

RUSSIA'S UNCERTAIN ECONOMIC FUTURE

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FOREWORD

By Senator Robert F. Bennett

Russia's economy has rebounded significantly since the crisis of 1998. Economic growth has resumed, unemployment has fallen, and production, consumption, and investment have all expanded. At the same time, Russia has initiated a series of promising economic reforms, including strengthening its banking system and enacting fundamental tax reform.

These improvements illustrate Russia's potential for a strong economic future. At the same time, memories of past economic difficulties demonstrate the risks that Russia faces if its reforms do not succeed.

Russia's economic future is of great importance to the United States. To assist American citizens and policymakers in thinking about that future, I asked the Congressional Research Service to commission a collection of expert reports on the Russian economy. The resulting reports review the recent history of the Russian economy, analyze current policy issues, and consider possible futures.

The reports were prepared by experts—in academia, the private sector, and government—who represent a wide diversity of professional perspectives on the Russian economy. The reports thus reflect a broad range of opinions on the challenges and opportunities before Russia. The views and conclusions in these reports are those of their authors, not those of the Joint Economic Committee or any of its individual members.

I hope that these reports will contribute to our ongoing efforts to understand the Russian economy. I thank the Congressional Research Service for its efforts and the authors for sharing their expertise.

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HISTORICAL NOTE

This study belongs to the series of committee prints for the Joint Economic Committee by the Congressional Research Service and its predecessor, the Legislative Reference Service, dating back to the 1950s, on the economies of the Soviet Union and successor states, the People's Republic of China, and Central Eastern Europe. In November 1959, the Joint Economic Committee held a week of hearings that highlighted the publication entitled *Comparisons of the United States and Soviet Economies*. These hearings were a continuation of the committee's past interest in this subject that had resulted in the publication of two studies prepared for the committee by the Legislative Reference Service of the Library of Congress—one, in 1955, entitled Trends in Economic Growth: A Comparison of the Western Powers and the Soviet Bloc, and the other, in 1957, entitled Soviet Economic Growth: A Comparison with the United States.

The first study on the People's Republic of China, An Economic Profile of Mainland China, was released in 1966, after the initiation of the Cultural Revolution. The first volume on Central Eastern Europe, Economic Development in Countries of Eastern Europe, was released in 1970, following the Soviet invasion of Czechoslovakia. Other studies followed at regular intervals.

The most recent study in this long series was China's Economic Future: Challenges to the U.S. Policy, released in 1996. The most recent study on Eastern Europe was East-Central European Economies in Transition, released in 1994, which was preceded by a twovolume study, The Former Soviet Economies in Transition, released in 1993.

HIGHLIGHTS By John Hardt¹

The authors in this volume analyze the present state of the Russian economy and its future possibilities. Vladimir Putin has committed himself to economic reform in his 2 years as Russia's president. The opportunity for a transition to a democratic market economy is more likely now than at any previous time in Russian history. This volume explores the opportunities offered by this transition and the obstacles it faces, with particular reference to Putin's reform agenda. The main findings of the volume are as follows:

- Sustained economic growth will be crucial to all reform efforts. Russia's recent performance since its financial crisis in 1998 has been positive in terms of both its annual growth of gross domestic product (GDP) and its balance of payments. Whether this recent performance represents a new trend line of sustained growth or is a part of a cyclical pattern of prosperity and crisis remains unknown.
- Putin's unfinished reform agenda features changes critical to the development of a pluralistic market system under the rule of law, such as the establishment of market-friendly administrative and judicial systems and the introduction of an effective banking system. Bureaucratic inertia and lingering corruption continue to hinder these reform efforts.
- Putin's reform policies will be decisive only if they result in redistribution of political power that controls economic decisionmaking along with revision of budgetary priorities. Restructuring the power of Russian financial and governmental elites and reducing populist subsidies will prove difficult, however, because that may erode Putin's power and popularity.
- Russia's economic competitiveness and growth potential would be greatly enhanced by the breakup of monopolies in three key sectors: energy, transportation and agriculture. Such reforms are underway, but they have not been completed.
- Russia's human capital has become a depreciating asset. Without appropriate legislation and budgets, Russia is facing a "demographic and health meltdown." Russia is not yet living up to Putin's commitments to the Russian people; welfare entitlements, pension funds and education needs are all underfunded.

The path of Russia's economic development will make a significant difference to the United States. U.S. policy, in turn, will play an important role in Russia's future economic development.

¹John P. Hardt, Senior Specialist in Post-Soviet Economics at the Congressional Research Service, is author of the Highlights, the Overview and coordinator of the volume.

- Russia may become a major trading and investment partner with the United States in spite of its modest bilateral trade and investment in the past.
- The United States may benefit from reduced Russian sale of arms to countries who may be a threat to U.S. security interests.
- U.S. support could facilitate Russia's integration into the global economy and its eventual accession to the World Trade Organization in spite of the noncompetitive nature of most Russian enterprises and strong protectionist sentiments.
- The United States may take an effective lead in helping Russia manage its external debt burden, even though the majority of its external debt is held by other countries.

OVERVIEW

By John Hardt¹

Russia's uncertain economic future is of special concern to U.S. as well as Russian policymakers. This was highlighted by the Bush/Putin Summit in Washington, DC, and Crawford, Texas, November 13-15, 2001, as Putin moved to align Russia more closely with the western market economies.² The range of possible economic developments in Russia is greater now than in the past.

This volume includes articles that present four approaches to the overarching question: Where is the Russian economy going?

- A discussion of Russia's past performance and insights for future growth. Is extrapolation of Russian past economic performance useful for projecting Russia's economic future? Will current opportunities for improved growth lead instead, as in the past, to economic crises?
- A discussion of the reform policy issues that challenge the leadership of President Vladimir Putin to make choices that may determine economic governance in Russia. What policy decisions would best advance the reform agenda and the necessary redistribution of power and financial resources? Will Putin prove to be an effective democratic reformer or yet another promoter of strong state power?
- A discussion of the range of possible outcomes for long-term development of Russia's political and economic system. Is Russia likely to abandon its historical pattern of autocratic governance in favor of the western model of democracy and market economy? Is either of these antithetical outcomes inevitable or subject to change?
- An assessment of U.S.-Russian economic issues that materially affect U.S. interests. Does it make a significant difference to the United States how Russia develops economically? Can and should the United States influence or effectively manage the outcome?

This volume is divided into four sections: past performance and insights for future prospects; Russia's economic challenges; longterm prospects for Russia's economic governance; and Russia's economic future and U.S. interests. What follows is a summary of the authors' responses to the above questions, supplemented by commentary provided by the volume's coordinator. The contributors to

¹John P. Hardt is a Senior Specialist in Post-Soviet Economics at the Congressional Research Service. References to authors from the volume are made in the text of the Overview. References to authors not in the volume are made in footnotes. ² Communiqués of Washington/Crawford Summit, Washington File, State Department.

this volume offer contrasting perspectives on these questions. They consider that Putin turning out to be an effective reformer rather than an authoritarian leader to be crucial to the development of Russia's economic future. While these contributions do not represent the views of the Congressional Research Service (which does not take positions on public issues), nor necessarily of the Joint Economic Committee of the U.S. Congress, they do reflect schools of thought in the professional community in the United States and abroad.

PAST ECONOMIC PERFORMANCE AND INSIGHTS FOR FUTURE PROSPECTS

Past performance in quantitative terms is useful but not definitive in understanding the past and in forecasting its future. While progress in reform made in the early 1990s provided some expectation of improved growth, Russia suffered a severe recession from 1992 through 1998. By 1998 gross domestic product (GDP) was 70 percent that of 1992. After the financial crisis in 1998, Russia experienced unprecedented short-term economic growth, with real GDP growth expected to reach 5 percent in 2001.

William Cooper, in his performance assessment, finds that making accurate projections of Russia's economic future is difficult: "The current economic growth could be short lived but it has generated political support and thus presents President Putin and his team with a 'window of opportunity' to promote economic reform. The current upswing in economic growth is favorable but not sufficient to assure sustained growth."

RUSSIA'S ECONOMIC CHALLENGES

Ben Slay reports: "Huge current account surpluses and unprecedented growth and reserves are welcome developments in the last 3 years. However, capital flight has not abated and foreign direct investment that would help modernize and recapitalize Russian industry is conspicuously absent in Russia." Ben Slay adds that large capital flight and minuscule foreign direct investment mirror each other as symptoms of failure of institutional reform in Russia.³ In this context it may be just as difficult to substantiate that Russia has "turned the corner" toward sustained economic growth and is now a market economy as it was earlier to document that Russia was a failing transitional economy.

Past performance shortfalls provide a road map for the difficult reform path ahead. Future reform requires development of an incentive system, a working financial system, competitive enterprises, and adequate attention to the quality of life.

Russia's current economic challenges are summarized in Putin's "unfinished agenda." Slay argues, along with many other specialists, that only the radical reforms in the Putin agenda will be sufficient to create a market-friendly system. While a turning point toward development of a market system may be more likely than at

³European Bank for Reconstruction and Development (EBRD), "Cross-Border Capital Flows," Transition Report Update, April 2001; John P. Hardt, Russia's Economic Policy Dilemma and U.S. Interests, CRS Report RL30266, January 23, 1999; Alexander Boulatov and Mark Silveira, "Capital Flight and Foreign Direct Investment," Working Paper, Washington, DC, August 2001.

any time in Russian history, implementation of reform policies on the Putin agenda can be decisive only if they result in redistribution of the political power that controls economic decisionmaking, along with a revision of budgetary priorities.

Central to reform implementation, in the view of this report's contributors, will be the character of President Putin as a reformer. President Putin has used his vision of Russia's economic future as the theoretical basis for his reform agenda. Putin's vision is for "rapid and comprehensive" institutional reform, to ensure that Russia will not fall further behind the developed countries in economic performance. Putin, as an advocate of reform, has prescribed the reform medicine favored by western economic specialists, but it remains to be seen whether Putin, as President, administers this medicine. By restructuring the power of Russian financial and government elites and reducing populist subsidies, Putin may erode his own popularity and power. While many reforms may have an immediate impact, the full benefits from successful reform may accrue to Putin's successors. If Putin is unable or unwilling to be proactive on his reform agenda, then, in the view of Jonathan Winer and Phil Williams, political elites will continue to dominate the political and economic future of Russia.

Putin's difficulty in supporting reform may be characterized as a twofold dilemma arising from the necessity to bring about a redistribution of power and a change in budgetary priorities. On the redistribution of power that is a prerequisite for reform, Putin has the classic Machiavellian constraint that he must utilize the full force of his leadership against the wishes of strong, entrenched opponents because the proponents of change are weaker and less ardent.

Budgetary priorities need to promote the market system rather than cater to the state and political elites. Winer and Williams consider the political elites satisfied that the fruits of reform and their preferential share can be retained through the use of state power.

Putin, as a reformer, may have to effectively use his leadership role to maintain both the elite and popular support needed for implementing reform. For example, in restructuring Gazprom, the energy conglomerate, Putin may have to convince its administrators and stockholders that being a global enterprise, and conforming to the requirements of the world marketplace, would protect their wealth and assure their future income, more than would retaining their privileged domestic position under an autocratic model of governance. Were Gazprom to become a model of corporate governance, the likely increase in wealth and profit for its shareholders might influence other oligarchs to support infrastructure monopoly reforms.

There are some recent indications that other enterprises may be seeking profits instead of rents. Ben Slay notes that the consolidation trend in industry has recently led many cash-rich enterprises to raise the level of corporate governance in lossmaking enterprises they have acquired. Responsiveness to market forces may thus be seen as beneficial to some Russian industrial elites by assuring protection of their wealth and prospects for profitability. Profit seeking beneficial to the Russian economy as a whole may prove more favorable economically to some industrial elites than rent seeking that only feathers their own nests.

In reducing subsidies to housing and utilities, Putin may need to design a support program that does not sink Russian urban dwellers further into poverty and generate opposition to reform but that, instead, offers prospects for future improvement in the quality of citizens' lives. By developing a new social contract supporting education and a meaningful social safety net, as suggested by Judyth Twigg, Putin might generate more reform support from the developing middle class and the populace. Some need-based income maintenance programs may be both economically and politically more successful than traditional subsidies.

Without a proactive policy, the benefits of market transition toward sustained economic growth are unlikely to be forthcoming. There is uncertainty about implementation of reform in Russia because Putin must face difficult decisions that will involve political risks and economic costs. Reform would reduce the direct political and economic power of the financial and governmental elites, including the Putin presidency. The marketplace, foreign investors and government regulators would take over important economic decisionmaking functions and change the basis for wealth accumulation from political to economic criteria.

Even with more revenue in a growing economy, relative shares of the budget would need to shift away from national security, politically popular or populist subsidies, and debt servicing. A market-friendly budget would need to fund necessary reforms: a new civil service, a working financial system, infrastructure improvement, and social welfare. These are both very costly and inimical to the interests of the entrenched elites. Budget priorities that favor the interests of the middle class and the populace as a whole may gain broad support for reform over time, but reduction of populist subsidies and uncertainty of future growth may lead to shortterm popular sentiments against reform.

REMOVING BARRIERS AND PROVIDING AN INCENTIVE SYSTEM

The authors in this section stress the importance of removing barriers inherited from the previous Soviet system in order to assure development of a market-based incentive system. In the indepth studies of Russian economic performance in the 1990s, Vincent Palmeda and Bill Lewis conclude that the productivity potential of key sectors and the economy as a whole have been constrained by the lack of an incentive system.⁴ Palmeda and Lewis, in updating their assessment to 2001, conclude that with marketoriented changes in economic institutions, Russia's economy might expect to sustain a GDP growth rate of 8 percent per annum.

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In their essay, Paul Gregory and Wolfram Schrettl note that the Russian economy denies itself the benefits of its full productive potential by the lack of a market-friendly administrative system that incorporates rule-of-law concepts, establishes property rights, and enforces laws through a competent judicial system. Such an administrative reform would require a professional civil service. Gregory and Schrettl opine that economic rationality should lead Putin to

⁴McKinsey Global Institute, Unlocking Economic Growth in Russia, October 1999.

give priority to administrative restructuring and adequately rewarding a new civil service in Russia as a condition for effective reform. However, they are not optimistic that Putin will overcome the political barriers to implementing these administrative reforms. Winer and Williams are even more doubtful that the current administrative system based on cronyism, crime and corruption will change. The necessary reforms, they argue, "require Russia to undertake steps that threaten those whose power depends on discouraging rule-of-law, including criminals, exploitative business persons and corrupt bureaucrats."

FINANCIAL REFORM: TAXES, BUDGETS AND BANKS

An efficient monetized economy is essential for operation of a market economy. To promote these objectives, a variety of financial reforms are required:

- Generation of sufficient tax revenue that may be used to fund reform programs;
- A shift of budget priorities sufficient to promote market reform initiatives; and
- Creation of banks that are attractive to savers and banks that efficiently convert savings to investment.

According to Z. Blake Marshall, tax reform currently under way will remove the onerous taxes of the past authoritarian command economy and replace them with taxes that do not place undue burdens on domestic and foreign enterprises. The new tax code, if fully implemented, will go far toward encouraging a market-friendly system.

Budgets have recently become important instruments of Putin's policymaking, according to James Duran. The current priority budgetary outlays, however, do not support effective reform. Three appropriations are scheduled to absorb the major share of the 2002 budget: external debt servicing, subsidies for holding down apartment rents and utility fees, and defense spending. Duran says reform may not be implemented effectively without a radical change in these budget priorities. Even if adequate expenditures for reform are mandated, there may continue to be unfunded mandates because of the likely over-commitment of future budgets and the continuing pressures toward funding traditional claimants.

tinuing pressures toward funding traditional claimants. On the issue of debt servicing, Putin accepted in 2001 the foreign creditors' requirement that debt be fully serviced. External debt servicing will peak in 2003 and continue at a high level thereafter unless Russia receives major debt relief.

Closing down popular subsidies for holding down rents and utility fees is proving to be politically difficult, as indicated by current parliamentary debates. Putin's civilian budget policy may be doomed to a robbing Peter to pay Paul policy of partially funding reform-related programs.

In the area of defense spending, Russia continues to allocate a higher percentage of GDP than any NATO countries, and spends more in absolute terms than all NATO countries except the United States, according to Christopher Hill. Under current defense plans, maintaining and developing some new weapon systems and downscaling military manpower will require additional spending. Hill states that in order to re-emerge as a modern and powerful presence on the world scene by 2010, total defense spending needs to increase by about 3.5 percent per annum in terms of real increase in GDP. Other Russian defense economic specialists say that fulfilling Putin's defense policy requirements for the decade will require defense spending increases that exceed the rate of GDP growth.⁵ Still other analysts do not see that increasing defense spending needs. They believe that Russia can establish market conditions in its civilian economy that would attract foreign investment and generate increased growth that could permit increased defense spending and also generate funds for necessary reform.⁶

On the issue of financial reform, David Kemme considers development of a functioning banking system the key to Putin's plan to generate increased investment in order to promote sustained growth. "While the number of financial institutions has increased dramatically, the state structure still dominates the financial sector," reports Kemme. Because of a lack of legal and regulatory development in banks, savers do not trust banks, banks do not convert savings to investment, and conflicts of interest are rampant throughout the banking system. At this stage of Russian development, banks are far more critical than stock and bond markets for assuring economic growth, according to Kemme. The best indicator for success in banking reform, according to Slay, would be purchase and control of some major Russian banks by large western banks, such as Deutsche Bank or Citibank. Only multinational banks possess the resources and the size needed to resist political pressures to lend, Slay asserts.

BREAKUP OF MONOPOLIES: ENERGY, TRANSPORTATION AND AGRICULTURE

There are three major monopolistic sectors Putin's reform policies seek to break up: energy, transportation and agriculture. Enhanced competitiveness in these sectors would facilitate increased economic growth.

Opening the energy industry by restructuring Gazprom and the Unified Energy System (UES) would provide the benefits of globalization, larger markets, more foreign direct investment and better corporate governance. The energy sector accounted for about 16 percent of GDP, 48 percent of federal budget revenue and 54 percent of foreign exchange earnings in 2000, according to Matthew Sagers. Energy, especially gas and oil, may be the primary engine of future Russian growth. Long-term investment necessary for growth in the energy sector is largely dependent on comprehensive reform, according to Sagers. A major increase in foreign direct investment (FDI) may be channeled early on to the oil and gas sectors if current reforms lead to one or more foreign investment success stories, e.g., joint oil and gas developments in Sakhalin, expansion of the Caspian pipeline consortia, or increased foreign investment in a reformed Gazprom and UES.

⁵Christopher Davis, "Defense Sector in the Economy of a Declining Superpower: Soviet Union and Russia, 1965–2001," *Defense and Peace Economics*, Overseas Publishers Association, 2001. ⁶Steven Rosefielde, "Back To The Future: Prospects for Russia's Military Industrial Revival," *Conference on Eurasia's Future Landpower Environment*, Washington, DC, July 10–11, 2001.

Overall, the saying "As Gazprom goes, so goes the economic reform of Russia" has some merit. If domestic and foreign shareholders have a larger say in decisionmaking and corporate governance improves, Gazprom may become a global enterprise and a major spur to overall reform. Gazprom, as a competitive global enterprise, might be the largest industry or sector contributor to future Russian GDP, revenue, and export earnings.⁷ Increased revenue from gas and oil sales might then serve to loosen budget constraints that limit funding for reform programs.

Putin wants the railroad system to follow the same reform pattern projected for Gazprom and UES. The current partially privatized rail transport system is inefficient and a burden on the Russian economy as a whole.

Although not directly bracketed in Putin's reform agenda with energy and transportation monopolies, Russian agriculture is another key monopolistic system from farm to market. Agriculture is ticketed for restructuring and clarification of property rights through a new Land Code for agricultural land. Only 5 percent of agriculture is privatized. While the Russian Parliament has passed a Land Code providing for property rights for urban centers, legislation has not yet extended the Land Code to include agricultural land. Providing for secure land ownership for Russian farmers would permit equity financing in the agriculture sector. Some vertical consolidation, "joint stock companies," may hold promise for more efficient farm-to-market agriculture, according to William Liefert.

Overall, demonopolization in the Russian economy may serve to shift the structure of the Russian economy toward value-added manufacturing and processing enterprises, according to Palmeda and Lewis. Oil, gas and other commodity output might substantially increase in *absolute* terms. Sectors such as general merchandising, food processing and distribution would then likely increase their *relative* share of GDP, moving Russia over time toward a developed economy structure and away from the commoditybased pattern of a developing economy.

HUMAN CAPITAL AND THE SOCIAL CONTRACT

Russia's large, literate and skilled labor force has traditionally been considered a strong asset for improving productivity. As Murray Feshbach and Judyth Twigg graphically demonstrated, Russia's human capital has become a seriously depreciating asset. Population decreases caused by the "burden of decades of destructive practices that have had a direct, harmful impact on public health" make addressing demographic and health concerns a national priority, according to Feshbach. With a projected escalation of HIV/ AIDS and tuberculosis, infectious diseases may reach calamitous proportions in Russia. However, there has been no appropriate legislation addressing what Feshbach calls the "demographic and health meltdown."

The quality of human capital, such as skilled workers and scientists, also has been sharply deteriorating due to lack of social security measures. In the Soviet era, workers had some degree of sta-

⁷ Boris Fyodorov, Interviews and Correspondence.

bility through a social safety net that provided minimal but predictable benefits. This represented an implicit social contract between the state and the citizenry. In post-Soviet Russia, this minimal commitment of the state to the citizens has not been fulfilled. Twigg notes the deleterious effect this has had on the development of human capital: "Sudden withdrawal of meager but comprehensive programs covering health care, pensions, employment, housing and other services has resulted in widespread poverty and disillusion."

Putin has introduced ambitious and, if funded, expensive programs for social welfare entitlements, pension funds, and education to meet human capital needs. Duran notes that Putin also supports expensive legal reform that would stimulate enterprise efficiency and protect workers' rights. Unless there is more revenue and a change in budgetary priorities, these mandates will be underfunded.

LONG-TERM PROSPECTS FOR RUSSIA'S ECONOMIC GOVERNANCE

Many Russian specialists subscribe to one of two differing schools of thought on Russia's future beyond 2010. One envisions a market economy, the other foresees rule by a predatory elite. James Millar sees an "inexorable trend" toward a complete market economy and away from the past autocratic economic governance model, especially the Soviet development pattern. This judgment is based on Russia's commitment to attain sustained economic growth that can only come from transition to a market system. Peter Stavrakis, on the other hand, projects a predatory model for Russia that rejects liberal democracy and postulates retention of only a patina of a democratic market system. "Free markets and civil society," Stavrakis claims, "are thus hostage to political elites who are free to intervene whenever and wherever this appears financially profitable and politically useful." In his view, Russian state leadership would continue to support the powerful predatory elites.

Russia's predatory elites favor a continued state role in governing the economy. The "directive economy" plan supported by Viktor Ishayev, governor of Khabarovsk, calls for continued state control of economic decisionmaking in investment and allocation of resources.⁸ Through state control of economic decisions on investment and production, Ishayev's group promises results comparable to those projected for Putin's unfinished reform agenda without reducing the direct economic power of the state and the political elites. The Ishayev program also promises to increase the size and influence of the middle class. Some members of Putin's state apparatus appear to be inclined toward supporting the Ishayev plan. There is concern that adoption of the Ishayev plan would support the views of Stavrakis that Russia's future governance will be based on a predatory, political elite system.

The authors in this volume consider it necessary that Putin take a strong leadership role in reform and make the necessary decisions reducing the role of the state in economic decisionmaking.

⁸Strategy for the Development of the State to the Year 2010, Moscow, 2000. Cf. John Hardt, CRS Report RL30266, op. cit.

Whether Putin is able to fulfil this strategic role is still to be demonstrated.

Proponents of these contrasting views expect Russia's future to be determined by long-term historical processes without major policy changes in the short run up to 2010. Both Millar and Stavrakis consider that the choices of Russia's future economic governance are at this point largely pre-ordained. Millar cites "reform fatigue" as a reason for not expecting effective reform soon. Moreover, a functioning market system would require across-the-board comprehensive reform that would not come quickly even if Russia adhered to the accession process of the European Union (EU). Effective compliance with the transition requirements of the EU would be a lengthy process for Russia.

Stavrakis finds the autocratic trend resistant to reform. He sees the entrenched "financial oligarchy now competing with the state elites using standard Russia-style methods: corruption and cronyism dominate and society has withdrawn from the political and economic arena." Moreover, he argues that the autocratic model is more consonant with Russia's imperial legacy. Stavrakis sees a pattern of historical crises, "times of trouble," characterized by recurring resistance of Russia to western democratic market models accompanied by increasingly authoritarian, inward-directed governance.

RUSSIA'S ECONOMIC FUTURE AND U.S. INTERESTS

In considering Russia's economic future, U.S. policymakers may recognize not only the diverse possible outcomes for Russia, but also the varying effects those outcomes may have on U.S. interests. Russian success and U.S. interests may not converge, but they are not necessarily opposed. Curt Tarnoff notes that "three overarching interests are involved: security, stability and humanitarian concerns." Successful reforms may provide considerable reduction in the threats to U.S. security if reform leads to decreased defense spending, reduced weapons inventories, non-proliferation of weapons of mass destruction, and reduced arm sales. However, a stronger economy may also permit re-establishment of military forces in Russia that might be considered a threat to U.S. security. Market reform may lead to a stable and profitable commercial relationship with Russia. However, a reformed Russia may be a stronger competitor in the world market and an increased threat to U.S. national security interests. The rule of law needed for effective market reform may contribute to development of a more civil, humane Russian society. However, the absence of effective reform may have negative effects on the human rights interests of the United States.

SECURITY ISSUES

The United States has tried to discourage Russia from making foreign arms sales, especially to states that are perceived to be threats to U.S. security. The current expansion of Russian arms sales appears troublesome to the United States, as Kevin O'Prey notes, because "more sophisticated weapon systems have been supplied to countries that may be a threat to U.S. interests."

U.S. policymakers may also be concerned that the income from arms sales might be used to revive and expand Russia's military industrial base. While 1,600 defense enterprises continue to operate at minimum production levels, only 6 to 10 of these enterprises benefit from cash sale of arms. Moreover, even with more arms sales and increased defense spending. O'Prev doubts that Moscow could resume the cold war arms race with the United States. Russia's military complex does not have the capability to compete in high-technology weapons, especially because of backwardness in electronics. Even in the worst-case scenario, Russia could return only to manufacturing large quantities of older generation weapons, according to O'Prey. Others consider it possible for Russia to fund reform and increase defense spending, thereby having the resources to rebuild its war mobilization base sufficient to compete with the United States.⁹

Promotion of nuclear and chemical non-proliferation has also been a centerpiece of U.S. security relations with Russia. If the United States felt assured that Russian budget priorities would shift to funding reform, some mutually beneficial debt swaps might be in order.¹⁰ Security and stability interests of the United States and Russia may be linked by debt for non-proliferation swaps that might dampen the proliferation threat and reduce the heavy debt service burden from Soviet-era debt. U.S. leadership in debt management negotiations might influence other creditors to follow suit.¹¹ Germany has been considering debt for assets swaps in ne-gotiating some inherited Russian Paris Club debt since the Schroeder-Putin summit in April 2000. The European Bank for Reconstruction and Development (EBRD) has offered to support debt swaps that might encourage nuclear power plant safety and discourage weapons proliferation in the former states of the Soviet Union.12

STABILITY ISSUES

Programs favoring development of a democratic market system may support domestic stability in Russia and its integration into the global marketplace and international institutions. In the Department of Commerce paper in this volume, Inga Litvinsky and Matt London note, "The U.S. administration would like to see business become the bedrock of U.S.-Russian relations ... Thus, U.S. and Russian interests are in alignment to commence a new bilat-eral commercial era." Bilateral trade and investment ties in the past have been small and concentrated in a limited number of sectors, according to Tanya Shuster. Were Russia to reform and enter the process of accession to the World Trade Organization (WTO), U.S. commercial relations with Russia might substantially expand

⁹ Steven Rosefielde, op. cit.; and Vitaly Shlykov in *Voennyi Vestnik* (Military Herald) #8, Mos-cow, April 2001. ¹⁰ John P. Hardt, Russia's Paris Club Debt and U.S. Interests, CRS Report RL30617, updated June 6, 2001; John P. Hardt, Putin's Economic Strategy and U.S. Interests, CRS Report RL31023, June 19, 2001.

¹¹The Biden-Lugar-Helms S-1803, Russian Federation Debt Reduction for Nonproliferation Act of 2001. James Fuller, Debt-for-Nonproliferation, Pacific Northwest Center for Gloval Secu-rity and Defense Nonproliferation Programs. Paper delivered in Moscow, Russia, December 10, 2001

¹²EBRD, Transition Report Update, April 2001.

in volume and scope. The Economic Dialogue, with its private sector initiative, undertaken after the Bush/Putin June 2001 Summit may encourage favorable trade and investment developments. Successful energy investments might top the bilateral commercial agenda. Litvinsky and London further note, "As Russia moves closer to WTO membership, the United States will need to re-examine our domestic trade laws." Permanent normal trade relations (PNTR), more access of Russian steel and other commodities to the U.S. market, and greater Export/Import Bank financing might then be placed on the U.S. legislative agenda.

Favorable developments in the bilateral commercial environment are contingent on Russia completing Putin's unfinished agenda. Thus, reform may have to be the horse leading the bilateral commercial cart.

HUMANITARIAN ISSUES

Human and civil rights in Russia have been of continuing concern to the United States. The conduct of the war in Chechnya violates many of the humanitarian principles of the United States. Threats to freedom of religion in Russia have drawn continuous U.S. monitoring and concern. Freedom of speech, imperiled by state intervention and control over television, radio and print media, has troubled U.S. policymakers. Human and civil rights and stability interests have been adversely affected by persistent crime and corruption in Russia.

Russian crime, corruption and money laundering have all plagued U.S.-Russian relations and deterred market reform. Capital flight and money laundering have had a disruptive effect on the U.S. banking system and encouraged international crime and terrorism, in the view of Winer and Williams. A peaceful, prosperous, market-oriented Russia might become more democratic and more sensitive to civil and human rights, but the record to date is mixed.

Thus, in summary, policymakers in Russia and the United States face prospective benefits and costs as well as the uncertainty inherent in Russian policy options. The current policy of renewed dialogue and engagement adopted by both sides at the Bush-Putin Summits of 2001 may generate a forum within which prospective Russian economic reform measures may be influenced by the interaction of Russian and U.S. policymakers. The analyses in this volume do not provide definitive answers to the questions posed at the outset of this overview or to the overarching question, where is the Russian economy going, but they may offer a carefully reasoned range of U.S. policy choices.

The United States, in concert with other western countries, may influence the direction that Putin pursues in economic reform. Policies needed for the reform process pose difficult decisions for the Russian leadership, some of which could lead to a different distribution of power and resources in Russia, contrary to the vested interests of powerful elites. These decisions may be influenced by U.S. policymakers and western allies of the United States. The United States and Germany may encourage or discourage Russian reform measures by use of leverage from debt management policy. By engaging in debt restructuring the United States may be able to use its leverage to push Russia toward more effective nonproliferation measures. Germany, as Russia's leading western trading partner and creditor, may play a leading role in economic policy with Russia, if it chooses to take the initiative. An economic dialog between the Bush and Putin Administrations could be an important stimulus for broader agreements that would enhance our mutual national interests. Similarly, WTO accession discussions might benefit both countries. However, caution may be required to assure that the Russian economic reform process leads to concrete developments rather than promises that remain unfulfilled.

The IMF, World Bank, EBRD and other international institutions may play a continuing but less critical role in Russian economic development. If debt rescheduling is put on the policy agenda, the IMF would need to be involved. Jonathan Sanford notes that after a decade of programs from international financial institutions (IFIs) treating Russia as a special case for aid and advice, the IFIs now plan to treat Russia as a normal country.

PAST ECONOMIC PERFORMANCE AND INSIGHTS FOR FUTURE PROSPECTS

RUSSIA'S ECONOMIC PERFORMANCE: ENTERING THE 21ST CENTURY

By William H. Cooper¹

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SUMMARY

Russia enters the 21st century potentially in better shape economically than it was during the last decade of the 20th century. It has not only survived several financial crises, including its most severe crisis in 1998, but has also enjoyed 3 straight years of economic growth and rising income for the average Russian citizen. But the improvement comes after more than 7 years of severe economic contraction that left many Russians worse off than they had been during the Soviet era, at least in economic terms. The economy and its people have been the victims of the lingering Soviet legacy of central planning and of misdirected and incomplete economic reforms of post-Soviet Russian leaders.

Some analysts have suggested that recent economic growth indicates that the Russian economy is on the road to sustained economic growth. However, the recent growth may be fragile and short

¹William H. Cooper is a Specialist in International Trade and Finance from the Foreign Affairs, National Defense, and Trade Division of the Congressional Research Service (CRS).

term. An examination of Russia's recent economic performance suggests that one might be cautious about predicting Russia's longterm economic prospects based on the past 3 years. The factors that have generated growth—high world commodity prices and ruble devaluation—are by nature ephemeral and subject to the vagaries of world markets. Furthermore, the economic growth has run neither deep nor wide. Some regions have benefited much more than others, and the disparity in income distribution within the Russian population has widened over the years.

Whether short term or more sustainable, Russia's economic growth presents President Putin and his policy team a "window of opportunity" to address the structural problems of the Russian economy by completing the reform process to help ensure long-term growth. In addition, Putin and his team must preserve the "accomplishments" attained during the past 10 years. For example, maintaining macro-economic stability, a crucial condition for gaining investor confidence and attaining sustainable economic growth, remains a challenge for Russia. The recent 20 percent inflation rates, while moderate by post-Soviet standards, are still high by conventional standards.

INTRODUCTION

By the end of the 1980s, the Soviet Union was declining economically, rapidly falling behind the industrialized West and even slipping behind some of the advanced developing countries of East Asia. The Communist system of central planning, under which the Soviet Union undertook rapid industrialization during and after World War II generated high economic growth rates through the 1960s. Eventually, however, the system led the Soviet Union into a period of economic stagnation in the 1970s and decline in the 1980s with few prospects of improvement. This dismal outlook was a factor in Mikĥail Gorbachev's decision to undertake perestroika to try to save the Soviet system through reform. The system proved beyond reform, and Gorbachev's perestroika led to the collapse of the Soviet Union by the end of 1991. For the next 10 years, Russian leaders, Presidents Boris Yeltsin and Vladimir Putin, and their respective governments, have had to lead Russia through the transition from a central planned economy to what many hope and expect to be a market economy. The transition remains a work in progress and not always linear.

The 10 year economic performance of post-Soviet Russia has been mixed at best. For most of the decade, the Russian economy shrank and, with it, the standard of living of the average Russian citizen. The economy has been burdened by the legacies of central planning and by misdirected and incomplete government reform efforts of its leadership. But Russia enters the 21st century potentially in better shape economically than it had been during the last 7 years of the 20th century. It has not only survived several financial crises, including its most severe crisis in 1998, but also has enjoyed 3 straight years of economic growth and rising income for the average Russia citizen. However, the Russian economic recovery may not be long term under present conditions.

Russia's record of economic performance suggests that Russian leaders face a formidable challenge in turning Russia into a modern industrialized economy. The performance has critical implications for the Russian leadership and for U.S. policymakers as well.

MACRO-ECONOMIC PERFORMANCE

Russia's economic performance during the past decade has largely been disappointing at best and destabilizing at worst. This is evident in examining the output of the Russian economy measured by real gross domestic product (GDP) and Russian inflation rates. It has also been uneven with some regions of the country hit harder than others. Yet, the performance during the last 3 years has shown tentative signs of recovery.

OUTPUT

GDP is one of the most comprehensive measures of a nation's economic activity and health. An economy must grow in order to improve, or at least maintain, the living standards of the population. A contracting economy, especially over an extended period of time, can threaten a nation's political as well as its economic foundation.

The Russian economy, measured in real (adjusted for inflation) GDP, has contracted since the collapse of the Soviet Union (1992– 2000). The level of real GDP in 2000 was less than 80 percent of what it was in 1992 (see Figure 1). The sharpest decline occurred early in the transition, between 1992 and 1996, when the economy shrank 27 percent, before the economy grew modestly (1 percent) in 1997.

The economic contraction affected sectors across the economy, some much harder than others. On the production side, industrial production declined 28 percent between 1992 and 2000 and agricultural production declined 29 percent. On the expenditure side, fixed investment, a crucial factor for future growth, declined 49 percent between 1992 and 2000.²

The economic slide, especially in the early years of the transition, was not entirely unexpected. An economy, like Russia's, that is going through a wrenching transition will certainly contract. Much of Russian economic output during the Soviet period was of little economic value. It was directed toward heavy industry to supply the military and military-related industries. Soviet production in the consumer sector, for example, clothing, prepared foods, and passenger cars, was of poor quality as Soviet producers faced no competition. Once the Russian economy opened its borders to trade, domestic producers were unable to meet the foreign competition, and production collapsed. Therefore, the decline was inevitable as market forces began to take hold and rationalize investment and production. But if the decline was inevitable, it was longer than in other economies going through post-Communist transitions in East and Central Europe.

In 1997 real GDP increased 1 percent. However, the positive news proved not only modest but ephemeral. In 1998, a financial crisis hit. (See note in appendix B for background on the crisis). As a result of the crisis, GDP plunged 4.9 percent. The downturn hit

²These calculations are based on CRS-constructed production indices of Goskomstat data.

all sectors of the economy, setting back economic progress. Many analysts speculated that 1998 would be just the beginning of a new phase of Russian economic decline because Russia would be cut off from capital markets and the weaker ruble would discourage consumption. Instead, Russia experienced growth in 1999 (3.2 percent) and in 2000 (7.7 percent). The Russian economy continued to grow in 2001 in terms of real GDP at an estimated rate of 5.1. percent.³

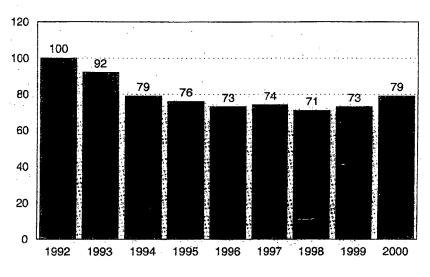


FIGURE 1.—INDEX OF REAL RUSSIAN GDP, 1992–2000

[1992 = 100]

Despite the recent growth, the 10 year record of economic performance suggests that the Russian economy still has much room to grow. In 2000, Russian real GDP was less than 80 percent of its level in 1992, just after the collapse of the Soviet Union. Its level of fixed investment was only 51 percent of the 1992 level. Similar gaps are prevalent throughout the economy.⁴

Russian economic growth has been unevenly distributed among the regions of the country. In 1999, the per capita nominal GDP for the entire Russian Federation was 15.81 thousand rubles. In the oil-rich Tyumen region, per capita GDP was 64.49 thousand rubles and was 37.49 in the Moscow region. In contrast, the per capital GDP for North Ossetia in the Caucasus was only 5.66 thousand rubles.⁵

Index constructed by CRS based on Goskomstat data.

³As of June 2001. Russian Economic Trends. October 2001. p. 14.

⁴ Ibid.

INFLATION

Compounding the problem of declining growth were very high inflation rates. In 1992 alone, Russian consumer prices rose 2,509 percent and 840 percent in 1993. Inflation robs individuals of their savings and lowers their standard of living. Hyperinflation, accompanied by declines in output, can create political and social unrest. Fortunately, except for an increase in workers' strikes, Russia avoided massive social upheaval. But the Russian people began to lose faith in their transition to the market economy. By 1997, inflation rates declined to 11 percent, but rose to 84 percent in 1998 as a symptom of the financial crisis. By 2000 they had declined to 20 percent, a manageable, but still unstable rate. As Russia enters the 21st century, inflation remains a persistent problem for the economy, although much less so than at the beginning of the economic transition.

TABLE 1.—RUSSIAN INFLATION RATES, 1992–2001

	Year	Inflation rate	Year	Inflation rate
1992		2,508.8	1997	11.0
1993		839.9		84.4
1994			1999	36.5
1995		175.0	2000	20.2
1996		21.8	2001 ¹	20.0

[Annual percentage change in consumer prices]

¹As of September 2001.

Source: Goskomstat data in Russian Economic Trends.

STRUCTURAL ECONOMIC PERFORMANCE

Underlying the weak macro-economic performance in Russia during the 10 years of the transition have been structural economic problems. Many of the problems affect the efficiency of the economy, that is, the productivity of its labor and capital. These inefficiencies make it difficult, if not impossible, for the economy to achieve long-term growth. They also affect the distribution of income among regions and within the population. Two critical areas of the economy that suffer from structural problems are the business sector and the banking sector. The problems in these sectors are symptomatic of structural problems throughout the economy.

DOMINANCE OF LARGE UNRESTRUCTURED ENTERPRISES

The Russian Government privatized most of the state enterprises in several phases. Nevertheless, the current profile of Russian business suggests that while Russia has made some progress in restructuring, it remains incomplete. Large enterprises that are legacies of the Soviet period continue to dominate the Russian economy. The top 20 Russian companies accounted for 30 to 35 percent of Russian GDP and for 70 percent of Russian exports in 1999. These companies are largely in the natural resources and infra-

structure sectors (energy, transportation, etc.).6 Small- and medium-sized enterprises accounted for only 30 percent of the total number of enterprises and 10 percent of the workforce. In contrast, small- and medium-sized companies accounted for 50 percent of the employment in the transition economies in Central and Eastern Europe and for 65 percent of the employment in the European Union. Furthermore, the number of small- and medium-sized Russian firms has remained constant since 1995 indicating little progress in business restructuring and development.⁷ The stalled restructuring impedes productivity as it signifies barriers to the exit of inefficient firms and the entry of new firms to the market. These barriers prevent the efficient use of resources and diminish productivity.

STRUCTURAL PROBLEMS IN THE BANKING SECTOR

A viable banking sector is critical to an economy. Its primary function is to operate as an intermediary funneling capital between savers (households) and borrowers (businesses, consumers, etc.) thereby facilitating the efficient use of financial resources. Without banks, businesses and others would be hard pressed to raise funds to finance investment to replace outdated equipment and technology or to expand production capacity. Banks also allow individuals to take out mortgages to invest in housing and to purchase big-ticket consumer goods. A weak banking sector can impede economic growth. An important principle for a banking sector to be credible is to maintain an "arm's-length" relationship with borrowers so that loans are extended at market-determined rates and that borrowers are deemed acceptable risks.

A number of private Russian banks emerged just prior to the collapse of the Soviet Union in response to the Gorbachev reforms. The number accelerated during the Yeltsin period. However, the ownership of the vast majority of these banks was closely tied to emerging private enterprises and functioned as conduits of soft credits from the government to those enterprises. Some of the larger banks belong to the financial conglomerates controlled by the socalled oligarchs. Such a conglomerate may consist not only of a bank, but a major enterprise, usually a raw material producer (nickel, diamonds, oil), or a news media outlet (television, newspaper). Most of the banks survived because of subsidies from the government or because they were part of an oligarch's conglomerate. In addition, some of the oligarch-owned banks made money by holding deposits for the Russian Government and investing the funds. They were not operating as financial intermediaries.

In the mid-1990s, many banks, including the larger ones, sought returns by heavily investing in Russian Government treasury bills (GKOs) that were paying high interest rates; they were not making money lending funds.⁸ Households have placed most of their savings deposits in the state-owned and -operated Sberbank, which is

⁶European Bank for Reconstruction and Development (EBRD). Strategy for the Russian Federation. Paris. October 2000. p. 15. ⁷Ibid. p. 47.

⁸One report estimates that 80 percent of household deposits are held by Sberbank. Talskaya, Marina. Russia Misled Western Creditors. Vremya. September 13, 2000.

the only institution whose deposits are insured by the state.⁹ The weakness of the banking sector was exposed when the government was forced to default on the GKOs in August 1998 forcing most of the banks into virtual bankruptcy. As a result, the Russian Government under Vladimir Putin has ostensibly made restructuring the banking industry a major priority. The government established the Agency for Restructuring Credit Organizations (ARCO). Its job was to ensure that those banks that had no hope of surviving would disappear while recapitalizing potentially viable banks under conditions that would make them profitable.

However, few banks have closed. At the end of the third quarter of 1998, the height of the financial crisis. there were 2.473 commercial banks in Russia. By the end of the second quarter 2001, only 398 banks had been closed.¹⁰ Most of the remaining banks are not viable, and the sector remains under-capitalized.¹¹ Unless the banking sector is restructured and banks are in a position to lend. the expansion of the business sector, and consequently of the economy as a whole, is stymied. Russian enterprises have relied on retained earnings as a source of investment, rather than banks, thereby severely limiting industrial expansion.

LIVING CONDITIONS

The macro-economic performance and the structural economic problems in Russia have had a direct impact on living conditions for the average Russian. These conditions have deteriorated during the past 10 years. The conventional measures of living standardsreal disposable income, unemployment, poverty, and life expect-ancy-indicate that the transition has adversely affected the average Russian, although here, too, experts differ on the significance and accuracy of the data.

REAL INCOME

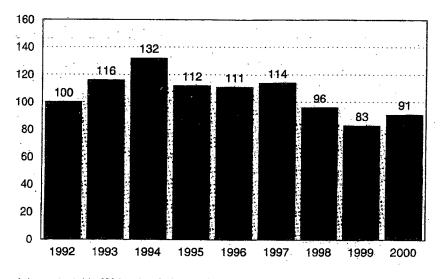
Russian real disposable income, a basic measure of economic welfare or purchasing power, has fluctuated during the 10 year period, but has declined appreciably overall. According to official government data, from 1992 through 1994, the level of real income increased. Between 1994 and 1996, real income declined substan-tially (16 percent) before recovering modestly in 1997, mirroring the upturn that year in real GDP. However, the data in Figure 2 indicate that the 1998 financial crisis had a major impact on the buying power of the average Russian. Between the end of 1997 and the end of 1999, the level of real disposable income declined 27 percent and rose only modestly (9 percent) in 2000. The data suggest that despite the recovery in the last 2 years, Russian real dispos-able income was still 21 percent below its level in 1997, before the financial crisis, and remained slightly below its level when the transition began in 1992. Preliminary figures show that during the first 6 months of 2001, real disposable income rose 4.4 percent.¹²

⁹EBRD. Strategy for the Russian Federation. Paris. October 2000. p. 16. ¹⁰Central Bank of the Russian Federation (Central Bank of Russia or CBR). Bulletin of Bank-ing Statistics. No. 7. 2001. p. 64. ¹¹Economist Intelligence Unit. September 2000. p. 31.

¹² Jamestown Foundation Monitor. August 6, 2001.



[1992 = 100]



Index constructed by CRS based on Goskomstat data.

UNEMPLOYMENT RATE

Russia has had to confront the phenomenon of unemployment in the post-Soviet period. Under the Soviet system, everyone had a job, although much of that labor was redundant. Economic changes in the last 10 years have forced Russian firms to rationalize their business practices, in order to compete. They have had to layoff workers or, in some cases, firms have had to close down thereby eliminating jobs. The unemployment rate has risen, accordingly, although some specialists argue that standard indicators do not accurately measure the magnitude of Russian unemployment. In some cases, the unemployment rate may not take into account redundant labor as some firms are forced to retain workers because the firms remain the primary distributor of housing, food, and other necessities, even though the employees may not be actually working. In other cases, the unemployment rate may not take into account laborers who work in "the shadow economy," in jobs not captured by official statistics.

The data in Table 2 show that the economic transition has taken a toll on workers. The rate of unemployment had risen since the beginning of the economic transition period in 1992, peaking at 12.6 percent in 1999. As a result of the recent economic expansion, the unemployment rate has declined since 1999 but is still above the rates of the early 1990s and is almost double the rate in 1992. The increase in unemployment may prove beneficial to the Russian economy, if the economy is shedding unproductive labor. While painful to the individual worker in the short run, the process can improve overall labor productivity in the economy. The economy then can create more employment through growth, which seems to be the case in the recent drop in the unemployment rate. But the process also draws on government resources to provide unemployment insurance and other safety net benefits to assist unemployed workers through the transition.

TABLE 2.—RUSSIAN UNEMPLOYMENT RATE, 1992–2001

[Percentage of workforce, International Labor Organization definition]

Year	Rate	Year	Rate
1992	4.7	1997	10.8
1993	5.5	1998	11.9
1994	7.4	1999	12.6
1995	8.5	2000	10.4
1996	9.6	2001 1	8.2

¹As of August 2001.

Source: For the 1992–1994 data-Goskomstat. For 1995–2001—Russian Economic Trends, October 2001.

POVERTY

The Russian statistical committee measures poverty as the percentage of the population that lives below an officially established subsistence level. The government calculates the subsistence as the cost of purchasing a set basket of goods and adjusts that level annually.¹³ The Russian Government has also revised its methodologies for calculating the poverty rate, at times making the construction of a consistent data series somewhat difficult.¹⁴ The Russian Government changed the methodology in 1994 and 2000, partially accounting for some of the abrupt downward shifts in the poverty rates in those years.

The data indicate, however, that the poverty rate declined somewhat between 1994 and 1997, but that the financial crisis in 1998 eliminated these gains as the poverty rate increased markedly by 1999. This trend is in line with the dramatic decrease in real disposable income and the rise in the unemployment rates in those years as noted in Figure 2 and Table 2. The growth of poverty is another sign of deteriorating living conditions in Russia. The Russian people are well known for managing to survive with little income through subsistence farming on private plots and through barter. Nevertheless, the low officially-determined level of subsistence means that a significant number of individuals may be living well below what would be considered subsistence in many other countries. Other data indicate among those that are considered liv-

 $^{^{13}}$ At the end of 2000, the official subsistence level was around 1,285 rubles, or about \$44, per month.

¹⁴For example, the methodology was changed in 1994 which biased the rate downward. The change accounts for some of the step drop in the poverty rate that year. One study estimates that the poverty rate would have risen to around 34 percent if the methodology had not been changed. Similarly, the government changed it again that added an upward bias. Ovtcharova, Lilia. *What Kind of Poverty Alleviation Policy Does Russia Need*. Russian-European Center for Economic Policy. Research Paper. May 2001. pp. 4–5.

ing in poverty are a number of people who live substantially below the official poverty level.

TABLE 3.—RUSSIAN ANNUAL RATE OF POVERTY, 1992–2000

Year	Rate	Year	Rate
1992	33.5	1997	21.2
1993	31.5	1998	24.6
1994	22.4	1999	39.1
1995	26.2	2000	33.7
1996	21.4	2001 1	31.3

[Percentage of population]

¹As of June 2001.

Source: Goskomstat, Russian Economic Trends.

LIFE EXPECTANCY

A significant indicator of the deterioration of living conditions in Russia has been the decline in the life expectancy of the average Russian, especially the Russian male. In 1991, life expectancy for males was 64 years and 74 years for females. By 1999, it had declined to 59 years for males and 72 years for females placing Russia among developing countries in that category. Increases in alcoholism and other diseases, some of which like tuberculosis have been nearly eradicated in developed countries, have contributed to the decline. It is also explained by the poor and deteriorating health system which has been slow to adjust to the transition from central planning. A World Health Organization (WHO) report ranks the Russian health care system 130th in the world, below that of even many developing countries.¹⁵

INCOME DISPARITY

The distribution of income within Russia has become increasingly unequal during the post-Soviet period. A standard measure of income distribution is the Gini coefficient (or index) which is on a 0.00 to 1.00 scale. The lower the number the more equal the income distribution. Thus, 0.00 is perfectly equal income distribution, while 1.00 is totally unequal.

According to Table 4, the Gini coefficient for the Russian population has increased. This conclusion is underscored by a second measure of income distribution, which shows how income has been distributed at various income levels of Russian society. These data show that in 1991, before the collapse of the Soviet Union, the richest 20 percent of Russian the Russian population accounted for 30.7 percent of Russian income while the poorest 20 percent accounted for 11.90 percent. By early 2000, the richest 20 percent held 48.6 percent of the income while the poorest 20 percent's share had declined to 5.9 percent. The middle 60 percent of the population's share had declined from 57.4 percent in 1992 to 45.4

¹⁵ WHO. World Health Report 2000. http://www.who.org.

percent by early 2000.¹⁶ The two sets of income distribution indicators mean that some segments of the Russian population have suffered more than others as living conditions in Russia have deteriorated during the past decade.

TABLE 4	 INCOME	DISTRIBUTION

[Gini coefficient]

Year	Rate	Year	Rate
1992	0.289 0.398 0.409 0.381 0.375	1997 1998 1999 2000	0.375 0.379 0.394 10.401

¹Estimate.

Source: Goskomstat.

EXTERNAL ECONOMIC PERFORMANCE

Russia's foreign economic has driven recent economic growth. However, Russia has also proved vulnerable to the vagaries of foreign markets, which could eventually undermine the growth.

FOREIGN TRADE

The role of foreign trade in the Russian economy has increased since Russia embarked on its transition. According to some rough estimates in 1994 (the earliest data available) exports were equivalent to 24 percent of Russian GDP. By 2000, the percentage had grown to 42 percent. Russian imports were equivalent to 18 percent of Russian GDP in 1994 and in 2000.17 Furthermore, Russian trade is largely conducted outside of the former Soviet Union. By 2000, only 14 percent of Russian exports and 30 percent of Russian imports were with former Soviet republics. In 2000, Russian exports were split 50–50 between the industrialized countries (Canada, the United States, Europe, Japan, Australia, and New Zealand) and developing countries. Developing countries accounted for approximately two-thirds of Russian imports and industrialized countries account for the remaining one-third.¹⁸ These figures indicate that the Russian economy has changed from one that operated under the closed system during the Soviet period where most trade was conducted within the Soviet bloc, including Central and Eastern Europe, to one where trade has become geographically diverse.

However, Russian trade particularly Russian exports, is highly concentrated in a narrow group of commodities. In 2000, 50 percent of Russian exports were in oil and oil products and natural gas. The share of commodities increases to over 65 percent, when ex-

¹⁶ Goskomstat.

¹⁰ Goskomstat. ¹⁷ Calculations based on International Monetary Fund (IMF) data in *International Financial Statistics*. July 2001. pp. 702, 704, 706. Trade data are expressed in dollars, while GDP data are in rubles. The ruble figures were converted into dollars using an exchange rate of 2.19 rubles per dollar for 1994 and 28.1 rubles per dollar for 2000. ¹⁸ IMF. Direction of Trade Statistics. June 2001. p. 214.

ports of other raw materials, such as metals, are included.¹⁹ These figures suggest that Russian trade is highly vulnerable to the often volatile world market prices for energy and raw materials. They also indicate that after 10 years of transition, the manufacturing sector of the Russian economy remains uncompetitive.

In 2000, the Russian current account (trade in goods and services, plus investment income, and unilateral transfers) had a surplus of \$46.3 billion, soaring from \$24.6 billion in 1999 and from \$0.7 billion in 1998. The surplus has allowed the Central Bank of the Russian Federation (Central Bank of Russia or CBR) to build up foreign reserves to \$24 billion by the end of 2000 (not including gold reserves).²⁰

FOREIGN INVESTMENTS

With outdated infrastructure and other modernization requirements the Russian economy needs financial capital. Other econo-mies in transition, such as Hungary and Poland, have proved ripe targets of foreign investors. Yet, Russia has run up large capital account deficits indicating minimal confidence of foreign investors in the long-term prospects of the Russian economy.

Both the Yeltsin and Putin governments have promoted foreign direct investment (FDI). Loosely defined, FDI is long-term investment in plants and real estate. Through FDI, foreign investors establish a presence in the economy that often includes transfers of technology, management skills, and other intangible assets. The Russian economy so far has failed to attract much foreign investment during the post-Soviet transition. From 1992 to 1999, total FDI flows into Russia were \$19.8 billion

(see Table 5), one-third of which occurred in one year, 1997. In comparison, total FDI flows into Poland were \$31.0 billion. The Russian FDI level was more comparable to that of Hungary (\$17.8 billion), an economy that is much smaller than Russia. Moreover, the trends are not improving despite economic growth. In 2000, \$2.7 billion in FDI flowed into Russia, down from \$3.2 billion in 1999. In fact, FDI outflows from Russia in 2000 exceeded inflows by about \$500 million. During the first half of 2001, \$1.2 billion in FDI flowed into Russia, while \$1.5 billion flowed out of Russia.²¹ (These recent numbers are preliminary and subject to revision.)

The regional distribution of FDI into Russia has been highly uneven. According to Goskomstat data reproduced by the Organization for Economic Cooperation and Development, as of January 1, 2000, Moscow and its environs accounted for 48.9 percent of the stock of FDI in Russia. Sakhalin region was next with 5.1 percent.22

Portfolio investments are all other foreign investments besides direct investments-government bonds, corporate stocks and bonds, treasury bills, etc. By their nature portfolio investments do not represent as firm a commitment and are an indicator of short-term investors' outlook for an economy. Russia has not done well in at-

¹⁹Russian Economic Trends. June 2001. p. 22.

²¹ Central Bank of Russia. Balance of Payments Data. http://www.cbr.ru.

²²OECD. The Investment Environment of the Russian Federation-Laws, Policies, and Institu-tions. p. 194. Paris. 2001.

tracting portfolio investments, either, especially since the 1998 crisis. Table 6 shows that portfolio investments surged, in 1997 to \$46 billion. In 1998, the year of the crisis, \$8.9 billion still flowed to Russia. But in 1999 and 2000, Russia incurred a *disinvestment* of foreign portfolio assets, \$1.3 billion and \$9.9 billion, respectively. During the first half of 2001, portfolio investments into Russia were only slightly negative.

TABLE 5.—FOREIGN DIRECT INVESTMENT (FDI) IN RUSSIA, 1992–2000

[In billions of dollars]

Year	Rate	Year	Rate
1992 1993 1994 1995 1996	\$0.7	1997	\$6.6
	1.2	1998	2.8
	0.6	1999	3.3
	2.0	2000	2.7
	2.5	1992–2000	19.8

Source: Central Bank of the Russian Federation (Central Bank of Russia or CBR).

TABLE 6.—PORTFOLIO INVESTMENT FLOWS INTO RUSSIA, 1994–2000

[In billions of dollars]

Year	Rate	Year	Rate
1994 1995 1996 1997	\$0.1 0.7 4.6 46.0	1998 1999 2000	\$8.9 1.3 9.9

Source: Central Bank of Russia.

The trends in foreign direct and portfolio investments in Russia indicate that investor confidence in the Russian economy weakened rather than strengthened. This conclusion is reinforced by the problem that Russia has had with "capital flight." Capital flight is an abnormal flow of funds whose holders seek safe havens from financial uncertainty and taxation or to launder proceeds from illegal activities. Russian capital flight is a longstanding problem with very negative consequences for the Russian economy. It deprives the Russian economy of critical investment and tax revenues that might be used for restructuring the pension system and other social security programs. More importantly, capital flight indicates a lack of confidence by Russian and foreign investors in the Russian ruble, in the Russian financial system, and more generally, in the Russian economy. Capital flight signifies that Russia's transition to a market economy continues to be incomplete and far from sustainable.

Estimates of the amount of Russian capital flight vary according to definition and context. Most estimates suggest that between 1992 and 1999, \$150 billion of capital left Russia as capital flight. Furthermore, the problem of capital flight has remained the same or may have worsened. According to one estimate, Russian capital

FOREIGN DEBT

The Russian Government carries a rather heavy burden of foreign debt. Much of this debt was inherited from the Soviet Union. As part of an arrangement with the other former Soviet states, Russia agreed to accept the obligations of servicing the Soviet debt in exchange for control over Soviet official assets abroad, such as embassy facilities. As Table 7 below shows, much of the Soviet debt was in the form of credits extended or guaranteed by foreign governments to finance Soviet Government purchases of equipment for major projects. Since the Soviet Union's collapse, Russia has incurred its own foreign debt obligations particularly in the form of loans from the International Monetary Fund (IMF), the World Bank, and the European Bank for Reconstruction and Development (EBRD).

TABLE 7.—RUSSIAN FOREIGN DEBT, 2000

[In billions of dollars]

Post-Soviet Russian debt Debt inherited from the Soviet Union	
Total federal government	\$142.2
Russian regional authorities Central Bank of Russia Russian private sector debt	3.4
· Total	175.6

Source: Central Bank of Russia, Economist Intelligence Unit.

Various measures are used to determine the burden of foreign debt on a nation's economy. It is not the absolute size of the debt that is critical but its term structure, composition, and size relative to the economy's ability to meet the servicing obligations.

IMF data (see Table 8) show the level of Russia's long-term debtservice payments and the ratio of these payments to the level of Russia's exports for the years 1997 to $2005.^{24}$ Data for the years 2000 through 2005 are projections. Although debt service payments are projected to remain roughly stable between 2001 and 2002, they are projected to rise in 2003 to \$23.3 billion, equal to 20.6 percent of goods and service exports, the highest percentage share since 1999, when they stood at 23.9 percent.

²³ This estimate is from the Ministry of Finance's Economic Experts Group and is cited in the Economist Intelligence Unit. Country Report: Russia. March 2001. p. 39. ²⁴ This analysis of the Russian debt burden is drawn from work by Patricia Wertman, Special-

ist in International Trade and Finance, CRS, and various IMF reports.

Year	Debt-service pay- ments (in billions of dollars)	Debt service/ex- ports (in percent)
1997	\$15.4 17.5	24.9
1998 1999	20.3	23.9
2000	15.7 18.2	13.8 15.8
2002	18.2 23.3	16.1 20.6
2004	17.4 19.2	14.9 15.7

TABLE 8.—RUSSIA'S FOREIGN DEBT SERVICE BURDEN, 1997–2005

Data for 2001 through 2005 are projections.

Source: IMF, Russian Federation: Post-Program Monitoring Discussions-Staff Report and Public Information on the Executive Board Discussion. IMF Country Report no. 01/02. July 2001.

Russia is projected to face a debt servicing burden ballooning in 2003. Nevertheless the IMF projects that Russia should be able to service the burden from its own resources. The IMF forecast assumes that declining oil prices will be offset by an improved domestic economic climate that will encourage foreign investment and the return of capital. In addition, the structural reforms, the IMF assumes, will allow Russia to boost non-energy exports cutting its dependence on oil and natural gas exports. Any dramatic negative shifts in these assumptions would affect Russia's debt forecast, and therefore the projections are subject to revision.²⁵ The trends in foreign investment and capital flight for 2000 and 2001 noted above would indicate that Russia's international financial situation may be deteriorating rather than improving.

ANALYZING RUSSIA'S ECONOMIC PERFORMANCE

The decade of economic transition has taken a large toll on the Russian economy and its people. Individual Russian data series may not accurately measure the economic performance. However, by examining the economic performance from a variety of perspectives, it is accurate to conclude that the Russian standard of living has declined considerably over the last 10 years. In some respects, the average Russian citizen is worse off now than he or she was prior to the end of the Soviet Union, and the depth of economic decline will require Russia to generate high growth rates over a significant period of time in order to regain what its people have lost. The data on Russian poverty levels, life expectancy, shrinking population, and health-related conditions point to an economic decline that has left deep roots and long-term problems.

Furthermore, the burden of the economic contraction has fallen disproportionately on some segments of Russian society and on some regions of the Russian Federation. The income gap between the richest and poorest segments of the Russian population has widened significantly in the last 10 years. In addition, the available

²⁵ IMF Country Report: Russian Federation. No. 01/102. July 2001. pp. 17, 25, 26.

wealth in the Russian economy has been concentrated in the larger, more politically influential regions of Moscow and St. Petersburg and in those regions naturally endowed with oil and other commodities. Other regions, such as those in the Caucasus, are much poorer and have been hit much harder by the effects of the transition.

Russia has shown signs of economic recovery since 1999, and that recovery appears to be generated in most sectors on the demand and supply sides of the GDP equation. Of particular importance has been the surge in investment in equipment and machinery. Russia's infrastructure in both the public and private sectors is sorely outdated, so new investment is a welcomed and necessary trend. Russian living standards have also shown signs of improving in the last 3 years with modest increases in real income and consumption.

Furthermore, Russian terms of trade have improved significantly boosting current account surpluses and Russian foreign currency reserves. This trend has allowed Russia's to meet its immediate foreign debt service obligations without incurring more debt. However, the large and increasing outflows of capital, especially in the form capital flight, strongly suggest that investors, both foreign and Russian, are skeptical about the depth of Russia's economic recovery.

What lies behind Russia's economic performance? In general, as many observers have pointed out, Russia's transition away from central planning was bound to be more difficult and longer than that of the Central and East European states. The Communist system was much more entrenched in the Soviet Union than it was in the rest of the Soviet bloc. Furthermore, Russia does not have a legacy of market economy to draw on as is the case with some of the Central and East European states. Russia has had to deal with the legacy of a Soviet economy that was administered to meet the needs of the military while civilian production and investment were given low priority.

However, the Soviet legacy aside, Russia's economic problems were also grounded in policy failures during the transition. These failures included loose monetary and fiscal policies early in the transition period. They have also included structural problems such as poorly developed and executed privatization programs that have left many potentially productive assets in the control of enterprise mangers from the Soviet period or in the hands of a few politicallyconnected individuals (oligarchs) who extracted the value from many of these assets rather than making them commercially viable for the long run. In addition, an inefficient banking system, the lack of private land ownership protection, the absence of a adequate system of commercial laws, and an inefficient and corrupt government bureaucracy inhibited economic growth and development.

Despite the setbacks and the challenges for Russian policymakers, it is important to keep in mind what Russia has accomplished in terms of economic reforms during the last decade:

• The government has eliminated price controls on most goods and services. This reform has been important because it allows the market forces of supply and demand to guide producers and consumers on purchasing, production and investment making the economy more efficient. Controls have remained on some important items, such as energy, housing, and transportation, but these, too, are scheduled for removal.

- Russia has opened its economy to foreign trade and investment.
- The structure of Russian production more closely resembles that of an open economy than of a militarized economy. For example, the service sector accounts for a much larger share of national output than does the goods sector.
- The ruble is convertible, and Russian residents may hold hard currency assets which can be a hedge against inflation and help protect Russian savings.
- The private sector accounts for roughly three-fourths of national output.

The economic growth that Russia has experienced since 1999 has been largely driven by favorable trends in the Russian balance of payments. The sharp depreciation of the ruble in 1998 cut demand for imports and encouraged domestic production of goods. A rapid increase in world oil prices boosted revenues from Russian exports. Those factors are by nature ephemeral, subject to sudden changes. Indeed, the ruble has recently been appreciating in real terms causing imports to increase and reducing the price competitiveness of Russian goods. Nevertheless, the Russian economy in terms of real GDP continues to grow in 2001 at an estimated 5.5 percent rate suggesting that domestic demand may be driving some of the growth. It is difficult to estimate how long this trend will continue.

POLICY IMPLICATIONS FOR RUSSIA

Sustainable economic growth is critical to Russia. Among other things, it is necessary in order to improve the standard of living of the average Russian, and, as the above analysis has indicated, the standard of living needs improvement. In addition, sustainable economic growth is necessary in order to generate tax revenues to meet growing pressures on the government sector.

The question of whether Russia's current economic growth is sustainable over the long term or just short term has significant policy implications for Russia. If the answer is the former, then Putin and his team could give the economy lower policy priority and delay undertaking politically challenging structural reforms.

Some specialists have suggested that Russia's period of economic growth indicates that the Russian economy has turned the corner and is on the road to sustained economic growth.²⁶ However, the above analysis suggests that one must be cautious in extrapolating long-term trends from the record of the past 3 years. The analysis, instead, indicates that the economic growth is fragile and that without continued economic reforms it may not be sustainable. Many of these reforms would be aimed at increasing investor con-

²⁶See, for example, Aslund, Anders. The Bear Turns Bullish. World Link. July-August 2000. pp. 49, 51, 53-54. (Available on the Carnegie Endowment for International Peace Web site: http://www.ceip.org/files/Publications/aslund/). Another expert who subscribes to this point of view is Yegor Gaidar, the former Russian Prime Minister. The Political and Economic Situation in Russia. Remarks to the Carnegie Endowment for International Peace. January 29, 2001. http://www.ceip.org/files/events/.

fidence in the Russian economy. They would include, banking reform, tax reform, land policy reform and the protection of property rights, government regulatory reform, and legal reform.²⁷ The Putin government and the Russian Duma have proceeded with introducing and passing some of these reforms which are part of the Putin team's economic strategy for the next decade. Some of these reforms are difficult because they will entail fundamental changes in the way of life for Russians. At the same time, the Putin leadership will have to preserve the "accomplishments" of past years. For example, macro-economic stability, that is low inflation and a stable exchange rate, is critical to gaining investor confidence and ensuring an environment conducive to sustainable economic growth.

Economic reforms will require political support. The current period of economic growth is a "window of opportunity" for the Putin leadership to undertake these reforms because it has provided Russians with some relief from the adverse impact of the transition and has generated popular support for Putin.

IMPLICATIONS FOR THE UNITED STATES

Russia's economic performance has significant implications for U.S. interests. How Members of Congress and other policymakers view Russia's economic performance in relation to U.S. national interests is a function of their views of the fundamental nature of the U.S.-Russian relationship.

In some respects, an economically weakened Russia has benefited the United States by greatly reducing it as a military threat. Some might argue, therefore, that a weak Russian economy will help to prevent the threat from reemerging. The military sector will have to compete with other domestic needs for limited resources helping to keep military spending down. In addition, Western creditors could maintain some financial leverage over Russia which might help to manage any threat to U.S. interests. This view is held by many of those who still see Russia as primarily a security threat, albeit a weakened one.

On the other hand, others believe an economically strong Russia better would serve U.S. interests. Many in the business and financial communities and those who analyze the U.S.-Russian relationship within an economic framework hold this view. It can be argued, for example, that an economically efficient and expanding Russia enhances U.S. and global economic welfare. Russia is viewed by many as a trade partner and target for U.S. investments, and these opportunities will grow as Russia becomes healthier economically. Furthermore, an economically strong Russia would be less likely to have to export arms to states whose policies are adverse to U.S. national interests. Some also hold that an economically stable Russia would mean a politically stable Russia which would benefit the United States, its allies, and the countries surrounding Russia.

²⁷OECD. The Investment Environment in the Russian Federation: Laws, Policies, and Institutions. Paris. 2001. pp. 36-37.

APPENDIX A: NOTES ON THE DATA

This survey of Russia's economic performance relies on official Russian Government data published by the Russian Government State Committee on Statistics (Goskomstat), the Russian Ministry of Finance, the Central Bank of Russia, and the Russian Economic and Trade Ministry. These data are derived directly from these agencies through their online sites or through secondary sources, such as *Russian Economic Trends*. Russian economic data, as with the Russian economy, has been going through a major transition since the collapse of the Soviet Union. Soviet data and early versions of Russian official data were notoriously unreliable.

Russian Government data-collection methodologies have improved over time and with them so has the quality of data. Russia's participation in international organizations, such as the IMF and the World Bank, and its bid to join the World Trade Organization (WTO), have required Russian data collectors to conform to international standards. As many analysts continue to point out, the current versions of economic data still suffer shortcomings, for example, under-reporting of some activity in the "grey economy." Nevertheless, the data do allow analysts to measure trends and changes in magnitude and thus to construct an informative survey Russia's economic performance over the last decade. Possible shortcomings in the official data will be noted in the survey.

APPENDIX B: THE 1998 FINANCIAL CRISIS

The 1998 financial crisis proved to be a pivotal event in Russia's transition to a market economy. It exposed many of the weaknesses of Russian economic policies and the need for economic reform.²⁸

SYMPTOMS

The crisis culminated in August 1998, when the government of then-Prime Minister Sergei Kiriyenko abandoned its defense of a strong ruble. It also defaulted on official domestic debt forcing its restructuring and imposed a 90 day moratorium on commercial external debt payments. The crisis led to the demise of many Russian banks, owned by oligarchs, which had held government debt. The crisis also led to Kiriyenko's firing by Russian President Yeltsin who replaced him with Prime Minister Primakov.

Symptoms of the crisis developed months before August.

• Interest rates soared.—Yields on GKOs rose sharply in a matter of months—to 135.3 percent by the end of August 1998. The CBR refinancing rate skyrocketed from 30 percent at the end of April to 150 percent by the end of May. The CBR's overnight interbank lending rate increased from an average of 45.3 percent in August to 135.3 percent in September 1998.²⁹

²⁸ This is a brief discussion. For more analysis of the financial crisis see CRS Report 98–578, The Russian Financial Crisis: An Analysis of Trends, Causes, and Implications, by William H. Cooper.

²⁹Central Bank of Russia data published in *Russian Economic Trends*. September 15, 2000. p. 29.

- Stock market values plummeted.—The Moscow Times (MT) index of stock prices declined 79 percent from the end of April to the end of August 1998.³⁰
- The value of the Russian ruble sank.—Between the end of July 1998 and the end of September 1998, the ruble lost 60 percent of its (nominal) value in terms of the dollar.³¹
- Foreign reserves declined sharply.—Between the end of July 1998 and August 1998, the reserves, including gold, dropped from \$18.4 billion to \$12.5 billion.³²
- Real GDP dropped 4.9 percent in 1998 after a modest increase in 1997 and inflation soared to 84.4 percent from 11.0 percent the year before.³³

CAUSES

The immediate cause of the crisis was the accumulation of Russian Government short-term debt in the form of GKOs and bonds (OFZs), to finance burgeoning budget deficits. As long as the Russian Government could service the debt, it managed to maintain large budget deficits without incurring inflation and was able to keep the ruble stable.

But beginning in 1997 and into 1998, a number of forces came into play that placed Russia in a financially vulnerable position:

- World prices for oil and other commodities, on which Russian depends for much of its foreign currency earnings, plummeted, putting downward pressure on foreign currency reserves and making it more difficult to service the debt and defend the ruble.
- The Asian financial crisis made investors much more wary of holding risky short-term securities such as GKOs.
- The decline in demand for Russian debt and declining world commodity prices put downward pressure on the Russian ruble, making foreign debt servicing much more expensive.

Foreign economic shocks that hit a financially vulnerable Russia largely explain the suddenness of the 1998 financial crisis. The effects of the crisis are still being felt. But analysts explain how Russia got to this point of vulnerability by citing more fundamental problems with Russian economic policy and economic structure. These included the failure to institute tax reform, property rights, and bankruptcy laws and procedures.

³² Ibid.

³⁰ Ibid. p. 30.

³¹ Furthermore, the ruble continued to decline losing 71 percent of its value from April to the end of 1998. Measured on a real effective exchange rate basis (adjusted for inflation), the ruble depreciated 41 percent between April and December 1998. CRS calculations based on data in Ibid.

³³ Ibid. p. 22.

RUSSIA'S ECONOMIC CHALLENGES

Removing Barriers and Providing an Incentive System

THE RUSSIAN ECONOMY: HOW FAR FROM SUSTAINABLE GROWTH?

By Ben Slav¹

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SUMMARY

The consolidation of capitalism in Russia during the 1990s was difficult, but reform initiatives ultimately succeeded in stabilizing prices and restoring economic growth. Most markets have undergone significant liberalization, and the bulk of the enterprise sector is in private hands. But the consolidation of these changes is likely to require important structural reforms that comprise Russia's "unfinished reform agenda." In the short run by 2010, institutional re-form, particularly in the infrastructure and financial sectors, would be necessary to establish a well-functioning market economy with sustained growth. If reform is not completed by 2010, Russian leadership could still finish the unfinished agenda.

INTRODUCTION

Russia has had a capitalist economy since the mid-1990s.² Market forces set most prices, and the bulk of Russian enterprises are privately owned. International economic integration has proceeded

¹Ben Slay is Director, Regional Support Centre, United Nations Development Programme's Regional Bureau for Europe and the CIS, Bratislava. The views in this paper do not necessarily reflect those of the United Nations. Much of this paper was written while the author worked as senior economist at PlanEcon, Inc., the Washington-based economics consultancy. The author acknowledges his gratitude for the PlanEcon data and analyses that underpin this paper. ² Aaslund, A., *How Russia Became a Market Economy*, Washington, DC, 1995, The Brookings

Institution.

apace: exports of energy, metals, and raw materials play a key role in determining Russia's external creditworthiness and growth prospects. The imperative of fiscal balance has played a key role in federal budget policy since 1999, while monetary and exchange rate policies reflect the tradeoffs between price stability and exchange rate competitiveness faced by central banks everywhere. Although elite commitment to democracy remains an open question, the inevitability of capitalism is widely accepted across Russia's political spectrum. And after years of sharp reported declines in output and incomes, the Russian economy has recorded growth in 4 of the past 5 years. The 14 percent cumulative expansion in gross domestic product (GDP) reported in 1999-2000 was Russia's best growth performance since the $1970s^{3}$

But if Russian capitalism is here to stay, it is far from wellfunctioning. The creation of efficient markets supervised by regulatory institutions applying best international practices remains years (if not decades) away in many sectors. Most enterprises have passed out of full state ownership, but problems of corporate gov-ernance, the judicial system, and land ownership continue to distort property rights. Market forces determine prices, but administrative decisions keep key tariffs for energy, transport, and communal services well below market levels. Although the federal government reported an impressive fiscal adjustment during 1999-2001, sub-national fiscal policy leaves much to be desired. Unaddressed consequences of the August 1998 financial collapse continue to plague Russia's banking system, and foreign capital inflows remain minuscule. While Russia is fully servicing its sovereign external debt in 2001, this is only the second year (after 1997) since the Soviet collapse in which Moscow has not stiffed its creditors. The strong economic growth reported during 1999-2000 was due in part to such transitory factors as high world prices for key energy exports, and the temporary effects of the ruble's sharp devaluation after August 1998. The signs of a slowdown were ap-parent in the first half of 2001, when industrial and GDP growth slowed to around 5 percent. And despite the strong growth recorded during 1999–2000, much of the country still lives in poverty.

Like most transition economies, the Russian economy has markets, private enterprise, and is growing. But in contrast to the leading Central European and Baltic transition economies, Russia's development prospects remain constrained by sharp institutional divergences from best international practices. As the Russian Government itself has admitted.⁴ the economy is unlikely to find a sustainable development path unless these divergences are narrowed significantly. Russia also faces some worrisome demographic, public health, and infrastructure trends that raise troubling longerterm questions.⁵ While the economic development program for

³All data are taken from the official monthly and annual publications for the Russian State Statistical Office and the Central Bank of the Russian Federation (Central Bank of Russia or CBR) (or from their Web sites) unless otherwise indicated. Indicators on poverty and inequality trends are taken from Human Development Report 2000: Russian Federation, UNDP, Moscow, 2001.

 ⁴Osnovnye napravleniya sotsial'no-ekonomicheskogo razvitiya Rossii na dolgosrochnuyu perspektivu (Gref program), Ministry of Economy and Trade, Moscow, 2000 (http://www.economy.gov.ru/program/soderzanie.html).
 ⁵See Russia's Physical and Social Infrastructure: Implications for Future Development, National Intelligence Council, Washington, DC, December 2000.

2000-2020 promulgated by Economics Minister German Gref and approved by President Vladimir Putin acknowledges these problems, prospects for their effective resolution are far from certain.

This paper addresses these issues in the following manner. First is a brief narrative of key macro-economic and political economy trends since the Soviet collapse. Special emphasis is placed on the causes and implications of the August 1998 financial crisis, and the drivers of the economic expansion that followed. Next is an investigation of external trends, paying particular attention to developments in the commodity composition of Russian trade, the balance of payments, foreign investment, capital flight, and relations with the country's creditors. Following that is an examination of key issues in the unfinished reform agenda, with particular emphasis on the infrastructure monopolies and the financial system. Last are some concluding remarks and some leading indicators on prospects for sustainable growth in Russia.

RUSSIAN MACRO-ECONOMIC AND POLITICAL ECONOMY TRENDS, 1991–2001

The official data in Table 1 show that Russian macro-economic trends during the 1990s closely resembled patterns apparent in other transition economies. An initial period (1991–1994) of systemic collapse and deep structural changes was accompanied by triple- and quadruple-digit inflation and sharp declines in reported output and employment.⁶ This was the period in which many prices and commercial activities were liberalized (although not with Central European decisiveness), and ownership of thousands of state enterprises passed into private hands.⁷ It was also the period of deep political transformation (if not necessarily democratization), in which President Boris Yeltsin forcibly suppressed an insurrection in October 1993 orchestrated by the Communist and Nationalist opposition. A constitution was approved (in highly inauspicious circumstances) by plebiscite shortly thereafter, codifying the basic outlines of electoral democracy and a federal system.

The introduction of a quasi-fixed exchange rate mechanism (the currency corridor) in July 1995 marked the end of the chronic macro-economic instability that characterized the first period of the Russian transition. The exchange rate's nominal peg and growing financial assistance from the International Monetary Fund (IMF) and World Bank helped inflation rates to fall sharply after mid-1995. Reduced financial instability helped attenuate the reported contraction in economic activity: annual declines in GDP fell to 3 to 4 percent during 1995–1996, and stopped in 1997. Slowing inflation, the appearance of economic growth, better relations with its creditors, Yeltsin's re-election in 1996, and propitious conditions on international capital markets caused the Russian stock market to boom.

⁶For a provocative investigation of the differences between actual and reported declines in output in Russia and other transition economies during this time, see Aaslund, A., "The Myth of Output Collapse After Communism," Carnegie Endowment Working Paper 18, 2001, Washington, DC, Carnegie Endowment. (http://www.ceip.org/files/Publications/ wp18.asp?from=pubauthor) 2001

⁷Blasi, J.R., M. Kroumova, and D. Kruse, *Kremlin Capitalism: Privatizing the Russian Economy*, Cornell University Press, 1997, Ithaca and London.

TABLE 1.—MACRO-ECONOMIC TRENDS, 1991–2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Dollar GDP (at purchasing power parity ex-	10m/b									
change rates, ¹ in billions)	\$1,063	\$909	\$830	\$726	\$696	\$672	\$678	\$645	\$680	\$736
Per-capita dollar GDP ²	7,200	6,100	5,600	4,900	4,700	4,500	4,600	4,400	4,700	5,100
Real GDP growth (in percent)	- 5.0	- 14.5	- 8.7	- 12.7	- 4.1	- 3.4	0.9	- 4.9	5.4	8.3
Growth in personal consumption (in per-									0.1	0.0
cent)	- 5	- 3	0	-3	-7	- 5	5	-3	- 4	9
Growth in gross fixed investment (in per-						-	-	-		•
cent)	- 16	<u> </u>	- 12	- 24	- 10	-18	- 5	-10	5	16
Federal budget balance (percent of GDP)	NA	-3	-1	- 5	- 3	- 4	-5	-3	-1	3
Consolidated budget balance (percent of									-	-
GDP)	NA	- 4	- 5	-10	- 3	-4	-7	- 4	-1	3
Consumer price inflation (annual average,										-
in percent)	96	1533	881	322	196	48	15	27	93	21
Unemployment rate (by ILO standards, in										
percent)	NA	4.9	5.5	7.5	8.2	10.1	12.2	13.3	12.2	9.6
Gini coefficient (income inequality)	0.26	0.29	0.40	0.41	0.38	0.38	0.38	0.40	0.40	0.39
Population with below-subsistence incomes										
(in percent)	NA	34	32	22	25	22	21	24	39	34

¹ PlanEcon estimates.

² Ibid.

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NA—Not available.

Some \$50 billion in foreign direct and portfolio investment poured into the country in 1997, as emerging market investors increasingly saw Russia as a transition economy on the verge of "turning the corner." After years of deterioration, social indicators of poverty and inequality also began to improve in the mid-1990s. After rising from 0.26 in 1991 to 0.41 in 1994, Russia's Gini coefficient of income inequality dropped to around 0.38 during 1995-1997. And the share of the population with incomes classified as below the poverty line dropped from around 33 percent during 1992-1993 to about 20 percent in 1997.

The calumnious events that led to the currency, debt, and banking crisis of August 1998 brought an end to the second phase of the Russian transition, and revealed the optimism engendered by de-velopments in 1996-1997 to have been premature. The federal government in that month defaulted on its domestic debt and began accumulating arrears on its rescheduled external debt obligations inherited from the Soviet period. The government and the Central Bank of the Russian Federation (Central Bank of Russia or CBR) halted their defense of the quasi-fixed exchange rate, permitting the nominal exchange rate to collapse from 6.2 rubles per dollar to 21.1 rubles per dollar by the end of the year. The ruble's collapse led to renewed price pressures: year-on-year consumer price inflation rates had returned to triple-digit levels by mid-1999. Almost all of Russia's private banks collapsed after the devaluation, leaving the state savings bank, Sberbank, the only domestic financial institution of any consequence. The "reformist" Western-oriented governments that had ruled Russia since 1992 were replaced in September 1998 by a cabinet that drew its support from the Communist Party of the Russian Federation, the largest party in the parliament.⁸

The shock waves generated by the "Russian crisis" were felt throughout the world. Investment bankers hawking the "Russian boom" gave way to pundits claiming that Russia's economic and political transitions had failed, or that Russia was a failed state. In Washington, opponents of the policies pursued by the Clinton administration and the IMF and World Bank vis-à-vis Russia explained the Russian crisis as the inevitable result of ideological orthodoxy and/or political opportunism.9 Coming on the heals of the East Asian crisis that began in mid-1997, Russia's financial crisis contributed to the global emerging market rout that led the Federal Reserve to sharply cut interest rates in order to avoid a global liquidity squeeze in late 1998. It also added new urgency to the search for a "new international financial infrastructure" to deal with such problems as financial contagion and money laundering.

Rather than marking the inevitable failure of the Russian transition, the August 1998 financial crisis reflected a confluence of unfortunate domestic and external factors. Some of these were avoidable, others of which not. Moreover, the storm clouds generated by August 1998 also weakened or removed many of the causes of the crisis, which helped pave the way for the strong GDP growth that

⁸For more on August 1998, see Komulainen, T., and I. Korhonen, eds., Russian Crisis and Its Effects, Helsinki, 2000, Kikimora Publishers. ⁹Stiglitz, J., "Whither Reform? Ten Years of Transition," Washington, DC, The World Bank,

^{1999.}

took hold in 1999–2000. The recovery of 1999–2001 marks the third phase of Russia's economic transition, which is marked by the challenge of transforming the growth that took hold since August 1998 into sustainable economic and social development.

Two domestic causes of August 1998 were paramount. First, Russia's macro-economic policy framework was plagued by inconsistencies between the quasi-fixed exchange rate regime and large fiscal deficits that were financed by foreign borrowing. Russia's consolidated government budget (i.e., the balance on the federal, regional, and municipal government budgets) reported deficits of 5 to 7 percent of GDP during 1996–1997, and through mid-1998. The borrowing required to finance these deficits created increasingly unstable foreign- and domestic-debt dynamics that by mid-1998 undermined the credibility of the monetary and exchange rate policies.

Second, the implementation pace of Russia's market reform agenda slowed noticeably after 1995. Virtually no major improvements in economic policy or institutions were introduced during 1995-1998. This resulted in part from a lack of leadership at the top, due first to the 1996 presidential election campaign and then to President Yeltsin's growing infirmity that culminated in his surprise December 1999 resignation. But the stagnating market reform agenda also reflected the political economy of transition, which has pro-duced what the World Bank's Joel Hellman has termed "low-level, partial reform equilibria" in many transition economies. As Hellman points out, the successes of the initial stages of the economic transition-the partial liberalization of prices and commerce, the first waves of rapid privatization, and the devolution of power from the central to regional authorities—create new interest groups who are opposed to further market reforms.¹⁰ In Russia, the "oligarchs" who benefited from the rent-seeking opportunities created by the incomplete liberalization of prices and trade, and then from quick and dirty privatizations of key state companies, were instrumental in securing Yeltsin's re-election in 1996. Yeltsin's reliance on Russia's regional leaders in his battles against the Communist opposition allowed the regions to pursue policies that balkanized Russia's large domestic market and weakened Russia's fiscal coherence. Measures to strengthen the financial system, improve regulation of infrastructure monopolies, or provide a level playing field across Russia's economic space, generally went nowhere after 1995.

The Russian economy in 1998 was also hit by three highly unfavorable developments over which it had no control: a bad harvest, an oil price shock, and financial contagion from East Asia. Bad weather in various parts of the country caused a 19 percent reduction in value added contributed by the agricultural sector in 1998. The dollar prices of Russian exports dropped 15 percent in that year, as oil exports were selling for only \$7 per barrel in December 1998 (according to official data). Export prices dropped another 4 percent in 1999 as well. This terms-of-trade shock pushed overall exports down from \$88 billion during 1996–1997 to \$74 to \$76 bil-

¹⁰ Hellman, J., "Winners Take All: The Politics of Partial Reform in Postcommunist Transitions," World Politics, 50 (January 1998), pp. 203–234.

lion in 1998–1999. Russia's current account balance, which registered surpluses of 2 to 3 percent of GDP during 1995–1997, had fallen into deficit by mid-1998. At the same time, foreign investors who were burned by the East Asian financial crises in 1997 became increasingly unwilling to risk investing in Russian securities in 1998. This "repricing of Russian risk" combined with the collapse of Russia's current account surplus would have posed daunting policy challenges even for a country with a robustly pro-reform political elite.

The August 1998 crisis did significant damage to Russia's financial system, to the country's external creditworthiness, and to living standards. Financial intermediation by private banks essentially stopped in August 1998, and has not been renewed since. With only a handful of exceptions, private- and public-sector borrowers in Russia effectively lost access to international capital markets and have not regained it since. After years of small improvements, Russian indicators of poverty, inequality, and social hardship deteriorated anew during 1999–2000.

But August 1998 also made possible the rapid GDP growth that was reported in 1999-2000. The ruble's sharp devaluation set the stage for an import-substituting industrial recovery led by privatized firms in the metallurgical, light industrial, and machine building sectors. The banking collapse and the low oil prices of 1998-1999 weakened the oligarchs, while the collapse of the domestic debt market deprived the federal and regional governments of sources of borrowing. Russia therefore got fiscal religion: regional governments were forced to start running budget surpluses in 1999, and the federal budget has been in surplus since early 2000. While these surpluses were due in part to reductions in debt servicing, they also reflected improvements in tax collection. The share of GDP collected as consolidated government tax revenues, which had dropped below 20 percent in 1998, rose to 21 percent in 1999 and 24 percent in 2000. And in contrast to 1998, when as much as a third of federal and half of regional tax revenues were collected in non-monetary forms, all federal tax revenues since early 2000 have been collected in cash. The crisis of arrears, barter, and monetary surrogates that seemed to be choking the Russian economy in 1998 has largely melted away.

Other factors besides the bounce from August 1998 facilitated Russia's recovery during 1999-2000. High oil prices were obviously one of these: thanks to 65 percent growth in the prices of export crude and refined oil products, Russia's dollar export prices rose by 26 percent in 2000. But high world prices for energy and other exports do not explain the strength of Russia's recovery during 1999-2000. For one thing, 5.4 percent GDP growth was reported in 1999, even though Russia's export prices fell 4 percent overall in that year. Sharply lower relative prices for energy and transport services also played an important role in promoting the Russian recovery. Thanks to regulatory decisions that held energy and transport prices in check in the aftermath of the August 1998 financial crisis, the relative prices of gas, transport, and electricity dropped by 20, 23, and 39 percent respectively (calculated vis-à-vis the industrial producer price index on an end-year basis) during 1998-2000. Energy-intensive companies in chemicals, ferrous metallurgy, and other manufacturing branches were able to re-export this cheap energy in the form of highly price-competitive exports. The economy also benefited from Boris Yeltsin's relatively painless departure from the Russian presidency in December 1999, and from the rapid consolidation of power by his successor Vladimir Putin.¹¹

Russia's growth in 1999 was driven largely by foreign demand. Whereas exports in volume terms rose by some 7 percent in that year, import volumes dropped by nearly a third. This sharp growth in net exports compensated for a decline in domestic demand, as personal consumption dropped 4 percent. In sector-of-origin terms, growth in 1999 was powered by the industrial sector (an 11 percent increase was reported in industrial value added) and agriculture (which, recovering from the poor harvest of 1998, reported a 17 percent increase in value added in 1999). By contrast, the declines in imports and personal consumption kept growth in the service sector flat, as value added generated by the trade sector dropped 3 percent in 1999. In 2000, on the other hand, domestic demand became the driver of the 8.3 percent GDP growth reported for that year. Personal consumption was reported up 9 percent, while fixed investment rose 16 percent. Russia's recovery in 2000 was also more balanced sectorally: the 12 percent growth in value added reported for the industrial sector was complemented by 11 percent growth in construction and 10 percent growth in the trade sector. While export volumes reported healthy 11 percent growth in 2000, import volume grew by some 20 percent. Average inflation rates also dropped sharply in 2000, while the unemployment rate at the end of the year had fallen to 9.6 percent, down from 13.3 percent at the end of 1998.

With a few exceptions, these trends continued into 2001. While growth in production volumes in the industrial and construction sectors slowed to 6 percent during the first half of the year, retail trade turnover continued to surge, with 10 percent growth was reported during the first half. Consumer price inflation stopped falling, however, and averaged nearly 25 percent in year-on-year terms during the first half of the year. This inflation was due primarily to very loose monetary policies. Inflows of foreign exchange produced by the continuing large current account surpluses, combined with unsterilized CBR intervention, kept growth in the monetary base and M2 in the 50 to 60 percent ever since the second half of 1999. While the demand for rubles grew strongly during 1999-2000 thanks to Russia's strong output growth and sharp reductions in the use of monetary surrogates, the supply of rubles in 2001 had clearly begun to outpace demand. Inflation in the 25 percent range combined with an essentially stable nominal exchange rate to further boost the value of the ruble in real effective terms; and the firmer ruble in turn helped boost imports and slow growth in the manufacturing sector. A long-delayed correction in the relative prices for energy and transport services also took hold in 2001, further slowing industrial growth.

Despite these problems, 4.9 percent GDP growth was reported for the first quarter of 2001, and gross output trends suggested a simi-

¹¹See Rutland, P., "Putin's Path to Power," Post-Soviet Affairs, Vol. 16, No. 4 (December 2000), pp. 313-354.

lar or slightly higher rate of growth for the second quarter as well. These are hopeful signs for Russia's economic prospects. But Russia's development during the 1990s suggested that a return to growth was at some point inevitable. Output trends in virtually all Eurasian transition economies—ranging from success stories like Poland and Estonia to laggards like Belarus and Tajikistan—show that a third, "recovery" phase eventually follows an initial period of macro-economic disorganization and contraction, and then a second period of stabilization and austerity. Russia's great misfortune was that the first two phases lasted nearly 10 years, whereas Poland managed to get through the first two phases of its economic transition in only 2 to 3 years.¹² The challenge now facing policymakers in Russia—as in many other Commonwealth of Independent States (CIS) economies—is to transform the recovery of 1999– 2000 into sustainable economic and human development.

RUSSIA'S EXTERNAL TRENDS

The dramatic improvement of Russia's external position during 1999–2000 is among the most hopeful post-August 1998 changes. The current account deficit reported at mid-1998 gave way to a surplus of nearly \$46 billion—nearly 19 percent of GDP—in 2000. Official reserves tripled from \$11 billion in March 1999 to \$35 billion as of mid-2001—more than double their previous high recorded in late 1997. Russia in 2001 returned to fully covering its external sovereign debt after rescheduling a portion of its Soviet-era obligations to the London Club of commercial creditors in 2000. In contrast to the 1990s, Moscow is not dependent on credits from multilateral or private lenders, and in contrast to 1997–1998 there is very little "hot money" in the country. If prior to August 1998 Russia was on IMF life support, Moscow was able to reduce its obligations to the Fund from \$19 billion in 1998 to around \$10 billion as of mid-2001.

To be sure, these improvements came at a high cost. The sharp reductions in household incomes and personal consumption recorded during 1998–1999, coupled with sharply higher unemployment, were the price Russian households paid for the restoration of external balance. Serendipity has also helped strengthen Russia's external position, in the form of sharply higher export prices in 2000 (when Russian received an estimated 33 percent terms of trade windfall). The extent of this improvement could face a sharp test in 2003, when Russia's sovereign foreign debt obligations are slated to rise from \$9 billion in 2000 to some \$19 billion.

Still, the unprecedented growth in reserves, the huge current account surplus, and the shift in Moscow's fiscal priorities in 2001 to allow for full coverage of external debt obligations, suggest that Russia's external position can weaken but still remain quite strong compared to pre-1998 levels. The risks associated with the debt spike in 2003 are being addressed by a host of policy measures, and others can be employed in the future. Moscow in late 2000 and the first half of 2001 used undisclosed amounts of surplus budget revenues to repurchase its heavily discounted sovereign debt. These

¹²Slay, B., "The Polish Economic Transition: Outcome and Lessons," Communist and Post-Communist Studies 33 (2000), pp. 49-70.

pre-payments reduce Russia's debt burden and make full coverage of future obligations less burdensome. Despite the sharp increase in debt-service payments in 2001, the CBR's foreign exchange reserves rose from \$28 billion at the end of 2000 to \$34 billion as of mid-2001. A joint government/CBR declaration on economic policy through 2004 released in May 2001 calls for reserves to grow to \$37 billion by the end of this year. This target seems eminently feasible—especially since reserves in mid-July had climbed close to \$36 billion. The CBR's target of \$45 billion in official reserves by the end of 2002 therefore seems quite attainable.

Russia's sovereign domestic debt at the end of 2000 stood at only \$20 billion, less than 10 percent of GDP. Strong ruble liquidity in the Russian financial system should allow Moscow to borrow domestically to repay foreign debt during 2001-2002. The Finance Ministry in June 2001 auctioned off 5 billion rubles' (\$175 million) worth of 3 year domestic debt instruments. This issue, which was snapped up by cash-rich Russian banks, marked the largest such sale of government debt since the August 1998 financial crisis. Should Russia's external position deteriorate due to a terms-oftrade shock, the Paris Club of sovereign creditors has declared its willingness to consider restructuring Russia's obligations. The IMF ostensibly stands ready to provide financing during 2002-2003 through a precautionary framework, should this prove necessary and if Moscow can meet its conditions. Additional revenues for foreign debt repayment can be raised from sales of precious metals, from issuing new eurobonds, or by arranging non-securitized loans.

But protection against a balance-of-payments crisis is not the same as sustainable growth. The commodity composition of Russian exports, Russia's problematic record with foreign investment, and continued large capital outflows are particularly worrisome in this respect. As Table 2 shows, fuels made up half of Russia's export basket in 2000—a higher share than in 1993. By contrast, machinery and equipment comprised only 11 percent of total exports in 2000, down from 14 percent in 1993. Attempts to parley Russia's comparative advantages in metallurgy, armaments, aerospace, and IT into a more competitive engineering sector have not achieved spectacular results. This contrasts sharply with the export-driven industrial restructuring that occurred in the leading Central European transition economies during the late 1990s.

The foreign direct investment (FDI) that has driven Central Europe's industrial modernization is conspicuously absent in Russia. Russia through 2000 had attracted \$23.5 billion in cumulative inward FDI, or \$160 on a per-capita basis. By way of comparison, per-capita inward FDI in Hungary—the leader among transition economies—was nearly \$2,500. The Czech Republic reported \$2,000 in per-capita FDI, Estonia registered \$1,500, and Poland had \$780. Among CIS countries, Russia's per-capita FDI compares quite unfavorably with Azerbaijan's \$620 and Kazakhstan's \$580. Even Armenia—a country with virtually no energy reserves, and which has faced an economic blockade for more than 10 years—reported higher per-capita cumulative FDI (\$170) through 2000 than Russia.¹³

¹³These data come from national bank publications or Web sites for the countries in question.

	1993	1994	1995	1996	1997	1998	1999	2000
Exports (in billions of dollars)	\$59	\$68	\$81	\$89	\$88	\$74	\$76	\$106
Percent share of fuel ex-								
ports in total	40	42	38	43	44	38	41	50
Imports (in billions of dollars)	44	51	61	69	73	59	40	45
Trade balance (in billions of								
dollars)	15	17	20	20	15	15	36	61
Percent share of GDP	8	6	6	5	4	6	19	24
Current account balance (in								
billions of dollars)	13	8	7	12	2 1	1	25	46
Percent share of GDP	7	3	2	3	1	0	13	19
Percent change in terms of								
trade	3	7	3	7	-3	-14	- 4	33
Inward FDI (in billions of dol-	-							
lars)	1	1	2	3	5	3	3	3
Net portfolio investment (in	-							
billions of dollars)	0	0	2	4	46	9	-1	-1
"Capital flight" (in billions of	-	-						
dollars) ¹	10	9	13	24	30	17	11	15
Percent share of GDP	5	3	4	6	7	6	6	6
Gross foreign debt (in billions	•	-		-				
of dollars)	121	132	143	152	167	191	181	172
Percent share of GDP	65	48	42	36	39	70	95	68
Official reserves, end year (in		10						
billions of dollars)	8	7	14	15	18	12	12	28
	ž	2	3	3	3	3	4	8
	2	6	Ŭ	Ũ	5	•	-	-
	169	79	40	39	8	- 32	- 29	22
Import coverage (months) Percent change in real effec- tive exchange rate ²	2 169	2 79	3 40	3 39	3	-		

TABLE 2.—EXTERNAL TRENDS, 1993–2000

¹Calculated as the sum of: (1) Russian purchases of foreign exchange; (2) export contracts that have been concluded but for which revenues have not been received; (3) import contracts that have been concluded but for which payment has not been made; and (4) net errors and omissions.

² Unweighted average of annual changes in real effective exchange rates vis-à-vis domestic, euroland, and dollar consumer and industrial producer price trends.

Russia's energy and non-ferrous metallurgical bounty suggests that industry, and energy and metals in particular, should have attracted the bulk of the country's inward FDI. This has not been the case. Only \$3.6 billion-one-sixth of Russia's inward FDI-went into the energy sector during 1993-2000. Virtually all of this went into crude oil extraction. Ferrous and non-ferrous metallurgy combined accounted for less than 2 percent of total FDI during this time, while virtually no FDI went into natural gas or electric power. The industrial sector as a whole attracted 47 percent of total FDI, with manufacturing accounting for 31 percent. The food processing branch was manufacturing's leading recipient, with 18 percent (\$4 billion) of total FDI. Since food processing accounts for at most 3 percent of Russian GDP, the sector's strong FDI performance is somewhat surprising. The explanation is largely political: foreign investment in food processing generally remains "below the radar screen." By contrast, Russian elites are generally unwilling to permit significant amounts of foreign capital into "strategic" sectors such as oil, gas, electric power, diamonds, nickel, and aluminum.

Rather than attracting foreign investment, Russia is instead becoming an important source of FDI for other CIS countries. The CBR registered some \$3.1 in outward FDI in 2000, which exceeded the \$2.7 billion in inward FDI reported. Cash-rich Russian oil companies took control of three of Ukraine's six major oil refineries during 1999–2000, while the Russian Aluminum conglomerate acquired Ukraine's Mykolayivsky Hlynozemny Zavod, Europe's largest alumina maker. Russian acquisitions were not limited to the CIS, however: Lukoil in late 2000 spent \$70 million to acquire Getty Oil's retail outlets in the United States. After recording large inflows during 1997–1998, net outflows were reported on Russia's portfolio investment balance during 1999–2000 as well.

Russia's strong economic recovery during 1999-2000 was paradoxically accompanied by a steep acceleration in capital outflows. After posting positive balances during 1995, 1997 and 1998, Russia's financial account swing heavily into deficit, posting net outflows of \$17 billion in 1999 and \$48 billion in 2000. But in many respects, trends on Russia's financial account offer a misleading guide to capital flows. For one thing, substantial negative sums are reported every year on "net errors and omissions." ' During 1995– 2000, this balance was fairly stable, averaging-\$7 billion annually. These large negative balances are commonly viewed as indicators of illicit capital flight and as such they should be considered part of Russia's net outflows. But not all transactions reported as net outflows on the financial account reflect transfers of assets from Russia to other countries. Some reflect portfolio management choices by Russian households and companies. Decisions to increase dollar cash holdings (for savings or working capital) in the informal sector, at the expense of ruble assets in official bank accounts, boost net outflows reported on the financial account even though these funds do not leave Russia. Likewise, export receipts that are left in off-shore accounts in order to finance imports may appear on the balance of payments as a capital outflow, even though they function as working capital.

Russia's external accounts do not distinguish "capital flight" that reflects illicit, speculative, or hedging purposes from "normal," transactions-based capital outflows reflecting the liquidation of Russian assets held by non-residents. A commonly used measure of capital flight in the Russian case is the sum of: (1) Russian purchases of foreign exchange; (2) export contracts that have been concluded but for which revenues have not been received; (3) import contracts that have been concluded but for which payment has not been made; and (4) net errors and omissions. This measure shows Russian capital flight falling from \$30 billion in 1997 to \$11 billion during 1999, before rising to \$15 billion in 2000. As a share of dollar GDP, this measure of capital flight has remained at 6 to 7 percent ever since 1996.

An alternative perspective on Russian capital flight comes from comparing gross capital inflows (changes in the gross liabilities recorded on the capital and financial accounts) and outflows (changes in the gross assets in Russia's capital and financial accounts, plus net errors and omissions). Gross outflows as a share of GDP rose from 9 percent during 1996–1997 to 13 percent in 1999, before dropping back to 12 percent in 2000. By contrast, gross capital inflows essentially dried up after August 1998, falling from 9 percent of GDP in 1997 to below 1 percent in 1999-2000. This suggests that the sharp acceleration in net outflows on the financial account during 1999-2000 were not due primarily to capital outflows per se, but rather to foreign investors' post-1998 aversion to Russia.

Russia's poor track record on attracting FDI may not last. Foreign investment in transition economies typically lags a few years behind recoveries in GDP and domestic investment. Still, a comparative assessment of Russia's FDI performance to date can not help but cast a shadow over future prospects for sustainable growth. Making Russia more attractive to investors—foreign and domestic alike—requires significant reforms in the financial and legal systems.

RUSSIA'S UNFINISHED REFORM AGENDA

Arguments about links between growth and market reform in transition economies-particularly in Russia-often reflect two implicit propositions: (1) the far-reaching institutional reforms needed to create a well-functioning market economy are necessary and sufficient conditions for growth; and (2) transition economies' shortterm growth prospects are closely tied to progress in market reform. The record of the 1990s shows that both assertions are at the very least exaggerations. Instead, the liberalization of prices and commerce, the creation of stable monetary, fiscal, and exchange rate environments, and some measure of privatization, are generally sufficient to create the "critical mass" of institutional and policy changes needed to end the transition recession.¹⁴ Albania, for example, recorded annual GDP growth during 1993-1996 and 1998-2000 of 8 percent or above, despite a large unfinished reform agenda. Azerbaijan's growth performance during the second half of the 1990s was far superior to the Czech Republic's, despite the fact that market reforms were much farther advanced in the latter country than in the former. Many factors besides the extent and pace of market reforms—including location, size, resource endowment, political stability, economic policies, and state capacity-have an important impact on growth in economies-transition or otherwise.

Still, there can be little doubt that progress in market reform understood as measures to remove barriers or threats to growth that were inherited from the Soviet-type system, or which appeared during the course of transition—has a key influence on prospects for sustainable growth and development in transition economies. If banks do not become effective financial intermediaries, capital will continue to be poorly mobilized and allocated. If infrastructure monopolies do not face competition or charge prices that cover their costs, the provision of basic public services can come under threat. If investors can not rely on courts to protect and clarify property rights, some investments will not be made. If bureaucratic connections are more important for entrepreneurs than competitive ad-

¹⁴Balcerowicz, L., "The Interplay Between Economic and Political Transition," in Zecchini, S., ed., Lessons From Economic Transition: Central and Eastern Europe in the 1990s, 1995, pp. 153-167.

vantage, companies will continue to invest in "relational capital" rather than in fixed assets. All of these problems stand in the way of sustainable growth, and—as the Gref program acknowledges— Russia suffers from all of them.

During Boris Yeltsin's second term, initiatives to address these problems made little headway. Upon becoming president, Vladimir Putin promised rapid and decisive steps in these areas. Some progress was made in Putin's first year, and as of mid-2001 the government had succeeded in pushing a raft of market reform initiatives through parliament. Still, much remained to be done, and many of the salient results anticipated from these changes will take decades to materialize.

REFORM OF INFRASTRUCTURE SECTORS

Thousands of urban dwellers in Siberia and the Far East spent much of winter 2000-2001 without adequate supplies of heat and electricity. In many places Russia's infrastructure for heat, power, and communal services simply buckled. The sharp declines in human welfare stemming from these problems prevented many Russians from experiencing the benefits of the strong economic growth recorded in 2000. While a number of factors—including a particularly cold winter and ineptitude on the part of the local authorities-contributed to the deep freeze, years of below-cost pricing and mismanagement by the Unified Energy Systems (UES) national electricity company and its subsidiaries played a critical role in this debacle. Although Russia's gas infrastructure remains relatively free of such problems, production at Gazprom-Russia's gas monopoly—dropped some 5 percent during 1999–2000, and the company had to import significant quantities of gas from Turkmenistan in order to meet its supply commitments. UES and Gazprom management argue that tens of billions of dollars must be invested in these sectors in order to maintain and expand output levels in the future. This seems to particularly be the case for UES, since fixed investment in the electricity sector dropped by some 30 percent during 1997-2000. Similar claims are made by municipal administrations, who point out that household charges for rent, sewer, and water cover less than half of the costs of providing these services. And Railroad Ministry officials argue that billions more must be invested in Russia's rail infrastructure, in order to prevent the further decapitalization of Russia's largest and most important transport network.

According to the Gref program, the government intends to deal with these problems by further marketizing these sectors, by: (1) reducing administrative barriers, so as to promote increased competition and entry by new suppliers; (2) increasing relative prices in these sectors, in order to bring tariffs closer to full cost-recovery levels; (3) selling off state monopoly assets to private (and potentially foreign) investors; (4) introducing compensating payments for those households (and other users) whose welfare is most threatened by step (2); and (5) introducing tighter controls over those monopolistic activities remaining under state control, via: (a) better regulation of monopoly pricing; and (b) more active control by federal bodies—acting in their capacity as owners—over management in these sectors.

As of mid-2001, measures embodying these themes had been approved for implementation in the electricity, gas, rail, housing, and communal service sectors. To the surprise of many observers, Rem Vyakhirev was replaced as Gazprom CEO by Putin loyalist Aleksei Miller in May. Miller promised to halt the large-scale asset stripping at Gazprom that allegedly occurred during Vyakhirev's tenure. He also promised to afford independent gas producers access to Gazprom's domestic pipeline network, thereby increasing other companies' abilities to bring gas to market. After nearly a year of haggling, UES CEO Anatoly Chubais in July 2001 struck a deal with minority shareholders that cleared away some obstacles to the sale of UES assets as part of the company's competitive restructuring. Economics Minister Gref and Railroad Minister Nikolai Aksyonenko by mid-year seemed to have agreed on a compromise rail restructuring program that would divest the Railroad Ministry of most of its commercial assets (i.e., rolling stock) and liberalize the determination of rail tariffs and route structures. And the government in August approved legislation to create an omnibus regulatory agency, in which the regulation of monopoly price setting would be centralized and (presumably) depoliticized.

These developments, combined with concurrent parliamentary approval of other measures—including passage of legislation on pension reform, the liberalization of the sale of non-agricultural land, reductions in the number of burdensome licenses needed for entrepreneurial activity, and banking reform—amounted to Rus-sia's most impressive flurry of market reform activity in nearly a decade. If implemented as planned, these measures could significantly improve prospects for sustainable economic growth. But political and economic factors are likely to constrain the government's ability to implement these measures as planned. For one thing, the sharp increases needed to quickly bring tariffs up to cost-recovery levels are seen as too painful socially, particularly in light of Rus-sia's still-high (20 percent and above) inflation rates and the parliamentary and presidential elections scheduled for 2003 and 2004, respectively. The bulk of these tariff hikes are therefore slated to be postponed until after 2004. But new suppliers are unlikely to enter these markets in significant numbers as long as (relatively) low prices are maintained. Sales of assets in firms whose prices are set below costs can be rightly seen as a asset stripping—as UES minority shareholders frequently pointed out when explaining their opposition to CEO Chubais' competitive restructuring program. In the meanwhile, the continued absence of competition from new suppliers is likely to result in higher costs and tariff hikes than would otherwise be the case. Finally, the difficulties Russia's ponderous social welfare bureaucracies would face in identifying and subsidizing those households most at risk from the tariff hikes are unlikely to be anything short of immense.

FINANCIAL SYSTEM

Russia's financial system has recovered from the crash of August 1998—after a fashion. Economic growth, tighter fiscal policies, and improved enterprise liquidity have reduced arrears and the use of monetary surrogates. More retained earnings helped finance investment growth. A consolidation wave based in the oil and metallurgical sectors that began in 1999 suggests that some of Russia's largest companies are becoming more interested in corporate governance. On the other hand, the government and CBR have done little to restructure commercial banks or improve the foreign investment environment. Financial sector privatization faces stiff opposition from political and business elites. And the restructuring driven by oil and metallurgical companies may do little more than create a new class of oligarchs that do not differ fundamentally from their predecessors.

The best news in the financial sector lies in the shrinkage of Russia's "virtual economy."¹⁵ After soaring in 1998, total arrears (measured as the sum of wage and general government tax arrears plus overdue enterprise payables to banks and other enterprises) dropped by 55 percent during 1999-2000. In real terms, arrears fell by three quarters during this time. The ratio of total arrears to nominal GDP, which averaged 0.33 during 1998, fell to 0.07 in 2000. Most of this progress came from sharp reductions in wage arrears, which constitute more than 90 percent of the total. Wage arrears shrank 77 percent in real terms during 1999-2000, as publicsector wage arrears (which are now less than a fifth of total wage arrears) fell 80 percent. While overdue enterprise payables to other companies rose in nominal terms during 1999–2000, their real value dropped some 38 percent. Similar trends are apparent in the use of monetary surrogates-barter, promissory notes, and mutual offsets of liabilities-accepted as "payment" by companies. Only 31 percent of total payments collected by Russia's largest companies were settled via these surrogates in 2000, down from 51 percent in 1999 and 63 percent in 1998. The 8 percent increase in the real value of the stock of tax arrears to the general government in 2000 was the only significant exception to this trend.

Positive developments occurred in terms of corporate governance as well. Minority shareholders, led by former Finance Minister Boris Fyodorov who represents minority shareholders on the UES. Gazprom, and Sberbank boards of directors, are increasingly wellorganized, and their demands for corporate transparency and accountability are increasingly difficult to dismiss. Minority share-holders in UES ultimately forced management to adopt a more investor-friendly version of the company's original competitive restructuring program. Fyodorov's campaign against Gazprom management helped precipitate Vyakhirev's removal, and tipped the balance toward removing some of the controls over foreign purchases of Gazprom shares. Although the legal framework (especially Russia's under-capitalized court system) continues to prevent effective capital market regulation, the Federal Securities Commission (FSC) intervened on behalf of minority shareholders against the managements of UES, Gazprom, and Norilsk Nickel. The FSC also promoted discussion and (in some cases) the adoption of corporate governance codes in some of Russia's largest companies.

More important corporate governance changes could be occurring as a result of consolidation trends within Russian industry. Cash-

¹⁵ For more on the "virtual economy," see Gaddy, C. and B.W. Ickes, "An Accounting Model of the Virtual Economy in Russia," *Post-Soviet Geography and Economics*, Vol. 40, No. 2, 1999, pp. 79–97; and Slay, B., "A Comment on the Virtual Economy," *Post-Soviet Geography and Economics*, Vol. 40, No. 2, 1999, pp. 110–113.

rich oil, metallurgical, and other companies are increasingly investing big money in productive assets, and are increasingly worried about getting their money's worth from their investments. Lukoil's 1999 \$300 million acquisition of Komitek, and the Tyumen Oil Company's (TNK's) \$1 billion purchase of Onako in September 2000, are the most visible results of this trend. In food processing, Wimm Bill Dann is using cash generated from dairy products to diversify into breweries. Severstal, Russia's largest and one of its best-run ferrous metallurgical companies, has acquired stakes in a number of automotive producers. Open-market purchases last year by Siberian Aluminium (Sibal) of equity in Nizhny Novgorod's Gorkovsky Avtomobilny Zavod (GAZ)—Russia's second largest automobile company—set off a bidding war for GAZ stock and ended with Sibal's acquisition of a controlling stake in the company.

These acquisitions have an international dimension as well. By the end of last year, Russian companies had taken control of three of Ukraine's six major oil refineries: Lukoil owned the Odessa refinery; Tatneft was running the UkrTatnafta joint venture at Kremenchug; while TNK owned the Lisichansk refinery. Thanks to these investments, Russian companies supplied half of Ukraine's refined oil products last year. The Ukrainian subsidiary of the Russian Aluminum conglomerate (Rusal—which is itself the product of consolidation trends within the industry) spent at least \$130 million during 2000 to acquire a controlling stake in Ukraine's Mykolayivsky Hlynozemny Zavod, Europe's largest alumina maker. Russian acquisitions were not limited to the CIS, however: Lukoil in late 2000 spent \$70 million to acquire Getty Oil's retail outlets in the United States.

This corporate shopping spree has many desirable properties. First, acquirers like Severstal and Rusal now have an interest in better corporate governance, in order to protect the value of their purchases. Second, in contrast to the consolidation that followed Russia's first privatization wave in the early 1990s, the role of state agencies and Russian banks in these acquisitions is very small. These purchases are the result of hardheaded business calculations, and do not represent the misappropriation of other people's money. Third, poorly managed companies and assets are generally being acquired by better-managed companies. This should ultimately boost efficiency. On the other hand, much of this consolidation violates the spirit (if not the letter) of Russian competition and securities law. Political considerations may be less important than in previous consolidation waves, but well-connected oligarchs like Roman Abramovich (oil, aluminum), Anatoly Chubais (electricity), and Oleg Deripasko (aluminum) continue to use their influence in the government, the courts, and the media to advance their corporate and personal interests. Russia's commercial playing field may be globalizing, but it is not necessarily becoming more level. The August 1998 financial crash left most of Russia's large, pri-

The August 1998 financial crash left most of Russia's large, privately owned banks insolvent. Their owners took advantage of Russia's unclear regulatory framework and transferred assets to other "bridge" banks, in the process defrauding creditors, depositors, and minority shareholders. Rather than seeking their prosecution, the CBR was more likely to refinance the oligarchs' new bridge banks. Since then, the CBR, the courts, and parliament have generally been uninterested in closing the regulatory loopholes that facilitated these scams. Russian households and companies therefore use the banks as a payments system, but continue to save and hold working capital elsewhere.

The banking system has in some respects recovered from August 1998. Bank exposure to foreign-exchange risk continues to fall: the ratio of commercial bank foreign-currency assets to liabilities rose from 0.8 during 1997–1998 to 2.0 in 2000. Total commercial banking assets rose from a low of \$49.1 billion in December 1998 to \$83.3 billion as of December 2000. "Overdue" bank credits at the end of 2000 represented only 4 percent of total bank credits, down from 11 percent in early 1999. Banks are now lending to companies: credits to enterprises grew by some 11 percent in real terms in 2000, and this growth has continued into 2001. The authorities in mid-2001 also succeeded in passing bank reform legislation that had been long sought by the IMF, directed at tightening banking supervision and cracking down on money laundering.

But there is little else to cheer about in the Russian banking sector. Despite the growth in total banking assets, the 0.34 ratio of banking assets to nominal GDP at the end of 2000 was actually below 1998's end-year ratio of 0.38. The absence of significant improvement in commercial bank transparency and supervision makes reported improvements in the quality of loan portfolios difficult to interpret. Key perpetrators of the August 1998 developments continue to play important roles in the Russian banking system. The Sberbank state savings bank seems to be the sole institution to enjoy minimal confidence on the part of the population. Thanks to the fact that its savings accounts are guaranteed by the federal government, Sberbank at the end of 2000 held some 40 million household savings accounts (87 percent of the total deposit base).

These circumstances make it difficult to be optimistic about the consequences of the rapid growth in bank lending to enterprises that took hold during 2000–2001. This growth was extremely rapid after mid-2000, averaging 72 percent in nominal terms and 25 percent in real terms. Much of this lending is now being done by Sberbank—its share of total bank credits to enterprises rose to 37 percent in 2000—and is occurring at negative real interest rates. When adjusted for changes in the industrial producer price index, the interest rate on 12 month commercial credits averaged—24 percent in 2000, and—19 percent in 1999.

Since 60 percent of Sberbank's equity is held by the CBR, and since neither institution is a paragon of transparency, it is difficult to assess the consequences of Sberbank's lending offensive. (The CBR's latest target date for completing the commercial banks' transition to international accounting standards is 2006.) Its monopsonistic position on the household savings market (which affords Sberbank a healthy spread on its commercial loans) and the reported declines in non-performing loans suggest that Sberbank's cash flow and profitability should be strong and improving. The bank's preliminary 2000 financial statement, which was computed under Russian accounting standards and released in February 2001, seems to confirm this: profits were reported up 63 percent from a year earlier. But Sberbank's management also announced in February that the bank's capital-adequacy ratio had dropped below the legally mandated 10 percent, necessitating a new share issue.

While its political and economic moxie make Sberbank's bankruptcy highly unlikely, pressures on bank managers to "lend to the real sector" combined with its opaque regulatory and ownership framework make Sberbank a strong candidate for a future financial crisis. Since its 40 million savings deposits are de facto liabilities of the Russian Government, a run on Sberbank could be tantamount to a run on the federal budget. Experience in other transition economies shows that poorly regulated state-owned banking systems are prodigious generators of financial crises. While the timing and magnitude of Russia's next banking crisis can not be predicted, the probability of its occurrence is high.

The experience of other transition economies shows that the sale of leading commercial banks to strategic investors is the only viable solution to the problems. Only multinational banks possess the resources needed to straighten out messes like Russia's and the size needed to resist political pressures to lend. The banking reform programs announced by the government and CBR during 2000-2001 generally ignore these lessons, however, and instead emphasize continued state ownership over Sberbank and Russia's other large commercial banks (the Vneshekonom and Vneshtorg foreign trade banks, and the Industrial, Agricultural, and Regional Development Banks). Federal government control over these institutions is to be attained through the acquisition of 75 percent equity stakes, large enough to prevent minority owners from assembling blocking (25 percent plus one) stakes. Funds to purchase these stakes are to be raised by selling off the state's minority shareholdings in up to 500 smaller banks.

In contrast to the dramatic post-1998 changes apparent in fiscal policy and foreign debt management, or the (perhaps excessively) ambitious market reform agenda apparent in the infrastructure sectors, Russian policies toward the financial sector are characterized by benign neglect. The lending campaign conducted by state banks, the continued sorry state of bank supervision, the official disinterest in improving corporate disclosure and transparency-all this has two strongly negative implications for Russia's growth prospects. First, it ensures that fixed investment must continue to be financed primarily by retained earnings. In part for this reason, investment growth had already begun to slow in 2001, as enterprise profits (reported under Russian accounting standards) actually fell in real terms during the first half of 2001. After soaring 18 percent in 2000, year-on-year growth in gross fixed investment had dropped to around 5 percent by mid-2001. Second, the surging growth in lending to companies by state-owned banks during 2000-2001 suggests that Russia's next banking crisis-if and when it occurs-will have a significant fiscal dimension. In light of Russia's heavy debt-service burden during 2003 and beyond, the implications of such a crisis can not be easily dismissed. The contingent fiscal liabilities implied by such a banking crisis could undo much of the post-1998 progress made in achieving fiscal balance, and could lead to heightened capital outflows as well. And the unwillingness to open up the financial sector (and other sectors) to foreign investment and competition constitutes a major obstacle to Russia's timely accession to the World Trade Organization.

Russia's unfinished reform agenda extends well beyond the financial sector and the infrastructure monopolies. The creation of an appropriate legal framework for the long-delayed restructuring of the agricultural sector (including passage of legislation to protect and standardize agricultural land ownership, and to govern the bankruptcy of Soviet-era state and collective farms), the modernization of Russia's judicial system, the rationalization of Russia's quasi-dysfunctional fiscal federalism—these are all multi-year undertakings fraught with grave political, economic, and social risks. To its credit, the government has pledged to address these barriers to growth. But should these attempts fail—or should the implementation of its reform programs stretch out indefinitely—its divergences from best international practices will continue to burden Russia's economic prospects.

LEADING INDICATORS FOR THE FUTURE OF RUSSIA'S TRANSITION

Russian "exceptionalists" often reject the utility of comparisons with other countries, claiming that Russia is "different." While such claims can of course be made for all countries, Russia as a transition economy does stand out in a number of respects. Its immense size and ethno-regional diversity, its scientific potential, its energy/natural resource base, the legacy of the large Soviet-era military-industrial complex, Russia's uncertain Eurasian geopolitical status, its federal nature, and (since 1998) its relative insulation from the international capital markets—the combination of these features does give Russia a somewhat unique profile among transition economies.

This combination suggests that not every lesson from the more successful Central European and Baltic transition economies is relevant for Russia. For example, membership in the European Union—the prospects for which have been a driving force behind the leading transition economies' success in introducing best international economic practices-is most unlikely to be an option for Russia in the foreseeable future. As such, the justification for introducing these changes must be sought elsewhere. Its characteristics as a transition economy-particularly the commodity composition of its exports-also suggest that Russia's short-term economic performance is likely to be less directly correlated with economic policies and reforms than other countries. Movements in world energy, metals, and raw materials prices in particular are likely to have a much greater short-term effect on economic performance in Russia than in most other transition economies-despite Russia's larger size and nominally smaller "openness."

Trends in a number of key indicators (besides movement in real output and incomes) are likely to be particularly revealing in demonstrating whether Russia is making progress toward sustainable growth. These include the following:

BUSINESS FORMATION

The number of registered Russian companies per thousand inhabitants rose to 23 in 2000, compared to 1995's 15 per thousand figure. While this remains well below Central European levels, it also shows the extent to which Russian businesses and households continue to operate below the authorities' radar screens. Moreover, while the numbers of large and medium-sized firms continued to grow in 2000, the creation of small enterprises seemed to come to a standstill. Continuing this growth—which requires reducing the administrative and tax burden on enterprises and households—will be an important indicator (and source) of sustainable growth. Continuing stagnation in small business formation by contrast would be a very bad sign.

LABOR FORCE PARTICIPATION RATES

During 1998–2000 Russia was able to offset accelerating population declines by boosting crude labor force participation rates (the labor force divided by the population) from 49.4 percent to above 50 percent. Along with the sharp declines in unemployment recorded during this time (from a high of 14.1 percent in February 1999 to around 9.5 percent during the first half of 2001), rising participation rates made possible the employment growth needed to fuel Russia's expansion. Since Russia's population is expected to shrink significantly during the next 15 years, prolonging the economic expansion will require continued increases in participation rates. This need not prove impossible: the crude labor force participation rate was close to 51 percent in 1993, and was much higher during the Soviet period. But boosting labor force participation will require further reductions in the tax and regulatory burden on enterprises and households, in order to strengthen incentives to move out of the grey sector.

COMMODITY COMPOSITION OF EXPORTS

The dominant role of energy, metals, and raw materials in Russia's export basket makes Russia's short-term economic prospects hostage to world price trends. The leading transition economies have succeeded in reducing this vulnerability by significantly increasing the share of engineering products—particularly machinery and equipment—in total exports. Sustainable growth in Russia is unlikely to occur if the share of primary products in total exports does not shrink. A "petro state" afflicted with Dutch disease and a dual economy would instead be the more likely outcome.

FDI LEVELS AND COMPOSITION

Industrial restructuring in the leading transition economies has been driven by FDI into their manufacturing sectors. Long-term improvements in Russia's industrial and export competitiveness are unlikely if FDI continues to remain at its anemic levels, and remains concentrated in oil extraction and food processing.

THE "PUTIN FACTOR"

President Vladimir Putin's robust support for market reform initiatives is one of the most pleasant surprises of the past 2 years. But this support—coupled as it is with his initiatives to strengthen the role of the Kremlin and security apparatus in Russian politics-is a double-edged sword. The successful economic transitions in Central Europe and the Baltics correlate unambiguously with democratization. demilitarization, the flowering of nongovernmental organizations (NGOs), and through this progress in establishing the rule of law. The creation of the rule of law in Russia that Putin's Kremlin claims to seek is inconsistent with the authorities' hostility-if not outright persecution-of NGOs, and with their profound suspicion of independent media and environmental activism. The perilous state of Russia's environmental and demographic balance, as well as attempts at reducing excessive administrative discretion and increasing public accountability, are poorly served by such hostility. The same can be said for Putin's bloody military solution to Russia's "Chechen problem"-a problem that ultimately does not have a military solution, short of a genocide directed against a people (the Chechens) that also happen to be citizens of the Russian Federation.

Putin's rule represents an attempt at strengthening order and markets at the expense of freedom. This combination is troubling, and not only because it contains strongly conflicting elements. Despite his support for market reform to date, Putin is not an economist, and as such he does not seem to value market reforms per se. Putin instead sees them as a means to achieving certain ends: namely, the rebuilding of Russia's position on the world stage, and sustained improvements in Russians' living standards. Should Putin become convinced that other economic policies are more conducive to meeting these ends, he could attempt to supplement or replace them with policies that deepen, rather than narrow, the gaps between Russian and best international economic practices. In this sense, Vladimir Putin's continuing evolution is itself a key indicator of Russia's progress toward sustainable growth.

UNLOCKING ECONOMIC GROWTH IN RUSSIA By Vincent Palmeda and Bill Lewis¹

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SUMMARY

Russia is in a dire economic situation. Unlike some other reformed ex-Communist economies—Poland or Hungary—where economic performance sagged in the early years of the reform, but surged as reforms took hold, Russia experienced only decline to 1999. Gross domestic product (GDP) per capita has fallen by as much as 40 percent since 1992 and is now at only 15 percent of the U.S. level. Unemployment topped 12 percent, and many more people are now engaged in subsistence forms of employment.

In an attempt to understand why economic reform has failed in Russia, we looked at the performance of ten representative sectors—software, steel, general merchandise and food retailing, hotels, oil, housing construction, cement, confectionery, and dairy—

¹Vincent Palmeda is the principal author of the McKinsey Global Institute study on Russia. Vincent Palmeda holds an engineering degree from Ecole Nationale des Ponts et Chaussées and an MBA from Northwestern University (Kellogg) in Chicago. Dr. Bill Lewis is the Director of the McKinsey Global Institute. His doctorate is in theoretical physics from Oxford.

and related their performance to that of the overall Russian economy. We also gauged the productivity of those industries against best practices around the world, determined why Russian companies lagged best practice, and identified what the government should do in priority to provide them with the means and incentives to improve their operational performance and expand. We believe that this micro-economic analysis is the only way to build a firm foundation for future economic policies and economic growth.

Our primary findings are:

Overall labor productivity is indeed very low. Our ten industries averaged only 19 percent of U.S. productivity levels, with software leading the group at 38 percent and cement at only 7 percent.

Soviet legacy assets-which were roughly 30 percent as productive as U.S. assets in 1992-have had their productivity halved. This precipitous drop results from the fact that industries have not restructured despite sharp drops in demand from Russian consumers who now have access to products from around the world. Roughly 25 percent of Russia industrial capacity is currently in sub-scale or obsolete assets, which are still operating and fully staffed, but should be shut down.

Assets added since 1992 are surprisingly unproductive. Almost no new capacity is being added in the oil and consumer goods industries. the sectors of the economy with the greatest potential for fast performance improvement. New assets are either well below efficient scale—as in housing construction and software, or undercapitalized—as in open-air markets.

Despite high competitive intensity, the competition is unequal and it causes low productivity. Price decontrol and privatization did successfully stimulate competition. Paradoxically, however, in Russia the more productive companies are often the least profitable. Thus, more productive companies are not gaining market share and not pushing less productive firms out.

In nine out of the ten sectors, the direct cause of low economic performance is market distortions that prevent equal competition. The distortions come from attempts to address social concerns, corrupt practices, and lack of information.

In the manufacturing sectors, regional governments channel implicit federal subsidies to unproductive companies. Such subsidies take the form of lower tax and energy payments, and are allegedly intended to prevent companies from shutting down and laying off employees. This puts potentially productive companies at a cost disadvantage, blocking investments and growth on their part.

In the service sectors, where employment should grow, investments by efficient companies are discouraged by the presence of well connected unproductive incumbents who benefit from favorable regulations, weak law enforcement, and privileged access to land or government procurements.

Furthermore, these sector level market distortions are key contributors to macro-economic instability, because they reduce government revenues and increase its expenditures. Macro-economic instability itself is another important deterrent to investments.

We found the other often mentioned reasons for Russia's economic problems to play a much smaller role (e.g., poor corporate governance and lack of a transport infrastructure).

There are no natural or economic obstacles to high economic growth in Russia, and the current situation need not be tolerated. Russia can rely on a skilled and inexpensive labor force, large and economically attractive energy reserves, and surprisingly, much spare capacity in potentially productive industrial assets. Explicit and targeted social policies combined with balanced and enforceable regulations (mostly at the sector level, involving taxes, energy, land and red tape) would remove the most important market distortions. The payoff would be strong economic growth in Russia. The findings and conclusions of this report have been largely

published by the Russian and international media. as well as extensively discussed with the current Russian Government.

Although economic reforms have accelerated in the last year in Russia and economic performance has been markedly better since the publication of our report in October 1999, we believe that its main findings and conclusions still hold true.²

First, Russia's strong economic performance in 2000 can be largely attributed to a rebound following the 1998 financial crisis and subsequent devaluation of the ruble. Good economic performance was further helped by the rapid rise in oil and gas prices. Furthermore, productivity growth (once adjusted for the cyclical increase in capacity utilization) and business investments, notably from foreign companies, are still at levels way below Russia's potential.

Second, despite a sound economic plan, most of the key necessary economic reforms outlined in our report have yet to be drafted, passed through the Duma and/or enforced. Nevertheless, there have been some promising starts with the tax and land codes as well as with the reform plans of some crucial sectors such as telecom, railways and electricity.

The U.S. Congress has a crucial role to play in helping Russia to quickly join the ranks of the advanced democracies, and we hope that it will find our report to be a useful contribution to that aim.

These findings are discussed in greater detail in the following sections.

INTRODUCTION

This paper is the executive summary of a year-long project by the McKinsey Global Institute, working closely with members of the McKinsey's Moscow office, on the economic performance of Russia.³ This report was first published In October 1999, but we believe that its main findings and conclusions still apply to the Russian economy of the year 2001.

McKinsey undertook this project as an important step in developing our understanding of how the global economy is working. The failure of the reforms undertaken in Russia in the early 1990s to generate good economic performance is one of the highest priority problems in the global economy. We wanted to find out whether the reforms were causing change at the micro-level that would eventually yield good economic performance. If not, we wanted to find out why reforms had failed and how to improve the situation. We have

²Bill Lewis, Director of the McKinsey Global Institute, reviewed the earlier detailed report and concluded that in June 2001 the main findings and conclusions still remain. ³The full report (more than 400 pages) can be accessed on the Internet (www.mckinsey.com) or obtained by faxing request to the Institute in Washington, DC (1-202-662-3218).

undertaken this work as an investment by McKinsey in knowledge building, we would emphasize that the work is independent and has not been commissioned or sponsored in any way by any business, governmental or other institution.

This project builds upon the previous work of the McKinsey Global Institute in assessing economic performance among the leading economies of the world. Our earlier reports addressed separately labor and capital productivity and employment, the fundamental components of economic performance. Later, we combined these components to address the overall performance of Sweden, Australia, France, Germany, The Netherlands, Brazil, Korea, the United Kingdom, Poland, Japan and India.

As before the core of our work is conducting sector case studies to measure differences in productivity, output and employment performance across countries and to determine the reasons for the differences. We studied in detail ten representative economic sectors. Specifically, we examined why Russian companies are not restructuring and expanding faster, and why foreign companies are not investing more in Russia. This comprehensive micro-economic approach reveals the relative importance of the various problems, which plague the Russian economy and thus helps set priorities among the long list of economic policy changes recommended from all directions.

In conducting the project, we have drawn on the counsel of an external Advisory Committee. Chaired by Professor Robert Solow of the Massachusetts Institute of Technology, it included Professor Olivier Blanchard, also from the Massachusetts Institute of Technology, Professor Richard Cooper of Harvard University and Ted Hall, Chairman of the McKinsey Global Institute Advisory Board.

THE PRODUCTIVITY PROBLEM

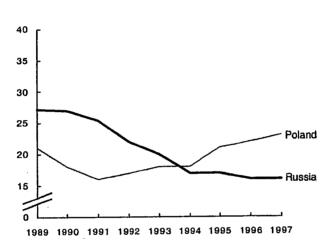
Market reforms so far have failed to improve Russia's economic performance. Although the efficiency (productivity) with which companies produced goods and services in the Soviet era was already low compared to the best practice in the world, it has gotten worse since the reforms started. By understanding the underlying operational sources of the productivity gaps between Russian companies and global best practice, we are able to better understand which factors in the external (regulatory) environment are causing managers and investors not to make progress toward closing the gaps.

The size and nature of the productivity gaps are discussed below in this section, the main external factors stopping productivity growth, and consequently economic growth, are discussed in the next section.

How Does Low Productivity Lead to Low Standards of Living

The material standard of living in a country is determined by the amount of goods and services produced by the economy, referred to as GDP. Russia's GDP per capita is only at 15 percent of the U.S. level. It is also falling behind many of the ex-Communist countries, notably Poland, which, unlike Russia, has been rebounding economically since 1992 (Figure 1). The GDP (output) level is determined by the combination of two factors: the amount of hours worked by the people (labor inputs) multiplied by the amount of goods and services produced by an average hour of work (labor productivity). Because people in all countries work to make ends meet, labor inputs tend to be at similar levels. In Russia, for example, despite high unemployment, labor inputs per capita are still at more than 80 percent of the U.S. level. Thus, labor productivity ultimately becomes the determinant of economic performance. Russia's labor productivity is very low at only 19 percent of the U.S. level in 1997, down from around 30 percent in 1991 (Figure 2).

FIGURE 1.-GDP PER CAPITA AT PURCHASING POWER PARITY



[United States = 100 in 1995]

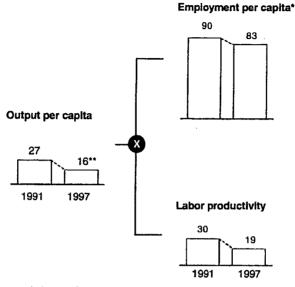
Source: Goskomstat, Polish Central Statistical Office; Organization for Economic Cooperation and Development (OECD), Economist Intelligence Unit (EIU).

LOW PRODUCTIVITY PERFORMANCE IN ALL PARTS OF THE RUSSIAN ECONOMY

In this study, we have examined in detail ten economic sectors which cut across manufacturing and services and together represent over 15 percent of total employment in Russia: steel, cement, oil, dairy, confectionery, residential construction, food retailing, general merchandising, hotels, and software. Agriculture and government sectors, like defense, were not included in the scope of the project. Our cases cover both heavy and light manufacturing, the large core domestic sectors of construction and retailing, and software, the largest of the new, high technology service sectors.

FIGURE 2.—RUSSIA'S GDP PER CAPITA

[United States = 100 in 1995]



* Based on hours worked per capita.

** Fifteen percent in 1998.

Source: Goskomstat; EIU; Bureau of Economic Analysis; McKinsey analysis.

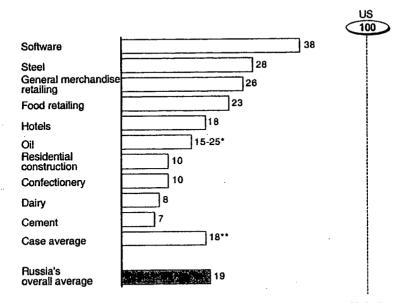
In each of these selected sectors we have compared the performance of companies operating in Russia (both Russian and foreign) with those in the United States, selected as the benchmark country.

Our study reveals huge productivity gaps in all sectors of the Russian economy, whose productivity ranges from 7 percent of the U.S. level in cement to 38 percent in the new software sector (Figure 3). Moreover, in the sectors we studied, a long tail of unproductive enterprises co-existed with a few relatively productive ones, dragging down the overall productivity (Figure 4).

Over the last 8 years, labor productivity in the old assets (put in place before 1992) fell from 30 percent to 17 percent of the U.S. level. This decline was not compensated for by a rapid growth of a new and productive economy. New assets (put in place since 1992) employ less than 10 percent of the Russian workforce and, surprisingly, achieve only 30 percent of the U.S. productivity level on average (Figure 5).

FIGURE 3.---AVERAGE LABOR PRODUCTIVITY BY SECTOR. RUSSIA 1997

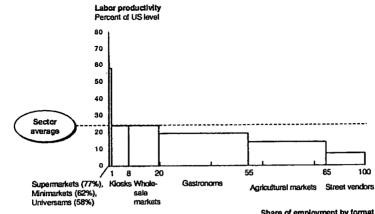
[United States = 100 in 1995]



* Russia's actual labor productivity is 25, but only 15 if measured on a geology-comparable basis. ** Weighted by employment share.

Source: McKinsey analysis.

FIGURE 4.—EMPLOYMENT AND LABOR PRODUCTIVITY IN FOOD RETAILING IN MOSCOW

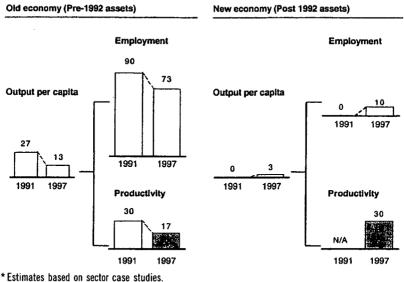


Source: Case studies.

Share of employment by format

FIGURE 5.---THE OLD AND NEW ECONOMY *

[United States = 100 in 1995]



Source: Goskomstat: EIU: McKinsey analysis.

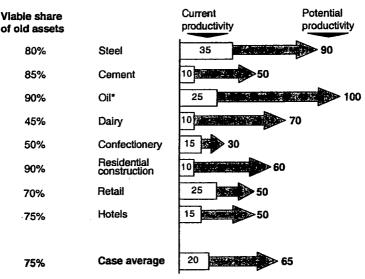
MAIN OPERATIONAL REASONS FOR PERSISTENT LOW PRODUCTIVITY

We found three main operational reasons for persistent low productivity in Russia:

- Excess workers maintained in the old assets.—Customers turned away from low quality products and services offered by the old companies once they had to pay the full cash price for them. The resulting 50 percent fall in the output of these companies was not matched by a similar reduction in employment, which fell by "only" 20 percent. We estimate that 10 percent of workers on average are redundant, while another 20 percent are currently stranded in non-viable operations.
- Inefficient organization still prevailing in the old assets.—Although most of the former Soviet companies have been privatized. They remain plagued by antiquated modes of organization: absence of marketing and sales skills, poor quality control, lack of basic profit incentives and teamwork. Below are three examples from the studied sectors:
 - In steel, breakdowns or defects often go unreported because workers fear being blamed for them.
 - Sales and marketing departments at many confectionery plants have extended their product portfolios well beyond an efficient scope.
 - In hotels, a team of receptionists could absorb the functions currently performed by the dezhurnayas on each floor (e.g., key handling and surveillance).

- Potentially profitable investments not made.—We discovered that managers and investors forego investment opportunities in covered upgrading existing assets and in developing new ones. In markets covered with equal conditions of competition, such investments would bring financial return in excess of 30 percent.
 - Our sector studies show that almost three-fourths of the old assets are still economically viable and could achieve up to 65 percent of the U.S. productivity with limited upgrade investments combined with modern forms of organization (Figure 6). The investments are primarily required to improve the quality of output and/or energy efficiency. Examples include upgrading the wet/gas technology in cement, more hydrofracturing in oil, more flexible production lines in panel housing and conversion of gastronoms into mini-markets.

FIGURE 6.—LABOR PRODUCTIVITY POTENTIAL OF VIABLE OLD OPERATING ASSETS



[United States = 100 in 1995]

* Impact from favorable geology included. Source: McKinsey analysis.

• Potentially high return and substantial investments in). The developing new productive assets are also not made. For example, new oil fields should be developed in the economically attractive proven reserves of Western Siberia. And, unlike in Poland, very little new capacity has been developed in the consumer goods industries. In these sectors, the demand for quality goods is still being met largely through imports. In food retail, there is strong evidence of unmet demand for high service (relative to open-air wholesale markets) formats like supermarkets. These modern high productivity formats are still almost entirely absent from Russia with less than 1 percent market share, against already 18 percent in Poland (growing fast) and 36 percent in Brazil.

We will now explain why managers and investors are not scrambling to seize these operational improvement opportunities, which should, in a market economy with equal competition, lead to higher profits.

THE DIRECT CAUSE: UNEQUAL COMPETITIVE CONDITIONS

Unequal conditions of competition at the sector level, caused by the existing economic policies, are the most important reason for the lack of restructuring and productive investment in Russia. These inequalities tend to favor low productivity incumbents, protecting them from takeovers and productive new entrants. These policies are often put in place to achieve social objectives, namely protecting existing jobs, but in many cases, the suspicion is that they also serve the personal financial interests of government officials in collusion with businessmen.

We show below how these distortions have both direct and indirect negative impacts on the economy.

IMMEDIATE IMPACT OF UNEQUAL COMPETITIVE CONDITIONS

In open markets with equal conditions of competition, the most efficient (productive) company should be the most profitable. Being more productive means that the company either uses less inputs for the same output (i.e., it has lower costs) or produces better output with the same inputs (i.e., it makes superior products that command higher prices). Higher profitability should enable productive companies to invest and grow at the expense of less productive ones, which should be eventually forced to either improve their operations or shut down.

Studying the sectors of the Russian economy, we found that while competitive intensity is usually high, the rules of the game are different for different competitors. The rules are seriously distorted in favor of less productive companies. Often the regulatory environment in which companies operate makes it difficult for the productive companies to crowd out or take over their unproductive competitors. As a result of unfavorable differential treatment, more productive companies often struggle financially, while their less efficient competitors thrive.

These distortions tend to be sector-specific; they can take many different forms such as:

- Different effective tax rates paid by the companies within one sector
- Preferential access to land and government procurements
- Different effective energy prices paid by different players in the same industry
- Variable degrees of red tape imposed on companies at the discretion of authorities

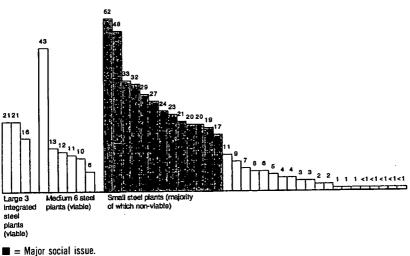
- Differential law enforcement, e.g., in the area of intellectual property rights or import tariffs
 Differential access to government-controlled export infrastruc-
- Differential access to government-controlled export infrastructure.

Below are examples of the impact these market distortions have on the development of the sectors covered by our study.

STEEL AND CEMENT

Obsolete (sub-scale and/or inefficient in their use of energy) steel and cement plants are avoiding shutdowns by paying for only a fraction of their energy bills—their largest cost component. Because these companies are often the major employers in a town, municipal and regional officials go to great lengths to keep them operating (Figure 7). Regional governments channel implicit federal energy subsidies to these companies by letting arrears to federal suppliers (Gazprom and Unified Energy Systems (UES)) accumulate at the local gas and electricity distribution companies. These energy distribution companies are often under effective control of the regional governments; laws make their bankruptcy practically impossible. These subsidies slow down recovery in many manufacturing sectors by preventing upgrading investments and industry consolidation in and around the viable industrial assets.

FIGURE 7.—COMPANY STEEL TOWNS



[Steel plant workforce as a percentage of town employment]

Source: Goskomstat.

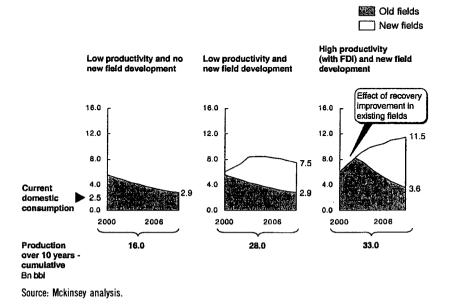
Serving as a means of reallocation of resources to unproductive enterprises, these subsidies may also be viewed as fines imposed on healthy firms. As a result of the subsidies, financially sound com-

OIL

Russia has large and economically attractive proven reserves which can become a source of additional export and tax revenues. Unpredictable economic policies impede investments into the development of new oil fields. Oil companies are reluctant to commit to large long-term investments without stable and workable tax policies (the recently passed law on the production sharing agreement is far from being operational) and without fully liberalized domestic oil prices. But here again, the social objectives are pursued inefficiently. Policy makers deliberately limit oil exports to secure supply of cheap oil to "strategic" customers like the agriculture and defense sectors. Combined with the current rate of depletion in the existing oil fields, the export-limiting regulations may make Russia a net importer of oil by 2009. Providing the necessary assurances to investors, notably well financed foreigners, could enable oil production to double in 10 years (Figure 8). Such an increase would be sufficient to meet the demand of a fast growing economy and to increase oil exports by at least 50 percent. In addition, it would provide additional tax revenues, which would be more than enough to compensate strategic customers for higher oil prices.

FIGURE 8.—POSSIBLE SCENARIOS FOR FUTURE OIL PRODUCTION

[Millions of barrels per day]



CONFECTIONERY

Investments into existing confectionery plants are also discouraged. Regional and municipal governments may effectively ban the best practice companies from laying off excess workers and reaping the productivity benefits of their investments. Local authorities have the means to discipline disobedient managers by, for example, subjecting them to troublesome fire, safety, health and other inspections, the number of which can reach 400 in a year for a single company.

Regional governments, as in the steel and cement industries, can support unproductive confectionery plants by effectively waiving their local tax obligations and helping them to pay less federal taxes. As a result, the few law abiding best practice foreign companies are less profitable (after taxes) than their inefficient domestic competitors (Figure 9).

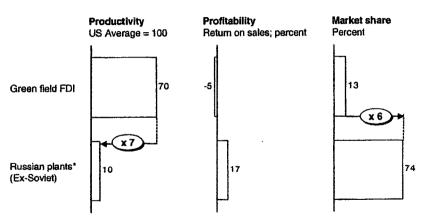


FIGURE 9.—CONFECTIONERY INDUSTRY DYNAMICS

* Excludes brownfield plants operated by multinationals (13 percent market share). Source: Goskomstat; Institute for confectionery industry.

RESIDENTIAL CONSTRUCTION

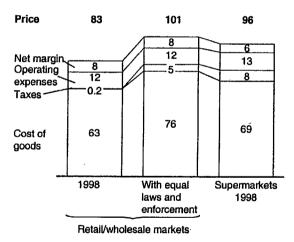
More than half of residential construction in Russia is still financed by the government. Although government contracts are officially submitted to open tenders, they almost invariably end up going to the same ex-Soviet companies closely affiliated with the local authorities. As a result, these companies have no incentives to increase their very low productivity (which they could quadruple with almost no investments). On the contrary, one of their implicit deals with the local government is to get the contracts in exchange for no layoffs.

FOOD AND GENERAL MERCHANDISE RETAILING

Productivity in the retail sector in Russia is low mainly due to a very low penetration of modern formats: supermarkets, hypermarkets, malls and convenience store chains. Supermarkets—the most productive format in food retailing—have less than a 1 percent market share in Russia.

The share of supermarkets is low because productive modern formats are treated unfavorably and, as a result, have a significant cost disadvantage vis-à-vis the much less productive sub-scale formats like open-air wholesale market stands and kiosks. The latter benefit from much lower tax liabilities, less control on the origin of their goods (which are often illegal imports or counterfeits), and cheaper access to prime locations (Figure 10). Here again the official rationale for such distortions is social: many jobs are at stake in small format operations, and open-air wholesale markets are the way to get cheap food to the poor.

FIGURE 10.—ESTIMATED EFFECTS OF UNEQUAL TAX AND LAW ENFORCEMENT ACROSS RETAIL FORMATS



[Indexed to price in gastronoms = 100]

Source: McKinsey price survey; McKinsey productivity survey; Gubernia, expert interviews.

SOFTWARE

Because the products of Russian packaged software companies are systematically pirated, they lack the resources to invest into the development of innovative products. This consequently limits their productivity and growth potential (Figure 11).

The other sub-sector in the software industry, project services, proves by reaching 72 percent of the U.S. productivity level that, with equal conditions of competition, a whole economic sector can reach high productivity. There are no market distortions in this sector for two reasons; first, it is completely new, with no incumbents to be protected, and second, its customized nature makes it immune to piracy.

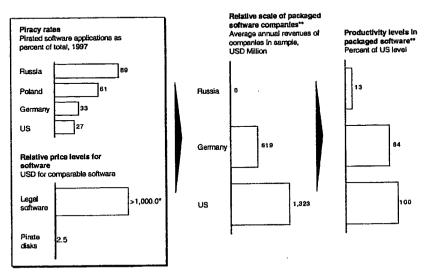


FIGURE 11.—EFFECTS OF SOFTWARE PIRACY ON PRODUCTIVITY

* Indicates total worth of software.

** Russia, 1998; other countries, 1996.

Source: Bureau of Statistical Analysis; International Development Corporation; "Russian Shield" Association; financial reporting; McKinsey analysis.

INDIRECT IMPACT OF UNEQUAL COMPETITIVE CONDITIONS

Negative effects of market distortions are not limited to the sectors where they appear. Barriers to higher economic performance in key sectors of the economy block the growth of productivity, and consequently output, in related industries via negative spillover effects, and fundamentally lead to macro-economic instability.

Negative spillover effects from problems in related sectors are important in explaining the lack of productivity and investment growth in four out of the ten studied sectors. Below are two examples:

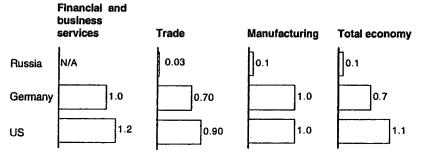
DAIRY

Negative spillover effects plague the all-important food chain. The absence of large modern retail formats leads to the dominance of monopolistic wholesalers who squeeze retailers and dairy plants. The cash-poor milk processors can neither invest in new equipment, nor pay the ailing dairy farmers. In response, farmers set up their own dramatically sub-scale dairy plants and then distribute the milk (including a large proportion of raw milk) directly to retailers and consumers. Recent development in Poland shows that the modern best practice supermarkets are interested in helping the local food industry to improve efficiency and grow. They establish direct purchasing agreements to leverage their scale and bypass monopolistic wholesalers. In turn, increasingly sophisticated Polish food processors have, due to supermarkets, the financial resources to help develop efficient farmers through contract growing agreements.

SOFTWARE

The growth of software companies in Russia depends on the growth of their local business customers. In markets with equal and intense competition, the largest software consumers (like banks, supermarkets and telecommunication companies) constantly require productivity enhancing software tools to help them beat their competitors. Naturally, when productivity improvement is not the primary way to financial success, as is the case in Russia, software services are in low demand. Russian companies spend only 0.1 percent of their output on purchasing software, against more than 1 percent in the United States (Figure 12). The much smaller size of output of Russian companies confounds the situation.

FIGURE 12.—ESTIMATED CONSUMPTION OF SOFTWARE BY SOME SECTORS OF THE ECONOMY *



[Software spending as percent of output of the sector]

* Russia, 1997; other countries, 1996.

Source: International Development Corporation; OECD; EIU; interviews.

Barter transactions, which are prevalent in half of Russia's economy, are fundamentally a result of these market distortions. Tax evasion, energy subsidies and directed government procurements are most often carried out through complex barter deals. The government and government-related companies conceal these subsidies under unfavorable (if real market prices are applied) barter deals, which also provide ample personal enrichment opportunities because they are put in place through short-lived and hugely profitable trading companies.

Macro-economic instability in Russia has been directly caused by the fiscal deficit, which results from the fact that the government spends more than the taxes it manages to collect. This deficit has to be financed by either printing money or by paying high real interest rates to attract private investors. Both ways of financing the deficit introduce macro-economic instability: inflation becomes a hidden tax on all holders of Russian currency, and high real interest rates paid on government debt lures private investment away from the rest of the economy. The negative effects of macroeconomic instability could be seen in all the studied sectors, and most notably in oil and hotels, where a long time is needed to recuperate large initial investments.

Unequal rules of competition are a fundamental cause of the chronic budget deficit. Government expenditures are increased by large implicit federal subsidies to inefficient enterprises in the traditional declining sectors (e.g., heavy manufacturing and construction), while tax collection from the unproductive but well-connected firms in the new growing sectors (e.g., retail) is very poor.

The recent progress made toward balancing the budget should be little cause for comfort. Around 40 percent of budget revenues still depend on extremely volatile oil and gas prices, which have fortunately soared in 1999. Key government expenditures, like the wages of law enforcement officials, are still grossly inadequate. Capital flight, rational when economic policies discourage investment within Russia, continues. Finally, the rise in industrial production, which followed the August 1998 devaluation, should be seen as a one-time adjustment due to a sudden increase in prices of imports, rather than the start of a prolonged economic recovery.

Overall, the facts show that inequalities in the rules of competition at the sector level are the main roadblocks on the path of economic growth in Russia. Notwithstanding corrupt practices or plain disbelief in the market economy, many of these distortions have been put in place by the government to meet social objectives. Unfortunately, they keep Russia at a very low level of economic performance and thus damage the social provisions they were intended to improve.

We discuss in the last section which policies and dynamics could unlock the current system of intertwined social, political and financial interests.

SECONDARY CAUSES

We found the other most often cited reasons for lack of growth in Russia to be much less important than the sector level market distortions described above.

Problems in the area of corporate governance, resulting from a combination of privatization to insiders and the lack of shareholders' rights, are often mentioned as key to Russia's economic underperformance. The existing governance environment gives the current managers more incentives to divert the company cash flows to their own trading firms, than to restructure or invest. Such cash diversions have been commonly mentioned in the steel, cement and oil sectors. However, in these industries, battles for corporate control are now coming to an end in most of the viable assets, allowing management to focus on increasing long-term value of the company. Restrictions on labor mobility may lead to social tensions in company towns, but do not limit the abilities of growing companies to recruit workers. For example in Moscow, where the labor market is allegedly tight, a large share of workers engaged in governmentfinanced housing construction could be easily made available for reemployment. Facilitating labor mobility, notably in the non-viable company towns, would nevertheless help release the current pressure on regional and municipal governments to oppose restructuring of enterprises.

Lack of legal infrastructure to enforce commercial agreements.— While the lack of a strong and independent judiciary does make it difficult for productive companies to appeal against the inequalities of competition, private parties are now finding ways to work out secured transaction arrangements (e.g., cash on delivery and employment of private third party negotiators).

Lack of an effective banking system.—Lack of trust in both the ruble and the banks (especially following the August 1998 debacle) leads people not to make their savings available for subsequent lending by the banks (savings are mostly kept at home in dollar notes, or outside of the country). Although this is certainly bad news for Russia, it should be noted that the virtual absence of bank lending in Poland did not prevent it from achieving a strong economic growth due to foreign direct investment (FDI) and retained earnings, the main source of business investments in the West.

Poor transport and communications infrastructure, even with the great Russian distances, did not emerge as an important barrier. Most of the population and production facilities are located west of the Urals, where distances are not as huge as in the Eastern part of the country, and most of the European part of Russia can be reached fairly quickly and inexpensively by truck or train.

RUSSIA'S GROWTH POTENTIAL WITH KEY ECONOMIC REFORMS

As described in the previous section, our investigation of sectors of the Russian economy helped us identify the relative importance of the reforms now being discussed. We concluded that the main barriers to economic growth, unequal conditions of competition, tend to be industry-specific. Thus, they have to be removed on a sector-by-sector basis. Given the political difficulty of reform, this process probably should start with the high growth potential sectors identified below.

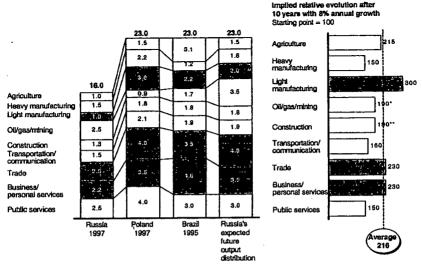
Removing the market distortions, especially in the sectors with high growth potential, could enable Russia to achieve and sustain rapid economic growth. Eight percent per annum would be within reach, allowing standards of living to double in less than 10 years. This performance could be achieved due to a significant share of potentially viable spare capacity, a sizeable pool of skilled and inexpensive labor, and crucially, a large inflow of FDI into Russia, which can be expected once the inequalities are eliminated from the conditions of competition.

SECTORS WITH THE HIGHEST GROWTH POTENTIAL

We have estimated the relative potential of output growth in Russia's economic sectors based on the experience of other countries, Russia's starting point and sources of comparative advantage (Figure 13). This analysis shows that in addition to oil, where exports could sharply increase, output in light manufacturing (food processing, consumer goods and automotive industries) should grow to replace the current high share of imports. Demand for new services, like supermarkets, should also continue to increase. These are the sectors where the market distortions should be removed first.

FIGURE 13.---RELATIVE OUTPUT GROWTH POTENTIAL OF RUSSIA'S SECTORS

[Percentage points of U.S. GDP in 1995 per capita]



* Oil expected to grow faster than gas and mining.

** Commercial and infrastructure construction to grow faster than housing construction.

Source: OECD; McKinsey analysis.

LARGE AMOUNTS OF POTENTIALLY VIABLE SPARE INDUSTRIAL CAPACITY

Our sector analyses have shown that about 75 percent of Russia's inherited assets (put in place before 1992) would still be viable if upgraded and managed according to modern principles. Generalizing from the sectors we studied and assuming equal market conditions, this upgrade would allow production in these assets to increase by 40 percent on average for a relatively small investment, only around 5 percent of GDP per annum, for 5 years (Figure 14).

BENEFITS FROM FOREIGN DIRECT INVESTMENTS (FDIS)

FDI could be attracted en masse into the high growth sectors and potentially viable assets, provided that the market distortions are removed. Foreign companies would bring not only the dollars necessary to finance imports of machinery, but also the best practice managerial skills indispensable to achieving high productivity.

	Nature of upgrading investments	Share of sector's value added (over 5 years) Percent
Steel	 Process control and management systems 	6
Cement	 Upgrading of wet/gas technology 	12
Oil	 More hydro fracturing and tertiary recovery 	5
Dairy	 Super-pasteurized technology 	10
Confectionery	 Improved packaging to increase shelf life 	10
Residential construction	 Flexible production lines for panel housing 	3
Retail	Conversion of gastronoms into convenience stores/minimarkets	2
	Weighted average	5

FIGURE 14.—SIZE OF UPGRADING INVESTMENTS

Source: Interviews.

In oil alone, foreign investment could amount to \$80 billion over the next 10 years, the equivalent of 3 percent of Russia's GDP every year. Foreign oil companies would also bring the expertise and technologies, that would double drilling efficiency in new fields.

In Poland, which has no oil, direct foreign investment already amounts to 7 percent of GDP, against less than 1 percent today in Russia. FDI in Poland is concentrated in light manufacturing and services, and in light manufacturing accounts for 60 percent of total investment (Figure 15). Large inflows of FDI have been the secret of Poland's "economic miracle." The Polish experience also shows that if exposed to intense competition on an equal basis, foreign companies do not "milk" the country, but rather keep reinvesting profits and develop a pool of local management talent.

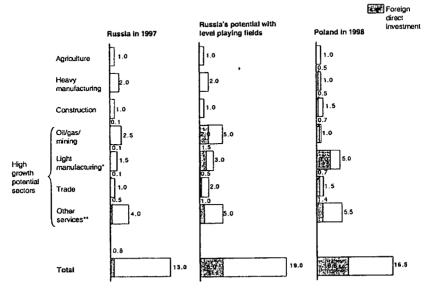
The Novgorod region of Russia is a rare positive example of what can be done in today's Russia by regional governments. It managed to attract more FDI than almost any other Russian region, including nearby St. Petersburg, by removing red tape, facilitating access to land and offering tax holidays to investors. As a result, the region has enjoyed economic growth since 1995, and over half of industrial output is now coming from productive foreign companies (Figure 16).

FUNDAMENTAL BARRIERS TO ECONOMIC REFORMS

The drive toward establishing a market economy based on equal opportunities for all competitors has essentially stopped in Russia since 1995. Why has this happened? There are three fundamental explanations for this: social concerns, corruption and lack of information. We discuss below how these factors interplay to lock Rus-

sia at the current low level of economic performance and what could be the ways to unlock it.

FIGURE 15.—POTENTIAL INCREASE IN BUSINESS INVESTMENT



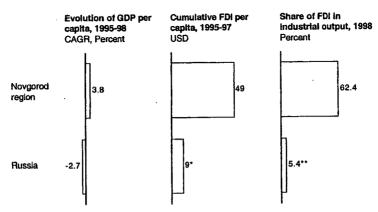
[Percent of GDP]

* Includes automotive.

** Transport, communication, business and personal services.

Source: Goskomstat; Polish Analysis of Industrial Enterprises (PAIZ); McKinsey analysis.





* Median of cumulative 1995-1997 FDI per capita of all regions.

** First quarter 1998.

Source: Goskomstat; interviews; Bureau of Economic Analysis; Institute of East-West Studies (IEWS); press reports.

SOCIAL CONCERNS

Many of the market distortions are kept in place in the name of preserving existing employment. When justified, these social concerns would be better addressed with a system of explicit direct subsidies to the workers, rather than through the current mechanism of implicit subsidies to companies, which also serves to enrich government officials and company managers.

- Ill-founded social concerns.—Based on the experience of other countries further ahead in their economic development, notably Poland, and our understanding of labor productivity gaps in Russia, we have estimated how employment would evolve by sector if the barriers to economic growth were removed. We found that employment should continue to grow in services and remain roughly stable in light manufacturing and construction. Thus, workers who would loose their jobs as a result of strong productivity growth or shutdowns in these sectors should be able to find new jobs of similar profile, especially if they are around large urban areas. As a result there are no social reasons to keep in place the following barriers which have been identified in the cases:
 - Red tape limiting the restructuring of potentially viable dairy and confectionery plants
 - Directed housing contracts to preserve employment levels in the traditional (panel type) housing construction companies
 - Tax and other advantages given to open-air wholesale markets, kiosks and pavilions
 - Government ownership of hotels.
- Alternative for addressing well founded social concerns. In the heavy manufacturing sectors, productivity would grow faster than output, leading to substantial employment losses. This prospect does raise serious social issues, especially in doomed company towns, because workers' mobility is restricted by the registration (propiska) system. In such cases, direct subsidies, given to the workers to help them relocate would be much more efficient than the current barter-based corrupt system of implicit federal subsidies to unproductive companies. Doing this would allow the removal of the following distortions:
 - Unequal energy and tax payments slowing down modernization of viable industrial assets
 - Limits on oil exports to force cheap oil to be supplied to agriculture and defense, discouraging investment into new oil production.

CORRUPTION

Our interviews with companies confirmed the common view that pursuit of personal financial gains within the government and government-related agencies or companies is pervasive in Russia. Like in many other developing countries, the combination of arcane laws, government control over key assets, low salaries of state employees and weak enforcement and control mechanisms provides the means and incentives for corrupt practices. In Russia, virtually every business is in violation of laws (primarily tax laws) and hence the potential target of public or private shakedowns (primarily at the local level). We believe that in many cases corruption, together with social concerns, is the main reason for the rules of competition to be kept unequal.

- The conventional wisdom on how to fix corruption suggests that the highest level of government, remaining untarnished, should initiate the crackdown: "the fish rots from the head." The salary level of key officials needs to be increased, laws against conflict of interest passed and strong independent controls need to be put in place together with credible punishment.
- Based on our case studies, we believe that a potentially more effective way to reduce corruption in Russia would be to remove the numerous means by which the federal and local governments can interfere with the markets to extract economic rent. This would entail lower and simpler taxes, streamlined red tape, reduced scope for government procurements (e.g., social housing) and privatization of remaining government assets (e.g., land and hotels).

This suggests that corruption is not only a cause of Russia's current economic problems but also a consequence of incomplete market reforms.

LACK OF INFORMATION

Such vicious dynamics have been broken in other countries through the democratic process on the basis of fact-based policy debates. Facts about the Russian economy are difficult to obtain. We hope to contribute a useful fact base to policy debates, as we show with micro-economic analysis:

- The extent of the performance gaps for both the old and new economy
- The absence of fundamental natural or economic obstacles to high economic growth in Russia
- The economic sectors with the highest growth potential
- The often underestimated importance of services in stimulating overall economic growth (e.g., supermarkets triggering positive spillover effects down the whole food chain)
- The key role that could be played by FDIs, especially in a "strategic" sector like oil
- The most important economic reforms, to be pursued with priority in the high growth potential sectors
- How these economic reforms can be made compatible with the pursuit of social objectives
- How these economic reforms would help reduce the scope for corrupt practices
- The key role and responsibility of regional governments in fostering economic growth.

The changes described above require painstaking efforts in the political process to overcome conflicts of interest and reach compromises. Today's advanced democracies have taken decades to achieve good economic policy, both at the macro-economic and sector levels. However, the result has been that they have achieved the highest levels of economic performance in the world. Russia can benefit from the hard lessons learned by others, but for historical reasons, the obstacles in Russia are more difficult. How to lead a democratic political process to overcome these obstacles is beyond the scope of this project and beyond McKinsey's experience and expertise. However, we have found no structural constraints on the economic side that would prevent Russia from quickly joining the ranks of the advanced economies.

APPENDIX: SUMMARIES OF SECTOR CASE STUDIES

Below we present summaries of each of the ten sector case studies. Each summary covers five topics: industry overview, productivity performance, reasons for productivity gap at the operational level, external barriers to productivity and output growth, and to conclude, policy implications and future outlook.

STEEL

Industry overview

In 1990 the Soviet Union was the largest steel producer in the world. Following a 60 percent drop in domestic steel consumption, not compensated for by an increase in exports, steel production fell by 40 percent in Russia since the 1990 production peak. The more than 100 Russian steel plants can be divided between the "Big Three" integrated steel plants (mainly flat products), the "Medium Six" (long products) and "Small Others." Each group employs around one third of the almost 400,000 steelworkers.

Productivity performance

With no shutdowns or layoffs, productivity fell by 40 percent to 28 percent of the U.S. level between 1990 and 1997. The Big Three achieve around 45 percent of the U.S. productivity level, the Medium Six 25 percent and the Small Others only 10 percent of the U.S. level.

The main reasons for the productivity gap at the operational level for the Big Three and Medium Six are low capacity utilization, excess workers in logistics and overhead functions, and low yields on energy and raw materials. These plants could achieve more than 80 percent of the U.S. productivity level with very little upgrading investments. Most of the Small Others, however, are not viable because they use the outdated open hearth furnace and ingot casting process, wasting energy and representing major environmental hazards.

The most important external barrier to productivity and output growth is the implicit federal energy subsidy given, in the form of arrears or advantageous barter deals, to many non-viable Small Others, allowing them to remain in operation. There have been virtually no layoffs in the viable steel plants because wages are free to adjust downward, as the prevailing registration (propiska) system curbs the ability of workers to travel in search of better jobs. Poor corporate governance was a key barrier to growth soon after the privatization (1993–1996) as managers concentrated their efforts on gaining control. Today, with the end of most shareholder battles at the large productive plants, it is of secondary importance.

Policy implications and future outlook

With adequate technology in most of its production capacity, and relatively low labor and energy costs, Russia has a clear competitive advantage in steel. To allow the industry to realize its full potential, local governments should stop channeling implicit subsidies to doomed plants in exchange for appropriate mobility provisions and social safety nets to be provided by the federal government. At the same time, a good way for the West to help Russia would be to remove the current restrictions on Russian steel imports.

CEMENT

Industry overview

There are 50 cement plants in Russia employing around 40,000 workers. Cement production collapsed by more than 60 percent since the 1990 peak; it is now at half the Polish level on a per capita basis. The industry has remained extremely fragmented since privatization, and the three foreign global players present in Russia have yet to commit to significant investment.

Productivity performance

Despite the production collapse, there have been virtually no plant shut downs or layoffs. Productivity has thus dropped from 20 percent of the U.S. level in 1990 to 7 percent in 1997. The best Russian plant achieves 30 percent of the U.S. productivity level, while many plants stand at 1 percent.

The main reasons for the productivity gap at the operational level are very low capacity utilization, lack of multi-tasking, less automation in packaging and delivery and inferior wet/gas technology leading to much higher energy consumption and lower cement quality. More than half of the cement plants could achieve 50 percent of the U.S. productivity level at full utilization, with best practice modes of organization and a few targeted investments like converting to semi-wet/gas technology.

The most important external barrier to productivity and output growth is the flow of implicit federal subsidies in the form of cheap energy, tax arrears and/or directed government procurements channeled to the weakest players by local governments anxious to prevent shut-downs. These subsidies and political constraints are also preventing best practice companies from buying up excess capacity to shut it down in order to increase capacity utilization and make the necessary upgrading investments that are worthwhile in the viable capacity. These subsidies do not only serve a social cause, since allegedly, part of the subsidy flow is being diverted, via complex barter deals, to short lived and well-connected trading companies.

Policy implications and future outlook

A strong federal government could force the rapid restructuring of the sector by cutting the flow of energy and tax subsidies and replacing them with direct help to the workers wherever deemed necessary. This would make more higher quality and cheaper cement available to major downstream industries, such as construction and oil.

Industry overview

While its employees accounted for only 1 percent of the Russian workforce, the oil sector ³ sales represented 6 percent of GDP, 16 percent of exports and 22 percent of budget revenues in 1998 (despite relatively low oil prices). Oil production has halved since the peak of 1988, with the fall in domestic demand and exports to countries of the ex-Communist block. The industry has been privatized to insiders with very little foreign involvement.

Productivity performance

The actual total factor productivity (the combined measure of labor and capital productivity) of the Russian oil industry is 55 percent of that of Texas on-shore. Once adjusted for favorable geology and younger oil fields in Russia, the productivity level falls to about 30 percent.

The main reasons for the productivity gap at the operational level are lower oil recovery due mostly to less hydrofracturing and poor reservoir management techniques, and inefficient drilling because of low quality drill bits, cleaning muds and cement being used. There are also more than 35 percent excess workers and a large amount of idle drilling equipment resulting from the stoppage of new field developments since 1991, despite attractive proven reserves in Western Siberia. The total production cost in these new fields would be as low as \$6 a barrel (against \$20 a barrel for current world oil prices) with best practice operations.

The most important external barriers to productivity and output growth are the lack of workable tax laws (the recently passed production sharing agreement is not yet operational) and distorted domestic oil markets with limits on oil exports. These limitations, which discourage any significant investments, force the supply of cheap oil to "strategic sectors" such as defense and agriculture. Other, less important, factors include unresolved shareholder battles with weak minority shareholder rights protection, and widespread barriers to layoffs put in place by local governments in oil company towns.

Policy implications and future outlook

If the main barriers to investment are not removed, Russia could, with the current rate of depletion in the existing fields, end up being a net importer of oil in 10 years. The social objectives and national interest would be better served if further assurances were given to investors, notably deep pocket foreigners who could pour in 80 billion dollars' worth of investment over the next 10 years. Such assurances should include workable taxes as well as a fully liberalized domestic oil market with open access to an enlarged export infrastructure. As a result production could double in 10 years, thus meeting demand of a (hopefully) fast growing economy and increasing exports by more than 50 percent (keeping Russia's market share of world oil exports constant given current expectations of increasing future demand). Also, the additional tax revenues would

³ Including refining and transportation of crude and petroleum products.

suffice to keep subsidizing (if deemed necessary) the oil purchases for agriculture and defense customers and help relocate stranded oil workers.

DAIRY

Industry overview

The industry consists of four functions: raw milk receiving, fluid and non-fluid milk processing, and packaging. Dairy farming and distribution are excluded from our study. The major processed dairy products are fluid milk (the largest category), cream, butter, cheese and milk powder. In 1997, 199,000 people were employed in the Russian dairy industry across 1,753 plants.

Productivity performance

Labor productivity in dairy is at 8 percent of the U.S. level. Russian dairy plants produce one-fifth of U.S. output per capita using more than twice as many people. Since 1990, labor productivity has almost halved. Productivity differs by size of plant, since large economies of scale are present in this industry: 72 large plants (capacity of 55,000 tons a year or more) employ about 20 percent of the industry workforce and have 12 percent of the U.S. level of productivity; 1,681 small plants employ the rest, and operate at 7 percent of U.S. productivity level.

The main reasons for the productivity gap at the operational level differ between small and large plants. Large plants (43 percent of industry capacity) could raise their productivity from 12 percent to more than 60 percent of the U.S. level without major investments, since the present gap is mainly due to low capacity utilization and inefficient organization of functions and tasks. The remainder of the gap comes from lack of automation and inefficient relations with suppliers. These large plants, if utilized at 80 percent, could produce all current output of the industry by themselves. Small processors need major investments to reach minimum efficient scale—an investment that will not be economical.

The most important external barriers to productivity and output growth are problems in up- and down-stream industries, macroeconomic instability and local government interventions. Problems in up- and down-stream industries hinge on monopolistic wholesalers, who force arrears onto dairy plants and set off a chain of events leading to inefficient dairy farming and the emergence of sub-scale mini-plants which do their own distribution. Macroeconomic instability manifests itself via a high cost of capital (discouraging investments into larger scale plants, and into shelf-life enhancing technologies that could give dairy plants more bargaining power over wholesalers) and a low level of demand (leading to reduced consumption of processed milk and lower capacity utilization of dairy plants). Local governments shield wholesalers from competition from supermarkets by taxing the latter ones out, and directly hamper restructuring of the dairy sector by deterring layoffs and bankruptcies of inefficient plants, thus creating unequal conditions of competition in the industry.

Policy implications and future outlook

For Russia to increase its productivity in the dairy sector, large plants should expand, while small ones should exit. For this to happen, barriers to growth of supermarkets need to be lifted (see the summary of the Food Retailing industry), regulatory interventions against layoffs must be stopped, and bankruptcies of small plants should not be artificially prevented. With these policies, the sector would be able to achieve more than 60 percent of the U.S. productivity level with limited investments.

CONFECTIONERY

Industry overview

The confectionery industry consists of four functions: raw material receiving: mixing; processing; and packaging. Farming and distribution are excluded from this study. Following the official Russian industry definition, biscuits and crackers are included in addition to regular confectionery. In 1997, 120,000 people were employed in the industry across 925 plants. This sector has been relatively successful in attracting best practice foreign companies, although these investments are still too small to make any significant difference to the overall sector's performance.

Productivity performance

Labor productivity in the Russian confectionery industry is at 10 percent of the U.S. level, down from 13 percent in 1990. Productivity differs between large (capacity of 35,000 tons per year or more) and small plants: 11 large plants achieve productivity of 22 percent, using 20 percent of total employment in the sector. The productivity of 914 small plants is 7 percent, using 80 percent of total employment.

The main reasons for the productivity gap at the operational level are low scale and capital intensity. Even the large plants that have minimum efficient scale have to rebuild their multi-storied structures in order to use new equipment. Large confectionery plants already have a high capacity utilization and thus the potential for improvements is smaller than in the large dairy plants. The productivity potential for large plants and small plants without major investment-fixing capacity utilization, organization of functions and tasks and product proliferation/value added within category—is around 50 percent of the U.S. level for the large plants and less than 30 percent for the small plants.

The most important external barriers to productivity and output growth are low labor cost, an unfavorable tax structure, unequal tax enforcement, and an inefficient wholesaling industry. The low labor cost renders automation uneconomical even for multinationals with a low cost of capital. Deductibility of advertising expenses for tax purposes is very limited, and advertising expenses can be taxed in some regions. This discourages expansion of best practice firms through brand building. The playing field is further distorted when local governments deter layoffs by best-practice firms by subjecting them to numerous inspections, and condone tax arrears from unproductive companies, which end up being more profitable than their global best practice competitors. Rights of brand ownership are not enforced, further hampering investment into branding and expansion, and the procedure for approving shelf-life claims can be very slow and subject to undue influence. Due to the large number of wholesalers in the confectionery distribution chain, wholesale margins in Russia are twice the U.S. level, which protects local players by making cross-regional expansion more difficult for productive players.

Policy implications and future outlook

In order for the industry to increase its overall productivity restrictions on layoffs must be removed, taxes from all firms collected equally, tax disincentives to advertising removed, brand property rights enforced, and shelf-life approval process streamlined. Under such conditions, the industry overall would be able to reach 30 percent of the U.S. productivity level (without major investments) and compete more successfully against imports.

FOOD RETAILING

Industry overview

The food retailing industry employs 4 percent of the Russian workforce and is one of the largest sectors in the economy. Since food constitutes 45 percent of Russian household spending and food retailing accounts for 20 percent of that cost, the sector affects 9 percent of total household spending. The sector has experienced a dramatic transformation in recent years. Open-air wholesale market stands, kiosks, pavilions and agricultural markets have taken shares away from Soviet-era formats (whose shares have declined from 90 percent in 1990 to 41 percent in 1997).

Productivity performance

The Russian labor productivity is at 23 percent of the U.S. level. Street vendors are at 9 percent, traditional Soviet-era formats (the smaller gastronoms) at 24 percent, open-air wholesale markets at 24 percent, kiosks and pavilions at 26 percent, and supermarkets at 78 percent of the average U.S. productivity.

The main reasons for the productivity gap at the operational level can be grouped into two. First, Russia lacks modern productive formats such as supermarkets and hypermarkets. The market share of modern formats is less than 1 percent in Russia compared to over 70 percent in the United States. Second, format-to-format, Russian stores suffer from over-manning, low scale of chains and stores, and low capital intensity compared to their U.S. counterparts.

The most important external barriers to productivity and output growth are those that prevent the penetration of modern formats. Modern formats cannot gain share against the less productive open-air wholesale market stands, kiosks and pavilions because the latter benefit from lower tax liabilities, less control on the origin of their goods (which are often illegal imports or counterfeits), and cheaper access to prime locations. Inefficient Russian food processors also impede the entry of modern formats since best practice firms will not invest in a country unless they can source quality products domestically.

Policy implications and future outlook

If the main barriers are removed, modern formats should gain substantial market share. For example, in the city of Obninsk in Central Russia, supermarkets gained 15 to 20 percent market share (compared to less than 1 percent for all of Russia) after the local government provided equal opportunities (for supermarkets and open-air wholesale market stands) in terms of land allocation and tax/tariff/counterfeit enforcement. As another example, Polish supermarkets and hypermarkets gained 18 percent market share in less than 5 years—having started from a similar format mix as Russia—after the government put into place equal tax legislation and clear land allocation procedures.

GENERAL MERCHANDISE RETAILING

Industry overview

The general merchandising industry employs 2 percent of the workforce and generates 2.5 percent of GDP in Russia. Between 1990 and 1997, general merchandising turnover dropped by 40 percent and the share of imports rose from 15 percent to 80 percent. The share of Soviet-era formats declined from 100 percent to 20 percent, they were replaced by new more convenient or cheaper formats, especially open-air wholesale markets, which captured 65 percent market share.

Productivity performance

The Russian labor productivity is at 26 percent of the U.S. level. Soviet-era multi-product stores are at 10 percent, Soviet-era singleproduct stores at 24 percent, open-air wholesale markets at 27 percent, kiosks and pavilions at 28 percent, and the few modern chains (mostly in electronics) at less than 80 percent of the productivity level of their U.S. equivalent.

The main reasons for the productivity gap on the operational level can be grouped into two. First, Russia lacks modern chains that are more productive than non-chains. The market share of modern chains is at 8 percent in Russia compared to 70 percent in the United States. Nearly all the modern chains are consumer electronics chains. Second, open-air wholesale markets stands have low productivity because they are both sub-scale and under-capitalized. Finally, and much less importantly, Russian (consumer electronics) chains have lower productivity than their U.S. counterparts because they do not use part-time workers to match demand fluctuations, and enjoy less economies of scale.

The most important external barriers to productivity and output growth are those that prevent the penetration of modern chains. Modern chains cannot gain share against the less productive openair wholesale market stands, kiosks and pavilions because the latter benefit from lower tax liabilities, less control on the origin of their goods (which are often illegal imports or counterfeits), and cheaper access to prime locations. In addition, the high cost of capital deters domestic investors from financing capital-intensive hypermarkets or malls.

Policy implications and future outlook

If the main barriers are removed, modern chains should gain substantial market share. Foreign multinationals can overcome financing limitations and are thus attractive candidates for investment. Such multinationals invested only \$0.1 billion in Russian retailing (both food and general merchandise) compared to \$2.1 billion in Poland (with another \$2.7 billion in the pipeline), where the playing field is much more level with serious law enforcement. As a result, Poland enjoys a 22 percent market share for chains, while bazaars (the equivalent of Russian wholesale markets) are in marked decline, with only 10 percent market share in 1999.

HOTELS

Industry overview

Approximately 100,000 people are employed in about 5,000 hotels located in Russia. Unlike most Russian sectors that have been privatized, over 80 percent of hotels remain in the hands of municipal, regional or federal government. Recently four- and five-star hotel foreign chain operators have entered the high-end segment of the market; they currently account for 15 percent of turnover.

Productivity performance

Russian labor productivity in the hotel sector (for lodging only, excluding food and beverage) is at 18 percent of the U.S. level. Russian chains (exclusively the four- and five-star hotels) are at 60 percent of the productivity of U.S. chains while Russian non-chains are at 19 percent of the productivity of U.S. non-chains.

The main reasons for the productivity gap at the operational level can be separated into three groups. First, comparing Russian non-chains to U.S. non-chains, Russian hotels are less utilized, do not implement multi-tasking of personnel, have lower value-added rooms, and are more sub-scale. Second, comparing Russian chains (managed by Western operators) to U.S. chains, Russian hotels are penalized by the need to train their personnel (e.g., cleaning ladies). Third, Russia lacks chains, which are more productive than non-chains (e.g., central booking leading to higher utilization); chains account for only 15 percent of turnover in Russia compared to 40 percent in Poland and 70 percent in the United States.

The most important external barriers to productivity and output growth are also separated into three groups. For non-chains, government ownership stifles managerial incentives for improving efficiencies. Also, the collapse in demand has reduced capacity utilization, while low income has limited the demand for higher value added rooms. For chains, lack of multi-tasking should be resolved over time as a skilled labor pool is developed. Last, for chain penetration, collapse in demand, high cost of capital and country risk, under-developed tourist attractions, high construction costs, and red tape/corruption involved in land allocation have been the main barriers.

Policy implications and future outlook

If the main barriers are removed, the Russian hotel industry could achieve productivity of up to 60 to 65 percent of U.S. levels. International experience shows that demand for hotels increases rapidly as income per capita grows. Removing the barriers is likely to increase investment in new hotels, especially in chains. Besides the improvements in the format mix, this higher chain penetration will also foster productivity in non-chains by increasing the industry's competitive intensity.

RESIDENTIAL CONSTRUCTION

Industry overview

Residential construction is one of the largest economic sectors in Russia accounting for about 5 percent of total employment and 3 percent of GDP. Output in the sector has declined by 25 percent since 1990. Growth in the construction of privately financed brick houses and apartments has not compensated for the 50 percent decline in the construction of government-financed traditional prefabricated apartment buildings.

Productivity performance

The overall productivity of the sector is estimated at around 10 percent of the U.S. level. Productivity fell to 10 percent of the U.S. level in the traditional segment, as many companies did not adjust their staffing levels to the fall in output. New entrants only achieve 20 percent of the U.S. productivity level, and furthermore, around one-fourth of all construction is now being carried out "brick by brick" by individuals (5 percent productivity level) as financing becomes available.

The main reasons for the productivity gap at the operational level for the traditional companies are very low capacity utilization at both the panel factories and construction sites, and complete lack of incentives for workers to improve efficiency or quality levels. The new companies are mostly affected by both the lack of special trade companies and the small scale of privately financed housing programs.

The most important external barrier to productivity and output growth is the fact that local governments systematically allocate housing programs to the same (ex-Soviet) companies in exchange for no layoffs. New private companies are also penalized by the fact that large single family housing programs (the most productive form of housing construction) are virtually impossible in the absence of an operational land code and mortgage financing.

Policy implications and future outlook

Government-financed housing programs should be limited to the most urgent social needs (e.g., relocation of stranded industrial workers) and carried out through open and equal tenders. The following would also help stimulate the demand for private housing, appropriate legislation in the areas of land property and usage rights, tenant rights, a mortgage system (with macro-economic stability as a prerequisite), removal of administrative barriers to labor mobility (propiska system), and accelerated phasing out of the utility and maintenance subsidies in the existing housing stock.

Industry overview

We address two distinct sub-sectors in our software case: packaged software and project services, in total employing about 8,000 people in Russia (compared to more than 600,000 in the United States).

Productivity performance

The overall labor productivity in the sector is 38 percent of the U.S. level, an average of 13 percent for packaged software and 72 percent for project services (consulting, implementation and training in the information technology area). This latter sub-sector is the most productive of all the industries we have studied in Russia.

The main reasons for the productivity gap at the operational level for packaged software, a high fixed (development) cost business, are low scale (on average, Russian packaged software companies are 100 times smaller than their U.S. counterparts), and a low value-added product mix. This latter factor is also responsible for the (small) productivity gap in project services. The most important external barriers to productivity and output

The most important external barriers to productivity and output growth differ between sub-sectors. In packaged software, the causes are the prevalence of software piracy and lack of leading-edge demand from business customers. The piracy rate is 90 percent in Russia—one of the world's highest, so Russian software firms lose most of their resources to pirates and can not invest in research and development of better products. Software-consuming sectors, whose demand drives development of software firms, are both very small in Russia and less interested in productivity-enhancing software tools than their Western counterparts. For example, banks, important software consumers elsewhere, in Russia depend on relationships with authorities, rather than cost control or good service. Kiosks, unlike supermarkets, do not consume software.

The customized nature of project services makes this sub-sector immune to piracy. The low value-added service mix of Russian project services firms, the main culprit of the (small) productivity gap, comes from the low level of customer demand. The low level of domestic demand can be partially overcome by serving overseas customers via offshore programming. The Russian business of offshore programming is growing at 50 to 60 percent per year, although from a very small base. With time, this industry should be able to obtain the requisite track record and international certification, and become a force in the world offshore programming market along with India.

Policy implications and future outlook

The following four policy measures should improve the economic prospects for the software sector in Russia: removal of barriers to productivity and output growth in the other (software-consuming) sectors (see all other sector case studies), stepping up enforcement of anti-piracy laws (which are already in place), support to ISOand SEI-certification initiatives (e.g., through setting up a number of specialized certification centers to ease the process for Russian companies), and removal of red tape in software export procedures. The future of the domestically oriented packaged software and project services sub-sectors will depend on growth of the whole economy. Offshore programming can be expected to continue growing output and employment at the current rate of 50 to 60 percent per year.

ADMINISTRATION AND REFORM OF THE RUSSIAN ECONOMY

By Paul Gregory and Wolfram Schrettl¹

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The goal of Russian administrative reform is to create a "rule of law" that encourages domestic entrepreneurship, foreign investment, and economic growth. Old planning institutions must be replaced by new state institutions that a market economy requires. After more than 10 years of transformation, the major administra-tive changes have been the replacement of the executive, legislative, and judicial Communist Party monopoly with a strong presidency and a to-date weak legislature. Destatized large enterprises have replaced the industrial ministries, and they represent a new source of independent power. New agencies have been created but they have not taken firm hold in the new administrative system. President Putin has presented a comprehensive program of administrative reform. His regional reform has passed the legislature and decides the federalism issue by centralizing power. His de-bureaucratization reforms seek to improve Russia's business and investment climate by reducing bureaucratic interference and arbitrary official behavior. Significant reforms remain to be implemented; namely, judicial reform and civil service reform. A key question is whether these reforms are successfully resisted, as have been earlier reforms, by those parts of the bureaucracy that stand to lose income and power.

OBJECTIVES OF RUSSIAN ADMINISTRATIVE REFORM

A significant part of the transformation process is the creation of a structure for the administration of a market economy to replace

¹Paul Gregory is Professor of Economics, University of Houston. Wolfram Schrettl is Head, Department of International Economics, German Institute for Economic Research, DIW Berlin. The authors wish to thank Henning Schroeder for comments and suggestions on an earlier draft of this paper and Carina Schulz for able research assistance. Wolfram Schrettl is grateful to the KfW-managed TRANSFORM program of the German Government for financial support to GLOROS ("Global Economy and Russia. A Russian-German Dialogue"), a project of DIW Berlin (German Institute for Economic Research) and HSE Moscow (State University Higher School of Economics).

the administrative structure of the planned economy. Such a transformation requires the government's credible commitment to firm legal "rules of the game," a non-corrupt bureaucracy that enforces and interprets these rules impartially, and a judiciary that independently interprets these rules and punishes violations. The term administrative reform means different things to different people in contemporary Russia. Changes in center-periphery relations, antibureaucratic legislation, and civil service reform all fall under the category of administrative reform. In this paper, we interpret progressive administrative reform as any reform that creates new legal rules of the game that will administered fairly and efficiently by the bureaucracy. We describe the current Russian administrative system in terms of this general goal, and we use the Soviet legacy, which has left a strong imprint on the current system, as our starting point.

SOVIET ADMINISTRATION

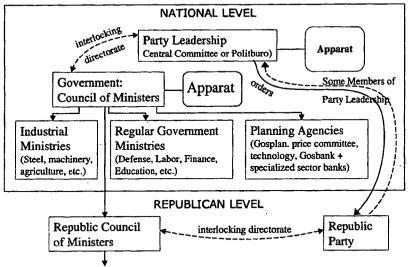
Figure 1 provides a schematic sketch of the Soviet-type administrative structure from which that of the Russian Federation evolved. It shows that the legislative rules of the game were set by the top leadership of the Communist Party in the Central Committee and Politburo. Formal decrees and orders were issued by the state administration (called the Soviet order), but the top administration of both state and party comprised an interlocking directorate of key political figures that blurred distinctions between the party and state at the highest level. This was a decree-based system in which national laws and instructions were issued by the Council of Ministers, with the most important decrees issued jointly by the state and party. Decrees and orders were typically quite specific, instructing some subordinate agency to fulfill a designated task.

The Soviet Government was the Council of Ministers in which the most important ministries and state committees were represented. Ministries consisted of two types: Industrial ministries which supervised productive enterprises and functional ministries that carried out the normal state functions, such as education, defense, internal security, justice, and public finance. State committees typically attended to functions specific to a planned economy and usually not found in market economies. Gosplan drew up national plans, Gossnab prepared supply plans, Goskomtsen set prices, Goskomtekhnika supervised research and development, and Gosstroi planned construction. A monopoly state bank assumed all functions of banking, and carried out, in particular, central banking and allocations of credit. Its monetary and credit policies were subordinated to the plans prepared by other state committees, and its main job was the distribution of credits according to plan.

This central administrative structure was replicated in the 15 republics, of which the Russian Republic was one, with Republican governments answering to the Council of Ministers and Communist Party. These Republican Party and state organizations supervised local industries, they did not play independent roles, and their influence on national policy was felt primarily through the Republican leader's influence within the party apparatus.

FIGURE 1.—SOVIET ADMINISTRATION

[Schematic version]



Same Structure as National Level

The plan was "the law." Given that there were a large number of plans, many conflicting, the administration engaged in considerable negotiating, coercion, and compromising in the absence of overall rules of the game. The party was the "leading institution" which gave it the primary role of negotiator, compromisor, and facilitator. Administrators with authority to make resource allocation decisions (party, planners, ministers, etc.) were the distributors of the economic rents associated with the monopolistic structure of Soviet industry. Contemporary writers even argue that the party's main role was to distribute economic rents among society's players.² Those with power to distribute and use resources were called fundholders. They actively traded resources among themselves by barter, plan instructions, and outright sales in a manner that is still poorly understood.

The Soviet system used a nomenklatura system for administrative appointments, promotions and firings, which was managed at the top by the party personnel department. The nomenklatura system had rather clearly stated rules concerning which agency (state or party) was authorized to make personnel decisions. We do not know to what extent the nomenklatura system was merit based. Some appointments were made on merit; others through connections or family relations. The operations of the nomenklatura system were opaque and unlike the Western-style ideal of a transparent civil service. The notion of free access to administrative careers in the state or party through a well-defined set of rules was totally foreign. In a society that lived drably, membership in the

² Boettke, Peter. Calculation and Coordination (London: Routledge, 2001).

nomenklatura meant access to goods, perks, and services beyond the reach of ordinary citizens. These perks and benefits could not be purchased; they were linked to specific positions in the nomenklatura.

THE ADMINISTRATION OF THE RUSSIAN FEDERATION

The Soviet administrative system collapsed along with the Communist Party monopoly in late 1991, which had been its founda-The administrative-command economy collapsed tion. with Gorbachev's withdrawal of administrative power from the branch ministries in the late 1980s. Once Yeltsin and his reform team determined to abandon the Soviet command system, administration had to change to meet the new circumstances of an economy that was no longer centrally planned, in which there was considerable market allocation, and significant privatization (or destatization) of property. Conceptually, such an economy required creation of a rule of law based upon a legislative framework to which the state was "credibly committed" as opposed to ad hoc decrees, which could change with the whims of leaders. Also required was a well-defined distribution of power among the executive, legislative, and judicial branches with the legislature making law, the executive executing that law, and the judiciary interpreting law and resolving conflicts. The distribution of power, tax revenues and government expenditures, and property between the central government and regional and municipal governments had to be agreed upon with non-contradictory and non-overlapping rules and regulations. Without such "federalism" agreements, state property could not be managed and disposed of and businesses could not operate in a uniform market with a level playingfield.

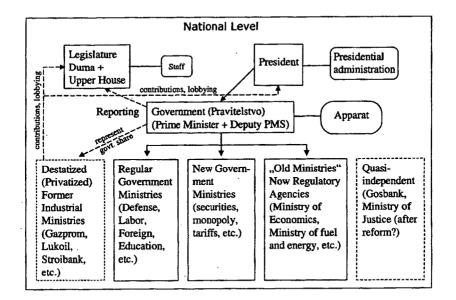
A series of new or improved government institutions was also required, including "normal" institutions for monetary and fiscal policy, such as a two-tiered banking system (with a quasi-independent Central Bank of the Russian Federation (Central Bank of Russia or CBR)) to replace the monopoly state bank and a system for orderly fiscal budgeting. Also new agencies required by a market economy had to be created and agencies associated with planning and administrative price setting had to be eliminated. Agencies had to be appointed that would effectively manage property, either fully or partially owned by the state, in the public interest.

In place of the party-directed nomenklatura, which was designed to issue orders and distribute resources in an opaque fashion, a Western-style civil service had to be installed. This civil service should be appointed according to merit, be inculcated with a notion of service to the public, and administer rules and regulations impartially.

Figure 2 provides a schematic sketch of the current Russian administrative structure. When compared with Figure 1, it shows the substantive changes that have taken place over the past decade but underscores the reforms that have yet to be made. The lack of full resolution of the general objectives of administrative reform listed above after more than 10 years is not at all surprising. A complete restructuring of a society's administrative structures and power relations requires considerable time, especially in the face of substantial and mostly concealed opposition.

FIGURE 2.—ADMINISTRATION OF RUSSIAN GOVERNMENT

[Schematic version]



The most significant changes are the disappearance of the Communist Party as the leading institution and the conversion of former industrial ministries into semi-independent corporations. Although the Communist Party remains the largest single faction in the legislature, it lacks the power to "order." Earlier it had the power to block, a power apparently lost under Putin. In the Soviet era, the party was the ultimate source of legislative power and was the ultimate enforcer of executive power, although most legislative decrees were formally issued by state power; namely, by the Soviet Council of Ministers. Given that all responsible positions were held by party officials through the nomenklatura, the party also had the power to punish and thus acted as well as a judiciary.

Figure 2 shows that the "legislative-executive-judicial" party has been replaced by a President, who serves as the ultimate source of executive power, but also can serve as a source of legislative power through the use of presidential decrees—a device used frequently during the Yeltsin presidency. The President has the power to nominate the Prime Minister and hence oversees the top appointments to the executive branch, subject to approval of the legislature, the Duma, which can be forced to dissolve itself if the President's nominee is not accepted. These procedures were put in place in the 1993 Yeltsin Constitution, which affords the President considerable power in naming the government (pravitelstvo). Given the strong presidency, a massive presidential administration of officials, advisors, and bureaucrats is associated with the office of the President.

The appointment, confirmation, staffing, and responsibilities of the government are defined in the constitutional law approved in December 1997.³ The government is headed by a Prime Minister and a number of Deputy Prime Ministers with specific obligations, who preside over the various governmental agencies and ministries. The government, like its former Soviet variant the Council of Ministers, continues to have a massive administrative apparat, which competes in influence and size with the presidential administration.

Figure 2 shows that there have been major changes in the makeup of the Russian Government which consists of slightly less than 50 ministries, agencies, and committees.⁴ Previously powerful planning committees have been converted primarily into regulatory agencies and agencies for devising economic policies and strategies. Gosplan has become the Ministry of Economic Development and Trade, which drafts industrial policy and regulations rather than issuing directives. Some former industrial ministries have become regulatory and licensing agencies such as the fuel and energy ministry and the geology ministry. Most significantly, most "production" ministries have been converted into non-state (at least partially privatized) enterprises in which the state continues to own significant shares, such as Gazprom, Lukoil, and Unified Energy System (UES). The conversion of industrial ministries from direct controllers of branch enterprises into "destatized" companies has been a significant change in Russian administration. The state's dealings with these companies remains in flux. It is unclear in whose interests these enterprises are being run and whether the state is able or willing to properly exercise its role as the largest single shareholder.⁵ Other agencies of the Russian Government are ministries common to all countries-education, defense, trade, labor, ecology, justice, and internal security, although the power of the Federal Security Service (FSB) may now be exceptional under Putin, insofar as Putin himself was trained in the FSB's predecessor organization, the State Security Committee (KGB).

Figure 2 also shows that new agencies required by a market economy have been created. Of the 49 ministries, committees, and agencies of the Russian Government, 6 are "new" agencies required by a market economy.⁶ Skeptics note that these new agencies were not part of the traditional power structure of the Soviet Union, and they have not become credible centers of authority. Another feature of the new Russian structure is the substantial overlap among agencies, with several agencies responsible for taxes, security, construction, and technology.⁷ This overlap and duplication will presumably be a prime issue of contention in future administrative reforms.

³ Federalny konstitutsionny zakon o pravitelstve Rossiiskoi Federatsii. 31.12.97 N 3–FKZ.
⁴ Spravochnik: Federal'naia vlast' v Rossii.

^a Spravocrink: Federal nata Viast V Rossil. ^b Putin's replacement of Gazprom Chairman Vyakhirev with his own man, Miller, in June 2001, represents perhaps a watershed in the state's relation with large destatized corporations. ^e Pravitelstvo Rossilskoi Federatsii, Struktura federalnykh organov ispolnitelnoi vlasti (www.pravitelstvo.gov.ru). They are the anti-monopoly ministry, the property ministry, the tariff committee, the securities commission, the bankruptcy commission, and the land registry com-

mittee.

⁷Parison, Neil. "Russia: Public Administration Reform: Issues and Options," mimeo; a Russian version appeared in E.G. Yasin (ed.), Investitsionny klimat i perspektivy ekonomicheskogo rosta v Rossii (Moscow: Vyshaia shkola ekonomiki, 2001), pp. 202-213.

The Russian legislature consists of two houses, the state Duma and the Federation Council. The lower-house Duma is comprised of elected deputies, while the upper house, the Federation Council, is comprised of regional leaders or, more recently, of their representatives.⁸ Of the two, the Duma is the dominant legislative body. Unlike the Soviet system where power clearly derived from the Communist Party, Figure 2 shows the basic power conflict in the new Russian administration—the potential of stalemate between legis-lative and executive power. The legislative branch has been dominated by the Communist Party, which has shared virtually no common goals with either Russian President. Legislation was passed slowly in the Communist dominated Duma, if at all, and Yeltsin sought to legislate by presidential decree—a poor substitute for legislation approved by the legislature. With the recent decline in Communist Party power and Putin's relatively easy election and personal popularity, it appears that the legislative logjam is breaking and movement toward a legislative rule of law is gathering steam.9

A second point of conflict is between the powerful administration of the President and the official bureaucracy of the country; namely, the apparat of the government. Such conflicts are not uncommon in democracies, where officials close to the chief executive often wield more power in specific areas than does the responsible minister.

A third source of potential conflict is between the Russian Government (as represented by the legislature or the President) and the quasi-independent large corporations, headed by former branch ministry officials (Gazprom, Lukoil) and the financial industrial groups headed by oligarchs who were not prominent members of the old elite (Berezovsky, Abramovich, Gusinsky). These large industrial, raw material, and financial companies represent a new source of power, whose relations with the state remain to be decided. Their prédecessors, the industrial ministries, were indeed powerful, but they were reined in by Gosplan, the Council of Ministers, and the Communist Party leadership. As major employers, often the most substantial tax payers, and sources of liquidity, these destatized corporations hold considerable unofficial power. They can make campaign contributions, bribe regulatory officials, acquire vast media empires, or "buy" their own members of the legislature. The balance of power between these large corporations and the official holders of power (the legislature, the President and the bureaucracy) is in flux and remains to be defined. The issue of unofficial state power has become so acute in some transition economies, including Russia, that experts question to what extent the state has been "captured" by these unofficial interests.¹⁰

In many cases, the state continues to own substantial shares in the destatized corporations, not only of the prominent companies

⁸ Putin's regional reforms, discussed below, phase out membership of governors in the Federa-tion Council. But selected regional leaders will be members of the resurrected State Council

⁹During its Spring 2001 session, for example, the Duma adopted 4 federal constitutional laws, ¹⁵⁵ federal laws, ratified 27 international treaties, and considered 58 of 83 priority draft laws scheduled for discussion. See RFE/RL Newsline, 16 July, 2001. ¹⁰The European Bank for Reconstruction and Development (EBRD) even compiles "state cap-

ture" indexes for the transition economies in their various transition reports.

such as Gazprom and Lukoil but also of regional and local destatized companies. The "state" therefore has a natural means of controlling such companies by exercising its rights as the largest single shareholder. Putin's recent replacement of Gazprom's general director with a trusted subordinate provides a model. In less prominent cases, such as smaller regional destatized companies. management appears to have "captured" state officials who are supposed to represent the state's interests, and they escape effective state control. For example, at about the same time that Putin was replacing the management of Gazprom, the GOK Combinat was being "auctioned" to insiders for \$20 million instead of its "expected" price of \$100 million. Accordingly, the state budget seems to have lost \$80 million through this insider transaction.¹¹

Some agencies have grown in power and others have lost power compared to the Soviet period. Previously dominant agencies, such as Gosplan, have been converted into a less-powerful Ministry of Economic Development and Trade.¹² The Soviet Ministry of Oil and Gas Industry, which ran the U.S.S.R.'s vast energy complex, has become a regulator and issuer of licenses as the Russian Ministry of Fuel and Energy. The various tax collection agencies have grown in importance now that taxes are collected from more independent units rather than semi-automatically by the state banking system from state enterprises. The property committee has been a powerful agency, particularly during periods of active privatization. It had no predecessor in the Soviet period. The "new" ministries and agencies required for a market economy (such as the Federal Securities Agency, the Federal Service for Financial Rehabilitation and Bankruptcy) were grafted into the structure of government without gaining much influence in government circles. They have been unable to attract sufficient funding or secure cooperation from other ministries. Moreover, cuts in government agencies have been carried out uniformly, meaning that the new agencies, which tend to be understaffed, become more understaffed, while traditional ministries, which are overstaffed become less overstaffed.13

Figure 2 lists one state agency, the State Bank, which by legislation of 1995, has become a quasi-independent agency. The Soviet structure also lacked independent agencies. The most obvious candidate for future independence, the judiciary branch, may become an independent branch of government if Putin's declared reform program is realized. Putin has made the creation of an independent judiciary a priority of his state program announced in 2001.¹⁴ Putin argues that the investment climate of Russia cannot improve without confidence in an impartial judiciary; hence an independent judiciary is being proposed for quite pragmatic reasons.

¹¹ "Ochen' spetsialny auktsion," Moskovskie novosti, 12-18 June, 2001.

¹² The power of a particular agency depends upon proximity and trust of the President. For example, the Ministry of Economic Development and Trade has been very influential in the first

 ¹³ Parisons, Neil. op. cit., pp. 202–213.
 ¹⁴ BBC Monitoring Service, Russian President's Annual Address to Federal Assembly, April 3, 2001; translation of Vystuplenie presidenta RF V.V. Putina s poslaniem federalnomu sobraniiu RF, 3 April 2001 (http://president.kremlin.ru/events/191.html).

FEDERALISM

In the Soviet period, there was no debate about federalism-who owned state property, how tax revenues were distributed, who regulated enterprises located in the region, etc.? Republics, provinces. regions, and cities were clearly subservient to the national government. The Soviet budget was a unified budget prepared by the Soviet finance ministry; taxes were collected and credits allocated by the state banking system; spending was allocated through the unified state budget. Nevertheless, the de facto owners of state property were known. The national ministries were the de facto owners of the most important industrial assets: Republican ministries and state agencies were the de facto owners of assets of lesser importance. Local governments were the de facto owners of enterprises that worked for local markets, such as gravel and local building materials. Regional, metropolitan, and local governments' claims to resources were largely dictated by the political position of the regional leader (whether or not the regional leader was in the Politburg or Central Committee). Appointments to republican, regional, and local positions were made from Moscow through the nomenklatura list. The best and most promising people were transferred to Moscow.

The federalism issue—how are power and resources to be divided between the center and the periphery—has been one of the most difficult tasks of Russian administrative reform. The lack of resolution of this issue should come as no surprise. Even highly stable countries, like the United States, still argue bitterly over issues like states' rights more than 250 years after their founding.

Federalism asks whether power is to be decentralized to the regions or centralized in Moscow? Different countries have arrived at different solutions that work well in practice. On a theoretical level, a decentralized system encourages diversity, offers citizens different choices, and allows for experimentation. On a practical level, a well-defined rule of law requires sufficiently uniform and consistent laws and regulations. Excessive divergences of regional laws from national laws, or even contradictions of one by the other, cause the national political space to subdivide into different markets, operating according to substantially different rules of the game. Founding constitutions usually address rights of regions visà-vis the center, but the 1993 Russian Constitution left many of these issues to be resolved in practice.

Upon achieving independence, the Russian periphery consisted of 89 regions, each headed by a governor or equivalent. The governor was elected, often with rigged elections, and could not be dismissed by the President. President Yeltsin's attempts to remove a regional governor failed. Each region passed its own laws and regulations and made claims to assets, such as oil fields or industrial assets that were located on its territories. Taxes were collected mostly at the local level, and the distribution of tax proceeds was a constant source of conflict. Many regional laws and regulations were passed chaotically without reference to the Constitution of the Russian Federation, and a number of regions made claims to complete independence (including Chechnya, which led to a war between the center and this periphery).

Putin's legislation creating seven federal districts was passed by the Duma and even by a compliant Federation Council (which the measure emasculated) in spring 2000. Putin's regional reform goes a long way toward resolving Russia's federalism issue in favor of the centralized variant. Putin has called the passage of this measure "one of the most important decisions taken in 2000."¹⁵ This legislation inserted seven federal regions, headed by a pleni-potentiary regional representative appointed by the President, between the federal government and the regional governors. This reform enables the Russian President to appoint all representatives of federal power within the district, control regional legislation, monitor the carrying out of federal decrees, and increase control over regional governors (even allowing the President to dismiss governors under certain conditions).

Putin's regional reform also redistributes tax revenue from 55 percent for the center to 70 percent for the center and makes the region's primary source of revenue the uncertain profits tax on enterprises on the theory that regional authorities can better gauge enterprise profits than some national tax authority.¹⁶ A key feature of the reform is the harmonization of regional laws and regulations with national laws and the Russian Constitution. According to Putin, more than 3,500 laws of the regions conflicted either with the constitution or with federal laws.¹⁷ In the year 2000, prosecutors and Presidential envoys brought 90 percent of the regional laws into compliance with federal laws,¹⁸ but the harmonization work continues, especially on joint jurisdiction issues. The negotiation of 42 power-sharing agreements is still required, on which more than 250 existing agreements are based.¹⁹

Putin's success in resolving, at least for the time being, the federalism issue relates to his first-round election in early 2000, his popularity associated with a rising economy, and his popular tough stand on Chechnya leading up to the Presidential election.

LIBERALIZATION, DE-BUREAUCRATIZATION, AND CORRUPTION

Russia receives low rankings from international organizations and agencies, such as European Bank for Reconstruction and Development (ÉBRD), Transparency International, and Heritage Foundation, concerning its high corruption and limited economic liberalization and economic freedom among the transition countries. Foreign investment is limited by the lack of a clear "rule of law" as is domestic entrepreneurship.²⁰ Excessive bureaucracy also encourages businesses to operate in the shadow economy by making it too expensive to operate legally. Unclear or conflicting laws encourage bureaucratic intervention. Tax complexity allows more discretion by tax officials and hence encourages bribes to officials.

 ¹⁵ BBC, op. cit., April 3, 2001.
 ¹⁶ Petrov, Nikolai. "Decentralization and Recentralization in Russia," Carnegie Endowment for International Peace, Russian and Eurasian Program, Vol. 2, October 25, 2000.

¹⁷ BBC, op. cit.

¹⁸Kommersant, June 27, 2001.

¹⁹ RFE/RL Russian Federation Report, Vol. 3, no. 20, July 2001.

²⁰ See e.g., the two volume study by E.G. Yasin (ed.), op. cit.

A vague criminal justice system encourages the negotiation of sentences for fees.²¹

Russian writers depict endless inspections, certifications, and unnecessary restrictions on property rights. In many cases, the same licenses are required by different agencies, making the cost of licensing excessively high. Examples of excessive bureaucracy and corruption abound: The budget gets, for example, only 5 to 7 per-cent of the sum charged for licences. Regional administrations issue unlawful licences for 600 types of entrepreneurial activities. Licences serve as market barriers on the principle "pay to enter the market and then do what you want."²² Expert calculations suggest that administrative barriers cost Russian families \$18 a month in the form of higher retail prices.²³ Because of confusing and contradictory laws, practically every businessman is obliged to break the rules and to pay bribes to get the exemptions required to oper-ate the business.²⁴

Economic analysts, both within and outside of Russia, argue that the regulatory burden on Russian enterprises must be reduced significantly if the economy is to continue to grow and to attract foreign investment.²⁵

The Putin government, as represented by the reform-minded Minister of Economic Development and Trade, German Gref, issued an "anti-bureaucracy" decree in June 2001 forming the "Commission of the Government of the Russian Federation for the Curtailment of Administrative Restrictions on Entrepreneurship and the Optimization of Expenditures of the Federal Budget on State ad-ministration."²⁶ This commission is charged with reducing the amount of bureaucratic intervention in business affairs, ensuring that laws are applied to business consistently, and combating corruption of officials. The government's long-term development program assigns the anti-bureaucracy commission the following tasks, among others: ²⁷ The Commission must lower barriers to entry into markets, remove technical barriers to the process of production and trade, eliminate redundant administrative regulation of entrepreneurial activity, assure agreement between national and regional organs of authority, and eliminate redundant and ineffective regulation in the sphere of arbitration. There should be one system of licensing for the entire Russian Federation with a unified system of forms and documentation based on a "one window" registration procedure. Moreover, there should be a register of information on

 $^{^{21}}$ A new administrative code passed the Duma in October 2000. It constitutes a 500 page document that updates the 16 year old Soviet administrative code. This code requires, among a large number of regulations, Russian citizens to carry their passports, regulates fines for traffic violations and sets the rights of police to impound vehicles, and levies fines on officials for giving false information to citizens. It is unclear whether the new administrative code is an improvement in guaranteeing the civil rights of citizens. One of the fiercest debates in the Duma was a provision (subsequently dropped) that would have allowed the traffic police to impound vehi-cles. On this, see "State Duma Lays Down the Law of the Land," *Moscow Times*, October 6,

^{2000.} ²²Press Briefing By Minister for Economic Development and Trade German Gref, March 2, 2001 (www.fednews.ru/).
 ²³ "Getting rid of bureaucrats will save \$5.8 bln," March 2, 2001 (www.strana.ru).
 ²⁴ Press Briefing By Minister for Economic Development and Trade German Gref, March 2,

^{2001,} op. cit. ²⁵ Yu. A. Tikhomirov, "Rol gosudarstva i prava v formirovanii blagopriiatnogo investitsionnogo klimata," in E.G. Yasin (ed.), pp. 213–218.

 ²⁶ Postanovlenie pravitelstva rossiiskoi federatsii No. 452, June 8, 2001.
 ²⁷ Kuzminov, Yaroslav. "Rol gosudarstva i prava v formiro investitsionnogo klimata v Rossii," in E.G. Yasin (ed.), pp. 213–218. formirovanii blagopriiatnogo

juridical persons that is available to all, and a sharp reduction in the number of licensed activities. The licensing of investment projects (such as major energy infrastructure projects) are also to have a "one window" licensing procedure and cannot be required to obtain licenses from multiple authorities. The Commission is also charged with reducing the number of certifications, the number of agencies that are allowed to make inspections; and the elimination of duplication of inspections. Moreover, it is recommended that more use be made of professional self-regulating organizations, rather than government agencies.²⁸

These anti-bureaucracy measures have considerable popular appeal and the support of both domestic and foreign entrepreneurs. but they also face considerable opposition. The economic theory of corruption states that an economy that is "over-regulated" with rules, licensing requirements and bureaucratic interventions encourages corruption.²⁹ A highly regulated economy creates opportunities for government officials to "sell" monopoly rents, or even to charge businesspersons for carrying out their "normal" bureaucratic duties, like issuing a routine license. The more liberalized the economy, the fewer the opportunities for officials to earn income by selling valuable rights or by charging customers for carrying out their normal duties. If the regulated domestic price of oil is one half the foreign price, an oil export license provides the owner of the license an opportunity to double his money. In a liberalized economy, the two prices would be the same and the export license would not be valuable. If there were specific sentencing guidelines in the criminal code, prosecutors could not sell lenient sentences to criminals.³⁰ If it did not take 6 months to obtain a business license, the situation would not exist where the license officially cost 15.000 rubles but people actually pay mav \$400,000.31

The regional reform's harmonization of regional and national laws is intimately related to the anti-bureaucratic reform in that much of the redundancy and duplication in matters of licensing and certifications are related to conflicts between federal and regional statutes and regulations.

Putin's anti-bureaucracy reforms, if implemented, attack the heart of official corruption. A lower bureaucratic and regulatory burden on businesses reduces the demand for official corruption. The more liberalized the economy's prices, international trade, banking institutions, licensing procedures, and the like, the less op-portunity officials have to sell monopolies to rent seekers.

Despite its popular appeal, these anti-bureaucracy measures face considerable open and hidden opposition for the very reason that they threaten the incomes of officials, who, more than likely, receive low nominal salaries for their official work. Any Russian official with the power to regulate, starting with a lowly traffic police-

 ²⁸Osnovnye napravlenila sotsial'no-ekonomicheskogo razvitila rossilskoi federatsii na dolgosrochnulu perspektivu, Moscow, 2001, Section 1.2.3.
 ²⁹Shleifer, A. and R. Vishny. "Pervasive Shortages Under Socialism," Rand Journal of Economics, Vol. 23, 1992, pp. 237-246.
 ³⁰Yasin, E.G. "Modernization of the Russian Economy: Problems on the Agenda, Modernization of the Economy of Russia," Higher School of Economics, Moscow, April 30, 2001.
 ³¹Press Briefing By Minister for Economic Development and Trade Corman Gref March 2

³¹Press Briefing By Minister for Economic Development and Trade German Gref, March 2, 2001, op. cit.

man to the distributor of oil export licenses, stands to lose considerable "bribe" income if the anti-bureaucracy commission is successful. As in Soviet times, economic reform stumbled over bureaucratic opposition; it remains to be seen whether Russia's bureaucrats can successfully block the current reform effort.

CIVIL SERVICE REFORM

Russia's civil service administration is governed by the Civil Service Law of 1995. Moreover, the Federal Constitutional Law on the Government of the Russian Federation spells out rules of conduct for government officials, such as the conflict of interest rules in article 11. Putin included a basic outline of proposals for civil service reform in his 2001 agenda, but apparently no draft of the civil service reform has been released. Its basic objectives, however, were spelled out in Putin's state of the union address of April 2001.³² According to Putin, "the efficiency of a state is determined not so much by the amount of property it has under its control but rather by the efficiency of the political and administrative mechanisms the state has to protect the public interest."³³ In his address, Putin stated the following principles: The Russian administration is currently too large and needs to be trimmed. The federal administration employed 882,000 in 1993 but employed more than one million in 2001. The number of bureaucrats at all levels has grown since Soviet days from 1.15 million in 1980 to 2.6 million. In 2000 alone, the number of official chauffeur driven cars grew by 23,500 to 605,290.³⁴

In line with the anti-bureaucracy measures, governmental agencies should be subjected to review to identify their functions and presumably reduce the amount of overlap. All relations between the state and business should be transparent, eliminating the possibility of arbitrary intervention and excessive regulation.

In its essence, Putin's civil service reform outline aims to change the Russian bureaucracy from its petitioning and strong control structure of the Soviet past to a service culture.³⁵ Position papers prepared in anticipation of an eventual civil service reform state the goal of creating a professional civil service based upon merit selection, civil service rules, and competitive salaries that reduce bribe taking and corruption. Low pay of civil servants discourages public service and limits the entry of young persons into public service (the average age of employees in the ministry of economics is over 50). The assumption is that Russian civil servants if properly compensated will reduce their intervention in the affairs of private businesses because they will no longer need bribes and other payoffs to make ends meet.

Although not stated specifically, the need for higher salaries appears to be a reason why administrative reform is not scheduled for the immediate future. If an average salary of, say, \$1,000 per month were agreed upon as one that would drastically limit graft and corruption, this figure alone would account for about one-third of all federal government spending or 20 percent of spending from

³²BBC, op. cit.

³³ Ibid.

³⁴ Reuters, March 6, 2001.

³⁵ Parison, op. cit., p. 362.

the consolidated budget. Clearly, if salaries are to be raised to such levels, the size of the state bureaucracy has to be markedly reduced, which is a time consuming activity that goes against strong vested interests.

In order for a public administration reform to be successful the remnants of the old nomenklatura mentality must be removed. The nomenklatura mentality was that public positions are to be obtained not through merit but through influence, connections, and perhaps even outright purchase.³⁶ The nomenclature or bureaucratic mentality also assumed that membership in the nomenklatura brought with it perks and privileges not accessible to others. When perks and privileges associated with public service declined, graft and bribe taking took their place.

ARE PUTIN'S REFORMS TOO GOOD TO BE TRUE?

The administrative reforms outlined in this paper are breathtaking in their rhetoric and scope. They surpass the 1992 reform language of the Gaidar reform government. These measures appear to move the country in the right direction, although one can disagree with Putin's consolidation of power in the center. It could be argued that a rule of law can be imposed on a country in chaos only from the center and that regional experimentation and autonomy may have to be sacrificed in the process. Two significant issues remain: Will Putin remain steadfast in his support of liberalizing reforms or will he, like his predecessor, Yeltsin, vacillate between liberalizing and de-liberalizing reforms with the passage of time and fluctuations in his popularity. If Putin, as a relatively voung man, intends to be President for the next decade, he would likely take a long-run view and realize that the Russian economy cannot prosper without a rule of law, without domestic and foreign private investment, and a reduction of corruption. Thus, Putin's interests and the interests of economic rationality would coincide. We, of course, cannot guess what Putin's personal objectives are, but we cannot rule out that they prominently include the long-term economic growth and development of the Russian economy. The second question is whether Putin, like decades of Russian and Soviet leaders before him, will be sabotaged in his reform efforts at the grassroots level. In attacking bureaucratic excesses, corruption, and barriers to entry, Putin is taking on powerful and largely unseen forces that have objectives inconsistent with the development of an efficient economic system. It should be noted that the current Russian nomenklatura is basically the old Soviet elite. During the first half of the reform decade, the survival rate among the regional administrative elite was 82 percent and 65 to 75 percent of the former nomenklatura continued to occupy positions within the Russian post-Communist elite. Some have moved across institutional boundaries, but most have continued to occupy their old positions or similar positions.³⁷ We cannot tell whether such vested interests still succeed in defeating these and subsequent administrative re-

³⁶ In modern day Russia there are rumors and other evidence that high-level government positions an purchased. See Parison, op. cit., p. 363.
³⁷ These figures are from Stephen White and Olga Kryshtanovskaya, "Russia: Elite Continuity

³⁷ These figures are from Stephen White and Olga Kryshtanovskaya, "Russia: Elite Continuity and Change," in Mattei Dogan and John Higley (eds.), *Elite, Crises, and the Origins of Regimes* (Lanham: Rowman and Littlefield, 1998).

forms. The thousands of administrative decisions that must be made monthly or quarterly, such as auctions of government shares in less visible companies or the implementation of debureaucratization rules at the local level, will determine whether Russia operates by a rule of law or not. These decisions cannot be taken by the President. They must be taken by thousands of faceless officials, who must somehow be motivated to decide in the larger interests of the state. This is a daunting goal that only a few "civilized" countries have achieved. In this light, Russia faces an uphill battle in its struggle for rational administrative reform.

RUSSIAN CRIME AND CORRUPTION IN AN ERA OF GLOBALIZATION: IMPLICATIONS FOR THE UNITED STATES

By Jonathan M. Winer and Phil Williams¹

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SUMMARY

While globalization and privatization have clearly fueled Russian organized crime, organized crime has a lengthy history in Russia. Among the most important elements of today's organized crime are liaisons between the nomenklatura, ethnic traders, and Russian criminals. Important elements of these groups colluded during Russia's transition to convert the resources of the Soviet Union's command economy to their personal ownership and control. The mechanisms by which they accomplished this included ruble to dollar

¹Jonathan M. Winer, formerly U.S. Deputy Assistant Secretary of State for International Enforcement, is currently counsel at Alston & Bird, L.L.P. Dr. Phil Williams is a Professor in the Graduate School of Public and International Affairs at the University of Pittsburgh and formerly Director of the University's Ridgway Center for International Security Studies. Certain elements of this paper were originally prepared for the National Intelligence Council in spring 2001 in separate presentations by each of the authors.

credit manipulation, theft of natural resources owned by the government through false documentation, the exploitation of the state to secure exemption from taxation and from oversight, bribery, extortion, contract killings, and money laundering. Triangular relationships between criminals, business persons, and officials exploit the lack of clear distinctions in Russia between what is legal and what is illegal; what is public and what is private; and what is permissible and what is prohibited. Closely linked to Russia's organized crime is Russian money laundering, whose infrastructure serves not only criminals but facilitates large-scale capital flight, depriving Russia of fiscal resources, and fueling Russia's shadow economy.

The transformation of Russia to a country where free markets and democracy are realities requires Russia to undertake steps that threaten those whose power depends on discouraging rule of law, including criminals, exploitative business persons and corrupt bureaucrats. Russian organized crime will likely continue to oppose Russian efforts to collect taxes in a fair manner, pay its civil service a living wage, maintain high caliber professionals in government, build effective self-regulatory organizations, and sanction those who engage in unfair trade and business practices. Reforms that would begin to provide an environment better suited for Russia to combat its organized crime problem would include effective anti-corruption measures, increased freedom of the press, a fairer and more effective tax system, financial sector regulatory reforms, legal reforms, and effective implementation of the recently passed money laundering legislation.

The investment that Russia has attracted over the past few years is minuscule, compared to that which has flowed to other transition economies, and to that which the country should attract, given its rich natural endowment and its talent and educated workforce. If you deduct negative investment, i.e., capital flight, the picture is a bit more discouraging. Capital flight is estimated at about \$2 billion per month. That amount attracted is meanwhile worse than minuscule. As President Putin said in his April Address to the Federal Assembly, up to now the only investors who have come here are those who have to be here, whether because they focused on Russia's natural resources or are supplying Russia's still fledgling consumer industry ... The reasons for this situation are the very issues that the Russian government is now moving to confront. They include corporate governance abuses, the country's weak judicial system, and inadequate defense of property rights, excessive bureaucracy and lack of trans-parency, and corruption. All of this further adds up to a profound issue of the lack of trust in economic institutions that continues to hinder normal economic relationships and structures from developing. (Farewell speech, U.S. Ambassador to Moscow, Ambassador James Collins, American Chamber of Commerce, June 15, 2001)

The excitement over reform in Russia—the passage of a budget, tax changes, a growing economy and political stability-is increasing among the international business community. In fact, it seems that Russia will soon become the darling of foreign investors, with political risk now practically nil and state coffers overflowing with petrodollars. But within this favorable situation. some critical factors remain largely ignored. The real environment in which Russian business operates, at least those firms that are profitable, lies within the shadow of criminal organizations with strong links to both the government and bureaucracy ... Since Russian crime syndicates do not have the documented origins and family structure of the Cosa Nostra-and are often loosely tied through backroom dealings—statistics on how many Russian businesses are actually under the control of the "Mafia" are virtually impossible to come up with. But the fact that almost all of the thousand-odd contract killings of business people here over the past seven years remain unsolved speaks for itself. (Editorial. "A Culture of Crime." Russia Journal. July 23, 2001)

Average Russians continue to suffer abuse daily at the hands of the militia, the traffic police, and corrupt bureaucrats. The state may try them more than once for a crime. They may be detained without charges for seventy-two hours or held in a tuberculosis-ridden pre-trial detention center for years. Opening a business involves as much paperwork and bribery as ever. The *mafiya* still extracts *dan* from entrepreneurs. The countrywide decay that began during the Yeltsin years continues, with television towers catching fire, nuclear submarines sinking, military aircraft crashing to earth, apartment buildings exploding from leaks in decrepit gas pipes, and entire regions of the country going without heat and electricity in winter months. Thirty-six percent of the population, or 52 million people, live below the subsistence level, set at a dollar a day. (Article, "Russia is Finished," Atlantic Monthly, May, 2001, Jeffrey Tailer)

RUSSIAN ORGANIZED CRIME: ECONOMIC IMPACT AND CHARACTERISTICS²

There is widespread consensus that the weakness of the Russian state, the existence of a pre-existing black market, and the corruption that pervaded the privatization process inhibited the development of formal legal standards and norms that would have exercised effective control over Russia's rapid transition from a command to a market economy. There is less consensus about the role played by organized crime in these problems. Some commentators

 $^{^2}$ For the sake of length and clarity, this paper looks at Russian organized crime in terms of criminal activity arising in and out of Russia itself, regardless of which Russian-speaking ethnic group carries out the activity. In general, the observations within this essay would apply with equal force to most other components of the former Soviet Union, including in particular Ukraine and Kazakhstan, and to some extent Belarus, Georgia, Armenia, and the Baltics. The tribal history and future of most of the other "stans," which include the withdrawal of substantial components of the former Soviet and John Substantial components of the former separate analysis.

seek to differentiate the economic impact of capital flight involving corruption and theft of resources from traditional forms of organized crime, such as drug trafficking, trafficking in women, motor vehicle theft, and extortion.³ However, standard characterizations of organized crime tend to define the activity in ways that render such differentiation meaningless: organized crime encompasses economically motivated illicit activity undertaken by any group, association or other body consisting of two or more individuals, whether formally or informally organized, where the negative impact of said activity could be considered significant from an economic, social, violence generation, health and safety and/or environmental perspective.4 Furthermore, even if one limits the definition of organized crime to that activity involving illicit force or the threat of force by non-state actors, such as contract killings or extortion, it remains clear that Russian organized crime pervaded the Russian transition, affecting such important economic sectors as oil and gas, minerals and other extractive industries, financial services sector institutions; and substantial portions of Russia's cross-border trade.⁵

Recent figures suggest that the influence of organized crime in Russia's economy remains a significant element of Russia's economy, as well as its political life. On February 7, 2001, Alexander Kulikov, the Chairman of the state Duma security committee announced that the shadow economy had become a matter of national concern, as the level of criminal business was seriously undermining the economic security of the state. Citing statistics from Russia's Interior Ministry, Kulikov stated that some 40 percent of Russia's economy was engaged in the shadow sector through parallel commercial structures involving "filial companies" and "dummy firms," in such sectors as alcohol, gambling and show business."⁶ According to Kulikov, between 50 and 85 percent of all banks operating throughout Russia are under the control of organized crime, while revenues from the shadow economy making up 40 percent of Russia's gross domestic product (GDP), with nearly 9 million citi-

³See e.g., L. Grigoryev, A. Kosarev, "Capital Flight: Scale and Nature," February 24, 2000, available from the International Monetary Fund (IMF), Bureau of Economy Analysis, arguing that most of the money laundered out of Russia represents avoidance of currency exchange and tax laws, rather than income obtained through drug trafficking, financial manipulations or racketeering. The authors argue that whereas in the west, the transferred funds would represent theft of a company's resources from owners or shareholders, in a Russian context, "owners and managers oftentimes do not draw much of a distinction between cash belonging to the enterprise and their own cash." As argued below, the lack of such distinctions is one of the major problems confronting Russia.

⁴ This definition is taken from the 1998 "Organized Crime Impact Study," of the Solicitor General of Canada. Other definitions include INTERPOL's 1988 definition of organized crime as "Any enterprise or group of persons engaged in a continuing illegal activity which has as its primary purpose generation of profits, irrespective of national boundaries," from INTERPOL's First National Symposium on Organized Crime at St. Cloud, France, May 1988; the German national police or Bundeskriminalamt (BKA) definition of organized crime as "Any group of people who have consciously and deliberately decided to cooperate in illegal activities over a certain period of time, apportioning tasks among themselves, and often using modern infrastructure systems, with the principal aim of amassing substantial profits as quickly as possible," and the current INTERPOL definition, "Any group having a corporate structure whose primary objective is to obtain money through illegal activities, often surviving on fear and corruption." The United Nation's Convention Against Transnational Organized Crime, signed in Palermo, Italy in December 2000, defines organized crime as actions undertaken by a group of three or more persons in violation of national law for economic or financial benefit. Each of these definitions captures the activities in Russia that are the subject of this article.

⁵A report in St. Petersburg Times, June 25, 1999, suggested that contract "hits" were most common in the oil and gas, metals and banking sectors.

^{6&}quot;Criminal Business Undermining Economic Security of Russia," February 7, 2001, RIA Novsti.

zens involved in such activities. Kulikov also claimed that "over the last five years, the number of organized crime groups increased 17 times, while the number of groups with corrupt links rose 170 times."7

Notably, Russia's economy ministries take a different view. Recently, Russia's Economic Development and Trade Minister, German Gref, contends that conditions for investment in Russia by foreigners are "better than ever" and that a "silent revolution" has taken place in Russia's economy, making the picture for the future positive.8 While the recovery has closely paralleled the worldwide increase in prices for natural resources, in particular, oil and gas, some analysts also contend not only that the impact of Russian crime on Russia's economy in the past has been overstated but also that it is likely to diminish even further in the future.9 For the most part, however, there is a consensus that capital flight, infrastructure decay, tax collection, loss of foreign investment, remain current, not historical problems, and each problem has been exacerbated by Russian corruption and organized crime.¹⁰

HISTORICAL AND CULTURAL ELEMENTS

While globalization and privatization have clearly fueled Russian organized crime, its presence in Russian society goes back to Czarist times, and endured throughout the Soviet period.¹¹ Salient fac-tors pertaining to the relationship between the Russian Government and Russian organized crime that have endured throughout the 20th century include:

• Disconnection between the authority and legitimacy of the head of state (whether the Czar, Stalin, or Yeltsin) and the actions of the often arbitrary or ineffective government operating beneath the head of state, with the result that the head of state has often acted to undermine the authority of key ministries and agencies.¹²

tions runs deep and includes a chasin between state and social and without recourse for its victims. To unreachable authorities. Power was exercised ruthlessly and without recourse for its victims. To day's Russia, despite the changes of recent years, still bears the deep imprint of this history." ¹²While this assessment may not be true of the Putin government, the current structural ele-

ments of Russian organized crime are a continuing consequence of the conditions of their forma-tion and operation during the Yeltsin period.

⁷ Id.

⁷ Id. ⁹ Interview, Russia TV channel, Moscow, BBC Monitor, June 24, 2001, ⁹ See e.g., "Think Again," Anders Aslund, Foreign Policy, July/August 2001, arguing that the ⁴ 4 percent loss of GDP in Russian from 1989 to 1998 is "grossly exaggerated" due to statistical quirks; that the virtual barter economy is "marginal," and that because privatization "perma-nently deprives public servants of public property ... they can no longer charge money for the privilege of using it." Aslund states that the Russian investment climate remains poor because of "excessive bureaucracy and corrupt law enforcement," distinguishing these elements from what he views to be essentially honest "privatization." ¹⁰ See e.g., CRS: RL30394: Russian Capital Flight, Economic Reforms, and U.S. Interests: An Analysis, William H. Cooper, Specialist in International Trade and Finance, Foreign Affairs, De-fense, and Trade Division, John P. Hardt, Senior Specialist in Post-Soviet Economics, Foreign Affairs, Defense, and Trade Division, March 10, 2000, "Capital flight is a symptom of poor eco-nomic conditions in Russia. But it also *re-enforces* poor economic conditions as it deprives the

Affairs, Defense, and Trade Division, March 10, 2000, "Capital flight is a symptom of poor eco-nomic conditions in Russia. But it also *re-enforces* poor economic conditions as it deprives the economy of the critical investment and budgetary resources to build sustainable economic growth and finance social welfare programs." See also testimony of U.S. Secretary of the Treas-urer Larry Summers before House Committee on Banking, September 21, 1999, stating that "money laundering requires neither official corruption nor capital flight. However, the three often come together where the rule of law is weak and confidence in the economy is low." ¹¹See e.g., "A State of Lawlessness, Corruption, Coercion Reign in Russia," David Hoffman, Washington Post, September 10, 1999, noting "throughout its history, from the czars to the So-viet Communist Party, Russia has no tradition of the rule of law. The legacy of previous genera-tions runs deep and includes a chasm between state and society and a heritage of arbitrary and unreachable authorities. Power was exercised ruthlessly and without recourse for its victims. To-

- Rulemaking and regulation which in practice and effect are experienced as arbitrary and capricious by the governed, making their rationality, as well as legitimacy, questionable.
- A lack of a developed and vigorous civil society. Social structures and institutions apart from the government are not only weak but are accompanied by governmental structures that function incompetently.
- Corruption as a way of life for officials, whether motivated by a desire simply to make ends meet or by greed.
- Corruption as a way of life for the private sector, however large or small that has been, to get its business done.
- Little transparency in governmental operations, leading to inadequate oversight and lack of popular participation in governmental decisionmaking.
- Collusion and even merger of key governmental officials and structures with counterpart criminals and criminal organizations on the outside.¹³
- A tradition of governance that emphasizes the rule of people or party and not the rule of law. Both the Czars and the Communists, in effect, were both above and beyond the law.

These conditions, which have undermined the Russian Government and strengthened Russian organized crime, are the heritage of both Czarist Russia and the Soviet state. Lenin and Stalin built power upon the delegitimatization of the Czarist state. The new Soviet Union was not an expression of a government in a traditional sense, but of a system of governance that aimed to further the ends of a political party, the Bolsheviks, whose means, if not their explicit goals, differed in scale but not in substance from those used by organized crime the world over. Core values of criminals everywhere are disdain for rule of law and for democracy. Criminals have no reason to adhere to either principle, except to the extent that they are threatened by sanctions being enforced by those who do adhere to those principles. The Russian Communist Party had similar reasons to oppose both the principles of rule of law and of democracy. Any increase in either of those two trends created a concomitant and relatively proportional increase in the risks that sanctions would be applied to the Communists and their relative power in society would decrease.

During the Brezhnev stagnation, the ideological and patriotic fervor sustained by the victory over the Germans in World War II and the grab for empire in Central Europe in the post-war period waned. Significant elements of the Communist Party, the Soviet Government, and the Soviet economy developed into a system of "mafiyas" that had a close resemblance to governance in Sicily. Favorites obtained territories that they were permitted to exploit. In that corruption, lay what a number of commentators have described as the seeds of the criminalization of the modern Russia, through the development of criminal practices, by three identifiable classes of persons:

• Nomenklatura, whose access to resources and licenses provided a means of trading access and permission for material goods

¹³A comprehensive journalistic description of this phenomenon in the Yeltsin era is set forth in "Comrade Criminal—Russia's New Mafia," Stephen Handelman, Yale University Press, 1995.

and special privileges. The nomenklatura consisted of both state managers and members of the institutions of social control such as the KGB, the Ministry of Interior and even the Soviet military.

- Ethnic traders, whose non-Russian status gave them greater access to the West, western institutions, and capitalist activities at a time when direct participation in commerce would have been ideologically risky for members of the nomenklatura themselves. The traders, who included Jews, Armenians, and Georgians, among others, formed the bow wave of this group, acting as importers and exporters under the Soviet regime, often in complex relationships with governmental enterprises, elements of the nomenklatura, elements of Soviet intelligence, and elements of the Soviet military;
- Thieves in law and other Russian criminals who honed bureaucratic survival skills in the gulag; later these groups formed close ties with those involved in Russian wrestling, hockey, and other sports where physical strength provided a basis for prestige and power on the one hand, and for demonstrating the ability to provide physical protection (or physical intimidation) on the other.

During the 30 year period of the cold war (roughly, from the death of Stalin through the death of Chernyenko), Geneva, Paris, Vienna, and Tel Aviv became important entry points for covert financial activities by the Soviet Union. Riga, Kalingrad, and Crimea developed port capabilities suitable for smuggling. Third world outposts in the Middle East, Africa, South East Asia, and during the 1980s, Central America, became opportunities for refining techniques of transporting prohibited goods through corrupt or weakened governmental mechanisms. False invoicing, fraudulent documentation, the use of shell companies and cut-outs, all essential elements of the tradecraft of Soviet espionage, became techniques widely known through the relatively small community of people who handled the Soviet's economic contacts with the West. These techniques, together with a culture of non-transparency and corruption, would translate easily into post-Communist Russia, and eventually play a substantial role in swallowing up reform. Indeed, they inflicted profound systemic harm to Russia's initial efforts. from 1990 through 2000, to modernize its political and economic system in a manner that would strengthen rule of law and democracy.

In this context, the Gorbachev reforms weakened the position of the Communist Party in society and of the state itself. *Glasnost* created the intended consequence of greater democratization and strengthened those elements of society, such as the academic and professional elites, the core of the then Russian upper middle class, whose political and economic opportunity would increase with greater democratization and strengthened rule of law. However, the reform process had the paradoxical result of also strengthening those elements of government that saw the weaker state as presenting a once-in-a-lifetime opportunity to seize control of important resources, and those elements of society that saw the weaker state as an unprecedented opportunity to engage in predatory or criminal behavior with little fear of retribution. The Communist Party and the Soviet State had historically functioned as mechanisms to divide up the wealth of whatever they controlled as the arbiters of the command economy. With the breakup of the Communist Party and the Soviet State as the entities which by right or might controlled all the wealth of the Soviet Union, who had the right to the resources was an extraordinarily open question. Not surprisingly, therefore, the three groups who provided the basic components of a novel and distinctive form of organized crime—the nomenklatura (including important elements of the military, law enforcement, and Soviet intelligence), the ethnic traders, and the criminals and athletes—found enormous and lucrative opportunities to collude with one another to convert the resources of the Soviet Union's command economy to their personal ownership and control. The mechanisms by which they accomplished this were as myriad as the opportunities provided by the transition from the Soviet economy to the so-called market economy. Some of the more significant included:

- The issuance of large quantities of ruble loans by Soviet finan-cial institutions to well-placed persons who later became known as oligarchs. These ruble loans, issued at interest rates that were intentionally well below market, were immediately converted into dollars. The mass conversion of these rubles into dollars in turn facilitated the depreciation of the ruble against the dollar, providing instant wealth the holders of the dollars. who were able to repay their debts at a few kopecks to a ruble. This activity had a massive impact in reducing the value of the ruble against other currencies and its buying power within Russia. It simultaneously provided a mechanism by which those with the ability to borrow rubles (i.e., ruble debtors) had a lever to convert a substantial portion of the inherited capital of the Soviet Union into personal fortunes. The concomitant corollary of this activity was the devaluation and the commonplace reduction to beggary of the millions of souls who had the misfortune of actually holding rubles. These soon became worthless and were exchanged at a ratio of 100 to 1 for new rubles.¹⁴ Thus the wealth of a nation, such as it was, was efficiently converted into the capital of the few. Prominent examples of this class of oligarch/criminal include Boris Berezovsky, Vladimir Gusinsky, Alexander Smolensky, and Mikhail Khodorkovsky.¹⁵
- Chubais' voucher-for-shares plan, which enabled the oligarchs who had previously enriched themselves through dollar-ruble

¹⁴The initial devaluation of the Russian ruble in the early 1990s was far more profound in its consequences than the more recent devaluation of 1999, which merely reduced the ruble's value by 75 percent, with the other three-fourths of the ruble's value mostly going to the lucky holders of Russian bonds who had been able to book the interest rates without holding as their own the worthless notes once the IMF recognized the folly of being the guarantor of the integrity of Russia's banking system. The systemic misleading of the IMF by Russia's Central Bank (Central Bank of the Russian Federation), including its long-term chief Central Banker, as evidenced in the Financial Management Company (FIMACO) affair in spring 1999, prior to the ruble's collapse, provided evidence that Russian financial services regulation did yet to meet global standards.

¹⁵Khodorkovsky declared his flagship bank, Menatep, bankrupt at the time of the Russian ruble crisis, moving its assets to a second Menatep in St. Petersburg, and re-opening the Moscow offices of Menatep in the form of an oil company that he had purchased through manipulating Menatep's assets. In the United States, this activity would constitute racketeering. In Russia, Khodorkovsky continues to be a successful businessman and financier.

manipulations to further secure the ownership of the vast preponderance of Russia's wealth-generating industries, especially those in oil and gas, metals, timber, and other extractive industries.

- The sale of natural resources owned by the government to private persons through various mechanisms, including many involving false invoicing, false financing, false titling, and false ownership, enabling those who were able to control the export of any particular quantity of natural resources to steal most if not all of its value without having to pay market prices for the goods, taxes on the goods, funds to invest in the productive infrastructure to continue the goods, or any other costs besides those associated with bribing or killing anyone who might prevent them from so exporting the goods.
- The exploitation of the state to secure unique benefits, such as exemption from taxation and from oversight, as was exemplified by Viktor Chernomyrdin's effective stewardship over Gazprom during the period he was Prime Minister of Russia.

Thus, collusion between those controlling Russia's resources, traders and brokers, and armed enforcers built the new system of Russian governance and economics. Under Brezhnev and his successors, the Russian command economy had required coercion, extortion, theft, repression, and systemic corruption in order to function. In the Yeltsin period, this devolved into a new public-private system for government that preserved most of these mechanisms (i.e., coercion, extortion, theft, repression and systemic corruption) but substantially privatized them, and made them even harder to control: in short, Yeltsin's reforms, taking place in the context of a corrupted Soviet state, resulted in empowering a criminal class to take over an economy, and in important areas, its government. As a consequence of these structural and cultural features of

As a consequence of these structural and cultural features of Russian life, Russian organized crime has not been simply about the provision of illegal goods and services; it is also about the *control* of legal goods and services. In Russia there is not simply a criminal-political nexus but a political-criminal-business troika, consisting partly of dense network connections among key people in the three sectors ands partly of some figures straddling the three sectors, and engaging in politics, licit commerce and illegal business. These networks are ubiquitous. They have several dimensions: direct person to person relations; shared ownership of, or interest in, specific companies; and linkages through pivotal figures who are clearly network connectors.

Russian organized crime is thus characterized by at least three seamless webs—the seamless web between extortionists and security companies, the seamless web between licit and illicit business, and the seamless web between criminals on the one side and political and bureaucratic elites on the other. Out of these seamless webs has emerged a triangle of crime, business, and politics. There are two major reasons why this triangular relationship is extremely strong and resilient. First, each of the participants brings a different but complementary dimension to the table, thereby ensuring that the exchange relationships are beneficial to all. The political figures have access to the resources of government; the business figures bring both access to wealth and connections in the

worlds of commerce and finance; and the criminal organizations provide coercive power and plausible deniability for the other two groups.¹⁶ The triangular relationship is an alliance of convenience rather than of natural affinity, but the benefits are so deep that, in effect, the relationship has become institutionalized. Second, the triangle is based on the lack of clear distinctions in Russia between what is legal and what is illegal; what is public and what is private; and what is permissible and what is prohibited. Furthermore, so long as there is no clarity in the borders among these areas, the stability and durability of the triangle are likely to continue unhindered.

THE ELEMENT OF VIOLENCE IN RUSSIAN ORGANIZED CRIME AND MAFIYA BUSINESSES

It is often observed that in Russia those would limit themselves to legitimate business activity in other countries must engage in criminal activities such as tax evasion and money laundering in Russia, in order to carry out legitimate business. While this observation may be true in the case of particular individuals, the magnitude of clearly criminal violence involving extortion has been an impressive feature of Russia's economic transition. During this transition, cities as diverse as Yekaterinburg and St. Petersburg have been characterized by clashes among rival groups that surpass anything that occurred in Chicago during Prohibition. One result of this has been the success of a new generation of Russian criminals who do not accept the old rules of the vor-v-zakone and see the rapid accumulation of wealth as their raison d'etre. The criminals, however, have gone well beyond killing one another. While rivalry in the criminal world is certainly not unique to Russia, what has been far more surprising is the diversity of the targets of Russian contract killings. The victims have included bankers and businessmen, journalists and reformist politicians, local bureaucrats, hotel managers, and anyone who poses a threat or presents an obstacle to criminal activities. In one prominent case, American businessman, Paul Tatum was killed amidst reports that he had been feuding with his Russian business partners in the Radisson Hotel joint venture. Another prominent victim was Galina Staravoitova, a leading Duma deputy active in combating organized crime and corruption.¹⁷ Other victims in recent years have in-cluded: Ilya Waisman, economic and finance director of the Baltica Beer Company, who, in January 2000, was shot and killed at his home in St. Petersburg; Uralmash General Director Oleg Belonenko who was killed in July 2000; and Alexander Volkovsky, President of the Russo-Balt Petroleum Company, who was shot in the entrance to his apartment building in January 2001. Not all hits are successful of course. Among those who survived an attempted contract killing was Deputy Mayor of the Moscow city gov-

¹⁶The authors would like to thank Gregory Baudin-O'Hayon, a Graduate Research Associate at the Ridgway Center, University of Pittsburgh and William Cook, formerly a Graduate Re-search Associate at the Ridgway Center, University of Pittsburgh for the ideas, research, and network diagrams that have informed this part of the analysis. ¹⁷See William A. Cook and Gregory Baudin-O'Hayon, "A Chronology of Russian Killings" Transnational Organized Crime, Vol. 4 No. 2 Summer 1998 pp. 117-201.

ernment. Josif Ordzhonikidze, a figure with considerable reputation as a facilitator for business.

Official statistics suggest some improvement in the situation, with only 386 contract killings in Russia in 2000, a major decline from the 500 to 600 that occurred each year through most of the 1990s.¹⁸ Obtaining accurate figures, however, remains difficult, not least because different officials often release contradictory statistics. In June 1999, for example, senior Ministry of Interior official, Akhmed Khairov, deputy head of the Interior Ministry's major crimes section told journalists that 567 people were murdered in contract killings in Russia during the first 5 months of 1999-more than double the 232 killed during the same period in 1998. Khairov attributed the increase to the financial collapse of August 17, 1998 and the increase in unpaid debts.¹⁹ Yet in March 2001, Alexander Kirushev, deputy chief of the Ministry of Interior's Criminal Investigation Main Administration noted that the number of contract killings in 2000, was only 386-down from the 591 committed in 1999. Unless the fall-off rate in the second half of 1999 was unprecedented (only 24 contract killings in 7 months), this seems to be a considerable under-estimate for that year. Even allowing for the discrepancy however, the overall trend does seem to have been a marked reduction in the number of contract killings (accompanied by an increased success rate in solving these murders). However, the apparent trend should treated with some caution. An examination of the incidence of contract killings reveals a clear tendency to cluster in particular industries or economic sectors for several months (or in some cases 1 or 2 years) and then to disappear. This can be explained in several ways. Perhaps the most plausible explanation is that contract killings cease when organized crime has achieved its objectives and successfully infiltrated a particular sector such as banking or a particular industry such as aluminum. By eliminating those who resist them, organized crime can have a highly coercive impact on those who are left-without further killing. Similarly, the reduction in contract killings of vory-v-zakone or criminal authorities suggests that internecine warfare in the criminal world has given way to an established pecking order in which territories and markets have been divided up in ways that are more or less acceptable. In short, the decline in contract killings suggests not a decline in the power and influence of organized crime but its consolidation.

Indeed, as the comments by Kulikov quoted above indicate, organized crime has had considerable success in infiltrating and controlling legitimate businesses and economic sectors. The methods by which Russian organized crime has achieved this include contract killings but only as part of a complex mixture of guile and intimidation, political influence and acts of violent criminal intimidation. On the basis of an analysis of the Russian aluminum industry

¹⁸Aleksandr Strogin "Contract Killings Being Cleared Up After All. One Has Already Been 60-Percent Cleared Up" *Moscow Kommersant, 21* Mar 2001 p. 3. ¹⁹See St. Petersburg Times, June 25, 1999, "Russia's economic woes have put the cut-throat back into competition, with the first 5 months of 1999 seeing the incidence of contract killings double, Interior Ministry officials said Thursday. Between January and May this year, 567 busi-nessmen were slain on the orders of their competitors, compared to 232 such killings over the same period last year and 599 contract killings for the whole of 1998, according to police figures. The figures also show contract "hits" are most common in the oil and gas, metals and banking sectors, said Akhmed Khairov, deputy head of the Interior Ministry's major crimes section."

as well as the energy sectors in St. Petersburg, it is possible to identify forms of behavior that tend to be present in all such cases (and that provide ample warning indicators):

- Murder and other violent attacks on personnel in a particular company or industry sector who might be an obstacle to the takeover.
- Equity or share purchases designed to obtain a controlling interest in a particular company. In some cases, shares are obtained through coercion and violence; in other cases where it is necessary to avoid Russian anti-monopoly legislation they are done through front companies that obscure the real ownership and interest.
- Insertion of personnel into management positions or on to boards of directors. Packing the board is also a means of ensuring that once the takeover has succeeded control is maintained
- Obtaining support from corrupt links with politicians who are visibly in favor of the takeover effort and lend their power and prestige to at least those parts of it that are legal and transparent.

These apparently disparate tactics typically blend into a coherent and effective strategy that facilitates at least short-term domination of an industry that in some cases is transformed into a longerterm pattern.

There is one view of mafia business, presented most fully by Diego Gambetta that suggests that the mafia is really about the business of private protection.²⁰ Federico Varese has applied this argument to Russia, and suggested that although in many cases the relationship between criminal organizations and businesses are purely parasitical, in other instances there really is protection for businesses as the criminals developed a vested interest in their success.²¹ In some cases the protection is requested; in others it is imposed. Whatever form it takes, extortion appears to be the single most important staple of organized crime activities at the local level, particularly as rivalries have given way to more stable spheres of influence among criminal organizations.

As well as ubiquitous protection rackets, Russian criminals traf-fic in a wide variety of products—stolen, regulated and illegal. Trafficking in women, nuclear material, arms, endangered species, drugs, icons, stolen cars, give the Russian organized crime scene a comprehensiveness that at least matches and perhaps surpasses that in Italy, China or Japan. In some cases Russian criminal organizations traffic commodities out of Russia; in other cases Russia itself provides the market—as for drugs and stolen cars. The wide portfolio is perhaps exemplified best by the Solntsevo group that reportedly controls the University, and Cosmos hotels; several casinos; the Solntsevo car exchange; all non-food markets in the Southwest District of Moscow; and commercial transportation to and from Vnukovo airport. In addition, about 300 commercial firms and banks are believed to be under Solntsevo's ownership or control.

 ²⁰ Diego Gambetta, The Sicilian Mafia: The Business of Private Protection, Cambridge, MA: Harvard University Press, 1993.
 ²¹ See e.g., Federico Varese, "What is the Russian Mafia?" Low Intensity Conflict and Law Enforcement, Vol 5 No. 2, pp. 129–138. See also Varese's forthcoming book on the Russian Mafia published by Oxford University Press.

These extend beyond Moscow to Samara and Crimea and even to Hungary, Britain, and Israel.²²

TYPOLOGIES OF RUSSIAN ORGANIZED CRIME

Organized crime historically has been first and foremost about muscle. In the case of Russian organized crime this element is certainly not lacking. Yet there is also a high degree of sophistication. A great deal of Russian organized crime is financial crime or what has traditionally been categorized as white-collar crime rather than the more mundane forms of organized crime. Sophisticated fraud and embezzlement schemes, proximity to the banking sector, the widespread use of front and shell companies to move money and illegal products across borders, and the extension of networks of power and influence into the licit economy are all characteristics of Russian organized crime that stand out. Even if the financial dimensions of Russian organized crime are not completely unprecedented, they are a much more important part of Russian organized crime than the provision of illegal goods and services.

The Russian criminal scene is characterized by considerable diversity, and it is possible to identify at least six different kinds of criminal groups in Russia:

- Businesses that are ostensibly (and in some instances perhaps even predominantly) licit but with their origin in criminal activities and a residual tendency to use violence and corruption to protect and promote their activities and to deal with competitors.
- Criminal organizations that have close links with officials and that are a key part of the competing administrative financial criminal oligarchies that are one of the dominant forces in Russia today and that operate at local and regional levels as well as nationally.
- Ethnic criminal organizations that include Slavic, Azeri, Georgian, and Chechen groups and that often specialize in one of more criminal activities. Although weakened somewhat by the "wars" with the Slavic criminals, these groups remain a significant part of the organized crime scene in Russia.
- What might be termed umbrella criminal associations that encompass a wide range of smaller groups and engage in a wide variety of criminal activities. Perhaps the exemplar of this kind of association is the Solntsevo group. One of Moscow's premier criminal organizations, Solntsevo has several layers of strong leadership, a well-established structure, a high level of professionalism, some 300 individual crime groups in its fold, and extensive transnational connections.
- Predatory criminal organizations that essentially engage in small-scale criminal activities such as localized extortion, car theft and the like, and that do not have links with corrupt officials. These organizations are more like street gangs than organized crime, although the more successful ones evolve into organized crime groups and develop links with the business, political, and administrative elites.

²² For a useful discussion see Jeffrey Robinson, The Merger, London: Simon and Schuster UK, 1999.

• Specialized organizations including groups of contract killers that are the equivalent of the old "murder incorporated" in the U.S. mafia.

This diversity—although sometimes a source of conflict among the different kinds of organization—makes the Russian criminal world particularly difficult to contain. Tactics that work well against some groups are less effective against others with different characteristics.

DIFFERENCES FROM ORGANIZED CRIME ELSEWHERE

Russian organized crime has some features in common with organized crime elsewhere, including the interpenetration of organized crime with government corruption, its reliance on extortion and bribery, and its provision of black-market goods and services in prohibited economic sectors. However, for reasons of history and culture, it also has distinct characteristics, even where it resembles other recent models for widespread organized crime.

For example, in post-World War II Italy, organized crime flourished through a menage a trois between Italy's political parties, especially the Christian Democrats, the Mafia, and Italy's labor unions, whereby the three groups traded jobs, business, and money among one another to sustain the power of each for some 45 years until the culture demanded a more law-based system.²³ However, even Italy's heavily criminalized political class remained only a strand, albeit a thick strand, in a broader set of political, social, and economic institutions. While the Italian mob may have held enormous influence with Italy's political parties and its governmental personnel practices, especially at the local level, it never dominated Italian business life or controlled a preponderance of Italian resources. Legitimate businesses in the north were not mobbed up. They controlled their own capital, and that capital was invested in legitimate enterprise.

Similarly, other powerful criminal cultures in larger countries in the world have tended to be limited to inhabiting portions of society, rather than a country's heart. For example, Nigerian crime features tribal predation. Criminal cells or families prey on innocents elsewhere in Nigeria, or outside Nigeria, but seldom their own people. In China and Japan, particular criminal subcultures maintain limited and unreliable ties to elements of the government (Chinese triads, Japanese yakuza), but do not control vast components of their country's respective national resources. In drug trafficking countries, such as Colombia, criminal enterprises can exercise enormous political and economic influence, and infiltrate governmental institutions and businesses, but the traffickers are viewed by everyone as external elements to the institutions they are corrupting, rather than as components of them as in Russia. In most other countries, such as the United States, Canada, Western Europe, and the Middle East, criminal groups exist almost entirely as subcultures, often based on disaffected components of society, segregated by and with resentments arising from economic class or ethnicity.

²³See "Excellent Cadavers," Alexander Stille, Pantheon, 1995.

In short, Russian organized crime has differed from organized crime in other regions in being less of a subculture, and more central to what has always been a centralized state with relatively few other political institutions to act as counterweights.

THE SCOPE AND IMPACT OF RUSSIAN ORGANIZED CRIME ACTIVITIES OUTSIDE RUSSIA

Globalization has meant that the infrastructure of the western democracies, for finance, information, telecommunications, governance, has rapidly spread throughout the world to constitute an ever-thickening web of connectivity. Post-Communist Russian organized crime arose just as this infrastructure was becoming rapidly more democratized through the proliferation of telecommunications technologies and electronic networks of various kinds. With the technical borders down, and the legal barriers against Russian contact with the west eradicated almost as rapidly as the Berlin Wall was bulldozed into history, Russian organized crime found an infrastructure outside Russia well-designed to facilitate every form of criminal activity, and ill-designed to investigate or prosecute it.

In considering the scope and impact of Russian organized crime outside Russia, there are several questions that need to be considered. These include:

- Where is Russian organized crime going? What is it doing there and what is it seeking to achieve?
- How is the presence developed? What kind of criminal activities come with the presence?

WHERE IS RUSSIAN ORGANIZED CRIME?

There are four main answers to this question:

- Given the extreme cold of Russian winter, Russian organized crime has often followed the sun.²⁴ Among the locations that Russian organized crime has become prominent are various Caribbean islands, Israel, the Costa del Sol, the French Riviera, South Florida, and Thailand. The playgrounds of the rich are very attractive for organizations and individuals whose primary activity is the accumulation of wealth through illegal means.
- Some Russian organized crime moved out of Russia but stayed close to it. Budapest, Berlin, and Vienna, for example, all witnessed a significant increase in the Russian criminal presence. In some respects these cities were natural haunts for Russian organized crime as they were familiar from the cold war era, and in the case of Berlin and Vienna provided convenient windows on the west while having the advantage of proximity.
- Russian organized crime looks for opportunities that come with an acceptable level of risk, engaging in what can be described as jurisdictional arbitrage. One of Israel's attractions, for example, until summer 2000, was the lack of any anti-money laundering legislation. When this permissive environment was combined with the law of return and the lack of questions about the personal wealth that immigrants brought with them

²⁴ The authors are grateful to Gregory Baudin-O'Hayon for this observation.

it is clear that Israel was an attractive, low-risk destination for Russian criminal organizations. The United States carries a higher level of risk but also provides enormous opportunities for criminals, particularly in areas such as Medicare, car insurance, and gasoline taxation where fraud schemes are very lucrative. The capacity to meld into the ethnic Russian communities also makes the United States attractive to Russian organized crime.²⁵ Conversely, where ethnic communities of this kind are not well established, Russian organized crime is less likely to have a significant presence. Neither Britain nor Sweden, for example, has experienced the influx of Russian organized crime that was expected.

• Russian organized crime follows the Russian Diaspora. It is sometimes argued that organized crime is extremely difficult to transplant to other countries, particularly when it is based on protection activities. Where and when organized crime can be embedded in migrant ethnic communities, however, then a successful transplant is feasible. Most migrant organized crime, initially, at least, preys on its own community, before subsequently expanding into the broader society and economy of the host nation.

WHAT KINDS OF PRESENCE AND HOW DEVELOPED?

To date, Russian organization crime penetration of other countries has developed into variations of six models:

- Direct criminal presence in another country accompanied by a full panoply of criminal activities, as demonstrated by Russian organized crime in the United States, Israel, much of Western Europe, and most formerly Eastern bloc countries in Central Europe.
- More limited criminal presence for the purpose of using the country's services on a regular basis, to make it a reliable part of the criminal organization's infrastructure, as in the use of Austria, Cyprus and Switzerland for financial and business dealings; and the use of the Baltic countries, especially Latvia, for smuggling.
- Criminal presence in a neutral (not a targeted or host) country that offers opportunities for contacts and negotiations with other criminal organizations rather than criminal activities per se. Some Caribbean islands have been used in this way as a meeting ground for Russian criminals and Colombian drug traffickers.
- Modest (or largely indirect) presence through connections with indigenous criminal organizations. In effect, the presence of Russian criminals is designed merely to facilitate cooperative relationships with the indigenous criminal organizations. Any Russian criminal presence in Colombia, for example, would likely be at the invitation of Colombian drug traffickers inter-

 $^{^{25}}$ Analysts affiliated with the National Institute of Justice estimate that approximately 15 criminal groups arising out of the former Soviet Union are currently operating in the United States, and that 8 or 9 of them maintain links to Russia. The analysts estimate membership of those groups to be 5,000 to 6,000 members. Finckenauer, James O. and Elin J. Waring, Russian Mafia in America, Boston: Northeastern University Press, 1998.

ested in exploiting the burgeoning Russian drug market or in obtaining arms.

- A purely "pass through" financial presence. The proceeds of Russian crime often go through or are secreted in jurisdictions in which there is little or no Russian physical presence. This is certainly the case with some of the offshore financial centers such as the Caymans, Nauru, Vanuatu, and Liechtenstein that have been used by Russian criminal organizations to move, launder, and hide their proceeds.
- Rest, relaxation, and consumerism. Russian criminals have congregated in resort communities in Southeast Asia and Western Europe, buying real estate and expensive goods, with little impact on the overall environment of such communities, which tend to accept money as money regardless of its provenance, with little change to the underlying culture of hedonism.

The extent of the Russian organized crime threat in a country depends largely on the viability and effectiveness of the institutions of governance. Where there is a viable, highly legitimate, wellfunctioning democracy based on the rule of law, then the threat is predominantly a law and order one, with some residual concerns over what might be termed the corrosion of institutions. Where these conditions are absent then the threat is more serious. In host states—as well as its home state—Russian organized crime uses corruption as an instrument to neutralize law enforcement and the criminal justice system, to co-opt support and buy impunity. Such tactics have an insidious impact and when a state already has serious governance problems these will be exacerbated.

THE IMPACT OF RUSSIAN ORGANIZED CRIME ON RUSSIA'S EVOLUTION

Russian organized crime has been a major impediment to progress toward democracy, the rule of law and free markets in Russia. It will continue to be so. There are two closely interwoven myths about Russian organized crime that have been perpetrated largely by economists in the United States and Western Europe and that continue to have some currency. They need to be dispelled. The first is that Russian organized crime is similar to the robber baron phase in American history. In fact, the robber barons built infrastructure and created wealth; Russian organized crime in contrast has looted the country, imposed parasitical relationships on licit business, driven out much legal entrepreneurship, and become an impediment to foreign investment. The second myth is that Russian organized crime is a passing phenomenon that will diminish significantly as the process of free market reform continues, that it is a temporary feature of transition rather than an enduring feature of post-Communist Russia, simply a short term nuisance unlikely to have long term impact. This ignores several characteristics of organized crime: it is a political as well as economic force, it consolidates its power in ways that enable it to outlast the market conditions that initially facilitated its expansion, it creates symbiotic linkages with politics and business that are difficult to undo, and it is not simply dependent on rents from imperfect competition in the Russian economy. Indeed, Russian organized crime represents a concentration of illegal power that is not going to go away and will continue to hinder efforts to establish a strong legitimate Russian state, to eradicate corruption and to develop a system that is clearly based on the rule of law. Born in part out of state weakness Russian organized crime aims to perpetuate this weakness.

Some argue that Russia is going beyond the neutralization of the state and is exhibiting symptoms of state capture. A recent paper of the World Bank Institute suggests that in Russia oligarchs have "captured the state," shaping the policy and legal environment to their advantage at the expense of the rest of the country.²⁶ The notion of state capture has the following components: (1) corrupt individuals have access to the resources of the state and are able to exploit these resources for their own purposes; (2) the state can only act effectively, at least domestically, when its actions do not seriously impinge on the power and well-being of the corrupt individuals; (3) state institutions can be used as fronts for corruption and extortion; (4) it is not clear where the state ends and the corrupt private-sector organization begins—or vice versa; and (5) the corrupt organization usurps some of the functions of the state.

The process of usurping state powers is nowhere more obvious than in the areas of business protection and taxation. Because the state has not provided legal protection and arbitration for licit business, organized crime has filled the breach, in effect exploiting lack of state capacity and filling the resulting functional holes. Organized crime provides contract enforcement and debt collection. In the area of taxation, the problem in Russia is that the system is not only burdensome and ineffective, but also provides perverse incentives for tax evasion and criminal behavior. Businesses typically evade taxes; criminal organizations discover this (often obtaining information through the banking system) and then extort busi-nesses that find it cheaper to pay "taxes" imposed by criminal organizations than those imposed by the Russian state. Consequently, Russia has failed to develop a tax base adequate to fund government services in a variety of sectors including law enforcement. This then becomes one of several interlocking vicious circles: lack of resources makes it difficult for the Russian state to combat organized crime; in turn organized crime becomes more powerful and acquires more resources that would normally accrue to the state. According to World Bank Institute analysis, countries with these features, such as Russia exhibit increasing concentration of wealth among the most corrupt firms, reduction in the ability of the state to provide necessary public goods, and weakened economic growth.27

To combat organized crime, most countries adopt a conventional, predominantly law enforcement approach, in which investigations lead to arrests, arrests to prosecutions, prosecutions to trials, and trials to convictions of individuals and the eventual dismantling of criminal organizations. In the case of organized crime in Russia this is patently inadequate. It is necessary to adopt a much broader

²⁶ "Seize the State, Seize the Day—State Capture, Corruption and Influence in Transition," Joel S. Hellman, Geraint Jones and Daniel Kaufmann, World Bank Institute, September 2000, Policy Research Working Paper 2444. ²⁷ Id

approach aimed at creating a far less congenial environment within which organized crime has to operate. In Russia it is crucial to establish clear lines of demarcation between public and private, legal and illegal, permissible, and impermissible activities. In addition, it is necessary to correct a tax system that provides perverse incentives for criminality. Consideration might also be given to a strategy of legitimization that would provide incentives for the inflow of flight capital-whether clean or dirty-and for the transformation of businesses founded on criminal activity into legitimate businesses that would abandon old habits and patterns of behavior. In effect, organized crime will be impossible to reduce unless major changes are made in both the environment and in the payoff structures

Putin inherited a Russia with limited institutional locations of integrity from which one could theoretically construct a decriminalized government. Regional governors, like the Duma, heavily intersect with some of Russia's most prominent criminals. Institutions like the Procuracy routinely lie to western counterparts about the information they have on Russian criminals, when the criminals are sufficiently prominent.²⁸ The Ministry of Internal Affairs (MVD) undertakes effective prosecutions of lower-level criminals who lack a sufficient krysha or roof to avoid sanctions, and is equally effective at investigating the bad acts of oligarchs who have been insufficiently adroit with the rulers of the day.²⁹ However. substantial areas of criminal activity and corruption are simply off limits, even to MVD officials who would like to enforce the law.³⁰

One factor in the prevalence of organized crime's involvement in Russia's economy is the structural similarity between a command economy, operating by force, and criminal activity, which similarly relies upon force. Another factor is the merger between groups: in Russia it remains often difficult to tell who is merely a businessman, and who is a criminal. It is not just a matter of appropriate epithets: a careful link analysis of the business activities of most of the oligarchs show social, economic, and personnel connections with various members of the more prominent purely criminal groups, such as Solntsevo, Mogilevich, and Ismailov. The difficulty of distinguishing between the monopolists, the oligarchs and the criminals in Russia was aptly illustrated in the Bank and New York/Benex money laundering/capital flight case. The operation laundered funds for prominent politicians, oligarchs, and criminals alike. The countries of Nauru and Vanuatu performed similar functions, laundering the proceeds of narcotics trafficking, organized crime, tax avoidance, and theft with the same legal and accounting mechanisms.

²⁸ This phenomenon was most clearly demonstrated in the case of Sergei Mikhailov, head of the Solntsevo organization. When the Swiss Government asked the procuracy in 1998 for information on Mikhailov's criminal activities, which had previously been detailed to the Swiss by an MVD general, the Procuracy stated it had no such information. Mikhailov was acquitted, and the MVD general was forced to seek asylum in Switzerland. ²⁹The current legal problems in Russia of formerly successful oligarch Vladimir Gusinsky pro-

vide a vivid recent example.

vide a vivid recent example. ³⁰ One of the authors had numerous conversations in Moscow in 1997, 1998, and 1999 with relatively senior Russian officials from Russia's foreign ministry, the MVD, the Procuracy, the VEK, the Customs, and the Tax Police concerning this issue in the course of his work for the State Department. In summary, officials from each of these agencies stated that Russia was not yet a normal country, and that anyone who put himself at risk as a result of investigating a well-placed official or oligarch would have far more at risk than merely the loss of their job.

Within Russia, resources that once were available to anyone with the will and location to secure them have now been converted to a more stable form of ownership that remains, however, potentially subject to further direction from the Russian state, as recent media takeovers have demonstrated. These assets were and remain the wealth of a command economy, not the wealth of a market economy. Those who converted these resources have primarily not been persons operating through the mechanisms of a market economy, but rather those operating through the decaying infrastructure of the old command economy. The persons who secured the wealth have not been faced in Russia with a system of rule of law or democracy that would confine their activities looking forward. For the reasons set forth in the World Bank Institute study, having obtained wealth and power, Russian criminals and oligarchs are unlikely now to abandon the unfair business techniques upon which they have built their empires. Generally, criminals and oligarchs limit themselves to legitimate and legal activities to the extent that there is no competitive threat to them when they do so. If other unfair competitors remain to intrude on their turf, they unfairly compete themselves. In Russia, individuals with extremely unsavory reputations, such as the Chernoy brothers, one of whom became a key figure in the aluminum industry amidst a spate of unsolved business killings, wind up having business dealings with a wide range of the most powerful and prominent people.³¹

MONEY LAUNDERING AND FINANCIAL CRIME

Russia's placement on the list of 15 non-cooperative countries by the G-7 in summer 2000 reflected the enormity of its money laundering and financial integrity problems. The combined lack of transparency and lack of integrity in Russia's financial system have made it a sieve for most forms of financial abuses, with catastrophic consequences for the safety and soundness of Russia's financial system, for Russian tax collection, and for sustained foreign investment commensurate with Russia's potential economy. These twin problems have facilitated not only money laundering and capital flight, but unfair competition, abusive business practices, the theft of Russian natural resources, the depreciation of the Russian ruble against hard currencies, and the creation of a business climate that is estimated by foreigners as among the worst in the world. Russian elites, including important members of the former Communist Party nomenklatura, pro-Western "reformers," bankers, brokers, and traders, and heads of criminal organizations, have collectively exploited the interface between Russian banking after the fall of Communism with the global financial services infrastructure of the West to steal Russia's wealth and commit massive frauds that have repeatedly shaken Russia's financial stability.

Moreover, the laundering over the past decade of the proceeds of stolen Russian resources, profits made through the manipulation of and devaluation of the ruble, the proceeds of drug trafficking, arms trafficking, prostitution, alien smuggling, theft, and extortion, com-

³¹ For example, Chernoy was in business with, and sold assets to, oligarchs Boris Berezovsky and Roman Abramovitch. The Moscow Tribune, February 16, 2000, "Russian Aluminum—When Politics Melts Metal," by John Helmer.

bined with the proceeds of capital flight, have made Russia's money laundering problem a global one, affecting countries literally all over the world. Russian money is laundered in former Communist countries like Latvia, Hungary, Slovenia, Poland and Ukraine; in the Middle East through Lebanon, the United Arab Emirates and Dubai; throughout Western Europe, including substantial amounts of activity in Austria, Cyprus and Switzerland; through the Russian community based in Israel; through off-shore havens such as the British Virgin Islands, Cayman Islands, Isle of Man and the Bahamas; through brass-plate institutions in the Caribbean (Antigua, Belize, Dominica) and the South Pacific (Nauru, Niue, Tonga, Vanuatu); and through and into the world's major financial markets in the United States and the United Kingdom. Russian money has been also laundered in the Seychelles, which has some 600 offshore companies for Russian persons and entities, and South Africa, where Russian money laundering and illicit finance has become a factor in the diamond business. Russian criminal groups involved in money laundering have been active in Central America (Costa Rica and Panama), engaged in money laundering and criminal activities in collaboration with Colombian and Bolivian criminals in the cocaine business, and moved into purchasing illicit businesses in the Pacific in places such as Thailand and Macao. In short, there is evidence of illicit Russian money streaming throughout the money-laundering infrastructure of the world, and the Russian money has already had some impact in weakening regulatory and enforcement structures in many locations, especially those involving poorer and smaller governments.

The persistence of large-scale capital flight, the legacy of an intrusive state bureaucracy, underdeveloped market institutions and lack of fiscal resources further complicate the fight against money laundering in Russia. Thus, Russia's money laundering problem is a subset of and simultaneously a contributing factor to Russia's governance problem, inexorably intermingled with it.

In Russia, no financial institution has ever been sanctioned for laundering money. There remains no system for financial services record keeping that is demonstrably enforced by bank regulators and no obligations to report the true beneficial owner of bank accounts. Elaborate mechanisms have been established by Russian financial elites in collusion with Russian financial institutions and in some cases with Russian officials that have successfully moved billions of dollars a year in funds offshore where they cannot be traced. Russia's areas of vulnerability and deficiency extend to every aspect of its financial services sector, and there may be no other nation in which the lack of transparency regarding transfers of funds plays a greater role in debilitating its economy. Significant areas of special vulnerability include:

THE GRAY ECONOMY, RUSSIA'S TAX SYSTEM AND CAPITAL FLIGHT

Russian regulatory and law enforcement officials have estimated that the gray economy accounts for some 40 percent of the total Russian economy, although other estimates put the number as high as 60 percent. Gray economic activity consists both of legal activities that are not reported to the tax authorities, leaving the income untaxed and unreported, and illegal activities, which are also not reported to the state and therefore not taxed. The gray economy includes and rewards barter, avoids documentation, and facilitates money laundering. It in turn has been created in part by Russia's complex tax system that has led to an environment in which many businesses view total compliance with all assessed taxes and penalties to be incompatible with staying competitive. The introduction of a flat rate social tax promises to simplify—and thereby improve—the tax situation in Russia. One difficulty, however, is that the Tax Police has only 7,000 of the 13,000 personnel it believes necessary to implement collection and to ensure that the funds enter the government budget. The Russian business sector's welldeveloped mechanisms for hiding funds from tax authorities will continue to pose a challenge even to the best funded enforcement agency.

POOR ACCOUNTING, AUDITING, AND DOCUMENTATION REQUIREMENTS

With no properly functioning regulatory mechanisms, such as effective banking regulators or an equivalent of the U.S. Securities and Exchange Commission, and with poor civil enforcement remedies, Russia has lacked mechanisms to develop and to demand high standards for accounting, auditing and documentation, even as Russia's tax system has driven businesses to develop methods for false bookkeeping. The lack of authentic documentation, and the ease of developing false documents make it easy for Russians to launder money through the formal financial services sector, as part of routine import-export activity.

PROMINENCE AND CONNECTION OF ORGANIZED CRIME TO OFFICIALS AND OFFICIAL STRUCTURES

As noted above, the chaotic business environment of post-Communist Russia has facilitated the development of criminal organizations, such as the Solntsevo, Ismailov, and Mogilevich groups, with close ties to government officials and official structures, that provide them protection from enforcement activity, through a mechanism sometimes described as a krysha, or roof. Significant criminal proceeds are generated in Russia, including funds from narcotics trafficking, smuggling, tax evasion and tax fraud, arms trafficking, extortion, theft of government property, and corruption. The interpenetration of government and criminal structures to engage in financial crime and corrupt activities provides a favorable condition for money laundering.

RENT-SEEKING ACTIVITY BY GOVERNMENT OFFICIALS

Low civil service salaries, corruption, the Communist heritage, and cultural experience, have provided a foundation for widespread payoffs of government officials in exchange for economic privileges such as business permits, government contracts, exemptions from taxes and customs duties, and protection from investigations. Each of these activities plays a significant role in Russia's money laundering problem.

EASE OF MOVING FUNDS OFFSHORE

Collusion between those involved in capital flight, those involved in organized crime, those involved in money laundering, and Russian's major financial institutions has made it easy for criminals to move funds offshore. Russian regulatory and law enforcement officials have estimated that since independence in December 1991, more than \$100 billion in illegal proceeds have been generated from criminal activity and subsequently laundered. As noted above. criminal funds leaving Russia have been transferred to financial institutions in the former Soviet Union, especially Latvia, Western Europe, the United Arab Emirates, Cyprus, the United States, and throughout the world's offshore sector, including some of the havens in the South Pacific. The use of correspondent bank accounts in foreign banks, in particular in the Baltics, Cyprus and offshore zones, has been a significant problem, due to the ability of the money launderers to commingle funds from many sources through this mechanism

INADEQUATE KNOWLEDGE BASE, TRAINING, GOVERNMENT CAPACITY

Russian law enforcement agencies have very limited experience in investigating and prosecuting significant financial crime cases, confront problems of integrity, training, capacity, and resources, and have to contend with uncertain laws, duplicitous sources of potential evidence, and major gaps in the overall regime for combating money laundering, such as the failure to require currency reporting or mandatory suspicious activities report (SAR) reporting.

In this environment, passage by Russia of comprehensive money laundering legislation, as was in process in July 2001, constitutes a first step to money laundering reform in what would under any circumstances be a lengthy journey.

OPTIONS FOR REFORM IN RUSSIA

The so-called new Russians who today control the most important elements of Russian wealth inherited from the Soviet Union, its industries, its raw materials, its lands and its infrastructure have demonstrated their ability to seize the resources of the former Soviet state. These people have not, however, by and large demonstrated a capacity to build, to put people to work, to invent, to improve, or to invest and maintain that which they have effectively exploited. Rather, they are people who were able to exploit politics to obtain wealth and power without regard for market integrity, transparency, democracy, or rule of law. Strengthened civil institutions, greater transparency, and greater market integrity all would create opportunities for others with less existing power and wealth to become potential competitors with the criminals who now control the vast preponderance of Russia's wealth. Accordingly, Russia's organized criminals have continued to slow the development of such institutions.

The transformation of Russia from a criminalized country to one where free markets and democracy are realities requires precisely those steps that most threaten those whose power depends on discouraging rule of law: bad businessmen and incompetent, corrupt bureaucrats. For Russia to evolve in a positive fashion, its government must collect taxes in a fair manner, pay its civil service a living wage, maintain an adequate number of high caliber professionals in government, supplement that government with selfregulatory organizations made up of businesses whose owners recognize that a level playing field is an essential element for keeping the game going, and sanction those who engage in unfair trade and business practices. These are formidable challenges for any country in transition. In a Russian context, their viability remains threatened by most of the more powerful interests with power in the country, including the oligarchs and the nomenklatura.

Accordingly, a package of reforms that would begin to provide an environment better suited for Russia to combat its organized crime problem would include:

ANTI-CORRUPTION MEASURES

Reducing the number of persons in government, increasing the salaries of those remaining in government, and creating strong disincentives to taking bribes.

INCREASED PRESS FREEDOM

The essential oversight function of an open press remains a prerequisite for effective reforms; the recent consolidations of Russian broadcasting under the control of the Kremlin has the potential for sufficiently impairing oversight by the press as to render other anti-corruption measures of little utility.

IMPROVING TAX SYSTEM

Strengthening the fiscal position of the federal government, through enforcing and collecting federal taxes at a sustainable rate. Recent changes to the Russian tax code, including a 13 percent flat rate on federal income tax, strongly endorsed by the International Monetary Fund, represent a potentially positive development.

FINANCIAL SECTOR REGULATORY REFORMS

Creating a modern capital market, strengthening the banking system and banking supervision. Russian financial institutions continue to operate on a quasi-barter basis, with little long-term lending to independent borrowers. The Central Bank of the Russian Federation (Central Bank of Russia) has had a poor track record of safety and soundness regulation and supervision. Securities regulation, investor protection, and basic elements of corporate governance are further necessities for the recovery of the financial sector.

LEGAL REFORMS

In May 2001, Putin announced his intentions for a sweeping reform of the judicial system, which would curb the powers of prosecutors and police, introduce jury trials, and increase funding for the courts. Creating transparent mechanisms with adequate and fair process to resolve both criminal and civil cases are essential elements of changing the environment to one less likely to facilitate organized crime, by creating the possibility of alternatives to private dispute resolution systems involving extortion and protection.

MONEY LAUNDERING LEGISLATION

Russia needs to complete passage of the comprehensive preventive law passed by the Duma in July 2001, to create clear legal obligations for customer identification and record keeping, and a mandatory suspicious transaction reporting regime without any monetary threshold. Related reforms would include clear legal provisions protecting financial institutions from criminal or civil liability in respect of disclosures made in good faith; much stricter controls on the licensing of banks and exchange houses; a clear timetable for the conversion of any existing anonymous accounts into normal accounts subject to the usual customer identification requirements; regulations issued by the Central Bank of Russia to ensure steps are taken to verify beneficial owners when an account is opened or a transaction is conducted; and provisions to insure that beneficial owners are identified and not hidden through intermediaries.

POLICY OPTIONS FOR THE UNITED STATES

In the post-World War II period, the United States has had a series of well-defined policies toward the Soviet Union, which roughly can be divided into the periods of containment, during the Stalin through Khruschev period of the cold war; competition and co-existence, during the period of Brezhnev through Chernyenko; and growing cooperation during the Gorbachev era of perestroika and glasnost. Following the collapse of the Soviet Union and the ascendancy of Boris Yeltsin, U.S. policy could be defined in brief as one of constructive engagement, in which the United States aggressively and assiduously worked to secure Russian integration with the world economy, Russian political, economic and legal reform, and democratization.

Current policy toward Russia in the context of organized crime could be seen as containing elements of each of these models. Existing U.S. policy in the area of international financial regulation, and limitations on the issuance of visas to suspected Russian criminals, could be seen as a form of containment strategy. Limited new assistance programs and new investment by the United States could be viewed as a kind of co-existence strategy, one that lives side-byside with individual cases of cooperation in a law enforcement context, and constructive engagement through some forms of continuing assistance.

These strategic choices play out in practice through a series of policy options for the United States, many of which may be seen in the first instance as not relating directly to organized crime, but which could have substantial impact on the Russian governance issues that most directly would impact organized crime. These could include:

• The level and nature of assistance to be offered Russia by the United States, and the kinds of conditions imposed on such assistance. Such assistance could focus on rule of law, democratization, judicial training and reform, civil society and democracy programs, support for an independent press, and corporate governance, among those programs that could potentially have an impact on organized crime. Such programs could potentially be structured with conditionality, so that failures of cooperation or follow-through could result in diminished assistance.

- U.S. policy toward balance of payments support from the International Monetary Fund, and the issue of conditionality. The United States could take the position that further assistance to Russia from the IMF depends on not only the enactment but also the implementation of comprehensive financial services regulatory reforms, with higher standards for auditing and accounting of businesses that include some mechanism for public scrutiny.
- Promoting or limiting direct Russian access to the U.S. financial system. Currently, the Federal Reserve has not authorized Russian entities to carry out banking services in the United States, due to inadequate supervision within Russia. The United States could set down an assessment mechanism and schedule for further consideration of granting Russia greater access to the United States as a result of Russia undertaking further reforms. Alternatively, the United States could consider further limits on access by Russian financial institutions; further enhanced scrutiny under Treasury regulations; or multilateral sanctions, as could be imposed by the Financial Action Task Force as a result of Russian failure to enact and enforce anti-money laundering laws.

Other options for U.S. action that would focus more directly on Russian organized crime could include:

- Allocating further resources to the creation of law enforcement and intelligence data bases focused on Russian organized crime;
- Establishing better mechanisms for interagency cooperation within the United States targeting those identified as major Russian organized crime threats;
- Identifying priority cases involving Russian organized crime for investigation and possible prosecution domestically, with resources appropriately configured to ensure appropriate treatment of priority cases.
- Identifying priority cases involving Russian organized crime for bilateral or multilateral or bilateral action involving relevant U.S. law enforcement partners. These could include more focused attention by the United States to take advantage of the capabilities of existing foreign law enforcement institutions, including the European Union's Europol; data bases pertaining to Russian organized crime at INTERPOL; possible further harmonized efforts by the national Customs authorities through the World Customs Organization; or a more case-oriented use of U.S. funded International Law Enforcement Academies, such as the Academy at Budapest. Such efforts could include initiatives aimed at *disrupting* criminal organizations in situations where prosecution was not feasible.
- Upgrading existing efforts to establish names databases for immigration purposes, to prevent Russian criminals from securing entry into the United States.

- Strengthening programs aimed at responding to the problem of trafficking in women to create a strategy that targets the criminal organizations engaged in the trafficking on an "end-to-end" basis, similar to the "kingpin" strategy used to combat Colombian cocaine drug traffickers.
- Enacting legislation in the United States to add foreign corruption as a predicate offense to U.S. anti-money laundering laws.
- Seizing the assets of Russian criminals through aggressive use of forfeiture laws.
- Publicizing information pertaining to incidents of Russian corruption, theft of resources, or criminal activity, adopting a "name and shame" approach that could make it more difficult for Russian criminals to do business in the United States and other countries.
- Imposing higher standards of due diligence for investments involving U.S. guarantee programs or other assistance to insure that U.S. programs do not inadvertently support corrupt individuals or entities.
- Using U.S. law enforcement, diplomatic reporting, or intelligence reporting, to create a black list of persons and entities not eligible for benefits under U.S. guarantee programs, such as those financed by the U.S. Export-Import Bank (Exim Bank) and the Overseas Private Investment Corporation (OPIC).

Even if these measures are instituted and the United States does develop and implement a well-coordinated strategy to combat organized crime and corruption in Russia, along with dealing with the transnational dimensions of the problem, success will be measured incrementally. The problem of Russian organized crime and corruption is a Russian problem which the United States can try to contain, influence, or combat but cannot hope to eradicate.

Some analysts continue to have a hopeful view regarding Russia's ability to combat organized crime. They cite the recent passage of a series of economic and political reforms by the Duma prior to its summer recess as evidence that under Putin, substantial further progress is not only possible, but likely. For example, in August 2001, the World Bank's chief economist for Russia, Christof Ruehl, told Reuters he was "cautiously optimistic, with the accent on optimistic," regarding Russia's medium-term economic future, due to the "good start made on the reform agenda" by President Putin.³²

If this perspective were to be adopted, it would argue for the kind of policy recently articulated by U.S. Secretary of the Treasury Paul O'Neill, who has focused on banking reforms, trade liberalization, and strengthening of accounting controls as mechanisms to strengthen Russia's economy and to bring it into line with world standards. Under this approach, the United States would work with Russia on a bilateral basis, and with the international lending institutions multilaterally, to promote good practice in business and in government in Russia's regions, as well as in Moscow and St. Petersburg. Secretary O'Neill has emphasized the importance of

³² "World Bank Optimistic on Russian Reforms," Reuters, August 10, 2001; See also "Russian economy seen more robust, not out of woods, Reuters, August 9, 2001, describing the optimistic views of various Western businessmen and economists regarding Russian reforms.

reforms reaching the local level in addition to the federal level. Other elements of the agenda would include advancing work on WTO accession, consulting on market economy status for Russia, cooperating on an anti-money laundering law, and exploring new Export-Import Bank financing.33

Other analysts, describing Russia as "Zaire with permafrost," believe that organized crime has become so central to the identity of the post-Soviet Russian state that it is unrealistic to expect any Russian Government, whatever its rhetoric, to combat organized crime with a sustained and systematic strategy. They argue that "within a few decades Russia will concern the rest of the world no more than any Third World country with abundant resources, an impoverished people, and a corrupt government. In short, as a Great Power, Russia is finished."³⁴ From this perspective, the U.S. Government must recognize the limits of the possible. The first decade of the Russian transition has underlined the limits of westernoriented reforms in a Russian context. Rather than an easy transition in Russia to a free market and liberal democracy, the Russian transition has featured a state that has been both criminalized and corrupt. For such analysts, there remain basic questions as to the degree to which Russia may be capable of fundamental reform. They point out that organized crime and corruption in Russia survived the Czars and outlasted the Communist Party, and will be a likely feature of the Russian social, political, and economic environment for the foreseeable future, regardless of any steps undertaken by the United States and other countries.

If this perspective were to be adopted, it might imply a possible strategic bifurcation for U.S. treatment of Russia: continued engagement with Russia within a national security context as a nuclear power and a mixture within the economic context of a policy of containment of Russia to protect against contagion from inadequate regulatory and law enforcement systems, mixed with continued efforts, to be sustained over many years, to build a better climate for reform.

³³ "How Russia Can Fulfill Its Potential," Secretary of the Treasury Paul O'Neill, Wall Street Journal, August 9, 2001. ³⁴See e.g., Jeffrey Tayler, "Russia is Finished," Atlantic Monthly, May, 2001.

Financial Reform: Taxes, Budgets and Banks TAX REFORM IN RUSSIA By Z. Blake Marshall¹

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SUMMARY

Of all the commercial policy issues brought to the fore during Russia's decade-long market transition, one has consistently topped the list of investor concerns: the dire need for reform of Russia's complex, unpredictable and inefficient tax system.

Russia's tax system remains a major obstacle to foreign investment and to business activity more generally, cited time and again by companies as a primary obstacle impeding their business plans, deterring new market participants and constraining Russia's considerable economic potential. The number of taxes with which a firm must comply, coupled with a perpetually changing compliance regime, leaves companies operating in an atmosphere of uncertainty that compromises business planning. Dating from the excess-wage tax controversy of the mid-1990s (which was ultimately abolished under pressure from business groups), corporate attitudes have reflected continual attempts to combat the imposition of a (often redundant) new tax, an arbitrary interpretation of an existing obligation, or capriciousness and harassment in the audits and penalties realm.

As Organization for Economic Cooperation and Development (OECD) analysts point out, the difficulties experienced by businesses have not primarily been a function of the rates prescribed by law: "Statutory tax rates were in fact not very high by world

¹Dr. Marshall is the Executive Vice President of the U.S.-Russia Business Council.

standards-other than in the case of wage taxes-even before the recent tax reform. It has been more a question of the multitude of different taxes levied and, primarily, the methods of determination of the actual tax base."²

Efforts to rationalize and streamline the tax system are inextricably linked to the country's fiscal health, as collection difficulties have plagued Russia's attempt to balance its social commitments and foreign debt burden, topics that are addressed elsewhere in this volume. Thus policy and rate revisions have an impact on compliance—a widening of the tax base that complements reforms aimed at improving tax administration and enforcement.

Given this dual importance, the business community has been encouraged by the significant steps forward that Russia has made in the past 2 years. For the better part of a decade, the average company operating in Russia has been responsible for deciphering and complying with a combination of roughly 50 taxes and social fund payments levied at the federal, regional and local levels. As a result of tax reforms put into effect for 2001, that number has been cut in half.³

This progress has not gone unnoticed in the business community. A recent Economist Intelligence Unit survey of 100 multinational companies operating in Russia found that two-thirds of the firms polled believe Russia's tax environment to be improving, with a mere 5 percent of the opinion that it is getting worse. It is not difficult to imagine that statistic's relationship to another telling data point: More than 80 percent of the respondents reported making a profit last year (and greater than half of them expect their 2001 sales to grow between 10 and 25 percent).⁴

Regarding the budgetary impact of recent reforms on a gray economy pegged at 30 percent, Deputy Minister of Economic Development and Trade Arkady Dvorkovich recently commented that "half of these companies might come out from the shadows purely thanks to tax reform."⁵ The early evidence this year supports this and similarly optimistic projections, as the government's collection rate rose to 90 percent in the first quarter of 2001, compared to only 60 percent in the first quarter of last year.⁶

The amounts collected have soared in tandem, as receipts for the first quarter of 2001 grew 36 percent year on year.⁷ In addition to the increased receipts, "the federal government has managed the difficult task of collecting all taxes in cash since the second quarter of 1999. This contrasts with a strong reliance on various money surrogates in the past."⁸ Figure 1 portrays the steady climb in tax revenue as a percentage of gross domestic product (GDP), an important indicator of the Russian Government's fiscal health.

Furthermore, there are clear indications that, contrary to the policy stagnation and stalled reforms that characterized much of the late 1990s, the Putin Administration is taking this issue seriously

²OECD, The Investment Environment in the Russian Federation: Laws, Policies and Institutions, 2001, p. 121. ³ Ibid., p. 23.

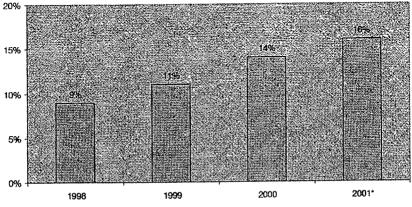
⁴ Reuters, April 11, 2001.

⁶ St. Petersburg Times, June 13, 2001. ⁶ Associated Press, April 5, 2001. ⁷ Agence France Presse, April 22, 2001.

⁸ OECD Policy Brief, Economic Survey of the Russian Federation, March 2000, p. 5.

and is committed to building on recent successes. Minister of Economic Development and Trade German Gref is clear on the priority affixed to tax reform initiatives for 2001: "Our plans for this year can best be described as Napoleonic-we would like, above all else. to complete the next phase of tax reform."⁹ With further reforms pursued in 2001–2002, this next phase will determine whether the Putin team meets its goal of lowering the nominal tax burden from 43 percent to 35 percent of GDP by the end of 2003.¹⁰





* Preliminary data for the first quarter of 2001. Source: Ministry of Finance of the Russian Federation.

This paper will discuss the nature of Russia's tax system from the perspective of business interests. In doing so, it will document the progress Russian officials have made in adopting constituent pieces of the Tax Code, as well as the remaining tax policy and tax administration challenges that are key to Russia's realization of its economic potential.

The progress to date covers both the enactment of part I of the Tax Code and the adoption and implementation of significant pieces of part II, including what could be fairly characterized as a radical liberalization of the income tax, social funds and turnover tax regimes. The adoption of four key chapters of part II last year has set the stage for further legislative progress on the profits tax-which, as discussed below, passed its second reading in the state Duma just prior to the summer recess-and other significant areas of importance to Western business.

Beyond the realm of rates and policies, the system of interpreting and implementing legislation must also be addressed. A key determinant of the system's evolving fairness and transparency is the extent to which Russia's 180,000 tax inspectors across the country adhere to uniform standards applied on a consistent basis. The

 ⁹Gref, German O. Speech to the U.S.-Russia Business Council, April 3, 2001.
 ¹⁰Bush, Keith. *The Russian Economy in June 2001*, p. 21.

same consistency should be fairly expected at the federal level from the Ministry of Taxes and Levies. For several years now, the system of auditing taxpayers has relied upon targeting law-abiding foreign companies when revenue shortfalls have to be remedied. Clearly, Russia must strive to bring pure tax evaders into the system, rather than repeatedly targeting firms that are willing to comply with a stable, predictable system.¹¹

POLICY PROGRESS TO DATE

TAX CODE: PART I

Part I of the Tax Code, the "tax constitution" of Russia, consists of 142 articles that outline basic principles, key definitions, and rights and responsibilities.¹² In codifying the relationships between taxpayers and the tax authorities, part I has had a far-reaching effect on the way the tax system is perceived, favorably impacting the business environment and inspiring increased company confidence. For the first time in its post-Soviet transition, Russia has arrived at a legislative framework with a fairer balance between the tax authorities and taxpayers. By clearly setting forth taxpayer rights and official responsibilities, it rid the system of unclear appeals procedures as well as a variety of punitive sanctions levied without recourse.

The changes brought about by implementation of part I, which came into force in January 1999, included several important provisions concerning both tax relief and enforcement. For example, part I took the bold step of reversing, in effect, the burden of proof in tax dispute between the tax authorities and the taxpayer—the latter is now presumed innocent until proven otherwise. The rights of the taxpayer include protection against arbitrary penalties not justified by the tax authorities in a court of law, placing the burden squarely on the Russian Government to prove taxpayer liability. The 19 penalties prescribed in part I are much less severe than their predecessors, and they also attempt to differentiate between "negligent" or "intentional" behavior and violations due to other mitigating circumstances.¹³

Part I of the Code also included a provision allowing companies to transfer certain assets to newly established subsidiaries as they undergo restructuring. Previously, these asset transfers were taxable because they were considered trading transactions. That is no longer the case, except in circumstances where there are sufficient grounds to prove that the restructuring process was designed purely as an instrument for tax evasion.¹⁴

Also important to companies operating in Russia was the elimination of tax restrictions on sales below cost. Originally intended to curb tax evasion, these measures instead had a debilitating effect on manufacturers. Their removal allows law-abiding firms to pursue flexible marketing strategies that include selling at a loss.

¹¹U.S.-Russia Business Council and American Chamber of Commerce in Russia, Commercial Engagement with Russia: Policy Recommendations for the Bush Administration, March 2001. ¹²OECD, The Investment Environment in the Russian Federation: Laws, Policies and Institu-

¹²OECD, The Investment Environment in the Russian Federation: Laws, Policies and Institutions, op. cit., p. 115. ¹³Ibid., p. 140.

¹⁴ American Chamber of Commerce in Russia Tax Committee, informal memoranda, March 1999.

As a result of the part I implementation, tax collection has become the liability of the so-called agent who controls the source of the taxable payments (such as an employer, in the case of income tax). Prior to 1999, companies could simply refer the tax authorities to an entity that received a payment, thereby making tax collection difficult, if not impossible, if the receiving company happened to be located outside of Russia. The revamped policy establishes that an agent that fails to transfer the requisite duties can be fined 20 percent of the amount due.¹⁵

Finally, part I also revised the definitions that apply to terms such as the "arm's length principle," "related parties," and "market price." These concepts were either undefined or received minimal treatment in the preexisting Russian legislation. Thus part I of the Tax Code sought to limit the tax-reduction tactics available to Russian companies via transfer-pricing schemes that allowed subsidiaries to minimize taxable profits and offshore parent firms to pay rates lower than their Russian equivalent.¹⁶ The stricter definitions contained in part I allow officials to examine contracts to ensure that related companies (defined as having more than 20 percent cross-ownership) are acting in accordance with market conditions (acceptable percentage variations established for prices charged) and not engaging in tax evasion. During the state Duma's fall session, the Ministry of Finance plans to introduce further amendments to part I pertaining to transfer pricing.¹⁷

TAX CODE: PART II

Several important chapters of part II of the Tax Code were adopted last summer by the Federal Assembly and signed by President Putin on August 6, 2000. When they came into force on January 1 of this year along with a law on implementing instructions for part II, these chapters signified a huge stride forward in Russia's efforts to rationalize it tax system and make it more closely conform to international practice.

To put the magnitude of these accomplishments into perspective, the four chapters adopted covering the flat income tax, social taxes, excise taxes, and the value added tax (VAT) represent 60 percent of the revenue side of Russia's ledger, and revenues from these four line items increased by 60 percent through the first 5 months of 2001 on a year-on-year basis.¹⁸ As Figure 2 indicates, when the profits tax is added in, these taxes account for roughly threefourths of Russia's tax revenue. In addition, companies welcomed a long-awaited reduction in turnover taxes. Several of these sweeping changes are described below.

PERSONAL INCOME TAX

Perhaps the most attention has been given to the Russian Government's introduction of a 13 percent flat income tax in place of progressive rates ranging from 12 to 30 percent. The new flat tax generated an immediate impact as soon as it took effect, as income

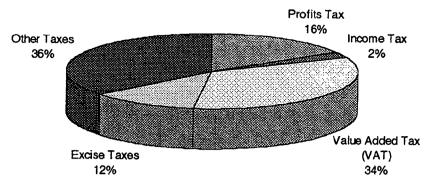
¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Interfax, May 29, 2001.

¹⁸ Ministry of Economic Development and Trade; and Interfax, June 13, 2001.

tax revenues increased by 70 percent in the first quarter of 2001 compared to the fourth quarter of last year.¹⁹ According to Minister of Finance Aleksei Kudrin, through the first 5 months of 2001, collections of the income tax were up 52 percent over the comparable period in 2000.20





Source: Audit Chamber of the Russian Federation.

UNIFIED SOCIAL FUND TAX

The adoption of the unified social fund tax integrated four previously separate budgetary line items into one, a move that, according to Minister Gref, "had wonderful anti-corruption consequences, making the revenue and expenditure sides of these funds more transparent."²¹ In place of the previous 39.5 percent flat rate, the new rates follow a regressive scale from 35 percent down to 5 percent.

VALUE ADDED TAX (VAT)

Several improvements to the VAT-the stable source of one-third of Russia's tax revenue (see Figure 2 above)—were introduced with the adoption of chapter 21 of part II last year. Among the most im-portant is the new exemption on capital construction that took effect on January 1. This provision eliminated the previously unrecoverable 20 percent charge on capital investment in Russia, and its adoption was influenced by several years of sustained engagement on the part of both the U.S. Government and Western business groups.

TURNOVER TAXES

Turnover taxes such as the housing fund tax and the road users tax have for many years been the primary example of Russia's

²¹Gref, op. cit.

¹⁹Gref, op. cit. ²⁰RIA Novosti, June 19, 2001.

penchant for taxes based on gross revenues rather than profits. These charges have long acted as a major disincentive to investment, as they disproportionately impact new businesses and those running operating losses. The conceptual underpinning of turnover taxes encourages businesses to understate or suppress their actual revenues, thereby gravitating into the infamous shadow economy. This of course distorts competition by shifting the relative tax burden onto those companies that comply in a straightforward manner.

Last year, the Putin team sought the complete elimination of turnover taxes but was forced into a compromise to orchestrate legislative approval of its tax package. Their overall reduction from 4 percent to 1 percent represented the outright elimination of the housing tax (1.5 percent) and a decrease in the road tax from 2.5 percent to 1 percent until its planned abolition in 2003.22 In his annual address to the Federal Assembly in April, President Putin stressed that "our strategic priority today is the consistent lowering of taxation on non-rental income and the final elimination of the turnover tax." 23

THE ROAD AHEAD: NEXT STEPS FOR POLICYMAKERS

This section elaborates on additional strands of Russian tax reform, picking up where last year's accomplishments left off. What are the next steps as perceived by the business community, and what are the relative priorities identified by the Putin Administration? In terms of the work remaining to be done by the Russian Government to build on last year's momentum, this section will focus on five key areas: profits tax, customs duties, VAT, tax administration concerns, and tax provisions associated with production sharing agreements (PSAs) in the energy sector.

PROFITS TAX

Companies active in the Russian market have for several years urged the Russian Government to move away from a variety of revenue-based methods of taxation. One of the primary focal points in this campaign has been an effort to make net profit, as defined by international norms, the basis on which firms calculate the profits tax. The level of taxation is not the root of the problem, as Russia's current 35 percent rate (43 percent for financial services firms) is on par with, or even less than, the corporate rates in other industrialized countries.²⁴

Despite a multi-year lobbying effort to allow widely accepted business deductions, the profits tax is still not payable on net profit. Advertising costs, training expenses, business travel, loan financing, and depreciation allowances are only deductible within very restricted norms. For example, deductible domestic travel expenses are capped at \$11.40 per day, and depreciation schedules far exceed the economic life of certain assets (e.g., buildings spread

²² OECD, The Investment Environment in the Russian Federation: Laws, Policies and Institutions, op. cit., p. 123. ²³ Putin, Vladimir V. State of the Nation Address to the Federal Assembly, April 3, 2001. ²⁴ OECD, The Investment Environment in the Russian Federation: Laws, Policies and Institu-

tions, op. cit., p. 125.

over 250 years).²⁵ As a result, as a recent OECD study points out, "the tax base for the Russian profits tax has been and still is larger than the comparable corporate tax base in other industrialized countries, often resulting in a higher ... effective profits tax rate than the nominal statutory rate."²⁶

Fortunately, relief is on the way. The Putin Administration has sought to build on last year's successes by overhauling the profits tax to stimulate business activity and recapture firms from the shadow economy, making this initiative the top tax-related priority for 2001.

In what Deputy Finance Minister Sergei Shatalov referred to as an "essential measure that can bring about revolutionary changes in Russia," the state Duma voted just prior to the summer recess to approve, by a vote of 339 to 6, chapter 25 of part II of the Tax Code, "On the Tax of Profit of Organizations." 27 The passage of this second reading, the most critical of the three readings, means the bill is expected to sail through third reading ratification early in the fall session and should be signed into law to take effect on January 1, 2002.

In addition to business-friendly provisions pertaining to thin capitalization rules and depreciation of fixed assets, the bill has produced two major accomplishments that will have a far-reaching impact on bottom-line performance when enacted next year: a considerable rate reduction and full deductibility of legitimate business expenses. In allowing deductions for all "necessary, reasonable and documented" expenses, the new law, according to Ernst & Young's Peter Arnett, "is moving away from the prescriptive Soviet approach, moving expense deductibility from an exclusive list to an inclusive list."²⁸

Furthermore, companies have been urging the Russian Government to promote both purchased and leased capital investments. To do so, financing and depreciation norms have to be revised, so that businesses are allowed to expense the full cost of fixed or leased assets over a period that reflects the economics of the transaction.29

The final product, which lowered the tax rate from 35 percent to 24 percent, was yet another example of executive-legislative compromise. The Putin Administration, mindful that each percentage point reduction equates to 25 billion rubles (approximately \$850 million) in foregone revenue, had sought to lower the rate to 25 percent.³⁰ The government proposal called for 8 percent to be allocated to the federal budget and the remaining 17 percent shared among regional and local budgets, while regions would be allowed to reduce the rate by up to 3 percent.³¹ The formula currently in effect allocates 11 percent to the federal budget, with 19 percent going to regions and 5 percent to localities. However, some regions

²⁵ Ibid., pp. 126–127. ²⁶ Ibid., p. 23.

²⁷ Agence France Presse, June 22, 2001.

²⁸ St. Petersburg Times, op. cit. ²⁹ U.S.-Russia Business Council and American Chamber of Commerce in Russia, op. cit.

³¹Financial Times, June 20, 2001.

waive all but a fraction of a percentage point as an investment and company registration incentive.32

Many in the state Duma, including a majority of the Budget Committee, had favored setting the rate at 23 percent, while retaining tax privileges and investment incentives opposed by the Ministry of Finance. Ultimately, the government agreed to split the difference, settling on the 24 percent rate in exchange for the removal of the investment deduction and other exemptions. Of that amount, 7.5 percent will go to the federal government and 14.5 percent to the regions, with the remaining 2 percent allocated to local budgets.³³ An incentive provision allowing regions to reduce the tax by as much as 4 percentage points was also part of the compromise version that passed.34

Businesses will feel the immediate impact of this changed environment in 2002, as the Finance Ministry estimates the enactment of the profits tax chapter will reduce the overall tax burden by some 100 billion rubles, or 1.1 percent of GDP.³⁵ As Steve Henderson, a tax partner at Deloitte & Touche puts it, "there seems to be a race on to see how much the economy will move when the profits tax rate is lowered. Globally, there is a tendency toward more consumer-based tax regimes. Companies will have more of their money available to invest and optimize operations." 36 The direct correlation to investment growth is striking-according to Alfa Bank, over half (54 percent) of capital investment in Russia is funded by company profits, while bank financing accounts for only 3 percent.37

And, as Minister Gref points out, the Russian Government will reap the rewards as well: "we have taken a long time discussing this law with our businesses and with the State Duma, and if this law is passed, it will provide a great stimulus to our economy. We expect to increase revenue by 1.75 percent of GDP." 38 The importance of the profits tax to the Russian federal budget is depicted in Figure 3.

CUSTOMS DUTIES

Russia's customs regime is an area where tremendous progress has been made but significant challenges remain. The issues described below continue to hamper business activity and compromise the system's potential for revenue collection.

Customs duties evasion is a major policy dilemma for the Russian Government as well as for competition in the marketplace. Tax evasion on goods coming in across the border costs the Russian Government billions of rubles in lost in revenue. In addition, graymarket imports that avoid paying customs duties are clearly less expensive than their domestically produced counterparts and legitimate foreign imports. This illustrates yet another example of instances in which companies that comply are competitively dis-

³² Ibid.

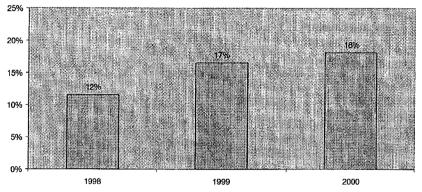
 ³³ Oganes Sarkisov, Taxation of Businesses in Russia: An Update, July 6, 2001.
 ³⁴ Troika Dialog, Duma Spring Term Report, July 2001.
 ³⁵ Interfax, April 5, 2001.
 ³⁶ St. Petersburg Times, June 19, 2001.
 ³⁷ St. Petersburg Times, June 13, 2001.

³⁸ Gref, op. cit.

advantaged, as the prices of their products obviously reflect higher importation costs.

As Russia seeks to become increasingly integrated into the global marketplace, it will have to ameliorate the conditions encountered in cross-border trading activity: overly complex and contradictory clearance procedures, ambiguous legislation pertaining to goods classification, and-most troubling in some respects-the threat of retroactive reassessment of goods imported many years ago. These issues introduce additional risks and costs that often alter the commercial terms of the original trade transaction.³⁹

FIGURE 3.—PROFITS TAX REVENUE AS A PERCENTAGE OF FEDERAL BUDGET



Source: Ministry of Finance of the Russian Federation.

Indeed these issues, and a variety of tariff barriers that are out of sync with international norms, implicate Russia's accession to the World Trade Organization (WTO). Their WTO relevance has provided an impetus to the Putin Administration's pursuit of customs reform. In January, the Russian Government reduced duties on one-fourth of all goods coming into the country, a measure that yielded a 25 percent revenue surge in the first quarter of 2001 compared to the fourth quarter of last year.⁴⁰

Importantly, the Russian Government has also taken steps to unify and recategorize import duties, a move that has greatly simplified the quest to comply with customs procedures and may help reduce both customs corruption and gray-market activity. Minister Gref has labeled the 30 percent reduction in classification line items (from 13,500 to 9,500) "an absolute revolution in customs tariffs" that will yield substantial benefits in the battle against corruption.41

Despite these recent accomplishments, much work remains for Russia to fashion a customs regime that will facilitate-not hinder—its aspirations to become a full participant in the global economy. The concrete objectives for the remainder of this year and

³⁹U.S.-Russia Business Council and American Chamber of Commerce in Russia, op. cit.

⁴⁰ Gref, op. cit. 41 Ibid.

into 2002 include codification of chapter 26 of part II of the Tax Code and the adoption of a new Customs Code.

President Putin himself has emphasized the importance of continued customs reform: "measures have already been taken to simplify and lower the level of import tariffs, but this is insufficient. A radical change in the system of customs administration is necessary. The main task of the year in this sphere is the approval of a new Customs Code, moreover as a law that has direct force. Naturally, the code must correspond to the norms of the World Trade Organization (WTO), accession to which remains our prioritv." 42

VALUE ADDED TAX (VAT)

The VAT is intended to be a levy charged to the final consumers of goods and services, not to firms producing these goods and services. Like the profits tax, its 20 percent rate and other statutory features make the Russian VAT not terribly unlike European variants, at least in theory: "Despite its superficial similarity to other countries' VAT laws, however, the Russian VAT does not function in a manner consistent with a traditional VAT." 43

In order to fulfill its intended purpose, businesses should collect and pay VAT to the Russian budget at each stage of production, and it should not be a cost to businesses themselves. Unfortunately, despite last year's amendments to the VAT Law, this is still not the case in Russia. Companies continue to grapple with a limited ability to fully credit VAT on purchases, making the Russian variant, in effect, a tax on production: "The result is that the effective VAT rate is usually greater than the statutory VAT rate and becomes a cost to business." 44

For several years, companies in Russia have been required to charge VAT on all exports to other Commonwealth of Independent States (CIS) countries. Charging VAT at the point of origin on intra-CIS trade, unlike the practice in other CIS countries, hinders the export operations of Russia-based manufacturers and limits investment in Russia, as it decreases Russia's attractiveness as a manufacturing base for exports to CIS markets. Russia's past reluctance to move away from the point-of-origin principle in favor of the destination principle (having refused to ratify a CIS protocol) has in part reflected serious concern over revenues derived from oil, gas and electricity sales Russia's CIS neighbors.45

Fortunately, as a result of lobbying efforts by both the Russian private sector and foreign investors, Russia has recently acted to remedy this problem. Moving to the destination principle for intra-CIS trade, effective July 1 of this year, affords Russia the opportunity to encourage manufacturers to build and expand facilities in Russia to supply ČIS markets, thereby deriving the direct economic benefits of job creation and budgetary revenues.

⁴²Putin, op. cit. ⁴³OECD, The Investment Environment in the Russian Federation: Laws, Policies and Institu-tions, op. cit., p. 129. ⁴⁴Ibid., p. 24. ⁴⁵U.S.-Russia Business Council and American Chamber of Commerce in Russia, Commercial

Issue Briefs, June 2000.

Resolving several remaining issues would make the VAT system more transparent and therefore better understood by investors. As a result, businesses would be discouraged from avoiding VAT payments, which would be collected more easily from the end consumer (who has fewer means of tax evasion). Following are several examples of the difficulties encountered by businesses.

- While last year's changes contained in part II provide that VAT is creditable when paid on certain nondeductible business expenses, such is not the case in practice.⁴⁶ VAT should be recoverable on all genuine business expenses (e.g., advertising) irrespective of their treatment for other accounting purposes (e.g., profits tax calculation).⁴⁷
- There continues to be a considerable difference between the provision of VAT refunds in theory and in practice. Business experience has shown that a legal entitlement to a VAT refund is not correlated to the timely issuance of that refund, if it is processed at all. Certain companies such as PSA investors, start-ups and export-oriented firms encounter great difficulties in collecting their refunds notwithstanding the unambiguous provisions in both part I of the Tax Code and the VAT Law. Prior to last year's adoption of chapter 21 of part II, interest did not accrue on the refund amounts due, and firms were not permitted to offset these refunds owed against other current tax liabilities. Provisions were introduced beginning in January of this year to address these deficiencies, but they have not yet been widely tested in practice.⁴⁸
 Interpretation of VAT-related legislation still lacks clarity and
- Interpretation of VAT-related legislation still lacks clarity and consistency (e.g., rules pertaining to when cross-border services are subject to VAT).⁴⁹
- Finally, because the requirement of moving from a cash basis to an accruals basis for VAT poses substantial costs to businesses on a cash-flow basis, consideration should be given to easing the practical burden of this transition.⁵⁰

ADMINISTRATIVE PROCEDURES

While the Russian Government's commitment to tax reform is evidenced by numerous recent improvements in legislation, the application of Russian tax law remains inconsistent and arbitrary. The OECD highlights three factors that contribute to this situation: a lack of modernization such as computers to track accounts, inadequate training of tax inspectors, and limited knowledge of market-oriented tax policy on the part of Russian judges.⁵¹ Clearly, practical measures in these areas could yield substantial dividends.

⁴⁶OECD, The Investment Environment in the Russian Federation: Laws, Policies and Institutions, op. cit., p. 131. ⁴⁷U.S.-Russia Business Council and American Chamber of Commerce in Russia, Commercial

⁴⁷U.S.-Russia Business Council and American Chamber of Commerce in Russia, Commercial Issue Briefs, op. cit. ⁴⁸OECD, The Investment Environment in the Russian Federation: Laws, Policies and Institu-

⁴⁸ OECD, The Investment Environment in the Russian Federation: Laws, Policies and Institutions, op. cit., p. 132.
⁴⁹ U.S.-Russia Business Council and American Chamber of Commerce in Russia, Commercial

⁴⁹ U.S.-Russia Business Council and American Chamber of Commerce in Russia, *Commercial Issue Briefs*, op. cit. ⁵⁰Ibid.

⁵¹OECD, The Investment Environment in the Russian Federation: Laws, Policies and Institutions, op. cit., p. 24.

In terms of the appeals process, the recourse available to companies is twofold. Firms can pursue an administrative appeal through channels of higher local, regional and federal authorities, or seek redress through a court action.⁵² Because there are no tax courts per se in Russia, tax disputes involving businesses are currently addressed in arbitration courts, where companies have been enjoying ever greater success: "Although precise statistics are not available, it is estimated that taxpayers win over 50 percent of cases involving disputes with the tax authorities." 53

The Russian Government could demonstrate progress in the area of tax administration by focusing on three key issues:

- The federal government should promote greater consistency by exercising central control over regional tax bodies that adopt inconsistent interpretations and apply inappropriate pressure on firms in their quests for additional revenue.
- While this year's modifications to the VAT regime ameliorated many previous inadequacies, it has not solved the problems concerning repayment of excess VAT persist-the tax authorities must take steps to ensure that refunds are available with minimum delay.
- Finally, an effective mechanism for tax appeals outside of the court process is sorely needed. A central ombudsman or a dispute resolution center would dispense with relatively uncomplicated tax disputes more efficiently and consistently than current administrative practice.

PRODUCTION SHARING AGREEMENTS (PSAS)

Russia's tax-related progress in support of a viable PSA regime has lagged behind its counterparts in the tax reform process. Exploiting the current window of opportunity offered by high oil prices means ensuring that the new Tax Code will work fairly and efficiently with respect to investors in the energy sector. Specifically, Russian policymakers should follow through on the enactment of the PSA law with specific Tax Code provisions that support the PSA tax rules.

The Russian Government pledged to introduce the relevant chapter of part II of the Tax Code by June 20. The draft given a first reading in the state Duma prior to the summer recess, however, was the Duma's version, not the draft under development by the Ministry of Economic Development and Trade. It met with strong objections by some deputies and executive branch colleagues striving to make the PSA regime operational. It remains unclear whether this Duma draft will be heavily amended or another draft might be substituted and introduced in the fall session.

It is equally critical that other new chapters of the Tax Code reaffirm, rather than contradict, the tax regime currently contained in the PSA law. Another possible test looming for the fall session involves the draft of chapter 27 concerning taxation of natural resource production, which is designed to supercede the mineral replacement tax and certain royalty payments to the Russian Government.

⁵² Ibid., p. 141. ⁵³ Ibid., p. 141.

CONCLUSION

Russian tax reform has a beleaguered history over the past decade. with conflicts within the Duma and between the legislative and executive branches slowing progress to a near halt for certain intervals in the 1990s. For the most part, the failure to move more expeditiously in establishing a fair, stable and transparent tax system has not been caused by a knowledge deficit concerning the problems and their solutions: "Russian policymakers and experts drafted a new Tax Code based on such principles as early as 1993, but this and subsequent reform initiatives have for many years been mired in political controversy, both at the federal and regional level, often becoming hostage to other political bargains." 54

Thankfully, the commercial policy area that has caused businesses the greatest frustration during Russia's market transition is now also exhibiting some of the most successful policy initiatives and concrete accomplishments. The Finance Ministry's Chief of Tax Policy, Alexander Ivaneyev, projects that the Russian Government will push through the final phase of tax reform in 2002, with the adoption of measures covering property taxes, the use of natural resources and a single agricultural tax to act as a companion to the profits tax.55

To be sure, remaining tax, corporate governance and other structural reforms lend a cautionary note to the optimism unfolding in the business community. But the recent track record on tax reform may help Russia finally close the chapter on its post-crisis recovery-debates over lingering devaluation dividends and exogenous factors such as commodity prices notwithstanding-and begin a new chapter featuring truly sustainable, diversified economic growth.

According to Peter Westin, chief analyst at ATON Investment Bank in Moscow, when the income tax set at 13 percent combines with a profits tax of 24 percent beginning next year, Russia will suddenly have one of the lowest marginal tax rates in the world.⁵⁶ And the revenue benefit from increased compliance and overall economic activity could be precisely the boon the Russian Government needs to help manage its roughly \$30 billion debt burden in 2002-2003. Though the reduction in Russia's profits tax is not as dramatic, the Irish rate-cutting example of a decade ago helps to illustrate the potential. When Ireland lowered its profits tax to 10 percent for the manufacturing and certain other sectors, its revenues increased from \$655 million in 1991 to \$3.7 billion in 2000, with the profits tax share of total revenue nearly doubling from 8 percent to 15 percent in that time.⁵⁷

The continuing development of the Tax Code will provide tremendous economic benefits to Russia if it results in a tax system conducive to capital formation rather than one marked by investment disincentives. The Russian Government would do well to capitalize on the momentum of the past 18 months and ensure that the guid-

 ⁵⁴ Ibid., p. 122.
 ⁵⁵ Interfax, May 29, 2001.
 ⁶⁶ Interfax, June 20, 2001.
 ⁵⁷ St. Petersburg Times, June 19, 2001.

ing principle for subsequent draft laws is that they are enacted in a form that promotes business and investment.

Success will be defined by the extent to which the Tax Code gives legal force to an equitable system of taxation that treats all businesses fairly. The creation of a level playingfield requires unambiguous laws that achieve their intended tax objectives and are consistently administered.

PUTIN'S DILEMMA: AUSTERE BUDGETING IN A POOR STATE

By James A. Duran, Jr.¹

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SUMMARY

President Vladimir Putin and the Council of Ministers are pushing an ambitious program to restructure five non-defense institutions inherited from the Soviet era. They are obstacles to Russia's transition to a liberal market economy. A change in the basic institutional environment to which the population had become accustomed threatens the welfare of a poor population. Under the centrally planned economy (CPE), a form of social contract emerged. The "nanny" state managed by a small elite created a broad network of social and economic benefits that provided a high degree of certainty to the great majority of the citizenry. Employees' wages were low, but they received proportionately very high subsidies for food, housing and municipal services, utilities, sports and cultural facilities, education, health care, social welfare entitlements, pensions, etc. Since 1991 the challenge to the reformers has been to restructure the social contract to one based on high wages giving individual households the right to select the goods and services they prefer in the market economy. Unfortunately, wages for most households have remained low while prices for food, consumer goods, and many services have risen sharply. A majority of households remain heavily dependent on subsidized institutions from the old order. Russian leaders have hesitated to restructure these obligations in fear of provoking social disorder.

Putin's dilemma is rooted in the lack of sufficient fiscal resources to finance major reforms. The combined federal, regional, and local

¹James A. Duran, Jr. is Professor Emeritus of History, Canisius College; Councillor of The Atlantic Council of the U.S.; an author of the Atlantic Council's Bulletin originally entitled Perestroika Update: The U.S.S.R. in Transition, later retitled as The Russian Federation: Political and Economic Update, from 1992 through 1998.

budgets fall far short of paying current obligations. Though currently enjoying the second consecutive year of growth, the Russian Federation ranks only at about the level of Mexico in gross domestic product (GDP), i.e., fourteenth in the world. Since 1989 the real GDP has fallen by an estimated 50 percent. With all levels of gov-ernment taking about 40 percent of GDP in revenues, raising taxes to finance further reforms would discourage entrepreneurs from investing in the nascent economy. Seventy-eight percent of GDP growth in 2000 resulted from increased earnings in energy and primary commodities exports. Budget revenues would drop sharply if world market prices were to plummet. Aware of this reality, the central government has pursued an austere balanced budget policy. In 2000 and 2001 the federal budget amounted to about \$42.4 billion. Adjusting for purchasing power parity at the official rate of exchange, that total would at most be around \$170 billion. About one-half goes to servicing debt, foreign and internal, and financing the security forces. That allocation leaves little money for funding the regular internal responsibilities of the federal government. In 2000 funds set aside for regional and local budgets were about 15 percent of GDP, the same percentage as the central government. As this paper will explain, most regional and local governments had insufficient resources to finance fully all their functions and in particular federal mandates inherited from the old CPE system. Ministers, academics, and analysts warn of a possible fiscal-budg-etary crisis in 2003. Foreign debt servicing in that year is scheduled to rise to \$18.2 billion, an increase of more than \$5 billion over each of the prior 2 years. If world market conditions deteriorate, the Russian federal budget will need assistance from the International Monetary Fund (IMF) to sustain even current levels of spending adjusted for inflation.²

The first two sections of this paper describes the fiscal conditions of the Russian state and the institutional changes that have taken place in the procedures for formulating and administering the state budget. During the Soviet CPE era the budget was secondary to the annual plan, the parameters of which were decided by a powerful Communist Party elite. Today the Russian Federation budget determines the cash flows necessary for implementing desired policies. Intense political bargaining by vested interest groups is comparable to the debates that occur in most liberal democratic states. With the help of bilateral and international agencies, the Russian bureaucracy at the central federal level has been trained to formulate, execute and audit the revenues and expenditures in a radically different way than was done previously. Focus has now shifted to improving the competence of regional and local officials in the administration of their fiscal affairs.

²Nina Pautola, "Russia's External Debt, Solvency and Options for Alternative Capital Inflow," Russian Economic Trends, v. 9, no. 1, 2000, pp. 30-38; Rossiyskaya Gazeta, 12 May 2001, FBIS-SOV-2001-0514; Russian Economic Developments, no. 96, March 2001, pp. 6-7; John P. Hardt, Russia's Paris Club Debt and U.S. Interests, CRS Report for Congress RL30617, updated June 6, 2001; John P. Hardt, Putin's Economic Strategy and U.S. Interests, CRS Report for Congress RL31023, June 19, 2001; Vremya MN, June 15, 2001, FBIS-SOV-2001-0615; Andrei Nesterenko, "The Modernization Challenge Facing President Putin," Finance and Development, A Quarterly Magazine of the IMF, vol. 37, no. 3, September, 2000, pp. 1-7; "IMF Concludes Post-Program Monitoring Discussion on the Russian Federation," IMF Public Information Notice (PIN) no. 01/68, July 18, 2001.

The succeeding sections of the paper analyze major policy debates on proposals to execute major reforms in five different sectors that affect the livelihood of every Russian citizen.

(1) A major problem concerns the shift from financing basic expenditures such as housing maintenance, municipal services, and utilities out of the budgets of local governments to individual households. During the CPE period only 2 to 3 percent was paid by the tenants with the rest being provided through state agencies or enterprises. Much of that burden, amounting to 4 percent of GDP, was transferred during privatization of enterprises to fiscally strapped regional and local governments. While tenants now cover up to 40 percent of charges, the government with lower budgets and individuals with modest incomes lack resources to do much more than deal with emergencies. Sixty percent of urban infrastructure has deteriorated so badly that billions of rubles need to be expended on renovation and new installations.

(2) Another 4 percent of GDP is spent on a broad range of more than 160 social welfare entitlements for which 47 categories of citizens are eligible regardless of need. Full payment would require an estimated 22 percent of GDP. The federal government has made the regional and local governments responsible for funding these mandates without transferring adequate fiscal means to do so. The question remains how to reduce the number of these commitments and focus distribution of funds to the truly needy. An estimated two-thirds of payments now goes to those above subsistence level.

(3) During this fall's session of the Federal Assembly, legislation to reform the old-age pension system funded by the extrabudgetary Pension Fund will probably be enacted. Inspired by the Chilean model, a portion of each worker's contributions will be transferred into a savings account to be invested in bond or stock funds. With a poorly developed financial services sector, finding suitable investments represents a major challenge. The combination of very low birthrates and a large relative increase of retirees constitutes a serious problem. Reform is essential if an already austere state budget is to avoid an additional rapidly growing fiscal burden beginning in 7 to 8 years.

(4) The fourth reform is designed to increase the confidence of the public in the judicial system. President Putin and his government are making the reform of the judiciary and of the Criminal Procedure Code a high priority and have proposed a large increase in appropriations in the federal budget for 2002. Funds are sought to increase dramatically the number of judges by 2003. In addition, the new lower level of justices of the peace to handle relatively minor cases is to be rapidly expanded. Such procedures as requiring that judges give prior approval to arrest warrants and the introduction of plea bargaining have the potential for significantly reducing the widespread abuse of prisoners held for long periods in pre-trial detention centers.

(5) The final reform to be analyzed is the comprehensive restructuring of the educational system from bottom to top. Recent studies have shown that the Russian work force is significantly less skilled even than that of the People's Republic of China. Even with the 50 percent raise proposed in the 2002 budget, teachers' salaries on average will still be below the official subsistence level. One goal is to expand the opportunity for graduates from regular secondary schools to gain entry into higher education institutions through the use of vouchers.

Prospects for approving most of the Putin Administration's programs appear promising. The present state Duma is more supportive of the executive branch's proposals than were the preceding legislatures during Boris Yeltsin's two terms as President. There is broad support for the restructuring of fiscal federalism. Too often a balanced budget at the center has resulted in passing federal mandates down to the regional and local levels which lack the means to pay. Federal authorities who control sources of revenue have been changing the rules virtually every year. Local officials bear the brunt of criticism from citizens deprived of what they regard as their just due. Responding to considerable pressure, the central government published a proposal on August 21, 2001, to set out in statute a clear division of responsibilities and revenues until 2005. More needs to be done to improve budget practices on the lower levels of government. Sound administrative practices are vital when reforms change the institutional framework within which citizens must live and are being implemented when resources are scarce.

AN IMPOVERISHED STATE WITH LIMITED FISCAL RESOURCES

Russian leaders face a dilemma in that they must operate within austere fiscal limits. Although Russia encompasses a huge territory and is richly endowed with natural resources and a relatively literate population of 147 million, the nominal GDP in 2000 was only about \$276 billion calculated at the official exchange rate. Of that total, state authorities consumed about 42 percent in revenues. Taxes collected to fund federal budget outlays amounted to 16.2 percent of GDP, regional and local budgets-15.1 percent, and the four major social insurance funds (The Pension Fund, Social Insurance Fund, State Employment Fund, and Medical Insurance Fund)-10.8 percent. The federal 2000 budget of \$42.4 billion in nominal terms approximately equals that of Finland. Since many prices fall below their counterparts in advanced market economies, estimates of purchasing power parity range from $3\frac{1}{2}$ to 4 times more than the nominal rate of the ruble on international exchange markets. The result is a federal budget about \$170 billion.³

President Putin and the Council of Ministers understand that businesses are too heavily taxed. Present exorbitant rates slow economic growth and stimulate off-the-books transactions and capital flight. The reduction of the personal income tax to a 13 percent flat rate effective January 1, 2001, has contributed to a 70 percent increase in this source of revenue during the first 5 months of 2001, although the double-digit inflation of 16 to 18 percent reduced real gain. On second reading the Duma has approved a reduction of the tax rate on corporate profits from 35 percent to 24 percent effective on January 1, 2002. Another measure under consideration is slashing the 29.6 percent combined social insurance payroll tax by a point or two since revenues allotted to the Pension Fund are run-

³Russian Economic Developments, No. 96, March 2001, pp. 6-7; Nesterenko. op. cit., p. 2, Padma Desai, "Putin's bluff," Financial Times, June 21, 2001, p. 16.

ning a surplus. Obviously, there is risk in supporting this supplyside policy, but incentives are essential in the effort to stimulate economic growth.4

A reason for Putin's continued popularity has been his insistence that pensions and federally budgeted salaries be paid on time. After years of uncertainty, some stability in household cash flow represents a significant improvement for the recipients. For years the state did not collect enough in rubles to cover these outlays. In 1996 nearly half the receipts for the "consolidated" budget, i.e., those of the central, regional and local governments, were in the form of "mutual offsets," i.e., barter in the form of goods and services, and monetary surrogates such as promissory notes, bills of exchange, local vouchers, etc. In addition, tax evasion was wide-spread. Cash was scarce. Salaries, wages, and allowances of budget-funded civil servants and the military fell into arrears. Delays in paying pensions were partly due to the failure of the government itself to pay the payroll taxes it owed to the Pension Fund. Simultaneously, legislators pressed hard to increase pensions and salaries to match inflation, but the recipients by no means received full indexing. Such privatization schemes as the scandalous "loans for shares" occurred in part because desperate leaders wanted cash to disburse to employees and pensioners. particularly as elections were approaching. As of July 2001, some arrears to civil servants and the military have yet to be paid.⁵

BARGAINING OVER THE BUDGET

The contentious but democratic haggling over budget assumptions and spending priorities among representatives of the executive branch, the state Duma deputies, and the Federation Council senators who represent the regions is in itself evidence of transition to a new political system. Without the approval of the legislature, the budget cannot become law. Bargaining is prolonged since there has been no disciplined, pro-government majority in the Duma. Nominated by the President and confirmed by the Duma, the Premier is primarily the President's man. Putin's Council of Ministers is charged with managing economic and routine internal affairs. The ministers are chosen not because they are prominent figures with strong political support in the legislature, but mainly for their technocratic skills. The Presidential Administration, comparable to the Executive Office of the U.S. President, is divided into departments which oversee all state activities. The Security Council and its staff responsible for security affairs, internal and external, are directly responsible to the President, who chairs its

⁴Ian Cochrane, Vladimir Gidirim, Tim Carty and Zhanna Dobritskays, "The Russian Tax System: Achievements in 2000 and the Possible Agenda for 2001," Russian Economic Trends, v. 9, no. 3, 2000, pp. 17-21; ITAR-TASS, April 25, 2001, FBIS-SOV-2001-425; ITAR-TASS, April 25, 2001, FBIS-SOV-2001-0623; Kommersant, April 21, 2001, p. 1; Moscow Mayak Radio, June 19, 2001, FBIS-SOV-2001-0628; Rossiyskaya Gazeta, June 26, 2001, p. 1, FBIS-SOV-2001-0626; Obshchaya Gazeta, June 14, 2001, FBIS-SOV-2001-0613. ⁵David Woodruff, Money Unmade, Barter and the Fate of Russian Capitalism (Ithaca, New York: Cornell University Press, 1999), pp. 79-176; ITAR-TASS, May 22, 2001, FBIS-SOV-2001-0522; Elena Romanova, "Pension Arrears in Russia: The Story Behind the Figures," Russian Economic Trends, v. 8, no. 4, 1999, pp. 14-24; Sergei Guriev and Barry Ickes, "Barter in Russian Enterprises: Myths vs. Empirical Evidence," Russian Economic Trends, v. 8, no. 2, 1999, pp. 6-13; Padma Desai and Todd Idson, Work Without Wages, Russia's Nonpayment Crisis (Cambridge, Mass.: The MIT Press), pp. 2-23.

meetings. The "power" ministers running military, police, and intelligence affairs are also directly subordinate to him. Unlike in the Soviet era, sharp public disputes occur among ministers and members of the Presidential Administration even as bargaining on the budget is underway with the legislators.⁶

Leaders of the executive and legislative branches in the past decade have established procedures in the Budget Code for enacting the annual state budget that basically conform to the standards of the G-7. They understand that managing cash flows is central to the implementation of desired policies. The Ministry of Finance is the principal agency that enters into negotiations with the government departments and agencies as well as with governors of the 89 regions (oblasts, territories, and ethnic republics) composing the Federation. The President lays out his priorities in the Annual Budget address to the parliament in June or July. By mid-August, the Cabinet presents its detailed proposal in the hope that the the budget will be enacted into law before the beginning of the fiscal year starting on January 1. The Duma Budget Committee and other committees on matters that fall under their jurisdictions review the document and make their recommendations. The budget bill must submit to four readings, one more than usual. The second and third are the most important. Upon passage, the bill is sent to the Federation Council for its review and approval by the Senators.7

Diverse coalitions representing various vested interest groups form and dissolve in the quest for budget commitments. Ministers engage in tough bargaining to gain support for their policies and sometimes are forced to make distasteful compromises which often cause an increase in budget obligations to ensure enactment. Disagreements between the two houses are resolved through a conciliation procedure involving Duma deputies, Senators, representa-tives of the Council of Ministers and the Presidential Administration. Finally, the President signs the budget into law. At a recent meeting of the collegium of the Ministry of Finance, Putin complained that 3 months of the fiscal year had passed before the bureaucracy completed all the paperwork authorizing the disbursement of funds in 2001.8

This democratic process, although prolonged, for adopting the budget sharply contrasts sharply with the document produced by the highly centralized Soviet system. At that time the state-owned, comprehensive CPE was directed by a tiny elite, the Communist

⁶Andrei Kunov and Alexei Sitnikov. "The 'Constitutional Economy' of Russia: Political Roots of Economic Problems," Russian Economic Trends, v. 8, no. 4, 1999, pp. 6–14; Eugene Huskey, Presidential Power in Russia (Armonk, New York, M.E. Sharpe, 1999), pp. 43–182; Steven S. Smith and Thomas F. Remington, The Politics of Institutional Choice, The Formation of the Rus-sian State Duma (Princeton, NJ, Princeton University Press, 2001), pp. 27–92, 116–160; Thomas F. Remington, Politics in Russia (New York, Longman, 1999), pp. 40–57, 124–173. ⁷Andrei Kunov and Alexis Sitnikov, "Economic Legislation of the Duma: The Role of Organi-zational Structure," Russian Economic Trends, v. 8, no. 2, 1999, pp. 14–21; Interfax, May 3, 2001, FBIS-SOV-2001–0503; Rossiyskaya Gazeta, May 4, 2001, FBIS-SOV-2001–0508; Rem-ington, Politics in Russia, pp. 124–173; The World Bank, Fiscal Management in Russia (Wash-ington, Dol, The World Bank, 1996), pp. 41–65, hereafter referred to as Fiscal Management in Russia, 1996; Russian Economic Trends, v. 6, no. 1, 1997, pp. 9–11. ⁸Kommersant, September 15, 1999, p. 2; Kommersant, September 24, 1999, p. 2; Kommersant, September 25, 1999, p. 2; Izvestiya, October 27, 1999, p. 1; Izvestiya, December 4, 1999, p. 5, Kommersant, December 4, 1999, p. 4; Rossiyskaya Gazeta, April 17, 2001, p. 3 in FBIS-SOV-2001–0417; Moskovskiye Novosti, July 17, 2001, FBIS-SOV-2001–717; Remington, Politics in Russia (New York, NY: 1999), pp. 124–173.

Party Politburo with its Central Committee secretariat and key ministers. Priorities were decided in camera. The budget was merely an instrument for implementing the annual economic plan. It also was a unitary system since the budgets of the lower echelons of government were incorporated into the final product. A brief annual budget bill was passed by the U.S.S.R. Supreme Soviet after a pro forma, carefully scripted debate. By mid-1988, Gorbachev's reforms freed some sectors of the economy which caused severe fiscal problems and rising inflation. In October the U.S.S.R. Minister of Finance revealed a major state secret: namely, the Soviet Union had been running a deficit budget since 1976 and the country had plunged into a severe fiscal crisis. Records indicate that the deputies in the Supreme Soviet did not seem to understand the profound implications of this revelation. Before the U.S.S.R. dissolved in December, 1991, this old CPE fiscal system had already collapsed.⁹

BUILDING BUDGET INSTITUTIONS

In 1991 leaders of the new Russian state faced the awesome task of building an essentially new set of institutions to manage fiscal affairs. With IMF assistance particularly since 1995, needed reforms have been put in place in the center which remains in a dominant position. The Ministry of Finance has been reconstituted and its staff retrained and expanded to play the central role in state finances. Only in 1995 did Russia adopt the basic line-item classification system developed as the standard for members of the IMF. The Ministry of Economics, currently the Ministry of Economic Development and Trade, prepares medium- and long-term forecasts, draws up detailed plans and estimates costs of proposed reforms. Its current head, German Gref, is influential with President Putin. Under the old CPE system corporate managers and individual households did not have to worry about paying taxes to the government as is customary in market economies. CPE accounting systems were rudimentary and centralized in the Central Bank of the Russian Federation (Central Bank of Russia or CBR) or the few specialized state banks. In moving to a market economy, Russian managers and accountants have become obligated to meet the rigorous reporting standards required by tax authorities. International accounting standards are scheduled to be fully in effect by January 1, 2003. An essentially new state Tax Service had to be established to extract revenue from a population with no taxpaying tradition. Inspectors have often been harassed or even physically attacked. Though their salaries are paid by Moscow, they remain vulnerable to local pressure. Like most federal civil servants in Russia, they are dependent on regional and local authorities for housing and municipal services. The state Tax Police were established in part to protect these collectors. The present Duma has made major market-oriented improvements in the Tax Code, but debate still continues on revising additional chapters. Many Russian entrepreneurs as well as foreigners conducting business in the

⁹Fiscal Management in Russia, 1996, 7–11; James A. Duran, Jr., "Russian Fiscal and Monetary Policy: A Tough Road Ahead," The Former Soviet Union in Transition, U.S. Congress, Joint Economic Committee. 103d Congress, 1st Session, S. Print 103–1, February 1993, v. 1, pp. 196– 217; Vremya MN, June 22, 2001, FBIS-SOV-2001-0622.

country will be pleased when comprehensive and relatively stable regulations governing taxes and taxpayers' rights have been instituted. As in any market economy, debate will continue as various interest groups seek to alter the laws to their advantage.¹⁰

Recognizing the urgent need for reform, the government as in-structed by President Putin published its "Program for the Devel-opment of Budget Federalism for the Period Until 2005" on August 21. 2001. A national commission is to prepare legislation for legislative enactment in 2002. The goal is to establish by statute the specific revenues assigned to regions and the specific programs which they are obligated to support. While Russia is constitutionally designated as a Federation, the center controls revenue and has placed mandates on the regions that cannot fully paid from their funds. Unlike in Western federal systems, the 89 regions comprising the Federation at present have no separate taxing authority. Nor do local governments whose revenues are included within the regional unit. The rates of virtually all revenues are set by laws passed by the central legislature in Moscow. These include the value added tax (VAT), corporate profits tax, turnover tax, personal income tax, sales tax, excises, export and import duties, levies on natural resources. social insurance contributions, land taxes, licensing fees, etc. Budget debates in Moscow focus not only on the rates, but also on the proportions to be allocated to the central budget and to the 89 regions. Through 2000 the division between the center and the regions was about 50-50. Recently President Putin and the Council of Ministers pushed through a 56-44 formula for 2001. On the expenditure side, more than 80 percent of regional expenditures are mandated by the center. Only by drastically underfunding most social welfare entitlements do lower-level administrators gain some limited resources to meet emergencies. About 1.7 percent of GDP is transferred through the Fund for Financial Support of Subjects of the Federation to poor regions that register claims. Unfortunately, the criteria can be manipulated by lobbying and do not take into adequate account the economic capacity of the region. Conscientious fiscal administrators are apt to receive the least amount. Thus, the present system of fiscal federalism puts lower officials in a very difficult position. Federal regulations and the outright fiscal unfeasibility of executing them lead officials to resort to informal practices to enhance their resources. Given the very low salaries paid to civil servants, a degree of corruption is inevitable. For these reasons, major legislation to re-structure the federal fiscal system will probably be enacted in $2002.^{11}$

¹⁰Fiscal Management in Russia, 1996, xxv-xxvi, 83-88; Russian Federation, OECD Economic Surveys, March 2000 (Paris, France: OECD, 2000), pp. 118-120, hereafter referred to as OECD, 2000; Milka Casanegra de Jantscher, Carlos Silvani, and Charles L, Vehorn, "Modernizing Tax Administration," Fiscal Policies in Economies in Transition edited by Vito Tanzi (Washington DC: International Monetary Fund, 1992), pp. 120-141, hereafter referred to as Fiscal Policies in Economies in Transition; RFE/RL Newsline, June 22, 2001; Frank Gregory & Gerald Brooke, "Policing Economic Transition and Increasing Revenue: A Case Study of the Federal Tax Police of the Russian Federation 1992-1998," in Europe-Asia Studies, v. 52, no. 3, May, 2000, pp. 433-455.

^{4355.} ¹¹Rossiyskaya Gazeta, July 18, 2001, p. 2, and August 21, 2001, p. 4; OECD 2000, pp. 116– 149; Alexei M. Lavrov, Alexei G. Makushkin, et al., translated by James E. Walker, The Fiscal Structure of the Russian Federation, Financial Flows Between the Center and the Regions (Armonk, NY: M.E. Sharpe, 2001), pp. 1–8, 39–43, hereafter referred to as The Fiscal Structure of the Russian Federation; Jorge Martinez-Vasquez and Jameson Boex, Russia's Transition to

Managing revenues and disbursements efficiently presents a difficult challenge to any government. During the Soviet period, this task was handled largely through accounts for all state agencies and enterprises held in the CBR or specialized state-owned banks. With the role of the CBR being steadily reduced to functions normal in Western market economies, a new institution, the state Treasury, was initiated in 1993. All revenues were to be deposited into its accounts and legally budgeted expenditures disbursed to agencies as authorized by decrees of the Ministry of Finance. By March, 1995, only 47 of the 74 regional offices were fully operational. Even then, a common electronic system had not been completed. The last regional office was established in Tatarstan only in March, 2001. During the interim while the Treasury system was being built, certain private, politically well-connected private banks were authorized to administer official accounts. Many earned a bad reputation by using these funds to speculate for private gain. During 2001 the seven regions possessing the largest budget deficits were placed under special Treasury monitoring. Initial results indicate a dramatic improvement in their fiscal affairs.¹²

Implementation of a standard system of accounting in all ministries and government agencies has proven to be a time-consuming task. Cash management, debt management, and procurement, relatively unimportant under central planning, are indispensable to function in a market economy. By October 1, 2001, the books of the Ministry of Defense, reportedly the last ministry remaining outside the system, are supposed to be brought into compliance with Treasury requirements. The dismissal of the Ministry's Colonel General of Finance, General Auditor, and General Accountant for incompetence resulted from the installation of the new accounting procedures. These officials could not account for the disappearance in London of \$450 million in hard currency.¹³

Provision was made in the 1993 Constitution for an Accounting Chamber headed by an Auditor General for a period of 5 years and similar in function to the U.S. General Accounting Office. The newly created office is responsible to the Federal Assembly. Its duties are to conduct budget evaluations and audits. The first Auditor General was a professional, but, as a moderate Communist, found himself at odds with the market reformers. He and his staff conducted hundreds of audits involving privatizations but their efforts failed to reverse any privatizations resulting from breach of contract. Many of the new private owners had violated their contractual obligations to invest and to preserve jobs. Instead, they had stripped assets for personal gain rather than honoring their contractual obligations to invest and to preserve jobs. Only one pros-ecution was initiated. In 2000 former premier Sergei Stepashin, a prominent political figure during the Yeltsin years, became Auditor-General. He was emphatic that suspect regional adminis-

a New Federalism (Washington, DC: The World Bank, 2001), pp. 1–54, 89–96, hereafter referred to as Russia's Transition to a New Federalism.. ¹²Rossiyskaya Gazeta, May 23, 2001, pp. 1, 3. FBIS-SOV-2001-0523; The Fiscal Structure of the Russian Federation, pp. 4–6, 59–61; Fiscal Management in Russia (The World Bank, Wash-ington, DC, 1996), pp. 77–78, 159–163, hereafter referred to as Fiscal Management in Russia; Russia's Transition to a New Federalism, pp. 51–52. ¹³Fiscal Management in Russia, pp. 83–88; Moscow News, No. 1–2, January 10–16, 2001, p. 2; A. Premchand and L. Garamfalvi, "Government Budget and Accounting Systems," in Fiscal Policies in Economies in Transition, pp. 268–290.

trations were to be strictly audited to ensure that government funds were spent for authorized purposes. His first target was Kalmykia, one of the most independent acting republics in the Federation. Stepashin has also advocated increasing the powers of the Auditor-General to include the right to initiate prosecutions for malfeasance rather than to depend on the independent Procurator-General (Attorney-General). So far, this suggestion has not been approved. A proposal by Putin to place the Auditing Chamber directly under the President has not been met with enthusiasm by many parliamentarians.¹⁴

Arguably, the first Russian federal budget that was fiscally sound was enacted after the financial collapse of August 1998 and implemented in 1999. The emerging fiscal crisis had precipitated a rapid turnover of cabinet ministers between 1997 and 1998. Russia was confronted with the pressing need to reduce expenditures in order to match the revenues available to the government. Resort to excessive internal short-term, high-rate borrowing complicated the problem since the rapidly increasing expenditures outlays to service the debt crippled normal government fiscal operations. The leftdominated state Duma would not agree to sharp cuts in expenditures and other reform measures. After Asian stock markets crashed and oil export revenues dropped sharply, foreigners lost confidence in investing in the financial markets of developing countries including Russia. Consequently, the Federation defaulted on its internal debt obligations and the ruble's value fell by 80 percent. Without the crash of 1998 deputies in the Duma, particularly the leftists, would not have been motivated to support the reduction of budget outlays and changes in tax laws. The crash of 1998 served as a harsh lesson to deputies in the Duma. The austere budget for 1999 proposed by the outgoing Kireyenko government was enacted into law with their approval. For the first time the government was able to fund most commitments made in the budget fully without resort to major sequestration or excessive borrowing. The budgets for 2000 and 2001 are in the same category.¹⁵

REDUCING PUBLIC EXPENDITURES ON HOUSING AND MUNICIPAL SERVICES

Despite progress toward fiscal accountability, entrenched institutions inherited from the Soviet period continue to drain precious funds at an exorbitant rate. President Putin and his ministers are wrestling with the difficult job of designing a strategy that would shift part of the costs for financing housing and municipal services to private consumers. At present, an estimated 4 percent of GDP from the consolidated federal and regional-local budgets is allocated to cover the expenses for housing maintenance, heating and water systems, waste disposal, utilities, and public transportation. Currently, local governments allocate 24 to 34 percent of their budgets for maintaining this sector. In many localities the remain-

¹⁴RFE/RL Newsline, June 26, 2001; June 27, 2001; July 3, 2001; and July 10, 2001; Rossiyskaya Gazeta, November, 15, 2000, p. 2; Kommersant, November 15, 2000, p. 3; Sevodnya, Nov. 9, 2000, p. 5 in The Current Digest of the Post-Soviet Press (hereafter referred to as CDPSP), v. 52, no. 45, December 6, 2000, p. 14; Noviye Izvestiya, September 29, 2001, p. 2 in CDPSP, v. 52, no. 39, October 25, 2000, p. 12. ¹⁵ ITAR-TASS, July 3, 2001, in FBIS-SOV-2001-0703; Interfax, June 5, 2001, FBIS-SOV-2001-0605; Vremya MN, June 15, 2001, FBIS-SOV-2001-0615.

ing money is barely sufficient to pay the salaries of their employees. Investment in renovation and installation of new infrastructure has remained at a near standstill for a decade because of lack of funds. An estimated 60 percent of water and district heating systems are worn out and need replacement. Experts predict that breakdowns such as occurred during winter 2000-2001 in the North and Far East are likely to multiply in future winters unless vital funds are made available. If a reform in this sector could reduce the budget burden by 1 percent of GDP, the solvency of re-gional and local budgets would be dramatically improved.¹⁶

This situation is an example of how reform is obstructed by the unbalanced social contract inherited from the Soviet period. Employees were paid very low wages in cash, but through employers received proportionately high benefits, i.e., housing and municipal services, utilities, kindergartens, clinics, restaurants, sports and cultural facilities, etc., for which they paid only 2 to 3 percent of costs. That percentage was less than the average household spent on vodka and cigarettes. The enterprise, ministry, academic or research institute, or other state organization took care of the ex-penses incurred by their employees, who essentially lived within "company towns." Capital costs were funded through the annual plan, not bonds which had to be paid off by real estate taxes. As major enterprises were privatized and entered into the market economy, the responsibility for funding many of these facilities and services were shifted mainly to the jurisdiction of local governments. The latter in 1994 only received one-fourth of the federal compensation theoretically authorized by privatization laws to cover the additional budgetary obligations. Many citizens took advantage of the opportunity to privatize their apartments. Unlike in western condominiums, owners of these apartments have not assumed responsibility for paying basic maintenance and capital expenses associated with their buildings. In most cases local governments continue to bear the responsibility for the most of the costs incurred. Only slowly have payments made by tenants and owners risen to cover an estimated 40 percent of the charges.17

The majority of households cannot afford a change in the system that would raise their monthly bill for housing, municipal services and utilities by 150 percent. The average monthly wage in 2000 was only 2,268 rubles (\$78), which is less than the official subsist-ence for an adult and child. Increasing salaries would resolve the problem by enabling the workers to pay for these basic living costs. Several deputies successfully introduced an amendment to the proposed Labor Code mandating that the legal minimum wage equal the subsistence level. Aleksandr Pochinok, the capable Minister of

¹⁶Rossiyskaya Gazeta, February 3, 2001, pp. 2, 6, in CDPSP, v. 53, no. 5, February 28, 2001, p. 9; *Trud*, February 16, 2001, p. 1, in CDPSP, v. 53, no. 7, March 14, 2001, p. 13; ITAR-TASS, August 21, 2001, FBIS-SOV-2001-0821; Interfax, August 14, 2001, FBIS-SOV-2001-0815. ¹⁷Kommersant, March 20, 2001, p. 8 in CDPSP, v. 51, no. 12, April 18, 2001, p. 8; Vremya MN, June 1, 2001, FBIS-SOV-2001-0601; Rossiyskaya Gazeta, June 26, 2001, FBIS-SOV-2001-0626; The Changing Social Benefits in Russian Enterprises (Paris, OECD, 1996); Andrea Stevenson Sanjan, "State-Society Relations and the Evolution of Social Policy in Russia," in State-Building in Russia, The Yeltsin Legacy and the Challenge of the Future edited by Gordon B. Smith (Armonk, N.Y.: M.E. Sharpe, 1999), pp. 177-199; Linda J. Cook, "The Russian Welfare State: Obstacles to Restructuring," in Post-Soviet Affairs, v. 16, no. 4, October-December, 2000, pp. 355-378; Nigel M. Healey, Vladimir Leksin, and Alexandr Svetsov, "The Municipalization of Enterprise-Owned 'Social Assets' in Russia," Post-Soviet Affairs, vol. 15, no. 3, July-Septem-ber, 1999, pp. 262-280. ber, 1999, pp. 262-280.

Labor and Social Development, cautioned that the government could not implement this measure in the near future. The additional cost of increasing pay for government-funded employees would be 800 billion rubles from the federal budget and almost 2.5 trillion rubles from regional and local budgets. That expenditure would surpass total outlays of the consolidated budgets of all three levels of government. The compromise version included the mandate, but provided that it would go into effect only after a separate authorization bill was enacted.¹⁸

This complex issue is compounded by the problems of the Russian Unified Energy Systems (UES) and Gazprom, the monopolistic electricity and natural gas companies who are owed 68 billion rubles by local consumers. Regional and municipal administrators often have deliberately avoided their responsibilities to cover energy bills and have pressured regional regulators to set the rates below costs. Even those charges were not fully paid. As a result, UES power plants, particularly in the North and Far East, lacked funds for essential coal supplies. Managers of some privatized mines chose not to ship supplies to generating and heating plants with overdue debts. So outages occurred in the midst of a hard winter. Successful reform and eventual privatization of the two great natural monopolies is partly dependent on adjustments in the housing and municipal services sector.¹⁹

No final decision on the strategy for reforming this sector which affects the household budgets of Russia's families. On March 15, 2001, the Council of Ministers approved a plan, but on July 5 switched to a "new model." In the earlier session plans were approved to have the public pay 100 percent of their housing, municipal services, and utilities by 2003. If a family's payments were to exceed 22 percent of its total income, then they would be entitled to a subsidy equal to the amount of payments above a threshold percentage. The Chairman of the State Committee on Construction, Housing, and Municipal Services estimated that 30 percent of citizens would be eligible for subsidies. President Putin later said a majority could apply. Moscow's deputy mayor immediately objected to the proposed increase in coverage since the city would be required to spend an additional 18 billion rubles if the new system were to be in effect. He called for its introduction in 2007 at the earliest. The governor of Perm Oblast said that subsidies should begin at 10 to 12 percent of family income. At the Cabinet session of July 5, a new model gained support. The aim to keep the family burden under 22 percent was honored and the deadline delayed. However, direct subsidies to families would be replaced by a transfer of funds already allocated for housing and utilities to building associations. These groups would then be free to contract with service providers instead of relying on the government-connected types now in place. This important advance would create competition and lead to lower charges for building maintenance. Critics point out that such associations, though provided for in the law on

¹⁸ Vremya MN, June 1, 2001, FBIS-SOV-2002-0601. ¹⁹ Izvestiya, November 23, 2000, p. 6 in CDPSP, v. 52, no. 47, December 20, 2000, pp. 5-6; Novyie Izvestiya, December 8, 2000, pp. 1-2 in CDPSP, v. 52, no. 49, January 3, 2001, p. 12; Kommersant, January 24, 2001, p. 4; Rossiyskaya Gazeta, February 3, 2001, pp. 2, 6 in CDPSP, v. 53, no. 5, February 28, 2001, pp. 9-10.

privatizing housing. are poorly developed and often controlled by small cliques who exploit their position for private gain. No final decision has been reached on the question of how to deal with this controversial issue. Meanwhile, the World Bank and the Russian Government in the past 6 months have concluded three agreements to provide \$287.5 million for selected projects in housing and municipal services.²⁰

TARGETING SOCIAL WELFARE ENTITLEMENTS

A debate has begun on restructuring the extensive system of social welfare entitlements established by the Soviet regime. The Soviet leadership of the "workers' state" developed a system of more than 160 entitlements that operated for seven decades and consumed over 4 percent of GDP. These benefits mandated by the center were paid primarily by regional and local governments at levels far lower than promised. If the benefits were paid in full, they would probably cost 22 percent of GDP. Approximately two-thirds of the population qualified for one or more of the 47 categories. Payments and costly privileges were awarded to veterans and their children, pensioners, orphans, disabled, students, families with many children, rural residents, victims of Chernobyl, victims of political repression, etc. Only about one-third of benefits go to those individuals who are classified as needy. For example, municipal bus companies can barely afford to keep their current operations functioning and are required to permit nearly two-thirds of passengers to ride without charge or at reduced fares.²¹

Federal transfer payments have been grossly inadequate. After 1991 a key stratagem for reducing central government expenditures was to shift the financial burden down to the fiscally hardpressed regions. Regional leaders tried desperately to restrict the growth of this burden on them through other means. Laws have been in force since 1993 explicitly prohibiting the center from devolving responsibility for paying these mandates unless it provided the funds to pay. However, eligible citizens in 1997 began to bring suits in the courts against local authorities who refused to pay various entitlements. Typically, the judges ruled in favor of the plaintiffs since the statute governing federal transfers to the regions has ambiguous language stating that mandates are calculated as part of the formula for determining the sum to be awarded. The regions have grudgingly paid when courts so ordered, but overall most of these entitlements are at best partially honored.22

This whole system of social welfare entitlements needs to be restructured to reduce the number of entitlements and to redefine

22 OECD 2000, p. 131.

 ²⁰Kommersant, March 20, 2001, p. 8; Moscow Mayak Radio, July 5, 2001, FBIS-SOV-2001-0705; ITAR-TASS, 5 July 2001, FBIS-SOV-2001-0705; World Bank, Press Releases, December 21, 2000, March 27, 2001, and June 7, 2001; Rossiyskaya Gazeta, May 30, 2001, FBIS-SOV-2001-0531; Rossiyskaya Gazeta, May 29, 2001, FBIS-SOV-2001-0529; ITAR-TASS, May 29, 2001, FBIS-SOV-2001-0529; Rossiyskaya Gazeta, May 31, 2001, in FBIS-SOV-2001-0521; Obshchaya Gazeta, July 12, 2001, FBIS-SOV-2001-0712.
 ²¹OECD 2000, pp. 129-136; Moscow News, no. 24, June 21-27, 2000, p. 2; The World Bank, From Plan to Market, World Development Report (New York: Oxford University Press, 1996), pp. 77-84; The World Bank, Balancing Protection and Opportunity: A Strategy for Social Protection in Transition Economies, May 3, 2000 (Washington, DC, The World Bank, 2000), pp. 24-29, 35-40, hereafter referred to as A Strategy for Social Protection in Transition Economies; Vremya MN, March 14, 2001, p. 5, in CDPSP, v. 51, no. 12, April 18, 2001, p. 8.

the conditions for eligibility so that the needy are targeted. In his annual budget message for 2002, the President declared that "unfunded federal mandates" need to be clarified as part of the project to reform budgetary relations between the center and the regions. Russian leaders are moving slowly because they understand the political risks when sensitive vested interests are at stake.23

PENSION FUND REFORM SCHEDULED TO BE ENACTED IN 2001

Prospects for enactment of old-age pension reform in 2001 were good. After much debate, a solid majority of the leadership including the President supported changes in the system to ease the future burden on the state budget. Currently, the extra-budgetary Pension Fund is receiving 82.5 percent of the 29.6 percent of the payroll tax levied to support the four social insurance funds. It is running a surplus. The Fund received about 8 percent of GDP. Since 1990 old-age pensions have been reduced to approximately the same level which is below subsistence for recipients regardless of years in the work force or total contributions as a result of inflation. This pay-as-you-go (PAYG) system would need to be restructured since birthrates have fallen below replacement level for a number of years. In Russia the ratio of pensioners to workers will reach a critical stage in 7 to 8 years beyond which the Pension Fund's budget will operate at a deficit. That situation would require supplementary appropriations from the federal budget.²⁴

Draft laws for changing the pension system in the medium- and long-term were scheduled to be enacted in 2001. In March a major dispute on the structure of the future system erupted at the Cabinet level on the eve of the first meeting of the presidentially appointed National Council on Pension Reform. The director of the Pension Fund, Mikhail Zurabov, slated to be the rapporteur from the Cabinet to the Council, differed with the newly defined terms earlier agreed to by the Cabinet. He wanted to maintain the present system, altering coefficients to provide a lower rate for pen-sioners. First Deputy Premier Mikhail Dmitriyev and Economics Development Minister German Gref with the support of the President agreed to the introduction of a partially savings-based system in which the Pension Fund would be obligated to turn over some of its financial flows to investment and management companies. On May 30 the National Council approved four draft laws and the ministries have begun to draw up detailed bills for consideration by the Duma in September.²⁵

 ²³ Text of Russian president's annual address to the Federal Assembly, Russia TV, April 3, 2001, Johnson's Russia List JRL #5185, April 4, 2001, p. 13 (hereafter cited as Putin's State of the Union Message); "Russian Federation President's Budget Message to the Russian Federation Federal Assembly: On Budget Policy for 2002," Rossiyskaya Gazeta, April 23, 2001, FBIS-SOV-2001-0425, p. 5, hereafter cited as Putin's Annual Budget Message; Rossiyskaya Gazeta, April 24, 2001. FBIS-SOV-2001-0425.
 ²⁴ Irina Denisova, Maria Gorban and Ksenia Yudaeva, "Social Policy in Russia: Pension Fund and Social Security," Russian Economic Trends, v. 8, 1999, no. 1, pp. 12-23; Sevodnya, September 29, 2000, p. 3, in CDPSP, v. 52, no. 39, October 25, 2000, p. 15; Obshchaya Gazeta, November 9, 2000, in JRL #4640, November 27, 2000; Putin's State of the Union Message, JRL #5185, 4 April 2001, p. 12; Rossiyskaya Gazeta, May 30, 2001, FBIS-SOV-2001-0530; A Strategy for Social Protection in Transition Economies, pp. 1-28; George Kopits, "Social Security," in Fiscal Policies in Economies in Transition, pp. 291-311.
 ²⁵ Sevodnya, March 6, 2001, p. 1, in CDPSP, v. 53, no. 10, April 4, 2001, p. 11; Izvestiya, April 19, 2001, p. 5 in CDPSP, v. 53, no. 16, May 16, 2001, p. 15.

Deeply influenced by the Chilean model, the system is predicated on the principle that the rates of return from investment in stock and bond mutual funds will yield higher returns in the medium-and long-term to pensioners than has historically been the case from public systems. Six percent of the social insurance tax paid by employers is to be transferred to individual pension accounts for participants under 35 and 2 percent for those aged 35 to 50. Individuals over 50 would not participate in savings-based funds. Since retirement age is set at 50 for women and 55 for men, their investments would lack time to accrue sufficient resources. Boris Nemtsov of the Union of Rightists, Grigory Yavlinsky of Yabloko, and Moscow Mayor Yuri Luzhkov of Fatherland supported the savings account system. They advocated that individuals be given the right to decide whether to use private pension funds or insurance companies instead of the services of a "government broker." The possible inheritance of the savings account by the worker's legal heir is also under consideration. Public opinion polls indicate that 60 percent of those questioned favor the reform.²⁶

Advantages to implementing this updated system were numer-ous. A huge future burden on the state Budget could be avoided. The steady flow of cash into investment funds could help provide the badly needed capital to sustain the development of the financial services sector. National Council members understand that the present lack of reliable investment options is a major deterrent to economic growth. The initial investments anticipated early in 2003 will probably be in interest-bearing medium-term state bonds. The stock markets are still too small to absorb so much money. A higher rate of return on investments in funds would potentially give latitude to the government to reduce the payroll tax, all of which is presently paid by employers.²⁷ On April 19, 2001, President Putin submitted a bill to the legisla-

ture to tighten the system for administering pensions. Originally, the Pension Fund was responsible for collecting its own revenues, but the task was transferred to the state Tax Service on January 1, 2001. Eligibility and disbursements were handled at the regional level. Unfortunately, some governors have been successful in pressuring lower officials to divert funds from their intended purpose. Last year regions were given the right by Presidential decree to transfer power to the central agencies who would determine eligibility and pay pensioners. About 30 regions reacted positively. The President has now asked that this significant change of policy be mandatory throughout Russia.²⁸

EXECUTING LEGAL REFORM

At the opening session of the national congress of Russian judges on November 27, 2000, President Putin stated that a high priority over the next 2 to 3 years was to strengthen and reform the Russian judicial system. Businessmen needed to be assured that their property and human rights will be enforced by the courts. Putin asserted that his aim is to adhere to international human rights

 ²⁶ Izvestiya, April 19, 2001, p. 5, in CDPSP, v. 53, no. 16, May 16. 2001, p. 15; Vremya MN, July 18, 2001, FBIS-SOV-2001-0718; Moscow News, no. 29, July 18-24, 2001, p. 3.
 ²⁷ Sevodnya, September 23, 2000, p. 3, in CDPSP, v. 52, no. 39, October 25, 2000, p. 15.
 ²⁸ Kommersant, April 20, 2001, p. 4.

standards. He cited inadequate funding of the courts as "a cause of miscarriages of justice" and the arbitrary hearing of cases by overworked judges. On June 28, 2001, 4 bills on judicial reform passed the first reading in the Duma with more than 380 votes for each. During the second reading the debate will focus on the limits to be set on the tenure of judges. The goal is to implement the reforms by 2004.29

The courts are overburdened. Sixteen thousand judges heard more than 5 million civil cases, more than 1 million criminal cases, and 2 million administrative cases in 2000. Judicial workloads have tripled in the last 6 years. One thousand judges are being added in 2001. Though the federal government pays their salaries, judges and their staffs remain dependent on regional and local authorities for professional facilities, housing, municipal services and utilities. Putin proposes to terminate the requirement that judicial appointments be cleared with regional officials. Many judges are holdovers from the Soviet period and have not proven to be willing or able to keep up with the rapid legal changes that have occurred since then. The 1970s administrative code for the courts, though much amended, is still in force.³⁰

The dramatic increase in spending to finance the judicial system in 2001 is a strong indicator that the Putin Administration is serious about enhancing the courts' credibility. At 11 billion rubles (\$367 million) in 2001, the request for 2002 is reportedly for 18.8 billion rubles (\$630 million) in 2002. In addition to monies from the regular budget line, additional sums are to be drawn from the extra-budgetary Federal Targeted Program for the Development of the Judicial System to be funded at the level of 44 billion rubles (\$1.5 billion) over the next 4 years. Unfortunately, administration of the court system's budget still remains under the jurisdiction of the Ministry of Justice which raises the question of separation of powers. The judges prefer that responsibility be transferred to the Supreme Court's Administrative Department to ensure the independence of the judicial branch.³¹

When Putin withdrew proposed amendments to the Criminal Procedural Code requiring prosecutors and security agencies to seek an arrest warrant from a judge before taking an accused into custody, critics viewed his decision as evidence of a return to authoritarian ways. The President justified his retreat by noting such legislation would necessitate adding 3,000 judges and 6,900 court employees at a cost of 1.5 billion rubles (\$50 million) to implement the new court procedures. The amendments have since been reintroduced over the strong objections of the Prosecutor-General, Minister of Interior, and head of the Federal Security Agency.

²⁹ Izvestiya, Nov. 28, 2000, p. 3 in CDPSP, v. 52, no. 48, December 27, 2000, p. 10; Nezavisimaya gazeta, November 30, 2000, p. 3, CDPSP, v. 52, no. 48, December 27, 2000, pp. 10-11; ITAR-TASS, May 29, 2001, FBIS-SOV-2001-0529; Vremya MN, June 21, 2001, FBIS-SOV-2001-0622; Moskovskiye Novosti, 26 June 2001, FBIS-SOV-2001-0628; Gordon B. Smith, "The Disjuncture Between Legal Reform and Law Enforcement, The Challenge Facing the Post-Yeltsin Leadership," in State Building in Russia, The Yeltsin Legacy and the Challenge of the Future, pp. 101-122. ³⁰ Linesting Nov. 28, 2000, p. 3 in CDPSP, v. 52, pp. 48, December 37, 2000, p. 10; PEE/

³⁰Izvestiya, Nov. 28, 2000, p. 3, in CDPSP, v. 52, no. 48, December 27, 2000, p. 10; *RFE* / *RL Russian Political Weekly*, vol. 1, no. 18, July 2, 2001, p. 7. ³¹Sevodnya, Nov. 28, 2000, p. 5 in CDPSP, v. 52, no. 48, December 27, 2000, p. 10; *Moskovskiye Novosti*, June 26, 2001, FBIS–SOV–2001–0628.

Putin has also announced his support for introducing jury trials throughout the country to be effective by January 1, 2003.³²

Other measures to strengthen the judicial system have not fared well. The President has complained about the unsatisfactory per-formance of the marshals (bailiffs), still under the Ministry of Justice, in enforcing decisions. The new justice of the peace courts de-signed to handle a large number of relatively minor matters have been established in only five regions in the first year. While the center is responsible for their salaries, the regions are supposed to pay for office and hearing facilities as well as housing and municipal services. Putin has now proposed to take the whole justice-of-the-peace system out of the jurisdiction of regional authorities and included funds for this drastic step in the 2002 fiscal year.³³

RAISING EDUCATIONAL STANDARDS

A comprehensive plan to restructure the educational system from preschool through the university level is being implemented. While Russians are a very literate population, the quality of education has fallen behind that of advanced countries. Findings of a study for the World Bank released in August, 2000, revealed that students in the former Soviet-dominated bloc now receive on average 5 years less education than is the norm for the Organization for Economic Cooperation and Development (OECD) states. A study frequently cited by Russian sources concludes that the proportion of the Russian work force rated as highly skilled is now less than 10 percent compared with China at 28 percent, the United States at 42 percent, and Germany at 54 percent. More than 1.5 million Russian children between 7 and 15 are not attending school and 15 to 20 percent have low reading and writing skills. Another 36 percent are in schools operating in multiple shifts, which means that school days are short and extra-curricular activities are minimal. Vocational education programs and access to computer training are urgently needed as well as modern equipment and qualified teachers. Since 1991 per capita spending for public school students has dropped by 38 percent. Only 3.2 percent of GDP is allotted to education.34

In August 2000 the Council of Ministers approved the recommendations for school reform over the next decade presented by Yaroslav Kuzminov, rector of the Higher School of Economics. Based on British models the plan is to extend general education from 10 to 12 years for all students and to upgrade the quality of instruction. After the tenth grade they will be assigned to college-preparation or vocational-education tracks. All curricula are to be

 ³²Sevodnya, January 23, 2001, p. 5, and Novyie Izvestiya, Jan 24, 2001, p. 1, both in CDPSP;
 v. 53, no. 4, February 21, 2001, pp. 5–6; Kommersant, April 4, 2001, pp. 1–2; Moskovskiye
 Novosti, June 26, 2001, FBIS-SOV-2001-0628.
 ³³Nezavisimaya gazeta, November 30, 2000, p. 3 in CDPSP, v. 52, no. 48, December 27, p. 10; Mayak Radio, June 28, 2001, in FBIS-SOV-2001-0628.
 ³⁴Trud, October 18, 2001, p. 1, in CDPSP, v. 52, no. 43, November 22, 2000, p. 16; Sevodnya, September 28, 2000, p. 6, in CDPSP, v. 52, no. 43, November 22, 2000, p. 16; Sevodnya, 24, 2001, 'FBIS-SOV-2001-0524; Nezavisimaya gazeta, May 4, 2001, p. 4 in CDPSP, v. 53, no. 19, p. 4; Rossiyskaya gazeta, June 23, 2000, p. 9, in CDPSP, v. 52, no. 27, August 2, 2000, p. 8; Sevodnya, September 28, 2000, p. 6 in CDPSP, v. 52, no. 41, November 8, 2000, p. 12; Novye Izvestiya, August 9, 2000, p. 12, in CDPSP, v. 52, no. 32, September 6, 2000, p. 12; Hidden Challenges to Education Systems in Transition Economies, (Washington, DC; The World Bank, 2000), p. pp. 2-5, 13-27.

revamped with more options for students. One goal is to connect all schools to the internet over the next 4 years. Extensive retraining programs will be required for teachers, e.g., 276,000 in information technology alone. Vocational-technical education should be upgraded in equipment and instruction. Kuzminov advocates the doubling of budget expenditures from the present 3.2 percent of GDP. He warns that the People's Republic of China will overtake Russia in trained professionals if a greater commitment is not made.³⁵

Such a thorough transformation inevitably encounters hostility and widespread opposition. On February 27, 2001, a demonstration organized by the teachers' union reportedly drew 300,000 protest-ers to demand payment of back pay which averaged 3 months in arrears and a 50 percent increase in salary. The average pay of teachers is below the minimum subsistence standard set at 1,285 rubles (\$43) per month on January 1, 2001. The Deputy Premier responsible for the sector promised to pay promptly any arrears overdue for more than 1 month and to raise salaries in the first 6 months of 2002 by 20 percent. She claimed that the government lacks the resources to pay teachers as much as other budget-funded employees. Salaries are funded by the center. Municipal services including utilities, many supplies and school buildings, i.e., two-thirds of educational expenditures, are the responsibility of regional and local governments. Provision has been made to raise teachers' pay by 50 percent in the proposed 2002 federal budget. That will not calm all their worries about change. Equally striking was the signature of 1,988,232 teachers in a petition opposing proposals to restructure the educational system from top to bottom in February. Many fear that the new system will deprive their own children of a chance for higher education by sharply reducing the number of student stipends.³⁶

The rectors of most universities are bitterly against the implementation of proposals that will affect their institutions' admis-sions procedures and financing. The rector of the prestigious Moscow State University stated bluntly: "Our triumphant system of higher education must not be put under the complete control of the "invisible hand of the market." In his State of the Union message, Putin endorsed new policies designed to increase opportunity for young people of humble origin living in the provinces. Differentiation by social class already exists as 82.5 percent of students at prestigious universities come from a small number of elite secondary schools. Only 6.5 percent are from ordinary public schools. The old Soviet system of admissions still dominates whereby each higher education institution designs and administers its own tests for admission. Since most state institutions give the entrance tests only once per year in the city where they are located and on the same day, failure to attend means postponing entry into higher education for a year, taking a second test offered later by a less

³⁵Rossiyskaya Gazeta, June 23, 2000, pp. 8–9, in CDPSP, v. 52, no. 27, August 2, 2000, p. 9; Novye Izvestiya, Aug. 9, 2000, p. 4, in CDPSP, v. 52, no. 32, September 6, 2000, p. 12; Sevodnya, September 28, 2000, p. 6, in CDPSP, vol. 52, no. 41, November 8, 2000, p. 20; Trud, October 1, 2001, p. 1, in CDPSP, v. 52, no. 43, Nov. 22, 2000, p. 16. ³⁶Sevodnya, February, 28, 2001, p. 2 in CDPSP, v. 53, no. 9, March 28, 2001, p. 13; Trud, April 20, 2001, p. 7 in CDPSP, vol. 53, no. 19, June 6, 2001, p. 5; Trud, September. 21, 2000, p. 7 in CDPSP, no. 52, no. 39, October. 25, 2000, p. 16; Obshchaya Gazeta, August 16, 2001, FBIS–SOV–2001–0819.

prestigious institution, entering the workforce with poor qualifications, or going into the military. The Ministry of Education has initiated a pilot project to give a national high school graduation/college admission exam comparable to the U.S. Scholastic Aptitude Test (SAT) which is to be conducted by outside examiners at 20 sites in each of three regions. Opportunities to collect substantial fees for special tutoring and bribes to influence decisions on admissions may be considerably reduced.³⁷

Even more threatening to the rectors is a radical initiative to issue full or partial tuition vouchers to the best achievers on the national examination. These students will be able to take their vouchers to any institution of higher education of their choice. Provision will be made for living allowances to children from poor families. Those not qualifying for vouchers will have to pay their own way. As is the case now, those possessing dollars are likely to gain entry. Whether or not an institution flourishes will depend to a significant degree on the competition to attract students with vouchers.³⁸

The acquisition of resources to maintain higher education standards has been a serious problem for rectors since 1991. State funding for higher education amounts to only 0.6 percent of GDP. That sum compares unfavorably with 5.2 to 5.5 percent allotted in France, Germany and the United Kingdom. The state will continue to fund salaries, the physical plant, utilities and equipment on campuses. In addition, the rectors will be encouraged to raise money from private sources with the state offering matching grants. Already substantial sums have been acquired from the private sector by renting out facilities or winning research contracts. Now the government is mandating that these revenues be reported. It is hoped that 50 percent of operating revenues will eventually come from non-governmental sources as well as individual students paying their whole tuition. Budget resources are unlikely to increase significantly in the next few years.³⁹

CONCLUSION

As explained in this paper, the Putin Administration is engaged in executing an ambitious agenda of reforms targeted at overcoming institutional obstacles inherited from the Soviet CPE era. Budget resources will remain very scarce in the years immediately ahead. Some changes, e.g., reduction of subsidies in the housing and municipal services sector as well as social welfare entitlements would recast basic elements of the old social contract still in place. Restructuring the pension system is imperative to lessen the future

³⁷Nezavisimaya Gazeta, September 1, 2000, p. 15, in CDPSP, v. 52, no. 35, September 27, 2000, p. 14; Moskovskiye Novosti, no. 47, November 28-December 4, 2000, p. 19 and Noviye Izvestiya, December 8, 2000, p. 2, both in CDPSP, v. 52, no. 49, January 3, 2001, p. 14; 3 articles in Kommersant, April 26, 2001, p. 8, in CDPSP, v. 53, no. 19, June 6, 2001, pp. 1-3; Nezavisimaya Gazeta, September 1, 2000, pp. i, 3 in CDPSP, v. 52, no. 35, September 27, 2000, pp. 14-15; Izvestiya, January 27, 2001, p. 5 in CDPSP, v. 53, no. 4, February 21, 2001, p. 16. ³⁸Kommersant, June 23, 2000, p. 8 in CDPSP, vol 52, no. 27, August 2, 2000, pp. 8-9; Moskovskiye Novosti, no. 47, November 28-December 4, 2000, p. 19 in CDPSP, v. 53, no. 19, June 6, 2001, p. 12.

³⁹Rossiyskaya Gazeta, June 23, 2000, pp. 8–9 in CDPSP, v. 52, no. 27, August 2, 2000, p. 9; Kommersant, April 26, 2001, p. 8, Nezavisimaya Gazeta, May 4, 2001, p. 3 and Trud, April 20, 2001, p. 5, all three in CDPSP, v. 53, no. 19, June 6, 2001, pp. 1–2, 4–5.

burden on the Federation budget and to channel the flow of much needed resources into the financial services sector. Strengthening a reformed judicial system is taking place and the charge will be a relatively light burden on the Treasury. An expensive upgrading of the quality of education is essential for Russia to be competitive with G-7 states in global markets and to sustain economic growth.

Unlike in the early years of the transition, a system of institutions for the sound management of fiscal affairs now exists at the federal level. Even without a formal agreement with the IMF, sound budget policies are being implemented. Too often the center has achieved the macro-economic goal by shifting financial responsibility for support of federal agencies, including the military and social welfare entitlements, to lower levels of government. Simultaneously, the center has repeatedly changed the share of revenues assigned to subordinate authorities which lack the means required to pay obligations in full. This uncertain situation makes the implementation of sound budget practices difficult and often impossible. Inevitably, governors and mayors are accused of arbitrariness as they reduce payments to match available funding. Under considerable political pressure the Putin Administration in August, 2001, proposed a legislative act to distinguish the responsibilities belonging to the center and those to the regions and local governments. The agency responsible for a particular function should be able to fund it from its own resources. In addition, the division of revenues should be set until 2005 to make possible reasonable budget management.

The President and his ministers understand that the key to retaining the support of a majority of the population for market reforms is dependent on significant improvements in the standard of living. The "socially oriented" 2002 budget proposal submitted to the state Duma has at its core a dramatic increase in the salaries of civil servants and the military by 50 to 70 percent. However, households will have to expend part of their higher income on increased charges for housing maintenance, municipal services, and utilities. As these expenses are phased in, expectations of the public about the proper responsibilities of the state will likely change to be comparable to those in the "social market" societies of Western Europe. Such a trend is positive for the interests of the United States.

RUSSIAN DEFENSE SPENDING By Christopher J. Hill¹

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SUMMARY

The published Russian defense budget is an inadequate guide to the country's total defense spending because many items which would be incorporated in any Western calculation are ignored. The true level of outlays last year was approaching twice the acknowledged figure.

Despite an increase of around 16 percent after inflation in the last 2 years, overall defense expenditure in 2000 was well under 40 percent of that in 1992 and just 15 percent of that of the Soviet Union at its 1988 peak. Moreover, last year almost three-fifths of the money was spent on personnel, leaving a hopelessly inadequate level of funding for weapons research, development, procurement and maintenance. As orders for new weapons have dried up, defense industries have been hard hit and many, perhaps most, are now by any normal measure bankrupt.

Russia devotes well over 5 percent of its gross domestic product (GDP) to defense, twice the North Atlantic Treaty Organization (NATO) average, but because of inadequate accounting procedures, both the political and military leadership is of the view that the burden is under 3 percent. Total defense outlays in 2000 were equivalent to around \$50 billion, the third largest in the world.

The Russian Government hopes to double Defense Ministry spending per serviceman by 2005 and to triple it by 2010. Despite plans for substantial cuts in the size of the armed forces, these goals are unlikely to be realized. The overall weapons inventory

¹Dr. Hill has worked in a number of government offices in the United Kingdom. He is currently head of the Defense Economics branch of the Ministry of Defense (MOD). His doctorate is from Manchester University.

INTRODUCTION

This paper looks at the financial resources which the Russian Government has made available for defense over recent years. It examines what the authorities in Moscow have themselves said about the level of such spending and assesses the comprehensiveness and reliability of those statements. Alternative ruble valuations are then offered as well as a judgment on the likely real trend in defense outlays once inflation has been taken into account. This is followed by some thoughts on the allocation of those funds both by branch of service and by function. After a short digression on the financial state of Russia defense industries, the report returns to its main theme, exploring the burden defense spending currently places on the Russian economy, comparing that both with the past and with other countries. In recognition of the problems many readers have with the use of rubles, an attempt is also made to convert Russian military spending into dollars via specially constructed ruble-to-dollar defense exchange rates. Finally, the piece offers a scenario for defense spending over the next decade and considers whether it will be sufficient to support any major resurgence in military capability during that period.

THE RUSSIAN DEFENSE BUDGET

Every year Russia compiles a defense budget. There are extensive discussions over available funding and priorities within the Ministry of Defense (MOD) and between that organization and both the Presidency and the Ministry of Finance before the government determines its spending plans, usually in the summer or fall. The figures are then submitted to the Duma where they are subjected to close scrutiny and in some years substantially revised. With the calendar and Russian fiscal years coinciding, the aim is to secure final approval of the budget before the end of December though this has not always been achieved.

Table 1 shows the defense budget allocation approved by the Duma in each of the last 10 years. Massive increases have occurred in all but 1 year, with an average annual rise over the entire period in excess of 100 percent.

Unfortunately, the funding actually given to the MOD, now usually published on a monthly basis, rarely bear much relation to the figures in the original budget. Outlays have regularly been revised, formally or informally, during the course of the year because of changed expectations on inflation, problems in securing budget revenues or altered perceptions of MOD requirements. This change has not always been in the same direction. In 1998, for example, the budget allocation was 81.8 billion rubles but, with the economy in trouble, the MOD was ultimately allowed to spend only 65.1 billion rubles. The following year the defense budget as approved by parliament foresaw outlays of 93.7 billion rubles but this was later increased to 109 billion rubles while the final count showed that over 116 billion rubles had actually been spent. In 2000 the budget was revised upward from 143 billion rubles to 154 billion rubles and outlays finally topped 190 billion rubles. Annual budget outlays for all years since 1992 and monthly outlays for 1998 through 2000 are given in Tables 2 and 3.

TABLE 1.---THE OFFICIAL DEFENSE BUDGET 1992-2001

1992	R0.384
1993	
	01220
1994	40.626
1995	
1996	
1997	
1998	
1999	
2000	
2001	
LOOT	

[In billions of rubles]

TABLE 2.—OFFICIAL DEFENSE BUDGET OUTLAYS, 1992–2000

[In billions of rubles]

Year	Approved defense budget allocation	Reported final de- fense budget out- lays	Under/overspend in percent
1992	R0.384	R0.855	+123
1993	3.116	7.210	+131
1993 Revised	8.327	7.210	- 13
1994	40.626	28.028	- 31
1995	48.577	47.800	-2
1995 Revised	59.379	47.800	- 20
1996	80.185	63.900	- 20
1997	104.300	79.700	26
1997 Revised	83.000	79,700	-4
1998	81.765	65.100	- 20
1999	93,702	116.800	+25
1999 Revised	109.000	116.800	+7
2000	143.000	190.800	+33

Even when these adjustments have been carefully noted, headline figures on defense spending are of themselves of limited worth without clear evidence on their coverage and composition. After decades during which Moscow effectively refused to provide any meaningful commentary on, or justification for, its claimed level of outlays, glasnost led to a gradual opening of the database and by the mid-1990s intended expenditure in a whole range of subcategories was being published. The analysis this generated from both Russian and overseas scholars appears, however, to have alarmed some in the Kremlin and thereafter tighter censorship was exercised. Last year the initial allocation for all of the activities of the MOD and for the Ministry of Atomic Energy's work on nuclear weapons were together summed up in just four published line items. Funding for maintenance of the armed forces and for military procurement was put into appendices which were classified. No information has been supplied on how final spending levels differed from those planned even in the broadest categories.

TABLE 3.—OFFICIAL DEFENSE BUDGET OUTLAYS BY MONTH, 1998-2000

	19	98	1999		2000	
	Monthly outlays	Total to end of month	Monthly outlays	Total to end of month	Monthly outlays	Total to end of month
January	R3.7	R3.7	R3.0	R3.0	R11.6	R11.6
February	3.6	7.3	4.3	7.3	10.2	21.8
March	3.6	10.9	9.0	16.3	20.1	41.9
April	4.0	14.9	8.3	24.6	14.0	56.0
May	2.5	17.4	7.9	32.5	14.1	70.1
June	4.8	22.2	8.1	40.6	12.1	82.2
July	2.5	24.7	8.7	49.3	9.8	92.0
August	3.5	28.2	8.6	57.9	16.9	108.9
September	5.4	33.6	13.1	71.0	12.5	121.4
October	5.5	39.1	12.9	83.9	22.8	144.2
November	8.7	47.8	9.6	93.5	19.5	163.7
December	17.3	65.1	22.6	116.8	27.1	190.8

[In billions of rubles]

After an outcry from deputies in the Duma and others, this policy of concealment was partially reversed for the 2001 budget and the breakdown of intended expenditure was made available (see Table 4).

Although a significant advance over the previous year, the 2001 budget still leaves over one-third of the defense budget expenditure unexplained. The vast majority of the money is almost certainly intended for the state defense order which covers primarily the research, development and procurement of weapons and spare parts. However, detailed information in this area remains classified. There has been no revival of the data provided through 1997 on the percentage allocation of procurement spending by branch of service and the costs of individual weapons programs are rarely mentioned. Moreover, comparisons with earlier years are difficult because of structural changes. As the government eventually, and reluctantly, conceded, most of the apparent rise in defense spending in 2001 is the result of nothing more than a decision to fund international peacekeeping activities, military reform and the railway troops out of the defense budget rather than, as previously, other parts of the government budget. Nor are such structural changes unique to this year. In 1995, for example, some hitherto unacknowledged research and development outlays were transferred for the first time into the defense vote. Then, in 1998, military pensions were moved in the opposite direction, a decision which explains most, though not all, of the apparent decline in nominal planned spending in that year. In 2000, part of the MOD's

civilian pay bill was apparently met from outside the defense budget though whether this continued in 2001 is unclear.

Budget line item	Billions of rubles	Percentage allocation	
Personnel maintenance	R91.6	41.8	
Monetary allowances including wages for civilian			
personnel	62.5		
Food	17		
Uniforms	3.6		
Holiday pay and assignments for health care	3		
Benefits and compensations	1.4		
Combat training and logistics	37.51	17.1	
Housing maintenance and repair	15.9		
Payment for and storage of special fuels	12		
Transportation	5.7		
Maintenance, operation and repair of property and			
installations	1.8		
Other expenditures	1.9		
Atomic energy program	5.129	2.3	
Mobilization and reserve training	2.277	1.0	
CIS collective security and peacekeeping	2.715	1.2	
Education and health care expenditures	2.15	1.0	
Insurance guarantees	1.5	0.7	
Central military command	0.912	0.4	
Defense industries	0.302	0.1	
Other (unspecified)	74.829	34.2	
- Total defense budget	218.924	100	

TABLE 4.—THE OFFICIAL DEFENSE BUDGET, 2001

Although the Ministry of Finance has in recent years exercised considerable power over the amount of money actually released to the MOD through the defense budget, it seems thereafter to have had little ability to monitor its usage. The MOD has operated through special accounts in the Central Bank of the Russian Fed-eration (Central Bank of Russia or CBR) to which others have had little, if any, access. Funds have been switched between objectives with minimal consultation or transparency, opening the MOD to accusations of non-accountability, corruption, waste and political manipulation. The Ministry of Finance has been trying to wrestle control of detailed defense budget spending from the generals since at least 1997 but only over the past year has its campaign begun to bear fruit. President Putin has now, against the MOD's wishes, insisted that in future all of the Ministry's payments must be processed by federal treasury bodies which will be expected to ensure that monies are spent only in accordance with the budget law. To assist them a new budget code and stricter accounting practices are being introduced. The appointment in March 2001 of Lyubov Kudelina, an economics graduate with over 20 years' experience in the Finance Ministry, as a Deputy Defense Minister with special responsibility for budgets and finance, is clearly meant to underline the new order. It is, however, too early to say how effective in practice will be the intended tighter financial management.

DEFENSE SPENDING OUTSIDE THE OFFICIAL DEFENSE BUDGET

Russian tallies of final defense spending, though of more value than the figures contained in planned budgets, still present an inadequate picture of the true level of outlays. This is because the government in Moscow operates on a very different definition of what constitutes defense spending than the one adopted by NATO countries. Expenditure on many of Russia's military personnel is not found, as it would be in the west, in the defense allocation but rather in other parts of the state budget. Examples include internal security troops, the federal border guard, the presidential guard, the federal security service, those forces formally designated for the protection of the Russian federation and, until this year, railway troops. In total these organizations contain well over 500,000 people and deploy significant numbers of aircraft, helicopters, armored combat vehicles, artillery pieces and patrol craft.

Other elements of defense spending are also located in supposedly civilian component of the state budget. These include: research and development work of specific military interest funded through the basic science and research vote; subsidies for defense enterprises and defense related construction as well as support for many defense related so-called presidential programs, met through the industry, energy and construction budget; money for conventional arms control and non-proliferation, including for the destruction of chemical weapons, treated separately in the state budget; subsidies to defense industries paid through the allocation to closed territories; national defense costs defrayed through provision made to the federations; military courts paid for out of the justice budget; and, as already mentioned, military pensions.

There are also a number of off-budget sources of defense spending. Oblasts and cities have on occasions provided direct financial assistance for local defense enterprises and military units² while the factories themselves sometimes subsidize weapons production and repair out of the proceeds of their civilian activities, often, it should be said, from ignorance of true costs. Some money earned from the export of military equipment is also plowed back into defense, in particular spending on research and development of new technologies. In December 2000 Leonid Safronov, Deputy Minister of Industry, Science, and Technology, announced that the government planned to impose a duty of 6.5 percent on military exports. The money thus obtained would then be divided up among new promising projects. The MOD earns significant sums of money by hiring out soldiers to local authorities and civilian enterprises, by leasing property and by selling second hand equipment, including weapons. These funds are then used to supplement the central government's budget allocation. Again, both the MOD and defense factories engage in barter deals, many of whose details are probably not even reported to the center, and borrow funds at extremely soft interest rates. And, finally, the MOD saves much money by delay-

 $^{^2\,{\}rm The}$ Moscow city government has, for example, funded major overhaul work on Russian naval vessels.

ing payments as long as possible, thus ensuring, at a minimum, that intervening inflation will reduce the real value of the debt while hoping that the central government will ultimately assume responsibility for meeting the obligations. The latter ploy has proved highly successful. In late 2000 the government agreed to take over from the MOD responsibility for debts it had incurred to the defense industries.

The total value of off-budget defense spending is very difficult to estimate and clearly varies widely between years, dependent partly on the seriousness of the MOD's financial plight and the condition of the overall economy. Defense outlays drawn from allegedly civilian parts of the state budget are easier to identify although some uncertainty obviously remains. Nonetheless, it seems likely that in 2000 not far short of half of budget funded defense spending came from outside the official defense budget. In 1999 the proportion had been even higher.

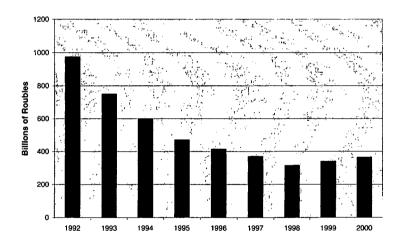
TRENDS IN DEFENSE SPENDING

A major problem with all Russian defense budget figures is that they are given only in the prices of the year under consideration. Measuring the real change in spending over time requires an allowance to be made for inflation. Moscow does not publish-and probably does not calculate-an inflation rate specifically for the defense sector. Inflation data for consumer goods and, indeed, for products offered wholesale is provided and some commentators have used particularly the first of these in an attempt to measure real changes in planned outlays. However, prices in individual sec-tors of an economy often change at very different paces, particularly in countries (like Russia) where general inflation is high and market mechanisms are inadequately developed, and there is no warrant for assuming that the price of Russian weapons has, over either the short or the long term, increased in line with that of consumer goods. Calculations of the real change in official defense spending made on this basis are thus of uncertain validity. Add in the problem of trying to determine the inflation adjusted level of defense spending outside the published defense budget when even its nominal level is not entirely clear and it is obvious that, at the very least, some method for cross checking the results is needed.

This is provided by the *building block* approach, initially developed in the United States during the 1950s. In concept it is very simple: identify every item that falls within what NATO would call defense expenditure, determine the outlays on each of them and then add everything together to produce a figure for total defense spending. Thus, for example, spending on weapons procurement is calculated by identifying every system that has been purchased and how many of each has been obtained and then multiplying that by the unit price. Similarly, military pay is determined according to how many servicemen there are in each rank and the salary, including the various allowances, given to those ranks. Constant prices of a selected year are normally used to overcome the problems of inflation. The method ought to be foolproof. The problem is, of course, getting hold of all of the inputs. Even in post coldwar Russia, much of the information is highly classified and some may not be collated at all. How, for instance, can even the most dedicated Western analyst hope to identify and price every piece of new construction or repair at every military facility or know in detail the cost of work in each field of defense research? In many areas, there is no alternative but to aggregate and estimate. Nobody should pretend that the final results are perfect. They are, however, even for determining aggregate levels of spending, usually an improvement over anything that can be obtained by accepting or, indeed, manipulating Russian Government figures.

Figure 1 shows the real value of total Russian defense spending over recent years according to *building block* calculations carried out by the author. It reveals a stark fall in outlays through 1998, at which point they were worth only about one-third of those some 6 years earlier. Such a steep rate of decline would appear to be unparalleled among major states that have not suffered defeat in war. There has been some recovery over the past 2 years but in 2000 total defense expenditure was still in real terms worth well under 40 percent of that in 1992 and 15 percent of that of the Soviet Union at its 1988 peak.

FIGURE 1.—TOTAL DEFENSE SPENDING ON NATO DEFINITIONS, 1992–2000



[Billions of rubles at constant 2000 prices]

The dramatic decline in defense outlays during the early and mid-1990s was primarily the result of severe economic difficulties. Russian GDP fell by over 40 percent between 1992 and 1998, inflation ballooned out of control for a time and remained high throughout the period, unemployment increased to around 12 percent of the workforce, living standards for most people plummeted and the government found it very difficult to raise the revenue needed to meet its obligations. Beyond this, however, defense was accorded a much lower priority by President Yeltsin and most of his senior advisers than it had been by their Soviet predecessors. The cold war was over, the West was sympathetic to the regime and, in any case, the military still possessed huge amounts of modern, serviceable equipment.

During 1999 and 2000 Russian defense spending rose in total by an estimated 16 percent after inflation. The beginnings of genuine economic recovery—GDP grew by about 14 percent over the same period—meant that, for the first time in years, it was possible to find extra resources for defense without hitting significantly either standards of living or the rest of the economy. Beyond that, however, the military put forward an increasingly powerful case for more resources. The international scene appeared to be darkening. NATO's actions in Yugoslavia were presented as evidence that the West, despite fine words, remained fundamentally hostile to Russian interests and was willing to pursue its goals with vigor unless constrained by the existence of strong Russian forces. Islamic militancy in Chechnya and Central Asia not only brought home the reality of the threat to national unity and to Russian influence in the near abroad but also underlined the weakness of the Russian forces. No longer was it possible to claim that weaponry and skills inherited from the days of the Soviet Union were adequate. Finally, the replacement as Russian President of Yeltsin by Putin brought to the fore a man with both more sympathy for security concerns and a greater belief in the need to keep the military onside.

THE ALLOCATION OF RUSSIAN DEFENSE SPENDING

One advantage of the *building block* methodology is that, with defense spending computed item by item, it is possible to recompile it according to different definitions. The two most useful are by branch of service and by function.

ALLOCATION BY BRANCH OF SERVICE

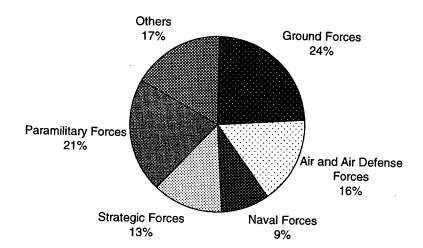
Figure 2 shows our estimate of the percentage distribution of outlays by service in $2000.^3$

The calculations indicate that in 2000 nearly two-thirds of total defense outlays went to the regular forces, with the remainder split between the various paramilitary organizations (border guards, internal security troops and the like), MOD civilians and certain centralized MOD functions which cannot sensibly be allocated to a particular service. Within the money devoted to the regular forces, the largest share went to the ground forces followed by the air and air defense forces and the strategic forces. Such distributions usually change only slowly over time but in Russia during the 1990s there was a significant enhancement in the proportion of funding allocated to the strategic forces. The reasons for this are not discussed by the Russians in public but to a western observer they are clear. Strategic weapons provide far more "bangs for the buck" than conventional systems and make better sense while the major threat is thought to come from a technically superior, nuclear armed, NATO. In the 1970s and 1980s Moscow's understanding of a war with NATO was, in crude terms, one in which its heavily superior conventional forces drove through Germany, placing on Western leaders the unpalatable choice between surrender or re-

³For the purposes of this figure the SSBN fleet is considered part of the strategic forces rather than the navy.

sort to nuclear weapons. In the 1990s, with the break-up of the Warsaw Pact, this was no longer practicable. Weapons of mass destruction were now seen as increasingly essential to offset conventional weaknesses which, through lack of money and other resources, could not be addressed.





Over the last 2 years there have been some signs that this emphasis is beginning to be questioned. Many in the MOD have come to accept that the military problems Russia faces—and is likely to continue facing over the next decade—cannot be met by strategic forces. Intercontinental and submarine launched ballistic missiles are of little use in the conflicts in Chechnya or the near abroad. The challenge there is from bands of Islamic militants and the requirement in military terms is for better trained and better equipped ground and air forces. The reduction in the relative financial priority for these branches of service has, it is thought, run counter to Russia's true needs.

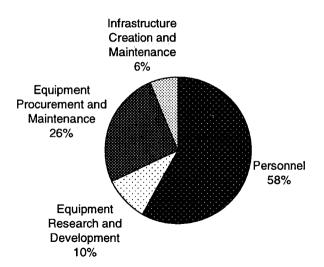
Not all, however, yet share the new thinking. One reason for the very public spat that occurred over summer and autumn 2000 between the then Defense Minister Sergeyev and the Chief of the General Staff Kvashnin was the very different perspectives they held on the relative importance of strategic and conventional forces. After much hesitation President Putin appeared to back Kvashnin, agreeing that more money needed to be put into conventional systems and that—partly to save money—the Strategic Missile Forces should by 2006 lose their independence and be absorbed into the air force. The latest information suggests, however, that the battle is far from over.⁴

⁴In spring 2001 Kvashnin was still continuing his campaign, reportedly telling the Academy of Military Sciences that "the Russian army is a man with one arm pumped up (that's the Stra-

ALLOCATION BY FUNCTION

In the Soviet era over two-thirds of all defense spending was typically allocated to the research, development, procurement and maintenance of military equipment and supporting infrastructure. This left a smaller proportion for personnel related expenditure (pay, allowances, pensions, food, clothing, accommodation, etc.) than in the United States or United Kingdom despite the very large numbers that the Soviet Union had under arms. The explanation, of course, was that most servicemen were conscripts who could be forced to endure dreadful living standards, receiving in return just pocket money. The change in the distribution of Russian spending over the last decade has been dramatic, as our estimates for 2000—given in Figure 3—demonstrate.





¹ These figures, being based on NATO definitions of what constitutes defense spending and how it should be allocated by category, inevitably differ from the partial data given by the Russians for the functional breakdown of the defense budget.

Personnel related spending now accounts for approaching threefifths of all defense outlays, a significantly higher proportion than in the West. Despite this, however, the MOD has still not been able to meet all its obligations. Officer salaries, once the envy of most employees in the civilian economy, have fallen dramatically in real terms as infrequent pay rises have failed by a long way to keep pace with inflation. Table 5 shows typical earnings for spring 2001.

tegic Missile Troops) while the other is short and dried-up (that's the general purpose forces). That's not a normal man; it's some kind of mutant. I can't allow that. It won't work! We'll dry up together!!"

TABLE 5.—SALARIES OF MILITARY OFFICERS IN SPRING 2001

	Basic salary	Addi- tional payments	Total
Lieutenant in charge of platoon	R1,627	R743	R2,370
Captain in charge of company	2,080	NA	NA
Lieutenant Colonel in charge of battalion	2,562	953	3,515
Colonel in charge of regiment	4,041	NA	ŃA
Major General in charge of division	¹ 5,028	1,301	6,329

[Rubles per month]

¹A different source gives this figure as 4,786 rubles.

NA----Not available.

Although precise calculations are difficult, it seems likely on these figures that a pay increase of more than one-third would be needed to provide most Russian officers with the same income relative to their civilian counterparts as would be normal in a western society. Moreover, although the large pay arrears that built up during the Yeltsin era have now largely been cleared, neither the recently growing economy nor supposed government sympathy for the military's plight has changed the fundamental position of the military officer. Published data suggests that over the past 2 years the only servicemen to secure pay rises much above inflation have been those sent to hot spots such as Chechnya.

Although a large number of officers have been forced to take second jobs (thus provoking media sarcasm over "part-time soldiers"), Russian statistics suggest that at the beginning of 2001 almost half of service families were living below subsistence levels and some 170,000 personnel were still on housing waiting lists. Morale among officers is unsurprisingly very low while recruitment is increasingly difficult. The average age of pilots in the air force has reached 37 compared to 30 in 1992. Frustrated by financial hardship, many officers, both senior and junior, have turned to corruption. In December 2000 Colonel General Oleynik, head of the Directorate of Budget and Finance, was dismissed (perhaps a little harshly) for involvement in the alleged laundering of \$450 million of defense budget funds through a Ukrainian company. As of late spring 2001, a further 13 generals were also said to be under investigation for corruption by the military prosecutor. In a report to the state Duma in May 2001 the Russian Audit Chamber stated that last year the Defense Ministry lost some 1.5 billion rubles through embezzlement and other illegal activities

The situation for conscripts is, of course, even worse than that for officers. As in the Soviet era, pay consists of no more than pocket money while the quality of benefits-in-kind (food, clothing, accommodation, etc.) has declined. Diet is at best monotonous and there have been occasions on which units have run out of basic foodstuffs. Worn out uniforms are not replaced and there has usually been no money to repair and maintain barracks. Sanitary conditions are often appalling. Inevitably, although discipline has generally been maintained, there are many reports of suicides, desertions, nervous breakdowns and physical ill health. On a per capita basis outlays on medical services in the forces were last year just one-fifth of those in Russia as a whole—and the latter were, by either Western or even past Soviet standards, grossly inadequate.

However insufficient, the money made available to support servicemen has been generous compared to that directed toward equipment research, development, procurement and maintenance. These now account for less than two-fifths of total defense funding. Although much basic research has continued, particularly in areas where the cost is not excessive, there have been problems maintaining momentum through the prototype construction, testing and evaluation phases. Program timings have been stretched and in some cases projects survive in little more than name. Russia's weapons research and development network, though still extensive and, by West European standards, achieving impressive results in some areas, is but a shadow of its former self.

As both total defense outlays and the proportion of those remaining allocated to equipment procurement have fallen, orders for new weapons dried up. By the late 1990s the value of overall weapons production had declined to less than one-tenth of what it was at the start of the decade. As Table 6 shows, many key sectors were hit even harder than that.

	1990	1992	1994	1996	1998	2000
Tanks	1,600	500	40	5	10	30
Light AFVs	3,400	700	400	300	250	50
Fighters	400	150	50	20	30	40
Bombers/ASW/SMAC	40	20	2	1	0	0
ICBMs/SLBMs	120	70	25	20	15	5
Major warships	2	2	Ó	1	0	1
Submarines	12	6	4	3	1	1

TABLE 6.—WEAPONS PRODUCTION 1990-2000

Official figures showing a significant percentage growth in state spending on defense equipment procurement over the past 2 years must, if true, reflect the acquisition of smaller systems and spares which attract little publicity. Certainly, there is little to justify them in terms of major weapons production. Despite its relative funding priority, the output of ICBMs has fallen to such an extent that around 60 percent of the missiles currently deployed are now past the service life originally planned for them. Tank manufacture has virtually ceased at one of the two plants still working in the field and only continued at the other in a desultory manner. Of the two major fighter production firms, one-MiG-apparently has very few orders while the principal bomber facility may also have little to do. Last year it was reported that only 1 percent of Russian military aircraft had been built since 1995 and almost half of the fleet dated to before 1985. The shipyards have a similar shortage of orders. Moreover, with conventional systems, a large share of the manufacturing that has taken place is aimed at the export market, particularly China and India, leaving virtually nothing for Russia's

own forces. All of the new submarines constructed in recent years have, for instance, been destined for overseas.

The MOD did not just have to give up its hopes of new weapons systems. Funding has been so tight that it has also continually postponed necessary maintenance contracts. As a result, by late 1999, only 30 percent of the ground forces' helicopters and 60 percent of its tanks were reported as being in satisfactory condition. The air force claimed around the same time that some 500 of its fixed wing aircraft and helicopters were in need of major renovation while the navy said that three-fourths of the vessels still in service needed refitting or repairs. These figures, though obviously open to definitional questions, give an accurate flavor of the deterioration in capability.

Moreover, even when systems were operational, there was often insufficient funding to train servicemen fully in their use. Average flying time for air crews, low by Western standards even in Soviet times, fell sharply. With just one-fifth of the fuel supplies the air force judged necessary, bomber pilots managed on average only 20 hours of airborne training last year while fighter pilots did even worse, securing just 10 hours. Around 400 of the 1500 pilots graduating from military schools since 1995 have apparently yet to get airborne. The air force has publicly blamed limited flight training for the 50 percent increase in accidents that took place last year. The navy has had similar problems. In 2000 warships were reportedly at sea on average for just 6.4 days while the naval air force spent 11 percent less time in the air than in 1999, itself a poor year even by previous Russian standards. Ground troops have reported insufficient fuel to run vehicles and have had to restrict activity.

Infrastructure has also suffered. Excluding military housing, it currently receives only an estimated 6 percent of overall defense outlays. Keynote projects have been few in number and more basic improvements limited. By last year two-thirds of military airfields were said to be in need of major overhaul and modernization while only one-fifth of the money which experts said was needed to tackle the problem was made available. One report concluded gloomily that, if the situation did not change, practically all military run-ways could be out of service by 2005. Ship repair facilities were also still ignored; the navy claimed that only 4 percent of the necessary funding was supplied in 2000. Although in 1997 Russia pledged to eliminate its chemical weapons stocks within 10 years only meager progress has been made, largely because of lack of money. In 2000 the budget allocated little more than one-sixth of the sum specialists said was required if Russia was to meet its obligations. Substantially more resources have, however, been promised for this year.

FINANCIAL ASPECTS OF WEAPONS PRODUCTION

The MOD's financial problems have inevitably had a knock-on effect on its suppliers, particularly defense industries. Not only has much less been ordered but, even when contracts have been agreed, payments have often been delayed for months. Without funds the plants cannot pay their own workers or suppliers and have fallen deeply into debt. Many, perhaps most, are by any normal measure

bankrupt and would in a market economy have been closed. In Russia they have been left to stagger on as several restructuring and rationalization plans have first been heralded and then abandoned once the social and financial costs have become apparent. Staff are rarely sacked. Instead they are moved to a shorter working week, often doing little productive even when in the factory. According to specialist Russian journals, one-fourth of employees have been forced to take unpaid leave lasting, on average, 40 days. In the West individuals placed in such a situation would have left in large numbers. In Russia, however, workers have remained tied to the company both by the lack of alternative employment and by social considerations. For instance, the factory, even when it cannot pay employees' wages, still owns their flat which has to be vacated if a job is taken elsewhere. Unsurprisingly, there is vast overmanning. The aviation and aerospace industry in Russia employs around eight times as many people as that of the whole of Western Europe but has an output that is dramatically smaller. The average age of workers across defense industry is now well over 50.

The Russian Government has in recent months been preparing new plans to tackle the crisis in the defense industries. Firstly, it has said that, with the state budget now in surplus, decisive action will be taken to settle state debts to defense industry enterprises. The exact size of these remains a matter of disagreement between the administration and the factories but the former fixes them 32.5 billion rubles and has promised that, by January 1, 2003, half of this will have been paid in money and the rest covered by bonds. Potentially even more important for the long term, Deputy Prime Minister Ilva Klebanov has announced that, in order to reduce overlap and eliminate waste, a new and major restructuring program is in preparation for the sector. It is to involve mergers and closures and be spread over a decade. Full details are as yet unavailable but some reports suggest that, within the first 3 or 4 years, one-third of the enterprises could disappear. Funding of 2 to 3 billion rubles a year is said to be needed to support the program.

Past experience suggests that all schemes should be treated with caution. Promises of debt repayment could easily evaporate if the government's financial position were to weaken and any radical defense industrial restructuring is in our view likely to be much more expensive than forecast and to face considerable opposition. Changes will probably be on a much smaller scale than economists would like or is needed to bring capacity into line with orders. Moreover, whatever organizational changes are made, an elderly workforce and obsolescent production machinery will remain a poor basis on which to build any rapid and sustained recovery in production levels.

THE DEFENSE BURDEN

Russian statisticians calculate the financial burden defense places on the economy by measuring official budget outlays as a proportion of GDP (see Table 7). For 2000 the result was 2.7 percent, a little below that in the United States and broadly in line with the figures for France and the United Kingdom. The impression given is thus one of moderation. However, a more accurate comparison, taking into account military spending funded outside the official defense budget, suggests that the true burden in Russia last year was well over 5 percent. As such it was twice the NATO average and also probably twice that in China.⁵ On a more positive note it should, however, be recognized that the burden has fallen significantly over the past decade: in 1992 it was on our estimates approaching 10 percent, one of the largest in the world.

TABLE 7.—THE DEFENSE BURDEN ON OFFICIAL RUSSIAN STATISTICS, 1992–2000

[Final defense outlays as a percentage of GDP]

Year	Percentage
1992	. 4.7
1993	. 4.4
1994	
1995	
1996	3.0
1997	3.1
1998	•
1999	
2000	. 2.7

The implications for Russian defense reform of this substantial and ongoing understatement of the burden are not entirely clear. However, it seems likely that, with both the government and the military apparently laboring under the impression that the defense sector is much less of a charge on society than is really the case, the pressure for radical change has been weakened. Indeed, in recent years one of the most persistent refrains in the armed forces' repeated demands for more funding rather than large scale restructuring has been the claim that, financially, they are treated badly compared to their counterparts in many other countries. That argument may eventually be undermined. Deputy Defense Minister Lyubov Kudelina has recently called not only for much greater transparency in spending but also a full analysis of non-defense budget funding. If conducted properly, this will, of course, show the Russian forces still absorb what is, by current international standards, a high proportion of national resources.

DEFENSE SPENDING IN DOLLARS

Few Western readers are likely to be wholly satisfied with expenditure data in rubles, seeking instead numbers in a currency they believe they can understand. But how can one convert rubles into, for example, dollars? The methodology normally adopted is straightforward: a market exchange rate, quoted in the quality financial press and elsewhere, is applied via simple division to the published defense budget and a result thereby obtained. Unfortunately, however, while the ruble is not freely convertible and while

⁵China admits to a defense burden of only 1.4 percent of GDP but, like Russia, conceals much of its military spending in supposedly civilian parts of the state budget and in non-budgetary accounts.

trade constitutes a relatively small proportion of Russian GDP, there is no reason to believe that market exchange rates even approximately reflect the military purchasing power of the currency. The discrepancy can be enormous. In 2000, for example, the initial budget allocation for defense was on this approach worth only about \$5 billion, not dramatically more than that of Singapore. Even taking into account the additional money poured into the defense budget during the year, outlays were still valued at under \$7 billion, significantly less than those of Canada. The Russian armed forces (including paramilitaries) are, however, in terms of manpower nearly 15 times the size of their Canadian counterparts and they have, in addition to a major strategic missile capability, 7 times as many large naval vessels, 14 times as many combat aircraft and approaching 200 times as many tanks.

Statistics derived from market exchange rate conversions are thus quite obviously seriously flawed-though that does not prevent them either from being quoted in otherwise serious publica-tions or for wholly erroneous deductions on the nature of Russian policy or its industrial efficiency being drawn therefrom. We prefer to make our own estimates from scratch, with the goal of measur-ing the financial cost of replicating the Russian military effort in the United States.⁶ As before, we adopt the building block methodology and cover all items that NATO countries would consider part of their defense spending. Some simplification of procedures is necessary because of lack of information but in principle equipment unit prices are determined according to how much it would cost a U.S. factory to produce, repair and maintain systems with the technical characteristics and quality of manufacture that exists in Russia. Fuel costs are similarly based on U.S. prices and Russian usage rates. Russian military and MOD civilian personnel are assigned a dollar valuation dependent on factors such as their rank, educational standard, training, assessed morale and (where relevant) leadership skills. The dollar cost of food, clothing and accommodation takes account of the low standards normal in Russia.

The calculations are complex and subject to uncertainty but the bottom line is that, on our estimates, the United States could last year have procured the full Russian military effort for around \$50 billion. This puts Russia in third place globally, far behind the United States itself and—on our calculations—some way adrift also of China. The latter is thought to have overtaken Russia in terms of defense resource allocation around the mid-1990s and now, despite the recent upsurge in Russian outlays, to devote around 25 percent more a year to the military. The leading European defense powers, the United Kingdom and France, together with Japan, still in 2000 lagged behind Russia.

PROSPECTS

At the time of writing (July 2001) the Russian Government has just approved the basic outlines of the 2002 federal budget. These

⁶ It does not, however, measure Russian military capability which reflects resource flows over many years, the efficiency with which those resources are deployed and a wide range of intangibles. Some commentators, failing to recognize this and, above all, to differentiate properly between inputs and outputs, have drawn conclusions on relative capabilities which—whether valid or otherwise—cannot be justified simply from defense spending data.

show a defense allocation of 262.9 billion rubles, an increase of 20.5 percent over planned spending this year. Were inflation in the defense sector to equal that expected for the overall economy (an admittedly uncertain thesis), the new budget would involve a real rise in outlays of over 8 percent, more than twice likely GDP growth. The proposals are, however, subject as always to scrutiny by the Duma and are likely to be revised before passing into law. There are few details on how any additional money is to be distributed but 9.3 billion rubles will be set aside to provide servicemen with an above-inflation pay award. Unconfirmed reports suggest that as a result the monthly salary (including bonuses) of a platoon commander will rise from 2,370 rubles to 4,012 rubles while that of a battalion commander will be increased from 3,515 rubles to 6,199 rubles President Putin has also recently submitted legislation to the Duma which will bring military salaries into line with that of Russian civil servants by January 2004. According to preliminary data, this is likely to require a further rise in military pay over and above anything given to civil servants. The deputies are expected to vote on the proposed law in the autumn.

Despite the commitment to increasing pay, Defense Minister Ivanov has said that he wishes to cut the proportion of the defense budget going on the maintenance rather than development of the armed forces from 70 percent in 2000 to 60 percent in 2005 and 50 percent by 2010.7 The only way of achieving this is, as he and other ministers have admitted, by a substantial reduction in force numbers. Despite inevitable qualms from some senior military officers, details of these cuts have been announced. The posts of some 365,000 Defense Ministry servicemen, 105,000 servicemen from other power ministries and 130,000 civilians are to be axed by 2005. Figures published separately for the downsizing in individual services do not add up exactly to these numbers (perhaps suggesting some ongoing debate) but provide an indication of priorities. Within the MOD, 180,000 military slots (52 percent) will be lost by the ground forces, 60,000 (40 percent) by the strategic rocket forces, 50,000 (29 percent) by the navy and 50,000 (27 percent) by the air and air defense forces. Among the other departments with military employees, the Ministry of the Interior will probably have to surrender 37,000 posts (18 percent),⁸ while the number of border guards will be reduced by 30,000, railway troops by 10,000 and "Emergency Situations" forces by 4,500. Further cuts, post-2005, have also not been ruled out though at the moment they are judged unlikely.

The Russian authorities have claimed that this reduction in posts will enable Defense Ministry spending per serviceman to double by 2005 and triple by 2010. Assuming-as seems likely-that the starting point for the calculation was the official figure of almost 1.2 million men serving in the MOD's forces in 2000, this means that real levels of defense spending are planned to rise by almost 7 percent a year through 2005. Without any further reductions in posts after 2005, attainment of the 2010 target would involve a fur-

⁷As so often with Russian statements, the language is imprecise but it seems likely that, by maintenance, Ivanov meant nearly everything outside the defense order. ⁸Some sources have said that the reduction will be larger, perhaps 53,000 posts (26 percent).

ther hike in outlays over the second 5 year period of about 8.5 percent per annum after inflation.

These goals are clearly extremely ambitious and we doubt whether, without a substantial deterioration in the international political climate. they will be realized. The 8.3 percent growth in GDP achieved last year was in large measure the result of increased energy and other raw material prices and the continuing impact of the undervaluation of the ruble on international markets. The boost provided by these factors is already starting to subside and although, barring a major international recession, the days of negative growth seem to be over, it is probable that over the next decade GDP will rise by on average no more than 3 to 4 percent per annum. If total defense spending were to expand at the same pace as the Russians appear to be planning for the MOD budget and economic growth were 3 to 4 percent a year then the defense burden would swell from just over 5 percent of GDP last year to more than 6 percent in 2005 and approaching 8 percent by 2010.9 At these levels it would increasingly impinge on the resources available either to invest in the civilian economy or improve standards of living.

Moreover, even if the planned rises in defense spending were to be obtained, it is doubtful whether the sought after re-orientation of outlays away from personnel and toward equipment could be fully achieved. Despite official claims that there are 1.2 million military personnel in the MOD, we believe that actual numbers are significantly smaller. Some of the projected cutbacks may thus involve little more than the scrapping of vacant posts. In these cases the financial savings will be minimal. Furthermore, where regular servicemen are retired, they will be entitled by law to substantial housing and severance benefits. Independent Russian analysts have calculated the additional financial cost of cutting personnel by the planned amount at 21 billion rubles over 5 years, a figure we believe to be a little too high but which is nonetheless indicative of the heavy charge on the defense budget. Former Defense Minister Sergevev is alleged to have written last year to Prime Minister Kasyanov arguing that it was impossible to reduce military personnel numbers by even 50,000 because they could not be provided with their housing entitlements.

There is also a concern that, in determining the rank mix needed to yield their planned savings, the authorities are storing up problems for the future. They have, indeed, said that almost two-thirds of the eliminated MOD military slots will need to be those of officers, including a very large number of senior staff. Insofar as the current force structure is top heavy, this emphasis makes sense. However, from around 2005 onward, Russia faces a severe and unavoidable demographic crunch, with the number of 18-year-old

⁹The Russian Government will, of course, at the moment be seeing—and making judgments based on—different and more benign forecasts of the defense burden. According to German Gref, the Minister of Economic Development and Trade, the authorities in Moscow are forecasting annual average economic growth of 5 percent a year through 2010 rather than the 3 to 4 percent we posit. Moreover, they will equate defense spending with the defense budget, thus omitting all outlays on military activities funded through other parts of the state budget or by nonbudgetary means. The Putin government may well believe that, even with the massive hikes planned for defense outlays, the latter will, in 2010, still account for just 3.5 percent of GDP. This level has long been seen as reasonable and, indeed, during the Yeltsin era, became some thing of a totem target for those seeking increased spending.

males available for conscription falling within 5 years by over 40 percent. Since at least the mid-1990s there have been many complaints from the forces that, even with the existing demographic pool, it has been difficult to secure sufficient numbers of healthy, well educated recruits. Unless the number of conscripts is cut more sharply than is at present envisaged, this problem will become much more acute toward the end of the decade. If, however, the government decides to reduce the number of conscripts in line with availability, the only way of preserving its planned force size will be to retain more regulars than envisaged. This will inevitably be costly.

Moreover, there has long been a recognition among Russian specialists of the benefits of eliminating conscription and converting the forces to an all-professional basis. Indeed, at one point, President Yeltsin declared that 2000 would see the final compulsory inductions into the armed forces. This deadline has now obviously been shelved but even a gradual shift over the next decade to increase the proportion of regulars in the services will add significantly to the wage bill.

Were the Russian Government to achieve its goals of tripling defense budget spending per soldier by 2010 and re-orienting outlays so that by the same date half of outlays were directed toward "developing" rather than "maintaining" the forces, then in real terms the MOD "development" budget (largely weapons research, development and procurement together probably with additional infrastructure) would rise by around 230 percent over the period. This seems implausibly high and we have therefore made our own projections. These cover all defense spending rather than just that funded through the defense budget. They are based on the assumptions that for the remainder of the decade total defense outlays will rise in real terms by 3.5 percent a year on average, in line with GDP, and that the share of those outlays allocated to development will increase by much less than Moscow currently envisages. As a result, development spending is forecast to grow by about threefourths, much less than that implicit in the Russian data but still a very impressive figure.

There are, of course, an almost infinite number of ways in which this additional money could be allocated. Nonetheless, it is clear that there will be no immediate, large scale, boom in weapons procurement. Neither the government nor the armed forces perceive any great benefit from increased acquisition of most of the weapons systems currently in the inventory, these usually having been developed in the 1980s or earlier and now considered less and less a match for their Western counterparts. Rather there is a belief that the emphasis needs to be placed on creating, almost across the board, a new generation of equipment which contains the latest technology. In financial terms, therefore, a high priority will probably be given to weapons research institutes. They are likely to receive substantial amounts of extra money for better machine tools and other equipment while their staff, hitherto very poorly paid, should see their status enhanced. This will, of course, be accompanied by an expectation of better results but it is unlikely that many major new weapons systems, including even those that have ^

been in development status for some years, will be ready for quantitatively significant levels of production much before 2007-2008.10

Manufacturing facilities will in any case need several years to prepare for the arrival of new systems. If the government presses ahead with its much needed reorganization and restructuring plans, heavy demands will inevitably be placed on defense industry management. There will be new chains of command and of supply to forge,¹¹ existing equipment and manpower to relocate or jettison and a more commercially oriented ethos to instill. Moreover, with many of the promised weapons systems technically much more advanced than their predecessors, increasingly sophisticated manufacturing equipment will have to be bought and staff will have to undergo training in its use.

The cost of developing better weapons systems and modernizing manufacturing plants to produce them in quantity will be enormous and, if done properly, could easily absorb all of the additional development funding contained in our forecast. In practice, however, significant sums are likely to be diverted for the better maintenance and repair of the existing weapons inventory. In part this is because, given the unavoidable delays in bringing new weaponry into service, the operational life of existing systems will need to be extended, often well past original expectations. Beyond that, however, the forces have, since the most recent Chechen conflict, became increasingly aware that the reliability of many of their older weapons systems (including associated vehicles) is uncertain and thus likely to undermine operations and put soldiers' lives at risk. They will press for a better adherence to recommended servicing schedules than has been typical over the past decade.

Nonetheless, despite life extensions programs and better mainte-nance, many Russian weapons systems are so elderly that the forces will in practice have little option but to scrap them in the coming few years. As a result the total inventory is likely to decline significantly. Exact figures are difficult to predict but our best forecast for holdings in the major weapons category is shown in Table 8.

Year	Modern tanks and armored vehicles	Artillery	Combat aircraft and attack helicopters	Major sur- face com- batants and sub- marines	
2000	45,000	33,000	2,800	95	
2010	35,000	20,000	1,900	60	

TABLE 8.—WEAPONS INVENTORY IN 2000 AND 2010

¹⁰According to Yuriy Koptiev, general director of the Rosaviakosmos state agency, the new fifth generation fighter, the PAK FA, is unlikely to be ready for delivery to the armed forces before 2011-2012 even if sufficient money is found for its development. The Russian Government has, indeed, said that between now and 2015 the armed forces will probably buy only 7 to 10 percent of Russian aircraft industry output, with a further 13 to 15 percent being purchased by domestic airlines and the rest exported. ¹¹The production of large ASW vessels apparently requires the cooperation of 2,000 sub-

contractors!

It is thus evident that, through 2010, there is unlikely to be any significant improvement in the overall capability of Russian forces. Post that date, however, as new weapons systems begin to enter the inventory in quantity, the picture should gradually improve. There will be fewer men than at present but they should be better trained and probably better motivated. The move away from conscripts toward an all-professional force could well be completed in this timeframe. Ultimately, although there is no possibility of Russia's conventional forces being rebuilt to the point where their strength relative to that of their Western counterparts is comparable to that enjoyed by the Soviet military throughout the cold war, they should, with sufficient funding, re-emerge as a modern and powerful presence on the world stage.

RUSSIAN FINANCIAL TRANSITION: THE DEVEL-OPMENT OF INSTITUTIONS AND MARKETS FOR GROWTH

By David M. Kemme¹

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Paga

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SUMMARY

A well-developed financial intermediation industry increases domestic savings, efficiently allocates investment resources to the most productive uses in the economy and increases the rate of economic growth. In the Soviet economy the banking system served as a means of collecting household savings and a means of distributing centrally determined capital grants to enterprises. Banks then audited enterprise financial activities to ensure compliance to the financial plan. After a decade the transition from the Soviet banking system to a market oriented banking system is incomplete and fraught with uncertainty. While the number of financial institutions has increased dramatically, the state sector still dominates fi-nancial sector activity, the legal and regulatory framework is incomplete, information necessary for risk management is of poor quality and policymakers and regulators have been slow to act to improve intermediation services. While significant progress has been made, the commonly recognized characteristics of a sound financial system are not yet met.

INTRODUCTION

The Russian financial crisis of 1998 not only destroyed the credibility of financial policymakers and the confidence of investors, but also delayed significant institutional reforms necessary for long-

¹David M. Kemme is the William N. Morris Chair of Excellence in International Economics, University of Memphis. The author would like to thank Josef Brada, Martin Gilman, Kim Iskyan, Lucjan Orlowski and an anonymous reviewer for helpful comments on an earlier draft.

term economic progress. While the favorable external environment of the mid-1990s provided support for domestic reforms and adjustment, events in global financial markets alone are not sufficient to explain the domestic financial collapse. Russian financial authorities were not only determined to prevent exogenous external shocks from spilling over into domestic financial markets, but also determined to defend the exchange rate peg as the domestic GKO market collapsed.² The failure to deepen the reform of institutions and appropriately manage financial risk at both the macro-economic and micro-economic level set the stage for crisis. The deterioration in the terms of trade and the government's inability to maintain federal revenue flows worsened fiscal imbalance and overall macroeconomic internal balance. Huge interest rate swings and the devaluation of the ruble destroyed the balance sheets of major banks.3 The Russian economy moved from a somewhat optimistic macro-economic environment in 1997 and the first quarter of 1998. to financial collapse by the end of 1998.⁴ By mid-1999 the economy had stabilized and policymakers were taking measures to bolster the fiscal system.⁵ Does the positive economic news represent real progress in domestic structural reform and solid economic performance? Or, have the increases in the world price of oil and stabilization of global financial markets provided the supportive external environment that allows the fragile Russian economy to grow even without significant domestic reforms?

This paper focuses on development of the domestic banking industry not only as an essential element of transition to a market economy, but also as a necessary factor for long-term economic growth. There is an extensive theoretical and empirical literature indicating a significant causal influence of the level of financial development upon long run economic growth.⁶ Financial development improves the allocation of savings to investment opportunities. The

²Gosudarstvennye kaznacheiskie obiazatelstva (GKOs), are short-term treasury bills. Foreign investors owned about 30 percent of GKOs. Granville (2000), p. 201 reports that in early 1998 there were some \$365 billion (more than 3,000 percent of the banking system assets) of outstanding foreign exchange forward contracts, mainly the result of foreign counter parties hedg-ing their GKO investments. Devaluation would, and ultimately did, render many banks insolvent.

³See Granville (2000), pp. 196–203 for a description of the GKO market collapse, resulting devaluation and debt default.

³See Granville (2000), pp. 196–203 for a description of the GKO market collapse, resulting devaluation and debt default. ⁴During the early 1990s there were expressions of concern about the stability of the banking system and in 1995 there was a liquidity crisis on the inter-bank lending market. However, some analysts were dismissive about the possibility of a banking system crisis: "This talk about crisis in the midst of one of history's largest banking booms has an air of unreality to it." Warner (1998), p. 335. It was true that banks had extraordinary opportunities for profits because of the low cost of funds, but conditions can and did change rapidly. Less than a year later in the same journal, but after the crisis, Buchs (1999), p. 700 notes "... it is less the crisis itself but the timing of the crisis which was a surprise in Russia." ⁵ For a review of economic performance during the 1990s measures. On August 17, 1998 Russian authorities devalued the Ruble, imposed a unilateral restructuring of GKO debt and declared a 90-day moratorium on private debt repayments. Estimates of losses to investors range from \$20 billion to \$90 billion. IMF (1999), p. 39. For a detailed description of the 1998. And for a description of the results see Westin (1999). ⁶ The level of financial development is usually described by measures of "depth," for example, the ratio of banking assets to gross domestic product (GDP), or market capitalization to GDP, etc. Berthelemy and Varoudakis (1996) and Pagano (1993) provides a survey of issues of financial development and growth. Levine (1997) also provides a survey of issues of financial development and growth. Levine (1997) also provides a survey of issues of banking assets to a domestic product (GDP), or market capitalization to GDP, etc. Berthelemy and Varoudakis (1966) and Pagano (1993) provide a brief review of the connection between financial development and growth. Levine (1997) also provides a survey of issues of banking assets to gross domestic product (GDP), or ma nancial development to economic growth.

possibility of choosing more productive investments, which in turn generate higher rates of aggregate economic growth, requires improved management of liquidity risks, more efficient diversification of investor's portfolios and higher quality of information about various projects and investor's abilities. As the demand for these services arises, specialized institutions develop. But, the literature indicates that aggregate income and savings must reach certain levels, or thresholds, before institutions and markets develop spontaneously. In transition economies economic policymakers may intervene, providing an environment for institutional development that may supercede spontaneous market developments.⁷

If one takes a more activist, "supply leading" financial development approach to transition and development, policymakers first must ask: (1) Among financial institutions what areas should be developed/supported first? (2) What are the most appropriate mechanisms to enhance the efficiency of the financial institutions identified? (3) What is the impact of competition and what is the optimal level of competition (in banking)? And, then, more specifically, (4) at what stage of financial development is the Russian economy and what policies should be implemented to enhance long term economic growth?

In the next section I briefly address questions one and two based upon a brief review of the financial development literature. This provides a framework for analysis of policy and institutional developments. The following section is a review of the banking sector's recovery from the 1998 crisis. Here I also discuss policy and institutional issues which must be resolved to ensure stable, long-term economic growth. The last section concludes with concerns and issues to be resolved.

DEVELOPMENT OF FINANCIAL INSTITUTIONS AND COMPETITIVE FINANCIAL MARKETS

The Soviet centrally planned economy had little need for a developed financial sector. The payments system was simple and sound: cash was used for household transactions and enterprise deposit transfers were made within the monobank for inter-enterprise transactions. Capital and investment funds were available via direct grants from the state budget according to the central plan. The banking system functioned simply as a payments system and state auditor to monitor plan fulfillment.⁸ Monetary policy was accommodating, ensuring that cash supplies met demand and enterprise deposit creation from the state budget corresponded to plan, both according to micro-objectives as well as balancing in the aggregate to

⁷The literature discuses two approaches to financial development. "Demand following" financial development follows widening of markets and product differentiation, which then requires more efficient risk diversification and control of transaction costs. This type of financial development is viewed as passive or it plays at most a permissive role in the growth process. "Supply leading" financial development precedes the demand for financial services and proponents argue it has a clear autonomous positive effect on growth due to the enhanced ability to mobilize resources, moving them from traditional to modern, high growth sectors. Supply leading financial development may dominate the early stages of development or transition, making possible the financing and increasing the effectiveness of sectors, institutions and activities neglected under central planning, until demand following financial development takes over (a la Gerschenkron, 1962).

⁸The three primary functions of the Soviet monobank were financial control of enterprises, dispersement of funds allocated by the central plan and mobilization of domestic savings to finance domestic debt of the state sector.

prevent inflation. Barter transactions in both the household and enterprise sectors and unplanned transactions within the enterprise sector were tolerated to smooth the operation of the plan. The financial plan governed the allocation of society's savings among potential investment opportunities typically based upon political objectives rather than financial criteria.⁹ While the banking system in a market economy is a critical element of the payments system, it also plays an active role in the allocation of investment resources.

WHY FOCUS ON THE BANKING SECTOR?

In the Soviet system the banking system did not provide financial intermediation services. Developed market economies, though, have both stock and bond markets and developed financial intermediaries such as banks. There is considerable discussion about which is more important. There is also a debate about the effectiveness of universal banking vis-à-vis specialized banking coupled with stock markets. Despite the nuances and the different routes taken. developed market economies have tended to converge toward a similar model of corporate finance. In developed economies, retained earnings or internally generated funds account for roughly 60 to 90 percent of investment financing, bank loans account for roughly 15 to 30 percent and bond and equity offerings just a few percent. In developing economies both bank loans, accounting for 25 to 35 percent, and equity markets, accounting for as much as 25 percent, play a slightly more important role in investment financing than in developed economies. While this varies over time and across countries, retained earnings remain the dominant source of funds, with bank lending next, and equities markets relatively unimportant in terms of providing finance for investment projects. In fact, Stiglitz (1993) argues that stock markets are primarily a means of sharing risk, not raising investment funds. When there are production risks, information asymmetries and costly monitoring, debt contracts with fixed repayment dates will always be preferred (by investors) to the purchase of shares with periodic reimbursement by payments of dividends that are subject to productivity shocks. Thus, bank intermediation is likely to play a significantly larger role in investment financing regardless of stage of development.

Monitoring costs are minimized with debt contracts because such costs are incurred only in the case of insolvency, while financing via shares requires continuous, ongoing monitoring. Banks and lending intermediaries have an advantage over stock and bond markets because they can be more efficient in terms of information gathering and monitoring. It is not efficient for an individual investor to undertake these costs, but banks can spread them out over many investors (depositors). Because some of the information collected on the performance of a firm becomes public, there is also a free rider problem that makes capturing payment for monitoring costs problematic. With large diversified portfolios banks can guar-

 $^{^9}$ For the classic description of the Soviet system of money and banking see Garvey (1977). For a more recent discussion of both Soviet banking and transition in the early 1990s see Tompson (1997).

antee a vield on deposits and make a credible commitment to monitoring investment projects. Thus, the informational advantage of banks as a source of external financing of investment is a strong argument in favor of emphasizing the development of the banking system as a means of enhancing capital accumulation. In fact, Wright, Buck and Filatotchev (1998) provide evidence that banks in Russia are beginning to develop oversight and monitoring relationships with loan recipients, albeit at a relatively slow pace. Banks may not be superior to stock markets at all stages of development, however, Both provide diversification and management of liquidity risk, provide a monitoring mechanism, which improves the management of resources, and provide means of evaluating the returns on investment activities, all of which contribute to the efficient allocation of resources. Competition among banks and between banking intermediaries and stock markets leads to lower intermediation costs and contributes to economic growth. But competition also leads to increased probability of insolvency, credit rationing and related adverse effects on growth. The optimal level of competition is a policy issue of importance in both market economies and transition economies.

The performance of intermediation services takes a well-functioning payments system for granted. In any economy a well-functioning payments system, a reliable and flexible means of exchange and payment, is necessary for growth. While the Soviet economy payments system was reliable, it was not flexible and does not satisfy the needs of participants in a market economy. Without direct capital grants from the central budget, enterprise projects must compete for funds, either internally, from retained earnings. or externally, from bank loans or securities offerings. Outside-thepayments-system transactions such as barter are also possible, but are costly. These costs often eliminate potential productivity gains due to increases in the division of labor and thus reduce the profitability of potential projects. In a market economy a financial system with low transaction costs develops in order to reduce the opportunity cost of holding money. As a result the payments system in a market economy evolves toward a credit system managed by banking intermediaries. Technological advances continuously reduce the information costs of utilizing credit while financial assets and credit instruments gradually replace traditional monetary assets. This is reflected by increases in the weight of financial activities in gross domestic product (GDP) as economic development takes place. Thus, the velocity of narrow monetary aggregates increases after a certain stage of development and the increase in this measure of velocity is paralleled by the development of intermediation technologies.¹⁰

¹⁰Note that in very early stages of economic development the economy is increasingly monetised as transactions become more complicated and sophisticated, thus there is a secular downward trend in money velocity. However, after some threshold level of development, pressure to reduce the opportunity cost of holding money leads to the replacement of money with credit instruments and an increase in the velocity of narrow money aggregates. The strong empirical link between GDP and degree of monetisation is demonstrated by Goldsmith (1969).

DEMONETIZATION AND NON-PAYMENTS

In a transition economy changes in the velocity of narrow money aggregates must be interpreted with caution, however, Measurement problems are severe. In Russia the method for calculating GDP is being refined, defining and measuring monetary aggregates is difficult, and the amount of dollars in cash in circulation is large and difficult to measure.¹¹ Further, significant changes in the behavior of economic agents have occurred and creation of new monecredit instruments tarv and is unpredictable. rapid and Demonetisation in the Russian economy may increase or decrease velocity for reasons completely independent of financial develop-ment. For example, in 1994 the Central Bank of the Russian Federation (Central Bank of Russia or CBR) began to implement more stringent prudential regulations at the same time monetary policy was tightened. A crisis in the inter-bank lending market in 1995 led financial intermediaries to innovate, creating new types of securities to facilitate payments.¹² There was a rapid increase in the use of cash surrogates including barter, sometimes complicated offset arrangements (zachety), bills of exchange (veksels). and various federal, regional and local securities.¹³ There was also a rapid increase in payments arrears. While some of these activities may be considered a first step toward financial deepening, employing primitive payments and intermediation technologies with high transactions costs, such as barter and illiquid offset arrangements. is clearly a step backward.¹⁴ Only if orderly secondary markets for zachety and veksels are developed may it be interpreted as a step forward. Matters were complicated at this time as the practice of issuing credit denominated in bills of exchange allowed banks to facilitate tax evasion, disguise bad loans by converting them to veksel credits and avoid provision requirements. Lack of transparency in accounting complicated matters further as prices varied depending upon the means of payment, confounding efforts to improve corporate governance, restructure enterprises and enforce tax and other regulations.¹⁵ Corruption and illegal activities also flourished.¹⁶ By 1997-1998 money surrogates accounted for over half of industrial transactions and consolidated budget revenues. In many regions of the country this share reached 70 percent.¹⁷

¹¹Buchs (1999) reports dollarization of 10 percent of GDP. ¹²Tightening of monetary policy and higher real interest rates led to liquidity problems and banks in turn borrowed heavily on the inter-bank loan market for liquidity. Both volume and rates increased leading many banks to withdraw from the market. On August 23–24 overnight rates spiked, lending was rationed and the market collapsed. The Central Bank was only par-tially accommodating and several hundred banks failed. See OECD (1997), p. 82 for additional details.

details. ¹³ OECD (1997), Annex II discusses the development of various money surrogates. Veksels may be promissory notes or, if tradable, bills of exchange. They perform a much broader role, however, serving as the equivalent of debt instruments like certificates of deposit, commercial paper, simple IOUs and bonds. ¹⁴ While OECD (1997), Chapter 2 describes the introduction of new securities and means of payment as important innovations and monetary and institutional changes at this time in a positive tone, the chapter concludes with a section titled "Commercial banking in the Russian Federation: the first signs of stability or impending crisis?" Conditions deteriorated rapidly from the time of printing and within a year the financial system collapsed. ¹⁶ Barter and offset prices tended to be higher than veksel prices that in turn were higher than cash prices for the same commodities. See OECD (2000) pp. 91, 92. ¹⁶ See Gaddy and Ickes (2001), Woodruff (1999) and Commander and Mumssen (1998) for fur-ther analysis of non-monetary transactions and the impact upon decisionmaking in the Russian

ther analysis of non-monetary transactions and the impact upon decisionmaking in the Russian economy.

¹⁷ For additional details on demonetisation see OECD (2000), Chapter 2.

While Pinto, Drebentsov and Morozov (2000) argue for a complete dismantling of the non-payments system, there were some positive aspects.¹⁸ It in fact represented an evolutionary step in the financial development process. In response to very contractionary macro-economic policy and the elimination of direct enterprise subsidies, in a system with soft budget constraints. cash short enterprises resorted to non-cash surrogates for payments both with each other and with the Treasury. Fiscal authorities permitted and enhanced the development of non-cash instruments for fiscal purposes as a means of supporting inefficient enterprises, which could no longer be subsidized directly. As international financial institutions objected to the use of a particular instrument it was eliminated, but quickly replaced by another nearly equivalent instrument.¹⁹

The share of non-cash transactions varied by industrial branch, but clearly increased through the 1990s. as indicated in Figure 1 and Table 1. The increase in offset arrangements in 1996-1998 also paralleled the increase of enterprise payments arrears, as they became the dominant form of non-cash payments. While it may be argued that offset arrangements prevented a further contraction in the economy and to some extent provided liquidity (some offsets were tradable) they also were very inefficient as a means of payment since transactions costs were extremely high and they facilitated the continuing distortion of relative prices.²⁰ With the development of alternative credit instruments barter should decrease over time.

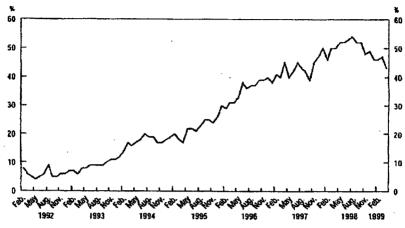
There are three causes noted for the Russian demonetisation: (1) barter occurred between enterprises that had Soviet era links and was facilitated by trade institutions that act much like Gossnab²¹ did, (2) macro-economic policy, the elimination of directed credits and high interest rates, increased the opportunity cost of money, encouraging financial innovation and the creation of non-money means of payments, and (3) barter and varying prices for differing means of payment facilitated tax avoidance. Clearly all three reasons contributed to the demonetisation, but by 1999 world oil prices and export earnings increased, and interest rates came down, all providing greater liquidity to the economy overall, and the need for monetary surrogates declined. The banking system stabilized and transaction levels within the payments system returned to more normal levels. While stable, the system is still far from liberalized.

¹⁸ Note that Pinto, et al. (2000), p. 1, defines non-payments as (1) arrears and (2) all forms of non-cash settlements including barter, veksels or promissory notes and tax offsets whereby government spending arrears and overdue tax payments are mutually cancelled. I focus on non-

or non-tash settements including bares, tensors of promising notes in the factors includes includes of provide the payments are mutually cancelled. I focus on non-cash payments or cash surrogates since these actually are a means of conducting payments, ei-ther at a discount or premium, which may compete with payments within the banking system. ¹⁹ For example, treasury tax offsets were employed in 1994–1996 then replaced by direct mon-etary offsets in 1996, 1997, which were replaced by reverse monetary offsets in 1997, 1998, which in turn were replaced by targeted financing. See Pinto, Drebentsov and Morozov (2000). ²⁰ It is also important to note that a large portion of the increase in arrears was due to the accumulation of penalties and fines on enterprises for late payment of taxes and payments to the government. Government-organization to government-organization payments arrears do not accrue fines and penalties and thus the proportion of enterprise arrears to government as a pro-portion of total arrears increased. Penalties and fines amounted to 65 percent of all debt to the Federal budget by the end of 1997. While the initial payment arrear is viewed by some as an increase in "soft credit" to the enterprise sector, the accumulation of fines and penalties prob-ably should not be. See Mumssen (1998) and OECD (2000). ²¹ Gossnab, the State Committee on Material and Technical Supply, was one of the most im-portant state committees instrumental in developing, coordinating and enforcing the central

portant state committees instrumental in developing, coordinating and enforcing the central plan during the Soviet era.





Source: OECD (2000) p. 85. Original Source: Russian Economic Barometer.

TABLE 1.—TYPES OF PAYMENTS BY LARGE FIRMS AND NATURAL MONOPOLIES BY INDUSTRIAL BRANCH, DECEMBER 1998

	Cash	Offsets	Securi- ties	Barter	Other	Total
All firms	43.4	29.5	11.5	7.5	8.1	100
Electricity	19.5	45.2	16.7	4.1	14.5	100
Fuels	39.4	36.5	15.2	4.7	4.2	100
Machine-building and metalwork Construction and construction	14.1	37.4	31.3	13.5	3.7	100
materials	26.0	44.6	7.8	18.5	3.1	100
Transportation	37.4	45.8	11.0	0.3	5.5	100
Light industry and food	69.8	12.7	4.0	7.6	5.9	100
Agriculture	65.1	3.3	0.5	28.6	2.5	100
Trade and public catering	84.4	11.6	3.2	0.3	0.5	100

[As a percentage of total payments]

Source: OECD (2000), p. 87. Original source Goskomstat.

FINANCIAL REPRESSION AND LIBERALIZATION

McKinnon (1973) defines financial repression as any policy or regulation that prevents financial intermediaries from operating at a level in accordance with their technological potential. Typical repressive policies of the banking system in a market-type economy are forms of implicit or indirect taxation of financial intermediaries or transactions. The most common are bank reserve requirements with low or zero yield, ceilings or controls on lending and deposit rates, and the inflation tax on monetary assets in general. The costs include the loss in efficiency due to the distortions in interest rates, credit rationing and overall discouraged savings due to low deposit rates.²² In addition, the market structure itself must be considered as a potential limiting factor on the development of the financial system. Stiglitz (1994) emphasizes market failure and the need for government intervention of various sorts to improve efficiency in the financial system.²³ There is considerable debate in the literature on both the optimal level of competition and the need for and type of government intervention, however.²⁴

With virtually no lending activity, strict controls on deposit accounts and rate ceilings and complete monopolization of the banking system during the centrally planned era, the Russian banking system has evolved from what may be considered an extreme in terms of financial repression. To complicate matters Russian bank management was not prepared to operate the newly created commercial banks as profit maximizing banks in a market economy.25 Russian banks were not able to identify potentially profitable investments, due to the lack of business reputations and reliable credit histories, predominance of insider control (politically supported) in enterprises, weak contract enforcement and an underdeveloped legal system. Although bank managers are slowly developing the skills to engage in effective project appraisal and monitoring, they have weak incentives to develop these skills as long as there are alternative, cheaper sources of high profits, like government securities.

The benefits of liberalization seem obvious, but the pace and timing of liberalization are critical. Many argue that the fiscal deficit must be under control prior to liberalization because significant increases in interest rates to dampen growth or control inflation may lead to adverse selection in bank lending activity, thereby threatening the soundness of the banking system. In addition, many argue that a perfectly competitive banking industry will underprovide financial services because of the public good nature of the information on profitability of entering the deposit market by individual banks and the high cost of entering the market. Thus, Hellman, et al. (1997) argue that "mild" financial repression may be beneficial because it creates rent opportunities that enhance incentives for financial deepening and deposit mobilization.²⁶ And Van Wijnbergen (1983) argues that informal financing that developed early in many

 $^{^{22}}$ The costs can be significant. In a study of twenty-six developing countries the inflation tax was estimated at 2.8 percent of GDP and ceilings on interest rates generated a tax equivalent to 1.8 percent of GDP. See Berthelemy and Varoudakis (1996).

to 1.8 percent of GDP. See Berthelemy and Varoudakis (1996). ²³Stiglitz (1994) notes seven types of market failure: (1) monitoring as a public good, (2) externalities of monitoring, selection and lending, (3) externalities of financial disruption, (4) missing and incomplete markets, (5) imperfect competition, (6) Pareto inefficiency of competitive markets, and (7) uninformed investors. He then provides a taxonomy of government interven-tions which may be appropriate. Levine (1996) provides a framework for policy analysis and gov-ernment intervention. Harwood and Smith (1997) provides an extensive look at financial development strategies for developing countries. ²⁴ For example, Jaramillo-Vallejo (1994) takes issue with Stiglitz's arguments for government

intervention. ²⁵ Tompson (1997) argues that at least through the mid-1990s Russian banks really did not bank. They did little to collect deposits and did little lending except to the state. A large share of their liabilities were free and a large share of their assets were idle. Banks maintained a high level of excess reserves even during highly inflationary periods. This activity is not nec-essarily financial repression via government policies, but by poor management. Iskyan and Besedin (2000) call Russian banks "bank-like institutions" and Schoor (2001) maintains most banks are simply treasury operations of their enterprise owners. ²⁶It is difficult to ascertain what level of repression is optimal. E.g., mild financial repression

may include deposit rate ceilings, which enhance franchise values. However, if ceilings and other regulations diminish competition and hinder the efficient allocation of resources diminishing growth then liberalization is in order.

developing economies may actually be more efficient than intermediated financing in a liberalized system. But this is true only if the informal sector has higher quality information on risk and lending opportunities. While all three caveats may apply to the Russian economy to a limited extent, recent research indicates that the effects of financial liberalization on economic growth are "not subsumed by other economic reforms or proxies for the develop-ment of capital markets and financial intermediation."²⁷ Therefore liberalization, per se, should proceed as quickly as possible.

A liberalized financial system contributes to overall economic growth by increasing savings. Financial markets and banking intermediaries improve the mobilization of savings, providing higher than expected yields and greater diversification of risk. This in turn encourages financial savings rather than the purchase of consumer durables (or real assets with a low rate of return). Such a reorientation of savings reinforces the deepening of the financial system.²⁸ This pattern may not be observed in the transition economy as pent up consumer demand is released in the initial period. The financial crisis in Russia (as well as other transition economies) then introduced skepticism on the part of savers and weakened the credibility of the financial system overall. The fact that there is no universal deposit insurance system for Russian savers also discourages savings. Because Sberbank is the only institution with state support perceived to be equivalent to deposit guarantees, households transferred deposits from independent, private commer-cial banks to Sberbank.²⁹ The share of total household deposits held by Sberbank increased from just over 50 percent in mid-1994 to over 85 percent by January 1999, then declined slowly to just over 75 percent in April 2001. One reason that other commercial banks, private and state-owned, cannot compete in the deposit market is because they lack the deposit guarantees that Sberbank offers implicitly. Thus, to increase savings government policy should reduce the risks to depositors associated with saving via bank deposits by developing a system of deposit insurance and by eliminating the household deposit monopoly Sberbank enjoys. There has been tremendous resistance to this, however, as evidenced by the continuing discussion of the proposed federal laws on deposit insurance.³⁰

A liberalized system also improves the allocation of resources, increasing capital productivity and economic growth. The inherent difficulties of resource allocation, with productivity risks, insufficient and imperfect information on the return on investment and

 $^{^{27}}$ Bekaert and Harvey (2001), p. 11. 28 Actually, income and substitution effects make the a priori outcome on growth indeterminate

²⁹ The August 1998 crisis led Sberbank to lose half of its net assets when the government de-faulted on GKOs. The government bailed out Sberbank, whereas depositors at other failing insti-tutions (Menatep, Most, SBS-Agro, Inkombank, Mosbusiness Bank, and Promstroibank) were re-quired to transfer deposits to Sberbank at unfavorable terms. See Buchs (1999) p. 693 and Schoers (2001).

Schoers (2001). ³⁰ The Antimonopoly Ministry, however, has initiated three proceedings against Sberbank and the CBR since the beginning of this year. However, all decisions taken concerning the promotion of competition in the banking sector must be submitted to the CBR, which "seems to deliberately hinder any attempts to achieve this task." *Russian Economic Trends*, (April 2001), p. 6. It should also be emphasized that Sberbank's advantages in the deposit market also contribute to an inefficient allocation of capital at the macro-level since its assets are held predominately in *Computer Source States*. government securities or loans to large state-owned enterprises, replicating investment patterns of the Soviet era.

entrepreneurs' skills, provide opportunities for creation of financial intermediation services. Financial institutions provide diversification of risks associated with productivity and demand shocks, manage liquidity risks and evaluate potential projects and entre-preneurs. These activities increase the rate of economic growth by increasing the resources invested in productive activities, increasing technological specialization,³¹ reducing the premature liquidation of capital³² and increasing productive efficiency. Evaluating projects and entrepreneurs, essentially assessment and monitoring, has very large fixed costs which financial intermediaries can spread over many investors, no one of which would be willing to pay the initial fixed costs. The intermediary can evaluate more projects, collect more information and provide it in a standardized form to large numbers of investors who then choose among varying levels of risk depending upon their risk preference. As a result of better assessment of risk and better information, more resources can be directed toward the most productive or profitable projects. Monitoring and diversifying systemic shocks also allows an in-crease in resources invested in productive, but riskier projects, therefore increasing the overall productivity of the economy's capital stock.

The working of financial intermediaries described above stands in stark contrast to the allocation of capital in the Soviet system in which crude indicators of effectiveness, imperfect information and political forces guided central planners' investment decisions. The Russian banking system is painfully evolving from one which served as the agent of central planners toward a system of market driven, profit oriented financial intermediaries. But it is far from that goal. First, the financial services industry is far from competitive. Although the number of commercial banks is large, just over 1,300, activity is highly concentrated. As of April 2001, Sberbank accounted for over 75 percent of household savings deposits. Sberbank accounts for about 20 percent of lending and Vneshtorg Bank accounts for about 5 percent. These banks have very little lending experience and will likely favor large enterprises in priority sectors not unlike the Soviet pattern of investments. As Table 2 indicates total domestic credit as a share of GDP is about 60 percent of the comparable market economy and private sector credit relative to GDP is less than 50 percent of the market economy benchmark. Second, while the number of privately-owned banks is decreasing, the state also continues to found new banks, Rosiiski Bank Razvitiya (the Russian Development Bank) in 1999 and Rosselkhozbank (the Russian Agricultural Bank) in 2000, which are likely to have different investment objectives, enjoy the implicit guarantees of the state, and therefore will likely provide directed, soft credits to industry and agriculture. Given that private sector lending activity is lagging dramatically (as indicated in Table 2) a more appropriate policy may be the creation of institutions subject to market discipline, but designed to meet the financing needs of

³¹To reduce the risk of disruption in the demand for products produced with highly specialized technologies (technology risk) firms often invest in less specialized and therefore less productive, flexible technologies. Therefore, diversification via activities of financial intermediaries, allows more investment in highly specialized, more productive technologies.

³²The law of large numbers reduces the probability that all depositors/investors withdraw at the same time.

small and medium enterprises in the private sector. On the positive side, smaller, regional banks, which were less affected by the 1998 crisis, are in a position to expand their activities.³³

TABLE 2.- TOTAL DOMESTIC CREDIT AND PRIVATE SECTOR CREDIT AS PERCENT OF GDP AND MARKET ECONOMY BENCHMARK

	1994	1999
Total domestic credit, percent of GDP	31.7	32.7
Market economy benchmark, percent	52.0	51.3
Proportion of benchmark level	61.0	63.7
Private sector credit, percent of GDP	12.1	11.5
Market economy benchmark, percent	44.2	43.3
Proportion of benchmark level	27.4	26.6

Source: Derived from Tables 1 and 2 of Fries and Taci (2001). Benchmarks are based upon regression estimates of each ratio as a function of GNP per capita for a sample of 127 market economies. See Fries and Tacci (2001) for details.

Third, information on enterprise performance, potential investment returns and entrepreneurial talents is very limited and of poor quality regardless of whether intermediaries or individual investors collect the information. In fact, even official, legally required information is often incorrect.³⁴ Fourth, most banks are acting primarily as treasury operations of their owners or acting implicitly as an agent of the government in lending activities, in effect continuing the history of centrally directed capital grants, but now with a weak expectation of repayment. As indicated in Tables 3 and 4 loans (claims on the private sector) account for roughly one-third of the banking sector's assets. Tompson (1997) notes in 1995 that only 49.5 percent of assets were nominally income earning, probably much less if non-performing loans were excluded.³⁵

The distribution of assets indicates moral hazard issues remain a serious problem. It was suggested above that the introduction of deposit insurance would enhance competition, increase aggregate savings and improve the allocation of liabilities within the banking system. A second, perhaps more important reason to introduce a system of risk-based deposit insurance, is that an explicit system of guarantees is a more efficient means of reducing moral hazard and improving resource allocation than the current system of implicit guarantees. Since the financial institution itself determines the size of the implied guarantee, the institution can expand the implicit subsidy by doing more and riskier lending. Explicit riskbased guarantees can be limited, however. By pricing the deposit insurance in accordance with the institution's risk profile, moral

³³ See Schoors (2001)

³³See Schoors (2001) ³⁴Iskayan and Besedin (2000), p. 5 reports that "a CBR audit of financial statements submitted to it found that roughly half of a representative group of banks systematically falsified reports." In addition, even if information reported is correct, Russian accounting standards make it difficult to understand an enterprise's condition and inter-enterprise payments problems, and non-payments, make it difficult for managers to assess their own enterprise's performance, much less to convince potential lenders/investors. ³⁵Thomson (1997), p. 1176. Note the level of lending was low and very short term, typically 30 to 60 days. No doubt the high and variable inflation of the time was a significant deterrent to lending. Although inflation has been reduced banks still tend to lend short term to finance transactions (e.g., imports) or acquisitions rather than longer term investment projects.

TABLE 3.—CONSOLIDATED ACCOUNTS OF CREDIT INSTITUTIONS

[In million rubles, December 31]¹

	1995	1996	1997	1998	1999	2000
Reserves ²	R36,712.3	R47,123.4	R72,974.5	R67,762.9	R160,017.3	R301,124.5
Foreign assets	46,149.4	72,874.8	72,717.3	219,593.0	370,651.3	476,581:8
Claims on general government	62,638.5	150,721.3	194,689.0	259,401.6	437,675.2	526,020.7
of which, claims on governments of constituent territories of RF and					40.070 5	10 501 0
local self-government bodies	721.7	2,790.4	18,691.8	24,445.6	19,870.5	18,531.3
Claims on non-financial state enterprises	62,460.4	69,371.4	33,217.4	33,078.8	46,901.2	73,972.6
Claims on non-financial private enterprises and households	133,786.8	157,337.2	236,438.4	345,962.6	521,644.8	867,132.2
Claims on other financial institutions	525.0	242.0	8,075.9	7,270.7	13,060.2	14,525.0
Total assets	342,272.4	497,670.1	618,112.5	933,069.6	1,549,950.0	2,259,356.8
Demand departs	69.331.9	87.303.0	162,532.1	149,470.7	249,673.7	443,020.9
Demand deposits Time, saving and foreign currency deposits	124,496.6	164,898.7	158,714.8	283,996.1	456,527.8	680,646,9
of which, deposits in foreign currency	55,255.7	69,447.7	80,454.7	190.872.7	290,212,9	420.090.5
Deposits, access—temporarily restricted ³			6,270.5	22,595.1	10,223.6	6,373.3
Money market instruments	11.858.5	30.372.2	42,435,9	43.311.9	107,817.2	191,059.0
Foreign liabilities	29,969.8	58,892.5	104,197.4	203,136.8	222,626.6	248,920.7
General government deposits	9,741.1	11.557.2	18,236.1	20,676.5	28,671.8	54,547.2
of which, deposits of governments of constituent territories of RF and	-,	,	,	·		
local self-government bodies	4,251.9	4,210.6	9,139.9	10,148.2	15,626.8	36,641.8
Obligations to monetary authorities	8,005.1	6,798.8	8,779.8	71,893.6	200,121.4	205,439.4
Capital accounts	66,687.8	123,817.5	143,909.4	157,594.7	293,199.4	437,265.2
Sundry (balance)	22,181.5	14,030.3	— 26,963.5	- 19,605.7	— 18,911.6	- 7,915.9

¹ From the consolidated balance sheets of credit institutions, Sberbank Savings Bank, and Vneshekonom Bank. ² Reserves of credit institutions comprise cash reserves in vaults and their funds in accounts with the CBR. ³ Deposits with temporarily limited access comprise funds in accounts with credit institutions which cannot be used by their holders within a certain time limit in accordance with a contract or transaction terms or current conditions of a credit institution's activity.

Source: The Bulletin of Banking Statistics, various issues, CBR.

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TABLE 4.—SELECTED ASSETS AND LIABILITIES OF COMMERCIAL BANKS, INCLUDING SBERBANK

	Total as- sets	Claims on the gen- eral gov- ernment	Claims on the private sector	Bank sav- ings by Russian citizens (ruble household deposits)	Foreign currency deposits	Foreign li- abilities
1995	R342.3	R62.6	R133.8	R70.6	R55.3	R30.0
1996	497.7	150.7	157.3	118.4	69.4	58.9
1997	622.7	191.5	225.9	148.2	80.5	104.2
1998	933.1	259.4	346.0	149.5	190.9	203.1
1999	1,549.7	437.7	521.6	211.1	290.2	222.5
2000	2,259.4	526.0	867.1	304.2	420.1	249.0
2001 (April)	2,472.0	561.3	989.2	342.5	477.1	256.4

[In billion rubles]

Source: Russian Economic Trends, June 2001, Original Source: Goskomstat, CBR,

hazard can be limited and discrepancies between depositors', insurers' and lenders' risk tolerances are narrowed. Thus, a system of risk-based deposit insurance benefits not only individual depositors, but also reduces system risk by reducing moral hazard. A prerequisite for an effective system of risk-based deposit insurance is the ability to measure risk, i.e., accurate financial information and uniform accounting standards providing greater transparency of bank activity. Legal reforms in the Russian banking system are gradually providing the foundations for these prerequisites, but currently, accurately measuring risk exposure of individual banks is difficult if not impossible.

The financial system is not passive in a market economy, but accelerates growth in the real sector. The organization of financial intermediation networks is expensive, however. The level of financial sector development and economic activity is inter-related. Because the bulk of costs in establishing an intermediation network are the initial fixed costs, threshold effects are typical. An economy develops a specific type of intermediation system corresponding to the overall level of economic activity, which may be proxied by the level of per capita income. Then as per capita income increases, at some point the benefits of expanding or innovating within the intermediation system are perceived and capturable, the next stage of financial development begins. The benefits of deepening the financial system have a positive effect on overall economic growth and create the possibility of a circular relationship between financial development and growth. In this case a "virtuous circle" in which high income levels support development of the financial system and development of the financial system makes possible higher rates of growth. On the other hand, an underdevelopment trap or low-level equilibria may result. In an underdeveloped economy with few growth prospects, low-income levels make the development of the financial system impossible, which in turn hinders the allocation of resources to investment and further weakens growth.³⁶ When financial institutions are inadequately developed selecting more flexible, less specialized, and therefore less productive technologies mitigates production risk. But reduction in risk by technological flexibility in production weakens the incentives to develop financial markets and banking intermediaries that involve substantial fixed costs. This results in a low level equilibrium with an underdeveloped financial system.³⁷ A more developed financial system enables selection of more specialized, more risky but more productive production technologies. And, the resulting increase in risk is more easily diversified and mitigated by the existence of a developed financial system.

Before turning to a description of the Russian banking system it is important to realize that the banking industry in a market economy is typically not a perfectly competitive industry, but characterized by varying degrees of imperfect competition. Thus, in a transition economy policies should encourage competition. recognizing that the optimal level of competition is unclear. Natural imperfections in the banking system in a market economy arise due to the information intensive functions of the system. The activity of gathering and processing information on investments involves large fixed costs, which leads to imperfect competition and market segmentation. Because lenders (savers) and investors (borrowers) are individuals there are information generally not the same asymmetries since investors have better access to information about the quality and likely success of investment projects than lenders do. Therefore the functioning of financial markets is characterized by adverse selection and adverse incentives. Although banking is often monopolistically competitive Stiglitz (1994) argues greater competition is a two edged sword. Compression of intermediation margins via greater competition erodes profits and makes the system more vulnerable to productivity shocks as it increases the possibility of insolvency. Unlike other sectors insolvency in the banking sector can have wide spread negative repercussions on the rest of the economy as the volume of lending and activity in the real sector decline. Also, when a bank goes bankrupt the information it has collected on its particular clients or sector of lending activity may simply disappear. If so this leads to borrower rationing, which has a negative impact upon growth-the opposite effect that we would expect from compressing intermediation margins. The optimal level of competition, or the optimal intermediation margin, is not that of a perfectly competitive market. Reaching that optimal level is difficult in a well-functioning market environment and particularly difficult in a transition environment like that of Russia today.

³⁶ See Greenwood and Jovanovic (1990), Levine (1992b), Townsend (1983).

³⁷See Saint-Paul (1992).

SYSTEM CHARACTERISTICS AND POLICY FRAMEWORK

While the overall level of financial development in a transition economy is difficult to measure, traditional indicators of financial development indicate the Russian financial sector is underdeveloped vis-à-vis market economies even after the crisis and stabilization of the system. As Table 5 indicates banking system as-sets as a percentage of GDP has increased from 22.2 percent in 1995 to 32.0 percent in 2000. This ratio for a market economy is typically in the 50 to 60 percent range.³⁸ Loans to GDP has in-creased from 8.7 percent to 12.3 percent. Banking system capital as a percentage of GDP has fluctuated, but averaged about 5.5 percent, in the range of a market economy, typically 5 to 6 percent.³⁹ While these aggregate measures seem to be improving it should be noted again that total domestic credit relative to GDP is about 60 percent of the comparable market economy and private sector credit relative to GDP is well less than half that of the comparable market economy (see Table 2). Further, these proportions have not changed during the last 5 years. Importantly the aggregate measures conceal the fact that the Russian banking industry is highly concentrated. At the end of 1997, just prior to the 1998 crisis, the top 5 banks accounted for 36 percent of total assets, and the top 50 accounted for 71 percent.⁴⁰ Also, as mentioned above, Sberbank holds roughly 75 percent of household deposits. Including enterprise deposits the top 5 banks accounted for 58 percent of ruble deposits and the top 50 banks accounted for 65 percent at the end of 1997.41

	1995	1996	1997	1998	1999	2000
Assets/GDP	22.2	23.2	25.1	34.0	32.6	32.0
H.H. deposits/GDP	4.6	5.5	6.0	5.5	4.4	4.3
Loans/assets	39.0	31.6	36.3	37.1	33.7	38.4
Loans/GDP	8.7	7.3	9.1	12.6	11.0	12.3

TABLE 5.—BANKING SYSTEM CHARACTERISTICS (END OF PERIOD) [In percent]

Source: Calculated from Tables 2 and 7.

Since 1998 bank restructuring has taken place, albeit at a pace that some see as too slow. The crisis led to a dramatic decline in bank capital and a deposit run on the large Moscow banks leaving the majority of them insolvent. The CBR adopted emergency measures forcing six large commercial banks to transfer the bulk of household deposits to Sberbank, with any remaining deposits fro-

 ³⁸ Great Britain and Japan are extremes with bank system assets as a percent of GDP at 270 percent and 159 percent in 1990 and 1993 respectively. Warner (1998), Table 2.
 ³⁹ Note though that GDP has fluctuated greatly and published data are sometime suspect. Therefore these ratios should be interpreted with caution. See Iskyan and Besedin (2000) p. 21.
 ⁴⁰ Russian Federation (1997), p. 88.
 ⁴¹ Russian Federation (1997), p. 88.

zen.42 This prevented further withdrawals by the population and stabilized the payments system. However, the CBR was unable to move quickly to close large insolvent banks, which were at the heart of the influential Financial Industrial Groups, or to extend rehabilitation credits in a timely manner. Although the bank had the power to revoke licenses and take over the management of insolvent banks, the attempts to do so immediately after the crisis were unsuccessful.43 Legal delays and political maneuvering allowed assets to be transferred from the failing institutions to newly created shell banks and balance sheets were unilaterally restructured. Although the Agency for Restructuring Credit Organizations (ARCO) was established rather quickly, in November 1998, its effectiveness also was limited in the early period after the crisis.⁴⁴ It was capitalized with 10 billion rubles, the state holding 51 percent of its shares and the CBR 49 percent, an amount estimated at about 10 percent of that necessary for a complete recapitalization of the banking system.45

By mid-2000 the results of ARCO's modest efforts were becoming visible.46 Temporary administration was imposed upon Most Bank in May and Vneshtorg Bank purchased it in October 2000. SBS-Agro and Mezhkombank were bankrupted. Bankruptcy proceedings continue with Promstroibank and Menatep, Mosbusiness Bank and Imperial Bank remain in receivership, or are battling for survival.47 The first bank to emerge from ARCO management, in 2001, is Chelyabkomzembank, purchased by Rosselkhozbank the wholly state-owned bank created in April 2000. A restructuring plan for Uneximbank was approved and shareholders approved its merger with Rosbank (the bridge bank of Rosiiski Kredit).48 In addition, the Central Bank is expected to divest itself of ownership in all banks. It sold its interest in five Russian-owned foreign-based banks (rosagranbanks) to Vneshtorg Bank this year and will sell its ownership in Vneshtorg Bank by 2002 and in Sberbank by 2004.

The foundation of the Russian banking system is provided by two fundamental laws, the Law on Central Bank of the Russian Federation and the Law on Banks and Banking Activity and by various parts of the civil code, in particular bankruptcy provisions and the tax code. The CBR carries the responsibility for not only mone-

nomic Trends (November, 2000), p. 17. ⁴⁴ It lacked funding and authority. Its first board meeting was held in March 1999. See Rus-sian Economic Trends, March 1999, p. 3. ⁴⁵ Russian Economic Trends, December, 1998, p. 3 ⁴⁶ While there are tangible results of ARCO's efforts critics maintain they are negligible since there here are tangible results of ARCO's efforts critics maintain they are negligible since

these banks are very small compared to the overall banking system and these bailouts may be seen as benefiting incompetent managers and therefore increasing moral hazard. The overall benefit to the banking system remains an open question.

⁴⁷See Russian Economic Trends, various issues, (2000), (2001). ⁴⁸Note that Uneximbank may be the only bank to be successfully restructured without assistance from ARCO or any other state agency. Russian Economic Trends, October 2000, p. 13.

⁴²These banks were Inkombank, SBS-Agro, Moct Bank, Rosiiskii Kredit, Menatep and Promstroibank. Also see OECD (1997) Annex I for a discussion of the largest 23 banks prior to the crisis.

⁴³ For example, the CBR's initial attempt to revoke the license of Inkombank was contested in court and it was not until June 2000 that the revocation of the license was allowed to stand and a Moscow arbitration court named external managers to liquidate the bank. See Iskyan and and a Moscow arbitration court named external managers to liquidate the bank. See Iskyan and Besedin (2000) for a chronology of this case and a primer on asset stripping. Also see Schoors (1999). Another notable case is that of Promstroibank. In July 1999 the CBR withdrew Promstroibank's license and it was declared bankrupt. Various government officials declared their support of Promstroibank, the bankruptcy procedures were halted and the license suspen-sion declared illegal, even though the bank was insolvent. In November 2000 an arbitration court ruled the CBR's actions were legal and proceedings were to continue. See *Russian Eco-nomic Trends* (November, 2000), p. 17. 44 It lacked funding and authority. Its first board meeting was held in March 1999. See *Rus*-

tary policy, but also bank licensing and prudential and regulatory oversight. Although the banking laws originated from the Soviet era, they have been amended many times. The 1995 amendments gave the Central Bank greater independence and made it the lender of last resort.49

In 1999 Russian authorities provided a stronger foundation for bankruptcy and bank rehabilitation, and the framework to accelerate the process of bank restructuring by passing two new laws. The Law on Insolvency of Credit Organizations strengthened the CBR's intervention powers and the Law on Restructuring of Credit Organizations (June 1999) gave sole responsibility for restructuring banks to ARCO, provided for an equitable and transparent mechanism for shareholder write downs, and empowered ARCO to invalidate transactions made with the intent to defraud depositors and creditors of insolvent banks.⁵⁰ In spring 2001 the Duma passed three bills (incorporating most of the Putin government's proposal referred to as the Gref program or the "IMF package") which gave the CBR additional supervisory powers, introduced the legal concepts of a banking group and holding, streamlined the procedures for bankruptcy of credit organizations and revised the responsibilities of bank founders, shareholders and managers.⁵¹ Inter alia, specific legal criteria were introduced to facilitate the CBR's actions to withdraw banking licenses and initiate bankruptcy procedures which are expected to eliminate the legal wrangling typical of most recent actions initiated by the CBR. Given the new legislation it appears that a second phase in bank restructuring may now be undertaken.52

RECOVERY OF BANKING ACTIVITY

Only recently has macro-economic performance allowed banks to rebuild reserves and slowly increase the level of confidence of depositors and investors. Growth in the banking sector has been driven by the overall positive developments in the real sector and increasing demand for banking services. Bank loans increased 66 percent in 2000 and nine out of ten banks were reporting profits. By the first quarter of 2001 assets of commercial banks reached 93 percent of the pre-crisis level in real terms, and hard currency assets were 43 percent of total assets.⁵³ As personal incomes recovered, household deposits in the banking sector have increased and the share held by Sberbank has stabilized at just over 75 percent in June 2001. (Also see Figure 2.) By spring 2001 lending had increased to about 40 percent of assets in the Russian banking sector. This is improved, but still very low compared with the 80 to 90 percent typical of a bank in a developed market economy. Further, Sberbank and Vneshtorg Bank, the two largest state-owned banks, accounted for most of the lending to the real economy.⁵⁴

⁴⁹ For additional details see OECD (1997), pp. 83, 84.

⁵⁰ IMF (1999).

⁵¹See Iskyan and Besedin (2001), Appendix B for a summary of the Gref program and the ⁵² Russian Economic Trends, June 2001, p. 8.
 ⁵³ Russian Economic Trends, June, 2001, p. 7.
 ⁵⁴ Russian Economic Trends, May 2001, p. 6.

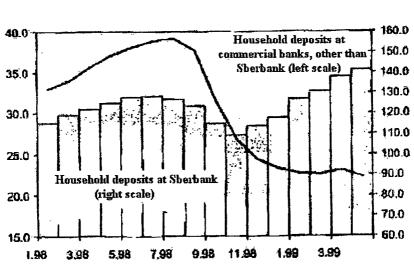


FIGURE 2.—HOUSEHOLD DEPOSITS IN SBERBANK AND OTHER COMMERCIAL BANKS

fin billion rubles]

Although lending has increased, Russian commercial banks still hold unusually large amounts of non-income producing excess re-serves, illustrated in Figure 3. Due to the high risk of lending to the productive sphere of the economy loans amount to less than 45 percent of assets. Nearly 15 percent of assets are held in noninterest bearing accounts at the CBR. Given the high inflation environment this obviously impacts bank profitability. The lack of lending to enterprises, investment into the real economy, also limits economic growth. This is not a new phenomenon, however. Throughout the 1990s banks held very low levels of income earning assets.⁵⁵ This is attributable to the inability of bank managers to find, evaluate and monitor viable investment projects, and extreme caution with respect to the possibility of bank deposit runs and risks associated with inter-bank lending. The government has pressured banks to increase lending and, as mentioned above, created two new banks, Rosiiski Bank Razvitiya (the Russian Development Bank) and Rosselkhozbank (the Russian Agricultural Bank), to expand lending in critical areas.⁵⁶

Increased lending is a double-edged sword, however. The rapid increase in bank lending requires increased diligence upon the part of bank regulators. Although bank capital increased 43 percent in 2000, undercapitalization is still a serious problem.⁵⁷ Total equity

Source: Russian Economic Trends, June 1999, p. 4. Original Source: Goskomstat.

⁵⁵ See OECD (1997), pp. 85-86.

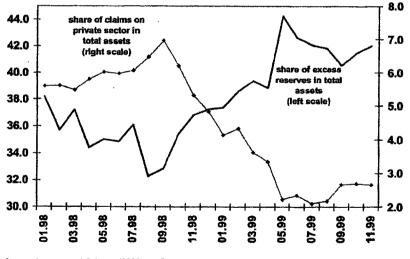
⁵⁰ See OECD (1997), pp. 85-86. ⁵⁶ Of course the consequences of such pressures are problematic to the extent that related-party lending some of which may not be market driven intermediation, and lending to state in-stitutions distorts the allocation of financial capital. Related-party lending and its consequences is very difficult to measure, however. See Iskyan and Besedin (2001) p. 15. ⁵⁷ This is for the banking system. Of the approximately 1,300 banks, the 1,115 smallest have capital ranging from \$0.1 million to \$5 million (Iskyan and Besedin (2001), p. 14). Many of these

Continued

capital is no more than 6 percent of GDP. Further, under relatively weak supervision many banks violate existing accounting rules, supplying the CBR with false financial statements. Regional offices are alleged to ignore the exaggerated statements of financial performance. According to the CBR 60 percent of banks overstated their profits and equity in official reports. At the same time CBR regional offices classified 9 percent of these banks as stable and with no faults. In addition, according to the CBR at least 20 percent of the banks classified as stable may be in difficulty.58 To improve financial reporting, in October 2000 the CBR launched the introduction of international accounting standards (IAS) for six banks. For these banks IAS-based reports will be provided in 2001. Other banks are expected to adopt IAS reporting, but over a process of many years. While adopting IAS is highly beneficial, CBR authorities at all levels must also be diligent and determined in enregulations. forcing prudential While significant legislative progress has been made, CBR regulatory efforts are still insufficient.

FIGURE 3.—SHARE OF COMMERCIAL BANKS' CLAIMS ON THE PRIVATE SECTOR AND SHARE OF EXCESS RESERVES IN TOTAL ASSETS

[in percent]



Source: Ivanova and Schoors (2000), p. 5.

institutions simply conduct treasury functions of their enterprise owner or operate as foreign exchange offices rather as banks

⁵⁸ Russsian Economic Trends, July 2000, p. 14.

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CONCERNS AND ISSUES

It is clear that Russian policymakers have made much progress in reconstructing the banking system in the aftermath of the 1998 crisis. Recent legislation has increased the authority of the Central Bank to expedite bankruptcy and restructuring programs for individual banks and the economic recovery has provided an environment for improving bank profitability. The banking system in the aggregate, however, is still far from a vibrant, sound banking system. Koch (1998) provides a framework for analysis of the banking system presented in Table 6. In each of the six categories there is substantial work to be done.

TABLE 6.---INDICATORS OF A ROBUST FINANCIAL SYSTEM

1. Legal and juridical framework
Well-defined property rights and contract law
Market contracts easily enforceable in practice
Ability to pledge and seize collateral
Well-developed bankruptcy code
2. Accounting, disclosure and transparency
Loan valuation, asset classification and provisioning practices reflecting sound assessment of counterparties Effective and regular auditing mechanisms
Information on the creditworthiness of financial institutions made publicly
available on a regular, frequent basis
Timely publication of relevant aggregate financial data (macro-economic indica-
tors, reserves, banking sector statistics, etc.)
Availability of impartial credit rating or credit information facilities
3. Stakeholder oversight and institutional governance
Capital adequacy requirements commensurate with risk
Replacement of management for poor performance
Enforceable legal liability of managers
Pervasive use of effective systems of risk management and internal control
4. Market structure
Financial sector open to qualified new entrants, including those from abroad
Share of foreign participants in total assets
Financial sector concentration ratios
Liquid inter-bank money and capital markets
Regulations permitting a full range of financial instruments
Sound and effective payment and settlement systems
5. Supervisory/regulatory authority
Independent from political interference in the daily conduct of supervision and appropriate accountability for achieving clearly defined objectives
Power to force disclosure, impose penalties, etc.
Adequate resources for staffing, training, compensation
Conducts supervision on a consolidated basis
Shares information with other supervisors
Verification of information on risk management and internal control systems and on asset quality by regular examinations or external audits Adherence to norms established by international consultative bodies (Basle
Committee, etc.), in principle and in practice Measures to address particular types of risk:
Evaluation of risk management systems

TABLE 6.—INDICATORS OF A ROBUST FINANCIAL SYSTEM—Continued

Connected lending Risk exposure and loan concentration Special attention to foreign currency and interest rate risk management and exposures Heightened scrutiny of asset quality and capital adequacy in the face of sharp asset price movements Strategy for addressing financial insolvency: Procedures for prompt corrective action or the equivalent Appropriate exit policy 6. Design of the safety net Explicit rather than implicit deposit insurance, paid for by banks and targeted especially toward protecting small depositors Appropriate allocation of losses among stakeholders Stringent conditionality for the use of public money Source: Koch (1998). Original source: Group of Ten (1997).

As mentioned above new legislation improved the legal juridical framework, but much of the legislation is untested in practice. The bankruptcy code is improved, but it is too early to tell if legal challenges and political pressures have been eliminated from the process. Accounting, disclosure and transparency is improving and the CBR's recent project on IAS is a tremendous step. However, even when bank reporting reveals problems authorities have been reluctant to take appropriate actions. For example, in the spring of this year the CBR reported "the risk exposure of Russian banks exceeds all reasonable limits."⁵⁹ But the CBR does not appear to be taking any action to ameliorate excessive risk exposure. Will the CBR be able and willing to take a more active approach in system risk management?

The 1998 crisis revealed that stakeholder oversight and institutional governance was a serious problem. New legislation was required to better define the legal liabilities of managers and enable management to be replaced during the restructuring process. Internal controls were notoriously weak and creditor rights were not clearly delineated and forcefully represented by authorities during the early phase of restructuring. Managers were able to strip the assets of banks and effectively rob depositors and creditors. ARCO still holds ownership stakes in over a dozen banks in the process of restructuring and new legislation will likely enable the process to work more smoothly in the future. However, political pressure and legal challenges will not likely disappear.

Market structure issues, ranging from the concentration of the industry, efficiency of financial products markets, relative lack of lending to the private sector, ease of entry and development of new financial institutions are a serious concern. Certain markets remain nearly monopolized. Sberbank's domination of the household deposit market gives it enormous power in the enterprise lending

⁵⁹Russian Economic Trends, April 2000, p. 6. While banks may be lending to more risky ventures there is also a serious problem in matching the term structure of assets and liabilities. Approximately 25 percent of loans are for terms of 1 year or more whereas about 14 percent of liabilities are for 1 year or more. Without a highly liquid, capital market with sufficient depth a liquidity crisis may easily develop.

market. Further, many argue there remains too much state ownership to effect competitive market-oriented behavior on the part of financial institutions. Sberbank and Vneshtorg Bank are more than 50 percent owned by the Central Bank, ARCO has a dominant share of over a dozen institutions, and the Russian Federal Property Fund owns a majority of Roseksim Bank. The creation of the Russian Development Bank and the Russian Agriculture Bank seem to move the industry toward greater participation by the state rather than less, and greater lending to state-owned enterprises rather than to the private sector. In addition, state organizations account for very large shares of deposits and assets for many banks. All of which provides tremendous opportunity for political pressures to influence bank behavior. One positive factor is that the Duma has required the Central Bank to divest itself of ownership of commercial banks by 2005. Exactly how this is done is of critical importance. To date the Central Bank has sold its stake in five rosagranbanks to Vneshtorg Bank—ownership remained in the state sector. While this does remove one conflict of interest and enables the Central Bank to take a slightly greater arms length view of these banks, the state still has ownership of them and political pressures are only one small step further away.

In addition, money and capital markets lack depth and breadth, which in turn may allow an individual, apparently healthy, participant to precipitate a market wrenching liquidity crunch.⁶⁰ In 1995 the Central Bank was slow to provide additional liquidity and nearly 200 banks failed. Can the Central Bank identify participants with excessive risk exposure and limit their participation to dampen system risk? Tough supervisory and prudential regulation is required. Given the admissions of rather lax enforcement of existing regulations, not so stringent enforcement of loan classification and provisioning requirements and the propensity for individual banks to distort information in the reporting process, serious questions remain.

Finally, the safety net for depositors, an explicit, universal deposit insurance program, paid for by the banks, but targeting household depositors is critical. It is the foundation for creating greater confidence in the banking system and increasing the amount of savings mobilized and available for investment. It also allows smaller banks to compete with Sberbank for deposits, promotes competition, reduces moral hazard and diversifies system risk. Yet the Duma, after much debate and many readings has failed to act.

In summary, tremendous change has taken place in the Russian banking system through the 1990s and since the 1998 crisis. The overall economic environment has improved and supported the recovery of the financial system (see Tables 7 to 9). It is an open question however, whether or not the systemic changes and the attitudes of regulators and policymakers have changed sufficiently to prevent a banking crisis comparable to that of 1998.

⁶⁰ For example, in May 2001 Infobank, a creditworthy institution with many large retail customers, nearly went bankrupt defaulting on payments on the inter-bank credit market. This could have precipitated a liquidity crisis similar to that of 1995. *Russian Economic Trends*, June 2001.

TABLE 7.—SELECTED ECONOMIC ACTIVITY

	Nominal GDP (In billion rubles)	Real GDP, (sea- sonally adjusted) (1997 = 100)	Nominal con- sumption of goods and serv- ices (In billion rubles) ¹	Real consump- tion of goods and services 2 (1995 = 100)	Nominal expend- itures on new construction and equipment (In billion rubles)	Real expendi- tures on new construction and equipment (1997 = 100)
1995	R1,540.5	102.6	R664.8	100.0	R267.0	128.5
1996	2,145.7	99.1	950.1	97.9	376.0	105.3
1997	2,478.6	100.0	1,124.0	100.9	408.8	100.0
1998	2,741.1	95.1	1,339.9	95.5	407.1	88.0
1999	4,757.2	100.2	2.191.7	82.7	670.4	92.7
2000	7.063.4	108.6	2.911.4	91.0	1.165.2	108.8
2001 (April)			1,114.3	93.0	331.0	110.2

¹ Series on consumption and investment differs slightly from SNA concept. ² Nominal consumption deflated by CPI.

Source: Russian Economic Trends, February 2001. Original Source: CBR.

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	Monetary base (In billion rubles)	Net inter- national re- serves ¹ (In bil- lion dol- lars)	Net do- mestic assets ² (In bil- lion ru- bles)	MO— currency in cir- culation (In bil- lion ru- bles)	M2 ³ (In billion rubles)	Out- standing stock of GKOs and OFZs nominal (In bil- lion ru- bles)
1995	R103.8	\$7.7	R68.1	R80.8	R220.8	R73.7
1996	130.9	1.7	123.0	103.8	288.3	237.1
1997	164.5	4.0	142.1	130.4	374.1	384.9
1998	210.4	- 8.4	249.3	187.8	448.3	NA
1999	324.3	- 3.2	0.0	266.5	704.7	NA
2000	519.6	16.0	88.6	419.3	1,144.3	184.2
2001, April	531.1	20.4	NA	435.4	1,210.0	189.5

TABLE 8.—MONETARY AGGREGATES (END OF PERIOD)

¹Since June 2000 net international reserves and net domestic assets are estimated by RET.

²Net domestic assets of the monetary authorities equal monetary base minuted by http:// serves. Net domestic assets are calculated using exchange rates of 27 rubles per dollar for 2000, 24.18 rubles per dollar for 1999, 6.0 rubles per dollar for 1998, 5,560 rubles per dollar for 1997, 4,640 rubles per dollar for 1996, and 3,550 rubles per dollar for 1995. In 1999 there were some changes in methodology for net domestic assets and net international reserves data.

³ M2 includes currency in circulation, demand deposits, and time deposits (there is a break in the series from December 1996, from then it includes only deposits at banks with active licenses).

NA---Not available.

Source: Russian Economic Trends, June 2001, original source: CBR.

TABLE 9.—INTEREST RATES (AVERAGE ANNUAL RATES) 1

	CBR re- finance rate ¹ (per- cent)	Lending rate ² (per- cent)	Deposit rate ² (per- cent)	Over- night inter- bank rate (per- cent)	GKO average second- ary market yield, all ma- turities (per- cent)	RTS index, monthly average (01.09.95 = 100)
1995	185	320.3	102.0	190.4	161.8	80.9
1996	110	146.8	55.1	47.6	85.8	160.3
1997	32	32.0	16.8	21.0	26.0	427.9
1998	60	41.5	17.1	50.6	NA	277.6
1999	57	40.1	13.7	14.8	NA	106.9
2000	32	24.2	6.5	7.1	12.7	199.5
2001, April	25	17.4	3.5			166.0

¹ Unweighted monthly average.

² Data prior to January 1997 are not compatible with current methodology. From 1998 data on lending rate are for commercial banks excluding Sberbank.

NA-Not available.

Source: Russian Economic Trends, June 2001, original source: CBR.

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Breakup of Monopolies: Energy, Transportation and Agriculture

THE RUSSIAN ENERGY SECTOR: CURRENT CONDITIONS AND LONG-TERM OUTLOOK

By Matthew J. Sagers¹

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SUMMARY

Energy production holds a central place in the economic and political life of the Russian Federation, as the country is a leading energy-producing country, ranking first in the world in gas production, third in oil production, fifth in hydro and nuclear generation, and sixth in coal production. The reform and re-emergence of this key part of the economy are integrally linked to the country's overall economic transformation and recovery, due not only to the energy sector's direct impact on gross domestic product (GDP) and overall value-added in the economy, but also to its importance in foreign exchange earnings and Russia's fiscal stability. Similar to the overall economy, however, Russia's energy sector initially experienced a sizable decline coincident with the launch of Russia's transition from a centrally planned to a market-type economy, although after bottoming out in 1997, it has since been rising. 2000 was a very good year for Russian energy production, with aggre-

¹Matthew J. Sagers was Director of Energy Services at PlanEcon, Inc. until October 2001 when he shifted positions to Director, Energy Economics for Eurasia and Eastern Europe at Cambridge Energy Research Associates. He holds a Ph.D. in Geography from The Ohio State University.

gate primary energy output rising by 2.1 percent; oil production climbing by 6.0 percent; coal production up by 3.5 percent; and electricity generation increasing by 3.8 percent; however, natural gas production declined, falling by 1.1 percent.

Broadly speaking, energy sector reforms over the past decade have typically lagged behind those in the economy at large. But increasingly, the outcome of general economic reforms will depend to a large extent upon the success of those in the energy sector. If properly managed, Russia's energy resources can help accelerate the economic reform process; if poorly managed, it can easily hinder that process.

Russia's principal energy policy document is the *Energy Strategy* of Russia to 2020, which was officially approved by the government in November 2000.² The Energy Strategy states Russia's priorities for its long-term energy policy and the mechanisms for its imple-mentation. The *Strategy* is set within the context of a resumption of economic growth in Russia, and there is a broad concern that, given the poor state of the Russian energy sector, it may not be able to provide for both increasing energy demand within Russia as well as generate the energy exports needed to sustain economic growth. Thus, the Strategy continues to emphasize improvements in energy efficiency and reform of energy pricing structures.

The Energy Strategy's projections for energy supply to 2020 are based on a major change in energy policy outlook. It expresses major concern over the energy security risk from what is deemed to be too high a dependence on natural gas. The Strategy envisages a change in the fuel mix such that the share of natural gas in total primary energy consumption decreases from about 50 percent in the late 1990s to 42 to 45 percent in 2020. In its place, the share of coal is planned to increase from 17 to 18 percent in the late 1990s to 22 percent in 2010 and to 21 to 23 percent in 2020. Nuclear energy is also slated to increase, expanding to 6 percent in 2020 from current levels of 5 percent, while oil's share in primary energy consumption will remain practically unchanged. The Strategy projects primary energy production in Russia in 2020 in a range of 1,525 to 1,740 million metric tons of coal-equivalent (mtce) (1,068 to 1,218 million metric tons of oil equivalent [mtoe]).³

However, PlanEcon's most recent energy forecast for Russia⁴ takes an entirely different tack. It does not view the large dependence on gas as a particular cause for concern; instead, this is viewed as a natural consequence of Russia's massive reserves of natural gas. The PlanEcon forecast projects total output of primary energy in 2020 in Russia at a much higher level than in the Strategy (1.446.3 mtoe, 46.7 percent higher than the 2000 figure), com-

²Government of the Russian Federation, 2000.

³The energy data presented in this report are given in the metric units commonly used in Russia rather than standard U.S. measures. An exception is Russian aggregate energy balances, Russia rather than standard U.S. measures. An exception is Russian aggregate energy balances, which are reported here in the usual international standard of million metric tons of oil equiva-lent (mtoe); Russian aggregate balances are presented in terms of million metric tons of coal equivalent (standard fuel or mtce) while U.S. aggregate balances are often presented in quadril-lion British thermal units (btu) (or quads). The conversion coefficient to mtoe from mtce is 0.7. Similarly, oil production is reported in million metric tons (mmt) per year instead of million bar-rels of oil per day (mbd), for which the conversion coefficient is 0.02 (i.e., 7.3 barrels per metric ton of oil). Natural gas production is reported in billion cubic meters (bcm) per year (at 20°C and a pressure 760 mm of mercury): the conversion coefficient from bem to for is 5.315. ⁴Sagers and Movit, 2001.

bined with less energy consumption, and therefore higher energy exports. In particular, coal production is expected to resume its long-term secular decline; oil output is expected to continue to recover (albeit slowly); and gas production is anticipated to turn around shortly, due both to improvements in the domestic investment climate (reflecting higher prices and toughening payment conditions) and to more buoyant demand from expanding economic activity in the region. Thus, natural gas is expected to garner a steadily rising share of Russia's energy production over the next two decades, reaching 58.3 percent by 2020. Over the entire 2000– 2020 period, aggregate primary energy output in Russia is projected to increase at an annual average rate of about 1.9 percent in the PlanEcon forecast.

For the most part, this forecast presumes the implementation of the bulk of the measures outlined in the proposed Putin-Gref reform program. This program includes general reliance on market forces and mobilizing private investment, strong elements of commercialization and marketization in the reform of the "natural monopolies" in the gas and electric power sector, particularly in terms of price reform, and the prospects of fairly strong economic recovery.

In PlanEcon's energy forecast, Russian oil production is projected to grow at an average rate of 1.4 percent per year over the entire 20 year period to 2020, to reach 392.7 million metric tons (mmt) in 2010, and then 423.2 mmt by 2020. The official Russian *Energy Strategy to 2020* envisions oil output at 335 mmt in 2010 and 360 mmt in 2020, an average annual rate of growth over the 20 year period of only 0.5 percent. The *Strategy's* overall oil production forecast seems far too conservative given what was achieved in 2000 (e.g., higher investment, expanded drilling, more new fields) and the changes in the investment climate that are likely to be realized over the next few years.

Despite Gazprom's current worries over its ability to produce gas in the future (a key feature of the *Strategy's* outlook), in PlanEcon's view, the decline in Russia's gas output is largely an organizational/institutional issue related to the lack of incentives to invest rather than a question of reserves or even the capacity to mobilize investment. Thus, with the current direction of reforms in the gas sector (albeit quite modest), production is likely to be able to turn around relatively quickly to support rising gas demand. PlanEcon projects Russian gas output in 2005 at 642.6 billion cubic meters (bcm), expanding to 797.0 bcm in 2010 and 1,030 bcm in 2020; gas output growth is forecast to average 2.9 percent per annum over the 20 year period.

In contrast, the Russian *Energy Strategy*, because of its goal of diminishing the domestic economy's reliance on gas, projects gas output at only 655 bcm in 2010 and a mere 700 bcm in 2020. Furthermore, the expanded production is largely geared toward higher exports, while domestic consumption is envisioned as remaining relatively flat over the next two decades.

The *Energy Strategy* takes the view that energy consumption in Russia has become too unbalanced in favor of gas. In particular, the *Strategy* calls for greater use of coal and nuclear power to meet the increased demand for electricity. The *Strategy* projects a decline in the share of gas in Russian primary energy consumption to about 40 percent by 2020, led by a decline in the share of gas in fuels use by the electric power sector from the current 62 percent to 51 percent by 2020. Concomitantly, according to the *Strategy*, the share of coal in primary energy consumption will rise slightly over the 20 year period, to about 22.5 percent by 2020.

PlanEcon's view is that coal and nuclear are not only intrinsically much more expensive than gas, but also come with enormous environmental liabilities. Therefore with huge reserves of relatively economic and clean natural gas, we forecast that Russia's reliance on coal for power generation and process heat is likely to wane further. The declining relative importance of metallurgy in the country's aggregate economic output should also serve to reduce the share of coal in primary energy consumption as well. Thus, by 2010, PlanEcon projects that the share of gas will be up to 57.1 percent, and that it will rise further, to 60.6 percent, by the end of the forecast horizon in 2020.

Russian coal production, in energy equivalent terms, is projected to slowly decline over the forecast horizon in the PlanEcon forecast (-0.5 percent per year on average). In contrast, the *Energy Strategy* envisions coal production rising to 320 mmt in 2010 and over 400 mmt in 2020. In the *Strategy*, major technological breakthroughs are postulated in coal production, processing and transportation that result in declining costs, and therefore end-user prices, of coal. In PlanEcon's view, such a prognosis seems highly unlikely, particularly the geographic locus of both production (increasingly concentrated in Siberia) and energy consumption (in European Russia).

The projected level of *primary* electricity production in the current PlanEcon forecast envisions the completion of only six new (1,000 MW) nuclear units during the forecast period, including *four* before 2005. The recently approved *Energy Strategy* calls for the completion of *five* new units (which were already well advanced in construction during the Soviet period) before 2005, identifying these as the cheapest generating capacity (in costs per MW or per kWh) that Russia could bring on stream. PlanEcon concurs in this assessment mainly because of the sizable investment that has already been sunk into these units. However, PlanEcon does not consider the *Strategy's* longer term plans for further nuclear expansion beyond these initial units to be realistic.

On the demand side, PlanEcon projects that the growth in primary energy consumption will lag well behind the trend in aggregate economic activity. Primary energy consumption is projected to rise at an average rate of only 1.7 percent per year over the 20 year period.

The projection of primary energy production and consumption provides a forecast for their difference, or net energy exports for Russia. Russian net energy exports reached a trough in 1993 at 302.8 mtoe, a decline relative to 1990 of 24.4 percent. Net energy exports are projected to rise to 565.3 mtoe in 2020, an increase of 55.5 percent above the level of 2000. This is projected to be comprised mainly of oil and gas, with gas surpassing oil in importance in the export mix by 2015.

INTRODUCTION

This report provides an overview of Russia's energy sector, particularly its current situation, and provides an assessment of its long-term outlook. The Russian Federation is a leading energyproducing country, ranking first in the world in gas production, third in oil production, fifth in hydro and nuclear generation, and sixth in coal production. In 2000, the Russian Federation produced in aggregate 997.8 mtoe of *primary* energy (i.e., energy not resulting from the transformation of other sources).

Energy production holds a central place in the economic and political life of the country. In the Soviet period, the energy sector was developed to provide resources for heavy industry and the defense-related sectors, as well as to earn foreign exchange for financing vital imports. Under present conditions, the emphasis has been shifted to the creation of an efficient market economy, which in the long run will be able to provide a higher level of well-being for the country's population.

The reform and re-emergence of this key part of the economy are integrally linked to the country's overall economic transformation and recovery, due not only to the energy sector's direct impact on GDP and overall value-added in the economy, but also to its importance in foreign exchange earnings and Russia's fiscal stability.⁵ In 2000, the energy sector accounted for perhaps 16 percent of valueadded in the economy (GDP) and about 45 to 48 percent of Federal budget revenues as well as 54.0 percent of foreign exchange earnings and 29.0 percent of the gross value of industrial output in the country. In the current situation, raw materials extraction, particularly of fuels, figures as a key engine of economic growth, generating vital foreign-exchange earnings and attracting foreign investment.

Similar to the overall economy, however, Russia's energy sector initially experienced a sizable decline coincident with the launch of Russia's transition from a centrally planned to a market-type economy. By 1997, Russia's primary energy production had plunged to a low point of 956.5 mtoe, a level only 71.6 percent of the peak output achieved in 1988 (of 1,393.5 mtoe).

However, Russia's aggregate primary energy production has risen for the third consecutive year in 2000 (+2.1 percent), representing a significant recovery after declining by 26.8 percent in the period 1990–1997 during the initial period of Russia's difficult transition from a planned economy. The sizable increase registered in oil and coal production last year was tempered by a slight downturn in gas production.

Broadly speaking, energy sector reforms over the past decade have typically lagged behind those in the economy at large. But increasingly, the outcome of general economic reforms will depend to a large extent upon the success of those in the energy sector. If properly managed, Russia's energy resources can become a major contributor to the general welfare and help accelerate the economic reform process; if poorly managed, it can easily hinder that process.

Russia's principal energy policy document is the *Energy Strategy* of *Russia to 2020*, which was officially approved by the government

⁵Sagers, Kyukov, and Shmat, 1995.

in November 2000.⁶ The *Energy Strategy* states Russia's priorities for its long-term energy policy and the mechanisms for its implementation. This is the most recent in a series of energy policy documents laying out a strategy for the energy sector under the transition to a market economy, including its immediate predecessor, the *Basic Guidelines for the Energy Policy of the Russian Federation to* 2010 (approved in October 1995). The new *Energy Strategy* specifies the main trends, tasks, and objectives of energy policy to 2020. It states that the highest priority is the most efficient use of the country's fuel and energy resources so that the fuel and energy sector can be harnessed to improve the living standards of the population.

Similar to President Putin's overall economic strategy, Russia's *Energy Strategy* is based on the assumption that to continue social and economic reforms, to overcome the economic crisis, and to initiate stable development, Russia needs a strong state power. The document states that a strong state power in Russia means a democratic, law-based and active Federal state, and that the state's role is to become an efficient coordinator of the economic and social reforms, determine optimal purposes and parameters of national development, and create conditions and mechanisms for their implementation.

The social and economic part of the Energy Strategy has been developed to address the following tasks: (1) to create acceptable living standards for all categories of the population; (2) to create a strong state and ensure human sovereignty; (3) to create an efficient and competitive economy; and (4) to ensure an honorable place for Russia in the world community. The document posits that this will not be possible unless long-term economic growth is ensured (minimum of 5 to 6 percent per year). To ensure such growth rates, the following should be implemented: (1) strengthening the economic functions of the state; (2) normalization of monetary and credit systems and restoration of budget equilibrium; (3) full-scale capital renewal and rational structural policy; (4) development and implementation of publicly acceptable and socially responsible economic policies to ensure priority growth of the real income of the population; and (5) stimulation of the purchasing power of enterprises and population for products, goods, and services, especially those locally made.

The development of the fuel-energy complex should meet the above stated parameters of the economic development of Russia. Thus, the *Energy Strategy* determines the demand of the country in fuel and energy required for economic growth, taking into account the expected structural, technological and territorial changes, and develops a forecast for the development of the fuel-energy complex and its main industries.

Price and tax policy remains the linchpin of the mechanisms driving the *Energy Strategy* forward. The goal is to skillfully conduct price and tax policy in combination with anti-monopoly measures to keep the fuel and energy sector a major source of budget revenues and to alter the wasteful character of energy-intensive branches of the Russian economy.

⁶Government of the Russian Federation, 2000.

OIL SECTOR

CRUDE OIL PRODUCTION

The Russian Federation (Russia) remains one of the world's major petroleum-producing countries, currently ranking third in the world behind Saudi Arabia and the United States. Since Russia also has accounted for about 90 percent (more or less) of the former Soviet oil output for several decades, when the former U.S.S.R. led the world in oil production between 1974 (when it surpassed the United States) and 1991, so did Russia. Russia is also one of the leading oil exporters in the world and ranks among the world leaders in oil reserves, with an even greater oil potential.⁷

Russia's oil sector was particularly negatively affected by the launch of Russia's economic reforms and initially experienced a severe depression. By 1996, Russian crude oil production had plunged to only 301.2 mmt, a level barely half (52.9 percent) of the peak output achieved in 1987 (of 569.5 mmt).8 In 1997, production actually turned around slightly, rising by 1.5 percent. Although the improving trend reversed in 1998 (a year of financial crisis in Russia), as output experienced a slight dip, it then recovered again in 1999 and surged in 2000. Perhaps not so surprisingly, annual trends in Russia's GDP show a similar pattern.

The current upward swing in Russian crude oil production began in early 1999, and continued to gain momentum throughout 2000. Overall for the year as a whole, Russian oil production was up by 6.0 percent, to 323.2 mmt.

A number of elements were involved in producing the turnaround in Russian output, but given that the upturn began in the second quarter of 1999, clearly the major underlying driver for this recovery was the sharp rebound in international oil prices that occurred after March 1999, when the Organization of Petroleum Exporting Countries (OPEC) (in collaboration with some major non-OPEC producers such as Russia, Mexico, and Norway) agreed to reduce their oil output and exports to international markets. The resulting rise in world oil prices led to a substantial increase in revenues for the Russian producers, and allowed them to increase capital spending on upstream development. At the same time, production costs (in dollar-equivalent) for the Russian producers were reduced substantially in the wake of the sizable devaluation of the ruble associated with Russia's financial crisis of 1998, greatly increasing the sector's profit margins.

Another dimension of the turnaround reflects a number of positive changes in the investment climate in the Russian oil industry that enabled this supply/investment response by the producers to take place. The combination of Vladimir Putin's accession to President in March 2000 together with the parliamentary elections of 1999 (substantially altering the composition of the state Duma, Russia's lower house of Parliament) have had a role in this. The

⁷ Sagers, 1996.

^o Dagers, 1990. ^gThe energy production data cited in this paper for Russia as a whole or regional totals are usually taken from reports issued by the Russian State Statistics Committee (Goskomstat Rossii), while production data for individual companies or enterprises are taken from published statistical reports issued by the Ministry of Energy (i.e., the monthly bulletins *Statistika*, *Dokumenty*, *Fakty* or *Itogi raboty Mintopenergo*).

policy directions taken by the Putin government toward the oil sector build on some important achievements that actually preceded Putin's accession to power, such as the beginning of tax reform (in-troduction of part 1 of the new Tax Code) and passage of the Amending and Enabling Laws to the Law on Production-Sharing (in early 1999).

The strong surge in Russian oil output has been largely driven by high international oil prices that boosted the revenues of the Russian producers, which they plowed back into capital spending. Capital investment in the upstream oil sector in 2000 more than doubled from the 1999 level in real terms (+102.4 percent according to the Ministry of Energy), at 110.6 billion rubles (\$3.9 billion at the average exchange rate for the year).9 Of this, 34.5 billion rubles (31.2 percent of the total) was spent on drilling activity. Development drilling in the sector increased by a whopping 80.3 percent in 2000, to 8,286,000 meters, and the number of new wells completed increased by 56.3 percent, to 3,405.

The largest contribution to the higher production level in 2000 continued to come from well work-overs, which reduced the number of idle wells to 31,940 by the end of the year (i.e., to only 22.5 per-cent of the total well stock compared to 24.2 percent at the end of 1999). This combination of new wells and restarted old wells added over 19 mmt to annual production capacity in 2000.

"New oil," however, is also becoming noticeable again after virtually disappearing in the mid-1990s. A total of 43 new fields were brought on stream during 2000, the largest annual number in al-most two decades. These new fields contributed relatively little to aggregate production during the year (a mere 546,000 tons), but the contribution of all so-called "new fields" (those that have been in production less than 5 years)¹⁰ was a more substantial 16.1 mmt in 2000, or 5.0 percent of national production last year.

In 2000, a total of 132 enterprises (companies) were producing oil in Russia according to Goskomstat; however, the bulk of these (110) are small, producing less than 1 mmt annually, and only 12 companies produce more than 10 mmt per year. Although the pro-portion is declining over time, the bulk of Russia's oil production is still produced by the large oil enterprises that previously were part of the former U.S.S.R. Ministry of Oil (95.5 percent in 1992 and 91.6 percent in 2000).

Gazprom remains the largest single producer outside these oil enterprises,¹¹ but as production by joint ventures (JV) with "for-eign" companies has surged, these have now become the largest component of production outside the traditional oil enterprises. At

⁹The exchange rate does not reflect the true purchasing power of ruble expenditures in the upstream oil sector vis-à-vis the dollar. Real investment activity is much higher than indicated by the conversion of ruble outlays into dollars at the average exchange rate. ¹⁰Similarly, a total of 36 new fields produced their first oil in 1999. This included 18 new fields by the Russian oil majors, 15 by independent Russian companies, and 3 by foreign producers. In 1998, a total of 20 new small fields were brought on stream. ¹¹Gazprom's contribution to Russian petroleum output amounted to some 10.2 mmt in 1992 and by 2000 had almost returned to this level (10.0 mmt); i.e., Gazprom has produced 2.6 to 3.2 percent of the Russian total during the last decade. Much of this would be gas condensate, although Gazprom does produce some oil as well. Total output of gas condensate (at least that proportion of gas liquids output included in the crude petroleum production statistics; i.e., "lease" condensate as opposed to "plant" condensate) in Russia was 9.7 mmt in 1999 and 10.4 mmt in 2000, or about 3.2 percent of Russia's total annual petroleum (crude oil plus condensate) output. output.

the same time, there has been a proliferation of other new types of oil producers, including Russian "independent" (or private) companies and geological exploration enterprises.

Among the various groups of producers, aggregate production rose substantially (+8.1 percent) for the largest and more important producing group, the large Russian vertically integrated companies (VICs); ¹² their combined aggregate output amounted to 296.3 mmt in 2000 (or 91.7 percent of total national output). Among the leaders in expanding production in 2000 were: Rosneft (+6.3 percent); Surgutneftegaz (+14.2 percent); Yukos (+11.4 percent); and Tyumen Oil Company (TNK), whose output was up by 23.4 percent.¹³ Russia's largest oil producer was Lukoil, at 62.2 mmt, with its acquisition of Komi-TEK. The second-largest Russian producer is Yukos, at 49.5 mmt (following the consolidation of the Eastern Oil Company [VNK] into Yukos).

The output of the smaller, "independent" producers, which until 2000 had generally been far more dynamic than the large VICs, included 10.826 mmt produced by small Russian companies (+22.2 percent compared to last year), as well as 19.105 mmt officially credited to the foreign joint ventures (+4.6 percent versus last year), and 2.188 mmt produced by the Khar'yaga and Sakhalin-2 PSAs (production-sharing agreements). Thus, "foreign" companies (the JVs and PSAs together) accounted for 21.3 mmt in 2000, or 6.6 percent of Russia's total oil production last year.¹⁴

Although the immediate situation appears quite positive, many of the underlying fundamentals in the oil sector remain quite poor; the transition to a market-type economy has proven to be very difficult. Many of the economic and fiscal policies implemented tended to be highly unfavorable for the energy sector, particularly in the initial phases of the reform process, although policy has tended to become more rational over time. The fiscal burden on upstream operations was by and large based on revenues and not on net profit—and thus penalized exploration and production in high-cost environments (particularly applicable in the period previous to 1998 with the strong ruble). Also, domestic energy prices initially remained controlled while those for most other goods were liberalized (causing the oil sector's production costs to skyrocket with the high rate of inflation), taxes have remained oriented to budget (as op-

¹² The Russian oil industry was reorganized in the 1990s into a few large VICs which combine geological exploration, crude production, oil refining, and distribution and retailing of refined products in one integrated structure. These companies have also been largely privatized, although the share of federal government ownership in some of them remains quite sizable, and republic-level administrations also own sizable stakes in some of them remains quite sizable, and republic-level administrations also own sizable stakes in some of the "regional" VICs. Current plans call for the eventual sale of most of the remaining shares still held at the Federal level to raise funds for the budget. The interest in establishing a state-owned "national" oil company, championed periodically since 1995, has largely waned since the election of President Vladimir Putin in March 2000. Currently, the Russian oil sector includes 11 large VICs, which collectively accounted for 88.2 percent of national crude production and 78.9 percent of total refinery throughput in 2000. The oil pipeline systems are not part of this "privatized" structure, but so far remain largely state-owned (some shares have been distributed to employees and some plans for further privatization have been mooted); they function as service-for-fee carriers, serving all the various companies. The pipelines are administered by two entities. One, Transneft, operates the crude pipeline network, while the other, Transneftprodukt, operates the product pipeline

network. ¹³The TNK figure includes the takeover of Sidanko's Kondpetroleum and Chernogorneft (now TNK Nyagan and TNK Nizhnevartovsk, respectively).

TNK Nyagan and TNK Nizhnevartovsk, respectively). ¹⁴The level of foreign involvement in JVs must be viewed with some caution. Many allegedly "foreign" partners are in fact Russian-owned (although foreign-registered) companies, as they are not clearly identifiable international oil companies. The real role of Russian companies is likely to grow further, as some of them are buying out the original foreign JV partners.

posed to investor) needs, the regulatory regimes need to be streamlined and clarified, and access to export markets continues to be restricted.

At the same time, Russia's oil industry has undergone the most liberalization and commercialization within the entire energy sector. The breakdown of the old central command structures and demonopolization under privatization, coupled with the proliferation of new producing entities, the formation of a quasi-market for oil domestically, the liberalization of prices, and the (partial) liberalization of exports, point to the tremendous changes that have occurred within this sector since 1991. The Russian Government has made considerable progress in clarifying the sector's administrative structure, establishing the level of competence of different levels of authority (Federal, regional, and local), and putting the sector on a firmer legal foundation. Nonetheless, all of these issues remain unsettled and much more still needs to be done. In fact, there was noticeable back-sliding on reform in the period after 1998, particularly in the area of exports, with administrative limitations again being imposed on crude and product exports.

While the fundamental problem in the oil industry is an economic one, partly caused by the ongoing economic transition, objective technical factors are also important.¹⁵ Russia's prolific West Siberian oil province is very mature,¹⁶ although its depletion can be attenuated by proper reservoir management and development of small and difficult fields; at the same time, a new oil basin with reserves similar in size to West Siberia's is not on the horizon. Thus, the key factor determining Russia's level of oil production in the future essentially hinges on just how long West Siberia's current plateau of 200 to 220 mmt per year can be maintained, while new reserves are put into production in less mature provinces such as Timan-Pechora and Sakhalin.¹⁷ Longer term, new provinces such as East Siberia, the Pechora Sea, or the Russian sector of the Caspian, are likely to make sizeable contributions to the country's overall production profile.

Production costs and international oil prices are crucial considerations in the prospects for maintaining West Siberia's current production plateau. But it should be technically possible to attenuate West Siberia's maturation with the help of modern reservoir management and modern tertiary recovery techniques to maximize reservoir drainage, and formation and well treatment in less permeable reservoirs. Several alliances have been formed to this effect between Russian companies and Western service companies like Halliburton and Schlumberger, and these are beginning to show some positive results.¹⁸

¹⁵ "Osnovniye," 2000. ¹⁶ West Siberia first faced a "production crisis" in 1983–1985. The downward trend then was reversed (albeit for only a couple of years) through a massive injection of financial and material resources. But after reaching an all-time peak of 418.6 mmt in 1988, West Siberian production then plunged to less than half this level by 1996.

¹⁷ Sagers, 1996.

¹⁷ Sagers, 1996. ¹⁸ TNK signed an exclusive deal with U.S. Halliburton to provide sophisticated oilfield services for its fields in 1999, while Yukos has a similar arrangement with France's Schlumberger dating from 1998. According to *McKinsey Report: Russian Oil* (February 2001), the actual total factor productivity (the combined measure of labor and capital productivity) of the Russian oil industry is only about 30 percent of international levels. The main reasons for the productivity gap at the operational level are lower oil recovery (due mostly to less hydro-fracturing and poor res-

Water-flooding, which has been employed in West Siberia since the very beginning to quickly boost output to maximum levels, has resulted in an increasingly large water cut. By 1990, the water cut was 76 percent for Russia as a whole, and 72 percent for the West Siberian fields; the average had been only 50 percent as recently as 1976. Currently, water encroachment in Russia is 70 to 90 percent at nearly all of the large fields. Injection of (associated) gas (which also has the advantage of reducing gas flaring) has been slow to be introduced, still accounting for only 1.9 percent of Russian oil production in 1999. Conversely, the share of oil produced from free-flowing wells dropped from 51.8 percent in 1970 to only 12.0 percent by 1990, and by 1999 was down to 8.4 percent.

OIL EXPORTS

Russia is one of the largest oil exporters in the world, currently ranking second behind Saudi Arabia. In the peak year of 1988, Russia exported 256.5 mmt of crude beyond its borders, of which 132.1 mmt (51.5 percent) went to the other former Soviet republics. However, the amount of crude oil Russia has shipped to the rest of the former Soviet Union has declined dramatically since the break-up of the U.S.S.R. in 1991: in 2000, Russia's crude oil exports to *all* countries amounted to 144.5 mmt, but only 21.2 mmt (14.7 percent) was exported to the former Soviet republics (Table 1).¹⁹ In contrast, Russia's crude exports to countries outside the former Soviet Union were up by 11.6 percent in 2000, to 125.3 mmt, actually surpassing the previous peak of 124.4 mmt achieved in 1988.²⁰

Russia's international exports of crude oil had contracted sharply between 1988 and 1991 under the old Soviet Government, falling by 45.4 percent, from 124.4 mmt to only 56.5 mmt in 1991. The Soviet Government had forced virtually the entire drop in domestic crude oil production into a reduction in exports. Since 1992, Russia's international exports have continued to rise with the marketization of the sector despite a host of administrative impediments and limits on exports.

The East European countries (then including Eastern Germany) were traditionally the largest destination for Russian crude. The region as currently defined (i.e., without Eastern Germany) saw its Russian crude imports contract to as little as 12.9 mmt in 1994, representing 14.5 percent of Russian international exports. This amount has since tripled, reaching 36.3 mmt in 2000 (29.0 percent of Russia's non-former Soviet Union exports).

ervoir management techniques), and inefficient drilling because of low quality drill bits, cleaning muds, and cement being used.

¹⁹This has been due to a combination of factors, including a decline in demand associated with the large contraction in economic activity, the financial difficulties of the refining sector in these republics, and the breakdown in inter-republican trade and payments mechanisms. In particular, Russia rapidly increased the prices being charged in inter-republican trade toward those prevailing on the world market after 1992, causing the importer-republics built up large payments arrears, and as a result, led Russia to withhold supplies and divert them to hard currency markets. Because of this leverage, non-payments by the importing republics for oil have remained relatively modest in comparison with natural gas or electricity.

²⁰In aggregate, Russia's crude exports in 2000 generated \$25.319 billion according to Goskomstat, or 178.8 percent more than in 1999. The average export price rose from \$105.3 per ton in 1999 to \$175.2 per ton in 2000. Exports to the non-Commonwealth of Independent States (CIS) generated \$23.0 billion (an average of \$179.9 per ton), while CIS exports generated \$2.4 billion (an average of \$139.7 per ton).

TABLE 1.—OIL BALANCE FOR THE RUSSIAN FEDERATION

[In million metric tons]

					· · · · · ·						
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Crude oil production	516.2	462.3	399.3	353.9	317.8	306.8	301.2	305.6	303.3	305.2	323.2
Refinery throughput	295.5	286.5	257.2	220.1	180.6	179.0	173.8	176.3	162.9	170.1	174.1
Direct use of crude/residual 1	10.5	20.0	11.1	16.7	15.0	12.4	6.3	8.6	9.7	6.1	10.9
Refined products consumption ² Oil exports	250.6	228.7	216.5	176.6	138.7	137.9	121.2	121.6	113.3	120.3	112.6
Crude oil	219.9	173.9	141.7	127.6	126.8	122.3	125.6	126.8	137.1	134.5	144.5
Foreign	99.3	56.5	66.2	79.8	89.0	91.3	103.0	105.6	111.9	112.3	123.4
Other republics	120.6	117.4	75.5	47.8	37.8	31.0	22.6	21.3	25.2	22.2	21.2
Refined products	50.7	63.6	43.0	44.8	43.4	45.4	56.6	60.6	53.8	50.8	61.9
Foreign	37.9	41.6	25.3	34.3	38.0	42.1	55.0	58.4	51.2	47.8	58.4
Other republics	12.8	22.0	17.6	10.5	5.4	3.3	1.6	2.2	2.6	3.0	3.5
Oil imports											
Crude oil	18.8	18.1	10.7	10.5	4.6	6.9	4.5	6.1	6.4	5.6	6.3
Foreign					_				—		
Other republics	18.8	18.1	10.7	10.5	4.6	6.9	4.5	6.1	6.4	5.6	6.3
Refined products	5.8	5.8	2.3	1.3	1.5	4.3	4.0	5.9	4.1	0.9	0.4
Foreign	0.2	0.7	0.9	0.2	0.4	1.4	1.8	3.5	2.4	0.4	0.1
Other republics	5.6	5.1	1.4	1.1	1.1	2.9	2.3	2.3	1.8	0.5	0.3

¹Balancing item. ²Apparent consumption (production minus exports plus imports).

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Earlier, Eastern Europe's oil demand was declining, and they also sought to diversify their imports. More recently, oil demand has recovered, and these countries have found Russia to be an economical source of imports due to existing delivery infrastructure. The bulk of this oil arrives via the Druzhba Pipeline, which delivers crude to the Czech Republic, Slovakia, Hungary, Poland, and Eastern Germany, and occasionally, the former Yugoslav republics. The other major destination for Russia's crude is Western Eu-

The other major destination for Russia's crude is Western Europe. These countries took 54.3 mmt of crude from Russia in 2000. The amount of Russian oil going to Western Europe has declined since peaking at 70.5 mmt (79.2 percent of Russia's total international exports) in 1994. Like Mexico and the North Sea, Russia/ former Soviet Union represents a major source of non-OPEC oil. The presence of Russian/former Soviet Union oil has been a welcome addition to the West European market, helping to diversify sources from too heavy a reliance on the Gulf region and OPEC. Most of the West European countries purchase oil from the Russia, although typically it represents less than 10 percent of total oil supplies for any individual country.

Russia's non-former Soviet Union crude exports in 2000 included 112.4 mmt shipped out through the main Russian pipeline system operated by Transneft, plus another 12.9 mmt (10.3 percent of the total) exported via other routes, including railroad shipments and through other minor ports. The share of exports carried by these minor routes continues to ratchet upward, probably because the main means used by the Russian Government to limit exports is control over Transneft's pumping schedule. In 1999, Russia's exports outside the Transneft system amounted to 8.6 mmt (7.7 percent of the total).

According to the Ministry of Energy, in 2000, Transneft moved a total of 314.8 mmt of crude in its pipeline system (5.1 percent more than in 1999). It delivered 312.5 mmt, of which 160.9 mmt was to Russian refineries, and 124.4 mmt of crude was shipped to export destinations outside the territory of the former Soviet Union (39.8 percent of the total shipped). In turn, this included 112.4 mmt of Russian crude and 11.7 mmt of transit crude (from Kazakhstan, Turkmenistan, and Azerbaijan), and another 0.35 mmt from Belarus that joined the pipeline system there on its way to Poland.

Despite the fact that total flows in the Russian oil pipeline system are now much less than before because of the precipitous decline in Russia's crude oil production (Russian pipeline shipments declined by 43.3 percent between 1990 and 2000, from 497.9 mmt to 294.6 mmt according to Goskomstat figures), constraints in Russia's crude oil pipelines have been a bottleneck since mid-1993.

The key constraints are at the export ports and the pipelines supplying them, particularly at Novorossiysk, Russia's major oil export port on the Black Sea. The reason for the emerging export constraints is that previously a large portion of the total crude flow was dispersed to refineries across the former Soviet Union, and a substantial amount was delivered to Eastern Europe via the Druzhba Pipeline. But with the dramatic decline in oil demand in the former Soviet Union (and to a lesser extent in Eastern Europe), a much larger proportion of the total flow has become focused upon the small number of export ports that dispatch crude to other international markets. The former Soviet Union pipeline system was designed mainly to move crude to internal consuming centers, while international exports were of much less importance. As a result, much of the core system in the interior of Russia now has huge redundant capacity.

Of Russia's own export shipments handled by Transneft in 2000, 53.2 percent (59.8 mmt) moved out via marine ports and 46.8 percent (52.6 mmt) moved out via the Druzhba Pipeline to Eastern Europe. Russia has made more of the marine terminal space, especially at Novorossiysk and Odessa, available for Caspian transit crude. The major marine terminals handled a total of 70.5 mmt in 2000, representing 56.7 percent of the overall total, while 53.9 mmt (43.3 percent) went out via the Druzhba Pipeline (Table 2). Compared to 1999, Druzhba shipments increased by only 1.6 percent while marine shipments increased by 13.6 percent. The large growth in marine shipments was mainly due to the new Butinge terminal in Lithuania, although all the other major terminals also handled more crude in 2000.

The addition of the new Butinge terminal in Lithuania in mid-1999 added another 8 mmt of annual marine export capacity to the former Soviet Union pipeline system. Even so, collectively the overall capacity utilization at the major marine terminals was still almost 90 percent in 2000 (Table 2). There is some remaining spare capacity at Ventspils and Butinge. But substantial new capacity is expected to be available shortly, with both the Primorsk (Baltic Pipeline) and the Yuzhnaya Ozereyka (Caspian Pipeline Consortium) terminals slated for completion in 2001.

The Druzhba Pipeline's aggregate capacity utilization is also quite high, increasing to 90 percent in 2000 (Table 2). However, the southern branch of the Druzhba (to the Czech Republic, Hungary, and Slovakia) remains underutilized, while the northern branch (to Poland and Germany) is now full. The increased flow in 2000 was concentrated entirely in the northern branch of the Druzhba that serves Poland and Eastern Germany.

REFINERY OPERATIONS AND OIL CONSUMPTION

The Russian Federation has a large refining sector, comprising 28 plants considered "full fledged" refineries. In addition to these petroleum refineries, Russia also has about a dozen other oil processing plants, including lube plants, oilfield topping plants, and specialized gas condensate processing facilities.

The 28 main refineries had a total primary distillation capacity that the Ministry of Energy reported as 296 mmt at the beginning of 1999. Collectively, these facilities therefore operated at a capacity of only 58 percent in 1999 compared with 87.5 percent as recently as 1990, even though almost 45 mmt of distillation capacity has been officially liquidated since 1990. Utilization varies considerably from refinery to refinery. Clearly, with so much excess capacity and the likelihood that refinery runs are going to fall even lower and remain there for some time, a massive rationalization of refining capacity is in store. Much of the redundant refining capacity is concentrated in the Volga and Urals regions.

TABLE 2.—FORMER SOVIET UNION CRUDE OIL EXPORTS BY EXPORT POINT (TRANSNEFT SYSTEM)

[In thousand tons]

Export point	1994	1995	1996	1997	1998	1999	2000	Capacity (mmt/yr)
Total (sum)	94,343	95,805	104,836	105,807	115,018	115,099	124,386	
Ports (sum)	53,451	54,084	60,851	60,633	63,580	62,058	70,473	
Capacity utilization (in percent)	73.2	74.1	81.1	80.8	84.8	78.6	89.2	73
Russian oil (reported)	50,474	51,439	57,056	58,281	58,762	53,735	59,822	
(Difference)	2,977	2,645	3,794	2,352	4,819	8,323	10,651	
Novorossiysk	30,003	29,018	31,706	31,090	32,870	33,066	37,363	
Capacity utilization (in percent)	88.2	85.3	93.3	91.4	96.7	97.3	95.8	34
Russian crude	28,903	28,111	29,989	30,258	29,893	30,021	34,906	
Kazakh crude	1,100	906	1717	712	199	436	1,699	
Azerbaijan crude	·	_		120	2,778	1,877	561	
Turkmen crude	_		_			731	198	
Ventspils	11,609	12,103	14,355	14,579	14,549	13,029	13,620	
Capacity utilization (in percent)	64.5	67.2	79.8	81.0	80.8	72.4	75.7	18
Russian crude	10,952	11,520	14,258	14,574	14,549	13,029	13,620	
Kazakh crude	657	583	97	4	0	0	0	
Tuapse	4,407	4,431	4,652	4,778	6,107	5,149	5,699	
Capacity utilization (in percent)	88.1	88.6	93.0	95.6	122.1	103.0	114.0	5
Russian crude	4,407	4,431	4,642	4,758	6,107	5,149	5,699	
Kazakh crude	0	0	10	20	0	0	0	
Odessa	7,432	8,532	10,138	10,186	10,054	10,265	10,724	
Capacity utilization (in percent)	92.9	106.7	101.4	101.9	100.5	102.7	107.2	8
Russian crude	6,232	7,377	8,167	8,691	8,212	5,536	2,530	
Kazakh crude	1,200	1156	1971	1496	1,842	4,729	8,194	
Butinge						550	3,067	
Capacity utilization (in percent)	—	—				13.8	38.3	8
Russian crude					_	550	3,067	
Druzhba Pipeline (sum)	40,892	41,722	43,985	45,174	51,438	53,040	53,913	
Capacity utilization (in percent)	68.2	69.5	73.3	75.3	85.7	88.4	89.9	60
Russian oil (reported)	38,808	39,706	41,381	42,879	49,117	49,927	52,573	

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TABLE 2.—FORMER SOVIET UNION CRUDE OIL EXPORTS BY EXPORT POINT (TRANSNEFT SYSTEM)—Continued

[In thousand tons]

Export point	1994	1995	1996	1997	1998	1999	2000	Capacity (mmt/yr)
(Difference)	2,084	2,016	2,604	2,295	2,320	3,113	1,341	
Druzhba Northern Route: Capacity utilization (in percent)	68.9	68.5	78.6	79.7	95.9	104.5	110.3	35
Germany	17,276	15,873	17,670	16,766	18,898	20,024	20,403	
Russian crude	16,276	14,957	16,126	15,664	18,457	19,052	19,533	
To refineries			12,837	12,938	18,457	19,052	19,533	
To Rostock (export)			3,288	2,726	0	0	0	
Kazakh crude	1,000	917	1544	1103	441	972	871	
Poland	6,850	8,108	9,857	11.115	14.658	16.558	18,195	
Russian crude (shipments)	6,066	7,339	9,171	10,225	13,551	14,416	17.845	
Kazakh crude	500	519	385	490	725	1,791	Ö	
Belarussian crude	284	250	300	400	382	350	350	
To refineries				9,921	13.273	14,408	16,217	
To Gdansk (export)				1,194	1,385	2,150	1.978	
Druzhba Southern Route: Capacity utilization (in percent)	67.1	71.0	65.8	69.2	71.5	65.8	61.3	25
Czech Republic	6,506	7,117	5,942	5,785	5,594	4,822	3,714	
Russian crude	6,306	6,928	5,692	5,785	5,265	4,822	3,714	
Kazakh crude	200	189	250	Ó 0	329	0	0	
Slovakia	4,971	5,058	5,303	5,335	5,711	5,555	5,506	
Russian crude	4,871	4,967	5,203	5,151	5,267	5,555	5,386	
Kazakh crude	100	92	100	184	444	0	120	
Hungary	5,289	5,565	5,213	6,172	6,577	6,081	6,095	
Russian crude	5,289	5,515	5,188	6,055	6,577	6,081	6,095	
Kazakh crude	0	50	໌ 25	118	´ 0	́0	0	
Total Kazakh shipments	4,100	3,828	6,001	4,122	3,980	7,928	10.883	
Total Kazakh shipments (reported)	4,070	3,813	6,001	4,142	3,980	8,072	11,610	

Note: Kazakh amounts by individual exit point are only approximate.

Russia's refineries are not very sophisticated, with limited secondary processing capacity. Petroleum products are obtained mainly via straight-run distillation processes (primary refining), the method with the simplest technology and lowest costs; there is relatively little use of cracking or other secondary refining processes.

Reflecting the lack of sophistication of the sector, the depth of refining is quite low. This indicator, defined as the share of premium products (essentially light products and lubes) in the output mix, was a mere 64.3 percent in 1998 for Russian refining overall compared with over 85 percent in advanced Western countries. Furthermore, this indicator deteriorated during the 1990s, falling from 65.0 percent in 1991, although there has been some improvement since 1994 (when it dropped to 61.3 percent).

The Energy Strategy to 2020 envisages substantial development of the oil refining industry through the construction and modernization of capacity, particularly the deepening of the refining process. Such reconstruction should also improve environmental conditions by reducing emissions as well as reducing the energy and material costs of production. The modernization is also aimed at improving the refining industry so that the quality of its products can be brought up to world standards. Thus, the Energy Strategy calls for the depth of refining to be increased to 75 percent by 2010 and 85 percent by 2020. This is to be accomplished by a broad program of refinery modernization and the installation of additional secondary processing capacity, particularly new cracking facilities.

The last decade saw a sharp plunge in refinery operations associated with the ongoing economic transition. Although Russia's refinery runs had been declining since 1980 (peak throughput in Russia was in 1980 at 325.2 mmt), during the 1980s throughput only slowly drifted down. But beginning in 1992, with the launch of economic reforms, crude runs by Russian refineries began to contract sharply. The decline lessened somewhat in 1995–1997, due partly to stabilization in internal refined product consumption, but mostly was due to a deliberate policy of fostering refined product exports. In 1998, a year of economic crisis, throughput dropped rather sharply again, to 162.9 mmt; at that point, throughput was down to only 54.7 percent of what it was in 1990.

The government had tried repeatedly during the 1990s to hold refinery throughput at much higher levels (in an effort to "fix" consumption of refined products at existing levels and "stabilize" the economy), but to little avail; it also was usually counterproductive. This was due to reasons largely having to due with the refineries' inability to pay much higher prices for crude and the financial insolvency of their customers. But this policy was more "successful" in 1999–2000 as the government reined in crude exports and forced higher deliveries to the refineries. This was through a mechanism that required specified deliveries to domestic consumers to be met before producing companies were allowed access to Transneft's pipeline system for exports. As a result, refinery throughput rose in 1999–2000, reaching 170.1 mmt in 1999 and 174.1 mmt in 2000.

Longer term, the *Energy Strategy* envisages growth in refinery throughput to 220 to 225 mmt by 2015–2020. This volume is projected as providing 130 mmt of light products (gasoline, diesel, and kerosene) with the greater depth of refining anticipated. At the same time, production of mazut is anticipated to drop from 53 mmt currently to 30 mmt.

While Russian refinery runs would normally be expected to rebound with the turnaround in product consumption as the overall economy re-expands, throughput of 220 to 225 mmt is probably economically unwarranted. First, aggregate product demand is currently less than 120 mmt, and is likely to grow fairly slowly over the coming two decades. Second, increased depth of refining should limit the need for higher throughput to provide sufficient light products. Third, the level of refined product exports, now running at 50 to 60 mmt annually, is likely to contract substantially as higher domestic crude acquisition prices and higher railroad transport tariffs erode profit margins on product exports. This is likely to result in throughput levels somewhat lower than now even by 2020.

The Russian Federation is a large consumer of refined products. Aggregate apparent products consumption (throughput minus product exports plus product imports) peaked in 1987, at 257.0 mmt. Following the launch of Russia's economic reform program in January 1992, bringing with it large declines in overall economic activity (GDP, industrial production, and transportation) combined with increases in (relative) fuel prices, consumption of refined products in Russia fell sharply. Overall consumption of refined products had contracted by 55.2 percent by 1998, reaching 113.3 mmt. In 1999, however, buoyed by a stabilizing economy and administrative limits on product exports, apparent consumption of refined products increased by 6.7 percent, to 120.9 mmt. In 2000, despite both continued limits on product exports and brisk economic growth, aggregate consumption of refined products dropped again, by 6.5 percent to 112.5 mmt. Russian statistics (from Goskomstat) report that gasoline consumption (sales/deliveries to the domestic market) in 2000 dropped by 4.8 percent, to 23.2 mmt; diesel fuel consumption increased by 5.1 percent, to 49.2 mmt; and residual fuel oil (mazut) consumption fell by 3.8 percent, to 41.9 mmt.

With the transition to a market economy, oil "demand" is undergoing structural changes, both by sector and by product. The composition of aggregate economic output is shifting away from heavy industry toward services. An emerging middle class is leading to sharp increases in private car ownership and use. Thus, the importance of traditional consumers, such as industry and electric power, in overall oil consumption is declining, while the relatively limited development of trucking and private automobiles is being redressed. As a result, changes in demand clearly favor lighter products at the expense of residual fuel oil (mazut).

Transportation is obviously the key sectoral component of the increased demand for light products. By 1999, the share of transportation had increased to about 50 percent of Russia's aggregate (civilian) petroleum product consumption, compared to 39 percent in 1990. The share of electric power (powerplants and boilers) had dropped to about 20 percent, compared to 31 percent in 1990. Similarly, industry's share had dropped as well, to about 18 percent, and agriculture's share had contracted to under 6 percent, about the same as the domestic sector (households and municipal use).

GAS SECTOR

GAS PRODUCTION

Russia is the world's leading gas producer. Russian production increased by nearly 8 times between 1970 and 1991, growing from 83.3 bcm to a peak of 642.9 bcm. During the 1990s, Russian gas production declined as the economy went into a tailspin, but the decline was surprisingly small given broader trends in the Russian economy. While Russian GDP declined by about 43 percent between 1990 and 1998 and aggregate industrial output plunged by about 56 percent, Russian gas output contracted by a mere 7.7 percent. Russian natural gas production has been able to virtually "defy gravity" and remain relatively stable because it was buoyed by surprisingly strong domestic consumption, which has been, in turn, a function of low prices and unusually easy payment terms.²¹ Another element that also supported the level of output was a large build-up in underground storage.

Russian gas production fell from a peak of 642.9 bcm in 1991 to a low of 571.1 bcm in 1997, before recovering to 591.0 bcm the following year. In 1999–2000, Russian production has declined slightly; in 2000, gas production declined by 1.1 percent, to 584.2 bcm. The decline in output in 2000 occurred despite rising demand for gas, both within Russia and the former Soviet Union as well as in Europe (see below).

The Russian gas industry is dominated by the Gazprom, the world's largest gas production, transmission, and exporting company. Gazprom, the successor of the old U.S.S.R. Ministry of the Gas Industry, is a privatized company, although still retaining a substantial Russian Government shareholding. In 2000 Gazprom produced 89.5 percent of total Russian gas production; controlled virtually all the gas transported through Russia's high-pressure pipelines; controlled all gas exports outside the former Soviet Union; and provided about 20 percent of Federal budget revenues and around 16 percent of Russia's total export revenues.

Although the bulk of natural gas production within Russia is by enterprises of Gazprom, production outside Gazprom is becoming relatively more important. Traditionally, this was mainly comprised of associated gas recovered by oil producers. But an important trend in the last few years has been the appearance of new so-called "independent" gas producers that collectively now produce almost as much gas as the oil companies do.

Also, Gazprom's production has fallen significantly in the last year or two—in 2000, by more than 20 bcm to 523.1 bcm—giving rise to considerable speculation that a substantial and irreversible production decline is imminent for Russian gas.

Gazprom produced 523.2 bcm in 2000 (89.6 percent of the Russian total), as its production declined by 4.1 percent compared to 1999. Gazprom cited the "exhaustion of its main fields" as the principal reason for the decline, combined with the lack of cash to invest in new fields. However, gas production by other entities increased in Russia; non-Gazprom output increased from 45.1 bcm in 1999 to 61.0 bcm (+35.3 percent) in 2000. The major oil companies

²¹ Sagers, 1999.

delivered marginally higher volumes of gas in 2000 (+4.5 percent, to 31.0 bcm), but the major increase (+232 percent, from 10.5 to 24.4 bcm) came from new, so-called "independent" gas producers, most noticeably the Itera group. Output by Itera's subsidiaries alone amounted to 18.0 bcm in 2000. Itera plans to increase output to 30 bcm in 2001.

Over the next few years and well into the future, the Energy Ministry expects that Gazprom's *share* of Russian production will continue to contract. Thus, a key problem for Russia is establishing a workable regulatory framework to allow such "independents" easier access to Gazprom's pipeline network. This remains a major focus of the government's ongoing reforms of the so-called "natural monopolies."

Gazprom complains that its ability to fund investment remains very limited because of low domestic prices and high non-payments by domestic and Commonwealth of Independent States (CIS) customers. Gazprom's plan is to hold its production in 2001 at 523 bcm, and claims to have sufficient investment funds to "support" production at a level of about 530 bcm per annum after that. If correct, this would mean that any increases in production would have to come from non-Gazprom production; i.e., "independent" producers and joint ventures. Moreover given Gazprom's forecast decline for its fields currently in production (see below), it would also mean that a great deal of new capacity has to be brought on stream over the next two decades.

Aggregate investment in the gas sector amounted to 90.5 billion rubles in 2000 (\$3.2 billion at the average exchange rate), a decline of 11.6 percent in real terms according to the Ministry of Energy. But it appears that investment spending picked up strongly in the second half of the year, a rather belated response to a substantial improvement in revenues and cash receipts for the sector in 2000. It appears that Gazprom was far more reticent to plow back its higher revenues into upstream investment than the oil companies were.²²

Gazprom's claims of insufficient cash to fund investment is becoming less and less credible as Gazprom's cashflow has been bolstered not only by rising international gas prices, but also by improved payments and higher prices domestically. Gazprom reported a profit of 60.7 billion rubles (\$2.1 billion) in 2000 as the company's total revenues jumped 63 percent, to 498.1 billion rubles (\$17.2 billion), with export revenues almost doubling to 294.3 billion rubles (\$10.2 billion) and domestic sales increasing by about 20 percent, to 118.7 billion rubles (\$4.1 billion).

In particular, the share of payments for gas by Russian consumers improved dramatically in 2000, from only about 63 percent in 1999 to about 71 percent in 2000, and the share of cash in total payments improved from 53 percent in 1999 to 71 percent. Combined with the domestic price increase that went into effect in May 2000 (of 20 percent), the sector's *real* cash receipts (sales volume \times average price \times average percent payment \times average percent payment in cash) in 2000 from domestic sales would be about double

²²Gazprom reported that its investment outlays on various projects (not just in Russia) amounted to 101.2 billion rubles in 2000 (\$3.6 billion) compared with 79.1 billion rubles (\$3.2 billion) in 1999.

what they were in 1999. The outstanding arrears owed by Russian consumers for gas actually dropped in 2000, from 108.3 billion rubles at the beginning of the year to 81.4 billion rubles (\$2.8 billion) at the end of the year, a decline of 24.8 percent, or \$931 million. However, the debts owed by CIS countries increased by 14.8 percent in 2000, to a reported 58.0 billion rubles (\$2.0 billion).

GAS EXPORTS

Russia is the largest gas exporter in the world, shipping over 200 bcm beyond its borders since 1998 (217.1 bcm in 2000, or 37.2 percent of production), including 129.0 bcm to countries beyond the borders of the former U.S.S.R. and 88.1 bcm to the former Soviet republics (Table 3).

Between 1990 and 1996 (when they bottomed out), Russia's gas exports to the other former Soviet republics plunged by 52.3 percent (Table 3). This sizable decline, from 153.2 bcm to 73.0 bcm, was caused by two primary factors. First, demand for natural gas declined due to a substantial decrease in general economic (especially industrial) activity in these countries. Second, most of the importing republics amassed enormous debts for natural gas, making Russian suppliers anxious about delivering any more gas without payments being made. As of the end of 2000, Russia was owed 58 billion rubles (\$2.0 billion at the average exchange rate for the year) by the other republics for natural gas (according to Russian statistics): Ukraine owed 39.7 billion rubles (\$1.4 billion); Belarus owed 6.0 billion rubles (\$208 million); and Moldova owed 12.3 billion rubles (\$426 million).

Russia exported 129.0 bcm in 2000 to destinations outside the former Soviet Union, including 38.6 bcm to Eastern Europe, 80.1 bcm to Western Europe, and 10.3 bcm to Turkey. These non-former Soviet Union exports increased by only 1.7 percent in volume terms in 2000 (Table 3); the bulk of this increment was actually realized to just one country, Turkey, as exports to both Eastern Europe and West Europe remained almost flat. Gazprom expects to export 135.0 bcm to countries outside the former Soviet Union in 2001, however, an increase of 4.7 percent.

With "Russian" gas exports to the former Soviet Union countries amounting to 88.1 bcm in 2000, this represented a sizable 13.3 percent increase compared to 1999 (Table 3). In turn, this was comprised of 4.8 bcm to the Baltic states and 83.3 bcm to the CIS countries. Although some 23.3 bcm of this is evidently "re-directed" gas from other countries (or re-exported gas), this can be considered to be "Russian" gas because of the role of Itera as the consignee, both on the import and export contracts. In 2001, "Russian" exports to the former Soviet Union should be much lower because of the switch in the structure of Ukraine's gas supplies. Gazprom reported that it expects to ship only 53.3 bcm of Russian gas to the CIS and Baltic states in 2001 (including both its own and "independent" exports), of which about 30 bcm will be to Ukraine.²³

²³The only "Russian" gas that Ukraine expects to receive in 2001 is the in-kind payment (by Gazprom) for transit services; the remainder of its supplies are slated to come from Turkmenistan (although Itera remains the intermediary). But Ukraine's national oil and gas company Naftohaz Ukrainy expects to transit less gas in 2001 than it did in 2000, and to there-Continued

Ukraine remains the largest customer for Russian gas in the former Soviet Union. Russian customs statistics report that Russia exported only 39.7 bcm to Ukraine in 2000, while Ukraine itself claims that its gas imports amounted to 60.7 bcm, comprised of 27.9 bcm from Gazprom and 32.8 bcm from Itera. The 27.9 bcm was what Gazprom paid for Ukraine's transit services, and the Itera imports would represent a combination of Turkmen imports arranged through Itera (1.9 bcm) as well as Itera's "own" gas (from Russian or Turkmen sources).

GAS CONSUMPTION

Despite the attention given Russia's international gas exports, natural gas is produced mostly for internal Russian consumption (representing 68.4 percent of production in 2000). Over the past 20 years, natural gas has made significant progress in replacing the previously most important sources of primary energy, coal and oil, in Russia's primary energy balance. In 1990, natural gas accounted for 43.1 percent of Russia's primary energy consumption, and by 2000, the share of gas had edged up to over half of total consumption at 52.2 percent (Table 6).

During the 1980s when the gas industry was growing so rapidly, the massive increments in gas supply were absorbed by directing most of it to a few very large industrial consumers, especially electric power stations, but also including iron and steel plants and nitrogenous fertilizer centers. This minimized the need for the construction of an extensive network of distribution lines to serve more dispersed consumers such as the housing and municipal sector (including households).

Gas consumption (end-of-pipe deliveries) in Russia peaked at 409.0 bcm in 1991. Apparent gas consumption (including pipeline use) in Russia also peaked in 1991, at 468.7 bcm (Table 3). By 1997, with the declines in economic activity and some energy efficiency gains, apparent consumption of natural gas in Russia bottomed out at 377.5 bcm, down 19.5 percent compared to 1991, and actual deliveries to consumers dropped by 19.3 percent between 1991 and 1997, bottoming out at 330.0 bcm; since then, apparent consumption has climbed back to 404.4 bcm by 2000, and actual deliveries to 347.1 bcm.

Since the second half of the 1980s, electric power has accounted for the largest share of natural gas consumption in Russia. In 1990, out of 404.0 bcm of natural gas in total deliveries, electric power stations used 179.0 bcm, or 44.3 percent. In 2000, electric power took 136.4 bcm, or 39.2 percent of all sales to domestic consumers.

fore receive a smaller payment than expected. In 2000, it moved 123.5 bcm, of which 112.3 bcm was to Europe (outside the former Soviet Union), and 11.3 bcm to CIS countries. Although its contract with Gazprom calls for transit of 124.6 bcm in 2001, Gazprom is making increasing use of the new pipeline through Belarus and Poland, and actual shipments through Ukraine are declining. Naftohaz Ukrainy projects that it may transit less than 110 bcm to Europe in 2001, and total transit may be less than 120 bcm.

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[In billion cubic meters]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Gas production	640.6	642.9	640.4	617.6	606.8	595.4	601.5	571.1	591.0	590.7	584.2
Gas consumption (total apparent)	460.7	468.7	454.7	453.2	424.4	408.4	409.5	377.5	390.8	389.8	404.4
Deliveries	404.0	409.0	395.3	382.1	348.0	339.0	336.8	330.0	331.6	339.9	347.1
Pipeline use/changes in stor-											
age ¹	56.7	59.7	59.4	71.1	76.4	69.4	72.7	47.5	59.2	49.9	57.3
Pipeline use and losses											
(reported)	63.6	63.5	59.6	57.1	56.3	54.2	56.3	47.7	53.0	53.0	51.0
Change in storage (re-											
sidual)	- 6.9	- 3.8	- 0.2	14.0	20.1	15.2	16.4	- 0.2	6.2	- 3.1	6.3
Gas exports	249.7	173.0	195.3	171.0	184.4	190.6	196.5	198.4	202.5	204.5	217.1
Foreign	96.5	90.0	88.9	92.7	105.8	117.4	123.5	116.7	120.5	126.8	129.0
Other republics	153.2	83.0	106.4	78.3	78.6	73.2	73.0	81.7	82.0	77.7	88.1
Gas imports	70.1	13.8	7.0	6.6	2.0	3.6	4.5	4.9	2.3	3.6	37.3
Foreign				—	_	—		—	—		
Other republics	70.1	13.8	7.0	6.6	2.0	3.6	4.5	4.9	2.3	3.6	37.3
Kazakhstan			3.9	3.5	1.6	3.2	2.0	2.7	2.3	3.6	5.3
Turkmenistan			3.1	3.1	0.3	0.3	1.9	1.9	_		29.1
Latvia						_	0.7	0.3			0.6
Uzbekistan	•••••						•••••				2.4

¹ Balancing item.

Industry remains the second largest consumer of natural gas in Russia. In 1990, Russian industry used 165.7 bcm of natural gas (41.0 percent of the total), primarily in chemicals, machine-building and metalworking, ferrous metallurgy, and the oil and gas extraction sector. These four sectors accounted for over 71 percent of all industrial consumption in Russia in 1990, or almost 29 percent of total gas deliveries at that time. But as industrial activity contracted with the transition, the share of industry in Russian gas consumption also declined, at least through 1998, bottoming out that year at 94.0 bcm, representing 28.4 percent of total consumption.

In 1990, the volume of gas used in the municipal sector and housing reached 42.3 bcm, or 10.5 percent of total Russian gas deliveries. Since 1990, the relative importance of the municipal sector has climbed as industrial consumption has declined, as the amount used by the housing and municipal sector has slowly increased. Its share had climbed to 27 to 28 percent by 1999–2000, actually rivaling that of industry.

COAL SECTOR

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Russian (gross) coal production declined by 41.3 percent between 1990 and 1998, from 395.3 mmt to 232.2 mmt, largely reflecting the contraction in consumption with the transition-related economic decline. However, production did turn around in 1999 and 2000, reaching 257.9 mmt in 2000. In 2000, this was comprised of 171.7 mmt (66.6 percent of the total) of "hard" coal (i.e., of bituminous or anthracite rank) and 86.2 mmt (33.4 percent) of lowerrank lignite.

The bulk of Russian coal (over 80 percent) is produced in Siberia, far from the main energy-consuming centers of the country in European Russia. The principal producing basins include: the Kuznetsk Basin (in West Siberia), with an output of 114.0 mmt in 2000; the Kansk-Achinsk Basin (in East Siberia), with an output 39.9 mmt in 2000; the Pechora Basin (in northern European Russia), with an output of 18.4 mmt in 2000; and South Yakutia (Far East), with an output of 10.1 mmt in 2000.

Not surprisingly, the principal areas of increase in 2000 were the Kuznetsk Basin in West Siberia (+4.6 percent) and the Kansk-Achinsk Basin in East Siberia (+9.8 percent); the older producing areas in European Russia did not do quite as well. These two large Siberian basins now account for 61.2 percent of national coal production. Although underground-mined coal expanded in 2000 (by 1.6 percent), coal mined in open-pits expanded by 4.2 percent, raising the share of open-pit-mined coal to 64.6 percent.

The expansion in coal output in 2000 was heavily driven by rising export demand, although internal (apparent) consumption was up slightly as well. Russia's exports of coal to international markets (beyond the territory of the former Soviet Union) grew quite rapidly in 2000, jumping by 69.8 percent, to 37.3 mmt (Table 4). Russia's coal exports to the former Soviet Union countries were up as well, although more moderately (+6.6 percent), to 6.1 mmt.

TABLE 4.-COAL BALANCE FOR THE RUSSIAN FEDERATION

[In million metric tons]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Coal production	395.3	353.3	337.3	305.0	270.9	262.2	255.0	244.4	232.2	249.1	257.9
Coal consumption (apparent)	398.4	361.1	337.5	305.0	274.9	251.2	249.5	237.3	223.7	237.4	239.9
Coal deliveries to consumers											
(reported)	ND	ND	ND	ND	272.6	259.0	205.6	197.8	196.4	210.0	205.8
Coal exports	49.2	37.4	40.5	28.7	23.3	29.6	25.6	22.9	23.5	27.7	43.4
Foreign	20.0	17.5	18.1	20.2	17.6	21.0	18.5	18.1	18.3	22.0	37.3
Other republics	29.2	19.9	22.4	8.5	5.7	8.5	7.1	4.8	5.2	5.7	6.1
Coal imports	52.3	45.2	40.7	28.7	27.3	18.5	20.1	15.8	14.9	16.1	25.4
Foreign					_	1.0	0.7	1.1	0.3	0.1	0.0
Other republics	52.3	45.2	40.7	28.7	27.3	17.5	19.3	14.7	14.7	16.0	25.4

ND—No data.

This strong export performance reflects not only the effect of higher prices (the average export price for Russian coal in December 2000 was \$28.3 per ton [\$26.9 per ton for non-CIS and \$38.8 per ton for CIS sales] compared with \$15.4 per ton in December 1999), but also the benefit from the sizable reduction in costs achieved with the devaluation of the ruble in 1998. These have made Russian coal exports much more profitable for the producers and highly competitive in export markets.

Reflecting rising demand from the strong economic rebound in 2000, Russia's coal imports surged as well, increasing by 58.5 percent, to 25.4 mmt (Table 4). Most of this coal is imported from Kazakhstan. Thus, apparent coal consumption in Russia also grew, reflecting the expansion in economic activity and expanded thermal electricity generation. *Apparent* consumption in Russia amounted to 239.9 mmt in 2000, up 1.0 percent compared to 1999. However, reported deliveries to consumers actually declined, dropping by 2.0 percent, to 205.8 mmt. Consumption mainly increased in electric power stations (+8.8 percent, to 135.2 mmt), coking/metallurgy (+3.6 percent, to 42.1 mmt), and the municipal sector (+9.6 percent, to 13.0 mmt).

Despite the turnaround in output in 1999–2000, Russian coal production in PlanEcon's energy forecast is projected to slowly decline over the next two decades (see below). In contrast, the Russian *Energy Strategy* envisions coal production rising to 320 mmt in 2010 and over 400 mmt in 2020. In the *Strategy*, major technological breakthroughs are postulated in production, processing and transportation that result in declining costs, and therefore end-user prices, of coal. This is viewed as making coal a cost-effective energy choice for consumers in European Russia.

The Russian coal-mining sector has been only slowly transformed in the last 5 years or so as the government has pressed forward on a difficult restructuring program under the impetus of the World Bank. In 2000, the sector included about 65 coal producers, including 60 already corporatized as coal-mining companies (not including subsidiaries), as well as 5 producers still organized as state enterprises; these companies worked 106 open-pit mines and 114 underground mines.²⁴ Three of the more prospective companies were privatized in 2000, reducing the number of companies in which the federal government still holds a majority of shares to 24.

As a result of the ongoing restructuring program for the sector, over the 1994–2000 period, a total of 134,200 workers have been shed, of which 23,500 were let go in 2000, and about 170 of the worst mines have already been closed. Because of this, productivity has been rising (in 2000, this improved to 108 tons per worker per month), and with higher domestic and international coal prices in 2000, has substantially reduced the need for direct government subsidies. But the government still provided "selective assistance" to 70 mines in 2000. The Ministry of Energy's program for 2001 calls for subsidies of 8 billion rubles (\$270 million), of which it would like to direct 3.1 billion rubles (38.5 percent) to investment

²⁴ During most of the 1990s (until December 1997), operational responsibility for the Russian coal-mining sector rested with a central body known as the Russian Coal Company or Rosugol. Rosugol was disbanded in connection with the agreement on the distribution of loans and credits from the World Bank for coal sector restructuring.

projects rather than the closures and social payments that have dominated up to now. What has also improved the finances of the sector is the improved situation for payments by consumers. Over the first 11 months of 2000, consumers actually paid for 86.2 percent of the coal they received, of which 46 percent was in cash. In January 2000, this had been only 54 percent and 38 percent, respectively.

ELECTRIC POWER SECTOR

ELECTRICITY PRODUCTION

Electricity generation in Russia closely follows consumption trends; only a relatively small proportion of electricity production is exported. As the economy slowed in the late Soviet period, generation increases started to slow dramatically in the latter half of the 1980s, and began to decline in 1991. Then with the transitionrelated difficulties of the 1990s, electricity production fell sharply. By 1998, when aggregate production bottomed out at 827.2 billion kilowatt-hours (kWh), output had declined by 23.6 percent from the 1990 peak of 1,082.2 billion kWh. Since then, output has risen slightly with economic re-expansion, reaching 878.1 billion kWh in 2000 (Table 5). Production in 2000 was comprised of 66.3 percent from thermal stations, 18.8 percent from hydro-stations, and 14.9 percent from nuclear stations.

Thermal generation in Russia increased by 3.2 percent in 2000, to 582.3 billion kWh. At the same time, primary electricity generation grew substantially, as nuclear generation increased by 8.8 percent, to 130.5 billion kWh, and hydro-electric generation increased by 2.7 percent, to 165.3 billion kWh.

The increased requirement for thermal generation put Unified Energy Systems of Russia (UES), the electricity utility which runs most of the Russia's thermal plants (see below), in a tough situation because Gazprom periodically threatened to reduce gas supplies last year, citing non-payments. However, UES actually ended up consuming more gas in 2000 than in 1999 (136.4 bcm vs. 134.1 bcm) as well as consuming more coal (132.5 mmt vs. 121.8 mmt). UES' fuel mix for thermal generation in 2000 shifted only slightly away from gas: to 66 percent gas, 28.6 percent coal, and 5.4 percent oil (residual fuel oil); this compares with 67.5 percent gas, 26.0 percent coal, and 6.5 percent oil in 1999.

ELECTRICITY CONSUMPTION

Electricity consumption in Russia started to fall in 1991 as the economy began the transition. The drop in (gross) electricity consumption (measured as production minus net exports) continued through 1998, when it bottomed out at 809.1 billion kWh, 24.7 percent less than the peak of 1,073.9 billion kWh achieved in 1990. Following the recent economic turnaround, consumption increased in both 1999 and 2000.

TABLE 5.—ELECTRICITY BALANCE FOR THE RUSSIAN FEDERATION

[In billion kilowatt-hours]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total production	1,082.2	1,068.2	1,008.5	956.6	875.9	862.1	847.2	834.1	827.2	846.2	878.1
Thermal stations	797.1	780.1	716.3	662.6	601.1	586.4	583.6	568.3	566.3	563.3	582.3
Hydro-stations	166.8	168.1	172.6	175.0	177.0	176.4	154.8	157.5	158.7	160.9	165.3
Nuclear stations	118.3	120.0	119.6	119.0	97.8	99.3	108.8	108.3	102.2	122.0	130.5
Exports (-)	43.3	47.2	44.0	43.4	41.7	38.0	31.8	26.8	26.4	22.5	14.8
Imports (+)	35.0	35.1	27.7	24.7	22.2	18.4	12.3	7.1	8.3	8.4	1.6
Apparent consumption	1,073.9	1,056.1	992.2	937.9	856.4	842.5	827.7	814.4	809.1	832.1	864.9
Losses and self-use	154.6	153.4	149.7	142.0	160.6	167.0	164.1	161.6	160.2	163.9	ND
Transmission losses	84.2	83.9	84.1	79.8	73.0	71.9	70.6	69.6	69.0	70.6	ND
Power station use and losses	70.4	69.5	65.6	62.2	87.5	95.1	93.5	92.0	91.3	93.4	ND
Domestic deliveries	919.3	902.7	842.5	795.9	695.8	675.5	663.6	652.8	648.9	668.2	ND
Industry and construction	574.3	552.5	505.3	450.4	359.5	345.1	331.4	329.4	320.7	336.9	ND
Agriculture	96.4	103.4	102.9	103.8	97.7	88.6	85.9	78.1	75.0	72.0	ND
Transportation	103.8	96.7	86.8	76.7	68.4	65.2	64.9	63.5	60.0	60.6	ND
Housing/municipal sector											
(urban)	144.8	150.1	147.5	165.0	170.3	176.6	181.4	181.8	193.1	198.6	ND
Industry (including power sta-											
tions)	644.7	622.0	570.9	512.6	447.0	440.2	424.9	421.4	412.0	430.3	ND

ND---No data.

The decline in electricity consumption during the period was much less than the overall decline in economic activity. This reflects a combination of several factors, including the relatively slow reform and commercialization of the sector (manifestations of which are low end-user prices and high levels of non-payments) as well as a high proportion of "overhead" or "fixed" consumption; i.e., consumption that occurs irrespective of direct production or economic activity. For example, a factory must be lighted and the assembly line turned on regardless of whether it produces only one item or a hundred.

According to the Ministry of Energy, (gross) electricity consumption rose in 2000, although only by 3.7 percent, to 864.9 billion kWh.²⁵ This indicates that the electricity intensity of the aggregate economy (kWh consumed per unit of GDP) is improving somewhat as the economy re-expands; i.e., the inverse situation of what occurred earlier in the decade as GDP declined.

The growth in Russian electricity consumption in 2000 occurred despite a much tougher payment policy by UES. Driven by the need to come up with sufficient cash to pay for its fuel deliveries (especially of gas), UES was willing to cut off non-payers, even if they were entire regions or major enterprises or even key defense facilities. With the tougher approach, UES had lifted the share of payments by Russian consumers to 100 percent by the end of the year, with the share of cash in these payments increasing to 74.2 percent.

Final electricity consumption (actual deliveries to consumers) declined by 29.4 percent between 1990 and 1998, from 919.3 billion kWh to a low point of 648.9 billion kWh. In 1999, final consumption increased to 668.2 billion kWh (Table 5). Final consumption fell slightly more than apparent electricity consumption because of a slower rate in the fall of electricity use at power plants and transmission losses.

Electricity consumption in Russia has been dominated by the industrial sector (particularly heavy industry), with a correspondingly small share by the residential and commercial sector. Whereas electricity consumption patterns shifted away from industry to the commercial and residential sectors in other countries over the course of their development, the Soviet development experience remained fixated upon industrialization, with the result that there was relatively little shift in this regard in Russia through the 1980s. In 1990, the industrial sector still consumed 60.4 percent of total final electricity consumption, while the residential sector accounted for a mere 8.4 percent; combined, residential-commercial users (the domestic sector) still accounted for only 18.9 percent of total final electricity consumption in 1990.

But such a shift is evident during the ongoing re-orientation of economic activity under the transition to a market-type economy. During the 1990s the sectors experiencing the greatest decline in electricity use have been industry and transport. Industrial elec-

 $^{^{25}}$ Net exports of electricity from Russia can thus be calculated as the difference between reported production and consumption in 2000 at 13.2 billion kWh, down from 14.1 billion kWh in 1999. Russia's exports of electricity (invoiced) in 2000 were reported as 14.849 billion kWh by Goskomstat, a decline of 38.5 percent from 15.346 billion kWh in 1999 (although *total* exports in 1999 amounted to 22.5 billion kWh). Thus, imports in 2000 would be 1.6 billion kWh.

tricity consumption (including the construction sector) fell by 41.3 percent between 1990 and 1999, dropping its share of final consumption to 50.4 percent in 1999. Industrial electricity consumption finally turned around in 1999 with the industrial recovery. In contrast, electricity consumption in the household and commercialmunicipal sector generally has been rising throughout the transition period. The combined share of the domestic sector (householdscommercial users) in final consumption in 1999 was 29.7 percent.

ORGANIZATIONAL STRUCTURE

The Russian electricity sector is now administered and run by three key entities: the large joint-stock company known as RAO UES (Russian Joint-Stock Company of the Unified Energy Systems of Russia); the 72 regional distribution companies (the energos); and the nuclear power operator, Rosenergoatom, which has exclusive responsibility for the nuclear stations (except for the Leningrad nuclear station which operates separately).

The government's organizational plan for the electric power sector laid out in 1992–1993 intended for each of the distribution companies to operate in the context of a Russian electricity "market," both generating electricity themselves from their own smaller stations as well as buying power from the large stations (independent producers) to supply their customers if needed or selling power into the grid if they generated a surplus. One of RAO UES' major tasks was to arrange a "Federal wholesale electricity market" (FOREM) through its operation of the transmission system. As dispatcher and operator of the high-voltage grid, it plays a crucial role in maintaining system stability and wheeling electricity to deficit power networks from those with a surplus. The Central Dispatch Office, which coordinates the seven regional power pools of the RAO UES network, was corporatized, with 100 percent of its statutory capital owned by RAO UES. The various regional dispatch offices (for each regional power pool) are subsidiaries of RAO UES as well.

RAO UES was organized and officially registered as a joint-stock company on December 31, 1992. It essentially absorbed many of the enterprises and activities of the former Rosenergo "concern," the successor of the old U.S.S.R. Ministry of Electric Power. At that time, the Russian Government planned to hold onto 51 percent of the new holding company's shares (although up to 30 percent was planned to eventually be transferred to local administrations, and currently the regional administrations vote 30 percent of the government shares in the energos), 21 percent was sold to employees of the enterprises that comprise the company both for privatization checks and for cash, and 15.1 percent was distributed to the population through check auctions (in February and June 1994), while another 7.1 percent was reserved for cash sale or auction. By early 2000, the government's stake in RAO UES had been reduced to 52.7 percent, with about 22 percent purchased by foreign institutional investors, about 6 percent in preferred (non-voting) shares in the hands of employees, and the remainder held by Russian institutional investors and individuals.

The local distribution companies, or energo, were incorporated into the RAO UES holding as "daughter" subsidiaries; RAO UES was intended to hold a 49 percent stake in each energo (on behalf of the state). Thus, RAO UES was given broad control over the sector and was intended to represent the government's interests in the power sector. However, due to several structural factors, RAO UES has been unable to effectively exert its control and manage these widespread assets successfully. This largely reflects the fact that RAO UES bears the ministerial administrative legacy from its Soviet predecessor plus the conflict between its role as a commercial company and that of a state-owned managerial body for the sector; an additional factor is that with the changes in the operating environment since 1990, it is simply too difficult for RAO UES to effectively manage the entire sector.

Many energos, supported by local government administrations, have taken a more independent line, with particularly strong opposition coming from the surplus power regions that objected to having valuable generating assets taken from them. As a result, various compromises have been reached. Still, for most of the energos, RAO UES did receive a 46 to 51 percent stake (giving it a majority of votes depending upon the particular composition of preferred versus common shares for each energo), and it has a 100 percent stake in 8 others, while in only two it holds no shares.

In turn, the energos include within their structure the smaller electric power stations (of less than 1,000 MW for thermal stations or less than 300 MW for hydro-stations), comprising about 480 stations. The energos own 118 GW of capacity, but operationally retain roughly 135 GW (about 63 percent of the Russian total), including about 65 GW of heat-and-power stations (TETs) and 30 GW of smaller thermal and hydro plants. Each of the smaller stations is, in turn, a "daughter" company of the local distribution company; i.e., it is itself a joint-stock company with 49 percent of its shares owned by the larger distribution company.

While a large component of RAO UES' holdings is comprised of the regional distribution companies (almost 60 percent of its charter capital lies in its holdings of the energos), this is not the only component. RAO UES also holds the large (independent) stations²⁶ as well as the bulk of the high-voltage transmission grid system (over 330 kV) and some auxiliary operations, such as research institutes, design bureaus, and construction enterprises. Thus, RAO UES has been described as the world's largest holding structure.

Russia's 51 larger stations (hydro-electric stations [GES] of more than 300 MW and thermal stations of more than 1000 MW) were supposed to be separated from the energos and were initially intended to become "daughter" companies within the RAO UES holding. These 51 stations (comprising a total of 96 GW or 45 percent of Russian total installed capacity), despite being incorporated into RAO UES, are described as being "independent" power producers. Similar to what happened among the energos, however, not all

Similar to what happened among the energos, however, not all the stations followed the national scheme. Only 23 of these stations are wholly under RAO UES (comprising 41 GW), while 9 stations

²⁶The scheme establishing RAO UES intended to strip the largest thermal stations (over 1,000 MW) and hydro-electric stations (over 300 MW) out of the energos where they previously had been administered, and put them in RAO UES' hands, which together with RAO UES' control of the high-voltage transmission grid, would lead to the formation of a wholesale electricity market among the regions. With the loss of the large stations, few of the energos would be self-sufficient in electricity.

(comprising 16 GW) are "leased" back to the local energos and 17 either remained with the energo, became an energo "daughter" company like the smaller stations, or were privatized under regional programs. Of these 17, 4 were privatized by the (autonomous) republics; 4 were "incorporated" by local authorities; and 5 were "incorporated" under different decrees or rules. In other cases, special purchase rules for the output of these stations has been agreed, further limiting the benefits to RAO UES from ownership. Thus, in a variety of ways, control over many of these larger stations has not remained with RAO UES as intended, but has often slipped back to the energos.

The nuclear stations also supply electricity to the network independently (their output is purchased both by RAO UES as well as by some of the energos directly). They are under the administration of the Russian Ministry of Nuclear Power, Minatom, or more properly, the government holding company under that ministry known as Rosenergoatom (except for the Leningrad station, which operates independently).

The Russian electric sector remains in a state of flux, and since the existing organizational structure creates a number of problems for the system in terms of operation and management, it is slated to undergo additional changes. A general restructuring plan for the sector was recently approved by the government, more or less along the lines of an earlier proposal mooted by Anatoly Chubais, the chief executive of RAO UES. The key elements of the plan envision the central government holding (RAO UES) divesting itself of generation and distribution assets, and refocusing its activities on the "natural monopoly" element of transmission. Change will be difficult, however, both because of the effective decentralization that has occurred and because the power sector has become extremely politicized at both the national and regional levels.

THE RUSSIAN FEDERATION'S PRIMARY ENERGY BALANCE IN LONG-TERM PERSPECTIVE

The main trends, tasks, and objectives of energy policy to 2020 are embodied in Russia's recently approved *Energy Strategy of Russia to 2020.*²⁷ This is the most recent in a series of energy policy documents laying out a strategy for the energy sector and mechanisms for its implementation under the transition to a market economy. Its immediate predecessor was the *Basic Guidelines for the Energy Policy of the Russian Federation to 2010* (approved in October 1995).

A major difference between the 1995 and 2000 documents is their macro-economic contexts. In 1995, Russia's economy was still contracting, and the reduction in primary energy requirements concomitant with that was largely viewed as a factor facilitating the task of supplying the country with energy and allowing foreign exchange to be generated by exporting the surplus. In contrast, the 2000 *Strategy* is set against a background of a resurgent economic growth, and its focus is mainly upon meeting the growing energy needs of a re-expanding economy. There is an overarching concern that, given the poor state of the Russian energy sector, it may not

²⁷ Government of the Russian Federation, 2000.

be able to meet the increasing energy demand nor provide the vital exports needed to sustain the economic transformation. Thus, even more so than in the past, the 2000 Energy Strategy emphasizes improvements in energy efficiency and reform of energy pricing structures as principal mechanisms.

The new Energy Strategy's projections for energy supply to 2020 are based on a major change in energy policy outlook given the concern of an energy security risk from a deemed too high dependence on natural gas. The Strategy envisages a change in the fuel mix such that the share of natural gas in total primary energy consumption will decrease from levels of about 50 percent in the late 1990s to 42 to 45 percent in 2020. In its place, the share of coal is planned to increase from 11 to 12 percent in 1998 to 22 percent in 2010 and 21 to 23 percent in 2020. Nuclear energy is also slated to increase, expanding to 6 percent in 2020 from current levels of 5 percent, while oil's share in primary energy consumption will remain practically unchanged.

. The Strategy projects primary energy production in Russia in 2020 at 1,525 to 1,740 million tons of coal-equivalent (1,068 to 1,218 mtoe), primary energy consumption in 2020 at 2,090 to 2,325 million tons of coal-equivalent (1,464 to 1,628 mtoe), and net energy exports at 565 to 585 million tons of coal-equivalent (396 to 410 mtoe).

In contrast, PlanEcon's current energy forecast for Russia²⁸ projects a substantially different picture for 2020, with a higher level of aggregate energy production, a lower level of consumption, and a higher level of exports. By 2020, PlanEcon's current energy forecast²⁹ projects total output of primary energy in Russia at 1.446.3 mtoe, 10.7 percent above the 1990 level, and 46.7 percent higher than the 2000 figure (Table 6).

In the PlanEcon forecast, coal production is expected to eventually resume its long-term secular decline; oil output is expected to continue to recover (albeit slowly); and gas production should be able to turn around shortly, due both to improvements in the domestic investment climate (reflecting higher prices and toughening payment conditions) and to more buoyant demand from expanding economic activity in the region. Thus, natural gas is expected to remain the largest component of Russia's energy production. The share of natural gas in primary energy output rose to 47.9 percent in 2000, and is projected to reach 58.3 percent by 2020.

Over the entire 2000–2020 period, aggregate primary energy output in Russia is projected to increase at an annual average rate of about 1.9 percent. While output of crude oil and natural gas is projected to rise considerably over the next 20 years, primary electricity production is anticipated to remain more or less stagnant (due mainly to high capital costs), and coal output (in energy equivalent terms) is expected to resume its long-term slide as rising extraction costs and prohibitive transport charges erode its markets.

 ²⁸ Sagers and Movit, 2001.
 ²⁹ Sagers and Movit, 2001.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2005	2010	2015	2020
Production (mtoe)	1,306.1	1,233.4	1,157.8	1,071.7	1,011.8	991.2	982.8	956.5	961.4	977.4	997.8	1,081.4	1,229.8	1,364.1	1,446.3
Shares (in percent):												-,	-,	-,	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Coal	14.5	13.5	13.8	13.5	12.8	12.8	12.5	12.3	11.5	12.3	12.5	11.3	9.6	8.6	7.8
Oil	39.5	37.4	34.2	32.1	31.2	31.0	30.6	32.0	31.5	31.2	32.4	33.7	31.9	30.3	29.3
Natural gas	40.1	42.6	45.3	47.2	49.1	49.1	50.1	48.8	50.3	49.4	47.9	48.6	53.0	56.2	58.3
Primary electricity	4.8	5.3	5.7	6.2	6.2	6.4	6.1	6.3	6.2	6.6	6.8	6.0	5.2	4.7	4.5
Other	1.1	1.2	1.0	1.0	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.3	0.2	0.2	0.1
Consumption (mtoe)	905.9	905.0	814.8	768.9	692.9	667.9	640.2	609.9	606.9	622.0	634.2	679.0	745.7	829.4	880.9
Shares (in percent):															
Coal	20.5	18.4	19.0	18.5	18.7	18.1	18.2	18.3	17.2	18.0	17.6	19.1	16.9	15.6	13.8
Oil	29.5	29.4	26.5	23.4	21.8	22.1	19.8	21.2	20.1	20.2	19.3	18.4	17.5	15.1	18.5
Natural gas	41.6	43.7	45.4	48.6	50.1	50.0	52.3	50.3	52.7	51.3	52.2	52.8	57.1	43.3	60.6
Primary electricity	6.8	7.0	7.6	8.1	8.4	8.8	8.7	9.2	9.3	9.8	10.2	9.1	8.1	7.4	6.9
Other	1.6	1.6	1.5	1.4	1.1	1.1	1.0	0.9	0.7	0.8	0.7	0.6	0.4	0.5	0.2
Net exports (mtoe)	400.2	328.4	343.0	302.8	318.9	323.3	342.5	346.7	354.4	355.4	363.6	402.5	484.1	534.7	565.3
Coal	3.4	- 0.0	4.4	2.9	0.4	6.3	6.7	5.7	6.4	8.3	13.0	- 7.5	- 8.0	- 8.6	- 8.2
0il	249.2	195.4	180.0	164.2	164.8	159.3	174.4	176.3	181.1	179.5	200.5	239.4	262.0	267.4	260.4
Natural gas	146.9	130.3	154.0	131.4	149.3	153.2	157.0	160.2	163.8	164.4	147.1	167.0	226.1	271.9	308.5
Primary electricity	0.6	2.8	4.6	4.3	4.5	4.5	4.5	4.5	3.1	3.2	3.0	3.5	4.0	4.1	4.6

TABLE 6.—PLANECON'S FORECAST OF THE PRIMARY ENERGY BALANCE OF THE RUSSIAN FEDERATION TO 2020

Note: Historical figures through 2000.

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Nonetheless, oil is projected to see a slight decline in its *share* of primary energy production, despite steadily rising output. This is because longer term, it is uncertain if the investment needed by the sector to sustain and expand oil output will continue to be forthcoming. The single most important determinant of oil investment is the tax regime, so the longer term prospects for Russian oil production are largely dependent upon tax reform. In its present form, the Russian oil taxation system has several major defects. The main problem is that it depends excessively on revenue- or volume-based rather than profit-based taxes. Until the circumstances of extraordinary high international prices and low production costs in 1999–2000, the existing Russian tax system resulted in unacceptable returns on virtually all categories of investment.

Yet, maintaining the recovery in the oil sector depends heavily on investment to replace the declining volumes of "flowing oil." The Duma is slated to act on tax reforms for the oil sector in 2001, and the remaining normative acts needed to complete Russia's regime for production-sharing agreements for oil and gas production, are also slated to be completed as well. These measures should allow investment in the oil sector to continue to rise. Combined with improved effectiveness in the sector's application of investment resources, this should assure a steadily rising volume of "new oil" sufficient to more than offset the decline of "flowing oil."

Thus, Russian oil production is projected to continue to rise over the forecast period by PlanEcon, although growth is expected to slow over time. During the next decade, oil output is projected to expand steadily at about 1.5 percent per year before slowing to about 0.5 percent per year in the period 2016-2020. Russian oil production is projected to grow at an average rate of 1.4 percent per year over the entire 20 year period to 2020, to reach 392.7 mmt in 2010, and then 423.2 mmt by 2020.

The official Russian *Energy Strategy to 2020* envisions oil output at 335 mmt in 2010 and 360 mmt in 2020, an average annual rate of growth over the 20 year period of only 0.5 percent. The *Strategy* estimates that to reach these production targets, investments of \$42 billion (expressed in constant ruble equivalent compared to 1999) will need to be mobilized over the next decade, and another \$80 billion will be needed in the following decade. This is an average of \$6 billion per year over the 20 year period compared with the 1999 investment level valued at \$2.0 billion (see above).

In general, these Russian estimates of investment requirements seem reasonable with the *Strategy's* oil production forecast. However, the overall oil production forecast seems far too conservative given what was achieved in 2000 (e.g., higher investment, expanded drilling, more new fields) and the changes in the investment climate that are likely to be realized over the next few years.

In contrast, natural gas production in Russia is largely dependent upon developments in consumption. Despite Gazprom's current worries over its ability to produce gas in the near term, in PlanEcon's view, the decline in Russia's gas output is largely an organizational/institutional issue related to the lack of incentives to invest rather than a question of reserves or even the capacity to mobilize investment. Thus, with the current direction of reforms in the gas sector (albeit quite modest), production is likely to be able to turn around relatively quickly to support rising gas demand, although growth will still remain fairly moderate. It will be driven upward by a combination of internal consumption needs and export demand in the former Soviet Union countries and non-former Soviet Union. PlanEcon projects Russian gas output in 2005 at 642.6 bcm, expanding to 797.0 bcm in 2010 and 1,030 bcm in 2020; gas output growth is forecast to average 2.9 percent per annum over the 20 year period.

In contrast, the Russian *Energy Strategy*, because of its goal of diminishing the domestic economy's reliance on gas, projects gas output at only 655 bcm in 2010 and a mere 700 bcm in 2020. The average annual growth rate envisioned in the *Strategy* for gas production is thus a mere 0.9 percent over the 20 year period. The expanded production is largely geared toward higher exports, while domestic consumption is envisioned as remaining relatively flat over the next two decades.

Clearly, such limited expansion would be favorable for Gazprom, as the organization is not really challenged in achieving this output. Such a situation that is essentially non-threatening to Gazprom's current dominance in the Russian gas sector.

In fact, the Strategy reflects Gazprom's current sensibilities, and projects output from Gazprom's three main producing fields (Urengoy, Yamburg, and Medvezh'ye) to decline from the current level of output (400 bcm) to a mere 87 bcm by 2020, necessitating a relatively high level of investment in replacement production capacity. Such a high rate of decline for the main fields (-7.2 percent per annum on average) seems excessive given the past experience with the large fields exploiting West Siberia's Cenomanian reservoirs. PlanEcon's forecast for Russian gas production envisions a much lower rate of decline in Gazprom's main existing fields (3.1 percent per annum on average), but nonetheless requires a substantial expansion of "new gas" (775 bcm by 2020). To achieve this, organizational/institutional changes will be needed in the Russian gas sector to support the development of more gas outside Gazprom (by so-called "independents").

Russian coal production, in energy equivalent terms, is projected by PlanEcon to slowly decline over the forecast horizon $(-0.5 \text{ per$ $cent per year on average})$. In contrast, the *Energy Strategy* envisions coal production rising to 320 mmt in 2010 and over 400 mmt in 2020. In the *Strategy*, major technological breakthroughs are postulated in production, processing and transportation that result in declining costs, and therefore end-user prices, of coal. Such a view seems quite unrealistic, however.

The projected level of primary electricity production in the current PlanEcon forecast envisions the completion of six new (1,000 MW) nuclear units during the forecast period, including *four* before 2005. The recently approved *Energy Strategy* calls for the completion of five new units (which were already well advanced in construction during the Soviet period) before 2005, identifying these as the cheapest generating capacity (in costs per MW or per kWh) that Russia could bring on stream. PlanEcon concurs in this assessment mainly because of the sizable investment that has already been sunk into these units, particularly recently; the first of these units (Rostov No. 1, a VVER-1000) was started up in February 2001. Commercial generation of power at the new unit is expected to occur in October 2001.

However, PlanEcon does not consider the Strategy's longer term plans for further nuclear expansion beyond these initial units to be realistic. The Strategy calls for 12 GW of new nuclear capacity (12 units) to be installed by 2010, pushing installed capacity to 33.2 GW and nuclear generation in the country up to 220 billion kWh, to be followed by further expansion and modernization of older units that would boost installed capacity to 48.4 GW in 2020, producing 320 billion kWh (19.8 percent of the Strategy's projected total for electricity generation). In comparison, Russia's nuclear stations produced 130.5 billion kWh in 2000, or 14.9 percent of total production. PlanEcon's forecast projects nuclear generation of only 106 billion kWh in 2020 (8.2 percent of total generation), largely because of the retirement of 13.2 GW of nuclear capacity over the 20 year period, which is only partially offset by the installation of the 6.0 GW of new nuclear capacity.

In thinking about the long-term outlook for the Russian Federation's primary energy balance, one of the most important factors in a functioning marketized economy (which Russia hopes to become) is energy demand. In turn, one of the most important demand drivers is the path of aggregate economic activity (GDP).

PlanEcon projects that Russia's economic re-expansion will continue in the future, although at a much slower rate than in 2000 (at least initially)—GDP growth is projected to average 3.8 percent per year in 2001–2005 and 4.6 percent in 2006–2010, before accelerating to 5.5 percent in 2011–2015. But in the subsequent 5 year period (2016–2020), economic growth is projected to slow to 3.5 percent per annum on average. Average GDP growth over the 20 year period is projected at 4.4 percent.

Two factors that will slow growth in the near term is rising domestic prices for energy and transportation and tougher payment conditions (particularly for electricity and gas). These developments, overdue since the 1998 devaluation that depressed these regulated prices in real terms, will reduce the profitability of many traditional, Soviet-style activities (particularly in industry). These were resuscitated and given a second lease on life by the tumultuous events of 1998. Nonetheless, economic growth is anticipated to remain fairly strong throughout the forecast period, although there remains a high degree of uncertainty in the pace of economic reform and the underlying economic policies that will be pursued by the Russian Government under President Vladimir Putin. Not surprisingly, the official Russian *Energy Strategy* envisions even more rapid growth than this, with average annual growth rates in the range of 5.5 to 6.2 percent.

But because a fairly rapid pace of structural change in the Russian economy would be commensurate with such high rates of economic growth (together with other adjustments), PlanEcon projects that the growth in primary energy consumption will lag well behind the trend in aggregate economic activity. Primary energy consumption is projected to rise at an average rate of only 1.7 percent per year over the 20 year period. While the energy intensity of the Russian economy in 2000 was considerably higher than in the Soviet period, improvements in the energy efficiency of the economy have occurred in the last few years, and this pattern is expected to continue by PlanEcon, perhaps even at a more rapid rate. The improvement in energy efficiency in the economy is projected in the range of 2.0 to 3.3 percent per year over the 20 year period by PlanEcon, averaging about 2.7 percent per annum. In the final period of the forecast (2015–2020), the aggregate energy *elasticity* (the rate of change in energy consumption per the rate of change in GDP) is projected to decline to a value closer to recent Western historical experience (i.e., to 0.3 to 0.4). Thus, by 2020, aggregate energy intensity is projected to decline to 64.4 percent of the 1990 level.

The official *Energy Strategy* is even more aggressive in projecting energy savings potential in the economy. Despite postulating much higher underlying economic expansion (see above), it projects that primary energy consumption will grow an average of only 1.3 percent per year between 2000 and 2020.

The shares of individual fuels in meeting aggregate primary energy needs in Russia changed significantly over the course of the 1990s, and PlanEcon believes that they will continue to change in similar directions over the next two decades. The share of natural gas has risen from 41.6 percent in 1990 to 52.2 percent in 2000. By 2010, we project the share of gas will be up to 57.1 percent, and that it will rise further, to 60.6 percent, by the end of the forecast horizon in 2020. Most of the gain in the share of gas takes place at the expense of coal. From a share of 20.5 percent in 1990, coal had already experienced a decline in importance to a low point of 17.2 percent of total primary energy consumption by 1998, before rebounding to 18.0 percent in 1999 and 17.6 percent in 2000. PlanEcon forecasts that coal's share of the total will rise again in 2001, to 19.9 percent, before heading back down to 19.1 percent in 2005, with a further drop by the end of the forecast, to only 13.8 percent by 2020.

The *Energy Strategy* envisions a very different picture. The Ministry of Energy, the *Strategy's* principal author, thinks that energy consumption has become too unbalanced in favor of gas. In particular, the *Strategy* calls for greater use of coal and nuclear power to meet the increased demand for electricity. The *Strategy* projects a decline in the share of gas in Russian primary energy consumption to about 40 percent by 2020, led by a decline in the share of gas in fuels use by the electric power sector from the current 62 percent to 51 percent by 2020. Concomitantly, according to the *Strategy*, the share of coal in primary energy consumption will rise slightly over the 20 year period, to about 22.5 percent by 2020.

PlanEcon's view is that coal and nuclear are not only intrinsically much more expensive than gas, but also come with enormous environmental liabilities. Therefore with huge reserves of relatively economic and clean natural gas, PlanEcon forecasts that Russia's reliance on coal for power generation and process heat is likely to wane further. The declining relative importance of metallurgy in the country's aggregate economic output should also serve to reduce the share of coal in primary energy consumption as well.

PlanEcon anticipates that the share of oil/petroleum products in meeting primary energy consumption will decline further before rebounding slightly by 2020. Although demand for motor fuels will increase as the Russian economy is increasingly motorized and the fleet of cars and trucks continues to grow, this will be partially offset by the retirement of the sizable fleet of less fuel-efficient gasoline-powered trucks and the improvement in the fuel efficiency of vehicles more generally. Additionally, restructuring away from heavy industry will further depress demand for residual fuel oil (mazut) under industrial boilers, while mazut as well as coal will face heavy competition from less expensive natural gas. The share of petroleum products has fallen from 29.5 percent in 1990 to only 19.3 percent by 2000. Over the forecast period the share of petroleum products is projected to decline to 17.5 percent in 2010 and 15.1 percent in 2015 before rising to 18.5 percent in 2020.

The projection of primary energy production and consumption also provides a forecast for their difference, or net energy exports for Russia. Russian net energy exports reached a trough in 1993 at 302.8 mtoe, a decline relative to 1990 of 24.4 percent. The greatest share of the decline took place in net exports of oil, as the lack of investment resources and the impact of the general economic decline fell heavily on the oil extraction sector. Net oil exports in 1993 were at only 65.9 percent of the 1990 level, and were even further below the peak reached in the late 1980s.

Net oil exports are now expected to surpass the 1990 level (of 249.2 mtoe) already in 2008, and reach a peak of 267.4 mtoe in 2015 before dropping slightly over the ensuing 5 years to 260.4 mtoe in 2020. The expansion of Russian oil output is anticipated to decline over time, causing a decline in net exports at the end of the forecast because of higher growth in demand projected at that time (i.e., 2.3 percent per year in 2016–2020) when restructuring of mazut and low-octane gasoline consumption is of less consequence.

Net exports of natural gas have remained constrained during most of the 1990s by the lack of absorption capacity by customers in international markets (primarily Europe) and elsewhere in the CIS. Partly because of limited demand growth in the importing countries (as well as institutional barriers to mobilizing investment to expand production in Russia), net exports of gas remained stagnant at around 150 to 160 mtoe (180 to 200 bcm) in the late 1990s. But with continued inroads by gas in displacing coal and mazut in the CIS and Eastern Europe and modest expansion of West European and Turkish demand for Russian gas, net exports of gas are projected to rise rather steadily in the later periods. Some new markets are also likely to be pioneered in Asia as well for Russian gas from Sakhalin and perhaps East Siberia as well. Net gas exports are forecast to reach 308.5 mtoe (377.1 bcm) by 2020, 2.2 times the level that characterized the low point of 1991. PlanEcon anticipates that Russia will not retain its position as

PlanEcon anticipates that Russia will not retain its position as a small net exporter of both coal and electricity. The net surplus for coal is expected to become a slight net deficit already in 2001, and the gap will steadily expand over the next two decades. Russia's own exports of coal to the non-former Soviet Union are expected to be more than offset by rising imports of coal from Kazakhstan. But a small net trade surplus in electricity is projected to remain over the 2000-2020 period.

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AGRICULTURAL REFORM: MAJOR COMMODITY RESTRUCTURING BUT LITTLE INSTITUTIONAL CHANGE

By William Liefert¹

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SUMMARY

Economic reform in Russia has substantially changed the volume and commodity mix of agricultural production, consumption, and trade. The main development has been the large drop in output, with the livestock sector being particularly hard hit. During the 1990s livestock output and animal inventories both fell by about half. However, the production decline has been an inevitable part of market reform, as the hefty Soviet-era subsidies to agriculture dropped severely. The contraction of the livestock sector has ended the large imports of grain and soybeans needed during the Soviet period as animal feed. On the other hand, imports of meat and other high value products have increased. These changes have affected U.S. agriculture, as Russia has become the top foreign market for U.S. poultry, in some years taking nearly half of all poultry exports.

¹William Liefert is a Senior Economist with the Economic Research Service (ERS), U.S. Department of Agriculture (USDA). The author thanks Stefan Osborne, Bryan Lohmar, Zvi Lerman, and Mary Anne Normile for helpful comments, though he bears full responsibility for any remaining shortcomings. The opinions expressed in this paper are the author's alone and do not in any way represent official USDA views or policies.

Institutional change, which involves farm restructuring and creation of the commercial and public infrastructure that a marketoriented agricultural economy needs, has been disappointingly slow. Private farms account for only 2 to 3 percent of agricultural output, while the former state and collective farms continue to dominate the organizational structure of agriculture. Although officially reorganized, with many becoming "joint stock companies," these farms have not substantially changed their systems of management and internal incentives inherited from the Soviet period. No federal legislation exists that allows genuine private ownership of agricultural land, which precludes development of a land market. In the absence of major institutional reform in agriculture, productivity growth in the sector during the transition period has been negligible at best.

INTRODUCTION

This paper surveys developments within the Russian agricultural economy since reform began in the early 1990s.² The paper focuses on two main questions: how has reform changed the commodity volumes and structure of Russian agriculture (production, consumption, and trade), and how has the institutional reform of Russian agriculture progressed? Institutional reform involves such matters as farm level restructuring and creation of the commercial and public infrastructure that a market-oriented agricultural economy needs.

The major commodity-related development during transition has been the large fall in production, especially in the livestock sector. Total agricultural output has declined by 40 percent compared to the pre-reform period, and production of livestock goods about 50 percent. The drop in output is important for U.S. policymakers and agricultural interests, for three main reasons. The first is that it has strongly affected U.S. agricultural exports. During the Soviet period, the U.S.S.R. was a major importer of U.S. grain, soybeans, and soybean meal, used primarily as animal feed for the country's growing livestock herds. The severe downsizing of the livestock sector in Russia (as well as in the rest of the former U.S.S.R.) during transition has largely terminated these imports. Russia is now importing substantial amounts of meat and other livestock products, especially poultry. Consequently, Russia has become the largest foreign market for U.S. poultry, in some years taking nearly half of all poultry exports.

Another reason commodity developments are important for the United States concerns policy advising and technical assistance. The Russian agricultural establishment argues that the contraction of agriculture, especially that of the livestock sector, is a catastrophe for the country, and that state policy toward agriculture should focus on returning output to pre-reform levels. To accomplish this goal, agricultural interests lobby for a substantial in-

 $^{^2}$ The paper draws heavily on a forthcoming ERS study (Liefert and Swinnen) that examines how reform has changed agricultural production, consumption, and trade in the transition economies of the former Soviet bloc. Another forthcoming ERS study (Cochrane et al.) focuses on how reform in the transition economies has specifically restructured the livestock sector. Sources on Russian agricultural developments during transition include ERS (annual to 1996, 1997, and 1998), OECD (annual), and OECD (1998). Much of the data presented in the paper are from ERS and Organization for Economic Cooperation and Development (OECD) databases.

crease in subsidies and trade protection for the sector, as well as other policy interventions into agricultural markets that would be to the sector's advantage, such as raising prices for agricultural output relative to input prices. The United States, as well as the European Union (EU) and international organizations such as the World Bank and European Bank for Reconstruction and Development (EBRD), have been heavily involved in policy advising and technical assistance with Russian agriculture. Therefore, it is important that the Russian agricultural establishment and advising Western bodies generally agree on the explanations as to why the main reform-related developments within the sector have occurred, the drop in output being at the top of the list.

The third reason the United States should be concerned about Russian agricultural commodity developments is that the drop in production and consumption during transition has raised questions about Russia's food security. Both the United States and EU have responded by providing Russia with food aid (most recently in 1999–2000).

The paper is organized as follows. The first section examines the main elements of Russian agricultural reform. The next section examines how reform has changed Russian agricultural production, consumption, and trade, highlighting the role that price and trade liberalization played in commodity restructuring. Subsections discuss how the restructuring has affected U.S. agricultural trade, the current status of Russian support and trade protection for agriculture, and the consequences of commodity restructuring for food consumption and food security.

The next section examines institutional developments, in particular farm restructuring and creation of market infrastructure for agriculture during transition. The focus concerning farm restructuring is on the three major types of agricultural producers—private farms, household plots, and the former state and collective farms. The section concludes by looking at new types of agricultural producers—large vertically integrated agri-food enterprises—which some Russian agricultural specialists believe could be a progressive force in Russian agriculture, perhaps raising productivity and injecting a stronger entrepreneurial spirit into the sector. The paper's last section examines the possibility that effective reform could turn Russia into a major exporter of grain, as some Western specialists forecasted at the beginning of transition.

MAIN ELEMENTS OF AGRICULTURAL REFORM

Agricultural reform in Russia has involved four main elements: (1) market liberalization; (2) farm restructuring; (3) reform of upstream and downstream operations; and (4) creation of supporting market infrastructure. *Market liberalization* involves removing government controls over the allocation of resources and output, thereby allowing the market to become the main means of allocation. It includes the key reform policies of liberalizing prices and trade and eliminating subsidies to agricultural producers and consumers. By changing prices, incomes, and other key monetary values that influence the market decisions of producers and consumers, market liberalization has resulted in major changes in the commodity volume and mix of countries' agricultural production, consumption, and trade. Liberalization and its effects thereby mainly address the question of *what* goods are produced and consumed in the agricultural economy. Market liberalization also links the macro-economy to agriculture. Macro-developments such as inflation and movement in the exchange rate affect the key variables (prices, consumer income) that drive agricultural markets.

Farm restructuring changes the nature or system of production at the level of the actual producer. It involves how farms are owned, organized, and managed, that is, *how* goods are produced. Key policies are privatization and land reform, which directly affect incentives for using labor and other resource inputs.

Market liberalization and farm restructuring affect output and consumption in different ways. Market liberalization changes the mix of goods produced and consumed in a way that better satisfies consumers' desires for goods, but without any necessary improvement in the system or technology of production. Farm restructuring entails changes by producers in the nature of production that could increase productivity. This would allow more output to be produced from a given amount of input, which would increase the total quantity of goods available for consumption.³

Market liberalization and farm restructuring are nonetheless interrelated. The main way is that market liberalization can help motivate farm restructuring. The desire to increase profit, or the fight just to stay in business, can spur producers to reduce costs by changing their system of production. The pressures from market competition are the key to the relationship. However, market liberalization by itself will not inevitably lead to farm restructuring producers must still make the actual changes in how they produce.

The third element of agricultural reform is transforming upstream and downstream operations. Upstream activities concern the supplying of agricultural inputs, while downstream activities cover storage, transportation, processing, and distribution. The transformation of these previously state-run operations that were well-integrated into the planned economy into privatized, marketoriented, and competitive enterprises not only would improve their productivity and performance, but also help farms improve theirs.

The fourth element of agricultural reform is the creation of *supporting market infrastructure*. This involves establishing the institutions and services, whether commercially or publicly provided, that a well-functioning market-oriented agricultural economy needs. These include systems of agricultural banking and finance, market information, and commercial law that can clarify and protect property, enforce contracts, and resolve disputes. Development of market infrastructure and the transformation of upstream and downstream operations are closely related, and in some respects

³Another way of explaining how market liberalization and farm restructuring differently affect the economy is with the concepts of (1) allocative efficiency and (2) technical efficiency and technological change. By changing the mix and distribution of output in a way that better satisfies consumers' desires, market liberalization increases *allocative efficiency*. The gains to consumers occur without any necessary improvement in the economy's overall (or any sectoral) production function. Conceptually, market liberalization results in movement along the economy's existing production possibilities frontier. By allowing more output to be produced from a given amount of input, farm restructuring increases *technical efficiency*. The move by underachieving farms to the best domestically available production practices results in movement from within an economy's production possibilities frontier to the frontier. If the improvement occurs because farms move to a new superior system or technology of production, the farm restructuring spawns *technological change*. This shifts the production possibilities frontier out.

might be hard to separate from each other. For example, in many isolated regions within Russia, the collapse of the planned economy has deprived farms (especially small ones) of any channels for obtaining inputs, or for selling, storing, or processing their output. In other words, upstream and downstream linkages, as well as the market infrastructure (such as market information) that could allow farms to find new linkages, are completely lacking.

The four elements of agricultural reform identified in this paper are roughly comparable to the taxonomy of reform elements developed by the World Bank (Csaki and Nash, 2000) for agriculture in all transition economies of the former Soviet bloc. The World Bank reform elements are (1) price and market liberalization; (2) land reform and privatization; (3) privatization and reform of agroprocessing and input supply enterprises; (4) rural finance; and (5) institutional reforms (largely involving public services). Market liberalization corresponds to World Bank element No. 1, farm level restructuring to World Bank element No. 2, reform of upstream and downstream operations to World Bank element No. 3, and market infrastructure to World Bank elements Nos. 4 and 5.

How Reform Has Changed Agricultural Production, Consumption, and Trade

Since reform began in the early 1990s, Russian agriculture has experienced major commodity restructuring—that is, major changes in the commodity volume and mix of agricultural production, consumption, and trade. The main feature of the restructuring has been a substantial drop in agricultural production, especially in the livestock sector (Table 1).⁴ During the 1990s meat production, as well as livestock inventories, fell by about half.

The data in the table are based on countries' official production numbers, which exaggerate the decline in output. In the pre-reform period farms had an incentive to overstate their production in order to look better with respect to output performance, while in the transition period farms have an incentive to understate production, in order to avoid taxes and buttress their argument that they need more state support. Also, the difficulty of measuring output by private and household producers adds to the undercounting of transition production. Yet, even if not wholly accurate, the official numbers clearly show a large decline in output. The downsizing of the sector has also coincided with a major drop in consumption of livestock products (Table 2).

Table 1 shows that the drop in agricultural production has been part of an economywide decline in output. Given that Soviet planners favored production of capital goods over consumer products, one should not be surprised that the elimination of central planning strongly hit industrial production (especially heavy industry such as metallurgy and chemicals). However, since foodstuffs are the most fundamental of consumer purchases, a major decline in agricultural production might seem counterintuitive. Yet, the main reason agricultural output has fallen in Russia during the transi-

⁴For data on Russian agricultural production and trade, as well as analysis of issues involving Russian agriculture, see the briefing rooms on Russia at the ERS Web site www.ers.usda.gov. ERS briefing rooms also exist for agriculture in the other transition economies of Ukraine, Hungary, and Poland.

tion period is the same as why industrial output and gross domestic product (GDP) have declined—consumers' desires for goods have replaced planners' preferences as the dominant force in determining what goods are produced, consumed, and traded. As with heavy industry, the contraction and commodity restructuring of agri-culture in Russia has been an inevitable part of market reform.

Commodity	Production index						
Aggregate:							
Total agriculture	60						
lotal crops	69						
lotal livestock products	52						
Total industry	50						
Gross domestic product (GDP)	61						
Crops:							
Grain	61						
Sunflowerseed	106						
Sugar beets	40						
Potatoes	93						
Vegetables	101						
Livestock products:							
Meat	48						
Milk	61						
Eggs	68						
Livestock inventories:							
Cattle	53						
Pigs	45						
Poultry	56						

TABLE	1.—	CHANGES	IN	PRODUCTION

Note: The production index gives average annual production (or inventories) over 1997-1999 relative to average annual production (or inventories) over 1986-1990, with 1986-1990 = 100.

Source: USDA.

Agricultural production has dropped severely in almost all the transition economies of the former Soviet bloc, though particularly in the countries of the former U.S.S.R. In most transition econo-mies, total agricultural output fell during the 1990s by 25 to 50 percent. The ensuing explanation for the sector's downsizing applies to a fair degree to all these countries. To examine the downsizing of Russian agriculture, one must first explore certain features of the pre-reform Soviet agricultural economy.

THE PRE-REFORM SOVIET AGRICULTURE AND FOOD ECONOMY

In the late 1960s the leadership of the Soviet Union decided to increase production of livestock goods, a policy the East European countries of the Soviet bloc generally followed. Consequently, from 1970 to 1990 livestock herds and output in these countries grew by 40 to 60 percent. For example, in the former U.S.S.R., Poland, and Hungary, meat production in 1990 was higher than in 1970 by 63, 43, and 57 percent (Economic Research Service (ERS) databases). The rise in feed requirements caused by the growing herds stimulated the crop sector. In the late 1980s the average annual output of feed grain in the former U.S.S.R. was up by about half compared to the late 1960s. The feed requirements of the former U.S.S.R. were so great that the country also became a substantial importer of grain, soybeans, and soybean meal, much from the United States (Table 3).

TABLE 2.—PER CAPITA	CONSUMPTION	OF FOODSTUFF	S BY	COUNTRY
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[In kilograms]

Foodstuff	Po- land	Hun- gary	Ro- mania	Russia	Ukraine	U.S.A.	Ger- many	Great Brit- ain	Japan
1990:									
Meat	73	101	74	75	68	113	96	72	- 38
Milk (excluding	230	178	99	¹ 184	¹ 184	256	224	227	65
butter).	145	148	173	¹ 164	¹ 164	109	94	93	133
Cereals Potatoes	144	58	59	106	131	55	81	105	25
1997:	~~		50	40	20	117	00	70	10
Meat Milk (excluding butter).	66 204 157	84 156 113	50 179 205	48 145 156	32 156 160	117 254 116	83 236 83	73 234 95	42 68 118
Cereals Potatoes	136	66	82	125	126	62	79	113	26

¹ Figure for entire U.S.S.R.

Source: United Nations Food and Agriculture Organization.

TABLE 3.—AGRICULTURAL IMPORTS BY THE FORMER U.S.S.R. AND RUSSIA

[In thousands of tons]

6	Former	Russia	
Commodity	1986-1990	1995-1998	1995-1998
Total imports:			
Grain	35,720	2,150	2,860
Soybeans and soybean meal ¹	4,500	850	190
Meat	810	1,970	1,670
Imports from the United States:			
Grain	13,700	660	190
Soybeans and soybean meal ¹	1,720	160	20
Meat	2	1,200	990

¹ In soybean equivalent.

Note: Figures give average annual values over the period. Imports by the former U.S.S.R. in 1995–1998 are from beyond the region, while imports by Russia for 1995–1998 are from both beyond and within the former U.S.S.R.

Source: USDA.

By 1990 per capita consumption of livestock products and foodstuffs in general in the pre-reform transition economies compared favorably to levels in many Organization for Economic Cooperation and Development (OECD) nations (Table 2). Since per capita GDP in the U.S.S.R. and Eastern Europe was at most only half the OECD average, these countries were producing and consuming high-cost livestock products at a much higher volume than one would expect based on the countries' real income. This "achievement" came at a price, as large state subsidies, to both producers and consumers, were necessary to maintain the high levels of production and consumption. For example, by 1990 direct budget subsidies to the agriculture and food economy in the U.S.S.R. equaled about 10 percent of GDP, with the bulk going to the livestock sector. The subsidies created price gaps, whereby the prices paid to producers exceeded those charged to consumers. In the late 1980s agricultural producer prices in the aggregate exceeded consumer prices by about 75 percent (Liefert and Swinnen).

A major feature of the pre-reform Soviet food economy was that consumer prices for foodstuffs were set so low that output could not satisfy all the demand generated by the prices. In the pre-reform period long lines of shoppers and bought-out food stores were commonly interpreted in both the Soviet Union and the West as signs of major food shortages. However, low state-set consumer prices that overly stimulated demand were the main cause of these "market shortages," rather than inadequate supplies of foodstuffs in volume terms (as the inter-country comparison of consumption in Table 2 shows).

PRICE LIBERALIZATION

The lead policy of economic reform in Russia was price liberalization. This involved the corollary policy of reducing or eliminating state budget subsidies needed to maintain the gaps between prices paid to producers and prices charged to consumers. The result was that the market became the dominant force in determining prices and the quantities of goods produced and sold. The fall in producer prices from ending the price gap lowered production.

Price liberalization had two other more indirect but nonetheless significant effects on markets for agricultural products. These came from the drop in consumer income and the deterioration in the terms of trade for agriculture that accompanied the liberalizing of prices. The freeing of prices led to high economywide inflation, in the early reform years in the hundreds of percent annually. The massive inflation substantially reduced consumers' real income, and correspondingly purchasing power, as prices economywide rose by a greater percent than wages and salaries. By the late 1990s real per capita income in Russia was only about half the level of 1990 (PlanEcon). The income decline reflects not only the drop in pay for workers who kept their jobs, but also the rise in unemployment during the transition period.

The degree to which changes in real income affect the market for a specific foodstuff depends on how sensitive demand is to income variations (*income elasticity of demand*). Among foodstuffs, demand for livestock products is relatively sensitive to changes in income (*income elastic*). This means that declining income particularly hurt the livestock sector. The fall in demand cut production further. The downsizing of the livestock sector also lowered demand for animal feed (feed grains and oilseeds), and thereby upset those markets. Since the bulk of grain output in Russia is used as animal feed (as in most countries), the contraction of the livestock sector largely drove the decrease in grain production, rather than a decline in human demand for grain products.

In fact, for certain foods, such as bread and potatoes, demand can rise rather than fall when income decreases (*inferior goods*). Table 2 shows that during the transition, consumption of cereals in Russia has remained generally steady while potato consumption has increased, suggesting that in Russia potatoes might be inferior goods.

The second way price liberalization affected agricultural markets was on the supply side, by raising the real prices for agricultural inputs. In the inflation following price liberalization, prices for agricultural inputs rose by a much greater percentage than prices for agricultural output. This increased the real prices producers had to pay for inputs, or in other words, worsened *producers' terms of trade*. In Russia, agriculture's terms of trade declined during the 1990s by about 75 percent. For example, in Russia in 1992, wheat producers on average had to sell 0.3 tons of output to purchase one ton of nitrogen fertilizer. In 1997 they had to sell 1.4 tons of wheat (Russian Federation, 1998). Higher input prices decreased the amount of inputs used in production, which reduced output further. For example, in Russia from 1990 to 1997, fertilizer use per hectare fell 80 percent, from 88 to 16 kilograms (Russian Federation, 2000).

Price liberalization could result in input prices rising relative to output prices for two reasons. The first is that in the pre-reform period prices for inputs were set lower relative to their production cost than were prices for output. When prices were then freed, prices for inputs had to rise more than prices for output to reach the value of the real cost of production. Such price-setting behavior means that in the pre-reform period producers were subsidized not only through direct budget subsidies, but also indirectly through the price system.

The second possible reason input prices could rise relative to output prices involves not just market liberalization but also the market structure for suppliers of agricultural inputs. In the pre-reform period farms were typically dependent for the supply of any particular input on just a few, and perhaps only one, large state distributor(s). During the early reform years, markets were liberalized and the input distributors privatized without the latter being broken up into smaller competing units. During the transition period farms have accused the large suppliers of using their monopolytype market power inherited from the Soviet period to charge higher prices than would be possible if a number of smaller competitive suppliers existed, prices that exceed the input producers' costs of production.

Although this problem has probably existed to some degree, gauging the degree of the problem is difficult. In Russia, local authorities continue to help the large former state and collective farms obtain inputs, often at below market prices, in return for the farms' willingness to sell them a certain amount of output at

agreed-upon prices. Since the prices of both inputs and output exchanged in these deals often deviate from existing market prices, it is difficult to determine whether farms are on net gaining or losing from the arrangement. Given that Russian regional governments have been paternalistic toward their local agriculture, fearing that defunct farms would create unemployment and food security problems, they have probably not used this relationship much to farms' disadvantage.

TRADE LIBERALIZATION

The second major reform policy that affected commodity restructuring in agriculture was trade liberalization. When Russia liberalized trade, domestic producer prices for most agricultural goods lay above world market prices (OECD, 1998). This was yet another way that the pre-reform system subsidized Russian agriculturesetting domestic producer prices above world prices. The fall in prices to world levels during the transition period further reduced agricultural production.

The Soviet Union was a major agricultural importer of products from outside the Soviet bloc (with most of the imports going to Russia). The main imports included feed grain, soybeans, and soybean meal, needed to feed the growing livestock herds. The reform-driven contraction of the livestock sector has severely reduced these imports (Table 3).⁵ Instead of importing feed to maintain their expensive livestock herds, Russia and the other countries of the former U.S.S.R. are now importing meat and other livestock products directly. From the second half of the 1980s to the period 1995–1998, average annual meat imports by the countries of the former U.S.S.R. rose by about 125 percent (Table 3), with Russia taking the bulk.⁶

The switch by Russia during transition from being a major importer of animal feed to a major importer of meat and other livestock products suggests that the country has a comparative disadvantage in the production of livestock products relative to animal feed; that is, it produces meat and other livestock products at a higher cost than it produces animal feed, relative to world market prices. Liefert (1994) supports this conclusion. He finds that at the end of the Soviet period, the U.S.S.R. had a general comparative disadvantage in agricultural goods vis-à-vis industry, and within agriculture a comparative disadvantage in meat production compared to grain. That agricultural trade during the Soviet period appears to have been inconsistent with comparative advantage shows the extent to which trade was driven by policy rather than economic rationality. Liefert (forthcoming) finds that in the late 1990s, despite the major production and trade adjustments that had occurred during almost a decade of transition, Russia continued to have a comparative disadvantage in meat production vis-à-vis grain.

⁵ This point takes issue with the criticism commonly made of the Soviet Union that it could not even feed itself. Rather than allaying food shortages, the imports of animal feed were used to maintain artificially high levels of livestock production and consumption. ⁶ The reason the data in Table 3 stop at 1998 is that in 1999 and 2000 the United States and EU gave Russia substantial food aid. The official Russian foreign trade data do not distin-

guish between commercial imports and food aid, and separating out the two categories of inflows would be overly difficult.

In addition to meat, Russia's main agriculture and food imports include other high-value products such as fruit, processed foods, beverages, and confectionary products, as well as the bulk crop sugar (mainly from Ukraine). A negligible agricultural exporter, Russia has maintained a large trade deficit in agriculture (Table 4).

TABLE 4.—AGRICULTURAL TRADE BALANCE

[In billions of U.S. dollars]

	1992	1993	1994	1995	1996	1997	1998
Total trade							
Imports	\$9.62	\$5.95	\$10.7	\$13.18	\$11.56	\$13.36	\$10.27
Exports	1.65	1.67	2.78	2.67	3.2	2.48	2.2
Net imports .	7.97	4.28	7.92	10.51	8.36	10.88	8.07
Trade with the							
United States							
Imports	1.13	1.22	0.65	1.03	1.33	2	0.83
Exports	0.02	0.02	0.02	0.02	0.04	0.03	0.03
Net imports	1.11	1.2	0.63	1.01	1.29	1.97	0.8

Source: USDA and OECD.

FALL IN OUTPUT WAS INEVITABLE PART OF MARKET REFORM

The analysis shows that commodity restructuring in Russia has been an inherent part of market liberalizing reforms. Price and trade liberalization substantially changed prices and incomes—the two main factors on which producers and consumers base their decisions to produce, buy, and sell goods. Changes in these variables in turn induced major changes in agricultural production, consumption, and trade. The decline in output, particularly in the livestock sector, was inevitable. Price liberalization caused output for a typical good to fall for three reasons—elimination of the gap between producer and consumer prices, the drop in consumer income, and the rise in inputs' real prices, with the last two effects occurring from economywide price liberalization. Trade liberalization added a fourth reason production could drop, since world prices lay below domestic producer prices for most agricultural goods.

A parallel way of explaining why reform has reduced output is by identifying how the pre-reform system directly and indirectly subsidized agriculture, and how price and trade liberalization caused production to drop by eliminating these subsidies. The three main types of subsidies were direct budget subsidies from the government (which maintained the gap between producer and consumer prices), the domestic price system which kept prices for agricultural inputs low relative to producer output prices and the real costs of production, and the price and trade system which kept domestic producer prices above world trade prices.

That the decline in agricultural output has been a necessary consequence of market liberalization means that the change in output is an unsuitable indicator of the success of agricultural reform. The degree to which output has fallen in individual countries is largely a measure of the extent to which agriculture in the pre-reform period was subsidized, planners' preferences for goods deviated from consumers' preferences, and the structure of countries' production and foreign trade differed from that based on comparative advantage.⁷

CURRENT SUPPORT AND TRADE POLICIES

Although the various types of direct and indirect subsidies to Russian agriculture steadily diminished during the 1990s, state support to agriculture has not been wholly eliminated. Relative to agriculture's share in GDP of 7 percent, budget subsidies by the federal government are low, comprising less than 2 percent of the federal budget, and just a fraction of 1 percent of GDP. However, as federal subsidies to agriculture diminished during the decade, subsidies by regional and local governments increased, such that in the aggregate they currently exceed total federal budget support. Regional governments are concerned about both the local food security and employment consequences of falling output and unprofitable farms within their jurisdictions. With their growing support to agriculture, local governments have gained influence over farms. As mentioned earlier, they typically help their farms obtain inputs, often at low or subsidized prices, in return for the farms' willingness to sell them output at agreed-upon prices.

Farms are also subsidized indirectly by the recurring policy of writing off of debt. Farms habitually receive "soft credits," either from state or quasi-state lenders, which are usually written off. During the 1990s most Russian former state and collective farms were unprofitable (currently about 50 percent are), and yet virtually none have gone bankrupt and closed down. That unprofitable farms can keep functioning means that their creditors (both input suppliers and lenders) indirectly subsidize them by either not calling in debt or eventually abolishing it.

Foreign trade policy in agriculture currently is not overly protectionist. Import quotas do not exist, with the exception of sugar (directed mainly at Ukraine). Import tariffs for most agricultural goods range between 10 and 20 percent, with 30 percent being the maximum. Some exports are also restricted, in particular sunflowerseed. Sunflowerseed exports are taxed, mainly to keep domestic output within the country to help national processors (crushers) suffering from excess capacity.

The dismantling of the state monopoly over foreign trade, and the array of prices and trade controls that were part of the monopoly, has substantially narrowed the gap between world and domestic producer prices for agricultural goods. As a result, the indirect subsidy to Russian agricultural producers during the Soviet period from receiving prices above world trade prices has declined significantly.⁸

⁷Although examining why industrial output has also fallen during the transition period is beyond the scope of this report, the general reasons are the same as those given for agriculture. Planners' desires for goods dominated over those of consumers, industrial production was subsidized (especially in heavy industry), and production and trade were not driven by countries' comparative advantage vis-à-vis the world market. Thus, industry also was an overexpanded sector of the economy. ⁸For detailed discussion and data concerning support to Russian agriculture during the tran-

⁸ For detailed discussion and data concerning support to Russian agriculture during the transition period, see OECD 1998.

However, agricultural trade restrictions have been stronger at the regional rather than federal level. Regional and local governments commonly restrict outflows of agricultural output from their jurisdiction. This hinders not only export beyond the borders of Russia, but also agricultural trade within the country. The most benign-possible reason for the flow restrictions is that regional authorities wish to protect their own consumers by ensuring that local supplies are adequate. The most malign-possible reason is corruption, as officials might exploit the regional price differences created by these restrictions to earn easy profits. Such controls work to segment regional markets from each other, as well as cut regional markets off from the world market. Without these restrictions Russian agricultural exports probably would not be much higher, but imports would be lower. The controls prevent regional output from reaching the large cities, such as Moscow and St. Petersburg, where domestic output competes with imports.

Russia began its negotiations for accession to the World Trade Organization (WTO) in 1994, and could finally gain admission within the next few years. The two main areas of negotiation concern market access (involving import restrictions such as tariffs and quotas) and domestic support. Compared to most other countries (whether in the WTO or not), the levels of Russia's current tariffs and domestic support to agriculture are neither particularly high nor low. Although Russia's negotiated terms of entry could reduce these amounts a bit, the effect on import volumes might not be substantial, at least in the near term. However, WTO accession would bind the country to maximum allowable levels of tariffs and domestic support, which would prevent Russia from raising the levels in the future.

Accession would also facilitate the development of a transparent, rules-based, and predictable trading system, the lack of which is probably the biggest current impediment to trade. For example, Russia has used arguments concerning health and safety to restrict imports of poultry from the United States. By binding Russia to the WTO's Agreement on the Application of Sanitary and Phytosanitary Measures, accession would require that any Russian complaints raised on this issue comply with WTO rules and procedures. A potential problem concerning WTO rules' enforcement for Russia, though, is the proliferation of support and controls by regional and local governments (such as the bans on outflows). Although these measures might conflict with WTO rules and commitments (just as they often violate Russian federal law), enforcing WTO disciplines at such decentralized levels of government could be difficult.⁹

EFFECTS ON U.S. AGRICULTURAL TRADE

The Soviet Union was a major market for U.S. grain, soybeans, and soybean meal (Table 3). The reform-driven changes in agricultural production and trade in Russia and the other countries of the former U.S.S.R. have strongly affected U.S. agricultural trade. U.S. exports of the above commodities to the region have fallen substantially (Table 3). However, the United States has moved from exporting almost no meat to the region in the pre-reform period to

⁹For further discussion of Russia's WTO accession involving agriculture, see Liefert (1997).

being a major meat exporter. The bulk of the exports are poultry, with most going to Russia. Since the changes in Russian agricultural trade are being driven by the economic fundamentals of comparative advantage, rather than any short-run "disruptions of transition," the changes in the volume and structure of U.S. agricultural exports to Russia and the rest of the former U.S.S.R. region are not likely to be reversed in the foreseeable future.

During the second half of the 1990s, Russia took nearly half of all U.S. poultry exports. Poultry accounted for about three-fourths of all U.S. agriculture and food exports to Russia in value terms, and imported poultry (mainly from the United States) provided over half of all poultry consumed in Russia. Other U.S. agricultural exports include red meat and processed foods. As the United States imports virtually no agricultural products from Russia, during the 1990s it ran an agricultural trade surplus with the country annually averaging about \$1 billion (Table 4).

Russia's financial crisis that hit in August 1998 severely cut the country's agricultural imports, seriously hurting U.S. exports. One of the main consequences of the crisis was depreciation of the ruble vis-à-vis the U.S. dollar and other major Western currencies by about 75 percent, as the exchange rate quickly fell from about 6 rubles to the dollar to 25 rubles. In the fourth quarter of 1998, total Russian agricultural imports were down by about 80 percent compared to the previous year, and by 2000 had recovered to only half the pre-crisis level. U.S. agricultural exports (again especially poultry) to Russia crashed in late 1998, though have since steadily rebounded. By early 2001 U.S. poultry sales to Russia were close to pre-crisis levels (230,000 metric tons in the first quarter of 2001).

In 2001 and 2002 U.S. meat exports to Russia might also benefit from the outbreak of both mad cow disease (Bovine Spongiform Encephalopathy, or BSE) and foot-and-mouth disease in the EU. The EU has been Russia's main source of imported beef and pork. In early 2001 Russia, along with other countries such as the United States and Canada, banned the import of all EU meat (though poultry was later allowed). In 1999 and 2001 Russia also forbade imports of pork from China, because of foot-and-mouth disease outbreaks there. Although it is unclear how long the meat import embargoes imposed by Russia will last, the bans, as well as lingering Russian suspicion concerning imported meat from the EU and China, could provide U.S. beef and pork producers with at least a short- to medium-term opportunity to expand exports.

CONSUMPTION AND FOOD SECURITY CONCERNS

The drop in agricultural production during reform has coincided with a fall in consumption of livestock products (Table 2). In discussing food security in Russia, the Western media commonly give the decline in agricultural output and consumption as evidence that transition has seriously worsened food security. Although transition has created a food security problem, the cause of the problem is not the drop in agricultural output, nor is it more generally insufficient food supplies. As mentioned earlier, before reform, Russia had high per capita levels of consumption of most foodstuffs, including meat and other high-value livestock products, compared with even rich OECD nations. The best evidence of the adequate availability of foodstuffs during transition is that, even with food supplies and consumption being relatively high in the pre-reform period, consumption of staple foods such as cereals and potatoes has remained steady or even risen (Table 2). Consumption of high-value livestock products has fallen during transition. As mentioned before, however, per capita GDP in Russia and the rest of the U.S.S.R. before reform was at most only half the OECD average. Consumption of "luxury" livestock products has therefore declined during transition to levels more consistent with the country's real income.

Reform has threatened food security in Russia not because of inadequate overall supplies of foodstuffs, but because of problems involving access to food for segments of the population and certain regions within the country. The inflation and rising unemployment of the transition period increased poverty, such that food became less affordable to a growing share of the population. The groups most vulnerable to poverty are those dependent on the state welfare system for their income (such as pensioners), which has declined in real terms because of inflation, and workers who have lost their jobs or suffered a decline in their real wages, largely because they are (were) employed by industries producing goods for which demand has dropped during reform. Reports suggest that as much as 30 percent of the Russian population might be living below the poverty level.

In addition, as discussed earlier, agricultural surplus-producing regions commonly restrict the outflow of foodstuffs. Whether the authorities' motive is to protect their consumers by strengthening local supplies or to benefit corruptly from the price arbitrage opportunities created by the restrictions, the controls can prevent fooddeficit regions from obtaining needed supplies.

In 1999–2000, Russia received substantial food aid from the United States and EU. U.S. aid for the 2 years totaled over 3 million metric tons (mmt) of commodities worth about \$1.1 billion, while the EU gave 1.8 mmt, worth almost \$0.5 billion. Most of the U.S. and EU aid was targeted to food deficit regions, while some of the U.S. aid was distributed by private voluntary organizations to the poor and elderly.¹⁰

These distribution policies reflect the wisdom of targeting food aid to needy social groups and regions. Such distribution will not only have the strongest possible humanitarian effect, but also limit any potential harm to agricultural producers. Funneling food aid to the poor who have reduced purchasing power and to food deficit regions where food prices are high will minimize the injury that food aid can cause agricultural producers by depressing prices.

¹⁰ One of the motivating factors in the large aid to Russia was worry about the effects on food availability of Russia's economic crisis of 1998. As discussed earlier in the report, the crisis substantially depreciated the Russian ruble vis-à-vis Western currencies. By raising the price of imported foodstuffs, the depreciation cut food imports in half. It has been a commonly held belief during the transition that Russia imports over half of its food. If true, the large drop in imports following ruble depreciation could by itself threaten food security. However, the Economic Research Service of USDA has calculated that even before Russia's crisis, imports accounted for only about a fifth of the country's total food consumption. Poultry (mainly from the United States) was the only major foodstuff for which imports have been providing over half of domestic consumption. Imports do account, though, for over half of the food consumed in major cities such as Moscow and St. Petersburg. Extrapolating the experience of the big cities to the entire country might explain how the misconception developed concerning the importance of imports to total national food supplies (see Liefert and Liefert, 1999).

The reform-driven drop in agricultural production and consumption in Russia is part of the economywide reallocation of resources away from producing and consuming goods favored by planners and the political elite to goods favored by consumers. It might seem surprising to describe foodstuffs as goods more favored by planners than consumers. Yet, as previously discussed, the high levels of agricultural production and consumption of foodstuffs during the prereform period required large direct and indirect subsidies to both producers and consumers. Once market liberalization and the decline in subsidies resulted in foodstuffs reflecting the full cost of their production, consumers switched from buying high value livestock products to other goods and services. Reform has in fact created entirely new goods, and in particular services, which consumers were starved of under the old regime and to which demand has turned during reform. Some of the worry in both Russia and the West about declining food production and consumption during reform has been based on the misconception that by their very nature, foodstuffs must be more favored by consumers than planners, such that the general public must on net inevitably suffer if reform reduces consumption.

FARM RESTRUCTURING AND INSTITUTIONAL MARKET INFRASTRUCTURE

This paper argued earlier that because the contraction of agricultural output has been an inherent part of market reform, output is a misleading indicator of reform progress within the sector. A more appropriate indicator is growth in productivity, that is, farms' ability to produce more output from a given amount of inputs. Productivity growth would increase farm output and profitability, improve the cost-price competitiveness of Russian production vis-à-vis the world market (which in the Russian context mainly means competing better against imported foodstuffs in the country's large urban markets), and save resources that could move out of agriculture to produce goods in other sectors of the economy.

The changes in Russian agriculture that could raise productivity must come in the major areas of agricultural reform (other than market liberalization) identified at the start of the paper—farm restructuring, changes in upstream and downstream operations, and development of institutional infrastructure. However, progress in these areas to date has been disappointing, from the point of view of both the actual changes made and improved productivity performance. Developments will be examined from the point of view of the three main types of agricultural producers during the transition period: private farms, household plots, and the former state and collective farms.

PRIVATE FARMS

At the start of reform many Russian agricultural reformers hoped that private farms would be the vanguard of successful market-driven reform of agriculture. By 1995 about 280,000 private farms existed in Russia, comprising 5 percent of all farmland, and producing 2 percent of total agricultural output (Table 5). The average size of the farms in 1995 was 43 hectares (106 acres).

TABLE 5.—SHARE IN AGRICULTURAL OUTPUT OF DIFFERENT PRODUCERS

[In percent]

Commodity	Private farms				 Household plots ¹ 					Former state and collective farms					
Commounty	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Total output	1.9	1.9	2.4	2.1	2.5	47.9	49.1	51.1	59.2	57.2	50.2	49.0	46.5	38.7	40.3
Grain	4.7	4.6	6.2	6.8	7.1	0.9	0.8	0.8	0.9	0.9	94.4	94.6	93.0	92.3	92.0
Sunflowerseed	12.3	11.4	10.8	10.9	12.6	1.4	1.6	1.4	1.5	1.3	86.3	87.0	87.8	87.6	86.1
Sugar beets	3.5	3.3	3.5	4.0	5.4	0.6	0.7	0.8	0.8	0.8	95.9	96.0	95.7	95.2	93.8
Potatoes	0.9	0.9	1.0	1.0	1.0	89.9	90.2	91.3	91.2	92.0	9.2	8.9	7.7	7.8	7.0
Vegetables	1.3	1.1	1.5	1.8	2.1	73.4	76.8	76.3	79.6	77.0	25.3	22.1	22.2	18.6	20.9
Meat ²	1.5	1.7	1.6	1.6	1.7	48.6	51.6	55.9	56.9	59.4	49.9	46.7	42.5	41.5	38.9
Milk	1.5	1.5	1.5	1.6	1.7	41.4	45.4	47.2	48.3	49.7	57.1	53.1	51.3	50.1	48.6
Eggs	0.4	0.4	0.4	0.4	0.4	30.2	31.2	30.4	30.1	29.4	69.4	68.4	69.2	69.5	70.2

¹ Includes garden plots. ² Liveweight (before slaughter).

Source: Russian State Committee for Statistics.

Since 1995 private farming has not grown by much, in terms of either number of farms or the farms' share in total output (though average farm size has increased to 58 hectares). A number of serious impediments exist to their growth and prosperity. Although these obstacles hurt all types of agricultural producers to some degree, they are the most vexing for private farms. One impediment is the absence of full private ownership rights in agricultural land. A 1993 Presidential Decree sanctioned private property in farmland. This has allowed individual farmers to obtain and use farmland for private gain, as well as de facto pass the land on to their heirs. Most private farmers acquired their land in two ways. The first was the reorganization of former state and collective farms in 1993, whereby farm members were given shares of land which they could choose to farm individually. The second way was purchasing land from the state land reserve, which was created at the beginning of reform from land taken from former collective farms.

However, private farmers do not fully own their land, and can only sell it back to the state land reserve. Also, foreigners cannot purchase farmland. What is most lacking is federal legislation passed by the Duma which gives individuals full legal title to farmland, which they could sell to others. The Yeltsin Administration pushed for legislation that would allow full private property in farmland, and it appears that some in the Putin Administration also support such a position. However, the Duma, in which conservative agrarian interests have been strong throughout the transition period, has consistently opposed such legislation. In June 2001 a law in the Duma passed its first reading (three "readings" are necessary to become law) that would allow private ownership of land. However, the law sidesteps the issue of ownership of agricultural land, by stating that agricultural land will be handled in future legislation. If no federal legislation is passed in the near to medium term that specifically addresses the question of farmland, regional (oblast) legislation would probably determine the specific conditions of its ownership and use. Although some regions have passed liberal legislation concerning agricultural land, others have enacted very conservative laws that deny private ownership.

The mass of conflicting federal and regional laws and rules concerning farmland has had the collective effect of preventing the development of an agricultural land market. One negative consequence of the absence of private ownership of farmland and a land market is that farmers cannot use their land as collateral for debt. Current law in fact prohibits farms from mortgaging their land. This makes it virtually impossible for them to obtain commercial loans. A second negative effect is that without the security of full ownership, farmers have reduced incentive to invest in developing their land.

Other major impediments to the development of private farming concern the third and fourth major elements of Russian agricultural reform identified at the start of the paper—upstream and downstream linkages and supporting market infrastructure. Upstream and downstream linkages and market infrastructure have all been weak during the transition period. During the Soviet era farms received inputs directly from the state and also gave their output directly to the state distribution system. Private farmers, however, must secure inputs for themselves and also market their output. The commercial channels for doing so were non-existent at the start of reform, and grew only slowly during the 1990s.

Private farmers not only need to establish these key linkages, but they also need supporting commercial and public institutions and infrastructure that a market-oriented agricultural economy requires. They in particular need a financial system that allows fast, affordable access to capital, a system for quick and inexpensive dissemination of market information (where can one buy and sell, and at what price?), and a strong system of commercial law that protects property and enforces contracts. Infrastructure and services in all these areas are weak. Virtually no system of private commercial finance exists for agriculture. A recent publication on Russia's agro-food economy (Wehrheim et al., 2000) argues that undeveloped institutions and infrastructure are the main problem facing the sector. The absence of this infrastructure increases the risks and transaction costs of doing business.

Another endemic problem in Russia that raises transaction costs is extortion and bribery, a consequence largely of the dysfunctional legal system. The problem is particularly serious for sellers of agricultural products. The easily identifiable and perishable nature of their output makes them vulnerable to vandalism by extortionists or corrupt officials who want to punish those who thwart them. In addition to poor institutional infrastructure, private farmers (like the entire sector) are plagued by deficient physical infrastructure. Although storage is inadequate, the main weakness is transportation, particularly the poor road system.

Yet another major impediment to the development of private farming is resistance by the farmers' parent farms. The managers of the former state and collective farms do not support, and often actively oppose, having their workers spin off private farms. Weak institutional infrastructure and upstream and downstream linkages increase private farmers' vulnerability vis-à-vis their parent farms, for it makes them dependent on the farms for obtaining inputs and marketing their output.

HOUSEHOLD PLOTS

As during the Soviet period, households on the former state and collective farms have small plots that they can independently cultivate. The plots average no more than half a hectare in size (about one acre). Yet, as during the Soviet period, they produce a disproportionate share of the country's agricultural output. The share has steadily risen during the transition period (mainly because output by the former state and collective farms has dropped), such that they now account for more than half of all production (Table 5). The plots produce mainly livestock products, potatoes, and vegetables, and virtually no bulk crops, such as grain and oilseeds. The households typically consume part of their output themselves and sell the rest, usually directly to consumers at local farmers' markets. During the reform period there has also been growth in output by garden plots tended by the general population.

The household plots' disproportionate share in output raises the question of whether they could serve as the foundation for developing a market-oriented agricultural system based on privately owned household farms. The plots' achievement, however, is deceiving. A major reason for their "success" is their strongly symbiotic (parasitic?) relationship with their parent farms, through which the plotholders obtain inputs (such as animal feed) inexpensively or for free. Despite the official statistics which identify the share of these plots in total farmland as only 3 percent, the plotholders also use some of their parent farms' land for their own purposes. The amount of land they actually utilize could be as high as 10 to 15 percent of the total (OECD, 2001). If the plots were wholly privatized, they would face the same challenges as the struggling private farms described earlier, in particular the problem of obtaining inputs through commercial means.

The plotholders would face these hurdles with the additional handicap of being much smaller than existing private farms. Even if the plots increased in area tenfold, they would still be very small. Russia could end up with a situation similar to Poland, the only country of the Soviet bloc that had small peasant-run farms, where farms currently average about 8 hectares in size (20 acres). The unproductivity of such a scenario is shown by the fact that agriculture in Poland accounts for only 5 percent of the country's GDP, but has 25 percent of the labor force. Small plots in Russia would in particular suffer from diseconomies of scale in producing bulk crops, which require heavy machinery for planting and harvesting. Although the productivity of Russia's household plots demonstrates the beneficial effect on incentives from giving farmers the freedom to farm for their own gain, such a system of small non-capitalized plots would be technologically and organizationally pre-modern in nature.

FORMER STATE AND COLLECTIVE FARMS

The dominant agricultural producers in Russia (if not in terms of total output, then in institutional structure and influence) continue to be the former state and collective farms. They hold about 85 percent of all farmland and produce about 40 to 45 percent of total agricultural output (Table 5).¹¹ They account for most bulk crop production. In 1993 the state and collective farms of the Soviet era were forced officially to reorganize. Many became "joint stock companies," while others became some sort of cooperative or collective association. As joint stock companies, the farms issued vouchers to all workers and managers, which gave them a claim to a share in the farms' land and other assets. Individuals could use these vouchers to obtain land to work as private farmers.

With the collapse of central planning, farm managers were given the freedom and responsibility to make their own production decisions, obtain inputs, and market their output. As a result, their position within the farms strengthened considerably. Farm management has been conservative during the reform period, such that little real change has occurred concerning farm organization, administration, and the system of internal work incentives. Farm produc-

¹¹Because the former state and collective farms produce most of the country's bulk crops, their output volumes are sensitive to the weather. A major reason these farms' share in total agricultural output slips in 1998–1999 to only about 40 percent is because poor weather caused low harvests, especially of grain. The statement that these farms currently account for about 40 to 45 percent of total output assumes average weather conditions.

tivity has increased only negligibly, if at all. Lerman et al. (2001) calculate that during 1992–1997, total factor productivity in Russian agriculture rose only 7 percent (in total over the period, not annually). Voigt and Uvarovsky (2001) compute that during 1993–1998, total factor productivity on the former state and collective farms fell 15 percent (in total). Both Sedik et al. (1999) and Voigt and Uvarovsky (2001) find that technical efficiency on the former state and collective farms, which measures the productivity performance of farms *relative to the most productive farms* in the country, has fallen during the transition period. This means that farms in general have moved further away from, rather than closer to, the best possible production practices within the country.

Because of the unlikelihood that private farming as previously described will flourish in the near to medium term, the "reorganized" former state and collective farms will probably continue to dominate agriculture in the foreseeable future (say the next 10 years). What are the chances that these farms will evolve into more dynamic and productive enterprises?

The farms face some major handicaps inherited from the Soviet period in changing their nature and behavior. One is that during the Soviet era farms did not specialize in production. Although very large (state farms averaged about 38,000 acres and collective farms 15,000 acres), they usually produced dozens of commodities. If a farm had the capability to produce a certain agricultural good, it usually did. Such non-specialization contrasted sharply with industrial policy during the Soviet period, whereby a huge enterprise might be the country's sole producer of a major product. The growing influence of local government over farms during the reform period has reinforced the tendency to diversify rather than specialize in production, as local governments worry about food security. Greater specialization would reduce farms' production costs by allowing them to capture economies of scale.

Another handicap is the farms' tradition of providing social welfare services for their workers, which includes health, education, housing, and entertainment. Although the quality of these services has declined during the reform period, the general obligation remains. According to a farm survey, these services increase farms' total costs by 10 to 30 percent (Uzun, 2001). Yet another handicap is the relationship household plotholders have vis-à-vis their parent farms, by which the former obtain inputs at the latter's expense. According to the same farm survey, this relationship raises farms' costs by another 20 percent (Uzun, 2001). Non-specialization in production, provision of welfare benefits, and service as a conduit for free inputs to plotholders all impede farms' ability to become market-oriented profit-maximizing and cost-minimizing producers.

In addition to reducing the burdens just identified, there are two general ways farms could become more efficient and productive. The first would simply be to shed existing unproductive inputs, especially labor. The relative unproductivity of agricultural labor is shown by the fact that agriculture currently accounts for about 7 percent of GDP, but has 14 percent of the country's total labor force. (In comparison, agriculture's share in the labor force in the United States is only about 2 percent—which is also primary agriculture's share in U.S. GDP—and in the EU 5 percent.) Poor labor productivity in Russia keeps production costs high and farm wages and income low.

An advantage of raising productivity by shedding labor is that it does not require a change in the existing system or technology of agricultural production. The drawback is that it requires economic developments outside of agriculture. The rest of the economy must grow in order to generate new jobs for agricultural workers.¹² Local governments resist attempts by farms to pressure workers to leave, out of fear it will add to unemployment. The collapse of the national social welfare system during the transition period also discourages workers from leaving the farm. Workers are understandably reluctant to face the prospects of both unemployment and a social welfare system inferior to that they currently enjoy.

The second way farms could increase productivity would be from genuine farm restructuring—that is, a major improvement in how farms are managed and internally motivated, which would increase the incentives to use resources more productively. Throughout the transition period, farm management has opposed such major changes, while the agricultural establishment in general has defended the existing system.

Rather than advocating major systemic reform of agriculture, managers and agricultural policymakers argue that improvement should come in two different ways. The first way is by restoring the various types of support that existed during the Soviet period, such as direct government subsidies to agriculture and high output prices relative to input prices. The main complaint of agriculture during the reform period is that the deterioration in its terms of trade has made inputs unaffordable. The second way is by acquiring superior Western technology. Yet, unless major improvements are made in the systemic nature of agriculture (effective farm level restructuring supported by the necessary institutional infrastructure), Russian agriculture might not effectively use the superior material technology and therefore fail to raise productivity.

The reason the Russian agricultural establishment has resisted major reform is probably some combination of a genuine belief that the main problems in agriculture are not systemic in nature, and that major systemic changes would threaten their power and privileges. This writer is in fact sympathetic to the argument that Russian agriculture lacks the mentality necessary to implement major reform. The Russian agricultural establishment appears to be stunned by the huge contraction of the sector, particularly the halving of livestock operations. Adding to the shock is the mindset inherited from the Soviet period whereby the main goal and performance indicator of economic activity was rising output (rather than growing productivity or consumer satisfaction).

NEW AGRICULTURAL OPERATORS AND A NEW SPIRIT OF ENTERPRISE?

There is evidence that some new forms of farm organization and "agricultural operators" are emerging in the country (Rylko, 2001). A feature of these new producers is that they are very large

¹²More generally, Lerman (1999, 2000) finds a correlation between GDP growth in transition economies and growth in agricultural output. GDP growth not only increases the quantity of agricultural inputs available to farms, but also helps develop the agricultural services and commercial infrastructure that farms need to function and reduce operational and transaction costs.

(around 36,000 hectares, or 85,000 acres, on average), and often are vertically integrated enterprises, combining primary production, processing, and distribution. Most of these new operations have not evolved from the former state and collective farms, but rather have been created by entities outside of primary agriculture, such as banks, input suppliers, agro-processors, or industrial enterprises. The apparent motive for the move into primary agriculture is that they think it will profitably complement their existing business (such as input supply or processing). Uzun (2001) finds that the most successful of the former state and collective farms are also very large, the hypothesis (backed by some evidence) being that they have lower per unit costs of production from economies of scale. Uzun argues that one reason these farms are successful is that they specialize in production much more than most former state and collective farms.

Nonetheless, the evidence is too new and slight to argue that these new operators and large former state and collective farms are the wave of the future. Yet, it is telling that the most dynamic new types of farm organization in Russia involve large and integrated enterprises, rather than smaller family-type farms.

Is there any recent evidence that Russian agricultural performance in the aggregate is improving, perhaps because of the benign influence of these new types of producers? The economic crisis of 1998 provided a good test of Russian agriculture's ability to respond to opportunities to expand output. The extreme depreciation of the ruble following the crisis severely cut imports and raised agricultural producer prices expressed in domestic currency. A large Russian production response would show that market incentives and mechanisms were working reasonably well.

However, it appears that agricultural output has responded to this opportunity only mildly. Although total agricultural output increased in 1999 and 2000 by 3 and 5 percent, this was mainly because weather improved in those years over the terrible weather year of 1998 (which produced Russia's lowest grain harvest in decades). In 2000 total agricultural production was still 4 percent lower than in 1997 (admittedly a very good weather year).

The change in production of livestock products is a better indicator of response than the change in crops, given that Russia is a larger importer of livestock products compared to crops and that livestock output is not so vulnerable to the weather. In 1999 livestock production declined 4 percent, while aggregate output in 2000 was roughly unchanged. The 2000 performance in fact represents some progress, since it was the first year since reform began that livestock output did not fall. Other positive indicators in 2000 were that farm profitability improved (the number of unprofitable farms fell from 54 percent to 48 percent), and output of agricultural inputs rose (Serova, 2001).

All this evidence supports the conclusion that the isolated effect of major ruble depreciation on agricultural output has been positive, though not robust. Some Russian agricultural specialists believe more generally that in the last couple years an improvement has occurred in the attitude and behavior of agricultural enterprises (farms and processors). Enterprises better understand and accept the challenges (and opportunities) of producing for a marketdriven economy, and thereby are becoming more concerned about productivity, cost minimization, marketing, and the need to be selffinancing.¹³ Such opinion provides some basis for optimism, though it is unclear how prevalent and deep the changed behavior is. In its most recent review of Russian agriculture, the OECD (2001) argues that any current upturn in the sector might be a response more to short-run and reversible favorable developments, such as good weather and ruble depreciation, rather than to any major improvement in business mentality or behavior.

This writer believes that it is still too early to conclude that a definite improvement has taken place in the attitude and performance of Russian agricultural producers. Although productivity growth is needed to make Russian agriculture profitable and competitive, the motivation within the sector to make the necessary systemic changes to raise productivity still appears rather weak. Motivation could be imposed on the sector from outside by the state enforcing a genuine "hard budget constraint." This would involve ending soft credits and requiring farms punctually to pay all debts, that is, to become genuinely self-financing. However, the agricultural establishment and local governments resist this, and no other force pushes for it. As a result, although most farms have been unprofitable during the 1990s, hardly any have gone bankrupt, as they muddle on with de facto subsidies from soft credits. Almost all farms continue to function despite a huge sectorwide drop in production, and with agriculture still employing almost as much labor as in the pre-reform period.

COULD REFORM TURN RUSSIA INTO A MAJOR GRAIN EXPORTER?

When Russia began economic reform in the early 1990s, U.S. agricultural interests worried that reform might not only eliminate the large U.S. exports of grain and soybeans to the country, but also turn Russia into a major grain exporter. Using forecasting models, Liefert et al. (1993) and Tyers (1994) predicted that if reform succeeded in significantly raising agricultural productivity in Russia, the country would become a major grain exporter, perhaps up to 20 million tons a year.¹⁴ Johnson (1993) argued that by simply reducing waste and thereby raising utilizable output of grain, which is one form of productivity growth, Russia could have exportable surpluses.

The reason Russia has not become a grain exporter is that the farm level restructuring and creation of supporting infrastructure that would raise productivity have not occurred. This means that the forecasters were not necessarily wrong in their predictions, since their forecasts were based on the general premise (fleshed out with specific assumptions) that ambitious and effective reform would be pursued.

However, even if reform succeeded in raising productivity in grain production, this might be insufficient to move Russia toward grain exports. The forecasting studies just identified examined the effect of reform within the agricultural economy alone. The studies

¹³This information is based mainly on the author's recent conversations with agricultural specialists in Russia.

¹⁴The forecast by Liefert et al. was for the former U.S.S.R. in the aggregate, though it would be unlikely that the region could become a major grain exporter if Russia were not exporting.

correctly forecast that the *isolated effect* of productivity growth in grain would be to improve the trade balance in the product. Productivity growth would stimulate exports by reducing per unit costs of production, thereby making domestic output more price competitive vis-à-vis imports and the world market—in other words, the productivity growth would improve Russia's comparative advantage in the product.

Assume, though, that reform raises productivity uniformly throughout the economy (for all inputs used to produce all goods), say by 50 percent. Because of the inverse relationship between productivity growth and costs of production, production costs for all goods would fall also by a uniform percentage. (Under standard assumptions, the per unit costs would drop by one-third.) Since comparative advantage depends on relative costs and prices, Russia's structure of comparative advantage would not change. If Russia were a relatively high cost producer of grain before the uniform productivity increase, it would remain a relatively high cost producer, because per unit costs for all goods would change by the same percentage. This means that if Russia were a net importer of grain or any other good before the productivity growth, it would be economically profitable for the country to continue importing the good.¹⁵

An example of this general point is that ever since Great Britain repealed the Corn Laws in the middle of the 19th century which opened the country up to free trade, it has been a major importer of agricultural goods. Over the past 150 years Britain has had significant productivity growth in agriculture in absolute terms. However, because productivity growth has occurred throughout the economy, Britain remains a high cost producer of agricultural goods relative to other goods it produces, and thereby has continued as a large agricultural importer.

If Russia currently does not have a comparative advantage in grain, as appears to be the case, it can develop a comparative advantage and thereby become a major exporter only if productivity growth in grain production exceeds that in most other areas of the economy. The southern half of the European part of the former U.S.S.R. has highly favorable natural conditions for agriculture, particularly grain production-excellent soil and climate and generally adequate (though inconsistent) precipitation. Once that region, which covers Ukraine and southern European Russia, adopts world-standard production technology, creates reasonably efficient systems of farm organization and management, and builds institutional infrastructure to service agriculture properly, it will most likely have a comparative advantage in production of grain and various other crops, such that it should be a major exporter. This would be consistent with the region's history of being a large grain exporter. However, during the transition period, agriculture has

¹⁵Conceptually, productivity growth would shift the domestic supply curve for grain to the right, thereby increasing output. However, by lowering the production cost of all goods by a uniform percentage, the productivity rise should appreciate the country's currency (under standard assumptions by an amount equal to the productivity growth). The appreciation would lower the good's world price expressed in domestic currency. The drop in price would increase domestic consumption and reduce domestic production. Thus, the country's trade deficit in the good might change little. Liefert (1994) examines the relationship between productivity growth and comparative advantage, particularly as applied to transition economies.

been one of the most conservative and anti-reform sectors in Russia (as well as Ukraine), and there is no firm evidence that it will become significantly more progressive during the next 10 to 15 years (the new farm operators notwithstanding). Thus, during at least this time frame, the likelihood that agriculture will outperform the rest of the economy in productivity growth to become a major exporting sector appears dim.¹⁶

CONCLUSION

During the transition period, Russian agricultural output has fallen in volume terms by 40 percent. The livestock sector has been hit the hardest, with production and animal inventories both down by about half. The decline in agricultural production, however, has been an inevitable consequence of market reform. The main reason for the output drop is that consumers' desires for goods have replaced those of planners and the political leadership as the dominant force in determining what goods are produced and consumed. The policies that engineered the switch from planners' to consumers' preferences as the driving force of production and consumption were price and trade liberalization. These policies reduced or eliminated the array of Soviet-era subsidies to agriculture that maintained artificially high levels of production and consumption. Agriculture was subsidized three general ways: (1) through direct budget subsidies from the government; (2) through the domestic price system whereby the prices farms had to pay for inputs were set low relative to output prices and to the real costs of production; and (3) through a price support system whereby the prices agricultural producers received for their output were kept above world trade prices.

The restructuring of agricultural production and consumption has strongly affected U.S. agricultural exports. The Soviet Union was a large importer of grain, soybeans, and soybean meal, needed to feed growing livestock herds, with the United States being a major supplier. The contraction of the livestock sector has pretty much ended these imports. In their place, Russia has been importing substantial amounts of meat. These changes have strongly affected U.S. agriculture, as Russia has become the largest foreign market for U.S. poultry. Research at the Economic Research Service of the U.S. Department of Agriculture (USDA) shows that the switch from importing animal feed to maintain a large livestock sector to importing meat and other livestock products is consistent with Russia's comparative advantage in agriculture—that is, the country produces livestock goods at a relatively higher cost than it produces animal feed.

The production decline has been accompanied by a fall in consumption of many foodstuffs, particularly livestock products such as meat and milk. This has raised concerns about food security. Although transition has created a food security problem for Russia, the cause of the problem is not the drop in agricultural output, nor is it more generally insufficient food supplies. Before reform Russia

¹⁶Using a forecasting model for Russian agriculture, the Economic Research Service of the USDA predicts that during the next 10 years Russia remains a net grain importer (though of only a couple million tons a year). The forecasts are based on assumptions that productivity growth in the grain sector, as well as throughout agriculture, is slight (ERS, 2001).

had high per capita levels of consumption of most foodstuffs, compared even to rich OECD countries. Although consumption of expensive livestock products has dropped, consumption of staple foods such as bread and potatoes has remained steady or even increased.

Reform has threatened food security because of problems involving access to food. Reform has increased the number of poor who lack the purchasing power to sustain adequate diets. Also, impediments to the flow of foodstuffs within the country have prevented food-deficit regions from obtaining supplies from surplus-producing areas.

That the fall in agricultural production has been a necessary part of market reform shows that output is an inappropriate indicator of reform progress. Better performance indicators for Russian agriculture are productivity growth (getting more output from a given amount of inputs) and cost reduction. In addition to increasing output, productivity growth would make domestic production more price competitive vis-à-vis the world market, and free up resources that could be used to produce goods in other sectors of the economy (such as the fast-growing service sector).

Productivity growth and cost reduction could be achieved two main ways. The first is through effective farm restructuring, which involves changing farms' internal systems of organization, management, and incentives for workers. The second is by reducing transaction costs for farms and enterprises by creating the institutional infrastructure that a market-oriented agricultural system needs. Necessary institutional infrastructure includes systems of rural banking and finance, market information, and commercial law that can clarify and protect property, enforce contracts, and resolve disputes. This infrastructure would also strengthen the upstream and downstream linkages that connect agricultural producers to their input suppliers and output processors and distributors.

To date, progress in farm restructuring and growth of institutional infrastructure has been disappointingly slow. Private farming has not taken off, and currently accounts for only 2 percent of agricultural output. A major reason is that the mass of conflicting laws concerning the use of agricultural land does not allow for full private ownership of land, which prevents development of an agricultural land market. This hurts private farmers' incentives to invest in their land, as well as their ability to get loans, since they cannot use land as collateral. Russian agricultural producers in general, but in particular private farmers, have also suffered from the fact that commercial and public institutional infrastructure for agriculture remains very undeveloped.

The household plots maintained by workers on the former state and collective farms now produce over half of the country's total agricultural output (mainly livestock goods, potatoes, and vegetables). A major reason for the plots' "success," however, is their symbiotic relationship with their parent farms, which allows plotholders to obtain inputs inexpensively or for free. Without this crutch, the plots would face all the challenges of private farms, with the added handicap of being only a fraction of their size.

The former state and collective farms continue to dominate the organizational structure of Russian agriculture. Although forced in 1993 officially to reorganize, with many becoming "joint stock com-

panies" owned by their workers, the farms have done little to change how they internally operate. Farm managers and the agricultural establishment generally oppose systemic changes in agriculture, probably from some combination of a genuine belief that the main problems in Russian agriculture are not systemic in nature, and fear that major changes would threaten their power and privileges. Most farms have been unprofitable throughout the transition period, and get by largely from continued soft loans from either state or quasi-state lenders that are eventually written off.

Some new types of producers are appearing in Russian agriculture, in particular large vertically-integrated enterprises, often created by input suppliers or processors. Some Russian agricultural specialists argue that farms and processors in general are becoming more reconciled to the challenges and opportunities of producing for a market economy, and thereby are growing more concerned about productivity, cost reduction, and marketing. However, the evidence is still too slight to conclude that these new producers, and attitudes, represent the future of Russian agriculture, and that they will lead to a substantial improvement in agricultural performance. If such improvement is not forthcoming, the main consequence for U.S. agriculture is that Russia will not become a major agricultural exporter, and will likely continue as a big meat importer.

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Human Capital and the Social Contract RUSSIA'S DEMOGRAPHIC AND HEALTH MELTDOWN

By Murray Feshbach¹

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SUMMARY

The demographic and health meltdown in Russia during the first half of the 21st century is based on trends already evident or emerging. The overall population and health decline starts with children born to women with poor reproductive health, and proceeds to high premature mortality of Russian males.

Human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) and its co-infection with tuberculosis are now in early but virulent stages. If present trends continue, these infections will have an increasingly negative effect on life expectancy and overall health of the Russian population. Mental retardation of the young adds another severely negative factor to future Russian health. Accumulative consequences of this demographic and health meltdown will be deterrence of an economic re-

¹Dr. Murray Feshbach is currently a Senior Scholar at the Woodrow Wilson International Center for Scholars of the Smithsonian Institution. He began work in October 2000 on policy implications of the population, health and environmental problems in Russia. He retired as Research Professor Emeritus from Georgetown University in July 2000. During this period he spent much of 1986–1987 as Sovietologist-in-Residence at NATO headquarters in Brussels, Belgium, working directly for Lord Carrington, Secretary-General. Prior to Georgetown University, he was Chief of the U.S.S.R. Population, Employment and Research and Development Branch, Foreign Demographic Analysis Division, U.S. Bureau of Census, until his retirement in 1981 from this organization. He joined the Census Bureau in 1957 after several years working on the Soviet Economy Project at the National Bureau of Economic Research, in New York, during 1955 to 1956.

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vival, reduction of military capabilities and dampening of morale of the populace. Migration into Russia is not likely to fully offset the effects of this demographic and health decline. Only large-scale Chinese in migration would stem the decline of the Russian population.

INTRODUCTION

In his first annual presidential address to the Russian people on July 8, 2000, President Vladimir Putin listed the 16 "most acute problems facing our country." Number one on the list, topping even the country's economic condition and the diminishing effectiveness of its political institutions, was the declining size of Russia's population. Putin put the matter bluntly. The Russian population is shrinking by 750,000 every year, and thanks to a large excess of deaths over births, and insufficient migration to compensate for the mortality/birth ratio, it looks likely to continue dropping for years to come. If the trend is not altered, he warned, "the very survival of the nation will be endangered."

Unfortunately, even Putin's grim reckoning of the numbers, based on official projections made by the State Statistical Agency, may understate the dimensions of the calamity confronting his country. Its birthrate has reached extraordinarily low levels, while the death rate is high and rising. The incidence of HIV/AIDS, syphilis, tuberculosis, hepatitis C, and other infectious diseases is soaring, even as the Russian health care system is vastly underfunded and insufficient for the need. Perhaps 40 percent of the nation's hospitals and clinics do not have hot water or sewage. Seventy-five percent or more of pregnant women suffer a serious pathology during their pregnancy, such as sepsis, toxemia, or anemia.

Only about 25 percent of Russian children are born healthy. At the same time, the infant mortality rate had significantly declined, at least according to official statistics in the last 5 years, but increased again in 2000. The leading Russian pediatrician Aleksandr Baranov estimates that only 5 to 10 percent of all Russian children are healthy, a much lower proportion than the official figure.

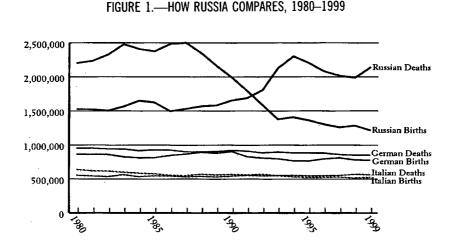
As if these challenges were not enough, Russia bears the burden of decades of environmentally destructive practices that have a direct, harmful impact on public health. Their legacy includes not just conventional pollution of the air and water but serious contamination around many nuclear and chemical sites throughout the country. In Dzerzhinsk and Chapayevsk, 2 of the 160 "military chemical cities" that produce chemicals for the military-industrial complex, the rate of spontaneous abortions or miscarriages is 15 to 34 percent of conceptions—a strong indication of chromosomal aberrations induced by the local environment. Yet a weakened Russia lacks the means to contain ongoing pollution or to begin the monumental task of environmental cleanup. The decline in the size of the Russian population, and in Russians' general health, vastly increases the difficulty of creating the economic wealth upon which such a cleanup—and so much else—depends.

It is not only compassion that should arouse the concern of the West. While some may cheer the weakening of this sometimes lessthan-friendly power, still armed with large numbers of nuclear, biological, and chemical weapons, Russia's decline raises the twin prospects of political disintegration and subsequent consolidation under an authoritarian leader overtly hostile to Western interests. The nation's problems, in any event, can no longer be thought of as somehow only its own. An unclassified U.S. national intelligence estimate warned that the global rise of new and re-emergent infectious diseases will not only contribute to social and political instability in other countries but "endanger U.S. citizens at home and abroad."² All new cases of infectious diseases (including HIV/AIDS at about 42,000 per year) in the United States have nearly doubled, to some 170,000 annually, since 1980. In Russia, the numbers of major diseases have increased many multiples. For example, new incidence of HIV/AIDS, officially recorded as 1,000 new cases in 1995, was over 56,000 by the end of 2000; all epidemiologists and commentators in Russia and at UNAIDS believe this number is actually 5 to 10 times higher. And radioactive contamination from Russia's deteriorating weapons stockpiles, its decommissioned (but not unloaded) nuclear rods and reactor compartments from submarines, and from sunken ships and submarines such as the Lenin nuclear icebreaker and the Kursk nuclear submarine, poses a threat of unknown dimensions, particularly to the nearby Scandinavian countries.

DEMOGRAPHIC MARKERS

The broad outlines of Russia's looming demographic decline can be sketched in stark terms. Russians are dying at a significantly faster rate than they are being born. Even in Germany and Italy, which also record more deaths than births, the difference is only about 10 percent. In Russia deaths have exceeded births by a multiple of 1.8 to 2.0 since the early 1990s (Figure 1). In 2000, the number of births in Russia was 1,259,400, while the number of deaths was 2,217,100-both increasing compared to 1999. The net natural increase declined more than the previous year because deaths increased even more than births.³ From the regional point of view, births increased in 70 regions, while deaths increased in 78 of the 89 administrative-territorial units. Nonetheless, deaths still exceeded births by 1.8 times in 2000, the same disparity as in 1999. In the first 4 months of 2001, the population shrank, by 308,800 persons, to 144,500,000 (including net migration), according to Interfax News Agency, on June 22, 2001. If this were to continue throughout the year, the net decline in the population of Russia, would be over 900,000 persons, a number 150,000 greater than the one Putin cited in his speech only 1 year earlier. By age group, the decline during the period 2000 to 2016 of persons younger than 16 will be over 8 million, from 29,044,400 to 19,871,600, or by 32 percent; Goskomstat's projection for the working age population (16- to 59-year-old males and 16- to 54-year-old females, inclusive) will drop by 6.4 million persons over the first 15 years of the period, from 86,359,400 to 79,967,900 at the beginning of 2016, or by 7 percent.

²Issued by the National Intelligence Council, as: *Global Infectious Disease Threats to the United States*, Washington, DC, 2000, 60 pp. ³Goskomstat, online Web site: www.gks.ru, February 2001, under the rubric "Sotsial'no-ekonomicheskoye polozheniye v Rossii." Also see footnote 4.



As negative as Putin's declaration was, it was based on the relatively optimistic projections of the State Statistical Agency, Goskomstat. This scenario assumes a small decrease in the total fertility rate beginning in 2000, a small increase in the mortality rate, and a large decrease in net in-migration. But only the latter projection is remotely plausible. However, if one expects large numbers of Chinese and/or illegal migrants from Afghanistan, China, Kurdistan, Southeast Asia and others to contribute to the economy, and settle in as residents, this could change markedly. As noted later, one leading migration specialist expects a significant number of legal Chinese migrants to settle into the east of the country; the political and social implications may be very serious; the economic consequences could be very positive.⁴

consequences could be very positive.⁴ By 2050, I believe, Russia's population will shrink by one-third. In other words, it will drop from 144.7 million at the beginning of 2001 to about 100 million, a blow that even a stable, prosperous country would have difficulty sustaining. The draft version of the United Nations' World Population Prospects. The 2000 Revision. Highlights, (ESA/P/Wp.165, 28 February 2001, table 15), projects a drop of 41,233,000 for Russia between 2000 and 2050, the largest in absolute terms for any country included in the report. Based on the medium variant projection this would yield a figure of 104,258,000. The next largest decline, in absolute terms, occurs in Ukraine (-19,609,000), and then Japan (-17,876,000). Italy and Germany are expected to witness declines of 14.5 million and 11.2 million, respectively, over the same half century. However, in relative terms only four countries exceed the relative decline (of 28.3 percent) in the Russian Federation—Estonia (46.1 percent), Bulgaria (43.0 percent), Ukraine (39.6 percent), and Georgia (38.8 per-

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⁴Predpolozhitel'naya chislennost naseleniya Rossiyskoy Federatsii do 2016 goda (Statisticheskiy byulleten), Moscow, 1999, pp. 113 and 144. All projections from this source use the medium variant. This variant incorporates an assumption that total fertility rates in Russia will approximate those of western countries over a period of time (i.e., be lower than currently), that mortality will decrease in the first year of life, and that migration will be small from "Russian-speaking diaspora" in Belorussia, Ukraine, Baltic States and Moldavia, and only a slow "repatriation" from the remaining CIS countries. Ibid., p. 5.

cent) and Guvana (33.7 percent)-all except one, in the eastern European region.⁵ Many western European countries also are projected to experience population declines, but not nearly as severe as that in Russia. While I believe that the assumption of relatively stable or improving mortality, and of an improvement in total fertility rate, as assumed in the United Nations (UN) projection are not likely I understand that any projection of 5 decades is at hazard to begin with. But the evidence presented below would seem to indicate that a lower variant projection would be more realistic in Russia than even the decline projected by the medium variant.

My projections, growing from a model developed for West Germany by the Population Reference Bureau, are less apocalyptic than those of various Russian officials, Duma members, and demographers. A new study produced under the auspices of the Institute of Social and Political Research of the Russian Academy of Sciences, for example, predicts that the Russian population will decline to between 70 and 90 million by 2045. If one takes the annual 750,000 decrease noted by Putin and multiplies it by 50 years, the result is a drop in population of 37.5 million persons, to a net total of 108 million-not far from my estimate of 100 million.

A model used by Dr. Yuri Komarov, former head of the Medical and Socio-Economic Information Institute of the Russian Ministry of Health, developed a projection of 94 million population in 2050. Dr. Nataliya Rimashevskaya, Director of the Institute of Socio-Economic Problems of the Population of the Russian Academy of Science, projected a population of 55 million in 2050 (this probably should have been indicated as the projected population in the year 2075 as other individual Russian demographers have projected). Anatoliy Vishnevskiy and Yevgeniy Andreyev (head of the Demographic and Human Ecology Center of the Institute of Scientific Forecasting and Laboratory Chief at the Center, respectively), published another set of projections in the January 2001 issue of Voprosy ekonomiki. In the worst case scenario, that is, a continued drop in births and increases in deaths, with zero net in-migration, the result is 86.5 million population in 2050. The better case scenario, with a rise in the total fertility rate to two children per woman (which is very unlikely, as they also indicate) and no change in mortality rates (also very unlikely, as noted below) yields only 94.5 million.⁶ The United Nations Revision 2000, cited above, projects a high of 113 million in 2050, 104 million as the medium projection, and 96 million as the low variant. (Personal communication from a staff member of the UN Population Division.) Thus, a decline of some 45 to 50 million over the first half of the century is not out of line with many other projections.

The U.S. population, meanwhile, is projected by the U.S. Bureau of the Census to grow from today's 285 million to 396 million in 2050, a level almost four times the UN-projected Russian population.

 ⁵ UN Population Projections, Revision 2000, table 15.
 ⁶ Anatoliy Vishnevskiy and Yevgeniy Andreyev, Voprosy ekonomiki, January 2000, p. 33.

Year	20–24	25–29	Total
2000 (As of September 1)	5,415	5.118	10,533
2003	5.728	5,311	11.040
2006	5,988	5,539	11.527
2010	5.827	5,923	11,750
2013	4.681	6,069	10,751
2016	3,721	5.527	9,247
2019	3,539	4,258	7,797
2022	3,592	3,589	7,181
2025	3,742	3,536	7,279
2029	3.914	3,681	7,595
2032	3,886	3,839	7,725
2035	3,721	3,917	7,638

TABLE 1.—NUMBER OF FEMALES, AGES 20-24, 25-29, AND 20-29

In broad demographic terms, one can say that Russia's population is being attacked by two pincers. On one side is the fertility rate, which has been falling since the early 1980s. Russian women now bear little more than half the number of children needed to sustain the population at current levels. In absolute terms, the number of annual births has dropped by half, to 1.2 million in 2000, since reaching a high of 2.5 million in 1983. Due to Russia's rising mortality rates, fertility would need to reach 2.15 births per woman just to reach the simple population replacement level. As of 1999, however, the total fertility rate stood at 1.17 births per woman (the total fertility rate for 2000 has not yet been published (early July 2001), but is likely no higher than 1.20, or may even be as low as 1.10). That is to say, Russian women bear an average of 1.17 children over their entire fertile life, ages 15 to 49. Fertility would need to rise by some two-thirds to reach the replacement level of 2.1 to 2.15, at current mortality levels; that is, over 750,000 additional births per year.

FERTILITY

Some Russian demographers take comfort from the fact that their country is not entirely alone, since deaths exceed births in a number of European countries. But in countries such as Germany and Italy, the net ratio is close to 1.1 deaths to every birth. In Russia, deaths exceeded births by 929,600 in 1999, a ratio of 1.8 to 1. If health trends and environmental conditions are not dramatically changed for the better, Russia could see two or more deaths for every birth in the not-too-distant future.

Goskomstat's projection points to an increase in fertility from 1.184 in 1999 up to 1.205 in the year 2000, then a continual decline to 1.160 by 2015.⁷ In the UN *Revision 2000* projection, the anticipated total fertility rate is slightly higher than Goskomstat's, and will be 1.18 in the period 2010–2015. It rises to 1.36 in 2020–2025, and only in 2045–2050, does it reach to 1.75 children per woman

⁷These and other official demographic projections are from Goskomstat RF, Predpolozhitel'naya chislennost naseleniya Rossiyskoy Federatsii do 2016 goda (Statisticheskiy byulleten), Moscow, 1999, 132 pp.

(let alone to 2.1 or 2.15). Goskomstat's projection likely is based on a hopeful extrapolation of trends at the end of the 1990s, but neither it nor the UN projection takes fully into account the serious deterioration of Russians' reproductive and general health. Also working against the hoped-for mitigation of the population decline is the harsh reality that the number of women in the prime childbearing ages of 20 to 29 is declining and will continue to fall sharply, while the rates of sexually transmitted diseases among men and women (which affect fertility) and gynecological illnesses are both rising. Between the year 2000 and 2037, the number of 20- to 29year-old females (the age group in which two-thirds of births take place in Russia) will decline from 10,530,000 to 7,431,000. A short interval of increase, to a peak of some 11,840,000 from 2000 to 2009, will be dramatically reversed during most of the rest of the first quarter of the century. This reflects the precipitous decline in births after 1987. These are persons already born. However, the likely outcome is a fall in the total fertility rate due to qualitative and quantitative reasons, as explained below.

The ranks of eligible parents, especially fathers, are being thinned not just by deaths but by illnesses such as tuberculosis, HIV/AIDS, alcoholism, drug abuse, and other causes, including infertility. Even as disease and mortality take more and more young people out of the pool of potential parents, attitudes toward childbearing have changed for the worse. An estimated two-thirds of all pregnancies now end in abortions (excluding spontaneous abortions).

Moreover, the recorded number of abortions excludes those performed in private clinics or illegal facilities, which if known would raise the ratio of artificially induced abortions to births even higher. Equally important is the frequent negative consequences of multiple abortions on the fertility of these women; up to 30 percent are reported to become ill or infertile.

According to a study published in late June 2001 under the auspices of the Agency for Social Security of Russia, 30 percent of young females do not wish to have children because of the economic hardships they confront. This source also cites the declining health of 33 percent of 17-year-old females which has led to a decrease in the ability to have children.⁸ Fifteen to 20 percent of all Russian families experience infertility, with 10 to 15 percent of females infertile, and some 5 to 10 percent of males. It is hard to see how the hoped-for fertility gains will occur. Yet without a doubling or even tripling in the total fertility rate of Russian women, and a sharp decline in mortality, a steep decline in Russia's population seems unavoidable.

MIGRATION

Legal migration should fall far short of the numbers needed to ensure an overall increase in the population. Goskomstat now

⁸The time period over which the decrease took place is not cited in the original source. S. Bazal'chuk, "Opros. Pir vo vremya chumy," *Moskovskaya Pravda*, 29 June 2001, p. 2, from Eastview Press Web site.: http://udb.eastview.com. According to an ITAR-TASS News Agency report of March 10, 2001, "every third married couple suffers from [one] form [or another] of sterility. Report by Anna Bazhenova. "Only Every Fifth Newborn in Russia is Practically Healthy." The latter source is somewhat more negative than the other reports.

projects a decline in net immigration from 132.000 in 1999 to less than half that number in 2015 (at 60.600).9 Only massive immigration of Chinese could suffice to compensate for the trend, and this one would think would be unacceptable to the Russian authorities. Nonetheless, while it is likely not to occur, one of the leading mi-gration specialists in Russia, Zhanna Zayonchkovskaya is cited in an article published in June 2001, that she expects that "the Chinese in Russia may become the second largest ethnic group after Russians and an inalienable component of the Russian labor force." 10 If this bold assertion comes to fruition, it will change many social and economic parameters very significantly; but then Russia may not be Russia as we have known it until now.

She continues:

"... the effectiveness of the labor market and the country's social stability will depend in the future directly on how well the authorities manage to organize the coexistence with immigrant groups ... [especially if] 10 to 20 million Chinese will live in the Russian Federation. Only a growth in immigration of this magnitude will compensate sufficiently for the decline in births and the rise in mortality." 11

MORTALITY

Mortality rates are also assumed to rise in the official Goskomstat calculation, but much less markedly than I anticipate. The Goskomstat projection through 2015, shows a crude death rate of 14.3 deaths per 1000 population in 2000 (exceeded in reality in both 1999 and 2000, with reported rates of 14.7 and 15.3 deaths per 1,000 population, respectively) and a projection of increases up to "only" 15.0 deaths per 1000 population in 2015, barely above the reported rate in 1999, let alone the "excess" in 2000 as reported. Some further perspective on the Russian situation is provided by a comparison with the United States, which projects an average life expectancy at birth and survival rates for specific age groups that are far from the best in the world-especially among American 15to 19-year-old males, who kill themselves with drugs, alcohol, and motorcycles. But in the United States, a boy who lives to age 16 has an 88 to 90 percent chance of living to age 60. His Russian counterpart has only a 58 to 60 percent chance. And those chances are shrinking.

HIV/AIDS

Tuberculosis, like HIV/AIDS, also is one of the maladies whose surging incidence is not reflected in current Goskomstat projec-

¹¹Ibid. The German Government also is rethinking its attitude toward restrictions on immi-gration of workers due to impending demographic decline in their population.

⁹ Predpolozhitel'naya chislennost naseleniya Rossiyskoy Federatsii do 2016 goda (Statisticheskiy byulleten), Moscow, 1999, 144 pp. ¹⁰ V. Yemelyanenko, "Chinese Happiness" Izvestiya, 23 June 2001, online version. A fascinat-ing new approach toward making this migration more viable is the announcement that a mar-keting network of made-in-China commodities will be established beginning in August 2001. The network will be set up in 22 Russian cities, with headquarters in Vladivostok. Asian Pulse, July 2, 2001 cited in Lexis-Nexis. And how many will accompany and/or be permanent staff members for this activity? How will the Russian national-patriots react to this putative "yellow peril" about which they have always been paranoid? ¹¹ Ibid. The German Government also is rethinking its attitude toward restrictions on immi-

tions. The disease flourishes among people weakened by HIV/AIDS, alcoholism, and poverty. Findings by the research institute of the Russian Federal Security Service during the 1990s projected enormous numbers of deaths from tuberculosis. According to the Russian Ministry of Health, the number of tuberculosis deaths increased by 12 percent in the 1998–1999 period. The 1999 death toll from tuberculosis of 29,000 was about 15 times the number in the United States, or nearly 30 times greater when measured as deaths per 100,000 population in both countries. The number of new cases increased from 50,640 in 1990 to 124,044 in 1999. Correspondingly, the number of deaths increased slightly more proportionately from 11,571 to 29,078 (or a case/fatality ratio of 22.8 deaths per 100 new cases in 1990 up to 23.4 in 1999).¹²

The Russian Ministry of Health Web site reports that after a major shortfall in funding in 1998 (that is, only 58.3 million rubles, equivalent to \$2.1 million at a rate of 28 rubles per dollar) of the 460.0 million rubles approved in the 1998 Federal Budget actually was funded; in 1999, however, the full amount of 485.8 million rubles was fully allocated. In addition, a larger sum was provided for capital investment and reconstruction work of anti-tuberculosis facilities. Perhaps they feel that this pattern creates sufficient expectations of full funding internally to reject the proposed loan of the World Bank, for some \$100 million for tuberculosis needs (\$50 million for AIDS).

Many Russian authorities also underestimate the future impact of HIV/AIDS, spread chiefly by intravenous drug use and sexual contact. Dr. Vadim Pokrovskiy of the Federal Center for AIDS Prevention and Treatment, Russia's leading HIV/AIDS epidemiologist and the most aggressive messenger of the future AIDS-related difficulties facing the Russian Government and population, estimates there will be 5 to 10 million deaths in the years after 2015 (deaths that, again, I believe from the logic of the numbers and discussions in Moscow, are not reflected in the population projections). Most of the victims will be 20 to 29 years old, and most will be males-further diminishing the pool of potential fathers. According to information cited on the online Web site of the Canadian AIDS Research Project in 1999, it was reported in the Russian press that "most Russian HIV/AIDS patients die within 3 to 5 years after infection." 13 Several other key pieces of information, and/or projections add to the burden of this disease on the Russian population now and in the future. The Russian AIDS Center projects that within 5 years, there will be up to 5 million HIV positive individual patients. (How many will not be patients, and therefore not recorded in this number is unknown, but would undoubtedly add significantly to this number.)

¹²Ministerstvo zdravookhraneniya Rossiyskoy Federatsii, Zdorov'ye naseleniya Rossii i deyatel'nost uchrezhdeniy zdravookhraneniya v 1999 godu, statisticheskiye materialy, Moscow, 2000, p. 51. See also, http://www.minzdrav-rf.ru/cgi-bin/show.pl?rubr=19&doc=551.

¹³It is not clear whether these deaths occur among those whose illness has shifted from HIV to AIDS, or all persons starting from HIV. *Moskovskiy komsomolets*, 16 August 1999, p. 4, cited in http://aidsrussia.org/English/news/99Oct28/99oct28.html.

As a consequence, the first 4 months of 2001 found 27.500 new cases of HIV^{14} and by the end of the 5th month, according to a staff member of the Ministry of Health, Dr. Irina Kochkarova, the number of new cases was 63,000 (apparently more than doubling from the end of the previous month).¹⁵ Thus, the prediction that

"in 5 years' time, every 30th inhabitant of Russia will be infected ... Bearing in mind that HIV primarily affects young people (90 percent of cases are persons aged 15 to 29), every tenth person under the age of 30 will be a carrier of the virus." 16

The Moskovskiv komsomolets report adds that if one looks at the increase in sexual transmission (heterosexual and homosexual) almost doubling from 6.0 percent of the total number of new cases of HIV in 2000, to 10.3 percent in the first quarter of 2001, is ex-tremely worrisome. Dr. Kochkarova is cited as also asserting that the actual number of HIV-positive people is five to seven times higher than the official figures. And, the article continues, if the sexual transmission rate reaches 30 to 40 percent of the new incidence "and this will be a cinch for us." the virus will have gone far beyond just the infectious drug use (IDU) community.

The most direct comparison between a reported and asserted number is revealed in an article about the etiology, co-factor, and prevalence of tuberculosis, injection drug use, and HIV/AIDS in St. Petersburg. Problemy tuberkuleza provides remarkable details and information about these interconnections. To the point at hand, specifically, it contains a figure of 300,000 HIV-positive individuals who are drug abusers.¹⁷ Simultaneously, the latest officially reg-istered number (prevalence) of cases of HIV/AIDS in St. Petersburg is 7,582 cases at the end of 2000. In addition, more than half of this total (4,712) was recorded during the first 4 months of 2001.¹⁸ If the 300,000 figure is to be believed, and the trends continue, mortality will be even higher than projected by Goskomstat and the UN, unless and until a vaccine is found, distributed, and prop-

¹⁴Anastasiya Kuzina, "Russia Will be Bankrupted Not by Bureaucrats but by AIDS. Each HIV-Infected Person Already Costs the Treasury \$10,000 per Year," *Moskovskiy komsomolets*, 16 May 2001, p. 2. And if the Federal Budget for 2001 allocates 42.96 million rubles (which when divided by 28 rubles per dollar equals about \$1.5 million for 300,000, 700,000 or 1 million HIV/AIDS patients, is sufficient for 150 patients! ¹⁵ Cited in Emily Charnock, "Health Official Says HIV is Soaring; Cases Double in Five Months," *The Washington Times*, 17 June 2001, p. A8.

¹⁶Kuzina, *loc. cit.* ¹⁷K.I. Volkova, A.N. Kokosov, and N.A. Brazhenko, "Tuberkulez v period epidemii vich/spida ¹⁶Kuzina, *loc. cit.* ¹⁷K.I. Volkova, A.N. Kokosov, and N.A. Brazhenko, "Tuberkulez v period epidemii vich/spida ¹⁸In contrast, a figure of 1,011 in all (prevalence) was reported for September 1, 2000. Cf. Anna Bazhenova, "Russia to Have Over 1 Million HIV-Infected by Year End," ITAR-TASS News Agency, 3 April 2001 and V.V. Pokrovskiy et al., "Razvitye epidemii VICh-infektsii v Rossii," *Epidemiologiya i infektsionaya bolezn*, no. 1, January-February 2001, p. 14, and "Chislo VICh-infitsirovannykh rastet," SPV Vedomosti, 3 May 2001, p. 1. It would appear that the figure of 300,000 and these numbers are irreconcilable, even with any reasonable multiplier. However, a dissenting view on the numbers of HIV-positive persons is expressed by Dr. Nikolay Fedorov, head of the Department for Gene Testing of Blood and its Components, of the Central Scientific Research Institute of Transfusional Medicine and Medical Equipment, of the Russian Academy of Medical and Technical Sciences and of the Ministry of Health. He advocates the use of gene testing and not just testing for antibodies, which he indicates give many false positives. He blames, in part, poor quality reagents and careless laboratory personnel. Thus, it is not the testblames, in part, poor quality reagents and careless laboratory personnel. Thus, it is not the test-ing per se, but the mechanics of the test process. See, Andrey Vaganov, "VICh-infektsiya: prigovor ne okonchatel'nyy," *Nezavisimaya gazeta, July 6, 2001, p. 2.* The rate of false-positives in the United States perhaps is 3 percent, but most are verified or rejected by additional anti-body testing and the Fedorov proposition apparently is exaggerated. Is this also a form of denial of the serious extent of the problem in the Russian Federation?

erly administered in time to mitigate this impending demographic disaster.

Moscow reported a rate of only 2.5 new cases of HIV nationally per 100,000 population in 1998. However, if we apply the reported number of new cases of HIV in 2000 (56,471) to the total population, the rate increases to 38.8 per 100,000 population (derived by dividing 56,471 by 1,455—the population in 100,000 units, midyear 2000 estimate). The U.S. HIV incidence rate was 16.7 new cases per 100,000 population in 1998. There are major regional differentials in the rates of infection. The Baltic port city of Kaliningrad and its surrounding oblast held the unhappy distinction of recording the highest official rate of HIV increase, at 76.9 new cases per 100,000 in that year. Moscow city and Moscow Oblast, as well as Irkutsk Oblast, and several others, however, are currently overtaking it.

The burden of this disease will not fall only on the general population or the economy ensuing from treatment costs, but also on the armed forces of Russia. According to correspondent Anastasiya Kuzina, an internal use only document obtained by Moskovskiy Komsomolets, points to the growing incidence of HIV/AIDS within the military and rising concern among the leadership over this phenomenon.¹⁹ AIDS (read HIV, even though the original cites the later aspect of the illness) penetration into the military was classified as secret for 13 years, until 2000. The report was signed by Dr. P. Mel'nichenko, Chief Public Health (Sanitarnaya) Physician of the Ministry of Defense, and entitled, "Internal [Sluzhebnove] Letter on HIV-Infection Morbidity in the World, in the Country and in the Armed Forces of the Russian Federation." The upsurge in Injection Drug Use in the general population has been reflected in the draftees into the military forces. Some of the infected military draftees reportedly have been sentenced under Article 228-the Drug Addiction Article. Still others may have joined to avoid their own medical care debt and to be cured by the military medical services. "As in civilian life, the number of infected soldiers in our power structures [that is, not just the armed forces, per se, but also the KGB/FSB, the internal security troops, etc.] began to double annually [except for 1998 and 2000], and half were registered as being ill in the last 2 years alone."²⁰ The numbers of those officially diagnosed with HIV/AIDS in the military are: 1991-4; 1992–2; 1993–2; 1994–7; 1995–2; 1996–29; 1997–72; 1998– 46; 1999-117; and 2000-110. The total is 391. Apparently, however, these numbers apply only to soldiers and sailors, not officers and warrant officers. The same source gives a total of "about 550 soldiers and officers." Through 1996, only 13 officers and warrant officers were afflicted with HIV, but the number implied here for this category is about 150. In July 2001, Izvestiya was reporting Armed forces daily found up to 2 HIV-positive the that conscriptees, and in recent years over 800 persons were infected with the disease. Compounding the illness problem for the military are reports of illiterate conscripts coming even from the Moscow

¹⁹Described in "Politika i ekonomika. VICh-polozhitel'naya armiya," *Moskovskiy komsomolets*, 1 March 2001, p. 2.

 ²⁰ Ibid. Also see Yelena Stroiteleya and Aleksandr Chuykov, "Strel'ba na porazheniye. Nasha armiya prodolzhayet voyevat protiv sebya, *Izvestiya*, July 10, 2001, p. 1.

Oblast (46 in all) and the rejection of over 500 drug addicts in one region (Samara Oblast) for military service. The former figure implies a possible serious increase in illiteracy among 18-year-old males. In 1999, only 22 such illiterate persons were drafted from all of Russia, not from 1 of the 89 administrative-territorial units. If the latter continues to expand and combine with the impending decline in the numbers of 18-year-old males (beginning in 2005, 18 years subsequent to the major decline in births commencing in 1987), then the pressure on the military to reduce its demand for manpower is clear from this point of view, let alone from budgetary or national security concerns.²¹ Beginning in 2000, three-fourths of new cases were diagnosed in Moscow city, Moscow and Irkutsk Oblasts; until 1999, 80 percent were found in Kaliningrad Oblast. The spread beyond just one oblast must be very worrisome to the military.

Sexually transmitted diseases have seen incredible rates of increase during the past decade. These diseases cripple and kill, damage reproductive health, and are associated with the spread of HIV/AIDS. The causes can be traced to the explosion of pornography and promiscuity; the growth of prostitution, notably among 10- to 14-year-old girls; and, especially, drug abuse involving shared needles and syringes. In 1997, the Ministry of Internal Affairs estimated that the market for illegal drugs was around \$7 billion, 600 times greater than in 1991 (assuming little inflation in prices during the period). Drug abuse and addiction is getting more widespread. According Dr. Tatyana vounger and to Dmitriyeva, a former Russian Minister of Health, and head of the well-known Serbskiy Psychiatric Institute (with a history of political involvement), is quoted by Interfax about the devastating increase of addiction among young people. Whether she is para-phrased or quoted is not clear, but in the report of July 8, 2001 from Interfax, she is cited as indicating that:

"the number of adult drug addicts has increased 8 times; over the past 10 years, that of teenage drug addicts has multiplied 18 times. The growth of drug addiction among children under [15] years of age is even more shocking by 24.3 times..."

Exacerbating even these numbers is her revelation that "the percent of children [that is, those of 0 to 14 years of age who are drug abusers] has increased from 5 percent in the late 1980s to 26 percent in 2000." Even Moscow now does not have the highest rate of drug addiction, she notes, but Siberia at 313.2 addicts per 100,000 population, is distinctly higher than even the Far East (at 184.8 per 100,000 population), but the Far East is higher than in Moscow, with a figure of 154.3 per 100,000 population. While one could hope that the reference to "addiction" is more in the line of "abuse,"

²¹ "Russian army received 46 illiterate conscripts from the Moscow region [oblast]," Ekho Moskvy Radio (in Russian), 1100 GMT, 4 July 2001 (from FBIS CEP20010704000162) and "Over 500 Drug Addicts exempted from military service in Samara Region [Oblast]," from http:// www.militarynewsru/fcl—l/enews.asp?id=64646 (from FBIS, CEP20010705000076). Another example of the prevalence of the lack of formal education among young males is the report about the situation in Kurgan Oblast, Western Siberia, is reported on Russian Public TV (ORT), 0500 gmt, 16 April 2001, as cited by BBC Monitoring, April 16, 2001, that "Every sixth conscript has only an elementary education of four grades. Almost half of those recognized as physically fit for service left school after the 7th or 8th year of studies."

and not yet quite so serious, but even the latter is a foreboding precursor for the future health of the population of Russia.

The Russian Ministry of Health reported 450,000 new cases of syphilis in 1997, and Goskomstat published a figure of close to 405,000. Even if there is a 10 percent difference in the two numbers, these are the last reasonably accurate statistics we are likely to have, thanks to a 1998 law that imposes prison terms on syphilitics who contract the disease and are drug abusers. Presumably, the new law has reduced the number of persons willing to seek treatment. Therefore, the numbers of persons recorded as having the illness are below the "correct" figures since that date. Just as one would predict, the number of registered new cases of syphi-lis declined in 1998 and 1999.²² However, the explosion in new cases of HIV, and a concomitant increase in the estimated number of drug addicts, belie the latest figures on syphilis. The "epidemio-logical synergy" between HIV/AIDS and other sexually transmitted diseases (including gonorrhea, which is vastly under-reported in Russia) suggests not only that syphilis is more widespread than reported but that further increases in the incidence of HIV/AIDS can be expected.

The 1998 law that classified drug addicts as criminals ensured that few addicts-a group at high risk for HIV-will seek treatment. Dr. Oleg Zykov, president of the No to Alcoholism and Drug Addiction Foundation, in 1998, warned that as a consequence of this law:

"We will see an increased risk of complications and overdoses; the death rate among drug addicts will rise; incidence of HIV/AIDS will rise; [and] the illegal market of drug-related services will begin to develop quite intensively." 23

All predictions unfortunately are beginning to be reflected in the subsequent period. U.S. experience also clearly follows this pattern according to the Centers for Disease Control (CDC): "Approximately one third of acquired immunodeficiency syndrome cases and one half of new hepatitis C cases are associated with injection drug use "

The contribution of IDU individuals to the soaring HIV rate, as well as those with venereal diseases (and non-IDU groups of the population) was documented by Pokrovskiv early in 2001, covering the years 1994 up to September 1, 2000 (Table 2).

While the overall number of persons who were found to be HIVpositive among those who were examined-therefore possibly leaving out a significant number who were not examined—jumped from 161 in 1994 to 39,052 by September 2000. The internal distribution

²² There were 342,657 new cases recorded in 1998 and 271,699 in 1999. Zdorov'ye ..., 2000,

²²There were 342,657 new cases recorded in 1998 and 211,099 in 1998. Labor ye ..., 2000, p. 55. ²³Cited in Yelena Salina, "Vchera v Rossii nachali sazhat bol'nykh. Narkomafiya kayfuyet!," *Komsomol'skaya Pravda*, 16 April 1998, p. 1. The Open Society Institute, funded by George Soros, issued a report prior to the UN General Assembly Conference on HIV/AIDS held in June 2001, stipulating that "Authoritarian governments in states of the former Soviet Union which punish illegal drug users" are enhancing the potential for a marked increase in AIDS. Agence France Presse, "Punishing drug users fueling risk of AIDS explosion in former U.S.S.R.: report," June 23, 2001. From the press coverage of the report, this clearly includes Russia. For the United States, see the Centers for Disease Control (CDC) report of May 18, 2001 issue of the *Morbidity and Mortality Weekly Report* (vol. 50, no. 19), p. 377.

shown here encompasses a variety of transmission etiologies, with IDU the largest (at 16,646 cases), the incarcerated (5,088), those with venereal diseases (1,552), and other categories, including adults who are found positive when "clinically detected" (which would seem to mean that the illness was asymptomatic and possibly at a late stage of development), and an "other" category not shown in the original source, but which is derived as the residual from the other groups and the total. It would appear to be a catchall category for doctors who could not find the direct cause of the infection. Nonetheless, it is one-fifth to one-fourth of the total number of new cases per year.

Category	1994	1995	1996	1997	1998	1999	2000 ¹
Drug addicts Persons with vene-	0	0	442	1,286	929	6,171	16,646
real disease	27	19	90	201	231	829	1,552
Blood donors	3	6	23	59	69	189	378
Pregnant women	8	8	18	92	122	296	480
Prisoners Clinically detected	3	5	218	893	800	3,010	5,088
adults	61	5 9	385	932	799	5,195	5,366
Other	59	96	385	890	1,085	4,439	9,182
Total	161	193	1,511	4,353	4,035	20,129	39,052

TABLE 2.—NUMBER OF HIV POSITIVE IN RUSSIA, BY CATEGORY, 1994–2000

¹As of September 1, 2000.

We are also informed of the number examined in each category, and the rate of infection per 100,000 of those examined. For drug addicts, the rate ranged from an unlikely zero in 1994 to 3,315.14 per 100,000 examined by September 2000. And the latter rate (of 3,315) is more than 20 times higher than the rate for all categories examined (at 153.62), clearly demonstrating the impact of the IDU scourge, and inexorably related to the growth figures given by Dmitriyeva, cited above (Table 3).

Perhaps linked to this risk of complications cited by the author is information about the number of pregnant women who are simultaneously found to be afflicted with syphilis. The number of those ill per 100,000 pregnant women in Moscow Oblast increased by 8 times in only a few years. That is, from 92 to 710 per 100,000 in the 5 year period 1993 to 1997.²⁴ The number of pregnant women tested ranged from 135,000 in 1993 to 121,000 in 1997.

The data on the impact of syphilis by age group demonstrate that youth is not a deterrent to the spread of the disease. A systematic set of data on notification rates, that is new incidence, by selected age group and the total population, by sex, in the years 1990 to 1997, demonstrates this clearly (Table 4). Females aged 0 to 14 were found to be syphilitic at a rate (including congenital syphilis)

²⁴ In absolute terms, the number increased from 124 to 860 in the 5 year period. K.K. Borisenko, L.I. Tichonova and A.M. Renton, "Syphilis and other sexually transmitted infections in the Russian Federation," *International Journal of STD & AIDS*, no. 10, 1999, p. 667.

per 100,000 population in this age group at 0.1 in 1990, and at 14 per 100,000 in 1997. This rate of increase must reflect not only better reporting, the increase in pregnant women with this illness, as well as child prostitution which bodes ill for reproductive health in the future.

TABLE 3.—HIV POSITIVE RATE PER 100,000 PERSONS EXAMINED IN RUSSIA, 1994–2000

Category	1994	1995	1996	1997	1998	1999	2000 ¹
Drug addicts Persons with ve-	0	0	415.19	733.82	413.14	1,723.98	3,315.14
nereal disease	3.05	1.97	6.97	13.59	15.43	47.64	77.82
Blood donors	0.07	0.15	0.54	1.5	1.83	4.93	8.94
Pregnant women	0.19	0.24	0.63	3.25	4.99	11.88	18.44
Prisoners Clinically detected	0.58	1.01	43.62	137.35	113.16	361.31	520.49
adults	1.19	1.33	8.53	19.72	16.54	87.61	83.16
Other	0.83	1.7	5.5	13.45	16.36	64.77	111.54
Total	0.73	0.98	7.71	21.32	20.07	91.34	153.62

¹As of September 1, 2000.

TABLE 4.—NOTIFICATION RATES PER 100,000 POPULATION OF NEW CASES OF SYPHILIS BY SEX AND AGE GROUP IN RUSSIA, 1990–1997

Category	1990	1991	1993	1994	1995	1997
All ages:						
Male	5.9	7.9	36.3	92.7	188.8	286
Female	4	6.7	31.6	80.3	166.5	266
Ages 0 to 14:						
Male	0.1	0.1	0.6	1.4	3	8.6
Female	0.1	0.2	1.1	3.4	6.7	14
Ages 15 to 17:						
Male	2.7	4.6	15.2	65.3	129.7	317.1
Female	8.8	14.1	89.4	217.4	436.5	564

OTHER HEALTH STATUS ISSUES

The health status of the population is not only a function of the incidence and prevalence of tuberculosis, HIV/AIDS, and syphilis, as discussed above. There are issues of smoking, alcoholism, hepatitis B and C, micro-nutrient supply and avitaminosis, which are discussed briefly in the following materials. Subsequent to this section, materials related to environmental health hazards follows.

More concern over smoking levels in eastern Europe and Russia has been expressed by the World Health Organization in the past year. Smoking is a habit among an estimated 70 percent of Russian males and one-third of females, and multinational tobacco companies aim to increase their sales in the country. The World Health Organization estimates that some 14 percent of all deaths in 1990 in the Soviet Union and eastern Europe were traceable to smokingrelated illnesses; it expects that number to rise to 22 percent by 2020.

Alcohol consumption reflects an epidemic of alcoholism. Russian vodka produced for the domestic market (usually in half-liter bottles) comes with a tear-off top rather than a replaceable cork or screw top presumably because it's assumed that the bottle, once opened, will not be returned to the refrigerator. An estimated 20 million Russians—roughly one-seventh of the population—are referred to as being alcoholics. Russia's annual death toll from alcohol poisoning alone may have risen to 35,000 in 2000, as compared with 300 in the United States in the late 1990s.

Hepatitis B has sharply increased in incidence, between 1998 and 1999, increasing from 52,561 new cases to 64,140, in the 2 years.²⁵ The then sole producer of vaccines for the disease told me in Moscow in September 2000, that only 1.3 million doses are produced annually to meet a total demand of 13 to 14 million doses; perhaps 4 million are now produced by a number of firms and imported, but still far short of demand. Perhaps even more alarming in the long run are increases in the incidence of hepatitis C, an illness that chiefly attacks the liver and requires a very costly, perhaps unaffordable treatment protocol, especially when combined with other needs for medical services and their attendant costs. The disease is often fatal. New incidence in Russia is given as 30,254 in 2000, up by almost 2,000 cases in the year compared to 1999. The comparable hepatitis C figures for the United States are 2,895 in 2000, down from 3,111 in 1999.²⁶

Micro-nutrients are in short supply, especially iodine. No iodized salt has been produced in Russia since 1991, and little or none has been imported. However, an important contribution of supplies of iodized salt and production equipment has been made by Kiwanis International through a \$900,000 fund earmarked for this purpose. The UNICEF office in Moscow, opened in 1997, includes solving the Iodine Deficit Deficiency disorder as one of its priorities. In young children, iodine deficiency causes mental retardation. A World Health Organization cartographic presentation provides a set of rates among all countries of the world who consume iodized salt shows that in Russia, only 30 percent of them have iodized salt as part of their diet. Other information would seem to contradict such a high proportion.²⁷ The United Nations Development Program (UNDP) regional offices report that "only 15 percent of the total amount of common salt is being iodized" throughout Central and Eastern Europe, the Commonwealth of Independent States, and the Baltic States. Thus, in Russia alone, it is very unlikely that the 30 percent figure is correct, and all the attendant consequences to

²⁵Zdorov'ye ..., 2000, p. 49.

²⁶Zdorov'ye naseleniya i sreda obitaniya, no. 1, January 2001, p. 34 and CDC, Morbidity and Mortality Weekly Report, vol. 49, Nos. 51 and 52, January 5, 2001, p. 1169. The U.S. figure may be some ten times too low based on other CDC publications; the Russian figure probably also is much higher. ²⁷See especially, two issues of the Kiwanis International magazine Web site, http://

²⁷ See especially, two issues of the Kiwanis International magazine Web site, http:// www.kiwanis.org/magazine/99may/99may-russia.html; and http://www.kiwanisinternational. com/magazine/01june/russia.html; and the Moscow Office of the United Nations Development Program (UNDP), http://www.undp.ru/eng/NewsletterSepPage7.htm.

such a shortfall is clearly another negative potential for young persons, in particular.

Avitaminosis is common. A longitudinal study by the Institute of Nutrition of the Russian Academy of Medical Sciences finds shortages of folic acid as well as vitamins A, B complex, D, and E among 30 percent of the population. This shortage of vitamins can cause an individual's system to be unable to resist pathogens, and may contribute to the high levels of some diseases. Malnutrition may well have contributed to the incredible increase in anemia, especially among pregnant women. For all adults, the rate of anemia per 100,000 population increased from 222.3 in 1993 to 392.8 in 1998. Correspondingly, for children ages 0 to 14, inclusive, the anemia rate increased by 58 percent, from 926.4 to 1463.0 per 100,000 children over the same period of time.²⁸

Heart disease exacts a toll more than twice that in the United States and Western Europe. The death rate from heart disease per 100,000 population in Russia is 843.8 in the 11 month period of January-November 2000, up from 810.2 in over the same period in 1999. In contrast, there were 267.7 deaths per 100,000 population in Belgium, 317.2 in the United Kingdom, and 352.3 in the United States. Cancer is becoming more common. New cases increased from 191.8 per 100,000 population in 1990 to 200.7 in 1998, with a death rate of about 205.0 in 1999 and 206.0 in the first 11 months of 1999 and 2000, respectively (the U.S. age adjusted rate for the year 1998 is 204.4). The incidence in Russia is likely to rise as a consequence of long-term exposure to low doses of radiation from decades of nuclear testing, as well as to benzo(a)pyrene, dioxin, and other industrial carcinogens. As in so many other cases, official statistics understate the problem. There is significant under-reporting of breast cancer, for example, especially among women of Muslim origin, who are reluctant to seek treatment from male doctors.

Some Positive Signs

None of this is to say that there are not some positive aspects in the health provision area in Russia. Three-and-one-half years after the adoption of a new "Kontseptsiya of Development of Health Care and Medical Research" in November 1997, a Draft Resolution on the Progress of this Kontseptsiya of the Board of Directors of the Russian Ministry of Health, dated 20-21 March 2001, was adopted. The unpublished document reviewed the goals for the period 2001–2005 and for the period ending in 2010. It is quite frank regarding problems which still persist, but it also makes some very reasonable positive remarks about progress in the health care field. Better financing, more efficient use of these funds, and a reduction in the deficit are spelled out. In addition, While they do not provide precise numbers on the number of procedures or on their success rate, it is impressive that the numbers for the year 2000 suggest that cardiac operations overall have doubled, bypass surgery has increased by 150 percent, hemodialysis by 100 percent, kidney

²⁸See the section on Nutrition and Health of the Population in Ministerstvo zdravookhraneniya Rossiyskoy Federatsii, Sanepidnadzor sluzhba, Gosudarstvenny doklad "O sanitarno-epidemiologicheskoy obstanovke v Rossiyskoy Federatsii v 1998 godu," Moscow, 1999, pp. 69-74, especially p. 70.

transplants by 50 percent, and bone marrow transplants by 900 percent. While these probably were small in number in the base period, it is quite an improvement in the availability of medical services. Many new Federal Programs such as anti-diabetes mellitus, anti-HIV/AIDS, anti-tuberculosis and others are being implemented (though other information would indicate major shortfalls in their funding to date), and new programs scheduled for endorsement in 2001 include high blood pressure, oncology, and sexually transmitted diseases. At least the issues are being confronted, but how long it will take to overcome the very significant size of the problems is still unclear. Words such as alarming, grave, serious threat, and similar descriptors are utilized in the review of the status of morbidity levels of various diseases and condition. Priority goals for the period ending in 2010 include:

"Reduction of the rate of premature deaths from: Cardiovascular diseases; Accidents, trauma and suicides; [and] Malignant neoplasms; Combating diseases of particular significance in the present demographic circumstances of this century: Diseases threatening the reproductive ability of mothers and neonatal diseases; Diseases of the elderly. Combating diseases that pose a threat to the health of the nation as a whole: Tuberculosis; HIV/AIDS; drug addiction; alcoholism: and sexually transmitted diseases. (p. 8)

More specification of child health other than "neonatal diseases" would be helpful in describing these priorities. But that they are the priority goals serves to underscore the internal depiction of the problems they face.

The listing of resolutions and decrees needed and responsible agencies to implement the Kontseptsiya are quite detailed. It can only be hoped that they will be successful in these endeavors given the depth of the problem and its implications for domestic and foreign policy.29

Childhood vaccination rates for tuberculosis, diphtheria, whooping cough, and other diseases have risen significantly since 1995. Vaccination for rubella (German measles), which causes birth defects when contracted by pregnant women in the first trimester, was added to Russia's prescribed immunization calendar, but only in 1999. However, rubella vaccine is not produced in Russia, and very little is imported; 597,000 cases of rubella were reported in 1999, and only 453,000 in 2000. In comparison almost no cases of rubella was found in the United States, due to immunization. The comparable figures for rubella at all ages and both sexes, in the United States, are 271 and 152, respectively, in these 2 years.³⁰ As noted earlier, hepatitis B vaccine is now produced by Russian and jointly owned firms with foreign manufacturers, nonetheless it still falls far short of needs. Moreover, contributing to the shortfall in medications and their supply, is the qualitative issue of laboratory standards. No laboratories in Russia meet good management practice and good laboratory practice even as late as 2000; they will be

²⁹ From an unpublished pdf file found in http://www.google.com, entitled: The Ministry of Public Health of the Russian Federation. The Board (Collegium) (Draft) Resolution 20-21 March 2001, Progress in Implementing the "Kontseptsiya of Development of Health Care and Medical Research," Objectives for the period 2001-2005 and for the period ending 2010, 27 pp. ³⁰ Same sources as for footnote 26.

required to meet good management practice standards by 2005. A long time for this to be accomplished and expensive, but very necessary to ensure the quality of vaccines and medications produced in the country. Hospital to hospital contacts from throughout the United States and the former Soviet Union have been helpful in improving the situation, albeit clearly limited so far. Countries other than the United States also have major contacts and provided services for health needs.

While there are a few encouraging signs, the larger trends support the vision of looming demographic catastrophe. And a number of other developments also offer dark portents for the country's future rates of fertility and mortality, and for the general health of its people, especially its children.

SELECTED ENVIRONMENTAL HEALTH ISSUES

To all the foregoing challenges to the Russian future we must add a daunting array of environmental ills. Russia will have to cope with a legacy of industrial development undertaken virtually without heed of the consequences for human health and the environment, just as it will have to contend with the consequences of decades of testing and stockpiling of nuclear, chemical, and biological weapons.

The crises that temporarily focus worldwide attention on these problems, such as the 1986 Chernobyl nuclear power plant accident, only begin to hint at their severity. The news media beamed shocking reports of the 1994 Usinsk oil spill around the world, but it was only one of 700 major accidents and spills (defined as those involving 25,000 barrels of oil or more) that occur every year in Russia, spreading phenols, polyaromatic hydrocarbons, and a variety of other toxic chemicals. As Victor Ivanovich Danilov-Danilyan, the former head of the State Committee on Environment, noted about the extent of all of these oil spills, that these losses are equivalent to about 25 Exxon Valdez spills per month!

Radioactivity remains a continuing concern. After the 1963 Test Ban Treaty barred open-air atomic weapons testing, the nuclear powers continued to conduct underground tests. But there was an important difference in the Soviet Union. There, many of the nation's more than 100 nuclear explosions occurred in densely populated regions such as the Volga, as well as in the Urals and the less densely populated Yakutiya (Sakha) regions. After first denying that any of those explosions had been vented into the atmosphere, then Minister of Atomic Industry Viktor Mikhaylov later admitted when in Norway (not in Russia) that venting had occurred in 30 percent of the underground blasts.

What the potential for human health hazards within the ten formerly secret nuclear cities devoted to the development and production of nuclear weapons in Russia remains largely a mystery. Around the city of Chelyabinsk, a thousand miles east of Moscow in the Urals, some 450,000 Russians face unknown risks from a series of spills and accidents that occurred from the late 1940s to the 1960s. And area rivers may have been tainted by seepage from nuclear waste directly injected deep underground at the Krasnoyarsk, Dmitrovgrad, and Tomsk nuclear-related sites. Near the Tomsk-7 facility, the site of a serious nuclear accident in 1993, Russian and American environmentalists found evidence of phosphorous-32, a radionuclide with a half-life of only about 2 months. The discovery strongly suggests that radioactive wastewater used in cooling Tomsk-7's two remaining plutonium producing plants was illegally dumped. Thus, health hazards emanating from nuclear contamination is not only a matter of past practices.

Chemical pollution is widespread. Even in Moscow, which is home to much heavy industry, there is evidence that pollution has caused genetic deformities in the young. In a study of the impact of chemical, petrochemical, and machine-building industries on human health, the Russian Ministry of Health found that newborns suffered congenital anomalies at a much higher rate (108 to 152 per 10,000 births) in industrial cities than in rural localities (39 to 54 per 10,000). Dangerous toxic emissions from the mining and metallurgical combine in Norilsk, still is reported (in Novaya Izvestiya, 28 April 2001, pp. 1, 4) as emitting 8,450 kilograms (8.45 tons) of industry-produced poisons per capita per year; 98 percent of which is sulfur dioxide. Alarming cases of mercury pollution, which causes illness and birth defects, have been reported (though aggregate official data have never been published). Three years ago, 16 tons of mercury was released upriver from the major northern city of Arkhangel'sk. A plant in Usol'ye-Sibirskoye of Irkutsk Oblast, when shutting down, spilled 25 tons of mercury. Due to mercury poisoning, mental deficiency and hypoxia was reported by Segodnya (on December 3, 1998, p. 7) among the illnesses suffered by 100 (sic) percent of newborns in Angara. Mercury has accumulated in the systems of area residents. and the dilapidated tanks leaked almost all the mercury into the ground. Moreover, in the 25 year period the plant had been in operation, some 550 tons "at least" had penetrated the ground near the facility, as well as in the Angara River. Perhaps "in 10 years" it will be safe for the residents of the area. Simultaneously, mercury reportedly has affected the population of Sayansk city, as well as the Bratsk reservoir.³¹

Another heavy metal, lead, is the underlying factor in a widespread pattern of nervous system and psychological impairments. Detailed data and information are now available from a joint Russian and American effort to determine the amount of lead contamination in the country and its human health impact, particularly on the young. The results show that the load rates far exceed the Russian (and U.S.) PDK (maximally allowed considerations). In the survey, it was found that 44 percent of children in 120 Russian cities "may have blood lead levels (BLL) that exceed the Centers for Disease Control standard of 9.9 micrograms per deciliter (mcg/dl) and a total of nearly 2.4 million children" may be affected. But based on recent evaluations published in American medical literature indicating that a BLL above 5.0 mcg/dl is harmful, then some portion of the 2.6 million children with 0–9 mcg/dl detected perhaps 1 million, for a total of 3.4 million children are affected. If there are some 27 million children under age 15, then the 3.4

³¹See the summary of the Novyye Izvestiya article of December 1, 1998, p. 2 and of Segodnya of December 3, 1998 p. 7, in The Current Digest, vol. 50, no. 48, 1998, p. 17. Also FBIS translated the text of the "Segodnya" broadcast of November 30, 1998, on NTV, at 1900 gmt. The latter source called it the "biggest environmental disaster of recent years." From FBIS, "Siberian Plant Accused of Massive Environmental Damage," FTS 19981201001018, December 1, 1998.

million total affected by neuropsychological and mental deficiency problems, would represent some 12 percent of all children. And this is from lead pollution alone.

The incidence of mental retardation among children (0 to 14 years of age) ensuing from such levels is noted to be as much as 75.7 percent in Krasnoural'sk, a town located in Sverdlovsk Oblast in the Middle Urals region, where lead car batteries were produced and copper smelting took place. There, the average content of lead in the blood of children is $13.1 \pm 0.5 \text{ mcg/dl}$. If one utilizes a broader definition, of complications of the nervous system and impaired psychological development, the share increases to 82.5 percent of all children 0 to 14 years of age, inclusive, in this city. Krasnoural'sk plants emit some 155 to 170 tons of lead per year; an unbelievable level, and devastating for the future of the city.³² Serious attention to this issue has led to a new method for producing car batteries, which will at least save some youngsters from such health hazards in the future.

The most striking information for current purposes of this paper is the information from a set of bar charts (without precise numbers) on the "Percentage of children with elevated blood lead levels in selected Russian cities." From this chart, we can determine (roughly) that in Krasnoural'sk, the city referred to above, 78 percent of all children had high blood lead levels, split between 63 percent of all children (0 to 14 years of age) who had elevated blood levels over 9.9 to 14.9 micrograms per deciliter (mcg/dl), and 15 percent who had 15.0 or more mcg/dl. Belovo was the next worse city with 51 percent of all children affected, followed by Gus-Khrustalnyy with 36 percent, Saratov with 23 percent, Volgograd with 28 percent, and so forth.³³

Using the survey of 43 cities designated as Lead Project Sites, it was estimated using this same U.S. Environmental Protection Agency (EPA) biokinetic model, that 1.9 million children throughout urban Russia were likely to have behavior and learning problems because the lead content of their blood was between 10 and 19 mcg/dl. Some 400,000 additional children had 20 to 44 mcg/dl lead in the blood and needed a medical check-up and a subsequent test for lead in their blood, and 90,000 children with 45 to 69 mcg/ dl lead content were in immediate need of therapy within 48 hours.³⁴ Hopefully treatment and other measures were promptly and properly undertaken. A number of appropriate steps were initiated, including adoption of a national program to decrease lead contamination. The 1999 National Environmental Action Plan and

 ³²P. 124, in the full report, Doklad ... cited below. A follow-up summary of the activity was published for USAID by MEASURE Communication, Lead in the Environment and Public Health in Russia; Five Years of American-Russian Collaboration. 1995–1999. (Place and date are not given, but likely is Washington, DC, in the year 2000. The original summary report in English, was published in Moscow in 1997, under the title: White Paper: Lead Contamination of the Environment in the Russian Federation and Its Effect on Human Health, Issued by the State Committee for Environmental Protection of the Russian Federation, 48 pp. The Russian-language, full report, also issued by the State Committee, is: Doklad o sointsovom zagryaznenii okruzhayushchey sredy Rossiyskoy Federatsii i yego vliyaniii na zdorov'ye naseleniya. Moscow, 1997, 233 pp. 200 copies.)
 ³³Lead in the Environment, op. cit., p. 13. Also see the unpublished paper by Valerie M. Thomas, Princeton University, and Anna O. Orlova, Johns Hopkins School of Hygiene and Public Health, entitled. "Soviet and Post-Soviet Environmental Management: Lessons from a case study of lead pollution." The paper was accepted for publication in AMBIO of June 22, 2000.

the 2000 National Environmental Health Action Plan, set a very high priority on lead reduction. Leaded gasoline production is expected to continue to decrease.³⁵ However, the national plans may be aborted if the new environmental administration sets other priorities. The new environmental administration, the Ministry of Natural Resources, which absorbed the functions of the State Committee on Environment, now is headed by its third Minister in 1 year's time; whether there will be continuity in following up on this very serious problem is clearly not discernible at this juncture. The main function of the new ministry is to develop and exploit the nation's oil and gas reserves, and not to protect the environment and human health.

Other heavy metals such as cadmium and arsenic are prevalent in the air and land throughout much of Russia. In the Arctic north, wind-blown heavy metal salts and other pollutants from the city of Norilsk's nonferrous metallurgical plants have left the land barren and treeless for 75 kilometers to the southeast. Lakes and rivers everywhere are badly polluted by heavy metals dumped by industry and allowed to run off farmland. Estimates by the Yeltsin-era Ministry of Ecology and more recent observers suggest that only 25 to 50 percent of Russia's fresh water is potable.

FOREIGN ASSISTANCE AND UNMET NEEDS

The world has not been blind to Russia's plight. By late 1998, the United States and other donors had sent a total of more than \$66 billion in aid, according to a U.S. Government estimate. The list of donors includes even South Korea, and recently officials of the European Union and the World Health Organization have recognized the need to act aggressively. But the aid has been inadequate and piecemeal, and/or its delivery has been hampered by corruption and inept administration. The frightening reality is that it may already be too late to help.

In a pessimistic assessment, perhaps deliberately hyperbolic to draw attention to the various problems of the economy and society, Andrey Iliaronov, an economic adviser to President Putin, has pointed to 2003 as the year of reckoning, when the demographic crisis, the crumbling infrastructure, and the burden of massive foreign debt may combine to deal a crippling blow to Russia's remaining productive capacity—and thus, to its ability to help itself.

Where will the money come from for all the myriad improvements needed in reproductive and child health, for tuberculosis prevention and treatment, for HIV/AIDS cocktails of protease inhibitors? (Especially now that the Putin government has rejected a proposed \$150 million loan from the World Bank for these specific needs.) Who will supply the \$200 billion needed to clean up the water supply over the next 20 years, or the \$79 billion over 10 years for highway transport improvement as stipulated by Prime Minister Kasyanov or the \$10 to \$12 billion to clean up chemical weapons storage sites, or the hundreds of billions of dollars to clean up nuclear waste? Yet at the same time, It is reported that Moscow spends \$1 billion per year conducting the war in Chechnya. The list of needs is depressingly long, and the Russian Government has not

³⁵ Ibid., p. 16.

always taken the right steps to address them. And yet, despite how dismaying the task may seem, and how long the odds of success, we cannot simply ignore the ruin in Russia. The United States and other nations of the world have a profound interest in helping to avert an economic and demographic Chernobyl that would give a fearful new meaning to the word meltdown.

SOCIAL WELFARE: A SOCIAL CONTRACT By Judyth L. Twigg¹

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SUMMARY

A large number of the Russian people have suffered significant losses from the dissolution of the social contract they enjoyed with the Soviet regime. The sudden withdrawal of a meager but comprehensive safety net covering health care, pensions, employment, housing, and other services has resulted in widespread poverty and disillusion. Health and demographic crises, increasing drug and alcohol abuse, and family breakdown are both causes and symptoms of unprecedented post-Soviet psychological alienation and withdrawal. Thus far, the government response to these social crises has been uneven. However, a handful of effective societal coping mechanisms, including strong interpersonal networks, non-governmental "civil society" institutions, and the re-emergence of a significant middle class, provide some cause for optimism.

The human costs of the Soviet regime were unquestionably and unbearably high. Few would argue for a return to the political repression, pervasive economic and bureaucratic inefficiency, corruption, and general malaise that plagued late Soviet society. From the perspective of the Russian people, however, not everything about the Soviet Union was bad. In particular, an extensive and universal social safety net was an important positive element of Soviet rule. Free education and health care, a comprehensive and diverse system of pensions and social benefits, job security, and extensively subsidized housing, basic foodstuffs, public transportation, child care, and vacations all contributed to a meager but reliable floor of living standards for the vast majority of the Soviet people. Upward social and economic mobility may have been se-

¹Judyth Twigg, Ph.D. in Political Science from MIT, is currently Associate Professor of Political Science, Virginia Commonwealth University. Segments of earlier versions of this paper were originally prepared under the auspices of the Social Cohesion Study of the Carnegie Corporation of New York's Russia Initiative (available at www.carnegie.org), and for the Carnegie Endowment for International Peace, to be included in its forthcoming volume *Russia: Ten Years After*. The author thanks Andrew Kuchins of the Carnegie Endowment and Deana Arsenian and David Speedie of the Carnegie Corporation for their permission to reprint the work here. Thanks also to John Hardt for important comments on previous drafts.

verely limited, but there was little reason to worry about slippage down the socio-economic ladder.²

Despite ubiquitous and sarcastic undercurrents about the flaws in the safety net and the inadequate labor incentives provided by the command economy-"we pretend to work, they pretend to pay us" being the most popular expression of a common sentiment-the implied social contract of the Soviet era was a critical thread in the fabric of Soviet society. People accepted a low standard of living in exchange for economic and social security and equity. While economic inequalities did indeed exist, in the form of an extensive network of perks and privileges for the politically powerful and wellconnected, they were carefully and mostly successfully hidden. To the extent, therefore, that Soviet consumers were aware of and craved unavailable luxury or convenience items-or even basic essentials of decent quality-there was a sense that the lack of consumer goods affected everyone equally. Everyone enjoyed the security of a rudimentary but all-encompassing social welfare network. On the flip side, living standards were not high, and the routine inconveniences borne of material shortages were a constant irritant, but these too were a universally shared fate.

This common economic and social circumstance, together with a slow but gradual improvement in living standards during the late Soviet period, was a critical source of societal cohesion. A significant portion of the Soviet Union's national identity and political legitimacy derived from its provision of social benefits. As long as everyone viewed the state as the guarantor of some basic level of material comfort and survival, and to the degree that this guarantee extended universally to all segments of the population, the Soviet people could "buy in" to at least some portion of the regime's propaganda about the success of the socialist experiment.

Over the last decade, the stress of market reform has ripped apart the Soviet safety net. The jolt of the sudden transition to capitalism has left the state unable to maintain the bulk of the social benefit package that generations took for granted, producing unprecedented poverty, material inequities, and socio-economic schisms. As a result, Russian society has become unanchored. One of its major sources of national identity and cohesiveness—the perception of socialist equity—has been fractured. The high expectations engendered by the early promises of reform have been devastated by a decade's worth of suffering and hardship. The Russian people's well-documented yearning for order and stability derives at least in part from nostalgia for the days when the social contract was honored, the safety net was intact, and life for many was not consumed by a daily struggle for basic survival.

THE COLLAPSE OF THE SAFETY NET AND ITS SOCIAL IMPLICATIONS

The Russian Government's acceptance of fiscal responsibility in the early 1990s forced it to slash social spending. Budgets for schools, kindergartens, health facilities, sanatoria, day care, and a myriad of other formerly state-provided services plummeted. Wage arrears for workers in the state sector reached epidemic propor-

²See Bertram Silverman and Murray Yanowitch, New Rich, New Poor, New Russia: Winners and Losers on the Russian Road to Capitalism (Armonk, NY: M.E. Sharpe, 1997), p. 22.

tions. At the same time, workplace-based social benefits, substantial during the Soviet era, were also eroded by the sudden demand for enterprises either to become profitable or to go out of business. Inflation decimated savings, and wage and benefit increases could not keep up with even more rapidly rising prices. The state could no longer afford to subsidize a basic floor of material living standards for the entire population.

As a result, a significant percentage of the Russian people have sunk into poverty. Anecdotal horror stories surrounding this phenomenon abound: the grandmother arrested in Ryazan in October 2000 for trying to sell her grandson for \$90,000 so that his organs could be removed and sold in the West, or patients in Omsk with multi-drug-resistant tuberculosis (TB) marketing their disease-saturated phlegm to desperate customers anxious to infect themselves so that they can buy food with the money from a disability pension. But these sensationalist accounts should not mask the larger and more important fact that 30 to 40 percent of Russians now grind out a living below the poverty line, with those estimates varying depending on how poverty is defined. Most analysts agree, however, that the government's definition of a "minimum subsistence" income-the amount of money required to purchase a basket of basic food and other consumer goods, and the figure on which pensions, child allowances, and other post-Soviet-era benefits are based—is woefully meager. In other words, these poverty levels, at monthly incomes of around \$30 to \$45, or the equivalent of less than \$1 a day, represent real hardship. One analysis in early 2001 showed that the minimum monthly income in Novgorod Oblast could barely feed five cats. Bread production in Russia continues to increase each year, since it remains one of the few affordable staples as the overall purchasing capacity of the population dwindles. For the average Russian citizen, consumption levels have fallen by half since 1992, and only one family in six is better off now than it was then.³

The root causes of poverty in today's Russia are unemployment and low-paying jobs. Although official unemployment figures hover around 2 percent, these statistics are notoriously difficult to interpret. On the one hand, they mask a significant level of underemployment among workers still officially categorized as enterprise employees but who actually perform little or no work and therefore receive few or no wages. These "unpaid vacations" may encompass as much as another 7 to 8 percent of the work force. On the other hand, the official statistics also miss what may be a significantly larger phenomenon, the substantial number of people working in the shadow economy, with wages paid off the books (largely for purposes of tax evasion). But these workers' unreported incomes most often involve unskilled labor, poor work conditions, and low pay. Both reported and unreported wage rates in Russian indus-

³Michael Slackman, "Sold for His Organs," *Newsday*, November 5, 2000; Valery Filonenko, "A New Method of Obtaining Disability Benefits Threatens to Sweep Omsk: Infecting Yourself with Tuberculosis," *Noviye Levestiya*, October 21, 1999, p. 5; "Poverty Hits Across the Country," *RFE/RL Newsline*, Vol. 5, No. 35, Part I, February 20, 2001; "Russians Buy More Bread as Poverty Bites," ITAR-TASS, October 5, 2000; Igor Semenenko, "State Debates Poverty As Wealth Gap Grows," *Moscow Times*, October 18, 2000; Christopher Williams, "Economic Reform and Political Change in Russia, 1991–1996," in Christopher Williams, Vladimir Chuprov, and Vladimir Staroverov, eds., *Russian Society in Transition* (Aldershot: Dartmouth Publishing Company, 1996), pp. 11–12.

trial enterprises and business offices remain frequently at levels comparable to developing countries, meaning that getting a job is no security against poverty.

Poverty in today's Russia is also largely a female phenomenon. In the late 1990s, nearly 80 percent of Russia's unemployed people were women. The vast majority of single parents are women, and more than 80 percent of them have no job at all. The Russian labor code guarantees that a new mother can take a 3 year unpaid leave without losing her job, but employers almost never comply, and many employers hesitate to hire a woman with small children for fear that she will take frequent sick leave. Few single mothers receive child support, and the alimony law is rarely enforced. Bureaucratic red tape prevents many of the needlest single parents from claiming the scanty, untargeted child benefit offered by the state; only 30 percent of the poorest families claim their monthly child stipend.⁴

Although Russian culture still prides itself on cherishing its children as a precious national asset, the declining material and social position of children has been one of the most alarming consequences of the post-Soviet transition. The single most potent predictor of poverty during the transition period has been the birth of an additional child to a family. The poverty rate among families rises steadily with the number of children, to the point where nearly three-fourths of families with four or more children are poor. Thanks to these economic trends, well over 1 million children in Russia aged 14 to 18 have been unable to finish high school in the last decade.

Substandard living conditions are taking their toll on children's health, starting at the very beginning of life. According to the Russian Academy of Medical Sciences, because of an overall decline in the health of the population, poor prenatal care, and other factors, only 30 percent of Russian births can now be classified as "normal." Leading Russian physicians now speak of the "deceleration," or the mental and physical deterioration, of children and teenagers. More than 70 percent of Russian young people aged 10 to 15 suffer from chronic diseases, the number of disabled persons in that age group is growing at an alarming rate, and the incidence of mental disorders among teenagers has increased fourfold in the last decade. These statistics are troubling in and of themselves, but when put into socio-demographic context-this is the post-Soviet generation that is supposed to transform Russia into an energized, market democracy-they are genuinely alarming.⁵

The most extreme manifestation of these negative trends is the problem of abandoned and orphaned children. In the words of one orphanage director, "I can tell how bad things are by the way families are starting to ask us to take their children. Families in Russia

⁴Sophie Lambroschini, "Russia: Report Says Women Bear Brunt of Poverty," Radio Free Europe/Radio Liberty, September 27, 2000; Anna Badkhen and Anna Andreyeva, "Lack of State Support Hits Single Parents Hard," *Moscow Times*, September 7, 2000. ⁵"Only 30 Percent of Russian Births Are 'Normal," *RFE/RL Newsline*, Vol. 4, No. 194, Part I, October 6, 2000; *Children in the CIS Countries: Statistical Handbook* (Moscow: Interstate Statistical Committee of the Commonwealth of Independent States, 2001), pp. 118-119; "Russia Sees Huge Rise in Incidence of Mental Illness," Interfax, April 5, 2001; "70 Percent of Russian Youth Said Unhealthy," *RFE/RL Newsline*, Vol. 5, No. 61, Part I, March 28, 2001; "Russian Health Ministry Points to Deterioration of Russian Teenagers' Health," Interfax, March 27, 2001 2001.

are falling apart." Networks of foster care and adoption services are still underdeveloped, and therefore almost 700.000 children must live in orphanages. Having been raised in an institutional environment, the long-term prospects for these children are not positive. According to recent Russian Government estimates, 40 percent of them will end up in prison, and another 30 percent will become alcoholics. Even more striking, the country is now home to 1 to 4 mil-lion homeless children, with that number largely dependent on the weather; more kids take to the streets in the summer months, and return home when the cold becomes unbearable. This seasonal variation hints at the peculiar nature of this "social orphanhood"— more than 90 percent of these street children have one or more living parents who have simply lost the psychological or material wherewithal to raise their offspring (usually due to alcoholism or unemployment). Either they have voluntarily abandoned their sons or daughters, or the state has stripped them of parental rights.⁶

The plight of parentless children is but one manifestation of the breakdown of the Russian family. Elderly Russians are increasingly neglected, becoming known as the new bezprizorniki (unsupervised ones) because their adult children are too busy with their own lives to attend to the needs of their parents. On the whole, however, elders are generally better off than children and single parents, since the pension system is one of the few elements of the social safety net that has remained a political priority. Divorce, while remaining at about the same rate as in Soviet times, is in-creasingly costly for women and children. The number of weddings has declined over the last decade. More and more children are being born out of wedlock. An increasing number of intact families are opting not to have children at all, or to have just one child. In the last 10 years, the number of children in Russia has dropped by over 4 million, a manifestation of declining birth and fertility rates. While some of this drop stems from medical infertility, much is due to conscious choice. Low birth rates are a direct message from people who have lost faith in their society, and who have little confidence that their social and economic circumstance is likely to improve. A recent survey of new mothers in one Russian region showed that 14 percent had reacted with horrified, suicidal feelings upon learning that they were pregnant, wondering how they would possibly support a new, dependent life. Little wonder that there are two abortions for every child born in Russia.⁷

Women's degraded economic positions have caused them to suffer in other ways as well. Hundreds of thousands of women have vol-

⁶UNICEF, "After the Fall: The Human Impact of Ten Years of Transition," November 1999; "Who Cares? A Special Report on Street Children," The World Bank, Spring 2000; Colin McMahon, "Russia Slowly Faces Growing Problem: Social Breakdown Sentences Children to Life on Streets," *Chicago Tribune*, April 1, 2001; David E. Powell and Heidi A. Holzfaster, "As Or-phans Multiply and Languish, Russia 'Decrees,'" Boston Globe, December 10, 2000; "Homes From Home: Russian Orphanages Boom as Children Founder," AFP, April 18, 2001; Masha Gessen, "Not Good Enough, Even for Orphanages: No One Wants Babies of HIV-Positive Moth-ers," U.S. News and World Report, April 16, 2001; Viktoria Molodtsova, "Is An Orphan's Lot Always An Unhappy One?" Rossitskaya Gazeta, March 2, 2000, pp. 1, 4; "Neglected Children Plagued By Alcoholism," RFE/RL Newsline, Vol. 4, No. 224, Part I, November 17, 2000. "Problems Mount for Old, Young, and Women," RFE/RL Newsline, Vol. 5, No. 54, Part I, March 19, 2001; "Making Transition Work for Everyone: Poverty and Inequality in Europe and Central Asia," The World Bank, September 2000; Olge Nesterova, "Russian Family Is Chang-ing," Trud, May 17, 2001; Amelia Gentleman, "Wanted: More Russian Babies To Rescue a Fast Dying Nation," The Observer (U.K.), December 31, 2000.

untarily turned to a life of prostitution, and tens of thousands more have been duped into sex slavery through an extensive European and Asian network of trafficking in women. At home, Russian women are now, even more than in Soviet times, routinely the victims of domestic violence. Between 12.000 and 16.000 Russian women each year are killed by their spouses, and another 50,000 suffer severe injuries—10 times the comparable U.S. figures. Only six shelters for abused women exist in the entire country, all the result of private or local initiatives. Russian culture still sees victims as somehow "deserving" their fate, and a lack of legal protec-tion follows those cultural assumptions.

This view of women is unsurprising, given the blatant sex discrimination and sexualization of women that has accompanied the market reform process. The ideological doctrine of socialist gender equity has given way to a routine of overtly sexist remarks during parliamentary debates, job advertisements that specify positions for "attractive" females under age 30 "bez komplexov" (without complexes, or willing to perform sexual favors), and open street vendor sales of sexually explicit publications. One mid-1990s survey indicated that over half of Russian women had been the recipient of sexual advances by their job supervisors.⁸

Not surprisingly, breakdown at the societal and family level is producing individual-level pathologies as well. One in three Russians now have psychological problems, a 50 percent increase in the last decade, and the country's suicide rate is now among the highest in the world (and four times the U.S. rate). Work hours lost to psychological problems have been a significant factor in the country's loss of economic productivity. Over the last 10 years, disability certification for mental health reasons has grown more dramatically than for any other kind of illness. Meanwhile, Russia's mental health care infrastructure can accommodate only about 200,000 people, far below the capacity needed to cope with this growing problem, and even that network of facilities is rapidly de-caying for lack of resources and investment.⁹

Of course, the most well-known and visible manifestation of Russians' inability to cope with the stresses of the post-Soviet transition is the vodka bottle. The average Russian man now drinks three half-liter bottles of vodka each week, and consumption levels appear to be steadily increasing. Alcohol is clearly a major contributor to the country's demographic crisis, accounting as it does for the growing rate of traffic and industrial accidents and cardiovascular disease in middle-aged men. Alcoholic parents produce many, if not most, of the country's abandoned children. If the country had a functioning network of battered women's shelters, it would be filled with victims of domestic violence perpetrated by

⁸ "Pollsters Report Findings on Women's Issues," *RFE/RL Newsline*, Vol. 5, No. 48, Part I, March 9, 2001; Maria Kotovskaya, "A Modest Little Castle in Switzerland and a Romantic Can-delit Dinner," *Nezavisimaya Gazeta*, December 25, 1998, p. 14; Valerie Sperling, "The 'New' Sexism: Images of Russian Women during the Transition," in Mark G. Field and Judyth L. Twigg, eds., *Russia's Torn Safety Nets: Health and Social Welfare during the Transition* (New York: St. Martin's, 2000), pp. 173–189. ⁹ "One-Third of Russians Suffer 'Psychological Disorders," *RFE/RL Newsline*, Vol. 5, No. 24, Part I, February 5, 2001; Yury Bliyev, "No One's Safe from Poverty or Illness," *Meditsinskaya Gazeta*, October 22, 1999, p. 7; Nina Fokina, "One Flew Over in a Straitjacket," *Trud*, October 29, 1999, p. 6; Colin McMahon, "Russian System Isn't Coping At All With Surge in Mental Dis-orders," *Chicago Tribune*, February 1, 2001; "One in Three Russians Has Psychological Prob-lems," *RFE/RL Newsline*, Vol. 5, No. 69, Part I, April 9, 2001.

drunken boyfriends and husbands. Yet vodka remains cheaper than milk, supported by a state that relies on almost \$500 million in annual revenues from alcohol duties. Despite efforts by the health ministry to call attention to this problem, the government continues programs like rewarding a few select oblasts over the May 2001 holidays with additional vodka allocations as a prize for "good work" carried out during the preceding 12 months. A draft law that would limit advertising for alcoholic beverages and promote public health campaigns about alcohol consumption has remained stalled for several years.

Illegal drug use is also a growing problem, to the point where the health ministry refers to it as an "epidemic." Between 3 and 5 million Russians are regular drug users. One-third of the country's urban population has tried illegal substances at least once. The rate of drug addiction has increased more than sevenfold in the last decade, with an even greater explosion among children and teenagers and a pattern of usage where Russian young people abandon "light drugs" for heroin and other more dangerous narcotics far more quickly than is the norm in other countries. Russian specialists are also concerned about a recent drop in the age threshold for drug use, from 16 or 17 a few years ago to 12 and 13 today. Injectable drug use is the almost exclusive transmission vector for Russia's growing HIV/AIDS problem.¹⁰

Illicit drugs are also a major factor in the country's growing problem with violent crime. Although crime rates fell slightly in the late 1990s, current levels still represent a significant increase over the Soviet period. Coupled with an unwieldy, often arbitrary judicial system, these crime levels have bestowed Russia with the world's largest prison population. One out of every four Russian adults has either been in one of the country's overcrowded, brutality-ridden prisons, or has had a family member there. The government's attempts to reform its penal system have generally involved mass amnesties, with the unfortunate result that tens of thousands of actively infected TB patients—Russia's jails are its main breeding grounds for a sweeping TB epidemic—have been released into the general population.¹¹

These social pathologies are not limited to Russia's urban areas. Rural Russia has become increasingly isolated. Telephone and postal service throughout the country's vast land mass remains poor and unreliable, many regions still go without dependable electricity, and transportation to many areas is problematic. Soviet-era programs to build and maintain rural infrastructure, including houses and roads, gas and water supplies, and communication networks, have been largely abandoned. As a result, villagers—who comprise about one-fourth of the country's population—must rely solely on radio and sometimes television as their primary contact with the rest of the country. This social isolation also extends to the economic realm. In Soviet times, the planned economy moved agricultural products to the cities, and manufactured goods back to

¹⁰ "Alcoholism Is Becoming a National Security Problem," Sevodnya, May 26, 1999, p. 6; "More Youths End Up Addicted," *RFE/RL Newsline*, Vol. 4, No. 249, Part I, December 29, 2000; "Up To 5 Million Russians Are Drug Users—Health Ministry," Interfax, February 21, 2001; "Russian Drug Addicts Unofficially Put at 3 Million—Parliamentary Official," Interfax, December 28, 2000.

¹¹Fred Weir, "Russia To Revise Crime, Penalty," Christian Science Monitor, January 9, 2001.

the countryside. The lack of investment in rural infrastructure has now decimated Russian agriculture, to the point where most specialists estimate that it will take two generations to recover, and the country must routinely import food.

According to several recent studies, Russian rural communities have responded to this circumstance by becoming autarchies largely outside the market economy. These communities are able to grow or make most of that they need for their people to survive, albeit at a relatively primitive level. Barter has resurfaced as the primary form of exchange of goods and services, and due to centuries-old village norms of equity and mutual support, nobody within the community goes without basic necessities. The good news is that nobody is starving to death, in a country where famine did indeed ravage the landscape several times in the twentieth century. Despite the existence of this community-based network of mutual support, however, Russia is currently undergoing a process of rural depopulation. Fewer employment opportunities and lowered living standards in the villages are pushing young villagers toward the perceived range of better conditions in the cities.¹²

INEQUITY AND THE SEARCH FOR A UNIFYING IDEA

Perhaps most important in terms of societal cohesiveness, the stratification of society according to income level has increased dramatically during the post-Soviet period. The gap between rich and poor is steadily growing, as is the absolute number of both very rich and very poor. At the end of the year 2000, salaries for the 10 percent of households with the highest income in Russia were 32 times those in the lowest income decile, and the richest households' total incomes were 44 times higher. The new rich, or "New Russians"-former Communist Party leaders, bureaucrats, and others who had the skills, connections, and good fortune to take advantage of the opportunities presented by the transition-rapidly became objects of considerable scorn in the early and mid 1990s. Their combination of garish displays of excessive wealth with lack of education and manners made them the butts of a whole new genre of jokes. (Two New Russians meet on the street. "Hey, Vasya, where did you get your nice tie?" "At the Valentino store. Cost me \$2,000." "That's nothing, I know where you can get the same tie for \$5,000!") But their profligate spending, particularly in Moscow and other major cities, drove up the price of new housing, public entertainment, and other goods to the point that ordinary people suddenly found those things out of reach.

The new poor, by contrast, are those who work for the government or other still-public industries, including a wide array of skilled workers and former intelligentsia. They have suffered through the humiliation of meager and often late wage payments, or in-kind compensation in the form of goods like bras, caskets, and manure, and the need to supplement the scientific or technical po-

¹²Margaret Paxson, "The Cultural Dimension of Agricultural Reform: Social Organization and the Metaphysics of Exchange in Rural Russia," lecture at the Kennan Institute of the Woodrow Wilson International Center for Scholars, Washington, DC, January 29, 2001; Gennadi Zhuravlev, et al., "The Socio-Demographic Situation," and Vladimir Staroverov, "Antagonisms in Russian Society," in Williams, et al., *Russian Society in Transition*, 1996, pp. 66–67 and 122– 124.

sitions that continue to harness their intellectual capacities with second and sometimes third jobs as taxi drivers, cooks, or janitors. For some of these people, the fall from a Soviet-era position of prestige and privilege has been dramatic. Workers in the scientific, industrial, and military sectors, particularly those located in the "closed cities," realized the best payoffs the Soviet social contract had to offer. (Indeed, their membership in the "First Circle" carried with it a unique clause in the social contract: denial of interaction with the international scientific community and the tightest reins on their freedom of expression, in exchange for material benefits.) But those benefits, based primarily on priority allocation of scarce physical resources, have now disappeared. They have been replaced by a monetarized system in which current earnings and budget revenues available to these former elite cannot begin to match the perquisites that were formerly associated with place of work and politically mandated access. In this regard, the Soviet-era social pyramid has been inverted. Oligarchs and traders are now the primary claimants to government largesse, while highly educated specialists (who still, incidentally, suffer from limitations on their freedom of expression in the "closed cities") have suddenly and unexpectedly become beggars.¹³

One late 2000 Russian Government economic development strategy report described the situation in these terms: socio-culturally and economically, two unequal social layers have formed over the last decade. About one-fifth of the population has maintained or improved on its standard of living since the Soviet era, and a minority of those, about 5 to 7 percent of the population, have been able to adopt an essentially Western lifestyle, complete with modern spending and consumption habits. These people have been able to transcend Soviet assumptions and mindsets regarding the personal work ethic and the appropriate role of the state. To them, the free market rewards those with skills, tenacity, and ingenuity. Their post-Soviet success has rendered the collapse of the old safety net irrelevant to them; they no longer need its protections.

By contrast, the almost half of Russians who are subject to persistent poverty have become jealous and indignant over the new inequities. In their world, growing inequality has little to do with the natural results of free-market competition. Instead, success for the few has stemmed not from hard work, but from dishonesty and "blat"—political and social connections. The gap between expectations and reality for these people has been psychologically as well as economically devastating. The disappointment and resentment among those who mistakenly thought they would benefit from the marketization of the economy has been profound, particularly when success seems often to stem from criminal behavior and financial speculation rather than the production of legitimate goods and services. Surveys have repeatedly shown that most Russians view the primary beneficiaries of the transition period as "swindlers and manipulators," while few agree that ordinary, honest people have reasonable opportunities to increase their incomes and living standards. Hard work and a good education do not necessarily

¹³ "25 Russian Regions Extricate Themselves from Poverty," *Trud*, December 23, 2000; "Number of Impoverished in Russia Declines," *RFE/RL Newsline*, Vol. 5, No. 4, Part I, January 8, 2001.

translate into a better life, and to the limited extent that they do, the latter is increasingly difficult to obtain. Declining public support for education and the rise of expensive private schools at all levels have seriously diminished one of the few remaining channels of social mobility.

The dynamic of this new, very public division of society into the haves and have-nots has exacerbated centuries-old Russian anger at the separation and exploitation of the masses by their masters. The well-known mantra about what the Russian people currently crave-order and stability-encompasses not just social and economic stability, but also a fundamental sense of social justice. The gap between winners and losers in post-Soviet Russia still may not match the level of inequality in the United States, but the rate of explosion of inequality in Russia has been so rapid that people indoctrinated in the socialist mind-set have had little time to adjust. As a result. Russia has lost all sense of a common national identity. In the midst of socio-economic chaos, no common set of unifying principles has emerged to replace the ideal, flawed as it was, of Soviet socialism. Gorbachev's perestroika undermined much of Russian tradition, forcing society to question its history, its political culture, its achievements as a superpower, the essence of its national dignity. For over a decade since then, the Russian people have been struggling with questions that cut to the core of their identity. What values do we hold? What values do we want to transmit to our next generation? How can we regain a sense of pride and patriotism? For a few, the answer lay in Western-style individualism borne of the free market and of liberal political democracy. For the majority, however, that path has been tainted by the stain of crass commercialism and materialism and the gross inequities produced by shock therapy.

Those people have struggled to find alternate social moorings. They feel isolated and abandoned. Most say that they can now count only on themselves in times of trouble; only a small minority claim they can rely even on family and friends. Only 30 percent are able to recall anything positive that has happened to them recently. Moscow's most popular radio station airs catchy tunes with lyrics that reflect the pessimism of post-Soviet life, songs about war death, death from hepatitis, and most strikingly, a number one single from early 2000 called "You Have AIDS (And That Means We Will Die)." This national malaise indicates that Russia continues to suffer a wrenching psychological upheaval. The symptoms of its discontent extend far beyond what would be considered "normal" for a country undergoing the pangs of economic development, or even the sacrifices now routine for a post-socialist transition. Almost nobody has had confidence in the ability of public authorities to put the country back on the right track.¹⁴

 dramatic cultural sea change has formed an integral part of this national identity crisis. Even factory workers and taxi drivers

¹⁴ "Nearly Four-Fifths of Russians Are Nostalgic About Soviet Union," strana.ru, March 15, 2001; "Russians Have Trouble Recalling Good Times," *RFE/RL Newsline*, Vol. 5, No. 77, Part I, April 20, 2001; Gaël Turine, "Russia's Homeless," *Time Europe*, January 31, 2001; Alexander Khlop'ev, "The Transformation of the Social Structure," in Williams, et al., *Russian Society in Transition*, 1996, pp. 93–106; Vladimir Shlapentokh, "A Normal System? False and True Explanations for the Collapse of the U.S.S.R.," *Times Literary Supplement* (U.K.), December 15, 2000; Masha Gessen, "Rockin' To Sad Songs," U.S. News and World Report," March 19, 2001.

in the Soviet era could recite Pushkin, wax lyrical about the latest achievements of the Kirov ballet and the Chekhov theater, or discuss the finer philosophical nuances of Tolstoy and Dostoyevsky. Stagnant as life may have been under Brezhnev, it afforded people time and energy to think private thoughts and to place those ideas within a rich cultural context. The transition to the market swept away this luxury. Pushkin and Tolstoy have been replaced with the most base and commercial representations of Western popular culture, with billboards sporting half-naked women advertising Levi-Strauss "dzhinsy" or Marlboro cigarettes. The television and film industries have become similarly dominated by American imports. Only 10 percent of the movies shown in Russian theaters in the mid-1990s were actually produced in Russia. And the domestic Russian media has responded by sinking to the lowest common denominator. Representatives of the Russian Orthodox Church have blamed Russian television and cinema for many of the ills currently plaguing Russian society, and one of Russia's leading film directors has accused Russian television of turning today's children into a "generation of monsters."

In practical terms, the most common response to the last decade's social and economic upheaval has been apathy, spiced with a generous dose of hopelessness. Cynicism reigns. There are no longer "honest" or "dishonest" ways to make money—just "easy" or "hard." There have been practically no mass, public displays of discontent over the initial economic contraction in 1992, the financial crash in 1998, and the months' and years' worth of nonpayment of salaries. Instead, only a small minority of people express an interest in protest actions. Most Russians avoid reading about or discussing politics at all.¹⁵

Those few who do seek political expression of discontent are increasingly turning to extremist outlets. A small but expanding number of young people, even those with good jobs and higher educations, are joining radical Communist and Socialist groups to protest wage inequalities and economic dislocations. Even more disturbing are the growing ranks of neo-Nazi youth groups across Russia that have been violently targeting non-Russians, particu-larly those from the Caucasus and Asia. Of the small number of Russian youth who express a strong interest in politics-no more than 5 or 6 percent of the total-over half claim to favor fascism. The two Chechen wars have provided more than ample fuel to this fire. Although it would be inappropriate to exaggerate the scope of these trends at the present time, it is a situation likely to be exacerbated if the Russian Government pursues its currently proposed policy of increased immigration as a solution to its demographic problems.¹⁶

Russian youth, although more individualistic, entrepreneurial, and adaptable than their parents, may be the most severely im-pacted by this crisis of values. Society has not offered them the "vospitanie"—the process of deliberate instilling of society's positive

¹⁵ Vladimir Chuprov and Julia Zubok, "Youth and Social Change," in Williams, et al., Russian

 ⁻⁻ vraummi Gruppov and Juna Zubok, "Fouth and Social Change," in Williams, et al., Russian Society in Transition, 1996, p. 132.
 ¹⁶ "Russian Youth Seen Turning Left," RFE/RL Newsline, Vol. 5, No. 50, Part I, March 13, 2001; Valerii Solovei, "Dragon's Teeth: A Look at Right-Wing Extremism Among Russian Youth," Vek, No. 17, April 2001.

values-that their parents enjoyed, primarily because society has been uncertain about what those values are. Their formative vears have been ones of turbulence and upheaval. Unable to derive meaning from society as a whole, lacking crucial societal anchors, many of them seem to believe in nothing larger than themselves. While this may bode well for their ability to survive in a competitive market economy, it also has led a significant number of them into a life of crime; well over half of Russia's racketeers are under 30 years old, and the crime rate for juveniles under 18 is higher than that for adults. The country desperately needs a mechanism to re-engage its young people and harness their considerable energies in a productive direction.17

THE STATE RESPONSE TO SOCIAL CRISIS

The Russian Government's response to the social crises of the 1990s has been, at best, uneven. The problems have stemmed both from shortages of revenue, and from ineffective allocation and distribution of the scarce resources on hand. The economic growth rates Russia has enjoyed over the last 2 years (albeit largely dependent on relatively high world oil prices) provide a window of opportunity for enhanced financing of reform efforts in the social sphere. But even during times of relative plenty, the budgetary choices are difficult. Debt servicing, the armed forces and military industry, and direct subsidies to individuals and regions continue to hold significant claims to any surplus budget revenues. And pouring more money into social benefits sectors still plagued by Soviet-era inefficiencies and perverse incentives does not constitute effective reform. Ironically, in many cases, austerity may go hand in hand with improved efficiency. Recent policy in the housing sector is illustrative here. Over the next several years, the Putin regime will phase out subsidies for housing and utilities, purportedly in an effort to free revenues for badly needed capital investment in the utilities infrastructure. Citizens who now average 5 percent of their monthly incomes on rent, heat, and water will be expected to pay up to 22 percent of their household budgets for these services. This reform presents both opportunity and danger. Smartly implemented, and with careful and appropriately targeted subsidies for the needy, it can revive a crumbling physical infrastructure and in-troduce market-based productivity to a huge sector of Russia's economy. Otherwise, however, it will evolve solely as another (monstrously significant) rip in the social safety net, with the basic material needs of a huge percentage of the population once again disregarded.¹⁸

Government policies toward health are illustrative of these dynamics as they operate in the social sector as a whole. The government has addressed declining health status through a series of market-oriented reforms that have produced genuine progress in some areas, and unintended negative consequences in others. Chronically underfunded at around 3 to 4 percent of gross domestic product (GDP) in Soviet times, and cut to barely more than half

¹⁷ Igor Ilynsky, "Law and Order," in Williams, et al., Russian Society in Transition, 1996, pp.

^{234-235.} ¹⁸ "Russian Federation Housing and Utility Services: Policy Priorities for the Next Stage of Reforms," World Bank Report No. 17483-RU, February 25, 1998.

that today. Russian hospitals and clinics exist on a shoestring. A system of nationwide compulsory medical insurance instituted in 1993 held out some promise for extra cash but, like the state budget, it suffers from chronic underpayment and late payment of taxes. Despite the earnest efforts of most physicians and nurses, dreadful quality of medical care is often the result. A shockingly high percentage of health facilities have no hot water or sewage systems. and most still use glass syringes and reusable needles, with steri-lization procedures far below Western norms. Patients suffer long waits even for urgently needed care. A long list of medications is not only unaffordable, but unavailable. Perhaps most disturbing, a higher quality of services, in a system where comprehensive free medical care is constitutionally guaranteed, is now routinely provided only to the small number of people with the ability to pay for it. State-owned clinics openly (and illegally) demand money for such basic services as a spot at the head of the queue, accurate diagnoses, routine attention from ward nurses, anesthetics and other drugs, and the like. One recent study found that one-fourth of St. Petersburg residents were required to pay more than 20 percent of their monthly incomes for their most recent medical encounter, and another reports that a shocking 59 percent of all health care spending in the country consists of out-of-pocket payments (compared to about 25 percent in the United States). Perhaps inevitably, health care has succumbed to market forces, but in a chaotic and uncontrolled manner that has left the most vulnerable parts of the population unprotected. Universal access to some level of free medical care, one of the hallmarks of the Soviet system, has been destroved.19

The crux of Russia's health problems, of course, lies not only at the federal level. The 1993 Law on Self-Governance devolved primary responsibility for health and health care to the regions and municipalities. The situation with now-bankrupt enterprises, and the resulting taxation and budget crises, have left governors with unfunded mandates to provide an array of social services, including health. Corruption and incompetence in some areas have permitted this situation to fester, untreated, for over a decade. A handful of Russia's administrative regions, however, are providing more comprehensive and promising examples of systemic reform. Samara, for example, is universally heralded as a pathbreaker in this area. Its progress seems to derive from the confluence of a variety of important factors. First of all, regional political leaders have afforded health care top and consistent political priority. Diligent efforts by regional health insurance bodies and landmark legislation passed by the oblast Duma have resulted in practically full funding of

¹⁹Yu. Shevchenko, "Primary Measures for Development of the System of Health Care in the Russian Federation," Zdravookhraneniye Rossiyskoy Federatsii, No. 2, 2000, pp. 3–8; Igor Sheiman, "Forming the System of Health Insurance in the Russian Federation," Social Science & Medicine, No. 39, 1994, pp. 1425–1432; Mark G. Field, David M. Kotz, and Gene Bukhman, "Neoliberal Economic Policy, 'State Desertion,' and the Russian Health Crisis," in Jim Yong Kim, et al., eds., Dying for Growth: Global Inequality and the Health of the Poor (Monroe, Maine: Common Courage Press, 2000), pp. 155–173; David E. Powell, "The Dismal State of Health Care in Russia," Current History, October 1998, pp. 335–341; Judyth L. Twigg, "Unfulfilled Hopes: The Struggle to Reform Russian Health Care and Its Financing," and Julie V. Brown and Nine L. Russinova, "Negotiating the Post-Soviet Medical Marketplace: Growing Gaps in the Safety Net," in Field and Twigg, Russia's Torn Safety Nets, 2000, pp. 43–64 and 65–82; V.E. Boykov, et al., "Participation of the Population in the Financing of Health Care," Zdravookhraneniye, No. 2, 2000, pp. 32–46.

health care budgets for the past 3 years. It is impossible to overstate the uniqueness of this situation. Literally every other one of Russia's 89 regions struggles with late or underpayment of health insurance taxes, leaving their coffers underfinanced and therefore their universal coverage promises impossible to fulfill. In contrast, Samara has voluntarily added benefits to the list of basic health services mandated by law.20

Samara's success also stems from its creative efforts to spend each health care ruble efficiently and effectively. Having abandoned the Soviet-style, central planning-oriented provider reimbursement mechanisms that remain the norm in most of the country, Samara now has in place an array of incentive structures to discourage wasteful spending at hospitals and clinics. The region is also-developing a network of general practitioners, in an effort to overcome the Soviet habit of unnecessary and expensive physician overspecialization. The presence of family doctors affords patients greater freedom of choice and a higher quality of comprehensive services on a cost-effective outpatient basis.

Samara also encourages state physicians to offer paid services within regular polyclinics and hospitals. Due to high start-up costs, there is still a relatively small number of physicians in private practice. But many state facilities now offer private, fee-based services alongside those covered by the state, and patients can choose to make these legal additional payments either for treatments not covered by basic national insurance, or for higher quality or more comfortable provision of state-mandated services. This mechanism has now, for the first time, provided physicians with an incentive to work harder and offer higher standards of care, despite the fact that their state salaries are still mandated according to rigid salary scales. They compete for the opportunity to provide these paid services, and they keep a portion of the proceeds earned from the busi-ness they attract. Visits to some of Samara's clinics that offer paid services and therefore enjoy this additional income, and those that do not, offer a striking comparison. The former contain at least some modern, Western equipment, and are undergoing significant capital repair, with evident new construction and remodeling. The latter continue to exhibit the shoddy construction and technical standards that were a hallmark of meager Soviet health care quality.

The success of Samara's reforms is difficult to dismiss, with dramatic reductions in infant mortality rates in recent years (12.2 infant deaths per 1,000 live births in 1998, compared with a figure of 16.5 for Russia as a whole) and an undeniably greater return on each health care ruble. The lessons of its experience-the importance of stable leadership and policy continuity in the health and social sector, and the magnitude of what can be accomplished when high political priority is assigned to these issues-should be instructive for other regions throughout the Russian Federation.²¹

 ²⁰ Alexei M. Lavrov and Alexei G. Makushkin, "Extrabudgetary Funds as a Channel for Territorial Redistribution of Public Finances," Chapter 7 of *The Fiscal Structure of the Russian Federation: Financial Flows Between the Center and the Regions* (Armonk, NY: M.E. Sharpe, 2000), p. 133; Judyth L. Twigg, "Russian Health Care Reform at the Regional Level: Status and Impact," forthcoming in *Post-Soviet Geography and Economics*, 2001.
 ²¹ Rudolf Galkin, "They Can't Discredit Reform," *Meditsinskaya Gazeta*, January 5, 1996, p. 4; Galkin, "Samara's Model of International Health Care," *Meditsinskaya Gazeta*, March 15,

Russian reformers at the national level have conceptualized federal policies to regulate the health sector's transition to a market economy, taking into account the need for regulatory mechanisms that maintain access for the poor and discourage wasteful spending. These include reducing the Soviet-era focus on expensive inpatient care, instead performing routine tests, therapies, and even surgeries on an outpatient basis where appropriate; training a new generation of family practice physicians to overcome the Soviet habit of overspecialization; permitting patients to choose their own physicians, clinics, and hospitals, so that the benefits of competition can be realized; removing physicians from rigidly set government wage scales, so that they feel a monetary incentive to provide more and better treatment; adopting provider reimbursement mechanisms other than fee-for-service, or worse, Soviet-style feeper-hospital-bed-occupied, which encourages inappropriately long lengths of stay and gross inattention to quality of care; and monitoring insurance company and provider behavior to limit adverse selection and eliminate or regulate the provision of paid services. In a handful of Russian regions, these and similar policies have been implemented to varying degrees, some with impressive re-sults. Samara's example demonstrates that the key ingredients to success are attentiveness to the health sector and political will among leaders at the regional level, which should be applauded and encouraged where they exist. Certainly a significant increase in health budgets should be one of the first priorities of Russian social policy. However, given the obvious difficulties in achieving meaningful increases in health budgets, measures to improve fair-ness and efficiency are essential to "cure" Russian health care. But while the federal and some regional governments have, to varying degrees, conceptualized some appropriate and even innovative policies, the legacy of Soviet-era institutions and mind-sets has in most regions continued to put the brakes on reliable, consistent implementation of effective reform.22

SOURCES OF SOCIETAL COHESION AND IDENTITY

Given the government's mixed success at addressing the country's ongoing social difficulties, how has Russian society survived the last decade's assault on its most basic structure and principles? Russian people and families have relied on a variety of coping mechanisms, some involving social structures held over from the Soviet past, others newly emergent from the chaos of market reform. Primary among the former are informal interpersonal networks. These "kitchen table" groups are close circles of family and

^{2000,} p. 6; "Health Care of a Region: Samara Oblast," Meditsinskaya Gazeta, June 17, 1998, pp. 5-10; Judyth L. Twigg, "Samara Leads the Way with Innovative Medical Practices," Russian Regional Report, Vol. 5, No. 32, September 7, 2000; author's interviews with health administrators and providers in Samara, March 2000. ²² Christophe Raison, "Regionalisation et crise sanitaire en Russie," Revue d'études comparatives Est-Ouest, Vol. 29, No. 3, 1998, pp. 207-239; "Basic Directions in the State Regulation of the Development of Health Care in the Russian Federation for the Years 2000-2010," Problemy Sotsial'noy Gigieny i Istoriya Meditsiny, No. 3, 2000, pp. 3-14; I. Nazarova, "Reform of Health Care: Pros and Cons," Zdravookhraneniye, No. 5, 2000, pp. 29-36; V. Shchepin, "Structural Effectiveness in the System of Treatment-Preventive Care in the 1990s," Problemy Sotsial'noy Gigieny i Istoriya Meditsiny, No. 3, 2000, pp. 24-27; Yu. Shevchenko, "Primary Measures for the Development of the System of Health Care in the Russian Federation," Zdravookhraneniye Rossiyskoy Federatsii, No. 2, 2000, pp. 3-8.

friends that, during the Soviet era, not only served as trusted confidants but also as networks of mutual provision of scarce consumer goods. Now, in many cases, these informal circles continue to provide material and psychological support, serving as the primary or only remaining source of cohesion and stability for many people. A similar psychological and economic impact is being engendered by intergenerational transfers of wealth. It is well known that some young adults who have navigated the transition period relatively successfully have financially supported their less adapt-able middle-aged and elderly parents throughout the last decade. Recent studies have further indicated that family survival in many other instances is being maintained almost entirely by older Russians "giving until it hurts" to their adult children and grandchildren, particularly in rural areas-food from the dacha, money, whatever they have.²³

In addition, many Russians are returning to the symbols, if not fully to the substance, of the Russian Orthodox Church. Well over half of Russians now call themselves Orthodox, and millions of baptisms were performed in the aftermath of the Soviet collapse. The Church has deliberately tried to place itself at the center of a post-Soviet Russian national identity, referring repeatedly to a uniquely Orthodox "Russian idea" or "Russian soul." But over the last decade, while successful in opening new parishes and monasteries, the Church has been less effective in bringing its essence to the center of people's lives. Basic knowledge of Orthodox doctrine and theology remains low. As a result, many Russians have turned to other faiths, a phenomenon to which the Orthodox Church has responded jealously. It has masterminded a law that restricts, and may ban, the activity of many of the thousands of non-Orthodox religious groupings in Russia, excepting only those deemed "traditional," such as Islam, Buddhism, and Judaism. Officially sanctioned discrimination against religious minorities, to the extent that it fosters a climate of divisiveness and intolerance, may undermine spirituality and religion as a sustainable source of family stability and societal cohesion.24

Russia is also now home to a burgeoning network of over 300,000 registered non-governmental organizations (NGOs), with many designed to provide families and individuals with social services and support. The obstacles these groups face are substantial, from ridiculous bureaucratic registration requirements to monitoring of their activities by the federal security services. Fund-raising also remains problematic for these groups, although some are now beginning to navigate the waters of public-private partnership, and oth-ers have been blessed by the largesse of well-known tycoons like Potanin and Berezovsky anxious to create positive public images for themselves through philanthropy. And many of them still suffer from public suspicion based on the fact that corrupt businessmen

 ²³ Cynthia Buckley, "Family Matters: Intergenerational Wealth Transfers and Survival Networks," presentation at conference "From Red to Gray: Aging in the Russian Federation," University of Texas, Austin, April 6, 2001.
 ²⁴ Scott Peterson, "A Russian Resurrection," Christian Science Monitor, December 21, 2000; Giles Whittell, "Moscow Tightens Its Grip on Rival Faiths," The Times (U.K.), January 2, 2001; Paul Goble, "Russia: Analysis from Washington—A Religious Flowering," Radio Free Europe/Radio Liberty, April 19, 2001; U.S. Department of State, "2000 Annual Report on Religious Freedom: Russia," September 5, 2000; Elliott Abrams, "In Russia, 'Liquidating' Churches," Washington ton Post, November 14, 2000.

and politicians often set up illegitimate NGOs for purposes of money laundering. Nevertheless, many of Russia's most talented people are choosing careers in this "third sector." To the extent that they grow and thrive, these networks of NGOs may prove instrumental in progress toward a climate of self-generated social welfare to replace the paternalistic model of state provision. Even more important, to the extent that they can link their efforts through regional and national associations, they can provide the foundation for a genuine civil society, creating a sense of "common good" and perhaps also the foundation of a stable, liberal democracy.²⁵

Government authorities have also recently attempted quite deliberately to re-establish a positive, distinctively Russian national identity. In a clear effort to build a new foundation for political legitimacy, President Putin is overtly cultivating a new patriotism, a new national pride-a sense that the country's past and present are nothing to be ashamed of, an attempt to step out of the shadow of a decade of socio-economic turmoil and more recent disaster such as the sinking of the Kursk. The restoration of the old national anthem was the first step; the second was the restoration of basic military training and patriotism classes in the public schools. In March 2001, the government announced a full-blown, \$6 million "patriotic education" program designed to counter a wave of "indifference, individualism, cynicism, unmotivated aggression, and disrespect for the state" evident since the collapse of the Soviet Union. Over the next 5 years, the project will attempt to reshape the education system through new history and other textbooks, influence the mass media (with prizes offered to journalists, writers, and filmmakers whose work exemplifies the goals of the program), and create a network of "military-patriotic youth clubs" around the country. Whether these efforts are intended to foster positively directed Russian nationalism or a cult of personality around Putin himself is debatable, but in many ways they are clearly falling on fertile ground. Recent consumption patterns-"nasha" products are now preferred over Western brands, and not just because of the price differentials with imported goods resulting from the August 1998 ruble devaluation—and numerous public opinion polls are now revealing a rejection of things Western. Consumer nationalism is leading advertisers to stress the "Russian-ness" of their products-even if those products are made by Western firms. U.S. confectioner Mars' newly launched candy bar, for example, is called

²⁵Sophie Lambroschini, "Russia: NGOs Just Beginning To Take Root," Radio Free Europe/ Radio Liberty, October 13, 2000; Joseph Boris, "Russian NGOs Threatened, Praised by Officialdom," UPI, January 4, 2001; "Good Works," *The Economist* (U.K.), March 24–30, 2001; "Putin Wants Dialogue with Civil Society, Welcomes Its Growth," *RFE/RL Newsline*, Vol. 5, No. 112, Part I, June 13, 2001; Marcia Weigle, *Russia's Liberal Project: State-Society Relations in the Transition from Communism* (University Park, PA: Penn State University Press, 2000), pp. 333– 379; 1999 Human Development Report for the Russia's Civil Society?" and "The Case for Assisting Russian NGOs," Policy Memos 51 and 137, Program on New Approaches to Russian Security (PONARS), November 1998 and April 2000; Jeffrey Checkel, "Access, Influence, and Policy Change: The Multiple Roles of NGOs in Post-Soviet States," Policy Memo 80, PONARS, October 1999.

"Derzhava"-the Russian word for "power," and an unofficial slogan of the strong Russian state 26

One important constituency for a new, positive Russian nationalism is the emergent middle class. Significant evidence suggests that this new middle class has energetically arisen from the rubble of the 1998 financial crisis—middle class not only in income and wealth, but also in outlook and behavior. They vacation abroad. They frequent cinemas and theaters and the country's most recent craze, bowling alleys. On average, they hold a significantly more optimistic view of the future than the rest of the population. Many of them are young professionals who believe in the virtue-and in the possibilities-of hard work, and they are determined to build a Russia within which they and their children can succeed. They manage to save some money. and they purchase major durables like cars and houses. They typically invest whatever profit they make back into their ventures, creating jobs and the foundation for a stable economic base. Although it constitutes no more than 10 to 15 percent of the population, remains vulnerable to shifts in the economy, and is located primarily in Moscow and a handful of other major cities, this emergent social stratum, plugging the gap between rich and poor, could serve as a powerful foundation of the necessary context for stability and cohesiveness. They are a significant cause for optimism.²⁷

CONCLUSION—LOOKING TO THE FUTURE

The Russian people have been subjected to seemingly unbearable humiliation and hardship over the last decade. It's hard not to ask why they've tolerated it. Why aren't masses of impoverished, disaffected, alienated Russians marching in the streets, demanding an improvement in their living conditions and in their social environment? Some Russian analysts cynically-but perhaps with a grain of truth-claim that the history of the Russian masses dem-onstrates a love of suffering, a craving for martyrdom. Others observe that many Russians have quite evidently chosen a more individualistic form of protest through withdrawal to the vodka bottle or the heroin needle, or more broadly, through withdrawal from active participation in society as a whole. Still others might cite a fear of disorder, of even more disruptive and destructive chaos if significant demands for change are made. And many observe that most Russians have been too preoccupied and exhausted by the daily struggle for survival to muster up the necessary energy to complain. Centuries-old Russian stoicism-an older Russian, looking back on her life, might observe that the last decade represents just one of many ups and downs for Soviet and Russian society-

 ²⁶ Mark Franchetti, "Russian Children to Train for War," *The Sunday Times* (U.K.), September 3, 2000; Susan B. Glasser, "Letter from Russia: Patriotism, Selling Like Hot Cakes," *Washington Post*, May 9, 2001; "Russia's School for Patriots," AFP, March 15, 2001; Fred Weir, "Moscow Pitches Patriot Games," *Christian Science Monitor*, March 22, 2001.
 ²⁷ "Russia's Middle Class Emerges from the Wreckage," AFP, November 6, 2000; Rob Parsons, "The Rise of Russia's Middle Class," British Broadcasting Corporation, January 11, 2001; Paul Starobin and Olga Kravchenko, "Russia's Middle Class," *Business Week*, October 16, 2000; Anna Raff, "Middle Class," *Finansovaya Rossiya*, No. 4, February 2001, p. 5; Tatyana Maleva, "Middle Class: The Doors Are Closing," *Vremya Novostei*, August 8, 2000, p. 3.

certainly goes a long way toward explaining the Russian people's acceptance of their fate.

Perhaps the cultivation of symbols and slogans can serve as a rallying point around which people can restore the national identity they so desperately need. But resurgent patriotism, no matter how heartfelt, will not erase the grinding poverty and gross inequities that continue to plague the Russian socio-economic landscape. The most important social questions for Russia today cannot be solved by surface propaganda. They can be addressed only by moving a significant portion of the truly depressed people and places throughout the Russian Federation stably into that new middle class. Regenerating the necessary degree of social mobility will require a restoration, albeit significantly amended and adapted to market circumstances, of the old social contract.

Why, beyond the obvious humanitarian concerns, should these social issues in Russia assume importance for U.S. policymakers? Elsewhere in this volume, Russia's historical endowment with superior natural and human resources is noted. Appropriate concern is voiced over the deterioration of the country's physical infrastructure-its roads and bridges, communications networks, and utilities. But perhaps even more important for the long term, largely because its repair is a much more complex and long-term proposition, is the degradation of Russia's human capital. The evidence presented here suggests that the physical and psychological health of Russia's human resources have suffered tremendously during the transition period, as has the incentive structure governing human development. This decline, due in large part to the rupture of Soviet-era social safety nets, carries with it enormous economic and political implications. Democracy, economic reform, and stability in Russia are largely dependent on the emergence of a stable middle class engaged in the development of a robust civil society. A social landscape stratified into haves and have-nots, with the majority of the population disengaged from a government it no longer trusts to provide even a minimal safety net of social protections, may nudge the Russian voting public toward a preference for a return to the past. Only a healthy, energetic, positively motivated population can provide the necessary spark to reform the country's economy, revitalize its society, and rebuild its national security institutions. And a politically, economically, and militarily stable Russia is much more likely to emerge as a friend and partner to the United States than is a Russia filled with uncertainty, insecurity, and continued collapse and decay.

LONG-TERM PROSPECTS FOR RUSSIA'S ECONOMIC GOVERNANCE

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LONG-RUN PROSPECTS FOR THE RUSSIAN ECONOMY

By James R. Millar¹

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SUMMARY

Long-run forecasts are particularly hazardous, and that has to be especially the case when it comes to Russia. Enormous changes have taken place over the past one and a half decades. Gorbachev undermined the stability of the system in his attempt at reform. Yeltsin destroyed the old political and economic system in what can properly be called a revolution. His replacement, Putin, remains largely a mystery. How committed is he to continued market reform and to democratic processes? It is too early to tell with any confidence.

One thing is clear, the economic transition, defined as radical change, is over. The population is exhausted and opposed to further radical change. The Putin government has benefited from the beneficial effects of the 1998 financial crisis upon Russian domestic industry and upon an unusually high and steady price of oil on world markets. In the short run, the economy appears relatively healthy. There are warning signs on the horizon, however, for the price effects of devaluation are wearing off, and the world market price of oil is unlikely to rise further or to remain at the current level. Consequently, steps need to be taken to provide alternative sources of economic growth. Putin's words thus far have been impressive. His actions have been more ambiguous.

¹James R. Millar is a Professor of Economics and International Affairs and the Director of the Institute for European, Russian and Eurasian Studies at the George Washington University, Washington, DC.

Chances are good that the economy will falter in the short run, or, at best, improve gradually. The best prospect for continued gradual reform in Russia is represented by the proximity of the European Union (EU). It is a major customer for Russian exports, and so are the Eastern European countries now in line for accession to the EU. The conditions for admission to the EU are essentially identical with those required for a successful economic transition to a workable market economy, and the charter spells out these requirements in chapter and verse.

Long-run prospects of developing a complete market economy in Russia are quite good. An examination of world economic history reveals what appears to be an inexorable trend away from economies based on custom and command toward market relations. The current emphasis upon globalization represents a continuation of this trend. In historical perspective, the Soviet economic experiment with central planning represented a deviation from the trend line. Thus, Russian and the other transition states are returning to the trend line, to a more optimal relationship between markets and government intervention in the economy. Although prospects are good that this movement will continue in Russia, it does not follow that progress in economic welfare will be achieved readily. A market economy may be the best solution for the allocation of resources, but until individual countries and/or the international economy learn to steer clear of currency crises, trade conflicts and depressions, sustained economic growth will be difficult to attain. Russia will be fortunate to reach the status of Brazil or Mexico in the long run. Catching up with the G-7 countries, with the EU or even with the leading countries of Eastern Europe appears unlikely for the foreseeable future.

INTRODUCTION

Burke ever held, and held rightly, that it can seldom be right ... to sacrifice a present benefit for a doubtful advantage in the future. ... It is not wise to look too far ahead; our powers of prediction are slight, our command over results infinitesimal. It is therefore the happiness of our own contemporaries that is our main concern; we should be very chary of sacrificing large numbers of people for the sake of a contingent end, however advantageous that may appear. ... We can never know enough to make the chance worth taking. There is this further consideration that is often in need of emphasis: it is not sufficient that the state of affairs which we seek to promote should be better than the state of affairs which preceded it; it must be sufficiently better to make up for the evils of the transition. (John Maynard Keynes, *Treatise on Probability*, cited in Robert Sidelsky, *John Maynard Keynes. The Economist As Savior*, 1920–37, p. 62.)

Lord Keynes is here discussing Edmund Burke's philosophy of governance and reform. The statement was condensed in *The General Theory*, where Keynes stated simply that "in the long run, we are all dead." The quote from Burke represents Keynes commitment to what has been the Anglo-American tradition of avoiding revolutionary change in favor of step-by-step, brokered reform of the economic system.

In contrast, economic reform under Boris Yeltsin was radical and utopian. Shock therapy was expected to entail large costs for the population in the short run, but provide substantial benefits in the future. It turned out, however, that the cost was much greater and the period of sacrifice much longer than the radical reformers and Western advisors anticipated.² They clearly did not "know enough to make the chance worth taking," and the benefits of the reforms in Russia have yet to prove "sufficiently better to make up for the evils of the transition."

Russia from the time of Peter the Great through the Soviet period has a history of radical change imposed from the top on the population, change that has almost always entailed very large costs on the contemporary population in the name of future benefits. The Bolsheviks carried out a series of campaigns, such as mass collectivization, rapid industrialization, the Virgin Lands program, that were typically imposed from the top and implemented with little concern for the underlying population, whether opponents or not. Yeltsin followed this tradition like a good Bolshevik despite his renunciation of the Communist Party. Price liberalization in 1992 wiped out personal savings of the population at large. Hasty privatization of Soviet enterprises and natural resources transferred public wealth into a very small number of private hands to a degree unprecedented in history. Real income crashed for most Russian citizens. Poverty and unemployment caused untold misery for Russian pensioners, the working class and the farmers. Only a few have benefited in the short run. Some improvement is now taking place in the medium term, after 10 years, but much remains to be done to turn the Russian economy into a workable and stable market economy. And there is no assurance that the positive rate of growth of gross domestic product (GDP) that Russian has experienced for the past 2 years can be sustained.³

Vladimir Putin has thus far eschewed radical economic reform, preferring instead to work with the Duma to promote a series of measures designed to make the economy more responsive to markets and the global economy. He may be labeled a gradualist to date, and willing to compromise with the foes of a liberal market economy rather than confront them. What is the prospect that he will indeed be able to achieve gradually what his predecessor Boris Yeltsin failed to achieve by brute political force? What does the long run hold for the Russian economy? The concern of this paper is to try to specify what that long-run prospect is likely to be, with due deference to how "slight" our powers of prediction are and the uncertain command Russian leaders have over results.

²Millar, James R. "The Failure of Shock Therapy." Problems of Post Communism, Fall 1994. ³Hedlund, Stefan. Russia's "Market" Economy: A Bad Case of Predatory Capitalism. London, UK: UCL Press Limited, 1999.

UK: UCL Press Limited, 1999. Bush, Keith. "The Russian Economy in June 2001," Russia and Eurasia Program, CSIS (June 2001), E-document.

THE CURRENT CONDITION OF THE RUSSIAN ECONOMY AND OF ECONOMIC REFORM

An examination of reform successes and failures among the 25 independent countries that emerged from the Soviet Empire reveals that a strong, unambiguous commitment to economic reform has been an important, if not the most important, variable. The most successful states have been those that wanted desperately to get out from under Soviet power. They have sought to link their fortunes with Europe, especially to the European Union. Also critical, almost all had experienced a period of independent existence as states before coming under Soviet influence.⁴ As in almost all of the former republics of the U.S.S.R., the leadership in Russia has been ambivalent about introducing the reforms necessary to create a workable market economy and ambivalent also about its relationship to Europe.

Yeltsin's commitment to economic reform was never constant, and it diminished over the years of his erratic rule. His successor, Vladimir Putin, remains something of a mystery. Is Putin a cautious, but determined reformer seeking step-by-step reform in the spirit of Lord Keynes and Edmund Burke? A recent statement on Russia Day, a celebration of the tenth year since Russia was declared a republic, might qualify Putin for this title: "Everything we endured over the past decade, all our experiences, successes and failures, shows one thing—any reform only makes sense when it serves the people."⁵

Or is he primarily concerned with maximizing political power primarily in order to keep himself in power? Putin has certainly talked like a real reformer, but his actions have been more difficult to interpret. The high world market price of oil has provided a large windfall gain for Putin's government, as has the vigorous response of Russian industry to the benefits of the devaluation of the ruble that followed the 1998 financial crisis. The question is: How effectively has Putin utilized this period of relative prosperity? What has he actually done to sustain economic growth after the windfall gains of 2000 and 2001 have been exhausted?

ECONOMIC MEASURES

At the outset of his presidency, Putin indicated that he planned to reduce the political and economic power of the wealthy individuals known as "oligarchs" who benefited so greatly from privatization of Russian industry and natural resources. Thus far two of the most prominent and vocal oligarchs, Boris Berezovsky and Vladimir Gusinsky, have been thoroughly undermined. Gusinsky has apparently lost his media empire, and Berezovsky has gone from kingmaker (for both Yeltsin and Putin) to political outcast. However, Putin's motive appears to have had less to do with economic power than with the desire to quiet criticism from their media enterprises. Putin obviously does not appreciate criticism, and he has effectively crushed the independent media in Russia by undermin-

⁴ Millar, James R. "The Post Cold-War Settlement and the End of the Transition: Implications for Slavic and East European Studies," *NewsNet*, The Newsletter of the AAASS (American Association for the Advancement of Slavic Studies), January 2001, v. 41, no. 1.

⁵ Johnson's Russia List #5295; Reuters: Jon Boyle.

ing Berezovsky and Gusinsky. More recently,⁶ Putin engineered the removal of Rem Vyakhirey, who had been CEO of the giant natural gas monopoly Gazprom since 1992, and replaced him with Aleksei Miller, a long-time Putin loyalist. Vyakhirev was a variant type of oligarch, one appointed essentially by the government to manage a partly private, partly state enterprise. huge In replacing Vyakhirey. Putin has strengthened his hand in many respects because Gazprom is such an important cash cow for the budget. If Miller manages Gazprom more efficiently and does not use access to its great wealth mainly for his own personal enrichment, this change will represent a major economic advance. That is yet to be seen. The verdict on Putin's policy toward the oligarche is, therefore, not yet in. The remaining oligarchs, with the exception of Anatoly Chubais, who has metamorphosed from radical reformer to oligarch and now runs the national electricity monopoly, are lying low politically, which may be the price they must pay to keep their ill-gotten wealth intact.

The Minister of Economic Development and Trade, German Gref has produced a 10 year plan for the Russian economy that was officially adopted by Prime Minister Mikhail Kasyanov in June 2000,7 but it has yet to be truly engaged. Curiously, the plan has certain earmarks of Soviet-era long-term plans, and it may meet the same fate-to be announced with great fanfare and then forgotten. Meanwhile, Presidential economic advisor Andrei Illarionov has bitterly criticized Gref's plan as insufficiently reformist and unrealistic. Illarionov, who seems to be something of a loose cannon, continues to guarrel with Anatoly Chubais, CEO of RAO UES (Unified Energy Systems of Russia), concerning reform and management of the energy monopoly. He has also criticized the Prime Minister sharply for even suggesting earlier this year the possible postponement of payments of principal and interest to the Paris Club,⁸ and they have had other public quarrels too. Meanwhile, Putin has maintained silence regarding these conflicts among his economic advisors. Apart from a tax reform and, more recently, urban land tenure reform, progress on the many economic reforms that are needed has been modest at best. Everyone agrees, for example, on the need for better corporate governance, but no one seems to be doing anything other than talking about it. Similarly, restructuring and reform of commercial banking and the financial system generally have been oft mentioned but rarely acted upon convincingly.

Andrei Illarionov also forecast (wrongly it now seems) bleak economic performance for 2001 to the European Business Club in Moscow January 16: "The party is over and the hangover is about to begin." He stated that the Prime Minister had had nothing to do with successful economic growth in 2000. It was "sparked by skyhigh oil prices and the rapid depreciation of the euro to the U.S. dollar."⁹ In June, Illarionov, addressing members of the American trade chamber, amazed his audience by arguing that "Russia has no need of investments or credits."¹⁰ Meanwhile, Kasyanov has

⁶New York Times, May 30, 2001. ⁷Russian Journal, June 29, 2000. ⁸Lipman, Masha. "The Indecisive President." The Washington Post, February 6, 2001. ⁹Semenenko, Igor. "Illarionov Warns of Looming Gloom." Moscow Times, January 17, 2001. ¹⁰Izvestia, June 4, 2001.

been urging investment in Russia during his foreign trips. The question is: Where was Putin? Are his economic advisors allowed to say anything they want; to quarrel publicly without official resolution of the issues?

Privatization of rural land remains deadlocked. Putin has urged the regional governors to support "coherent land legislation" and a federal land code. German Gref, Mikhail Kasyanov and Andrei Illarionov all agree on the economic benefits private land tenure would bring about. Recent developments indicate that urban land, which comprises less than 10 percent of all land area in Russia, will be opened to private, and perhaps even foreign private, ownership. But the opponents of privatization of rural land in the Duma continue to oppose it on ideological and historical grounds.¹¹

Urban land has been controlled by mayors and regional governors for local ends and personal profit, and they may still find ways to frustrate or restrict private ownership. Agricultural land has always been treated as commons or as communal property, and even most peasants want it to stay that way. The result is that action on land tenure continues to be controversial and stagnate, which contributes to a poor environment for foreign direct investment.

POLITICS, MILITARY REFORM AND FOREIGN POLICY

What is true of economic policy is true generally. Putin's policies have been anything but bold, coherent and decisive. Putin has had relatively good relations with the Duma, but he has yet to push reforms through it vigorously. He was successful in establishing federal control over the various provincial regions last year, at least pro forma. The regional governors were ousted from Parliament, but, in the end, they were allowed to appoint their replacements. Also, the maximum of two terms for the 89 regional leaders was revised in January 2001, allowing 69 of them to run for a third term. As one observer put it, "In other words, as long as the gov-ernors don't challenge Putin's authority, they can continue to rule as they have been [doing]"¹² The jury is still out on how effective Putin's seven presidential super-governors will be in reigning in the regional governors. A recent Radio Free Europe/Radio Liberty (RFE/RL) Russian Federation Reform Roundtable discussion among American scholars suggests that the reform has been quite ineffective.¹³ The jury is still out on how effective Putin's seven presidential supergovernors will be in reigning in the regional bosses.

Putin has also succeeded in silencing media criticism of him and his government. Grigory Yavlinsky, head of the small liberal party, has described Putin's policies harshly as "National Bolshevism." What is happening to the country, he stated recently, is "sham freedom of speech, sham independent judiciary, sham elections, sham multi-party system and a sham separation of powers." The Putin regime displays, according to Yavlinsky, "Absence of any no-

¹¹Lambroschini, Sophie. "The Government Uncertain Role to Land Privatization." Part 1, *RFE/RL*, February 9, 2001. ¹² Moscow Times, Editorial, January 29, 2001.

¹³ Johnson's Russia List #5226, April 27, 2001.

tion of the value of human life, any idea that there are inalienable rights and freedoms."14

Some progress has been made recently on military reform. The conflict between the chief of the general staff, Anatoly Kvashnin, and the minister of defense. Igor Sergeev, over what the relative priorities ought to be between strategic missiles and conventional weapons and troops may have been resolved in favor of Kvashnin recently, but it is too early to tell. But no resolution is apparent regarding the deep reforms of the military that budgetary constraints require. The military continues to deteriorate, along with the defense industry, which is deeply in debt. Russian military leaders have vet to confront the limitations they face after years of budgetary priority in the Soviet period. Today the budget for the military is, at best, one-fifth that for the U.S. military.¹⁵ Once again Putin has not spelled out a clear cut policy. The submarine Kursk episode shows that Putin is prepared to allow the military to lie to the public and the world about the probable cause of the sinking. This recalls Soviet times when high officials and military personnel sometimes maintained a lie despite the fact that only the least informed foreigner or domestic citizen believed them.

In foreign policy Putin has sought to restore economic and political relations with the Soviet Union's old allies: Iran, Iraq, Cuba, and North Korea. It has also strengthened relations with China. The Foreign Minister, Ivanov, has stated that the Near Abroad, that is, the former republics of the U.S.S.R., falls within Russia's sphere of influence. The implication is clear, Putin has been seeking to restore Russia's dominant position in the region and, to the extent possible, restore the Soviet empire through energy dependency, aggressive military exercises, showing of the flag, and minatory behavior in the Caspian region. With the exception of China, the countries Putin is reaching out to are either global outcasts or economic basket cases. It is an alliance of losers. The policy could be, therefore, a costly one internationally and economically. The attempt to attain hegemony over the so-called Near Abroad represents a serious drain on Russia's resources. So does the apparently interminable war in Chechnya. What the new conflict between the United States and Afghanistan portends for Russian foreign policy is still not clear, but it has all the makings of a quag-mire that Russian might not be able to avoid.

Interestingly, and related to "empire envy," is the restoration of some Soviet symbols and the creation of new patriotic ones. The Soviet hymn has been resurrected and refurbished. Red banners have been restored for the military, perks have been created for the President that are competitive with those received by the American president. And Putin has traveled abroad to high visibility events where he can be photographed consorting with the world's powerful leaders. These activities, which have little to do with reform, have been met with approbation by the general public.

Putin's positive response to the terrorist attack on the United States and to America's declaration of war on international terrorism appears to contradict his policies to date designed to restore

 ¹⁴ Johnson's Russia List #5058, Moscow Times, January 30, 2001.
 ¹⁵ Dr. Christopher Hill, British Ministry of Defense, London, Briefing, January 31, 2001.

former allies and republics of the U.S.S.R. to Russia's sphere of influence and support. Not only has he moved sharply back toward the Western camp, he has acceded to U.S. action in Afghanistan and, more surprisingly, to the placement of U.S. troops and other military assets in Uzbekistan and perhaps elsewhere in Central Asia. He will ultimately have to choose between creating a "multipolar" counterweight to U.S. hegemony in the world and becoming a junior partner in the international alliance against terrorism. It is too early to tell how he will resolve this contradiction, but he cannot waffle for very long.

PUTIN AS LEADER

On balance, Putin appears to be rather indecisive. If one reads only his speeches. Putin provides accurate diagnoses and reasonable prescriptions as remedies, but the follow through has been weak.¹⁶ Putin avoids direct conflict with his subordinates. When trouble arises, he tends to back down, or to claim he knew nothing about the issue, or that he has no authority in the case in question, or remains silent. Time-Europe correspondent Paul Quinn-Judge writes:

"The pessimistic variant is that, when major problems arise. Putin will opt for the easy way out-blaming enemies, stifling criticisms and muddling through."17

According to Alexandr Tsipko:

"Like many of his predecessors, solving moral and political problems comes more easily to Putin than solving social and economic problems."

"Gorbachev's glasnost rehabilitated truth, ethics and common human values. Putin has rehabilitated Russian patriotism, national dignity, statist integrity and the consolidation of Russian statehood."

"The task of maintaining ... the national consensus ... will be in constant conflict with the task of modernizing Russia and implementing market reforms."18

WHY IS PUTIN POPULAR?

Survey research specialist Yuri Levada states that: "He has given Russia leadership." Paul Quinn-Judge writes:

"Putin's first year has turned out to be a remarkable example of mind over matter in public opinion. There have been few major accomplishments, several disasters and some ominous developments in the field of human rights and press freedom."19

The simple answer may be a variant "Linda Tripp" phenomenon. Judging by his behavior, Putin does not really have to consult the polls because he is "just like them." He clearly regrets the breakup

 ¹⁶ Putin's January 1, 2000 speech, "Russia at the Turn of the New Millennium." Web page of Russian Federation, http://pravitelstvo.gov.ru.
 ¹⁷ "The Politics of Mind Over Matter," *Time-Europe*, January 22, 2000.
 ¹⁸ Jamestown Foundation Prism, A Monthly on Post-Soviet Studies, January 2001, Vol. VII, Very 1, Det 4.9.

Issue 1, Part 2 ¹⁹ Time-Europe, January 22, 2000.

of the U.S.S.R. and Russia's loss of military power and respect in the world community. He is suspicious of markets and prefers state control of heavy industry, the military-industrial complex, communications and the media, banking and transportation. He is in favor of a paternalistic and strong state. The public agrees on every count.

IMPLICATIONS FOR THE SUSTAINABILITY OF ECONOMIC REFORM AND GROWTH IN RUSSIA IN THE NEAR FUTURE

The outlook for economic reform and continued economic growth over the next year or so is positive, but only marginally so. Gorbachev sought to reform the Soviet socialist economy, to make it more humane and more responsive to the popular will by introducing certain elements of a market economy. The reform failed. Yeltsin led a revolution that destroyed the coordinates of the Soviet economy and attempted to replace it with market institutions. The revolution achieved partial success. The planned economy was destroyed totally, but the disastrous economic consequences of the revolution for the population at large and the capture of it by the nomenklatura caused it to grind to a halt. Putin is now leading a partial restoration of Russia, a pause in the radical changes that have been taking place since perestroika and glasnost were introduced in 1988–1989. In this sense the economic transition is over, but, of course, a good deal remains to be done to complete market institutions.

Putin is restoring hope for the future, the sense that Russia will again assume her proper place as a major power in the world, that domestic order will be restored, corruption will be curtailed and that the economy will rebound. He has also created the hope that these ends may be accomplished without further violent disruptions to society. In the short run these aspirations are doomed to disappointment. Economic growth is more likely to stagnate than to be maintained, for too much depends at present upon the uncertain price of oil and of other natural resource exports, such as gas and metals, and upon the diminishing boost to domestic production from the 1998 devaluation. Foreign direct investment is unlikely to increase significantly until reforms in corporate governance, commercial banking and competition policy are enacted. The distraction caused by empire aspirations will continue to drain the treasury and inhibit economic reform. Also, despite brave statements to the contrary, Putin has yet to tackle the problem of public or private corruption.

Thus far, Putin has been more focused upon the accumulation of power than upon its exercise. This is a sign of insecurity by a leader who, above all, wants to remain in power. Completion of the reforms necessary to turn the Russian economy into a functioning, workable globally competitive economic system will require the expenditure of power and the risk, as Gorbachev discovered, of removal from power. Putin's caution may, therefore, slow the reform process and highlight instead the pageantry and ritual of the process of restoration. This is not to say that the Soviet economy or the Communist Party will be restored. They are dead and gone and cannot be resurrected. What Putin is trying to restore is the national pride and will of the Russian people. This is a necessary but

insufficient condition for the completion of market reform and successful entry into the competitive global economy. At present, however, the most likely outcome is gradual change, with economic stagnation a close second. A much bleaker picture was presented in a recent Russian Government Report, which forecast the conjuncture of three major negative trends in the year 2003. The economic infrastructure will crumble. The demographic crisis will peak. And external debt service will become overwhelming.²⁰ Like the "wonderful one-hoss shay," the Russian economy might go "to pieces all at once ...".21

PROSPECTS FOR THE LONG RUN

In October 1980 a conference was held at Airlie House in Virginia which "had as its theme the long-term prospective growth of the Soviet economy." The conference was organized by Professors Abram Bergson and Herbert Levine, two very senior specialists on the Soviet economy. The list of contributors and participants reads like an honor role of Soviet specialists. Their charge was to appraise economic prospects to the year 2000.

Participants considered several scenarios, but, in the end, the consensus was that the Soviet economy would continue to "muddle" on without radical changes for the next two decades. In summing up his reaction to the presentations, Seweryn Bialer, in "Politics and Priorities," concluded:

In sum, we can anticipate no fundamental changes in the Soviet Union during the 1980s despite intense and divisive discussions concerning economic reforms, a number of organizational policy initiatives, experimentation with the economic structure, and significant political conflict.²²

Needless to say, the forecasts produced in 1981 were history by 1988 much less 2000. The picture painted for the year 2000 was totally off, whether predictions of GDP, population, agricultural production, development, planning and management or politics. Like everyone else, the top specialists on the Soviet economy were blindsided by Gorbachev and Yeltsin.

Soviet specialists' experience in this attempt to project current trends 20 years into the future must give pause to any attempt to do the same today with Putin's Russia. The analysis and forecast that follow differ in two respects from those produced at Airlie House. First, The Soviet Union had experienced a decade or more of stagnation under Leonid Brezhnev. Russia, by contrast, has undergone radical change and much political and economic instability over the past decade. Further radical economic change is highly unlikely because the population is exhausted and opposed to new economic experiments. Putin appears to oppose radical change too. The transition is over for Russia. Second, the Bergson-Levine volume was not based on any explicit theory of economic and social change. Pure extrapolation is always dangerous.

 ²⁰ Weist, Fred. Christian Science Review, February 15, 2001.
 ²¹ Holmes, Oliver Wendell. "The Wonderful One-Hoss Shay." http://www.library.utoronto.ca/ uetl/rp/poems/holmes9.html.
 ²² The Soviet Economy Toward the Year 2000, p. 419.

THE FUTURE OF RUSSIA AS A MARKET ECONOMY: THE TRANSITION IN HISTORICAL PERSPECTIVE

Peering into the future cannot be based merely on an extrapolation of current trends. An examination of Russia's place in the historical process of economic development may provide some insights into what we can expect the Russian economic developments to be over the next several decades.

A debate engaged Western economists during the 1950s and 1960s over the possible convergence of socialist systems, such as the Soviet Union, and capitalist systems, such as the United States. The debate over convergence appears in a quite different perspective today in the light of the universal collapse of the Soviet command economy and the contrasting vitality of capitalist systems. Two positions in the debate were considered extreme and highly unlikely outcomes by most participants in the debate. Marxists anticipated the overthrow of capitalism and worldwide convergence on a Communist economic system. The expansion of Soviet power in East Europe, Mao's success in China, and the attraction of Marxism for many underdeveloped countries provided a foundation for the viewpoint. For the Marxists, market institutions represented merely a transitory stage in human history, one that would be followed by equity in economic allocations and, consequently, an end to economic conflicts caused by scarcity.²³

The other extreme view was expressed most fully by Friedrich A. von Hayek. He expected the abandonment of central planning in the socialist economies because of the inherently superior efficiency of market economies in solving the crucial "economic problem," that is, the rational allocation of resources among competing alternative uses. The argument held that central planning cannot substitute for markets because there are simply too many supply and demand equations for any central agency to solve satisfactorily. Decentralized decision making by private individuals represented the only successful way to do so historically.²⁴

Neither argument for unilateral convergence gained much traction in the debate of the 1950s and 1960s. Mutual convergence was instead the prevailing view. Capitalism and socialism were conceived as occupying opposite ends of a spectrum, with the U.S. and Soviet economies near either extreme. Proponents of mutual convergence viewed socialist and capitalist economies as moderating their distinctive institutions and becoming more alike. Welfare capitalism was developing in the West, and, at the same time, socialist economies were experimenting with the introduction of market elements.

The most sophisticated version of mutual convergence was put forward by the Nobel Prize winning economist Jan Tinbergen. His main contribution was the "theory of the optimal regime." Tinbergen recognized the inevitability of a trade off between economic efficiency and economic equity in any actual human society. There exists, he assumed, an optimal regime that rational men and

²³ Marx, Karl. Capital: A Critique of Political Economy, New York, NY: The Modern Library, 1906.

²⁴ Hayek, Friedrich A. The Road to Serfdom. Chicago, IL: The University of Chicago Press, 1957.

^{-----,} ed. Collectivist Economic Planning. London, England: Butler & Tanner Ltd., 1935.

women would ultimately recognize and work toward, one that balanced the benefits of efficiency against those of equity. If so, extreme regimes, such as the United States and the Soviet Union, would prove unstable, and each would approach the mean. Thus, he predicted convergence under which the Soviet Union would gradually introduce markets, reduce government intervention in the economy and allow a greater role for private property. Similarly, the United States would develop increasingly as a welfare state, strengthen government regulation of markets and increase public ownership of productive property. Capitalist and socialist systems would, therefore, converge over time on the optimal eco-nomic regime.²⁵

In retrospect, Tinbergen's theory, and others like it based on rational choice and political pragmatism, appears seriously flawed. The implicit assumption that the U.S. and U.S.S.R. economies were equidistant from the optimal regime may be seen today to have been wrongheaded. Von Hayek's analysis has fared much better as a prediction. When the planned economies were opened to the global economy they wilted like tropical plants deprived of a hothouse. The egregious extent to which these economics had become distorted as a result of central planning based on quantitative orders and arbitrary pricing of final goods and services confirmed Havek's point. Soviet-type socialism was clearly highly inefficient in the allocation of resources and in fostering innovation. The problem was efficiency, not equity. Command economies may be highly effective in mobilizing resources for a specific purpose, such as a war or to develop the atomic bomb, but they have failed to compete successfully with capitalist economies in the long run. For longer periods, the absence of flexible prices, entrepreneurship and local decision making was costly in efficiency and growth.

It is not necessary, however, to abandon Tinbergen's notion of an optimal regime, a regime that balances equity and efficiency. The Soviet economy was, it seems, the historical outlier, and it is now presumably being modified in the direction of the optimal regime. Support for this view is provided by another Nobel Prize winner, J.R. Hicks, in his Theory of Economic History (1969). Hicks is interested in the rise of the market as an historical phenomenon, and he views the non-market economy, which includes the command economy, as an older form of economic organization. He traces the evolution of markets from the earliest periods of recorded history. Markets originated for the conduct of external trade, but gradually penetrated the domestic economy. First, there was the growth of internal trade in goods. Second, was the extension of the market to include labor services. Subsequently, land and capital became subject to the market. Domestically, the market has continued to broaden its coverage, displacing, for example, what had been con-sidered family obligations to children and parents with paid serv-ices. The system of custom and command has gradually retreated as we have moved toward a cradle to the grave market economy.

²⁵ Tinbergen, Jan. "Do Communist and Free Economies Show a Convergence Pattern?" Soviet

^{1959,} pp. 264-305.

The temporal sequence by which markets have penetrated personal as well as business relationships is telling, for a similar sequence may be seen in the transition economies of today.

Morris Copeland, quite independently, developed a complementary theory of economic history, one that stresses the critical role of money and credit in market economies as sources of economic discretion, and, by implication, rationality. Money implies the existence of prices, wages and interest rates and thus the possibility of multilateral trade. The spread of pecuniary institutions codeveloped with markets and facilitated efficient trade.²⁶

Seen in this light, the Soviet-type socialist economy was an historical regression, a deliberate, conscious attempt to reverse fundamental historical processes. Soviet economic institutions were created for the explicit Marxist intention to minimize and eventually eliminate markets, money, credit, prices and wages. It is not surprising that the Soviet economy performed well in WWII as a way to mobilize and concentrate resources on a limited number of goals. However, the attempt to maintain the command economy indefinitely implied the need for a permanent emergency, and the cold war afforded a rationale. The Hicksian-Copeland understanding of the spread of the market economy implies, therefore, that Russia is today back on the track of normal evolution of markets and market instruments after a long and costly deviation. Russia, and the other former republics of the U.S.S.R., traveled the longest and farthest along this historical deviation. As the theory suggests, it has been the most difficult for Russia and the other former republics of the U.S.S.R. to redevelop those markets that were relatively underdeveloped at the time of the 1917 Revolution, such as the markets for urban and rural land, or that were extirpated thoroughly by the Bolsheviks, such as investment, financial and existing productive asset markets. It has also proven difficult for them to establish true commercial banking systems, effective and equitable corporate governance institutions and workable competitive markets. Attempts to catch up with capitalist institutions in the more advanced countries have been opposed by Marxist ideologues, Soviet traditionalists, and a deep-seated and widespread popular belief in the uniqueness of Russia's mission in the world. Economic interests vested in the monopolistic and oligopolistic structure of enterprise ownership that Russian-style privatization created have also been obstacles to further reform.

THE PROBABLE STRUCTURE OF THE RUSSIAN ECONOMY IN THE LONG RUN

At the outset of radical economic reform under Yeltsin in Russia there were a number of economists and policy makers in the West who dreamed of creating the perfect capitalist system in Russia. The collapse of communism and central planning was viewed as a "clean slate." Jude Wanniski, for example, wrote in 1992:

It is possible to imagine a future of Russian capitalism that asserts itself early in 21st century as the envy of the world. \dots

²⁶ Copeland, Morris. Essays in Socioeconomic Evolution. New York, NY: Vintage Press, 1981.

The Russian people are now engaged in nothing less than designing the basic architecture of a brand new country. Why not consider all possibilities? Why not design the Russian system of capitalism to be the best?²⁷

By the "best" Wanniski clearly meant an economy in which state ownership and intervention in the economy would be even less than in the most advanced capitalist countries, such as the United States. As a more "pure" capitalist system, the transformed Rus-sian economy would outperform the rest. Jan Wanniski's idea that Russia might leapfrog the west in perfecting capitalism has proven an idle dream. Old economic institutions and behaviors do not ordinarily disappear without a trace, and especially where the they have continuing support from the population at large, including the leadership.

The Gosplan has disappeared, but surveys both before and after the collapse of the Soviet economy reveal that very substantial majorities still expect the government to provide, for example, price stability, job security, subsidized housing, free medical care, and free public education through college. Similarly, the majority has repeatedly indicated a preference for public ownership of railroads, airlines, heavy industry, communications, banks and other largescale enterprises such as the defense industries.²⁸ In addition. many enterprises and public institutions still operate like company towns and have yet to rationalize employment. The Russian economist Nikolay Shmelev aptly pointed out that it had taken "three generations" to build the "insane asylum" that was the Soviet economy and that it would take at least three more to escape from it. To escape will require changes in both the thinking and the behavior of citizens and leaders alike.29

In the 1920s Vladimir Lenin persuaded the Bolsheviks to give up the attempt to go directly from capitalism to socialism. The Great War and the revolutions and civil war that ensued had left the economy in ruins, and Lenin realized that the Bolsheviks were too few and too inexperienced to build a new economy from scratch. Consequently, the Bolsheviks introduced the New Economic Policy (NEP), which permitted small-scale private enterprise both in rural and urban areas, but reserved what Lenin called the "commanding heights" to state ownership and control. The commanding heights included heavy industry, electric power generation, transportation, communications and banking. It was anticipated that eventually the superiority of the socialist state sector would allow it to crowd out the private sector. The New Economic Policy was relatively successful, and, partly for this reason, it was destroyed by Joseph Sta-

 ²⁷ Quoted in Millar, James R. "The Economies of the CIS: Reformation, Revolution, or Restoration?" in *The Former Soviet Union in Transition*, Volume 1, Study Papers submitted to the Joint Economic Committee Congress of the United States. 103d Congress, U.S. Government Printing Office, Washington, DC: 1993, p. 36.
 ²⁸ Millar, James R. "Empire Envy, Stop-Go Economic Policies, and Political Constraints in Economic Reform in Russia." *Problems of Post-Communism*. 1998, vol. 45, no. 3.
 ———. "Prospects for Economic Reform. Is (Was) Gorbachev Really Necessary?" in Lee, J.J. and Walter Korter, eds. *Europe in Transition: Political, Economic and Security Prospects for the 1990s*. Austin, TX: Lyndon B. Johnson School of Public Affairs, 1991.
 ²⁹ Millar, James R. "The Economies of the CIS: Reformation, Revolution, or Restoration?" in *The Former Soviet Union in Transition*, Volume 1, Study Papers submitted to the Joint Economic Committee Congress of the United States. 103d Congress, U.S. Government Printing Office, Washington, DC: 1993, pp. 34–54.

lin's introduction of rapid industrialization and forced mass collectivization in the 1930s.

What has been developing in Russia over the last decade is not Wanniski's pure capitalism, but a modified version of the NEP. Let's call it the neo-NEP. Small business is private, but the "commanding heights" are mostly shared by the state and the oligarchs. Privatization in Russia often did not break cleanly with state ownership. The state, as in the case of Gazprom for example, maintained either a controlling or a significant minority position as shareholder. Thus, the state also has appointed members of the boards of these enterprises and, occasionally, even the director himself. This kind of sharing between the state and private capital is not uncommon in Europe, and it is likely to remain a feature in Russia for the indefinite future.

Although Russia is not now a candidate for accession to the European Union, the institutional structure of the EU can be expected to shape Russian economic and legal institutions in substantial degree in the future. In fact, the EU is much more likely to influence economic development and reform in Russia than are the International Monetary Fund (IMF) and World Bank, both of which are associated with major policy failures in the transition economies. The EU is an important trading partner and likely to become increasingly important over time, if only because Russia is such an important source of energy supplies to Europe. Russia also trades with East Central and East Europe, and many of the countries are either on the path to accession or hope to be in the near future. The EU has spelled out in chapter and verse just what a country needs to do to harmonize its institutions with those of Europe. Russia is certain to be influenced both directly and indirectly to harmonize with Europe. This is the most optimistic outlook for the future of capitalism in Russia.³⁰

As many observers have noted, the criteria for accession to the EU are essential the same as the requirements for a successful transition to a workable market economy from the Soviet-type model. Accession indicators that are used to determine eligibility for membership include measures of the extent of large-scale and small-scale privatization, of success in restructuring enterprises to harden budget constraints, rationalize production and improve corporate governance. They also seek to measure the degree to which markets are competitive, prices have been liberalized and import and export restrictions have been eliminated. In addition, banking and financial institutions are evaluated against international standards of regulation and performance. Basically, the accession process involves modeling the transition economy upon the most successful members of the EU.

Countries are scored on each of the eight principal indicators on a scale ranging from "1" for little progress, to "4+" for achieving standards and performance typical for advanced industrial economies. According to my own rough estimate, Russia's scores today range from a "2+," for example, on large-scale privatization and corporate governance, to a "3+" on price liberalization and foreign

³⁰ Implications for Slavic and East European Studies," *NewsNet*, The Newsletter of the AAASS (American Association for the Advancement of Slavic Studies), January 2001, v. 41, no. 1.

trade and foreign exchange system policies, for an overall score of "3" or "3-." These scores would not be sufficient to earn Russia membership, but they are indicative of the progress that has been made in market reform since 1991. The neo-NEP model described above as most nearly characteristic of the Russian economy today need not hamper further progress so long as enterprises controlled by the state singly or jointly with private interests meet governance and other requirements. The long-run outlook is, therefore, positive if the Putin government continues to press consistently for gradual reform and avoids foreign policy adventurism and domestic distortions caused by corruption and an ambiguous commitment to join the world economy as a full member.

Russia is moving haltingly, therefore, toward the "optimal regime" Jan Tinbergen envisioned. It will never get there, of course, but the historical processes of marketization and pecuniarization are back at work in Russia, after 70 years or so of regression. Russia's economy is not going to be closed to the global economy. International trade is too profitable and memory of the failure of autarky and central planning is too fresh for that.

It is highly likely, therefore, that Russia will become a fullfledged market economy in the European style. It does not necessarily follow that the market economy that develops will be any more successful than many other late developing market economies, such as Brazil, Mexico or Argentina. Stop-go economic policies are the most likely policies in these countries because reform will always run into public resistance. The adverse economic consequences of stopping reform eventually generate another round, which, in turn, again generates public resistance. Escaping from this circular process is Russia's challenge in the long run, as it is for so many countries aspiring to develop. Putin may not to be up to the job, it is too early to tell, but a successor may do so if Russia continues to focus on Europe as a trade partner. On the other hand, empire envy may prevail, thereby limiting Russia's options in the long run as well as today.

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RUSSIA'S EVOLUTION AS A PREDATORY STATE By Peter J. Stavrakis¹

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SUMMARY

The decade since the collapse of the Soviet Union has seen the lively debate regarding the future of Russia move from early exuberant optimism, through growing concern, to deep pessimism. Of-ficial pessimism.² Official Western policy has avoided either extreme, but there is little doubt that America's vision for Russia early on reflected considerable optimism for the transition to free market democracy. Regrettably, Russia proved to be more complex than prevailing theories of democratization and development could have anticipated. The end of the Yeltsin era left scholars and policymakers hopeful for Russia's future, yet deeply concerned that their hopes might not be fulfilled.

President Vladimir Putin has now been in office for more than eighteen months, yet there has still been no persuasive account of the direction in which the new president is leading Russia. This is partly because many in the West have no persuasive, coherent model for understanding Russia other than as an emerging liberal democratic society. The purpose of this essay is to present an alternative framework for understanding Russia and, in so doing, provide policymakers with a model that more reliably informs them of Russia's future development. The central premise of the model is straightforward: post-Soviet Russia is not destined to be a liberal, free market democracy. Instead, a form of elite rule is being con-

¹Dr. Peter J. Stavrakis is in the Political Science Department of the University of Vermont.

His doctorate was from the University of Wisconsin. ²Jeffrey Tayler presents the pessimistic view that the past decade has been the beginning of Russia's long—and seemingly permanent—descent from Great Power to international nonentity, "Russia Is Finished," *The Atlantic Monthly*, May 2001.

solidated that, while principally corrupt, nevertheless retains considerable economic regenerative capacity. Understanding this emerging political system—the predatory state—makes it possible to recognize the motive forces driving Russia toward considerable social stability, a primarily productive economy, and a potentially influential role in global affairs.

This is not to deny the considerable achievements in Russian reform during its first post-Communist decade: tolerably free democratic elections, the emergence of a free press, mass privatization, and considerable decentralization of governance, to name a few. The worrisome thing, however, is that President Vladimir Putin has aggressively pursued a prominent rollback of key reform achievements, and provided clear signals that Russia will move in directions different from those of liberal democracy: (1) prospects for economic recovery have improved, yet capital flight remains high and the revival of production is reliant on the vagaries of the oil export market; (2) privatization consumed Russian reform, but the state and a handful of economic oligarchs retain control over core enterprises and private ownership of agricultural land remains taboo; (3) state power is being recentralized and evidence accumulates daily that societal institutions such as a free press are being suppressed by renascent security organs; (4) earlier images of democratic governance have been replaced by an informal network of clan and crony rivalry, suffused with a kind of violent politics and corruption that harkens back to the first days of Soviet power; and, (5) previous hopes for the emergence of a limited state have been eclipsed by the renaissance of the strong state.

The Putin era differs from the freewheeling chaotic struggles of the Yeltsin era—a period more akin to the populist despotisms seen elsewhere in the developing world. Under Putin, talk of state weakness has ceased, and clan politics continues, albeit in a more regulated fashion than previously. There is in the record of the past 2 years a sense that the basic elements of liberal democracy are being forcibly molded to suit Russian tastes and filled with a more familiar traditional content. Putin's policies reflect less a qualitative break with the past than a re-ordering of the ranks of privileged oligarchs and the institutionalization of the norms of political conduct-it is a bureaucratized variant of the disorderly blend of post-Communist populism that characterized the Yeltsin years. The rough edges of elite conflict have been smoothed off, the state has returned to its privileged position in society and economy, foreign investors now mull over not whether, but when and how, to reenter the Russian market; and being from St. Petersburg or the Federal Security Service (FSB) has gained a level of respectability and influence that grates against the sensibilities of the Muscovite elite. This is no democracy, to be sure, but it is unmistakably the case that some form of order is taking shape out of the ruins of the past decade. Russia, in Shakespeare's words, may be madness, but there is method to it.

The remaining sections are devoted first to an explanation of the nature of the predatory state and illustrations of its core characteristics present in contemporary Russia. A section devoted to explaining why Russian elites prefer the predatory state to the alternative of liberal democracy follows this. On the face of it, it is difficult to comprehend why a system interpenetrated by pervasive criminalization and corruption: weak legal and administrative institutions; and extensive state intervention (or ownership) would be preferred to the stability and productivity that liberal democracy promises. The final section presents some of the implications of the predatory state model for Russia's future, and its relations with the West.

THE PREDATORY STATE: MODEL AND CHARACTERISTICS

Russia's recent past and more distant future are best explained by the model of the predatory state derived from the experience of post-imperial and post-colonial polities. The developmental path of these societies moves from state crisis to an equilibrium in which authoritarian elites exploit informal networks and corrupt practices to enhance their power and wealth at the expense of society. This produces a pattern in which an externally strong state undergoes a period of (often substantial) growth and influence. The economic and social marginalization attendant to predatory practices, however, generates growing vulnerabilities that in time may return the state to instability and crisis.³ Predatory elites sustain themselves through the arbitrary, coercive absorption of successful autonomous spheres of economic and social life.⁴ Free markets and civil society are hostage to political elites who are free to intervene whenever and wherever this appears financially profitable or politically useful.

A brief review of some of the main features of the predatory state reveals its success in capturing key aspects of contemporary Russian experience.

OFFICIAL CORRUPTION, CRONYISM, AND CLAN POLITICS

Perhaps the most glaring defect of post-Soviet Russia is the pervasiveness of official corruption, which extends up to the highest level of the political elite and is so widespread it is often assumed to constitute an aspect of "normal" life. Transparency International has consistently ranked Russia as one of the most corrupt countries in the world, placing it firmly in the neighborhood of post-colonial societies where predatory practices abound.⁵ Enormous transfers of wealth occur within the framework of transitional societies. so some corruption linked to the reform process is unavoidable. What distinguishes Russia from most other states, however, is the scale of corrupt practices and the actors involved: Russia's ambitious privatization program was among the largest transfers of property in history, whether measured by the number of enterprises affected, or the potential wealth that changed hands. Still more importantly, corruption was not restricted to a narrow segment of economic ac-

³A similar case of predatory state behavior was earlier observed in Africa: "hybrid regimes ⁶A similar case of predatory state behavior was earlier observed in Africa: "hybrid regimes [in which] an outward democratic form is energized by an inner authoritarian capacity, espe-cially in the realm of economic policy." Thandika Mkandawire, "Crisis Management and the Making of 'Choiceless' Democracies," in Joseph, Richard ed. State, Conflict and Democracy in Africa (Boulder, Co.: Lynne Rienner, 1999). ⁴ More detailed examples of these processes can be found in Peter Stavrakis, Shadow Politics: The Russian State in the 21st Century (Carlisle, Pa.: U.S. Army War College, Strategic Studies Institute Decomber 1999).

Institute, December 1998). ⁵In 1999 Transparency International ranked Russia as 76th—a mere 9 places away from the rock bottom score of 85th. This suggested a level of corruption similar to that found in Nigeria, Indonesia, and Ukraine.

tors, but was instead embraced by government officials-even "reformers"—and quickly became accepted practice.

The second stage of the Russian privatization process is perhaps the best example of the interwoven nature of corruption and cronyism in the setting of predatory practices. Following the voucher stage of privatization (which brought its own form of graft with it), Anatoly Chubais, former Chairman of the Russia State Property Committee and Chief of Staff to Yeltsin, and Vladimir Potanin, former head of Uneximbank, concocted the "loans for shares" privatization. A select group of seven "court" banks were provided controlling shares in the crown jewels of the Russian economy in exchange for loans the Russian Government needed to cover its budget deficit. This arrangement ostensibly permitted the government immediate access to finances while preparing the ground for the sell off of key industries that would generate still more revenue. The scheme was blatantly corrupt, however, as the favored banks all had intimate links to the reform government, and they subsequently purchased Russia's richest assets at far below the market value.6

The loans for shares scheme also demonstrated the willingness of Russian reformers to use economic reforms to preserve their hold on political power. The need to use the privatization process to create a critical political counterweight to clans opposed to Yeltsin has been acknowledged recently by Russians involved in the struggle for reform.⁷ The scheme had its origins as far back as 1994 and amounted to a "crude trade of property for political support" 8 that played a pivotal role in bringing into existence the financial oligarchy. Russian oligarchs such as Boris Berezovsky, Vladimir Gusinsky, Mikhail Khodorkovsky, Peter Aven, and others returned the favor by providing crucial financial and media support for Yeltsin's re-election in 1996.⁹

The reliance on cronies and clans at the expense of formal government capacity meant that Russian elites had to actively undermine the efforts of agencies responsible for combating corruption. Hence, Russia was witness to numerous bizarre instances of alleged reformers attacking or debasing the very institutions and individuals they ostensibly sought to imbue with effective authority. When, for example, Yuri Skuratov began to take seriously his position as Procurator and initiated investigations of Kremlin officials—including Yeltsin's family—he was soon the target of kompromat: the release by Skuratov's opponents of compromising documents, whose negative political impact outweighs their often questionable legal status. The tactic succeeded, as Skuratov soon found himself embroiled in a scandal that resulted in his removal from office. Even out of office, Skuratov defends the validity of his investigation, and has recently released the names of top-ranking

⁶Author interview with Iuri Iurievich Boldyrev, Deputy Chairman, Accounting Chamber of the Russian Federation, January 15, 1997. Boldyrev also covers this episode in "V strane sozdany ideal'nye usloviia dlia korruptsii," *Novaia ezhednevnaia gazeta*, October 28, 1996, p. 1. ⁷Vladimir Mau, "Rossiiskie ekonomicheskie reformy glazami zapadnykh kritikov," *Voprosy ekonomiki* (1999) no. 11. Mau is an economist sympathetic to the privatization policies of *Chubais* ord Patanin

Chubais and Potanin.

⁸ Chrystia Freeland, Sale of the Century: Russia's Wild Ride from Communism to Capitalism (New York: Crown Business, 2000), p. 169.

⁹Boris Berezovsky affirmed this in unequivocal terms in an interview for the Financial Times, December 1, 1996.

officials whose illegal dealings in Russian treasury bonds (GKOs) he maintains helped trigger the 1998 financial crisis: both of Yeltsin's daughters, Chubais, Viktor Serov, former foreign minister Andrei Kozyrev, and five deputy finance ministers.¹⁰

A similar fate befell the effort to form a professional civil service. which had not existed in Russia since the October Revolution. In an effort to assume direct control over the process, Chubais used foreign assistance funds to construct Russia's massive privatization program. Russian Privatization Centers (RPCs) were created to implement the program, yet the RPCs needed to recruit personnel. A ready pool of labor was found among government personnel loyal to Chubais, who were secretly paid for their consulting services. Chubais could count on finding many recruits because his government was responsible for the low wages paid civil servants. Privatization thus triumphed in Russia only by compromising the possibility of a genuine civil service.¹¹ Putin has recently ordered the formation of a commission, headed by Prime Minister Mikhail Kasyanov, and charged it with developing a plan for reforming the civil service by the end of 2001.¹² It is, however, the third such effort to address civil service reform since the collapse of the Soviet Union

AMBIGUOUS BOUNDARIES BETWEEN KEY SOCIETAL SECTORS AND INSTITUTIONS

In contrast to modern democracies, which place extraordinary importance on a clear delimitation of the legal and political boundaries among institutions, predatory states eschew formal efforts to sustain such meaningful divisions. This sacrifices considerable clarity and efficiency, but the trade off for post-imperial elites comes in their ability to remain key players in virtually all spheres of society. An entrepreneurial class independent of state activity has clearly emerged in Russia over the past decade, but it is overshadowed and increasingly constrained by far more powerful "entrepreneurs" who owe their existence to the state's decision to vest them with property and protection. In doing so, predatory states retain the ability to select the specific composition of the "entrepreneurial" class and thereby retain direct influence over the development of the market. This process has been documented in post-Soviet Russia,¹³ but it is most vividly illustrated by the govern-

¹⁰ "Former Prosecutor Fingers Top Politicians for Money Laundering," Russia Today citing Agence France Presse, August 22, 2001, http://www.europeaninternet.com/russia. Skuratov also alleges that Russian officials sold their insider information to the West, and claims that mem-bers of the "so called Harvard Project [used] U.S. taxpayers' money to buy GKO bonds." ¹¹ More information on civil service reform is in Stavrakis, Shadow Politics. Boldyrev's inter-

 ¹¹ More information on civil service reform is in Stavrakis, Shadow Politics. Boldyrev's interview with the author (note 5 above) also confirmed this.
 ¹² "Putin Forms Commission to Reform State Service," Russia Today, August 22, 2001, http://www.europeaninternet.com/russia.
 ¹³ Details on cronyism and the creation of the economic class in Russia can be found in: Olga Kryshtanovskaia and Stephen White, "From Power to Property: The Nomenklatura in Postcommunist Russia," in Graeme Gill, ed. Elites and Leadership In Russian Politics (London: Macmillan, 1998); and, Olga Kryshtanovskaia, "Smert' oligarkhii: oligarkhiia soderzhala gosudarstvo v litse ego kliuchevykh chinovnikov," Argumenty i fakty, no. 46, November 11, 1998, p. 5. Jean Francois Bayart captures the essence of this in the African setting: "The state is the prime (though not the only) channel of accumulation... Even the successful businessmen in the informal sector are highly dependent on the state because they need constantly to circumvent regulations and obtain official permits. It is, therefore, otiose to seek to establish a conceptual difference between the private and public sectors." Bayart, "Civil Society in Africa," in Will Continued

ment's formal policy of having top government officials sit on governing boards of the country's major economic enterprises, such as Unified Energy Systems (UES, the state electricity monopoly) and Gazprom. Putin's recent ouster of Gazprom chief Rem Vyakhirev and replacement with Aleksei Miller was an excellent opportunity for serious structural reform, yet the Russian Government has maintained that even after reforms, Gazprom will retain its monopoly over gas exports.¹⁴ Similarly, the reform of UES recently approved by the government calls for the break up and privatization of power generation but creates a state-owned monopoly to operate the entire national grid.¹⁵ This also appears to reflect a victory of the informal clan network over formal institutions. It is the brainchild of Economic Development Minister German Gref and largely ignored the recommendations of the State Council in favor of a plan that allows Anatoly Chubais to retain control over energy reform—and custody of the state-owned power grid.¹⁶

DIFFICULTY IN CONSOLIDATING THE BULE OF LAW

Given the centrality of illegal practices to sustaining elites in power, predatory states reflect a profound weakness in consolidating effective judicial and police institutions, despite a formal commitment by elites to combat crime and corruption. In this respect, Putin's goal of restoring "law and order" carries with it a hypocritical ring present in developing economies: coherent formal institutions of coercion and control will emerge, yet they will intentionally refrain from enforcing meaningful distinctions between public and private, legal and illegal, formal and informal.¹⁷ Western exhortation and advice to fight crime is therefore unlikely to alter Russian elites' preference for using coercive institutions to ad-vantage one set of clans at the expense of others in the struggle for control over resources.

Indeed, despite having pledged to restore legality in public life, Putin has in actuality done little more than revive the coercive power of the state by resuscitating security organs.¹⁸ The principal thrust of more efficacious enforcement bureaucracies, however, has not been on eliminating the shadow (underground) economy and corruption in society at large. Instead, Putin has marshaled his forces toward the goals of molding clan behavior to his satisfaction and restraining the sphere of civil rights. This explains the simultaneous crackdown against the likes of Berezovsky and Gusinsky, while ignoring credible claims that Prime Minister Mikhail Kasyanov (known popularly as "2 percent Misha") owes most of his

Reno, Corruption and State Politics in Sierra Leone (Cambridge: Cambridge University Press, 1995), p. 16.

^{1995),} p. 16.
¹⁴Statement of Deputy Prime Minister Viktor Khristenko on August 6, 2001; *RFE/RL Security Watch*, August 13, 2001; http://www.rferl.org/securitywatch/index.html
¹⁵ "Electricity Monopoly Reform Plan Adopted," *Russia Watch* no. 6 (June 2001), p. 2; http://www.ksg.harvard.edu/bcsia/sdi.
¹⁶ Marina Volkova, Vladislav Kuzmichyov, "Ssora Grefa i Illarionova stavit vlast v situatsiiu buridanova osla," *Nezavisimaia gazeta*, June 20, 2001. Gref and Chubais are both from the "St. Petersburg clan" that has dominated much of post-Soviet politics.
¹⁷ Vadim Volkov, "Politekonomiia nasiliia, ekonomicheskii rost i konsolidatsiia gosudarstvo," *Voprosy ekonomiki* (1999) no. 10.
¹⁸ Coulloudon maintains that Russia's numerous anti-corruption campaigns have had a moralistic aim, with no real effort to attack structural problems underlying corruption: "Corruption"

alistic aim, with no real effort to attack structural problems underlying corruption; "Corruption and Governance in Russia."

considerable wealth to kickbacks.¹⁹ Here Russian behavior is consistent with the predatory state: strong bureaucratic structures exploiting vague and shifting boundaries between illegal and legal activity. This feature of the state allows the Russian president to exploit illegal means when useful, yet still rely on formal institutions to implement such policies. Reformers in the Central Bank of the Russian Federation (Central Bank of Russia or CBR) exhibited similar skill in exploiting ambiguities in international financial regulations to reap additional profits.²⁰

EFFICIENT INFORMAL COMMUNICATION NETWORKS

In contrast to expectations, predatory states possess a highly efficient informal communications network, but it is one restricted to a charmed circle. Those individuals blessed with favorable access to the informal communication network can, whenever circumstances require it, circumvent formal bureaucratic structures to achieve their goals.²¹ The speed at which communication can be passed within Russia is often staggeringly short-and becomes shorter still whenever the issues revolve around an opportunity to acquire money.²² These networks were developed under Yeltsin and remain intact under Putin; indeed, there is every reason to maintain them, for they are remarkably efficient at relaying infor-mation in a short period of time. The common perception of Russia as incapable of accomplishing anything is misguided: formal Russian state structures can often accomplish little, yet the capacity of elite networks to fill in the gap remains impressive.²³

The combination of efficient informal communications, weak and malleable legal institutions, and institutional ambiguity helps explain how predatory states are successful in extracting profit. Several examples reveal how an interventionist state can move into any promising sphere of economic activity, molding legal institutions to suit its needs. The arbitrary nature with which tax laws were interpreted and enforced, for example, so frustrated General

¹⁹When the author referred to Kasyanov as "7 percent Misha" in conversation with a senior official at lukos Oil Company, the official shook his head and immediately added the correction: "It was 2 percent Misha, a fact he could confirm from his own experience"; June 26, 2000. ²⁰The CBR in 1999 conceded that it channeled some of its reserves (some sources claim as

²⁰ The CBR in 1999 conceded that it channeled some of its reserves (some sources claim as much as \$50 billion) into FIMACO, an obscure off-shore corporation in Jersey, principally to pre-vent its recapture from Western creditors. Sergei Aleksashenko, former Deputy Chairman of the CBR, admitted that the sequestering of bank funds was done to protect them from Western creditors. FIMACO was a French corporation chartered in Jersey. It was 78 percent owned by the Russian Government. The reform team had deftly exploited western financial practice to se-curely channel money to themselves—out of reach of creditors. More information on the FIMACO affair can be found in *Kommersant* and well as in IMF documents. ²¹ Interesting in this regard was the fate of the internal phone network that in Soviet times was accessible only to high-ranking party members. It never disappeared, but was instead ap-propriated by the new elite who later replaced it with a system more in tune with current fash-ion in technology—the predatory elite has gone high tech and cellular.

propriated by the new elite who later replaced it with a system more in tune with current fash-ion in technology—the predatory elite has gone high tech and cellular. ²² This is especially true whenever foreign assistance funds are concerned. This is in marked contrast to the slow and deliberate pace of Western aid agencies. The author was involved in several such cases, where Russian organizations were able to filter information from Washing-ton, DC, through Moscow to the regions and back again all in less than 24 hours. ²³ The author was present in August 1999 when one governor—clearly "in the loop,"—used his cell phone from his regional office to juggle successive calls to and from Anatoly Chubais and Viktor Chernomyrdin. He later explained that Yeltsin was angered by the declaration of a "left" electoral bloc by Yuri Luzhkov and Evgenii Primakov in advance of the December 1999 Duma elections, and had ordered Chubais to undertake the formation of a "inght" bloc. Chubais asked the governor in question to serve as mediator between Chubais and Chernomyrdin to lay the groundwork for subsequent negotiations. An agreement proved elusive, but the speed and means by which it was arranged was impressive.

Electric that it elected to close its Moscow subsidiary.²⁴ Similarly, Australia's Star Mining learned that its purchase of part of Lenzoloto, a small gold mining business, was invalidated because it purportedly violated privatization rules. The problem was that "the laws are so vague, the bulk of the Russian stock market could easily be deemed to have breached these rules." 25 Trans-World Metals, a London-based metals company that has acquired a substantial portion of the Russian aluminum industry, was also caught in the maelstrom of elite conflict. Trans-World's sin was to acquire its investments under the patronage of former Kremlin security chief Alexander Korzhakov and former First Deputy Prime Min-ister Oleg Soskovets. Once Yeltsin fired both of these men and the aluminum industry came under suspicion of supporting Aleksandr Lebed, Trans World became an easy target for state agencies con-trolled by Chubais and Viktor Chernomyrdin. Not surprisingly, local Russian officials soon nullified its stake in at least one major smelter.²⁶

Domestic actors are also fair game for the predatory state. Moscow Mayor Yuri Luzhkov succeeded in 1998 in using a modest municipal payroll tax on Moscow residents to generate a road fund of approximately \$645 million. Yet the federal parliament—evidently with executive support—entered the picture and passed a law requiring that at least half this amount be spent on the national road system. This effectively stripped the mayor of control over part of the municipal budget.²⁷

SOCIETAL WITHDRAWAL AND ECONOMIC MARGINALIZATION

Russia's predatory proclivities have had a significant negative impact on society. Despite having invested considerable energy in developing an institutional framework for articulating public sentiment, Russian civil society has slid toward greater apathy in civic life. Demonstrations marking the tenth anniversary of the failed Soviet coup (August 19 to 21) were noteworthy only because the police outnumbered those who felt it important enough to show up on Red Square—a pale echo of the remarkable and courageous resistance to communism a decade ago. Public sentiment appears resigned to viewing its relations to state power solely in tributary terms: the state takes what it demands, and individuals seek to achieve their objectives primarily by circumventing its authority. Predictably, the most significant political parties today are the Communists and those created at the instigation of the presidential administration

Political withdrawal is paralleled by economic withdrawal. Since productive activity is viewed by state elites as something that can be either expropriated or arbitrarily taxed, producers retreat from the legal economy to preserve autonomy. This explains the persistence and growth of the extra-legal, "informal" economy in post-

²⁴ Financial Times, 20 March 1997. ²⁵ Financial Times, 10 April 1997. ²⁶ The Independent, March 15, 1997. Another instance of expropriation of western interests occurred when the Russian Government terminated the work of NM Rothschild in developing a \$1 billion telecommunications share offer. The government turned it over to MOST Bank and Ale Bank bath et a which were members of the aboremed "group of The Financial Times. Alfa Bank, both of which were members of the charmed "group of seven," The Financial Times, November 26, 1996, p. 1. ²⁷Moskovskii komsomolets, 23 May 1997.

Soviet Russia. Consolidating a stable tax regime in this environment becomes a challenge, for if a tax regime is viewed by producers merely as a means of being identified for future expropriation, they have strong incentives to move production underground where chances of detection are smaller.

Finally, the marked disparity between Moscow's affluence on the one hand, and severe economic deprivation in the rest of Russia, is leading to the creation of a two-tiered economy in which the vast majority of the population is economically marginalized and sees little to no chance for improving their lives.²⁸

It is precisely here that predatory politics sow the seeds for potential future instability, for no society can sustain itself indefinitely on the basis of an economy based principally on the material well being of its capital city. Failure to provide the Russian public a meaningful stake in economic life will lead to an insufficient revenue base that undermines government policy. Similarly, Russian elites should by now appreciate the fact that a resigned or alienated population in the context of sagging economic expectations is a combination likely to produce a serious challenge to their legitimacy.

RECENTRALIZATION AND ATROPHY OF REGIONAL AUTHORITY

Whereas Boris Yeltsin initially urged Russia's regions to take as much sovereignty as they could, the style and substance of President Putin's regional policy has moved in the opposite direction. The earlier momentum of efforts to decentralize governance in Russia has slowed significantly, as the presidential administration's policy initiatives have adopted a more pragmatic style, leavened with a distinct preference for a recentralization of political authority. The disorderly parody of federalism that emerged under Yeltsin certainly made some degree of recentralization a rational means of restoring order. But such recentralization was also consistent with the logic of predatory states, as it maximizes access to potential sources of economic wealth and deprives regional politicians of the safety of a constitutional framework. While it is true, as some commentators have noted, that Putin has yet to clearly articulate his ultimate objective in regional policy, recent events support a disturbing trend toward the growth of central authority. In place of the personalistic style of Yeltsin (which Putin is said to disdain), the Russian president has organized the country's regions into seven administrative districts. The heads of these sit, along with federal authorities, on the recently created State Council, whose jurisdiction remains ambiguously defined. The impact on regional influence is clearer to discern, however: the state Duma, or lower house of parliament is increasingly marginalized, and powerful regional governors have gravitated to lobbying the State Council.

More importantly, while still a prime minister, Putin announced his view that the various bilateral treaties concluded during the Yeltsin era that formed the basis for regional power ought to be scrapped. Accordingly, President Putin delegated to Tatarstan

²⁸This was the image of Russia--strikingly similar to many African societies-described by an official in Putin's administration; conversation with Vladimir V. Shemiakin, Advisor to the Administration of the President of the Russian Federation, June 30, 2000.

President Mintimer Shaimiev (who is a member of the State Council) the responsibility of elaborating a clear division of powers between the federal and regional governments. But Shaimiev's working group concluded that the central government ought to fully legalize these regional treaties and use them as the basis for a broader regional policy. This displeased the President so he dis-banded Shaimiev's group, ignored their proposals, and appointed Dimitrii Kozak, (member of the more loyal presidential administration) to a new working group on regional issues. This time, however. Kozak has made plain that his goal is to formally re-establish the primacy of Moscow (the so-called "power vertical") in regional affairs.²⁹ In Putin's Russia, the Kremlin appears likely to de-mand—and receive—the right to greater intrusiveness in regional and municipal life than was envisaged in the more optimistic predictions of the previous decade.

EXPLAINING RUSSIA'S AFFINITY FOR THE PREDATORY STATE

If the preceding analysis proves more useful in making sense of developments under President Putin, then it strengthens considerably the conclusion that Russia has deviated from progress toward free market democracy. It is moving toward a predatory state model that consolidates an authoritarian elite whose principal objective is in managing social contradictions to its benefit. This raises a central question: Why have Russian elites rejected the promise of liberal democracy in favor of a political system that embraces pre-existing inefficiencies and retains the tension between an overly powerful central elite and marginalized society that will surely prove the source of future discord?

Clearly, a major factor at work is the fundamentally different way in which Russian elites view the potential payoffs of any reform. Western strategies of reform focused on how short-term obstacles and dislocations could be managed to achieve longer-term economic transformation. But in Russia, Imperial and Communist legacies created a predisposition to predatory practices, with the result that precious few Kremlin elites ever had the political security to focus on long-term goals. They instead preferred to concentrate their energies on achieving short-term gains by using familiar institutions and political styles.³⁰ Simply put, the benefits of pursuing immediate gains through traditional means were preferred to the potential rewards of a risky and uncertain future.

The impulse toward predatory practice can thus be broken down into two component parts: a preference for retaining traditional political styles and values, and the consequent need to situate them in an institutional setting acceptable to the outside world. In Russia, an additional factor proved decisive: the ineradicable memory of success in achieving the status of Great Power as an empire whose practices rested heavily on the political precursors of predatory rule. A brief examination of each of these factors helps explain

²⁹ Vladimir Lysenko, "Otryzhka demokratiei," *Novaia gazeta* July 19, 2001. ³⁰ Even Yeltsin era elites initially committed to reform felt reforms could only be achieved quickly. Hence, Chubais and Boris Nemtsov viewed their tenure in office as short and accord-ingly endorsed a "shock therapy" approach. Nemtsov, in particular, was fond of characterizing himself as a "kamikaze" reformer.

how Russian elites could find the rewards of predation greater than those of a liberal democracy.

OLD WINE IN NEW BOTTLES: THE "RECOMPOSITION" OF TRADITIONAL RUSSIAN POWER

The recomposition of power,³¹ refers to the process whereby traditional forms of state power are placed into a modern institutional infrastructure. This results in modern state agencies operating in distinctly traditional ways. Eurasian and African states have proven remarkably adept at this: as new political institutions replace earlier ones, they are filled with a traditional cultural content. This preserves the ability of elites to function as in the past (recomposition); while allowing institutions of power to acquire the external appearance of respectability.

The reason Russian elites would prefer this outcome is clear: their new responsibility to build a modern state and economy necessarily entails ceding large spheres of their authority and subjecting their own actions to the rule of law. But who among them could willingly consent to this limitation of their own power? The preferred alternative is to hold on to the institutional resources of the autocratic center. Reformers thus become seduced by the very entity they seek to eliminate, which explains why many veteran reformers of the 1990s find it impossible to leave the political arena.

The traditional weakness of society also militates against a breakthrough to modern governance and in favor of a resurrection of traditional authority. Imperial Russia exemplified the tragic consequences of perfecting autocratic power in advance of a free economy and national consciousness. The state simply overwhelmed and dominated nascent civil society, depriving it of the opportunity to develop its own independent identity. Post-Soviet experience repeated this pattern, as a small group of state elites assumed responsibility for creating the new property owning classes and decreeing the formation of political parties and social organizations.

The combination of strong state and weak society helps explain why no political elites—reformers or otherwise— abandoned the familiar context of Russian clan rivalry in favor of establishing a limited decentralized government and genuinely free economy. Predatory behavior is linked to the political elite's inability to see beyond its short-term gains to the more distant rewards of reform, hence their preference for political intrigue, a weak legal regime, and a market with only contingent freedom. State and society drift away from commitment to genuine reform, as a narrow clique of rulers contents itself with augmenting the number of select clans eligible to struggle for central power. Indeed, some scholars have argued convincingly that the Russian reforms in January 1992 were converted into a political struggle among ruling elites as early as April of that same year, as then prime minister Yegor Gaidar opted for compromise with the "red-brown" opposition made up of Com-

³¹The term was first employed by Achille Mbembe, "Democratization and Social Movements in Africa," *Africa Demos* 1 (1990) no. 1; Richard Joseph, "The Reconfiguration of Power in Late Twentieth-Century Africa," in Richard Joseph, ed. *State, Conflict and Democracy in Africa* (Boulder, Co.: Lynne Rienner, 1999).

munists on the one hand, and industrialists and entrepreneurs on the other hand.³²

The Soviet regime's toleration of illegal and criminal practices in its later years also provided an important route for the infiltration of predatory behavior. The Kremlin must remain first among equals, whether dealing with financial oligarchs, regional leaders or organized criminal structures (mafias). Hence, instead of challenging the legitimacy of these actors or seeking their elimination in favor of a more equitable order, the predatory state aspires to be the largest economic oligarch, the most potent of all mafias, and the most dynamic of all the regions.³³ Its possession of the reins of formal state power provides it with a decisive advantage: for the Kremlin alone among competitors can claim the right to interact with the outside world. Moscow thus parlays its privilege into that of a legal entity willing to undertake illegal actions.

The rule of law in this setting is a direct challenge to autocratic power; for it implies an institutional framework that would inhibit the power of the elite to intervene arbitrarily in society and the economy.³⁴ And while rents³⁵ typically generate the bulk of elite revenues at society's expense,³⁶ predatory states can—where profitable-evince profound interest in economic development. It is not development they disdain; rather, it is the need for working within a legal framework. This allows them to exploit any lucrative economic activity that emerges in the informal or criminal sector of society. Their paramount concern is to exploit this, rather than to find a legal context within which entrepreneurial dynamism can flourish. Ultimately, what sustains predatory rule is not some abstract fear of progress, but the toleration by ruling elites of a political style that is sufficiently familiar and rewarding in the shortterm to arrest the impetus for genuine reform. Russian elites are not afraid of the free market; they simply find it far more profitable to tailor the market to their interests, rather than risk allowing it to determine the winners and losers in society.

³²The most thorough treatment of this period can be found in Peter Reddaway and Dimitri Glinski, The Tragedy of Russia's Reforms: Market Bolshevism Against Democracy Washington,

DC: United States Institute of Peace, 2001), chap. 6 passim. ³³Vadim Radaev examines this phenomenon of the state as the largest and most influential mafia in society; "O roli nasiliia v rossiiskikh delovykh otnosheniiakh," Voprosy ekonomiki (1998) no. 10.

³⁴This comports with the view of Yuri Yurievich Boldyrev who, as Vice Chairman of the Russian Government's Accounting Chamber, had extensive experience in battling corruption and ef-forts to enforce the rule of law, "Corruption in Russia as an Element of a System of Total Law-lessness," paper delivered at the Princeton University-Central European University Joint Conference on Corruption, Budapest, Hungary, November 5, 1999 (http://:www.coc.ceu.hu).

³⁵ Rents are those opportunities for economic gain created by the state's restriction of the free market. In Russia, government licenses, restrictions on free trade, state intervention in enter-prise decision making, and rationing of foreign exchange, were "rent havens" exploited by well-connected businessmen and bureaucrats. Russia's second stage of privatization, by restricting

eligible recipients of state property, also fits this category. ³⁶On this point, see: Joel Hellman, "Winners Take All: The Politics of Partial Reform in Postcommunist Transitions," World Politics 50 (1998) no. 2, pp. 203–234. This phenomenon has far broader applicability: Roger Tangri, for example, (1999) has observed in that Uganda, Kenya, Ghana and elsewhere in Sub-Saharan Africa, privatization programs came to focus more on the dispensation of lucrative rents to privileged and well-connected elites than to the original goal of getting the state out of the private sector; Tangri, Roger. *The Politics of Patronage in Africa: Parastatals, Privatization, and Private Enterprise* (Trenton, NJ: Africa World Press, 1999).

APPEARANCE MATTERS: "PRESENTABILITY" AND THE IMAGE OF DEMOCRACY

States in the contemporary international system cannot afford either the luxury of isolation or the burden of exclusion, so it is important to understand how a predatory state survives in a globalized world. Economic globalization presses states to demonstrate a commitment to maintaining domestic institutions ensuring some predictable measure of transparency, legality, and democratization. Without this, the foreign investment flows essential to participation in the global economy simply cannot be guaranteed. Yet, none of the predatory state's internal characteristics reflect even modest adherence to these preconditions.³⁷ This contradiction between the international and domestic norms is managed through the practice of presentability, in which the formal institutions of market democracy are paralleled by the informal embrace of practices, norms, and institutions that are animated by pre-existing political culture. This is necessitated because predatory states must mediate between promising opportunities in an international economy they cannot control, and a domestic socio-economic environment they have structured to their advantage.38 Russia's elites skillfully embrace the rhetoric of democracy and the free market while yielding little in the way of public accountability or effective economic reforms.

Western policy has played an important—if unsuspecting—supporting role in the evolution of presentability, as key Eurasian, African and Asian states deemed by Western institutions as too important to fail are evaluated solely on the basis of formal, rather than substantive, criteria. Democratic reform acquires a brittle skin-deep quality, though sufficiently opaque to permit the process of political recomposition to proceed. The end results are modern formal institutions filled by a more familiar traditional political substance.

The elites' preference for presentable, as opposed to substantive, democratic reform receives a powerful impetus from the recomposition of traditional power. Since predation is largely a function of elite political culture and is indifferent to the architecture of formal institutions, Russia can absorb much of the formal infrastructure of free market democracy even as the substance and style of its politics fills these institutions with more traditional values. The new Russia conforms neither to the West's desired image of it, nor is it a simple return to the past—Czars, boyars, commissars and democrats have blended the dark arts of autocracy with the "dismal science" of economics and a pretense of populism, molding reform to preserve their interests.

³⁷ It is true that many states do not possess these attributes in full. Some of these are undoubtedly admitted for the "formal" reasons discussed below. Another factor is that Western industrialized nations and multilateral institutions are not fully confident that potential Russian misbehavior, unlike that of most other states, can be managed with existing institutional remedies. China also falls into this exceptional category.

 ^{misbenavior}, unlike that of most other states, can be managed with existing institutional reflections also falls into this exceptional category.
 ³⁸Recent discussions of "virtuality" in democratic practice echo similar sentiments. See: Richard Joseph, "Democratization in Africa after 1989; Comparative and Theoretical Perspectives," Comparative Politics 29 (1997) no. 3, pp. 367–368; Fareed Zakaria's "illiberalism," discusses the similar same phenomenon, though he does not view culture as the determining factor, "The Rise of Illiberal Democracy," Foreign Affairs 76 (November/December 1997) no. 6 passim.

Key political and economic developments over the past decade vindicate the image of Russia as a presentable society. Democratic presidential elections were largely determined by a narrow elite with access to state resources. In Yeltsin's case, his initial support by a cluster of "reformers" was augmented to include financial oligarchs. Putin, by contrast, was virtually anointed by Yeltsin as the latter's successor, with strong endorsement from the Kremlin "family," Chubais, and Putin's allies from St. Petersburg. Political parties are formed by presidential diktat and sustained in large part by funds drawn from state coffers. And Putin's appointment to high office of his former colleagues from within the former KGB has aided the re-entry of the secret police organs back into the fold of Kremlin politics. Finally, the rhetoric regarding separation of state from economy is belied by a policy in which the government retains crucial share holdings in huge economic enterprises and government ministers sit on governing boards of enterprises.

The recent behavior of former privatization chief Alfred Kokh provides a vivid example of the transition from reformer devoted to Russia's transformation, into loyal combatant in the predatory state. In his current incarnation as head of media relations for Gazprom, Kokh spearheaded the successful effort to crush NTV, Russia's only independent television network. In barely 3 years' time, Kokh shifted from a reformer advocating for free market democracy to a high-ranking member of the nebulously-defined Russian "private sector," doing the Putin administration's bidding by crushing an independent voice of opposition to government policy.³⁹

Presentability is in certain respects the key aspect of the predatory model, for it explains why Western policy toward Russia tolerated the persistence of traditional Muscovite politics. Once Western states had resolved that only Yeltsin could implement reform, it became imperative to permit him to secure his domestic political position. Yeltsin, however, had learned his political survival tactics in the old school; hence, if the he were to survive as president, he had to resort to the familiar world of clan politics and not democratic processes. The West felt obliged to accept this reality, and did so on the condition that the leading clan reflect the interests of free market democratic reform. Yeltsin responded by developing what might be a textbook recipe for a "presentable" transition: (1) seizing the rhetorical high ground and imposing upon all Russian elites (excepting the Communists) the vocabulary of reform; (2) producing sufficient substantive changes to permit the West to declare transition a success; (3) exploiting Communist ineptitude to cast them as the perfect villain. This allowed Yeltsin to declare outright war on the "red-brown" opposition while simultaneously replacing many of his shock therapists with old-style economic managers and restoring state subsidies to enterprises.⁴⁰ This is the unsettling reality of predatory Russia, which resembles closely the "choiceless" democracies in Africa: ⁴¹ the domain of electoral rights are broadened

³⁹ See, for example, Kokh's "Gusinsky has Made 'Freedom' a Bad Word," Russia Watch, no. (June 2001), pp. 19-20; http://www.ksg.harvard.edu/bcsia/sdi.
⁴⁰ Tim McDaniel, The Agony of the Russian Idea (Princeton: Princeton University Press, 1996), 6

p. 153. ⁴¹Mkandawire, "Crisis Management and the Making of 'Choiceless' Democracies." Other variants of democracies lacking a democratic essence: Igor Klyamkin and Lilia Shevtsova compare Yeltsin's regime to an "elective monarchy," *Nevavisimaia gazeta*, June 24, 1998; still oth-

with great fanfare, even as the range of meaningful policy options presented to the public narrows to the vanishing point. The popular election of a Russian president is indeed an event unprecedented in history: but this achievement must be balanced by recognition that in 1996 and 2000, the Russian public has had the opportunity only to legitimize the candidate pre-selected by the elite. That is why presidential elections in Russia have to date been won only by former Communist Party bosses and operatives of the secret police.

THE LEGACY OF IMPERIAL SUCCESS

The third fundamental dimension of Russia's evolving predatory regime distinguishes it from all other similar systems: Russia is a country with demonstrated success in achieving Great Power status in the 18th, 19th, and 20th centuries, and a society familiar with the challenges of extracting extraordinary results from dysfunctional institutions. It is precisely for this reason that the thrust of this analysis is not about inherent Russian weakness but about the challenges of managing the consequences of Russia's restoration, and preparing for the next contraction that signifies yet another turn in the wheel of Russian history. The focal point is Russia's adaptive response to its historical crises, which has allowed it to develop a polity distinct from Western models, and to achieve a substantial measure of international power and prestige.

Whether as Czarist or Soviet regime, Russia acquired extensive experience in the global competition for power. The belief is widespread in Russia that power is a key element in maintaining a state's-especially a Great Power's-independence in the international system. The alternatives to this, Russians fear, are to be penetrated by other states or become the objects of territorial ag-grandizement.⁴² Russia has vivid memories of both and its ruling elites will find it intolerable to again be at the mercy of other powers—a view that is increasingly articulated by oligarchs, bureau-crats, Putin himself, and even democratic reformers. The dictates of the International Monetary Fund grate against Russian sensibilities and Russia has the potential to be far less accepting of the constraints imposed by international assistance than many other societies. NATO's military intervention in the Balkans further reinforces the desire of Russian elites to position themselves out of the grasp of Western institutions they see as either depriving them of sovereignty or limiting their freedom of maneuver. The festering Russian offensive in Chechnya was made presentable to the West by Putin's exploitation of the vocabulary of Western politics-as well as its fear of Islamic fundamentalism-arguing that Russian actions follow the NATO precedent and seek the objective of de-stroying alleged Chechen/Islamic terrorists.

The globalization of capital and investment flows is another factor complicating the predicament of predatory states, and with

ers, such as Terry Karl, have noted the phenomenon of "electoralism," where the election proce-

⁴²Western scholars have also concluded that these are the most likely outcomes for much of the developing world. See, for example, Robert H. Jackson, *Quasi-states: Sovereignty, Inter-national Relations, and the Third World* (Cambridge: Cambridge University Press, 1990). The more contentious issue, however, is whether such an outcome will prove beneficial or detrimental to socio-economic development.

which Russia must contend. Increasingly, economic processes challenge sovereignty without resort to territorial expansion, and the price to pay for entry into a globalized world is greater trans-parency and predictability in the legal and economic environment. Many other states grappled with this reality for decades while Russia remained insulated behind the walls of communism. Russian elites therefore had to contend with a second shock in addition to the loss of empire: economic progress threatened a loss of control over domestic life. This sense of vulnerability and the new requirements and resources for competition in the state system may prove precisely the factors capable of persuading Russian elites to become more than rentier capitalists. Global rivalry may eventually compel Russia's rulers to focus on raising productivity in order to restore the institutions (i.e., the military) that can return Russia to the concert of Great Powers. But this still cannot ensure the transformation of Russia into a law-governed state. Indeed, the elites' evidenced skill in using the illicit side of the global economy suggests this may be their preferred means for exploiting opportunities there.

Another factor with a distinctive impact on Russia concerns still unresolved questions of national identity. Russia was the center of a multinational empire that denied the existence of constituent nations. Recent imperial memory lingers in the Russian consciousness, interacting with memories of power lost. To the extent that the Soviet mythic legacy continues to dominate Russian popular thinking, elites will find fertile soil in the public mood for building a Russian state that restores a substantial measure of the influence it wielded in previous eras. Even if not expansionist in content, such a conception retains the close link between identity and state power. National self-definition, with prodding from political elites, could reinforce popular resentment arising from the loss of sovereignty and serve as an important element to revive national power.

Russia also possesses a human and natural resource base that defies comparison with the any other predatory system. Even with its environment and population threatened, the enormous investment in education and training in the natural sciences by the Soviet regime has left a skilled workforce that can be harnessed quickly. Unlike post-colonial societies that tend to bristle with economists and political scientists, Russia can marshal millions of trained engineers, physicists, chemists and other professions essential to catalyzing a post-Soviet economic transition. Russia's present malaise, moreover, should not ignore the reality of a substantial nuclear stockpile and residual military power. Even a modest improvement in Russia's economic fortune could allow these military resources to have a profound impact on international security.

Finally, there is the unavoidable reality that Russia simply possesses too much potential for mischief to be left to the whim of entropic forces. Hence, the dialogue between the Putin government, international financial institutions, and Western governments will remain important. But the concessions already made to Russia's predatory pathway mean that it will seek only the necessary mix of symbols, gestures and minimal substantive commitments to persuade the West that it is in transition to a reassuring destination. If the past decade is any guide, Russia will certainly attempt to achieve what it desires while making the West feel good about what it is.

CONCLUSIONS AND IMPLICATIONS FOR THE WEST

Viewing Russia as a predatory state carries important implications for expectations of its domestic development, as well as for multilateral and bilateral efforts to engage Russia in international affairs. Russian-American relations will be far more complex than the recent or even Communist past.⁴³ The United States has in the past dealt with dysfunctional developmental regimes as well as Great Powers, but the coincidence of the two in one state is rare, if not unique. The following points are therefore intended to project into the future some of the main lines of development of a predatory Russia, with some of its implications for international politics.

(1) Russia is not destined for development as a free market democracy, nor is it likely to remain an irresponsible power.—The predatory model suggests that Russian elites will succeed in integrating a state-economic elite that responsibly exercises power in pursuit of its own interests, often at the expense of society. Such a system will undergo considerable development and restoration of power, but the burdens associated with sustaining it militate against permanent stability.

(2) The consolidation of the predatory Russian state does not exclude the development of capitalism.—On the contrary, some form of capitalism is inevitable. It will, however, be heavily textured by an interventionist state and the constraint of civil liberties.

(3) Successful foreign investment in Russia will require the ability to establish and maintain constructive relations with influential clans.-Russian elites will be keen to encourage investment, but the low value placed upon a coherent and enforceable legal framework for commercial activity implies that personal and political factors will be the critical determinants of which foreigners gain access to lucrative Russian markets. Moreover, Russian elite motivations will spring from a desire to enrich themselves and their allied clans, rather than for budgetary revenues. Hence, so long as Putin remains president, those Russians linked to him and his entourage will receive favorable treatment, while those outside this group become targets for expropriation and political pressure. In all likelihood, the Putin government will maintain the practice of the Yeltsin era by offsetting prohibitive or inhospitable formal conditions for investment with informal guarantees that circumvent all obstacles. Foreign investors may well succeed in Russia, but they will have to operate in fluctuating political conditions, and place greater reliance on personal rather than institutional guarantees.

(4) The true test of Russia's potential over the long-term rests on the character of the leader or leaders who succeed Putin.—This is most likely to occur sometime after 2010. The historic pattern of Russia's development has been a cycle that moved through a "time

⁴³Some of these points are amplified in an Occasional Paper prepared by the author for The Atlantic Council of the United States: "After the Fall: U.S.-Russian Relations in the Next Stage of Post-Soviet History," December 1998.

of troubles," then to state consolidation, and finally, power projection. If the past is any guide, the next stage in Russia's cyclical development requires a leader with more dynamism than Putin has exhibited. Russia thus awaits its leader—or *vozhd*—who blends his personal authority with the resources of state (which include an economy with deep organic links to the government elite) to undertake the great task of mobilization that has always been necessary to produce a quantum change in Russian societal development.

(5) Given his role as a stabilizer rather than a mobilizer, Putin's policies—foreign and domestic—will likely be temporizing, focused on providing the time and space needed for restoration and positioning of Russia for greater future influence in foreign affairs.— Putin and Russia will seek to avoid costly engagements abroad in preference for consolidating a network of relations that expand its influence. It presents little immediate direct threat to the United States or the West.

(6) The potential for Russia's return to a consequential global role rests heavily on the qualities of its next leader(s).—If the predatory model holds, Putin's successors will be vetted by the political elite and legitimized through popular elections. They will not, as was once hoped, be individuals who worked their way up from the lower ranks of democratic society to the upper echelons of power.

(7) A decentralized federalism is not in Russia's future.—While it is doubtful that Russia can return to the level of centralization of Soviet rule, there is little chance that the center will consent to surrendering large spheres of its authority to regional competitors. This is one of the most complex aspects of Russia's future, for it requires the articulation of a novel form of government—neither federal nor wholly central—for which there is no precedent.

(8) Corruption, cronyism, and a vast informal economy will be integral building blocks of future predatory Russian society.—The opportunity for the West to radically transform the dynamics of the informal economy has passed. Privatization resulted in the transformation of political elites into economic elites who now claim their place at the table of Kremlin power. Their reliance on extralegal measures to attain that status and the future benefits they can expect to derive from corrupt practices militate against serious reform. But predatory practice has demonstrated that, given the proper political conditions, substantial efficient and productive activity remains possible.

(9) The economic and social costs associated with Russia's development as a predatory state will still leave it vulnerable to periods of instability.—The predatory project is attractive because of the short term gains it provides elites; but the long-run economic and social costs are undeniably high: excessively high barriers to entry to the elite, enormous expenditure of resources to maintain crony networks, maintenance of extensive oversight over the economy, and marginalization of society. These factors echo many of the same problems present at the end of Soviet power: tightening resource constraints, a diminishing pool of skilled elites, low workplace morale and productivity, and an unwillingness to cede political control for the sake of economic gains. The failure of predatory elites to address basic social problems and consolidate the foundations of a free market economy may lead to an accumulation of problems that overwhelm self-interested elites. Historically, Russia has relied on strong leadership to avoid such crises. But the collapse of Romanov autocracy and the implosion of the Soviet Union are clear reminders that Russia's institutional structures tend to be too rigid and inflexible to survive crises on their own. In essence, Russian elites are more adept at surviving socio-economic crises than avoiding them. The challenge of dealing with Russia in the future will therefore be more complex than the already daunting task of dealing with a socio-political order that rejects the basic essence of liberal democracy; it will also require engaging a society that, despite recapturing significant global influence, retains internal tensions that may undermine stability.

RUSSIA'S ECONOMIC FUTURE AND U.S. INTERESTS

U.S. BILATERAL ASSISTANCE TO RUSSIA, 1992–2001

By Curt Tarnoff¹

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SUMMARY

For nearly 10 years, the United States has supported programs of bilateral and multilateral assistance to Russia. Although policymakers always anticipated that multilateral assistance through the World Bank and International Monetary Fund (IMF) would compose the bulk of global efforts to assist Russia, throughout this period the United States has maintained a program of bilateral assistance that more directly and immediately reflects U.S. interests and priorities. While smaller than the multilateral effort, as a grant, not loan, program, bilateral assistance can be employed in a wider range of situations than multilateral aid.²

The U.S. bilateral program has had three overarching and related aims—security, stability, and humanitarian. The United States has sought to achieve security, both U.S. and Russian, by promot-

¹Curt Tarnoff is a Specialist in Foreign Affairs in the Foreign Affairs, Defense and Trade Division of the Congressional Research Service.

² For a discussion of multilateral aid, see the paper "Russia and the International Financial Institutions: From Crisis to a Normal Country" by Jonathan E. Sanford.

ing nuclear and chemical weapons non-proliferation activities. It has sought stability-Russian and world stability-by supporting a range of programs to create a democratic and economically prosperous Russia that would, as a result, be a cooperative member of the international community. Its humanitarian programs, like those elsewhere in the world, transcend specific U.S. strategic and other interests in Russia-they are a reflection of traditional American values.

As might be evident from the current state of Russia's economy. society, politics, and military, the numerous and diverse projects that were developed in order to achieve these aims have had a mixed record. Over time, as a consequence of failures, successes, lessons learned, financial constraints, and program restrictions and conditions, the aid program today is substantially different in size and scope than it was early on. How it will change over the next decade is unclear. But in determining where the program is to go in the future, it may be helpful to know where the program has been.

A DECADE OF ASSISTANCE

Through September 2000, about \$8.8 billion in grant assistance has been budgeted for programs in Russia.³ Roughly 37 percent of these funds have been targeted at security objectives, 32 percent at humanitarian goals, and 31 percent, at stability objectives (see Figure $1)^4$

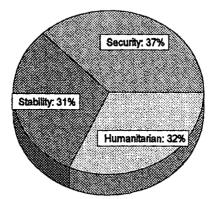


FIGURE 1.—OBJECTIVES OF U.S. ASSISTANCE TO RUSSIA: 1992–2000

SECURITY PROGRAMS

Of the roughly \$3.3 billion intended for security purposes, most has come from the Department of Defense appropriations, largely

³Another \$908 million was expected to be allocated for Russia programs in 2001. ⁴The United States also provided loan and other guarantees to support roughly \$6 billion in the face value of U.S. goods and investments to meet trade objectives. As these mostly benefited U.S. exporters and investors, they are not discussed here.

authorized under the so-called Nunn-Lugar Cooperative Threat Reduction (CTR) Program first approved by Congress in November 1991. Related programs are also funded and implemented by the Department of Energy and Department of State. The bulk of security programs are intended to lessen the potential threat to the United States posed by Russian nuclear weapons, material, and expertise vulnerable to sale, theft, or hire by terrorists or rogue nations. There are several key components of these efforts.

Weapons destruction and dismantlement

The CTR program has helped Russia meet START I Treaty limits by facilitating the elimination of delivery vehicles for nuclear weapons, including SS-18 missile silos and heavy bombers, and supporting destruction of its chemical weapons stockpile.

Control and protection of nuclear material

The United States has provided design and construction assistance for a storage facility for fissile material from dismantled nuclear warheads, along with the containers for the transport of warheads and storage of materials. It has sought to enhance the security of warheads and materials during transport, storage, and at research facilities by such measures as providing super-containers, inventory control systems, sensors, and personnel reliability methodologies. Customs officials have received training and radiation detectors have been provided in order to thwart illegal export of fissile materials.

Demilitarization

U.S. assistance has supported the conversion of Soviet defense industries into commercial, non-military, enterprises. Several programs aim to employ Soviet weapons scientists in peaceful civilian research.

HUMANITARIAN PROGRAMS

Since 1992, the U.S. Government has provided Russia with \$2.8 billion in humanitarian assistance. Almost all of it has been food aid, delivered under the P.L. 480 Food for Peace, Section 416(b), and the Food for Progress programs carried out by the Department of Agriculture. In some cases, food was given to private voluntary organizations for distribution to the needy. In other cases, commodities were sold and their proceeds were used to support development objectives—such as the cooperative credit system, child vaccination programs, and the Russian Pension Fund. The U.S. Government has also provided transport costs for medical and other aid donated by the private sector, and has contributed to international organizations working in Chechnya.

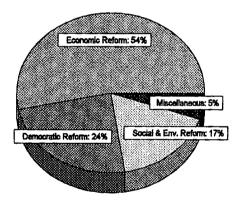
STABILITY PROGRAMS

Programs aimed at creating a stable and peaceful Russia by facilitating its transition from authoritarian communism to a free market democracy receive particular attention from Congress and the public. During the past 10 years, \$2.7 billion, mostly funded under the foreign operations appropriations and authorized under the FREEDOM Support Act has gone to such efforts. Projects designed to meet these objectives have been numerous and diverse. The breadth of purpose and sectors they cover, many of which overlap, make it difficult to categorize them. They might be put into three broad baskets.⁵

Economic reform

More than half (54 percent—about \$1.5 billion) appear to have as their primary objective the economic restructuring of Russia and development of a strong private sector economy (see Figure 2). Among the projects that sought to meet this need were efforts to encourage reform of tax, banking, fiscal, energy, housing, and privatization policies. U.S. funds have been made available for equity investments in small and medium business, and loans to small and micro-business. Technical advice has been provided to farmers and businesses, as well as opportunities to gain experience in U.S. firms. Various efforts have been made to encourage U.S. trade and investment in Russia.

FIGURE 2.—U.S. ASSISTANCE FOR RUSSIAN STABILITY: 1992–2000



Democratic reform

By the narrowest definition, only 8 percent of stability efforts in Russia were directly geared toward the development of democratic institutions and practices. These would include projects providing advice to staff of political parties and political election commissions, encouraging the growth of civil society through offering advice and funding to non-governmental advocacy organizations, promoting the rule of law through provision of judicial training programs and expertise on a civil code, and crime and anti-corruption programs. Democracy programs, more broadly defined, also have included a wide range of U.S. exchange programs and small grants to non-governmental organizations (NGOs), many of which facili-

⁵A fourth, miscellaneous, catch-all group, composes 5 percent of stability efforts. These mostly include funds for the Peace Corps and USAID training programs—cross-cutting activities that benefited all three stability objectives.

tated economic reform objectives, but whose effect, through exposure to U.S. institutions or development of indigenous civil society, has been helpful to democratic development. Just under one-fourth of stability programs fit into this broader definition.

Social and environmental reform

Social and environmental reform activities account for about 17 percent of stability efforts. Programs to improve the social welfare and environmental conditions of the Russian public, while meeting humanitarian concerns, were largely intended to bolster the key U.S. objectives of economic and democratic reform. Experts have argued that the Russian public would be more likely to support these objectives if they experienced fewer negative consequences as a result of reform efforts. Unenforced environmental standards by the Communist regime and the end of a cradle-to-grave social system has fostered a dramatic health and environmental crisis in Russia. Health programs supported by U.S. assistance have sought to reform health care delivery and financing systems, and they have targeted specific diseases such as HIV/AIDS and tuberculosis. U.S. hospitals have provided equipment and expertise to partner hospitals in Russia. Family planning assistance has been provided as an alternative to the common practice of abortion. Russian orphanages have been assisted.

Environmental programs have provided small grants to innovative indigenous projects and replication of "best practices," and have supported use of the Internet and e-mail to strengthen communication between environmental groups spread throughout Russia. They have supported forest management reform and reforestation, and pilot demonstration anti-pollution and energy efficiency projects. To avoid a Chernobyl-like scenario, the Department of Energy and the Nuclear Regulatory commission have provided training and equipment to improve the safety of Soviet-designed power plants.

CRITICISM AND ACHIEVEMENTS

When the FREEDOM Support Act was introduced in 1992, government officials tried to sell the program as a relatively shortterm effort, lasting until fiscal year 1998. However, even then, many realized that the transition to democracy and free markets might take a generation or more, depending on the sincerity and rapidity with which political leaders adopted the basic framework and laws of a new polity and economy. At the present time, Russia remains an unfinished work with analysts ranging from doubtful to hopeful in their views of its future course.⁶ Views of the U.S. assistance program follow the same trajectory. Both optimistic and pessimistic perspectives have helped shape the current program and can provide lessons for its future.

In any case, the role of the aid program in Russia's progression to what it is today and to what some expect it to become is hard to define. Even in countries such as South Korea or Costa Rica

⁶The former category might include Stephen F. Cohen, Failed Crusade: America and the Tragedy of Post-Communist Russia, W.W. Norton, NY, 2000. More hopeful views are expressed by Anders Aslund, "Underselling Russia's Economy," New York Times, January 18, 2000, and Michael McFaul, "Getting Russia Right," Foreign Policy, Winter 1999–2000.

where the aid programs were proportionately large and their political and economic development highly successful, making a connection between the U.S. programs there and specific consequences is obscured by the numerous variables that come into play. The results of some programs are more easily measured than others, such as numbers of children vaccinated, which logically means lesser incidence of disease, or elimination of missile launchers, which directly leads to the conclusion that U.S. security is enhanced. The immediate returns on most programs are often straightforward such as numbers of micro-loans provided or people trained in business management. How the trainees or loan recipients ultimately contributed to the broader objective of creating a market economy, however, is less transparent. If the objective is concrete, the program budget "sufficient," activities narrowly focused on the goal, and the recipient environment cooperative, as was more often the case with security and humanitarian programs in Russia, the results may be more transparent. Stability programs had few of these features and only the short-term results appear "measurable." Further, U.S. stability assistance was never expected to be the primary determinant of a successful Russian transition. Its impact could only be at the margins. Such considerations should be kept in mind when judging the impact of U.S. assistance programs in Russia.

CRITICISM

From the time it was launched, critiques of the aid program have emerged with regularity. Some attacks, many hyperbolic, had ulterior motives—those linking the aid program to Vice President Gore as the 2000 election approached or the snipes at aid implementors made by some unsuccessful applicants for funds. But criticism came also from knowledgeable individuals who sought a more effective outcome. The range of criticism can be summarized as follows:⁷

Too little, too late

Efforts to assist the democratic and economic transition in Russia have often been criticized as offering too little funding, too late. Early on, the George H. Bush Administration was criticized for reacting too cautiously to the dramatic changes taking place in the Soviet Union in 1991. CTR security initiatives came entirely from Congress. Although some small stability-related programs were proposed by the Administration, it was not until the April 1992 announcement of the FREEDOM Support Act, following critical comments from national figures such as former President Nixon, that a concentrated effort was made to offer U.S. aid and organize sup-

⁷In addition to these substantive, policy-related, critiques, observers have raised concerns regarding the administration of projects, such as the inadequacy of management, ineffectiveness of implementation, and possible malfeasance of individuals employed in projects. Some have opposed aid to Russia entirely, arguing that funds would be better spent on programs in the United States. Among more recent critiques are: "Food Aid to Russia: The Fallacies of U.S. Policy," Mark Kramer, Harvard University, October 1999; An Agenda for Renewal: U.S. Russian Relations, Carnegie Endowment for International Peace, December 2000; Collision and Collusion: The Strange Case of Western Aid to Eastern Europe 1989–1998, Janine R. Wedel, New York, 1998; International Efforts to Aid Russia's Transition Have Had Mixed Results, GAO, November 2000; Russia's Road to Corruption: How the Clinton Administration Exported Government Instead of Free Enterprise and Failed the Russian People, Speaker's Advisory Group on Russia, House of Representatives, September 2000.

port from international donors. To those expecting a new Marshall Plan in response to what appeared then to be a short window of opportunity for adoption of revolutionary but painful reforms, the U.S. contribution was considered paltry and half-hearted, and the bulk of offered international assistance, loans from the IMF and World Bank, were not appealing to a country reluctant to add to its debt.

A year later, the Clinton Administration proposed a significant increase in U.S. assistance—roughly \$1.5 billion. Following this one-time infusion of aid, annual levels appropriated for Russia quickly declined, settling below \$200 million. Throughout the decade, critics continued to remark on the disparity between the supposed importance of Russia to U.S. interests and the level of funding for efforts to effect change there. Although Russia received a greater proportion of available funding for the region, neighboring nations, such as Armenia and Georgia, with significantly smaller populations consistently ranked higher than Russia on a per capita basis.

Too much, too early

Some would argue that a major reason for failed projects and wasted resources in the early years was the impetus to spend before there was a serious prospect of success in certain sectors. Economic reform legislation was developed with U.S. assistance while a Communist dominated parliament promised to thwart each measure. Assistance was offered to develop farming before land was privatized. And foreign investment was encouraged before rule of law safeguards were in place to protect investors.

Too American

However much the United States claimed to provide to Russia, the fact is that much of the focus was self-serving, and many of the funds never left American hands.⁸ Moreover, many critics com-plained that Americans with specific knowledge of Russia were underutilized in the formulation and implementation of assistance programs. Stability programs designed and run by non-expert Americans were accused of displaying little cultural sensitivity and providing advice that was inappropriate. Few Russian staff members were hired to compensate for American ignorance of local matters. This critique was mostly aimed at the large for-profit contractors which focused on government policy reform work and dominated the aid program in the early years. Critics also argued that inadequate funds were provided to the relatively smaller NGOs which worked with the Russian grassroots and were more responsive to local realities and needs. As a result, U.S. assistance created a degree of public resentment, critics would argue, instead of the anticipated good will.

⁸A GAO report criticized the DOE Initiatives for Proliferation Prevention program for providing only one third of its funds to Russian institutes for employment of scientists. But most security assistance, in the form of U.S. equipment such as containers, and humanitarian aid—U.S. commodities—were items requested by the Russian Government. On the other hand, stability aid was mostly U.S. technical advisers and equipment, key exceptions being monetary grants to grassroots organizations, equity investments in private sector firms, and grants provided for on-lending to small and micro-business. The Russian Government had little to do with how stability funds were spent.

To the wrong Russians

Both the George H. Bush and Clinton Administrations argued that aid should follow reform. However, some argued that, partly due to the lack of Russia expertise or a misguided effort to support the Yeltsin government, aid was provided to individuals or groups that were not reformist. In particular, critics pointed to U.S. support for Anatoly Chubais' program of privatization, which they argue exacerbated income divisions and helped foster the so-called oligarchs. Policymakers, according to critics, blindly provided support to individuals like Yeltsin, despite his inconsistent support for economic reform and democracy, rather than to democratic "institutions." When a substantial amount of food aid was provided in 1993, many suggested that proceeds were channeled through corrupt officials who may have used them illegitimately. Others argued that congressional directives funneling funds to specific regions insured ineffective programs by assisting non-reformers.

The wrong strategy

Some critics disagreed with the mix of programs that were funded by the United States. They argued, for example, that stability programs emphasized economic reform efforts while leaving democracy programs underfunded. Stronger democratic institutions, they suggested, would have led to more economic reform. Other critics argued that too much assistance was provided to programs in Moscow and not enough to the regions. Others contended that too much went to the reform of Russian Government policies and not enough to grassroots activities and the private sector.

Some CTR critics argued that funding the destruction of chemical weapons was less important than elimination of nuclear weapons; others that more funds should have gone to insuring the security of materials used to produce weapons. Some questioned the wisdom of defense conversion programs, arguing they subsidized the Russian defense industry and had no effect on current production capacity. Others suggested that funding weapons dismantlement while Russia continued to modernize its systems simply subsidized modernization. Critics of food aid argued that sale of the commodities lowered local food prices and harmed Russian farmers, especially the new independent farmers some aid programs were trying to encourage.

There are many possible responses to the numerous and disparate criticism made during the past 10 years: It could be said that, no matter the amount of funds available, little could be done without a strong commitment on the part of the Russian Government to support the few Russian reformers who emerged in positions of power. While, there may have been American experts on Russia who knew more than Kremlinology, few of these had experience in running assistance programs, and no one had expertise on the transformation from communism to democratic capitalism. Everyone had a formula for how funds could best be spent. Each donor had different priorities and did not channel funds into a coherent program for maximum leverage. Congressional directives caused dispersal of limited U.S. funds on too numerous objectives.

ACHIEVEMENTS

In taking aim at individual aspects of the aid program—the privatization effort, corrupt food aid, insufficient support for democratization, etc.—critics often promoted the impression that the whole aid program was in dispute. While there was much in the critiques that rang true, there were also many things that could be said to be right with the program, positive accomplishments, some of which have been noted by the critics themselves.

Security program achievements

A January 2001 report by the Russia Task Force co-chaired by former Senate Majority Leader Howard Baker and former White House counsel Lloyd Cutler found that "current nonproliferation programs in the Department of Energy, the Department of Defense, and related agencies have achieved impressive results thus far ...".⁹ Among these are elimination of 336 SLBM launchers, 369 ICBM silos, 83 strategic bombers, 422 ICBMs, and 19 SSBNs. Secure storage of fissile materials has been enhanced by delivery of 32,000 containers and by assistance in construction of a storage center. The stockpile of nuclear weapons is more secure due to upgrades in inventory and security systems. Interdiction capabilities have been enhanced by providing border crossings with radiation detection equipment and guards with training. The employment of thousands of scientists may have helped prevent a brain drain of sensitive expertise in weapons of mass destruction and to some extent has re-directed it toward peaceful, commercial enterprises.

Humanitarian program achievements

The aid program has provided large quantities of food assistance to Russia, 1 million metric tons in fiscal year 2000 alone. It has also provided transport costs to deliver more than \$628 million in privately donated food, medical and other supplies, and contributed to international organization work in the North Caucasus region. While some of the food deliveries may not have been necessary, tens of thousands of displaced persons, children, pensioners, and other needy individuals received food and pensioners received financial aid from the proceeds of food sales they may otherwise not have received.

Stability program achievements

While no one will argue that Russia has become a full fledged western democracy and free market economy, it has changed radically since the end of the Communist era (and continues to evolve in directions we can only surmise). Tens of thousands of private businesses now exist, political parties and grassroots advocacy organizations proliferate, travel abroad is unrestricted, an open exchange of information, including the Internet and a free press exist. Stability programs did not create this situation, but they nurtured it, and, to some facets of the new order, the contribution was arguably significant. Stability programs sought to affect many discrete aspects of Russian life, but perhaps their greatest cumulative

⁹ A Report Card on the Department of Energy's Nonproliferation Programs with Russia, January 10, 2000, Russia Task Force, Secretary of Energy Advisory Board, page 1.

impact in the long-term may have been the introduction, dissemination, and practice of new ideas.

Exposure to new ideas.--A large number of assistance projects sought to change Russia by exposing its government and citizens to new ideas.

- Policy reform.—U.S. technical experts have provided advice to national and local governments on legal and administrative reforms in a wide range of sectors. While many reforms have yet to be implemented, these efforts have introduced officials to procedures and law in other countries and may influence future reform developments. A program to assist fiscal reform, for example, provided the Ministries of Finance and Taxation, the Budget Committee of the State Duma, the regional administrations of six Oblasts, and the municipal administrations of Novgorod and Tver with analytical models for forecasting the effects of tax policy. The program also trained a team of Russian specialists in these skills.¹⁰ Housing reform project staff reportedly contributed views on 160 national laws and decrees and directly drafted 37 legislative acts.¹¹
- Mortgage finance.—Housing reform specialists introduced the practice of residential mortgage lending to Russia by drafting a legislative framework for this activity, writing the industry's "how-to" handbook, and offering technical assistance to banks. By 1998, 47 banks were making mortgage loans.¹²
- International accounting standards.—U.S. experts promoted the use of international accounting standards to Russian business in order to make it easier to attract investors and qualify for loans and to promote transparency. In 1999 alone, 3,670 were trained.13
- Direct exposure to the United States .- Since 1992, more than 47,500 Russians were brought to the United States for both targeted education and training and broader familiarization with U.S. culture and institutions. For example, the SABIT program provided experience working in a U.S. business (131 in 2000), the Cochran program experience in agriculture-related concerns (50 in 2000), and the productivity enhancement program management-training internships (425 in 2000). The Russian leadership program brought promising leaders for short visits, including home-stays, at the grassroots level $(1,605 \text{ in } 2000).^{14}$
- Person-to-person exposure.-Several programs brought American volunteers to Russia, emphasizing personal contact with Americans as much as provision of "know-how" at a grassroots

¹⁰Work carried out for USAID by Georgia State University. Final Report Evaluation of the Impact of Technical Assistance on Russia's Fiscal Reform and the Identification of Possible Fu-ture Work, Carana Corporation, March 21, 2000, p. 49. Advice on tax administration and en-forcement was also provided by Department of Treasury-appointed advisers in the Ministry of Finance.

¹¹Work carried out for USAID by Urban Institute. Evaluation Report: The Russian Housing Sector Reform Project Phases I and II, Carana Corporation, November 1999, p. 4. ¹²Evaluation Report: The Russian Housing Sector, p. 28–33. ¹³Results Review and Resource Request: USAID/Russia, April 2000, p. 14.

 ¹⁴ Implemented by the Department of Commerce, Department of Agriculture, and Library of Congress, respectively. The vast majority of exchange programs (serving more than 32,000 Russians since 1992) are conducted by the Department of State's Bureau for Education and Cultural Affairs; USAID has brought over 9,000 Russians to the United States for project-related training

level. During their 2 year term of service, Peace Corps volunteers (100 in 2000) taught English and business skills. The Farmer-to-Farmer (150 in 2000), Financial Service Volunteer Corps, International Executive Service Corps, and others provided the technical skills of practicing and retired farmers and businessmen to their counterparts in Russia on a one-to-one, short-term basis.

• Advice and training for business.-Emerging businesses and their employees received both general and specialized training in business skills as well as targeted, individualized advice. Many of the volunteer programs noted above were aimed at providing experts to individual business clients to help solve specific problems, such as how to improve production or marketing. Nearly 1 million Russian school children were introduced to concepts of capitalist economics through Junior Achievement programs.

Creating vehicles for dissemination of ideas.—Many aid projects sought to increase the capabilities of organizations that traditionally act as agents of change and disseminators of new ideas.

- Internet networking.—In the first years of the assistance program, aid was provided to the Initiative for Social Action and Renewal in Eurasia (ISAR), an organization which facilitated the sharing of ideas and strengthened the solidarity of environmental NGOs in part by establishing an e-mail network system linking them. Support for Internet access and training at more than 50 sites throughout Russia has been provided to alumni of U.S.-sponsored exchanges in order to build contacts among them and reinforce positive experiences gained while in the United States.¹⁵
- Think tanks.—To continue the policy reform work provided by U.S. experts, USAID supported the creation and strengthening of indigenous Russian think tanks whose expertise-often former Russian associates of U.S. technical experts-could be drawn upon by national and regional governments. For example, the Institute for Economies in Transition, run by Yegor Gaidar, received grants for tax, budget, land code, and other policy studies and providing advice to the government. The Moscow School of Political Studies trained young leaders in democratic principles.
- Developing civic organizations.—The United States has aided the development of institutions, such as NGOs, political parties, and trade unions, that advocate new ideas and are essential to a healthy civic society. U.S. assistance helped 5,000 NGOs in 1999 through 48 Russian NGO resource centers.¹⁶
- Independent media.—U.S. aid has provided training and technical assistance to television and print media. During the 1998 economic crisis, grants were provided to help independent television stations survive despite a drop in advertising revenue.¹⁷

¹⁵ The Internet Access and Training Program is carried out by Project Harmony for the Department of State.

¹⁶Work carried out for USAID by International Research and Exchange Board (IREX), ISAR, and others. USAID Results Review, p. 28. ¹⁷Work carried out for USAID by Internews and others.

• Developing business support organizations.—Assistance programs provided support to 33 business service centers to provide consulting and other services to small and medium business, and fostered development of business educational training through support to 59 business schools.¹⁸

Putting ideas into practice.-Through grants, lending programs and other means, U.S. assistance has helped individual businesses and civic organizations apply the new entrepreneurial and democratic concepts often learned through training and technical assistance.

- Loans and guarantees.—The United States provided funds to Russian institutions for on-lending to micro-, small-, and medium-sized businesses. USAID programs alone disbursed more than 7,100 micro-loans between 1995 and 1999. U.S. guarantees on bank loans promoted introduction of consumer finance activities in Russia. A U.S. assistance program provided guarantees on loans to enable Russian banks to make their first residential mortgage and auto loans.¹⁹
- Grants.—Several programs provided competitive grants to NGOs to enable them to conduct programs contributing to reform at the grassroots level. Since 1993, a U.S. funded foundation has provided more than 2,000 grants worth over \$50 million to NGOs, local governments, independent media, and private businesses seeking demonstrable positive results in the fields of enterprise development, public administration, and civil society. Another program awarded funds (87 grants in 1999, most in the \$30,000 range) to replicate successful environmental practices.²⁰

THE RUSSIA PROGRAM TODAY

The U.S. assistance program of today is substantially different from that of its initial several years. Lessons learned as a result of failure and achievement, of criticisms and congressional review during the first years set in motion an evolving re-evaluation of programs and redistribution of resources. In many cases, programs were revised internally even before outside criticisms were made.

By fiscal year 2000, the most recent year for which data is available, the program's broad profile had shifted dramatically (see Figure 3). First, program priorities appeared to have changed. Whereas a 10 year profile showed a near balance between spending on security, stability and humanitarian concerns, by fiscal year 2000, there was an overwhelming emphasis on the security objective, while the stability effort declined significantly. This relationship is real as well as proportionate. Security funding increased in absolute terms over the period and even began to be drawn from the

¹⁸Service centers work implemented for USAID by Citizens Democracy Corps, Agricultural Cooperative Development International and Volunteers in Overseas Cooperative Assistance (ACDI/VOCA), and others; Morozov schools by the Russian Academy for Management and Mar-

ket. ¹⁹ Work carried out by the U.S.-Russia Investment Fund. The U.S.-Russia Investment Fund also made more than \$30 million in equity investments in more than 30 promising Russian small and medium businesses. The results, however, are not demonstrably positive at this time. ²⁰ Work implemented for USAID by the Eurasia Foundation and the Institute for Sustainable

Communities, respectively.

chief pool of resources available for stability funding, the NIS account appropriations. Meanwhile, stability funding, as suggested by NIS account levels, was cut (see Table 1). Cuts came partly due to the perception that the program was slow in meeting its economic and political reform objectives. They also reflect broad cuts in foreign aid following the accession of a budget-trimming Republican Congress (that have been reversed since 1999). Moreover, cuts were made specifically for Russia programs in response to concerns regarding Russian Government behavior abroad and at home.

FIGURE 3.—OBJECTIVES OF U.S. ASSISTANCE TO RUSSIA [Fiscal year 2000]

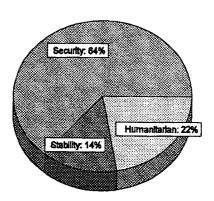


TABLE 1.--- U.S. ASSISTANCE TO RUSSIA FROM NIS ACCOUNT

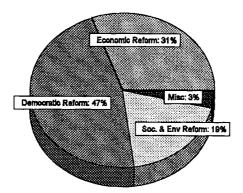
[Dollars in millions]

Fiscal year	Administration request	Allocation after appropriation
1992–1993	(1)	\$350.0
1994	(1)	1.300.0
1995	\$379.4	344.2
1996	260.0	137.0
1997	173.0	94.8
1998	241.5	133.2
1999	225.4	161.2
2000	295.0	186.6
2001	161.9	167.8
2002	167.0	

¹ Prior to fiscal year 1995, the administration did not break down its NIS account request by country.

Bearing the brunt of budget cuts and criticisms, the composition of the stability program changed far more sharply during the decade than did the humanitarian or security programs.²¹ Perhaps the most striking feature has been a shift in emphasis from economic reform to democratic reform. For the whole period, economic reform received 54 percent of stability funds; but in fiscal year 2000, it received only 31 percent (see figure 4). Democratic reform efforts, on the other hand, were supported with 24 percent of overall funds, but in fiscal year 2000 received 47 percent. To be sure, the emphasis seems to be on exchanges rather than institution-building, but even the narrowly defined democracy programs now represent 13 percent of stability efforts versus 8 percent during the whole period. The greater priority now given broad democracy activities re-flects the lack of progress in economic reform until recently, past criticism that not enough attention was being paid to democracybuilding and person-to-person contacts, and cuts in assistance to the central government of Russia which was the recipient of much economic reform aid. The cuts were the result of congressionally imposed conditions that subjected half of aid to the central government in fiscal year 1998 and later years to the requirement of a presidential determination that Russia had terminated sales or transfer of nuclear reactor technology to Iran.





By 2000, the make-up of the stability program had changed in a number of other important ways. Extrapolating from the experience of USAID, which accounted for roughly half of stability program activity, very little assistance was still being directed toward helping the central government of Russia. Although the central government was the key target of the large number of policy reform efforts undertaken in the 1993–1995 period—in fiscal year 1996, the first year for which data is available, accounting for 17 percent of USAID's program—by 2000, central government-related projects accounted for only 7 percent. The proportion is likely

²¹ Within the security program, percentages devoted to weapons dismantlement, material control, and demilitarization changed little during the period.

smaller today. Support for private sector activities rose correspondingly, from 68 percent of the fiscal year 1996 program to more than 82 percent in fiscal year 1999.

There is also some evidence that, compared with its early years, the assistance program now has more activities in the regions than in Moscow and Petersburg (80 percent in the regions in fiscal year 2000), more funds directed toward NGOs (75 percent in fiscal year 2000), and more Russian nationals involved as both implementors and staff. Many of these changes were featured in the Clinton Administration's Partnership for Freedom initiative, which was introduced in 1997 largely in response to the criticisms noted above and in an effort to recover congressional support. A Regional Investment Initiative was introduced at the same time, concentrating aid on three (now four) regional sites in a bid to attract foreign investment and increase program effectiveness. The two initiatives promised to alter the presiding aid strategy toward Russia, and, in this, appear to have succeeded.

PROSPECTS FOR THE FUTURE

Ten years after the assistance program was launched, the time may be ripe for an assessment (and, in the case of stability assistance, a reassessment) of the strategies designed to make each aid objective achievable. A review of the broader issue of what should be the objectives of the U.S. aid program in Russia may also be in order.

While the stability program may now have met the main criticisms of the early to mid-1990s—and scrutiny of individual projects under this program must continue in order to enhance its effectiveness—it is not clear whether the program adequately meets present or future needs. This question is put into sharper focus in 2001, as the Russian Government at last appears serious in its support for economic reform legislation. Some argue that constraints on U.S. support for economic policy reform—restrictions on aid to the central government and limited availability of funds may mean a lost opportunity for a critical U.S. contribution on this issue. In view of recent threats to freedom of expression in Russia, the U.S. program's growing attention to democratic reform would appear to merit continued, if not strengthened, U.S. support, but constraints on funding levels and program flexibility may limit U.S. efforts here as well.

Questions have also been raised regarding the availability of funding for security programs. The Bush Administration submitted an fiscal year 2002 request for Energy Department non-proliferation activities—control and protection of nuclear materials and demilitarization programs that fund alternative employment for scientists—that represented a 12 percent decrease from fiscal year 2001 allocations.²² With some observers arguing for significant increases in non-proliferation assistance to Russia—the Baker-Cutler report called for spending \$30 billion over the next 8 to 10 years, and the September 11 attacks generated heightened nuclear proliferation concerns—Congress restored some, but not all, of the

²²An Administration review of non-proliferation programs in 2001 proposed no significant change to Department of Defense CTR programs.

funding, leaving an 8 percent cut. Efforts by one member to redirect \$130 million to non-proliferation programs did not meet with success, but indicated that there is likely to be further discussion in the coming year on how security programs have met and will continue to meet critical U.S. interests.

In fact, there is dispute over whether relative proportions of funding going to stability, security, and humanitarian objectives appropriately represent current and future U.S. interests. Until now, policymakers have dealt with stability and security objectives mostly through different funding spigots and rarely considered the U.S. effort in Russia as a whole piece. But some analysts would argue that there can be no sure security for the United States regarding Russia's weapons of mass destruction unless that country is a more democratic and economically stable society. All three objectives, according to this view, are intimately intertwined.

The United States continues to hold a very strong interest in Russia and the outcome of events there. Whatever the accomplishments of the past 10 years, U.S. assistance may continue to play a role in those events. Whether that role should be expanded—and, if so, how—is likely to challenge policymakers in the future.

ARMS EXPORTS AND RUSSIA'S DEFENSE INDUSTRIES: ISSUES FOR THE U.S. CONGRESS By Kevin P. O'Prey¹

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SUMMARY

In recent years, Russia has experienced a significant improvement in its arms export performance. During the year 2000, Russia signed deals making it the world's second leading supplier of armaments. Moreover, in contrast to Soviet experience, the Russian Government and defense enterprises actually are making money off of these commercial deals.

The implications for U.S. national security and the Congress are several. First, regardless of the state of U.S.-Russia relations, the United States will have little leverage to overcome Moscow's very significant incentives to export as many weapons as possible to whoever will pay for them. Second, export success will do little to improve the current poor state of Russia's military and defense in-

¹Dr. Kevin P. O'Prey is Executive Vice President of DFI International's Government Practice, a Washington, DC-based research and analysis firm. The analysis presented here is based on work he has conducted at DFI International, at the Brookings Institution, and for his doctoral dissertation for the Massachusetts Institute of Technology. The author would like to thank Ms. Agnes Lee, Mr. Erik Teleen, and Mr. Graig Saloom for their research assistance and Dr. Eugene Rumer for providing comments on a previous draft.

dustries. While export revenues have certainly improved the financial health of some Russian defense enterprises, overall they are not likely to help Russia to develop and produce new, technologically competitive weapon systems. Third and perhaps most important for the United States, Russia's aggressive approach to arms exporting will almost certainly contribute to the proliferation of high technology weapon systems to countries that are potential U.S. competitors—China and Iran being the most significant cases in point.

What is the current state of Russian conventional arms sales abroad and what are Russia's near-term prospects? What does the answer mean for Russia's defense industrial sector, for the proliferation of high technology weapons, and, by extension, for U.S. national security? In recent years, Russia's state organs and defense enterprises have improved Russia's performance as an arms exporter. This paper examines Russia's recent success, the factors that explain it, as well as their broader implications for Russia and the West.

While Russia's arms sales successes have had a positive impact on the financial health its defense sector, their effects have been decidedly limited in scope. Only about seven to ten of Russia's approximately 1,600 defense enterprises appear to have benefited significantly from arms sales. Moreover, even for these fortunate few, arms export achievement has not translated into success in overcoming the many structural challenges to the development of profitable firms in the Russian defense sector. At most, arms export success appears to have helped a few design bureaus undertake modest research and development (R&D) initiatives and a few production facilities to maintain a manufacture that, by historical Soviet standards, is modest. Translating this R&D and low manufacturing rate into the production of new, technologically competitive weapon systems, however, seems exceedingly difficult.

Overall, the infrastructure of the Russian defense sector appears to be remarkably immutable. Despite a decade of economic privation and repeated attempts to reform or downsize the defense industries, few, if any, defense enterprises have formally gone bankrupt. Rather than shut their doors, many plants continue to operate at minimal production levels. While managerial changes have occurred in many plants, organizational restructuring has been very limited.

Against this backdrop, there is a broad consensus among Russian decisionmakers—in government and industry—on the need to export arms. From the government's perspective, the value of arms export ranges from diverting the attention abroad of potential subsidy-seeking enterprises; sustaining key components of a defense industrial base it can no longer afford; reducing the per unit costs of defense production; as well as obtaining hard currency revenues for state and, in some cases, personal coffers. For industry, exports represent the potential to restart or maintain modest production levels; to pay worker salaries; to invest in some new projects; and to profit on a personal level.

The implications for the U.S. Congress are several. First, the motivations for continued aggressive Russian efforts in the global arms export arena are profound and, probably, enduring. The United States possesses few instruments to discourage Russian efforts in this arena. Moreover, post-9/11 improvements in U.S.-Russian security relations are not likely to change Moscow's export behavior. Second, Russia's increased arms export success seems unlikely to have much of an impact on Russia's defense industrial capabilities. While export revenues improve the financial position of some enterprises, export success appears fundamentally only to delay inevitable restructuring. Third, Russia's export efforts will increase the proliferation of advanced conventional systems to countries that might pose a threat to U.S. forces-China and Iran being the most important examples.

THE STATE OF RUSSIAN ARMS EXPORTS

Like the Russian economy more broadly, the Russian defense industries have turned a corner in the last 2 years. After hitting bottom in terms of economic performance, some Russian defense enterprises appear to be showing signs of modest levels of activities. While a spike in procurement orders due to the war in Chechnya provided an initial boost, the real basis for this improved state of affairs has been arms export success. During calendar year 2000, Russia succeeded in signing arms sales agreements worth approximately \$7.7 billion. As Figure 1 demonstrates, this represents an improvement over 1999 results by nearly 90 percent and a remarkable 270 percent increase over the 1998 figure. According to unofficial estimates, Russia's performance for calendar year 2001 would be comparable.² After a decade of efforts by the government and defense industries, Russian export promotion is finally paying off.

Part of Russia's export success can be attributed to a global increase in the level of the arms trade. After bottoming out at \$24.3 billion in 1997, the level of worldwide arms transfer agreements increased steadily to \$36.9 billion in 2000.3

Yet Russia's 2000 success also reflects a trend of increasing market share relative to its non-U.S. competitors in the global arms trade. Although the United States continues to hold the dominant position in the market—50 percent of year 2000 arms transfer agreements—Russia has laid claim to a strong second place with nearly 21 percent of the 2000 value (See Figure 2). Figure 2 also demonstrates that, with the exception of 1998, when it signed agreements worth only \$2.6 billion, Russia has occupied either second or third place among global arms exporters since 1995.

The lion's share of Russia's recent success can be attributed to Asia. As Figure 3 depicts, during the 1997–2000 period, the Asian market accounted for over three-fourths of Russia's export agreements with the developing world. The lucrative Middle East market, meanwhile, accounted for a 16 percent share of Russia's agreements. Africa accounted for just over 6 percent.

 ²Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993-2000, (Washington, DC: Congressional Research Service, August 16, 2001), Figure 1, p. CRS-21. By November 2001, Rosoboroneksport was predicting export revenues on the order of \$4 billion for 2001. If historical trends hold, that would put the overall revenue Figure for Russian arms exports at approximately \$5 billion. See "In Brief: Arms Sales Near \$4 Bln," Moscow Times, November 16, 2001, p. 6.
 ³These figures are in constant calendar year 2000 dollars. The data are from Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993-2000, Table 8A, CRS-72.

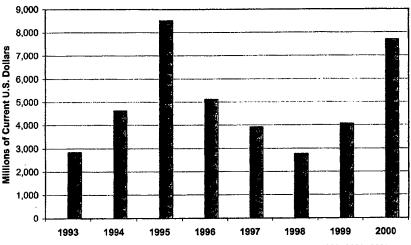
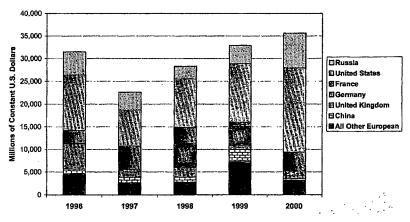


FIGURE 1.—RUSSIAN ARMS TRANSFER AGREEMENTS WITH THE WORLD, 1993–2000

Source: Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993-2000, 2001.

FIGURE 2.---ARMS TRANSFER AGREEMENTS WITH THE WORLD, BY SUPPLIER, 1996---2000



Source: Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993-2000, 2001.

Even within the Asian market, Russia's success is highly concentrated to two customers: China and India. Recent Chinese acquisitions include over 20 Su-30MKK and 8 Su-27UBK fighter aircraft; a Kilo-class submarine; 13 Tor M1 surface to air missiles; and 2 Sovremenny class destroyers. Some reports project China as potentially accounting for between 30 and 50 percent of Russia's arms exports over the next decade. In terms of India, over the

2000-2001 period, New Delhi signed deals for the purchase or licensed co-production of over 130 Su-30MKI fighter aircraft; 310 T-90 tanks; and a Kilo submarine.⁴

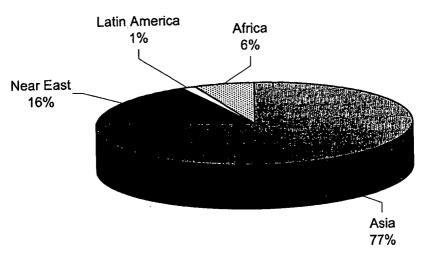


FIGURE 3.—RUSSIAN REGIONAL ARMS TRANSFER AGREEMENTS, 1997–2000

Source: Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993-2000, 2001.

MAKING MONEY

Perhaps more important than the overall value of agreements, in contrast to the Soviet era and the experience of the early 1990s, Russia appears to be earning hard currency from its recent arms sale successes. During the 1980s, arms export "success" on the order of \$20 billion a year was tempered by the fact that the U.S.S.R. typically received hard currency payment for only one-third of its arms exports.⁵ The situation did not improve markedly in the early 1990s, as Rosvooruzheniye, the Russian arms export agency, reportedly negotiated deals that often involved payments in kind, debt swaps, or "soft" currency, such as Indian rupees. For example, in a deal that sent MiG-29s to Malaysia, Moscow agreed to accept one-fourth of the payment in the form of palm oil. In another case, the director of the Krasnoye Sormovo shipyard complained that half of China's payment for two diesel submarines was

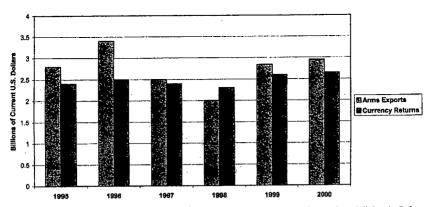
⁴ Interfax interview with Konstantin Makienko, "Military-Technical Cooperation between Rus-

⁴Interiax interview with Konstantin Makienko, "Military-lechnical Cooperation between Rus-sia and China, 17 July 2001, reprinted on www.cast.ru/english/database1.html?article=102. ⁵See Kevin P. O'Prey, *The Arms Export Challenge: Cooperative Approaches to Export Manage-ment and Conversion*, (Washington, DC: Brookings Institution, 1995), p. 75 and Pavel Fel'gengauer, "Rezkoye sokrashcheniye eksporta otechestvennogo: oruzhiya vpervyye obyavleny ofitsial'nyye tsifry voyenno tekhnicheskogo sotrudnichestva za 1991 god," (Sharp Reduction in Exports of Our Weapons: The First Releases of Official Figures of Military-Technical Coopera-tion for 1001b Nervicing Constanting Sentember 20, 1000 pr. 1.2 tion for 1991), Nezavisimaya Gazeta, September 29, 1992, pp. 1-2.

made up of jogging shoes and women's sandals. all of which reportedly disintegrated within a month of delivery.⁶

As Figure 4 demonstrates, the situation turned for the better in 1997 and has been improving ever since. According to Rosoboroneksport, its predecessor as the official Russian arms export agency took in hard currency for approximately 90 percent of its sales in 1999 and $2000.^7$





Source: Novichkov, Nikolai. "Russia Exports \$3.6B of Arms in 2000. Sees Strong Growth." Jane's Defence Weekly, 2001.

RUSSIA'S MARKETS

Although some of Russia's client relationships appear only to be curiosities of the international arms market-e.g., purchases by North Atlantic Treaty Organization (NATO) member Greece and by the United Arab Emirates, which can afford to maintain relationships with multiple suppliers—the broader picture is more worri-some. From the U.S. perspective, most importantly, the principal markets for Russian conventional arms sales are some of those countries that have been the most vocal opponents of America's leadership role around the globe. Although commercial sales do not suggest an anti-U.S. alliance, in some cases, they could pose threats either through technology transfer or the direct enhancement of military capabilities that might be used against the United

⁶See Sergey Mashtakov, "MiG i v Malayzii. Kto eshche kupit nashi istrebiteli?" (MiG also in Malaysia. Who Else Will Buy Our Fighters?" Rossiyskaya Gazeta, September 7, 1994, p. 3; Pavel Fel'gengauer, "Torgovlya oruzhiyem ne tak vygodnaya Rossiy, kak utverzhdayet Rosvooruzheniye," [The Arms Trade Is Not As Beneficial to Russia as Rosvooruzheniye Asserts] Segodnya, March 10, 1995, p. 2; and Unidentified Correspondent, "Shibayev, Deputy Chairman of the Committee for Foreign Economic Relations: If Everyone Were Allowed to Sell Arms, the Unjustified Competition Would Lead to a Fall in Prices," Komsomolskaya Pravda, February 25, 1992, p. 1, translated in Foreign Broadcast Information Service (FBIS) SOV 92–039, pp. 31–32. ⁷ There are no data available for hard currency returns of enterprises operating independently of Rosvosruphonic@Roschomendescort

of Rosvooruzheniye/Rosoboroneksport.

States or our allies. The remainder of this section addresses Russia's most noteworthy partners.

The China market

Beijing clearly ranks as Russia's most important client for armaments. Although Russia and the People's Republic of China have had an on-again, off-again relationship in terms of militarytechnical cooperation throughout China's Communist period, ties between the two strengthened considerably during the 1990s. During this period. Russia's defense complex has come to look on the China market as essential for its survival. In a series of 1999 interviews with a range of officials from the Russian Government and defense industries, virtually all respondents strongly defended arms sales to China as critical sources of revenue for Russian enterprises and design establishments. As one interviewee put it. Russian defense industrialists may find cooperation with China to be "degrading" as they would prefer to work with Western hightech partners. However, financially speaking, they find that they have few options.8

Apparently, only the Russian General Staff had expressed any objections to military technical cooperation with China. Reportedly, some General Staff officials argue that in 10 to 15 years, the Chinese military threat could return based on a foundation of transferred Russian technology. Yet these arguments do not carry the day as Kremlin decisionmaking is more focused on near-term financial and domestic political considerations.9

The full extent of Russian-Chinese cooperation is difficult to determine through open sources. According to one observer, one of the conditions that Beijing demands for its cooperation with Russia is absolute secrecy regarding its agreements. Reportedly, the Chinese Government explicitly threatens to terminate any deals that are leaked to the public. The Russian Government and enterprise managers evidently view the relationship as important or valuable enough to comply with these conditions. As a consequence, despite a general tendency to advertise arms sales success and to discuss defense industry issues in public, virtually no commentators-official or unofficial—will touch this subject in any but the most general terms, either publicly or privately.¹⁰

The only restraint on the China relationship currently appears to be the product of Moscow's concern about Chinese reverse engineering of Russian technologies. Historically, China has sought to use arms imports as a means of technology-rather than hardware—acquisition. In an often-cited example, Chinese industry evidently reverse engineered MiG-21s purchased from the Soviet Union as the basis for its J7 fighter aircraft development. As a consequence, the Russian Government evidently bars transfer of its highest technology items to Beijing. In fact, according to one source, Russia permits India greater access to high technology than

 ⁸ Kevin O'Prey, "Analytical Report of Trip Findings," Unpublished Report for DFI International, December 21, 1999, p. B-3.
 ⁹ Kevin O'Prey, DFI Trip Report, p. B-3.
 ¹⁰ Kevin O'Prey, DFI Trip Report, p. B-2.

it does to China, a fact that has proved to be a continuing sore spot for Beijing.¹¹

Last, although technology acquisition is still a priority for Beijing, recent agreements suggest that the trend for the Chinese Government currently is in the direction of purchase of foreign systems, rather than the development of indigenous capabilities. This development might be due to Beijing's perceived need to build up its military forces rapidly to match its foreign policy priorities, or its recognition that its experience with reverse engineering has not been particularly effective, or some combination of the two factors. Since the mid-1990s. Chinese deals with Russia have included:

- The purchase of more than 72 Sukhoy 27 fighter aircraft;
- The purchase of 4 Kilo class attack submarines;
- Co-production of 200 Su-27 aircraft;
- 2 Sovremenny-class destroyers and their associated missile systems:
- The purchase of 40 to 60 Su-30MKK fighter aircraft; and
- An agreement to purchase at least 4 upgraded A-50E Mainstay airborne early warning aircraft.¹²

Of particular concern to U.S. national security, many of these capabilities reportedly are being acquired to improve Chinese forces for a Taiwan Straits scenario.¹³

Cooperation with India

Long a client of the Soviet Union, New Delhi has continued a robust relationship with the Russian defense industries. In late 2000, Russia concluded a licensed production agreement with India valued in excess of \$3 billion for 140 Su-30MKI combat aircraft. It also concluded an agreement for the sale to India of 310 T-90C main battle tanks for about \$700 million, and an agreement to retrofit and deliver the Admiral Gorshkov aircraft carrier for over \$650 million.¹⁴

In contrast to recent developments with China, New Delhi appears to view its relationship with Russia as a source not just for armaments, but also for technology to support India's growing defense sector. For example, India has a long history of co-production agreements with Soviet and then Russian defense industries. The trend continues as New Delhi's recent purchase of 124 T-90 tanks was exceeded in quantity by the 186 additional T-90s for which India purchased production licenses.¹⁵

Despite the recent improvements in U.S.-India ties, New Delhi's military-technical cooperation with Moscow appears to be both robust and likely to persist. For one, as noted below, with a force compromised primarily of Soviet and Russian weaponry, it would

¹¹For example, according to one observer, cooperation over the Su-27 program has been con-strained by Russian refusal to share advanced hot zone technology for the Lyulka engine. See Kevin O'Prey, DFI Trip Report, p. B-4. ¹²Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993-2000, p.

CRS-8.

¹³See e.g., Interfax interview with Konstantin Makienko, "Military-Technical Cooperation be-tween Russia and China," 17 July 2001, reprinted on www.cast.ru/english/database1. html?article=102.

 ¹⁴ Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993–2000,
 ¹⁴ Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993–2000,
 ¹⁴ Sington, DC: Congressional Research Service, August 16, 2001), p. 8.
 ¹⁵ See Lyuba Pronina, "Fired Up About Arms," The Moscow Times, September 24, 2001.

be extremely expensive for New Delhi to further diversify into NATO-standard equipment.¹⁶ Second, Russian weapons are affordable, and Moscow has demonstrated a willingness to supply India with its most advanced technology.

The Iran relationship

In the past year, Moscow has renewed its cooperation with Tehran in the conventional military arena. Immediately after the fall of the Soviet Union, Iran was a major purchaser of Russian weapons. Among the Russian items acquired by Iran were MiG-29 fighter aircraft, Su-24 fighter-bombers, T-72 submarines, and Kiloclass attack submarines.¹⁷ Under pressure from the United States, Russia largely suspended conventional cooperation with Iran throughout the 1990s.¹⁸ However, as a result of the decline in U.S.-Russia relations, increased economic pressure at home, or both, in 2000 Moscow notified the United States that it would resume its arms cooperation with Tehran. True to its word, Russia signed agreements in December 2000 to provide Tehran with air defense systems (the S-300 and Tor-M1) and Kamov-50 helicopters.¹⁹ According to one Russian source, Tehran acquired the advanced air defense systems to defend the Bushehr reactor complex.²⁰

Subsequently, during a March 2001 visit to Moscow, Iranian President Mohammad Khatami presented a more robust wish list to Russian officials. Among the items Khatami sought were:

- Tanks:
- Patrol boats;
- The Shkval and other torpedoes;
- Upgrades to its MiG and Sukhoy fighters;
- Yakhont anti-ship missiles.²¹

In a much heralded October 2001 visit, Iranian Defense Minister Ali Shamkhami signed a military-technical cooperation agreement worth up to \$300 million annually. Although the agreement constitutes only a framework, press reports described Shamkhami as negotiating to purchase Inconder long range supersonic missiles, Yakhont anti-ship missiles, surface-to-air missiles, and stealthy patrol boats.²² Earlier in the summer, Iran had signed contracts with Rosoboroneksport for 30 Mi-8 cargo helicopters.²³

Tehran's wishes aside, there are a number of reasons to expect some limits on m Moscow's future dealings with the Iranians. Most significantly, Tehran's wishes certainly exceed its current means. Regardless of the common cause that Moscow and Tehran have

¹⁶On the Indian arsenal, see *The Military Balance*, 1999–2000, (London: The International In-stitute for Strategic Studies), pp. 161–163 and Rahul Bedi, "India's T–90 Tank Deal with Russia Runs Into Difficulty," *The Asian Age*, December 1, 2000, pp. 1–2. ¹⁷ Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993–2000, p.

CRS -8.

¹⁸ Illicit transfer of ballistic missile technology and broader nuclear cooperation were notable exceptions to the rule. ¹⁹David A. Fulghum, "Iran Specifies New Weapons Mix," Aviation Week and Space Tech-

 ¹⁹ David A. Fulghum, "Iran Specifies New Weapons Mix," Aviation Week and Space Technology, March 26, 2001, p. 32.
 ²⁰ David A Fulghum, "Iran Specifies New Weapons Mix," p. 32.
 ²¹ Chris Stephen, "U.S. Anger as Putin Seals Arms Deal with 'Rogue' Iran," The Scotsman, March 13, 2001, p. 13.
 ²² See Nikolai Novichkov and Vladimir Shvaryov, Vremya MN, October 3, 2001; and Agence France Presse, October 4, 2001, via Lexis Nexis.
 ²³ The total value of that deal was reportedly \$150 million. See Vedomosti, November 1, 2001, reprinted in The Russian Business Monitor, November 2, 2001.

found in fighting Islamic extremists in Central Asia, Iran is a financially strapped state. Moreover, Russia has commercial interests mitigating against a strong relationship with Tehran. In particular, Moscow recognizes the transfer of advanced capabilities to Iran will potentially alienate the Gulf states, who, both individ-ually and collectively, represent substantially more market potential than Iran.24

UNDERSTANDING RUSSIA'S SUCCESS

Russia's recent success can be attributed to a broad range of factors, ranging from the appeal of Russian weapons on the global market, to the need for defense plants to find any resource of revenues in the absence of state orders, to the government's desire either to divert the attention of needy defense enterprises or to find international funding for its priority initiatives. Also, for some officials in industry and government, arms exports are personally enriching. Despite recent growth in the economy, it is impossible to overstate the value of hard currency in Russia.

THE RUSSIAN APPEAL

On the demand side of the equation, Russian armaments are very attractive commodities in some markets. One of the most important factors behind this appeal is the affordability of Russian weapons. Because Russia's defense enterprises are still the beneficiaries of a range of implicit subsidies, Russian weapons typically are the product of negative net value or value subtraction in production: the inputs to the typical weapon system are worth more on the world market than the final product itself.25 These subsidies are generally not the product of a defense promoting strategy on the part of the Russian Government. Rather, they are a by-product of what economists Clifford Gaddy and Barry Ickes termed the "virtual economy."²⁶ In short, because Russian enterprises do not pay market prices, key factors of production such as energy are exchanged at prices well below international market rates. Furthermore, because barter persists among enterprises, much of the real value of economic transactions goes unrecorded. As a consequence, soft-budget constraints persist and Russian manufacturers can offer prices for weapons that are considerably cheaper than the input costs.

Second, despite the financial and technological struggles of the Russian defense sector in recent years, some Russian systems are actually quite competitive technologically on the global market. For example, Russia has been willing to sell the state of the art Yakhont, an anti-ship missile that uses scramjet technology.²⁷ In

²⁴ Marina Koroleva, interview with Ruslan Pukhov, Director of the Centre of Analysis of Strat-egies and Technologies (CAST), and Konstantin Makienko, Deputy Director of CAST, during *Ekho Moskvy Radio* program, 1408 GMT, January 17, 2001, translated in FBIS, January 17, 2001, Document ID: CEP 20010117000369. ²⁵ Vitaliy Shlykov, "The Potemkin Complex: A Government Program Cannot Solve the VPK's Problems," *Itogi*, April 10, 2001, translated in FBIS, April 9, 2001, Document ID: CEP 200110409000302. ²⁶ Clifferd Coddy and Repertation, "Busic's Virtual Foregam," Foreign 46, and 77

²⁶ Clifford Gaddy and Barry Ickes, "Russia's Virtual Economy," Foreign Affairs, vol. 77, no.

^{5.} ²⁷ John A. Battilega, David R. Beachley, Daniel C. Beck, Robert L. Driver, and Bruce Jackson, Transformation in Global Defense Markets and Industries: Implications for the Future, National

addition, Russia also produces reliable space launch systems such as the Proton rocket at a time when there is global shortage in space launch.²⁸ Russia's competitiveness in this area is underscored by the fact that U.S. defense giants such as Lockheed Martin have entered into joint ventures. Furthermore, although their electronics components are poor, Russia continues to produce outstanding air defense missile systems, such as the S-300.29

Third, Russian defense enterprises and state organs have demonstrated little discretion in terms of end users. Governments that find themselves internationally ostracized can often find a willing seller in Moscow. Generally speaking, unless a government is under United Nations (UN) sanction. Russia will sell to it. For example, as noted above, Russia proceeds with a robust arms sale re-lationship with China despite Russian General Staff concerns that Beijing is a likely future military competitor.³⁰

Finally, the Russians have simply gotten better at sales. Western participants in recent international arms expositions observe that Russian presentations have become significantly more professional. From the attire of the industry representatives to the quality of their glossy brochures, there is a marked improvement in the salesmanship of Russian exporters. Part of the explanation can be traced to learning. Another part can be attributed to the recently achieved organizational stability of Russian arms export organizations, which have been reorganized numerous times over the past decade

CONSTRAINTS ON FURTHER RUSSIAN SUCCESS

Yet there are a number of reasons to expect that Russia will only modestly improve upon its arms export success in the coming years. Any growth will likely come from Moscow's existing client base, rather than winning markets in head to head competition with Western suppliers.

First, interoperability concerns on the part of buyers will likely continue to hamper Russian arms export efforts. In fact, the continued success of the United States, United Kingdom, and France noted in Figure 2, underlines the global trend toward NATO-standard armaments. Possessing an armaments inventory that is all of one standard vastly reduces the complexity of operations and reduces maintenance costs. Few countries can afford and are willing to maintain an arms inventory that possesses both NATO and Russian standard equipment.³¹ Even Russia's former Warsaw Pact allies are shifting to NATO standard equipment in order to position themselves better for ultimately joining the NATO alliance.

Second, beyond the areas of rockets, airframes, and air defense systems, Russian weapon systems are generally held in low regard for their technological levels and overall reliability. In particular, Russia, for all intents and purposes, missed the electronics revolu-

Intelligence Council Report, Russia chapter, p. 9 (Found on http://www.cia.gov/nic/pubs/ index.htm).

²⁸Kseniya Gonchar, Russia's Defence Industry at the Turn of the Century, Bonn International ²⁹ Mark Galeotti, "Russia's Arms Bazaar," Jane's Intelligence Review, April 1, 2001.
 ³⁰ Kevin O'Prey, DFI Trip Report.

³¹The United Arab Emirates, which is both wealthy and is seeking independence from a single arms supplier, is a notable exception.

tion that occurred during the 1980s and 1990s in other industrialized countries. Given the importance of electronics to the effectiveness of most modern weapons systems. Russian arms exporters are necessarily at a disadvantage. For example, although the Su-27 fighter reputedly has the highest performance air frame in the world, it's poor electronics capabilities—in terms of avionics and armaments systems—make it relatively uncompetitive when com-pared to analogous systems in the West.³²

Decades of Soviet economic inefficiency and backwardness also took a toll on the capital stock of Russian defense enterprises. Despite niches of high technology distributed throughout the defense industries, by 1990 overall the sector was characterized by technological obsolescence. For instance, in the late 1980s the chief designer of the Temp aviation design bureau complained that over a third of his equipment had been produced before 1940.33 Nor did the situation improve in the weak economy of the 1990s. The decline in investment surpassed the fall in overall industrial output such that by 1999, the volume of capital investment stood at only 10 percent of its 1990 level.³⁴

The regional concentration of Russia's export markets is also a limitation. As noted above, Russia's success relies heavily on markets in the developing world. Over the 1997-2000 period, among arms exporting countries only China (92.5 percent of agreements) was more dependent than Russia (90.9 percent) on developing world arms markets. The United States, United Kingdom, Germany, and Italy, by contrast, relied on developing markets for less than 60 percent of their agreements.³⁵ Despite the recent expansion of this market, the developing world by definition lacks sub-stantial financial resources to invest in arms. The weakness of the global economy is likely to serve as a further brake on this market in the near term.

Furthermore, within the developing world market, Russia does not have a strong position in the one consistent bright spot: the petro-dollar infused Near East market. The Near East accounted for 47 percent of the developing world market over the 1997-2000 period. As is the case around the globe, the United States domi-

³² For example, in early 1992, Deputy Minister of Defense, Andrey Kokoshin, lamented that " for example, in early 1992, Deputy Minister of Detense, Andrey Rokosnin, famented that the Russian electronics sector—a linchpin for any modern economy—lagged terribly behind world standards. In his view, this lag had a dangerous multiplier effect, hampering Russia's ability to compete in the world economy and, for that matter, to defend itself. See Andrey Naryshkin, "Andrey Kokoshin ob industrial'noy politike," [Andrey Kokoshin on Industrial Pol-icy], Krasnaya Zvezda, August 25, 1992, p. 3.

For a western analysis, see Harley Balzer, "Dismantling Russia's Technotopia: Six Ministries in Search of an Industrial Policy," in Judith B. Sedaitis, *Commercializing High Technology: East* and West, Center for International Security and Arms Control, Stanford University, January 1996, p. 48.

See also Aleksandr Anatolyevich Ivanov, first deputy chief of communications of Russian Federation Armed Forces, and Lev Ivanovich Titov, general director of Telecommunications Systems Development Fund, Vooruzheniye, Politika, Konversiya, no. 1 (4), 1994, (signed to press August 4, 1994), pp. 45–50, translated in JPRS-UMA 94–056, pp. 29–32.
 ³³ I. Mosin and A. Pokrovsky, "Conversion without Illusion," Pravda, June 7, 1990, p. 4, translated in FBIS-SOV 90–116, pp. 75–80.
 Op preduction obselescence generally see Directorate of Intelligence Control Intelligence

On production obsolescence generally, see Directorate of Intelligence, Central Intelligence Agency, The Soviet Weapons Industry: An Overview, DI 86-10016, September 1986, pp. 29-30. ³⁴Kseniya Gonchar, Russia's Defence Industry at the Turn of the Century, p. 18.

³⁵ See Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993-2000, Figure 1, p. CRS-21.

nates this market with a 61 percent market share over the same period. Russia, meanwhile, possessed only a 7 percent share.³⁶

Despite improvements in export salesmanship over the past decade, Russian arms exporters still can not match the West in their after sale support. Because they were politically driven, after sale support-in the form of technical training, spare parts, and servicing-were not major features of Soviet arms export deals. Thus, when Russian arms exporters were thrust out onto a competitive global commercial market, few or none possessed organizations with this capability, or, for that matter, experience. Moreover, despite discussion of this liability throughout the 1990s, Russian exporters appear to have done little to improve these capabilities.³⁷

Finally, the collapse of the Soviet bloc has allowed new competitors to crowd into previously loval Russian markets. Beyond the Westward tilt of Russia's former allies in eastern Europe, this phenomenon includes the market for upgrades of Soviet weapons systems. Israel, in particular, has aggressively moved into the upgrade market for MiG-21 aircraft.38

THE RATIONALE FOR RUSSIAN EXPORTS

The United States and international community appear to have very little leverage in discouraging Russian efforts to export armaments as widely and in as great numbers as possible. In short, Russia's Government and industry possess extremely compelling incentives to expand their arms sales as much as the market will bear. Although some of Russia's incentives are universal to all arms producing countries, others are particular to Russia's unique circumstances

The first set of reasons for seeking arms exports are shared by virtually all arms producing countries worldwide. By increasing the overall number of a production run, exports reduce the per unit cost of any subsequent purchases of that item, making weapons production more profitable. Even if the a government elects not to procure more of a particular model, exports provide the producing firm with more resources to invest in new development projects. Moreover, if a government seeks to maintain a defense industrial base on the cheap, foreign purchases can keep production lines open-"smoothing out" production peaks and valleys-in anticipation of future procurement orders.³⁹

Beyond these universal incentives, Russia's industry and government confront pressures generated by the persistence of excess capacity in the defense industries, the drop in state procurement orders, and the continued political-economic importance of defense

³⁶See Richard F. Grimmett, Conventional Arms Transfers to Developing Nations, 1993-2000,

³⁷ In October 2001, President Putin reportedly chastised his Cabinet after hearing complaints from South Korean President Kim Dae Jung. In particular, President Kim complained of the poor quality of hardware purchased from Russian in the mid-1990s, lack of maintenance, and chronic delays with deliveries of parts. Malaysia reportedly had similar complaints regarding the MiG-29s it had purchased.

See Ivan Safronov, "Russia May Liberalize Arms Exports," Kommersant, October 25, 2001, p.

 ^{2.} ³⁸ See e.g., Mohammed Ahmedullah, "Russians Say Copycat Firms Robbing Millions in Spares Sales," Defense Week, vol. 22, no. 41., October 15, 2001.
 ³⁹ Kevin P. O'Prey, The Arms Export Challenge: Cooperative Approaches to Export Management and Conversion, (Washington, DC: Brookings Institution, 1995), pp. 10–11.

enterprises to their local communities. While the rationale behind Soviet arms exports was geopolitical—to buy influence among Moscow's client states-during the Russian period the rationale has become predominantly *commercial*, oriented toward domestic politics. The remainder of this section deals with each of these factors in turn.

EXCESS CAPACITY

From the perspective of Russian industry, the most compelling reason for greater levels of arms exports is the persistence of a very large defense industrial base with very little domestic demand. When the Soviet Union collapsed in 1991, it bequeathed to Russia a defense industrial base with a size and diversity worthy of a superpower. In all, Russia inherited approximately 1,700 state owned defense enterprises and industrial establishments organized into nine functional ministries (e.g., Ministry of Aviation Industry). Beyond the official defense complex, defense procurement orders reached far and wide in the Soviet-Russian economy. According to Clifford Gaddy, more than one third of all industrial enterprises had some role in arms manufacture.40

Perhaps as problematic as the sheer number of Russian defense establishments at a time when the cold war demand was slacking off was the vast size of these enterprises. By U.S. standards, these enterprises were enormous. Within the Soviet defense industries there were approximately 100 enterprises with over 10,000 employees.⁴¹ For example, a single facility such as the Moscow "Znamya Truda" [Banner of Labor] Machine Building Plant-a builder of MiG aircraft—employed 30,000 personnel in 1990.42 In contrast. it appears that there are no more than a handful of U.S. industrial establishments with more than 10,000 employees.⁴³

Part of the reason for the enormous scale of Russian defense enterprises was related to the logic of Soviet economics. The exigencies of the command economic system encouraged a degree of concentration and autarky in defense industry organization that is rarely encountered in the U.S. economy. Constant conditions of scarcity in the supply system created pressure for self-sufficiency in material inputs as enterprise managers sought to minimize the degree to which they depended on outside help.⁴⁴ The Izhevsk Mechanical Plant is a case in point. A producer of small missiles, the enterprise possessed shops for the manufacture of all the electronics components for its missiles, as well as virtually all of the tools necessary to produce the electronics.⁴⁵

 ⁴⁰ Clifford Gaddy, The Price of the Past: Russia's Struggles with the Legacy of a Militarized Economy, (Washington, DC: Brookings Institution Press, 1996), pp. 24-26
 ⁴¹ Clifford Gaddy, The Price of the Past: Russia's Struggles with the Legacy of a Militarized Economy, (Washington, DC: Brookings Institution Press, 1996), p. 25.
 ⁴² U.S. Department of Commerce, Russian Defense Business Directory—1993, (Washington, DC: U.S. GPO, 1993, pp. 38, 36.
 ⁴³ Although a number of firms possess in excess of ten thousand employable faw possess such

DC: U.S. GPO, 1993, pp. 38, 36. ⁴³ Although a number of *firms* possess in excess of ten thousand employees, few possess such a concentration at a single establishment. See Paul Joskow, et al., "Competition Policy in Russia During and After Privatization, p. 312. ⁴⁴ See Ed Hewett, *Reforming the Soviet Economy: Equality versus Efficiency*, (Washington, DC: The Brookings Institution), p. 173. ⁴⁵ See Nikolay Belin, "Izhevskiy oruzheyniki," (The Izhevsk Gunsmiths), *Krasnaya Zvezda*, September 9, 1992, pp. 1, 4.

At both the micro- and the macro-levels, the trend was toward mass scale at the expense of efficiency. Consequently, Russia inherited a defense sector that was—and continues to be—grossly inefficient by Western standards. When comparing the personnel size of the Russian and European aerospace and missile production sectors, Russia performs extremely inefficiently. According to Vitaliy Shlykov, a Russian defense industry observer, Europe's combined aerospace and rocket industries generate approximately \$2.2 billion in revenues with 98,000 personnel. However, it takes the comparable Russian industry 800,000 personnel to generate \$2 billion in revenue.46

During the cold war, the Soviet Government was willing to absorb the opportunity cost of such a large, inefficient defense sector because it was producing vast quantities of weapons to support its superpower competition. However, when the cold war ended with the collapse of the Soviet regime, the defense industries saw the domestic demand for their wares drop off dramatically. One of the first measures of Yegor Gaydar as acting Prime Minister in 1992 was to reduce state orders for arms procurement by 68 percent.⁴⁷ State expenditures on tactical aircraft, missiles, as well as antiaircraft and air-launched missiles were cut by 80 percent. Tanks and field gun expenditures were cut by a dramatic 97 percent.⁴⁸

Taking the historical view, the cuts in weapon procurement were remarkable. For example, 3,500 tanks were built in 1988. But the state ordered only 20 tanks in 1992.49

Nor did the cuts in Russian defense orders stop there. Figure 5 depicts the relative decline in state arms procurement spending from 1984 to 2000. Overall military output in the defense complex in 1999 accounted for only one-third of the 1991 level.⁵⁰ This year only 10 percent of Russian defense enterprises have any state orders for defense output. Moreover, there will be no deliveries this year to the Russian Government of combat aircraft, helicopters, tanks, or other armored vehicles.⁵¹

Although Russian procurement levels have increased over the past 2 years, the net effect has not been significant.⁵² As Figure 5 demonstrates, even with this increase, state arms procurement funding in 2000 was still only 76 percent of the 1994 level. Given the low levels of the procurement budget, the practical impact of

⁴⁶Vitaliy Shlykov, "The Potemkin Complex: A Government Program Cannot Solve the VPK's Problems.

⁴⁷See Julian Cooper, "The Soviet defence industry heritage and economic restructuring in Russia," p. 36; and Yegor Gaydar, "The Race with the Crisis," *Novoye Vremya*, no. 48, 1991, p. 13, as cited in Anders Aslund, *How Russia Became a Market Economy*, (Washington, DC: The

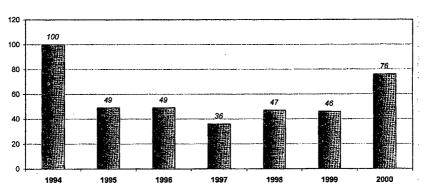
 ^{13,} as cited in Anders Aslund, How Russia Became a Market Economy, (Washington, DC: The Brookings Institution), p. 66.
 ⁴⁸Oleg Vladykin, "Novaya Armiya so starym oruzhyem. Nuzhna li Rossiy takaya perspektiva?" [A new Army with Old Weapons. Is This the Kind of Prospect Russia Needs?] Krasnaya Zvezda, August 19, 1992, pp. 1-2.
 ⁴⁹See Peter Almquist, "Soviet/Russian Procurement Database;" Marina Chernuka and Vyacheslav Terekhov, interview with First Deputy Minister of Defense Andrey Kokoshin, "Nation and Society" feature, Interfax, 0545 GMT, July 24, 1992, translated in FBS-SOV, 92-143, July 24, 1992; and Aleksey Shulunov, "K chemu vedyet byudzhetnaya strategiya pravitel'stva." ⁵⁰Kseniya Gonchar, Russia's Defence Industry at the Turn of the Century, p. 4.
 ⁵¹Vitaliy Shlykov, "The Potemkin Complex: A Government Program Cannot Solve the VPK's Problems."

Problems.

⁵² In 1999, then Prime Minister Putin established defense production for domestic consump-tion as a priority over conversion and arms exports. Furthermore, Deputy Prime Minister Klebanov pulled several converted enterprises back from civilian to military production. The effect of these measures was to generate 80 percent growth in the procurement budget in 2000. Kseniya Gonchar, Russia's Defence Industry at the Turn of the Century, p. 17.

these investments is small. For example, in 1999, the procurement budget funded only ten Topol-M missiles, ten satellites, and one Tu-160 strategic bomber.⁵³ In 2000, the aviation industry leading Sukhoy design bureau received state orders only for an aircraft upgrade development project, which ended up amounting to only 10 percent of the bureau's business for the year.54





[In constant 1996 prices, where the 1994 value = 100]

The net effect of these cuts in defense orders without comparable contraction in industry, of course, was substantial excess capacity. In late 1999, Russian defense sector still had the capacity to produce 3,500 tanks and 4,500 pieces of movable artillery per year. Approximately 40,000 people are also currently employed in duplicating R&D within the strategic missile program, when the Ministry of Defense estimates that 8,000 to 10,000 would suffice.⁵⁵ The aviation industry is capable of manufacturing about 350 fixed-wing aircraft and 300 helicopters per year. The actual output in 1998, however, reached only 100 pieces.⁵⁶ In an indication that this problem of excess capacity was broadly understood, Ministry of Defense industrial plan in the early 1990s stipulated that only 220 of the 1,700 defense enterprises would be essential for Russian security.⁵⁷

In this environment, arms exports have proven to be the most important source of income for the defense industries. As Figure 6

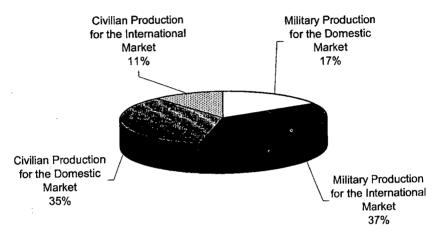
Source: Kseniva Gonchar, Russia's Defense Industry at the Turn of the Century, 2000.

⁵³Kseniya Gonchar, Russia's Defence Industry at the Turn of the Century, p. 40. ⁵⁴Interview with Mikhail Pogosyan, General Director of Sukhoy Aircraft Military Industrial Complex, "Only a Definite Strategy Can Attract Money," *Eksport Vooruzheniy*, May–June 2001,

Complex, "Only a Definite Strategy Can Attract Money, Ensport voor aznenty, may-oute 2004, p. 18. ⁵⁵See Anatoliy Sitnov, Chief of Armaments, Ministry of Defense, interview in Eksport Voorazheniy, November/December 1999, pp. 20-22, as cited in Kseniya Gonchar, Russia's Defence Industry at the Turn of the Century, p. 17. ⁵⁶Kseniya Gonchar, Russia's Defence Industry at the Turn of the Century, p. 33. ⁵⁷See A.A. Kokoshin, First Deputy Minister of Defense, "Protivorechiya formirovaniya I puti razvitiya voenno-tekhnicheskoy politiki Rossiy," (Contradictions of Formation and Ways of De-veloping the Military-Technical Policy of Russia), Voyenaya Mysi, #2, 1993; and Lt. Colonel Valentin Rudenko, "My sposobny proizvodit unikal'noye oruzhiye i etu sposobnost nel'zya uteryat," (We Are Capable of Producing Unique Weapons and This Capability Must Not Be Lost), Krasnaya Zvezda, March 11, 1993, p. 2.

demonstrates, military production for the domestic market accounted for only 17 percent of defense industry output in 1999. Production for arms exports, by contrast, accounted for 37 percent of the defense sector's production. Table 1 provides more tangible evidence of the disparity in output terms, by specific weapons type.

FIGURE 6.—SHARE OF RUSSIAN DEFENSE COMPLEX OUTPUT, 1999



Source: Kseniya Gonchar, Russia's Defense Industry at the Turn of the Century, 2000.

TABLE 1.—ESTIMATE OF	NUMBERS OF WEAPON SYSTEMS MANUFACTURED FOR
DOMESTIC	AND INTERNATIONAL SALES, 1992–1999

Weapon system	Domestic procurement	Export sales
Ships	2	11
Tanks	31	435
Submarines	2	10
Aircraft	7	278
Helicopters	8	98
Air defense systems	1	22
Armored vehicles	17	217

Source: Kseniya Gonchar, Russia's Defense Industry at the Turn of the Century, 2000.

STATE POLICY

Excess capacity persists in the Russian defense industries in large part because the Federation Government has avoided imposing fundamental reform on the sector throughout the 1990s. As Kseniya Gonchar argues, Russia's ideal pattern of defense planning—drafting of the military doctrine, long-term planning of supply and procurement, and finally contracting—has been replaced by an adjustment to minimal funding, lobbying, and the implicit prioritizing of the nuclear forces.58

Both reform-oriented and more conservative administrations have viewed the defense industry problem as something to be put on the back burner. Although neither the managers nor the labor forces of Russian defense enterprises were powerful political groups, no Russian Government has had the appetite to take them on directly.

The primary reason that successive Russian Governments have been reluctant to take on real defense industry reform has been the social ramifications of the militarization of the Russian economy. Estimates of the number of personnel who worked in the Soviet defense establishment-the lion's share of which was located in Russia—at the height of the cold war range from 9 to 14 million.⁵⁹ By comparison, in 1990 U.S. defense industry work provided employment to only 1.5 to 1.9 million workers.⁶⁰

Perhaps as many as 70 Soviet cities were developed around a single defense enterprise.⁶¹ In the extreme case, the republic of Udmurtiva depended upon defense work for 57 percent of its industrial workforce. Six other oblasts-the Soviet/Russian equivalent of a state in the United States-depended upon defense work for over 40 percent of their industrial labor forces.⁶² In contrast, in 1991 defense work accounted for only 8.3 percent of non-farm, private sec-tor employment in the most defense industry-dependent state in the United States, Connecticut.63

Beyond their role in providing employment, Soviet defense enterprises played a major role in providing social services to their regions. In the majority of cases, a Soviet defense worker and his/her family depended on the defense plant to supply their housing, hospitals, kindergartens, and, even, vacation facilities.⁶⁴ Even after the onset of Russian reforms, in some enterprises the social infrastructure employed over 20 percent of the plant's staff.65 One defense industry official later reported that in 1994, 9 to 25 percent of funds in the defense complex were devoted to maintaining social infrastructure.66

⁵⁸Boris Kuzik, Oboronno-promyshlennyy Kompleks Rossii: Proryv v. XXI Vek [The Russian De-fense Industrial Complex: Breakthrough to the 21st Century] (Moscow: Russkiy Biograficheskiy Institut, 1999), cited in Kseniya Gonchar, Russia's Defence Industry at the Turn of the Century,

p. 15. ⁵⁹ Julian Cooper offers the estimate of 9 million while Andrey Kokoshin estimates the number ³⁵ Julian Cooper oners the estimate of 9 minion while Andrey Rokoshin estimates the inducer of Soviet defense industry jobs as ranging between 12 and 14 million. Julian Cooper, "The Soviet Defence Industry Heritage and Economic Restructuring in Russia," in Lars B. Wallin, ed. *The Post-Soviet Military-Industrial Complex, FOA Symposium—October 20, 1993*, (Stockholm: The Swedish Nations Defence Research Establishment, 1994), p. 30; and Andrey Kokoshin, "Defense Industry Conversion in the Russian Federation," *Russian Security After the Cold War: Seven Views from Moscow*, in Teresa Pelton Johnson and Steven E. Miller, eds, (Brasseys, U.S., 1994), ⁴²⁰ p. 48. ⁶⁰ Adjusting to the Drawdown, Report of the Defense Conversion Commission, pp. 17–18. "Two Quarters Starvation Radio and Radio

⁶¹Stepan Sulakshin, "Dva kvartala na golodnom paykye;" [Two Quarters Starvation Rations], *Krasnaya Zvezda*, May 28, 1994, p. 3. ⁶²See Julian Cooper, *The Soviet Defence Industry: Conversion and Economic Reform*, (NY: Council on Foreign Relations Press, 1991) and Clifford Gaddy, unpublished trip notes, Summer 1992.

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 ⁶³ Logistics Management Institute, Impacts of Defense Spending Cuts on Industry Sectors, Occupations Groups, and Localities, Table 3-2.
 ⁶⁴ See, e.g., Yelena Druzhinina, "The Defense Industry is Revealing Its Cards," Delovoy Mir, November 2, 1991, p. 8 in JPRS-UMA 91-031, pp. 62-64.
 ⁶⁵ Kseniya Gonchar, "Employment Aspects of Defense Conversion in Russia," mimeo, May 1000 (Sector)

^{1994,} footnote 13.

⁶⁶ Áleksey Shulunov, "K chemu vedyet byudzhetnaya strategiya pravitel'stva."

Therefore, the net effect of this militarization of the Russian economy is the creation of a direct link between the financial health of a Russian defense enterprise and the socio-economic welfare of the surrounding community. For example, because the Komsomolsk-na-Amure Aviation Production Association (KnAAPO)—the producer of Su-27 aircraft exported to China—accounts for 78 percent of the industrial output of the Khabarovsk Krai, KnAAPO's welfare is the region's welfare.⁶⁷

In political terms, the Russian Government has been left with few options. Moscow has had neither the resources nor the inclination to increase defense procurement significantly. When Deputy Prime Minister Ilya Klebanov announced the 2010 defense program, he promised that the government would increase the value of defense industry contracts from the current level of approximately 2.6 percent of GDP to 3.5 percent of GDP in 2006. But in a blow to any hopes for the development of new systems and the opening of new series production efforts, the first 7 to 8 years of this 10 year plan emphasize the upgrading and modernization of existing defense systems.68

Nor has Moscow been willing to undertake the politically painful process of streamlining the defense sector by permitting, encouraging, or even directing failing enterprises to close. In the same initiative, Klebanov promised to address excess capacity by reducing the size of the defense industry from its current level of enterprises from 1,700 to 1,000. The initiative would also address organizational and efficiency issues by overseeing the reorganization of leading defense enterprises into 30 to 40 holding companies.⁶⁹ For example, by 2006 the reform would concentrate the aircraft sector by creating two holding companies: one merging MiG, Tupolev, and Kamov and the other integrating Sukhoy, Ilyushin, and Mil.⁷⁰

However, defense industry officials and outside observers could not be criticized for their pessimism that the reform would come to pass because it resembled in significant detail previous, muchheralded government reform proposals. In particular, Klebanov's plan looked a lot like Kokoshin's plan of 8 years earlier as well as a series of draft initiatives in between. Although all of these plans got it right in terms of objectives, none were ever seriously implemented.

Consequently, rather than carry out real reform or cave in to industry demands for financial support, both the Yeltsin and Putin Administrations sought the less painful "third way" of encouraging industry self help through arms exports. As early as January 1992, President Yeltsin was urging defense enterprises to find arms exports customers.⁷¹ In a move that probably cost it little financially, the Yeltsin government relaxed restrictions on the types of arma-

 ⁶⁷Alexander Golts, "A Dead-End. The Defense Industry is Not Deeply Distributed in Depth: Military Production in Russia is Living on Foreign Orders for the Time Being but That Can't Continue for Long," *Itogi*, October 24, 2000, translated in FBIS October 31, 2000, Document ID: CEP 20001031000156.
 ⁶⁸ "Russia: State Planning to Boost Defense Sector Contracts," *Interfax*, 1351 GMT, March 30, 2001, reprinted in FBIS March 30, 2001, Document ID: CEP20010330000296.
 ⁶⁹ Dmitry Safonov, "Military Industry Reform Approved," *Izvesitya*, July 28, 2001.
 ⁷⁰ "RF Government Has Approved Federal Targeted Program for Reform and Development of the Defense Industrial Complex for 2001-2006," *Agenstvo AK&M*, July 27, 2001, translated in FBIS, Document ID CEP2001 10727000193.
 ⁷¹ Nikolay Burbyga, "Boris Yeltsin: Russia Has No Special Secret Policy Regarding Nuclear Issues," *Izvestiya*, Feb. 24, 1992, pp. 1, 3 in *FBIS-SOV* 92-036, pp. 35-39.

ments that could be exported and vastly increased the share of revenues that enterprises received from their exports.⁷² The government also took an active role in promoting defense industry exports.73

GRAFT

Beyond all the other factors providing incentives for Russian arms exports, perhaps the most compelling one throughout the past decade has been personal profit—or outright graft—by state officials and industry managers. Because (1) the state of the Russian economy has generally been poor, and (2) Russia has little that it could export for hard currency, arms exports have joined the energy industries as the objects of fairly intense political competition at the top of the Russian political system. The frequent turnover of the Russian Government's arms export agencies as well as the periodic reorganization of these agencies themselves were evidence of constant competition among elite groups around Presidents Yeltsin and Putin. For example, in order to help finance Yeltsin's successful campaign for re-election in 1996, members of the "Family"-the political faction of Yeltsin boosters that included his daughter, Tatyana Dyachenko-put their own people in charge of Rosvooruzheniye in order to get access to the hard currency revenues from arms exports.

The benefits for the "Family" and anyone else who has access to arms export deals are not limited to skimming off the top of any transaction. Merely controlling hard currency bank accounts and benefiting from the interest provides a range of benefits that are not available to capitalists exploiting wholly domestic Russian sectors.

Although defense enterprise managers have argued that they, not the state organs, should control the export revenues that they generate, there is no evidence that they are more magnanimous than state officials. On the contrary, they appear to be equally oriented toward using their control over these hard currency accounts for their personal enrichment.

Thus, beyond any well-reasoned policy or political impulse supporting Russian arms export efforts, there is a more fundamental reason—elites stand to make more money.

IMPACT ON THE RUSSIAN DEFENSE SECTOR

Despite the positive overall picture for Russian arms export performance in recent years, the effects on the state of Russian de-fense industries has been limited in scope. For the small number

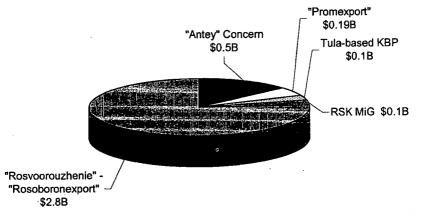
⁷²See Nadezhka Potapova, *ITAR-TASS*, June 8, 1992 in *FBIS-SOV* 92-111, p. 63; and *Vremya*, Moscow Television, July 21, 1990, in *FBIS-SOV* 90-143, p. 76. ⁷³For example, even the westward leaning Foreign Minister Kozyrev described arms export promotion as one of the main reasons for his May 1992 trip to the Persian Gulf region. See Aleksandr Golts, "Andrey Kozyrev Spends Six Days in Six Countries Seeking New Partners for Russia," *Krasnaya Zvezda*, May 6, 1992, p. 3. On at least one occasion the cash-strapped Federation Government actually provided credits to a foreign government in order for it to purchase Russian weapons-related technologies. In March 1992, the Russian Federation Government agreed to provide credits to India for the purchase. Although the Federation is required to spend some of its revenue

chase of Russian weapons. Although the Federation is required to spend some of its revenue in India, the money will also go toward the purchase of goods that will go directly to Russian defense enterprises. See Correspondent Nikolay Paklin, Radio Rossii, 1100 GMT, March 26, 1992 in *FBIS*-SOV 92-060, p. 22.

of enterprises that have found foreign demand for their manufactures, export revenues have provided economic resuscitation. Yet given the very significant economic and organizational challenges confronting these enterprises, to use a medical analogy, they have moved from being on life support to intensive care. Arms exports have improved their performance, but none of these enterprises appears to resemble a financially solvent firm. Nor do the prospects seem much enhanced for technological or procurement breakthroughs as the widespread economic malaise in the defense industries will be a barrier to significant R&D and production.

The effects of Russia's arms export success have been fairly concentrated in a handful of enterprises. Figure 7 details the Russian sources of arms agreements during the year 2000. As the Figure depicts, most the 2000 arms export revenues were funneled through state coffers. Rosvooruzheniye, Rosoboroneksport, and Promeksport—three state agencies at the time charged with promoting exports—accounted for three-fourths of the year 2000 Russian arms trade. Within this category, 70 percent of exports were aircraft and related services. The largest of these projects were supplies and licensed production of Sukhoy combat aircraft.⁷⁴

FIGURE 7.—ENTERPRISE ORIGINS OF RUSSIAN ARMS TRANSFERS, 2000



Source: Makienko, Konstantin. Preliminary Estimates of Russian Performance in Military-Technical Cooperation with Foreign States in 2000, 2001.

In contrast, only three individual enterprises shared the remaining one-fourth of export revenues. Of these, the Antey Concernthe producer of the Tor-M1 surface to air missile system—was the big winner among individual enterprises, taking in roughly \$500 million. The Tula Instrumentmaking Design Bureau—the designer and producer of tracked air defense systems such as the Pantsir took in roughly \$100 million. The corporate successor to the famed

⁷⁴ Interview with Aleksandr Mikheev, Director of the Air Force Department of Rosoboroneksport, "Our Obligations are Being Fulfilled in Time," *Eksport Vooruzheniy*, July-August 2001, p. 6.

Mikovan design bureau and production facilities. RSK MiG, also took in the remainder-approximately \$100 million.

These enterprises also are concentrated in just two sectors: aircraft and air defense systems. The MiG-29, Su-27, and Su-30 aircraft variants account for two-thirds of Russian exports. Air de-fense systems—principally the competing versions of the S-300 account for most of the remainder of Russian exports in 2000.75 The picture became a little more complex in 2001 with the large sale of tanks to India. Moreover, this picture does not capture the export success of Russia's nuclear and space industries, which are no longer counted within the defense complex.⁷⁶

The principal effect of arms export success has been to create a class of relatively successful Russian defense enterprises. Throughout the 1990s, arms export revenues were the dominant factor in explaining the relative success or failure of Russian defense enterprise performance. In a survey of 72 defense enterprises over the 1990-1995 period, I found that only 15 percent were performing in a way that could be considered to be relatively successful—e.g., they appeared to be more or less covering their operating expenses with some mix of revenues and state subsidies.⁷⁷ The feature that separated this group from the 21 percent that were failing outright and the remainder that were "muddling" at best was the fact that they had foreign markets for their arms products.78

Perhaps the best sign of the relative prosperity of arms exporting enterprises is the fact that they have been hiring workers. The S-300 producing Antey Concern in Moscow is looking to hire another 10,000 employees to add to its existing 40,000 personnel. A 1998 report described the Tula Instrumentmaking Design Bureau-the developer and producer of the Pantsir air defense system-as hiring 400 new engineers to support its export-led business. Uralvagonzavod, the beneficiary of the 2000 agreement to supply 310 T-90 tanks to India, was similarly reported to be hiring personnel to support renewed production after an extended down period.

Exports have also helped some enterprises undertake the development of new systems. Most notably, the Tula Instrumentmaking Design Bureau's deal to sell the Pantsir air defense system to the UAE apparently includes explicit UAE financing of the system's final development.⁷⁹

⁷⁵ Dr. Mark Galeotti, "Russia's Arms Bazaar," Jane's Intelligence Review, April 1, 2001.
⁷⁶ On the success of these sectors, see Kseniya Gonchar, Russia's Defence Industry at the Turn

of the Century, p. 4. ⁷⁷Kevin P. O'Prey, Russian Defense Enterprise Adaptation—1984–1995: Coping with Political-Economic Reform and Transformation, MIT Doctoral Thesis, January 1998.

Economic Reform and Transformation, MIT Doctoral Thesis, January 1998. This figure tracks with current estimates of economist Kseniya Gonchar, who argues that only one-fifth of the entities within the defense industry show signs of stability and long-term viability. See Kseniya Gonchar, Russia's Defence Industry at the Turn of the Century, p. 4.
 ⁷⁸Twenty-one percent of surveyed defense enterprises—the "basket cases"—were experiencing periodic shut-downs due to a variety of financial maladies, including an inability to pay energy bills, wages, and so forth. These shut downs typically involved the enterprise management locking the gates and sending the workforce on unpaid leave for weeks at a time.
 The majority (67 percent) of surveyed enterprises could be performing in a way that could only be characterized as "muddling." Although they by and large kept their doors open, they clearly lacked products whose revenues could sustain them as currently constituted. See Kevim P. O'Prey, Russian Defense Enterprise Adaptation—1984–1995: Coping with Political-Economic Reform and Transformation, MIT Doctoral Thesis, January 1998.
 ⁷⁹ Col. Stanislav Lunev, "Russia's Arms Sales Destabilizing Gulf Nations," Newsmax, March 28, 2001, reproduced on http://www.newsmax.com.

^{28, 2001,} reproduced on http://www.newsmax.com.

Yet the Pantsir case appears to be more the exception than the rule. Without a robust, multi-year government defense R&D budg-et, the development of fundamentally new systems appears to be exceedingly difficult. In the aviation sector, despite the change of nomenclature, the Su-30 aircraft being sold to China and India are upgrades of the Su-27. Despite frequent press references to the imminent development of a fifth generation Russian fighter to succeed either the MiG-29 or the Su-27, no financing appears to be in the offing. According to Mikhail Pogosyan, the General Director of the Sukhoy design bureau, the biggest obstacle is the lack of state financing: "Everyone understands that it is impossible to carry out all the R&D related to the new generation with [current levels of] budget funding alone." Thus, the Sukhoy design bureau invests some of the revenues from exports, and hopes to convince foreign clients to invest in the development of new systems, or to encourage foreign joint development.⁸⁰

The Sukhoy complex of enterprises also provides an illustration of how export success cannot overcome the obstacles created by the organizational vestiges of the Soviet system. The Soviet-era Sukhoy complex included four geographically dispersed, organizationally distinct entities. In addition to the Moscow design bureau, there production facilities for Su-27 variants: the were three Komsomolsk-na-Amure Aviation Production Association (KnAAPO), the Irkutsk Aviation Production Association (IAPO), and the Novosibirsk Aviation Production Association (NAPO). Since the collapse of the Soviet-era aviation ministry, the managers of these enterprises have resisted repeated efforts to create a unified firm. In particular, as the producers of the exported aircraft, each of the production associations has sought to keep the resulting revenues for themselves.

Today, the divided approach appears to have mixed results. While the design bureau and KnAAPO are doing relatively well, the Novosibirsk and Irkutsk plants hare having difficulty fulfilling their orders.⁸¹

Perhaps partly in response, like the Yeltsin Administration before it, the Putin government is seeking to create a unified firm of all of Sukhoy's components. However the prospects for this effort are dubious due to the differing forms of ownership across the different Sukhoy enterprises.⁸²

Finally, while arms export success appears to provide a palliative, it cannot overcome the fundamentally weak state of the Russian defense economy. Across the board, it is clear that arms export revenues—when they reach the individual enterprise—can help enterprise directors to pay their bills and, perhaps, to fund some new initiatives. However, none of these enterprises appears to be profitable, as they could not cover their costs without substantial explicit and implicit subsidies. Nor can they help these plants overcome the challenges of operating in the transitional Russian economy. In a telling example. Uralyagonzavod is reportedly finding it difficult to

⁸⁰ Interview with Mikhail Pogosyan, "Only a Definite Strategy Can Attract Money," p. 19. ⁸¹ Interview with Mikhail Pogosyan, "Only a Definite Strategy Can Attract Money," p. 18. ⁸² See comments by Ruslan Pukhov in Guy Chazan, "Russia to Reduce Weapons Producers in a Bid to Streamline the Defense Sector," *Wall Street Journal*, July 31, 2001. On Yeltsin era efforts, see Dmitry Safonov, "Military Industry Reform Approved," *Izvesitya*,

July 28, 2001.

produce T-90s for its India export orders because its former subcontractors have either failed or have moved to other pursuits.⁸³

ISSUES FOR CONGRESS

There are three compelling issues for the U.S. Congress that emerge from this analysis.

- The virtual certainty of continued aggressive promotion of arms exports by Russia.
- The limited effects that export success will have on Russian defense industrial advancement.
- The negative impact that these exports will have in terms of greater proliferation of high technology weapons systems to potential U.S. competitors.

In short, despite the improving climate of U.S.-Russian relations, the United States possesses few levers against Russia's efforts to sell high technology weapons systems to anyone who will pay for them. Sanctions or attempts to create diplomatic linkages are highly unlikely to overcome the very significant incentives for Moscow to continue to promote exports. While it is difficult to envision arms export success helping the Russian defense sector rebuild itself anew into a competitor with the United States and the West, the proliferation impact could pose challenges to U.S. forces. The remainder of this section addresses each of these issues in turn.

THE VIRTUAL CERTAINTY OF CONTINUED AGGRESSIVE PROMOTION OF ARMS EXPORTS BY RUSSIA

As described above, it is a virtual certainty that Russia will continue to aggressively promote arms exports for the foreseeable future. There are virtually no stakeholders in the Russian political system who have an interest in constraining Russian arms exports. For the government, arms exports help to maintain priority defense industrial capabilities on the cheap while reducing industrial demands for bail outs for the state. Given the likely enormous amount of financial resources and time that it would take to reform the defense industrial base—thereby reducing the political pressure to export—it is difficult to imagine any government choosing any other course. Moreover, as arms continue to be one of the only hard currency generating items that Russia can export, there will always be prominent figures in the government who stand to profit personally from export promotion.

For Russian defense industries, export revenues represent the difference between success and failure. Russian defense industrialists recognize that aside from intercontinental ballistic missile (ICBM) manufacture, there are virtually *no* prospects for meaningful state R&D or production orders over the next 5 years at a minimum. If these industrialists do not find foreign markets for their weapons, they are faced with very bleak prospects.

Unfortunately, the United States has very little in the way of moral suasion on this issue. As the dominant player in the military

⁸³ "Russia: Uralvagonzavod Not Prepared to Produce Tanks for Indian Contract," Vremya Novostey, March 14, 2001, p. 1, translated in FBIS, March 15, 2001, Document ID: CEP 20010315000367.

export market over the past decade (see Figure 2), Washington cannot credibly appeal for Russian restraint in terms of general export promotion efforts.

THE LIMITED EFFECTS THAT EXPORT SUCCESS WILL HAVE ON RUSSIAN DEFENSE INDUSTRIAL ADVANCEMENT

Russia's arms export success is not likely to be a vehicle for the reinvigoration of the Russian defense industrial complex. Russia's defense industries today are very sick. They have not overcome the organizational vestiges of the Soviet period and few, if any, enterprises have developed into viable *firms*. By U.S. standards, none of these organizations is profitable.

Given this environment coupled with the lack of government resources, the prospects for the development and production of a wholly new weapon system appear to be very bleak. While the Russian system can turn out modifications of existing systems such as the Su-27 fighter, fundamentally new programs require the largescale, multi-year funding that appears beyond the reach of the Russian Government and enterprises for the foreseeable future. Simply stated, at a time when Russian enterprises are trying to stay afloat, it is extremely unlikely that they can take on a robust development program that would be taxing to even advanced defense industries like that of the United Kingdom, France, or Germany. From the U.S. perspective, therefore, the worst-case scenario is

From the U.S. perspective, therefore, the worst-case scenario is that Russia could return to manufacturing large quantities of older generation weapons. In the unlikely event of renewed military competition with the United States and the resulting political prioritization of domestic Russian investment, and given the persistence of a large defense industrial infrastructure, Russia could once again turn out large numbers of ICBMs, artillery, tanks, and aircraft. However, continued limitations in electronics and other aspects of modern military systems would likely hobble this military in actions against any Western force.

THE NEGATIVE IMPACT THAT THESE EXPORTS WILL HAVE IN TERMS OF GREATER PROLIFERATION OF HIGH TECHNOLOGY WEAPONS SYSTEMS TO POTENTIAL U.S. COMPETITORS

The more significant problem for the United States and the West is the proliferation of advanced Russian weapons systems to potential regional competitors. There is little doubt that the rationale for China's and Iran's acquisition of Russian weapons and technologies is at least partly based on improving their capabilities vis-à-vis the United States. If Iran were to acquire Yakhont anti-ship missiles, for example, it would put Tehran in a position from which to threaten U.S. naval forces and international shipping in the Persian Gulf. Modern air defense systems, furthermore, might help Iran defend its nuclear facilities from preemptive strikes. Similarly, Chinese acquisitions of high performance aircraft and other weapons are likely based on a desire to improve Beijing's capabilities in regional competition with the United States.

In this area the United States does possess some options. Moscow still appears to respect international legal restrictions. Moscow abides by UN sanctions on its former arms client in Iraq. It also officially respects the terms of the Missile Technology Control Regime (MTCR). Although there are serious questions about illicit cooperation between Russian missile manufacturers and Iran, among others, it appears that Moscow is responsive to international pressure whenever these relationships are exposed. Continued efforts to strengthen existing international legal regimes governing arms trade—and, perhaps, developing new ones—appears to be a good return on U.S. diplomatic investment.

Targeted sanctions, however, do not appear to offer much promise. Although U.S. sanctions against particular individuals or enterprises puts the international spotlight on problems, they cannot overcome the fact that the United States does not possess economic levers over Russian industry. Most importantly, Russian enterprises do not care if they are subject to U.S. sanctions because they do not generally do any business with U.S. firms anyway. Moreover, in extreme cases, it is hard to foresee how a cut-off of all Western business with a Russian enterprise would hurt more than one sizeable contract with a country like Iran. The only exception to the rule appears to depend upon tactical diplomatic efforts. In the case of Iran sales, for example, the United States can encourage the Gulf states to break off current cooperation and/or rule out future Russian purchases. The opportunities for similar efforts with respect to China, however, appear to be limited by the fact that few Asian countries represent market opportunities for Moscow.

In sum, therefore, the rationale for Russian arms exports has become largely based on *commercial interests* and *domestic politics*. Gone are the days when geopolitics drove Soviet arms transfers. As a consequence, the United States is likely to have an exceedingly difficult time finding anyone in Moscow or Russian defense industries willing to listen to appeals for restraint unless it is in their economic interest. For the foreseeable future, the Russian Government and defense industries will be focused on the near-term opportunities offered by arms exports. Thus, as the Bush Administration and the Congress evaluate the evolving U.S.-Russian relationship, both must recognize that the arms trade is almost certainly going to be a continuing source of disagreement.

U.S.-RUSSIAN TRADE AND INVESTMENT: POLICY AND PERFORMANCE

By Inga Litvinsky, Matt London, and Tanya Shuster¹

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SUMMARY

The U.S. Administration would like to see business become a bedrock for overall U.S.-Russian relations. At the same time, President Putin and the Russian Government are banking on foreign investment and integration in the global economy led by the United States to expand and sustain Russia's gross domestic product (GDP) growth. Thus, U.S. and Russian interests and policies appear to be in alignment to commence a new bilateral commercial era.

In order, however, to turn these intentions into increased commercial opportunities so that bilateral trade and investment can fi-

¹Inga Litvinsky is the Senior Russia Desk Officer and Matt London is the Russia and Caucasus Desk Officer for the U.S. Department of Commerce, International Trade Administration. Tanya Shuster is Deputy Director and Senior Russian Specialist with the Business Information Service for the Newly Independent States (BISNIS), U.S. Department of Commerce. BISNIS provides market research, business leads, and expert guidance and assistance to U.S. companies with interests in the 12 Newly Independent States (NIS) countries (www.bisnis.doc.gov). Chang Suh, an intern with the Department of Commerce, also contributed to this article.

nally take off, concrete steps will be required by both sides. Finishing Putin's reform agenda with financial, rule of law, and other institutional reforms are essential conditions precedent to developing a new Russian business climate capable of attracting significant new investment. Specific improvements in corporate governance, tax policy and commercial energy developments are likewise required. Implementation of bilateral treaties fostering commercial relations and Russian accession to the World Trade Organization (WTO) would also be catalysts for increased trade and investment. If Russia moves closer to integration into the international economic institutions and the global market, the United States would need to reexamine its domestic trade laws in order to address Russia's concerns regarding trade restrictions, access to the U.S. market and expansion of appropriate trade and investment promotion measures.

U.S.-Russian trade and investment increased over the decade of the 1990s from a very low base. Russia's financial crisis in 1998 accelerated the trade imbalance and interrupted the overall upward trends, leading to a setback from which bilateral trade and investment performance have not yet fully recovered. Even at the past low level of trade turnover, some American sectors and enterprises fared rather well, e.g., machinery and poultry. While foreign direct investment (FDI) to Russia was minuscule, the United States led the advanced western nations as a supplier of FDI. Russia has been far and away the leading U.S. commercial partner in the region formerly controlled by the Soviet Union. If trade and investment were to substantially increase, sectors and enterprises already in the Russian market would expect to be primary beneficiaries of the expanding commerce. However, new participants such as small- and medium-sized businesses may also be able to flourish in a new business-friendly environment.

The current U.S. Administration is emphasizing the leading role of the private sector in driving the bilateral commercial relationship and has warmly welcomed the formation of the Russian-American Business Dialogue.

POLICY GOALS AND VEHICLES²

As the United States seeks to advance its relations with Russia in all spheres, including development of a new security framework, the Bush Administration is giving priority to the bilateral commercial relationship. The Administration would like to see private business relations become a bedrock for overall U.S.-Russian relations. For their part the Russians, under President Putin and the economic reform team led by Economic Development and Trade Minister Gref, are banking on increased foreign investment and integration into the global economy. This development would sustain and expand the country's GDP growth and favorable balance of payments, which have been primarily fueled by high oil prices and depreciation of the ruble in recent years. Thus, in principle, U.S.

²For a good overview of the Administration's commercial policy toward Russia, see October 5, 2001 remarks by Secretary of Commerce' Donald Evans to the U.S.-Russia Business Council at www.doc.gov.

and Russian interests and policies are in alignment to commence a new bilateral commercial era.

While the first Bush Administration and Clinton Administration conducted business with Russia through a bilateral Commission made up of eight Committees, the new Bush Administration has de-emphasized formal intergovernmental structures and stressed the role of the private sector in relations with Russia. They have disbanded the previous Administration's principle vehicle for economic discussions with Russia, the Joint Commission on Economic and Technological Cooperation (or "Gore-Chernomyrdin Commission"), and have opted for a more informal and decentralized approach to commercial enhancement.

At the first meetings between Presidents Bush and Putin at the Ljubljana, Slovenia and Genoa Summits (in May and July 2001), commercial issues were high on the agenda. In Genoa, Italy, the two Presidents announced formation of a private sector-led Russian-American Business Dialogue to promote new business opportunities and make policy recommendations to the two governments. The creation of the private sector led Business Dialogue is a recognition that our bilateral commercial relations are at the beginning of a new era, one that will be driven by the two countries' private sectors rather than by the governments.

Following up on the economic discussions between the Presidents, Commerce Secretary Donald Evans and Treasury Secretary Paul O'Neill went to Russia in July 2001 to begin to chart a new business-driven policy with the stated purpose of expanding bilateral trade and investment. Subsequently, at the request of President Bush, Commerce Secretary Evans led a successful business development mission of senior U.S. executives from a variety of sectors, including Committees on Energy, Aviation, and Information Technology, to Russia in October 2001. Several companies, including those new to the Russian market, signed investment protocols during that visit.

In order to turn these positive intentions into increased commercial opportunities, trade liberalization and business environment issues will need to be addressed by both sides. It is generally acknowledged by trade and investment specialists in both countries that critical improvements are needed in Russia's business climate, including corporate governance and rule of law for business, commercial taxation, and improvements in the banking system. While Russia is still perceived as a risky place to do business by domestic and foreign businesses alike, there have been positive changes in the past year, including in commercial tax reform and simplification of business licensing requirements.

Russia's accession to the WTO would be a major catalyst for increased trade and investment as it would reinforce Russia's economic reform program and would ensure that Russia abides by international trade rules. As Russia moves closer to WTO membership, the United States will need to re-examine its domestic trade laws. If both sides are to reap the full benefits of Russia's accession to the WTO, reconsideration of the Jackson-Vanik Amendment to the Trade Reform Act of 1974 may be necessary so that permanent normal trade relations (PNTR) status may be accorded to Russia. The United States may also need to address Russia's concerns regarding access of Russian products, such as steel, to the U.S. market.

BILATERAL TRADE³

RUSSIA, U.S. MAJOR TRADING PARTNER IN CENTRAL EASTERN EUROPE, NOT IN THE GLOBAL ECONOMY

A more detailed examination of the U.S. and Russia trade activities provides some, perhaps unexpected, perspectives. Russia has emerged among all countries from Eastern Europe and the Newly Independent States (NIS) as the United States' leading trading partner in the region, but nonetheless accounts for less than 1 percent of total U.S. foreign trade. In 2000 this pattern largely held true, with Russia capturing 80 percent of U.S. trade with the NIS. In this trade, Russia provided nearly 40 percent of platinum, 14 percent of aluminum and 3 percent of iron and steel imported into the United States.⁴

TRADE IMBALANCE INCREASED, 1995–2000

According to Russia's Ministry of Economic Development and Trade, the United States accounted in 2000 for less than 5 percent of total Russian foreign trade but ranked third as a market for Russian exports, after Germany and Ukraine. However, if oil and gas are excluded from consideration (the United States imports a disproportionately low level of oil and gas from Russia compared to other leading trade partners), the United States ranks second among all countries as a recipient of Russian exports. In short, while Russia plays a minor nominal role in U.S. imports and exports on a worldwide scale, it remains very important as a trade partner in the region (former Soviet-bloc countries). The United States ranked lower (in eleventh place) as an exporter to Russia. The U.S. market is especially important to Russia as a recipient of certain products.

U.S.-Russian trade differ from worldwide trade trends because of significant growth in Russia's trade surplus with the United States.⁵ (See Table 1 and Figure 1). Russia had solid growth in its exports to the United States each year since 1996,6 while there was a the sharp decline in U.S. exports to Russia in 1999 following the financial crisis. The deficit in U.S.-Russian trade was far more pronounced than Russia's overall worldwide trade performance, although less severe than that experienced by Japan.⁷ While Russian

³The analysis of trade and investment performance has been prepared by Tanya Shuster, Deputy Director of BISNIS. Additional information on U.S. trade and investment with Russia and other CIS countries, including data on exports from individual U.S. states to the NIS, is available via BISNIS Online, www.bisnis.doc.gov. For a more comprehensive summary of trade between the United States and Russia in 2000, see BISNIS U.S.-Russia Trade Profile, available via the Russia page of BISNIS Online www.bisnis.doc.gov/russia.html. Data in this article is from outhorization official surgers. from authoritative official sources.

⁴U.S. platinum (palladium) imports from Russia nearly doubled between 1998 and 2000, to more than \$1.6 billion.

⁵Russia's trade surplus with the United States grew 350 percent between 1995 and 1998, while Russia's trade surplus worldwide grew 240 percent. ⁶Initial U.S. Department of Commerce data for January-June 2001 indicates a small decline

⁽⁴ percent) so far for the year in U.S. imports from Russia, which is attributable at least in part to declining prices for fuel and other commodities imported from Russia. ⁷Japan's exports to Russia dropped 57 percent in 1999 over 1998. The value of U.S. imports declined 48.5 percent. The European Union (EU) experienced a 45 percent decrease.

total trade worldwide in 2000 was roughly the same level as in 1995, U.S.-Russian total trade reached all-time highs in 2000. The total dollar value of U.S.-Russian trade grew more than 50 percent between 1995 and 2000 largely attributable to the 93 percent growth in the value of U.S. imports from Russia during the period (the value of U.S. exports in 2000 was only 82 percent of the level in 1995).

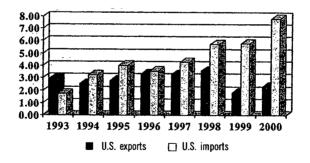
TABLE 1.—U.S.-RUSSIA TRADE, 1995–2000

[In billions of dollars]						
	1995	1996	1997	1998	1999	2000
U.S. exports U.S. imports	\$2.826 4.035	\$3.340 3.561	\$3.289 4.290	\$3.585 5.734	\$1.845 5.805	\$2.318 7.796
Total trade , turnover	6.681	6.901	7.579	9.319	7.650	10.114
Trade balance	- 1.209	- 0.221	- 1.001	- 2.149	- 3.960	- 5.478
0 0101110						

Source: BISNIS.







Source: BISNIS.

U.S. EXPORTS TO RUSSIA VARIED BUT LEADING EXPORTS WERE STABLE

Initial U.S. data for the first 6 months of 2001 indicate that the modest recovery continues, although if performance in the second half of the year is consistent with the first, the United States will attain year-end export levels only on par with the mid-1990s. Growth in U.S. exports to Russia of 25 percent in 2000 over 1999 showed some recovery from the effects of ruble depreciation and other factors. The U.S. exports to Russia were only \$633 million for January-June 1999. For the same period of 2000, U.S. exports were valued at \$1.23 billion. The value of U.S. exports to Russia for January-June 2001 was nearly \$1.4 billion. U.S. export levels in 2000 and 2001 remained far below levels achieved each year between 1993 and 1998.

Some Russian demand for U.S. imports has emerged in waves. First, in the early 1990s came demand for U.S. food products, followed by strong demand for U.S. consumer products. 1995 saw a surge in demand for construction materials, hotel and restaurant equipment, and furniture. Following the 1998 ruble devaluation and financial crisis. Russian consumers cut back heavily on many imported consumer and manufactured goods, with Russian companies benefiting from a cheap ruble and stepping up production, and quality, to meet increased domestic demand.

Still the Russian demand for core U.S. exports was more stable. The overall portfolio of *leading* U.S. exports to Russia⁸ has remained fairly consistent since the late 1990s, although the relative importance of some categories of goods has shifted. The leading U.S. exports to Russia in 2000, in order of dollar sales were: poultry,9 aircraft, oil/gas machinery and parts, uranium, corn and wheat, computers and components, beef and pork, telecommunications equipment, electrical machinery, and other machinery. Meat products (which shifted from a balance of pork, beef and chicken in the mid-1990s to predominantly chicken in 2000), and machinery have remained in the top tier of U.S. exports throughout this period. Prior to 1998, U.S. prepared foods, including sausages, were among the strong export categories for the United Statesthese categories have been all but absent from U.S. exports since 1998. The granting by the Russian Government of tariff waivers on U.S. aircraft generated a record-breaking dollar value of aircraft exports in 1998; this achievement was not repeated in 1999 or 2000. U.S. food aid and grain packages resulted in high volumes of wheat exports in 1999 in particular, although this dropped in 2000.

SOME U.S. IMPORTS FROM RUSSIA INCREASED CONSISTENTLY

Russian exports to the United States continue to consist pri-marily of raw materials. Platinum (palladium), aluminum, uranium, oil, seafood (crab and fish fillets), iron/steel, clothing, and nickel were the most important Russian exports to the United States in 2000 by dollar value. Although iron/steel played a larger role in the U.S. import profile from Russia prior to 1999, as did fertilizers, the general group of items in this "basket" of leading imports has remained fairly consistent. Clothing was the only finished good export that showed strongly on Russia's export profile to the United States in 1998 and 2000.10

⁸Determined according to the dollar value of the exports on the basis of the first two-digits

^o Determined according to the utility value of the exports of the basis of the first two-digits of HS classification. Using two digits is a fairly broad way of categorizing products. In contrast, a complete HS classification for a specific product can be up to ten digits long. ⁹ Specifically, frozen chicken quarters, which came to be known as "Bush legs" in Russia and the CIS for their forceful appearance on the market during the Presidential Administration of George H.W. Bush.

¹⁰ In 1999 clothing did not make the "top ten" list, but vodka did.

BILATERAL INVESTMENT¹¹

Foreign investors have been attracted to Russia because of its large domestic market, vast supply of natural resources, and skilled and well-educated labor force. However, the risks in the Russian market have kept many investors at bay. Russia's long-term sovereign rating by the international rating agency, Standard & Poor's (S&P), is currently B - with a stable outlook, a rating also given to Turkey and India. While FDI in Russia far outpaced FDI for CIS countries, foreign investment levels into Russia in 2000 fell far behind the levels S&P reported for China (\$46 billion) and Eastern European countries such as the Czech Republic (\$5 billion). Meanwhile, many potential domestic investors have sent their money abroad as "flight capital."

Russia reported record-high levels of FDI for 2000, although Russian estimates for *total* foreign investment¹² indicate that the country attracted higher levels of total investment in 1997 and 1998. Cumulative FDI into Russia as of January 2001 was \$16.13 billion.¹³

TABLE 2 -	-ANNHAI	FORFIGN	INVESTMENT	IN	RUSSIA	1993-2000	
		IVALIUN	IN VLUISVILINI		11000017.	1333-2000	

Year	Foreign direct investment (FDI)	Portfolio in- vestment
2000	\$4.43 4.26 3.36 3.90 2.05 1.50 1.30 1.36	\$0.145 0.031 0.191 3.3 3.2 1.5 2.5 0.300

[All countries, in billions of dollars]

Source: BISNIS.

FOREIGN DIRECT INVESTORS INTO RUSSIA

The United States has been and continues to be the leading foreign *direct* investor into Russia, accounting for nearly 35 percent of all cumulative FDI.¹⁴ Table 3 indicates the leading foreign direct investors into Russia according to cumulative investments as of January 2001.

¹¹Additional information about U.S. investment into Russia is available in the BISNIS Commercial Overview for Russia, available at www.bisnis.doc.gov/russia.html.

¹²Official Russian data on total investment reflects direct + portfolio + other investment, the latter of which includes trade credits and foreign loans. Estimates of FDI in Russia can vary widely by source.

¹³Note: Cumulative FDI does not equal the sum of annual FDI due to divestment.

¹⁴Germany, which has provided more trade credits and "other investments" has had the highest total investment levels into Russia, but the United States leads all countries as a foreign *direct* investor into Russia.

U.S. investors in Russia

Many major U.S. companies have approached Russia with an eye toward developing a long-term commercial strategy. As indicated above, U.S. companies are active across many sectors. While the level of U.S. activity in Russia slowed following the financial crisis in August 1998, the majority of U.S. direct investors remained in the country, reportedly to protect sizable investments and further their long-term prospects.

TABLE 3.- TOP FOREIGN DIRECT INVESTORS IN RUSSIA

Country	Cumulative FDI	Leading investment sectors in 2000		
United States	\$5.49 billion	Transportation, fuel, communica- tions, engineering		
Cyprus	3.24 billion	Food, transportation, fuel, con- struction		
Germany	1.26 billion	Advertising/auditing, food, forestry		
Netherlands	1.18 billion	Transportation, food		
Great Britain	982 million	Construction		
Sweden	610 million	Communications		
France	256 million	Chemical/petrochemical		
Japan	215 million	Fuel		
Italy	160 million	NA		

[By cumulative investment levels as of January 2001]

NA-Not available.

Source: BISNIS.

The American Chamber of Commerce in Moscow counts some 500 U.S. company members as foreign-directed investors in Russia. Some of the more well-known U.S. companies who have already made significant investments developing production capability in Russia are: Caterpillar (a dealer network in Russia/NIS and in a factory for road building machinery in Leningrad Oblast), Coca Cola (bottling and beverage production plants across Russia), ExxonMobil (oil/gas development), Ford (a factory to produce the Ford Focus in Leningrad Oblast), General Motors (multiple production projects), Gillette (shaving accessories factory in St. Petersburg), ICN Pharmaceuticals (pharmaceutical production in multiple Russian locations), International Paper (pulp and paper mill in Leningrad Oblast), Kraft (instant coffee plant in Northwest Russia), Lucent (telephone line production), Mars (confectionery and pet food production), McDonald's (at least 60 restaurant outlets in Russia), Procter & Gamble (production of detergents and cleaning agents), Xerox (copiers), and Wrigley (chewing gum production). In addition to these well-known companies, numerous small- and medium-sized firms are active in Russia.

Regions attracting foreign investment

According to Goskomstat statistics, Moscow city attracted the most foreign *direct* investment in 2000, worth more than \$1.47 billion, or roughly 33 percent of incoming FDI. This is consistent with the city's overall performance in the years since 1991. Other top re-

gions for FDI were: Krasnodar Territory (almost \$1 billion), Sakhalin (\$246 million),¹⁵ Leningrad Oblast (just over \$205 million), and Moscow Oblast (just under \$205 million). Novosibirsk, Tyumen, and St. Petersburg city all received between \$145 and \$151 million. The Yamal-Nenets Autonomous District in northern Russia received approximately \$100 million in FDI. Volgograd, Sverdlovsk, Samara, Tatarstan, and Orenburg each received roughly \$50 to \$77 million in FDI.

While U.S. firms have invested heavily in the cities of Moscow and St. Petersburg and in the Leningrad Oblast, American companies have also moved beyond these population centers into Russia's regions. Sakhalin Island, with its multi-billion-dollar offshore oil and gas projects, reportedly has the third-largest U.S. expatriate community in Russia during the summer months. U.S. firms are also heavily invested into Western Siberia (mostly for oil and gas), Russia's Volga regions, and elsewhere.

BUSINESS ENVIRONMENT ISSUES IN RUSSIA

American firms note a number of issues critical to the development of Russia's business environment, including improved corporate governance, a fair commercial tax system, and an investorfriendly regime for the energy sector. Russian accession to the WTO.

GOOD GOVERNANCE ¹⁶

Good governance is a concept which covers good business ethics, corporate governance, protection of IPR, and effective commercial dispute resolution. All of these are institutions of rule of law for business that are attributes of most successful economies. An evolution in commercial conditions and business thinking is motivating some Russian managers to improve business practices and corporate governance for the purpose of obtaining business partners, capital, and loans. However, it is generally recognized that much more needs to be done by the Russian Government and business community.

Russia has made progress in harmonizing its IPR laws with international norms, but enforcement of laws and regulations remains poor and the country has not been able to stem the high rate of IPR-related infringements. Protection of well-known trademarks is weak, and the high rate of counterfeiting of consumer goods has become a major issue for U.S. companies operating in Russia. Another major problem is enforcement of commercial arbitration awards and court decisions. Indeed, notwithstanding awards and

¹⁵ In the summer months, when work on Sakhalin Island's multi-billion-dollar offshore oil and gas development projects is in full swing, Sakhalin reports the third-highest U.S. expatriate population in Russia, after Moscow and St. Petersburg. ¹⁶To assist U.S. companies and to build Russia's capacity and institutions of rule of law, the

¹⁶To assist U.S. companies and to build Russia's capacity and institutions of rule of law, the Department of Commerce has developed several specific programs, including a Handbook on Commercial Dispute Resolution in Russia, as well as Basic Guidelines for Codes of Business Conduct which was accompanied by training in the United States. There are plans to develop a Manual on Enforcement of Arbitration Awards and Court Judgement and a Corporate Governance Guidebook for Enterprises in Russia as well. Furthermore, the U.S. Government is providing technical assistance to help Russian Government agencies to stem the high rates of intellectual property rights (IPR)-related crime.

decisions in their favor, several U.S. companies have been mired in long standing battles to have their judgments enforced.

COMMERCIAL TAXATION WITH INTERNATIONAL ACCOUNTING STANDARDS (IAS)

Russia's onerous tax laws and their inconsistent application was the number one complaint of both Russian and U.S. companies in the 1990s. Since 1993, the U.S. Department of Commerce has cochaired a Bilateral Tax Working Group with the Russian Min-istries of Finance and Taxation, which allows the U.S. tax experts to make recommendations on improving the commercial tax regime. Many of these recommendations have been incorporated in the new Russian Tax Code. Overall tax laws have been significantly improved under the Putin Administration, with Duma passage of Part II of the Tax Code in summer 2000 and subsequent actions to reduce the commercial tax burden in summer 2001. Specifically, the personal income tax rate was reduced to a flat rate of 13 percent: social taxes on corporations have been unified; business expense deductibility has been recognized; and the profits tax has been cut from 35 percent to 24 percent. While reducing the tax burden on entrepreneurs, these actions have resulted in increased tax collections. The key issue will increasingly become Russia's commitment to fair tax administration. American companies still cite arbitrary and confiscatory actions by tax authorities. alleging that foreign companies are targeted as "cash cows."

In order to develop fair and predictable commercial taxation Russia needs to adopt IAS. IAS is important to Russia's effort to attract investment through fair taxation. In evaluating opportunities, international investors typically insist on reviewing IAS prepared financial documents so that they "know what they are looking at." By contrast, Russian accounting standards have been based largely on identifying, in some cases, concealing tax obligations. Many of Russia's large, "blue-chip" companies have already gone to IAS. This is a positive development which should be encouraged and broadened to all companies.

COMMERCIAL ENERGY DEVELOPMENT

Despite Russia's vast oil and gas reserves and need for world class exploration experience and technology, U.S. and other foreign companies have been unable to commit to large-scale investments. Due to the long-term nature of major oil and gas projects, energy companies need to be guaranteed a stable tax and tariff framework, and assured repatriation of profits over the life of the project. In many resource-rich countries, the preferred vehicle for multi-year energy projects is a production sharing regime, in which the host government and the foreign company split the production and revenue of a specific hydro-carbon deposit on an agreed-upon basis. Russia passed a production sharing agreement (PSA) law in 1996, but implementing regulations have been stalled for most of the projects. At this time, the primary impediment is opposition to PSA by Russia's own energy firms and in the parliament.

RUSSIA'S ACCESSION TO THE WORLD TRADE ORGANIZATION (WTO)

The Russian Government, under President Putin, has made WTO membership a priority, stating that Russia would like to join the organization next year in time to participate in a new global trade round. The U.S. Government supports Russia's accession to the WTO on commercially acceptable terms and is providing technical assistance to help Russia meet membership obligations. In the current interconnected global economy, Russia understands that it cannot achieve sustained economic growth without an open trade and investment framework. Adoption of the WTO's provisions will complement and reinforce Russia's broader economic reform program and promote transparency and the rule of law in trade and investment. To join the WTO, Russia must implement and enforce the organization's agreements in such critical areas as IPR. standards and certification, customs valuation, and industrial subsidies. The adoption of these WTO rules will promote trade and investment liberalization and harmonize Russian laws and regulations with international norms, thereby helping to facilitate access of U.S. goods and services to the Russian market.

The pace of progress toward eventual membership will be determined by Russia's actions to adopt WTO rules and to make commercially meaningful market access commitments in goods, services and agriculture to other WTO Members. In this regard, the Russian Government will need to make hard decisions about the pace of trade liberalization and the extent to which they will commit to opening up the economy in areas that are priorities for their major trade partners, including agriculture, civil aircraft, information technology, financial services.

U.S.-RUSSIAN TREATY ON MUTUAL PROTECTION OF INVESTMENTS

Russia's ratification of the Bilateral Investment Treaty (BIT) which was negotiated with the United States in 1992 would send a positive signal to U.S. investors. The BIT, if implemented, would guarantee non-discriminatory treatment for U.S. investments and operations in Russia, hard currency repatriation rights, expropriation compensation, and the right to third party international arbitration in the event of a dispute between a U.S. company and the Russian Government. While the BIT was ratified by the U.S. Senate in 1992, it still awaits ratification by the Russian Duma.

OUTSTANDING TRADE ISSUES WITH THE UNITED STATES

Although Russia continues to enjoy a significant trade surplus with the United States (\$5.5 billion in 2000), the Russian Government has consistently raised several trade issues with the U.S. Government, including a desire to be treated as a Market Economy under U.S. trade law, a request to be freed from the constraints of the 1974 Jackson-Vanik Amendment, and increased access for Russian products, including steel, to the U.S. market.

RUSSIA'S NON-MARKET ECONOMY STATUS

The Russians believe that their non-market economy status makes them more vulnerable to various anti-dumping petitions under U.S. trade law. However, if Russia is deemed a market economy under U.S. trade law, they will no longer be able to negotiate quota based anti-dumping suspension agreements with the U.S. Government and will be subject to possible countervailing duty actions.

TRADE IMPLICATIONS OF THE TRADE REFORM ACT OF 1974 JACKSON-VANIK AMENDMENT

The Russian Government sees continued application of the 1974 Jackson-Vanik Amendment as trade-disruptive and a relic of the cold war. In practice, Jackson-Vanik does not restrict trade as Russia currently enjoys conditional Normal Trade Relations status with the United States and for some time has been found to be in full compliance with the emigration requirements of the legislation. Termination of the application of Jackson-Vanik clause of U.S. law and granting Russia PNTR status will require Congressional action. Congress will likely review PNTR for Russia as Russia moves closer to joining the WTO, as has been the case for other acceding countries, such as Kyrgyzstan and Georgia.

1999 STEEL AGREEMENTS

Russian steel exports to the United States are currently subject to three agreements: Agreement Concerning Trade in Certain Steel Products from the Russian Federation (Comprehensive Agreement); Suspension of Antidumping Duty Investigation: Certain Cut-to-Length Carbon Steel Plate from the Russian Federation; Agreement Suspending the Antidumping Investigation on Certain Hot Rolled Flat-Rolled Carbon Quality Steel Products from the Russian Federation. The Russian Government has indicated that they seek renegotiation of the 1999 Agreements to increase the access of Russian steel to the U.S. market.

PROSPECTS FOR TRADE AND INVESTMENT

The history of U.S.-Russian commercial engagement has been one of small trade and investment with periodic hopes raised for increases that were consistently dashed by trade and investment restrictions. Now, for the first time in the long history of U.S.-Russian commercial relations, including the Soviet period, there is an expectation of a substantial and enduring commercial relationship between the two countries. If this were to occur, it would represent an historic turning point in the bilateral commercial relationship and represent a major factor in the overall relationship. The prospective development is based on official policy and national interest declarations from both the U.S. and Russian leadership, projected improvement in the business environment in Russia, and a new mechanism for promoting commerce based on private sector initiatives in each country.

However, stated policy and expression of national interest would have to be translated into concrete changes in the business environment and market access in both countries. Improved business environment in Russia requires substantial implementation of Putin's institutional reform and introduction of market-friendly systems that reduce risk in investment and foster competition in trade. U.S. business enterprises look for improved corporate governance, a commercial tax system, commercial energy development, adherence to bilateral commercial treaties and agreements and substantial progress toward accession to the WTO. Russian business interests look to their American counterparts for reduced trade barriers, such as removal of restrictions on most-favored-nation trade, improved access to the U.S. market, promotion of commercial development of energy production, and development of assistance through a favorable official credit policy.

The tradition of Russian and Soviet trade and investment has been high on hopes for substantial increases in commerce and low on favorable, enduring results. Severe setbacks, such as the default on Russian debt and securities in the 1998 financial crisis have been characteristic of the past commercial relations. Prudence by policymakers requires evidence of concrete changes in the bilateral business environments and performance. Even with U.S. sponsorship and Russian priority for joining the WTO, U.S. policymakers may be cautious in assuming that by steps toward accession Russia will effectively join the global capital and commercial market and develop a new bilateral commercial relationship with the United States.

Notwithstanding these cautions, there are a number of reasons to be optimistic about the prospects for the U.S.-Russian commercial relationship over the next several years. First, both the Bush and Putin Administrations have demonstrated their commitment to taking business cooperation to the next level. Indeed, as a result of recent high-level meetings, the two governments are already pursuing practical solutions to achieve measurable results. A checklist of issues and corresponding time line is being developed, including advancing work on Russia's WTO accession, consulting on the market economy status for Russia, and exploring new Export-Import Bank financing programs.

Second, while in the past West European countries have been the major trading partners and promoters of commerce with Russia. the new Russian-American business dialogue is designed to provide an initiative for development of a major, perhaps leading, American commercial relationship with Russia. The Russian business community clearly recognizes the advantages of developing commercial ties with the United States, which is the dominant source of international capital, the world's largest market, and a global technology leader. For the U.S. business community, Russia, despite the frustrations, remains a market of considerable potential, especially beneficial at a time of domestic economic downturn in the United States. The new Russian-American business dialogue may engender greater familiarity and trust between the respective business communities opening the way for new joint commercial projects, particularly among the small- and medium-sized businesses.

Third, Russia's economy is growing and offering new market opportunities. Russia's economic reform program is only now beginning to gain traction, and it is not unreasonable to posit that conditions will improve if reforms are expanded and implemented.

On the other hand, expected advancement of U.S.-Russian trade and investment may not be forthcoming if past patterns of uncertainties and instability of bilateral commercial relations return. The path to increased trade and investment is full of hurdles. Most notably, Russia's business climate and culture still does not yet inspire broad U.S. investor confidence. Changing this perception may not be a short term proposition. Russia may yet give in to impulses toward economic nationalism and protectionism. Trade disagreements, for example, over Russian exports of steel to the United States could cloud the commercial relationship. Other advanced industrial countries, particularly the Europeans, may more aggressively compete for the Russian market. Russia's economy remains vulnerable to external shocks, such as a significant drop in oil prices and/or a major global recession, that may impede bilateral commercial development.

Nevertheless, at this time, both governments expect progress. At a strategic level, a more robust commercial relationship is in the interests of both countries, business communities and governments alike. U.S. companies stand to gain substantial profit if significant new commercial opportunities are realized. For the Governments of Russia and the United States, increased bilateral business holds the promise of stabilizing the overall bilateral relationship.

RUSSIA AND THE INTERNATIONAL FINANCIAL INSTITUTIONS: FROM SPECIAL CASE TO A NORMAL COUNTRY

By Jonathan E. Sanford¹

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 $[\]overline{^1$ Jonathan E. Sanford is a Specialist in International Political Economy in the Foreign Affairs, Trade and Defense Division of the Congressional Research Service.

SUMMARY

The international financial institutions (IFIs)-the International Monetary Fund (IMF), World Bank, and European Bank for Reconstruction and Development (EBRD)-provided substantial levels of assistance and policy advice to Russia during the past 10 years. Between 1992 and 2001, the IMF and the multilateral development banks (MDBs) approved programs of financial assistance for Russia which totaled altogether about \$59 billion. Of this, \$32.5 billion was disbursed, \$24.6 billion was canceled, and the rest is awaiting disbursement as projects are implemented. All of the money lent by the IMF took the form of balance-of-payments support tied, to varying degrees, to plans for macro-economic and structural reform. For the World Bank, over half the money it agreed to lend and nearly two-thirds the amount it disbursed went for similar purposes. Many of the World Bank's project loans have been slow getting underway due to difficulties finding an effective policy environment for their implementation. Many of the issues which are the focus of these loans-enterprise reform, reform in the financial system, corporate governance and the legal framework, etc.-are matters on which there remains considerable disagreement between reformers and their opponents. Most of the assistance from the EBRD and from the International Finance Corporation (IFC)-the World Bank's private sector aid facility-has gone to strengthen private firms and promote growth of the private sector. The EBRD and IFC have had less difficulty implementing their projects because these are not directed at core policy issues but rather at private sector growth.

Until 1999, with the strong support of the United States and other major member countries, the IFIs treated Russia as a special case. The standards and guidelines for assistance to Russia were more relaxed and flexible than those applied to other countries at a similar stage of development Only one non-member country-the Soviet Union-ever had "special association" status with the IMF and World Bank and had a major program of technical assistance committed for its behalf. No other country besides Russia had a shadow program with the IMF in place before it became a member. No other group of countries-Russia and the other struggling former Communist countries-had a special loan account created for them in the IMF offering loans with such little conditionality. No other country, considering its relative size-a gross domestic product (GDP) barely larger than Turkey, smaller than Argentina and half the size of Mexico and Brazil—received such a disproportionately large amount of money and bulked so large upon the agenda of the IFIs. No other country received large and increasing loan commitments from the IMF and World Bank at the same time that it was failing conspicuously to meet the full performance requirements of its earlier loans.

The IFIs sought through their programs to strengthen the hand of the Russian reformers and to promote macro-economic and structural reform in Russia. During the early years, the establishment of macro-economic stability was the primary goal and structural reform—change in the basic way the economy is organized and its underlying operational principles—was an important but secondary concern. During the latter part of the 1990s, however, the IFIs put increased emphasis on structural reform. In 1999, the IMF and World Bank canceled most of their big loan programs for Russia and they shifted their basic approach. It appears that dissatisfaction with the slow progress Russia was making with many key types of structural reform was as great, if not a greater, consideration in 1999 than was Russia's uncertain macro-economic situation.

Today, the IFIs and their major member countries increasingly view Russia as a "normal" country, that is to say, a country that does not need special standards and special dispensations. As with most middle-income developing countries, Russia has major problems and it needs substantial reforms in the structure and operating principles for its economy. No large programs of balance-ofpayments assistance are planned, however, and most MDB projects are likely to focus on specific projects aimed at improving social conditions, promoting institutional reform, or encouraging policy change in specific well defined situations. Russia's current macroeconomic situation is such that it does not need new IFI stabilization or structural adjustment loans (SALs). Given its performance with structural reform in prior loans-the substantial overhang of as-vet unsatisfied commitments-Russia is unlikely to qualify for such loans even if it needed them. The size of the EBRD and IFC's assistance programs in Russia will likely depend, in future years, on the level of interest shown by foreign investors and the private sector. The size and focus of the IMF and World Bank's future assistance programs in Russia will likely depend, by contrast, on the types of reforms the Putin government puts into effect.

OVERVIEW

There are four principal parts to this paper. The first provides an overview of the IFI's operations in Russia. The composition of their programs are discussed in some detail. The second part discusses the course of events during the 1990s, the way the IFIs sought to balance their enforcement of conditionality with their desire to provide levels of assistance to Russia sufficient to keep the hope and effort toward reform underway. The five stages of the process are labeled here as follows: disburse regardless, 1992–1994; disburse with compliance, 1995; disburse despite resistance, 1996– 1997; commit in the face of crisis, 1998; and reconsideration, 1999– 2001.

The third section relates the IFI's views on their experience with Russia. As it indicates, the concept that Russia is a "normal" country does not imply that it is a country without major problems. Rather, it is a country whose situation is no longer unique and whose problems resemble those seen in many other developing countries. The fourth section provides some concluding remarks.

This paper makes extensive use of public documents available from the IFIs. It also uses some information obtained through interviews.

A DECADE OF SPECIAL CONSIDERATION

PRELUDE AND OVERTURE

Special association

Since 1987, under Chairman Gorbachev, the Soviet Government had been pursuing-against considerable internal resistance-a program aimed at restructuring (perestroika) the Soviet economy. In 1990, the Soviet Union was in the midst of a deep financial and economic crisis and Gorbachev reached out to the West for advice and assistance in dealing with the situation. At their summit meet-ing in Houston, in June 1990, the leaders of the G-7 countries commissioned the World Bank, Organization for Economic Cooperation and Development (OECD), EBRD, and IMF to do a study of the Soviet economy. Issued in early 1991, the four agency study recommended a comprehensive program of reform. This included the early and comprehensive decontrol of prices, restructuring of the financial system, clarification of property rights, and commercialization and privatization of industry. It also included trade and investment liberalization, labor market liberalization, and the creation of an affordable social safety net. The West would provide technical and project assistance and food aid to help facilitate Soviet economic reform.

On October 5, 1991, the IMF and Soviet Union signed an accord giving the U.S.S.R. "special association" status with the IMF. A similar agreement with the World Bank was signed on November 5. Because it was not a member, the Soviet Union could not borrow from the two agencies. However, the IMF and World Bank agreed to provide technical assistance and advice to help the Soviets stabilize their economy, improve their system for gathering statistics, reform the banking system, and strengthen their social safety net. On August 27, the Bank's executive board created a \$30 million special trust fund (using some of the Bank's net income) to support technical cooperation programs in the U.S.S.R. during the next 2 years. Most of the funds were reportedly committed late in the year and not spent until later. Russia and three other republics eventually signed the agreement. Until October, according to IMF sources, the Soviet Government insisted that the IFIs deal with and through the Soviet Government.² Later, as the handwriting on the wall became increasingly clear, the IFIs began direct talks as well with Russia and the other republics.

What is to be done

On October 28, 1991, President Boris Yeltsin delivered a speech to the Russian Congress of Peoples' Deputies and the Russian people outlining his plans for radical economic reform and the transition from state socialism toward capitalism and a market economy. "I appeal to you at one of the most critical moments in Russian history," he said. "Right now it will be decided what kind of country Russia will be in the coming years and decades." At the time, Rus-

² Interview with John Odling-Smee, Director of the IMF department responsible for the former Soviet Union, June 14, 2001. On October 14, the IMF Interim Committee said that assistance would be available "to assist the [U.S.S.R.] authorities in moving forward with urgently needed economic stabilization and structural reforms." IMF Annual Report, 1992. Interim Committee Press Communiqué, October 14, 1991, p. 126.

sia was not yet an independent country but the Soviet state was rapidly withering away.

The central focus of Yeltsin's new economic program was stabilization and economic freedom. Strictly speaking, it was not to be a "big bang" or "shock therapy" approach, since by intention (and by actual events) its provisions were phased in over a period of time. The macro-economic portion of the plan was an orthodox stabilization program emphasizing price liberalization and strict budgetary policy. Major cuts would be made in the budget deficit, state administration, and subsidies for enterprises. A fixed exchange rate would be established for the ruble, Yeltsin said, and it would be made convertible. Restrictions on foreign trade and investment would also be lifted. Privatization of small- and medium-sized enterprises would be a priority and he hoped that one-half could be privatized within 3 months.

Yeltsin's speech showed the direction in which he wanted the economy to move. On many key issues, though, it was vague. He said the country's tax system should be put in order, but there was no mention of the plummeting rate of tax collections. He said there should be more competition and a break-up of monopolies, but there was no discussion of corporate governance or fundamental change in the structure of state industry. The banking system should be reformed, but there was no mention of privatization or new systems of regulation. Monetary and credit policy should be strictly controlled, but there was no indication whether he believed the ruble zone should be continued or dissolved or how the Central Bank of the Russian Federation (Central Bank of Russia or CBR) would be brought under government control. Yeltsin admitted that the process of change would be painful and that "today in the severest crisis we cannot carry out reform painlessly." Living standards would decline and it "will be worse for everybody for about half a year." Afterward, though, he said, prices would fall and the markets would be full of goods. By fall 1992, he said, "as I promised before the elections, the economy will stabilize and people's lives will gradually improve."

The 1992 shadow program

Yeltsin called, in his October speech, for the outside world to come to Russia's aid. "We turn officially to the IMF, the World Bank, the European Bank for Reconstruction and Development and invite them to elaborate detailed plans in cooperation and participation in economic reforms. He appealed for developed countries and international organizations to provide technical assistance and policy recommendations. "Russia carries out its reforms in its own interests," he indicated, "and not under external pressure. Help from the world community can facilitate our movement along this road considerably and accelerate the reforms." Yeltsin promised the West whatever information or collaboration it would desire.

The same day that Yeltsin spoke, the deputy finance ministers of the G-7 countries and representatives of eight Soviet republics, including Russia, signed a memorandum of understanding (MOU) allowing a moratorium on principal payments for Soviet debt owed to the G-7. Under the terms of the MOU, the moratorium could not extend beyond March 31, 1992 unless the IMF approved a shadow program for Russia.

It is very rare, if not unprecedented, for the IMF to negotiate a shadow program with a country that is not a member of the organization. Shadow programs are not unusual. Countries may negotiate such arrangements with the IMF when they do not need (or could not qualify) for loans but they wanted to demonstrate (through IMF endorsement) the basic soundness of their economic policies. The shadow program allowed the Russian Government to announce a package of economic policies which had the IMF's active endorsement. Among other things, this was supposed to create some basis for international confidence in Russian policy. It was also intended to assure the country's creditors that any resources saved through debt relief would not be dissipated through bad economic policies. The shadow program was not a condition for Russian membership in the IMF. However, most people assumed it was a condition for future IMF assistance. The G-7 also made it clear, when they announced on April 1 their \$24 billion assistance package, that Russia needed to qualify for a regular IMF standby loan before it could gain access to those resources.

Agreement on the terms of the shadow program had been greatly eased by Yeltsin's prior announcement that the road to transition for Russia should lead through fundamental reforms to a new market-oriented economic system. There might have been little room for discussion between the Yeltsin government and the IMF if he had advocated some "third way" between the market and central planning or a more democratic continuation of the old system of state economic control. On February 27, after discussions with the IMF, the Russian Government announced that it was putting a new economic program into effect. A few days later, on March 31, the IMF endorsed the MOU embodying the government's plan. In many ways, the economic blueprint embodied in the shadow program was the first real economic plan the government had adopted. It was more specific than the government's prior announcements and it addressed a number of key issues on which the government had been vague in the past.

Most of the provisions of the shadow program were based, however, on plans or policy goals the government had announced earlier. It said that inflation would be reduced and the government's budget deficit would be cut to 1 percent of GDP, mainly through reductions in military spending and subsidies to enterprises. The government would adopt a program of targeted social subsidies to help the worst off and unemployed. CBR monetary and credit policies would be tightened. Most remaining price controls on goods and services would be lifted by the end of March, except for rents, transport, and domestic gas and energy. (The government had removed price controls for most products in January.) Domestic oil prices would be freed on April 20. The value added tax (VAT) of 28 percent—introduced in January but later withdrawn—would be restored and would be applied to imports after July 1. A unified regime of export taxes on energy and raw materials would be established. A progressive tax on pay increases by state firms, which exceeded specific norms, would be levied. In June, as promised, the Russian Government created a unified exchange rate for the ruble, dropping the old system of multiple exchange rates. In November 1992, the ruble was made convertible for Russian residents' foreign trade transactions.

RUSSIA JOINS THE IFIS

The Soviet Union never joined the World Bank or the IMF. It was a founding member (1991) of the EBRD, but by agreement the amount it could borrow from the EBRD was no larger than the amount it had contributed. In January 1992, the Bush Administration announced that it supported membership by Russia and the other former Soviet republics in the IFIs.

In early May 1992, soon after the IMF had endorsed the Russian shadow program, the executive boards of the IMF and World Bank invited Russia and the other former Soviet republics to join. Russia became a full member of the both institutions in June, with seats of its own on their executive boards. It received a 3.2 percent quota share in the IMF, making it the ninth largest member. It got a 1.82 percent voting share in the International Bank for Reconstruction and Development (IBRD), the World Bank's near-market-rate loan facility, making it—along with Brazil—the fourteenth largest member. Russia joined the Bank's other affiliates at this time. The amount a country may borrow from the IMF is determined by the size of its quota. This is not so for the multilateral banks. In early 1992, the Soviet Union ceased being a member of the EBRD and the 12 successor states became members in their own right. (The three Baltic states joined in 1991.) Russia got a seat of its own on the EBRD board.

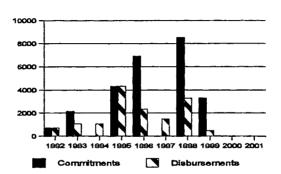
IFI OPERATIONS IN RUSSIA

The IMF

Between 1992 and 1999, as Figure 1 illustrates, the IMF approved six loans to Russia with a total value of SDR (special drawing rights) 33.73 billion (about \$42.69 billion by the current exchange rate). Of this, half (SDR 16.16 billion or \$20.45 billion) was disbursed. Access to the rest was terminated due to non-compliance with loan terms.



[Special drawing rights (SDR) in millions]



The World Bank

Likewise, during the same period, as Figure 2 indicates, the World Bank approved loans to Russia totaling \$12.21 billion from the IBRD. It also approved \$412 million in loans or equity investments from the IFC, its private sector assistance facility, as well as \$249 million in guarantees for foreign investment through the Multilateral Investment Guarantee Agency (MIGA). The IBRD makes loans to government agencies or with government repayment guarantees on near-market-rate terms. As Figure 3 indicates, more than one-third of the funds approved for IBRD loans to Russia have not yet been disbursed. According to data provided by the World Bank's office in Moscow, \$2.79 billion of the total was canceled. The remaining \$1.75 billion is awaiting disbursement as work on the relevant projects or programs goes forward. Table 1 lists the projects the IBRD approved in Russia in the past decade and the disbursement status for each.

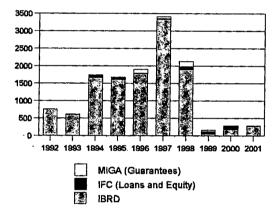
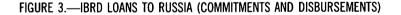


FIGURE 2.—WORLD BANK AID TO RUSSIA (COMMITMENTS)



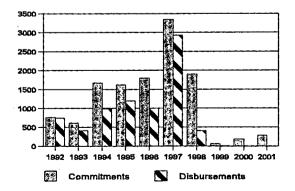


TABLE 1.---WORLD BANK LENDING TO RUSSIA, 1992-2001

[In millions of U.S. dollars]

Date	Purpose	Status	Commit- ment	Can- celed	Undis- bursed
8/5/92	IMF approves first credit tranche loan				
8/06/92	Rehabilitation 1	Closed	\$600.0		0.0
11/24/92 12/17/92	Employment Services/Social Protection Privatization Implementation Assist-	Closed Closed	70.0 90.0	\$14.4 4.0	0.0 0.0
	ance.				
6/17/93	Oil Rehabilitation 1	Closed	610.0	196.0	0.0
6/30/93	IMF approves Systemic Transformation Fa	acility (STF) lo	an, release	s first tra	nche
2/17/94	Highway Rehabilitation & Maintenance	Closed	300.0	19.2	0.0
3/22/94	IMF releases second tranche of STF loan				
5/19/94	Financial Institutions. Development	Active	200.0	59.5	\$66.7
6/16/94	Ag Reform Implementation Support	Extended	240.0	118.2	4.1
6/16/94	Land Reform Implementation. Support	Active	80.0		41.8 163.1
6/21/94 6/29/94	Enterprise Support Project Oil Rehabilitation 2	Active Closed	200.0 500.0	153.4	0.0
11/8/94	Environment Management Project	Active	110.0	133.4	55.5
12/15/94	Management and Financial Training	Closed	40.0		0.0
2/16/95	Portfolio Development Project	Active	40.0		19.0
3/7/95	Housing	Active	400.0	150.7	71.5
3/9/95	Tax Administration Modernization	Closed	16.8	0.1	0.0
3/11/95	IMF approves first regular standby loan				
4/25/95	Emergency Oil Spill Rehab/ Mitigation	Active	99.0		5.2
5/2/95	Energy Efficiency Project	Active	106.5	36.5	51.0
5/16/95 6/6/95	Urban Transport Rehabilitation 2	Active Closed	329.0 600.0	77.6	4.4 0.0
11/30/95	Standards Development	Extended	24.0		3.7
	· · · · · · · · · · · · · · · · · · ·	-	24.0		0.7
3/26/96	IMF approves first extended fund facility	(EFF) IOAN			
3/28/96	Bridge Rehabilitation Project	Active	350.0	195.3	30.3
4/30/96	Community Social Infrastructure	Active	200.0	56.5	78.3
5/7/96	Enterprise Housing Divestiture	Active	300.0	43.6	215.8
5/30/96	Capital Market Development Project	Active	89.0	33.8 46.5	35.9 14.1
6/4/96 6/13/96	Medical Equipment Project	Closed Active	270.0 58.0	40.5	32.6
6/27/96	Legal Reform Project Coal Sector Adjustment 1	Closed	500.0		0.0
6/27/96	Coal Sector Restructure Implement	Active	25.0		8.8
	Asst.				-
3/27/97	St Petersburg City Ctr Rehabilitation	Active	31.0		7.5 57.6
6/5/97 6/5/97	Education Innovation Health Reform Pilot Project	Active Active	71.0 66.0	3.0	57.6 49.6
6/5/97	Bureau of Economic Analysis Project	Active	22.6		45.0
6/5/97	Enterprise Restructuring Services	Closed	85.0	85.0	0.0
	Project.	510000	00.0	00.0	4.0
6/5/97	Structural Adjustment Loan (SAL) 1	Closed	600.0		0.0
6/5/97	Electricity Sector Reform Support	Active	40.0	·····	37.9
	Project.				

TABLE 1.—WORLD BANK LENDING TO RUSSIA, 1992-2001-Continued

[In	millions	of	U.S.	dollars]
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Date	Purpose	Status	Commit- ment	Can- celed	Undis- bursed		
6/25/97	Social Protection Adjustment Loan (SPAL).	Closed	800.0		0.0		
10/7/97	Social Protection Implementation Project.	Active	28.6		18.0		
12/18/97	Coal Sector Adjustment Loan 2	Active	800.0		150.0		
12/18/97	SAL2	Closed	800.0		0.0		
7/20/98	IMF approves second EFF loan and Compensatory and Contingency Financing Facility (CCFF) loan						
8/6/98	SAL3	Closed	1,500.0	1,100.0	0.0		
12/22/98	Highway Rehabilitation & Maintenance	Closed	400.0	400.0	0.0		
5/13/99	Z. State Statistical System Development	Active	30.0		29.0		
7/28/99	IMF approves second standby loan						
12/22/99	Regional Fiscal TA Project	Active	30.0		28.0		
5/23/00	Sustainable Forestry Project	Active	60.0		NYE		
12/21/00	Water Supply and Sanitation Project	Active	122.5		NYE		
2/6/01	Moscow Urban Transport Project	Active	60.0		NYE		
3/27/01	Municipal Heating Project	Active	85.0		NYE		
5/24/01	Education Reform Project Northern Restructuring Pilot Project	Active Active	50.0 80.0	•••••	NYE Nye		
6/7/01							

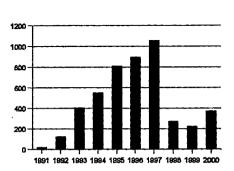
The IFC makes loans to and equity investments in firms in developing countries in order to promote growth and strengthen the private sector. It also provides technical assistance and other forms of operational advice. It does not require government guarantees, and it charges essentially market rates for its aid. At some point, when a firm has grown and its stock has appreciated in value, the IFC will sell it shares. If the IFC is an investment bank, the MIGA is an insurance company. It guarantees investors, for a fee, against various types of non-economic risk, such as expropriation, restrictions on international currency transfer, and damage from war or civil strife.

The European Bank for Reconstruction and Development (EBRD)

The EBRD reports that, between 1991 and 2000, it approved loans or equity investments for Russia totaling $\in 3.41$ billion (about \$4.43 billion according to the dollar/euro exchange rate for 1995 and \$2.79 billion according to the rate for 2000). Of this amount, about $\in 733$ million is awaiting disbursement and a major portion of the balance appears already to have been repaid. The EBRD charges commercial or near-commercial rates for its loans and does not require government guarantees. The current official figures are somewhat at variance with data taken from the EBRD annual reports. When aggregated, the annual figures show that the EBRD approved $\notin 4.32$ billion in assistance to Russia (about \$5.61 billion by the 1995 exchange rate and \$3.97 billion by the 2000 rate). The difference between this and the total published by the EBRD is probably explained by cancellations or by funds which were not needed for the completion of approved projects. It is impossible to determine the years to which the difference should be assigned. Figure 4 shows the annual amounts the EBRD approved for Russia during the 1990s.

FIGURE 4.—EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT (EBRD) ASSISTANCE TO RUSSIA

[In millions of euros]



COMPOSITION OF THE IFI ASSISTANCE PROGRAMS

Most of the programs the IMF and World Bank supported in Russia during the past decade sought to promote macro-economic stability and structural reform. All of the IMF's loans have supported these goals and provided balance-of-payments support. The IMF does not fund projects. For the World Bank, in terms of the number of loans, most of those for Russia went for investment projects or programs of technical assistance and institutional reform. In terms of the amounts of money lent overall, however, most of the Bank's assistance to Russia took the form of balance-ofpayments support aimed at promoting broad-based reform in Russia's economic policies and the structure of its economy. Figure 5 shows that between 1992 and 2001, over half the funds IBRD committed and nearly 65 percent the funds it disbursed went to these "big picture" loans. Loans to strengthen the oil and gas industry (a major source of exports and tax revenue) comprised another 10 percent of the approvals and 11 percent of disbursements. Loans promoting change in the organization and operations of industry, the financial sector, the housing market, agriculture and land ownership, and technical procedures accounted for about 16 percent of commitments and 10 percent of disbursements.

à

Institutional Technical (1,8%) institutional/Technical (2%) Other (3.5%) Other (0.5%) tion (11.5%) Adius rtelfon (8.5%) 08 (9.9%) 01(11.1%) ing (2.9%) d Reform (2%) Adle 12 656 ket (2,2%) Enteror reat (5.4%) Enternet Disbursements Commitments

For most active World Bank projects, a large part of the undisbursed balance will be paid out eventually as implementation proceeded. By contrast, most of the "big picture" adjustment loans approved in the past decade were fast disbursing, the proceeds being made to the borrower as each loan allotment or tranche became effective. Bank-funded investment projects may take 8 to 10 years for full completion. The proceeds from the loan are gradually disbursed as work on the project is completed and the bills from contractors or suppliers are received. Most disbursements occur during the middle years of that period. It is worth noting, though, that many of the projects for Russia approved in the early 1990sfor example, the loans for financial institutions development, land reform, enterprise support, environmental management. and housing in 1994-have used only a small portion of the amounts originally approved. In several cases, a large portion of the loan commitment was later canceled due to changes in context or problems in implementation. In some cases, it seems the Bank is still waiting for the government to take steps or to implement policies which it endorsed in the original loan agreement. In some instances, it appears that necessary legislation has not yet been passed making it eligible for release.

The IMF's programs generally specified the overall goals and priorities for macro-economic and structural reform in Russia. The Bank's adjustment loans often reinforced those objectives and sought to apply them in particular areas. Many of the Bank's projects loans also addressed issues of particular concern. These included, in addition to enterprise reform, privatization, and capital markets development, other concerns such as agricultural reform and improvements in tax, legal, and technical systems. The World Bank had considerable difficulty implementing many of these loans. (See the amounts canceled or not yet disbursed on Table 1.) This reflects the problems the IFIs have encountered generally in their efforts to promote structural reform in Russia.

The IMF

The principal goals of the IMF's programs in Russia included fiscal reform (controlling expenditures, increasing tax collections, re-

436 Figure 5.—Ibrd Loans to Russia

ducing the budget deficit), monetary stabilization (reducing the rate of inflation), and a series of structural reforms (for instance, accelerating privatization, restructuring the banking and finance systems and corporate governance, and implementing legal reform). The Bank's adjustment programs in Russia had similar goals.

Stabilization and adjustment loans provide a direct infusion of foreign exchange. This helps bolster a country's balance of payments, relieving pressure and potentially promoting growth. However, this is only a temporary effect. The underlying concept behind these loans is the expectation that a borrower country can improve its economic situation only if it makes basic changes in its macroeconomic policies and it adopts structural reforms to enhance the efficiency and productivity of its economy. In effect, a country cannot reach its goals unless it is willing to change its course. Generally, the key government authorities in the borrower country want to make these changes (that is, they have some degree of "ownership" of the project plan.) However, they often face stiff resistance from other power centers in their country's decisionmaking system. Some of the proceeds from the loan are available right away. The remainder is available only when the borrower country achieves certain pre-set reforms or performance standards. Such conditionality meets both the lender and the borrower's needs. The lender knows that the agreed goals of the program are being achieved and the borrower knows in advance that it will receive ac-cess to additional funds if it does certain specified things. Among other things, this presumably helps to strengthen the hand of the reformers in their country's internal policy debates.

The EBRD

By contrast with the programs supported by the IMF and IBRD, most of the assistance provided to Russia by the EBRD, IFC, and MIGA has sought to encourage the growth of the private sector and to strengthen private firms. According to data provided by the EBRD, less than 18 percent of the funds committed through June 30, 2001 for Russia went to state institutions.³ This includes 8 loans to firms predominantly owned by government and three to government agencies. It also appears to include loans to firms which have been privatized but where (for example, many natural monopolies) the government still own a significant share of the stock.

Initially, the EBRD put strong emphasis on technical assistance in connection with its loans and investments. By late 1993, though, it had shifted its attention mainly to projects. The EBRD began its operations in Russia expecting to finance projects throughout the Federation. However, with experience, it shifted plans and consciously focused much of its assistance to regions more open to reform and foreign investment. It has also limited the scope of its activities to areas where it believed it has a comparative advantage.

Figure 6 shows (without regard to public or private ownership) the sectors of the Russian economy that received EBRD assistance. The finance sector got the largest share (29 percent). The EBRD

³EBRD signed projects in Russia (table) as of 30 June 2001. Available from the EBRD Web site at http://www.ebrd.org/english/opera/country/rusproj.htm under the general heading "EBRD signed projects in Azerbaijan."

put much effort into strengthening Russian banks, finance and insurance companies and in facilitating new entries (mostly foreign) in this area.

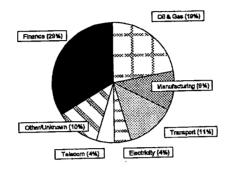


FIGURE 6.—THE EBRD'S RUSSIAN PORTFOLIO

Major shares have also gone to the oil and gas sector (19 percent) and manufacturing (19 percent). The latter includes privatization, food, and agro-industry. Most of the EBRD's approvals for oil and gas production took place in the first half of the decade, when Russia's balance-of-payments situation was very tight. Most of the EBRD's loans or equity investments in manufacturing were approved after 1995. All loans for mining were aimed at the extraction and production of metals. None were made for coal. The EBRD did not specify the sector for several loans it had approved for Russia.

The EBRD manages a Russia Small Business Fund which provides funding to small and medium size enterprises in Russia. The loans are entirely private sector, with no government guarantees or guidance, and are implemented through the private banking system. The fund is supported by the G-7 countries, by the EU, and by Switzerland, with an overall capitalization of \$300 million. Of this, \$50 million is set aside for technical assistance. Since inception, the Fund has disbursed \$431 million through 36,720 loans.

The EBRD also has a special Legal Transition Program which provides policy and technical assistance to improve the legal and regulatory environment for commerce. The EBRD says that it has been very successful in generating proposals for regulating legal entities and for reforming markets and many of its initiatives have been adopted. It is also focusing increasingly on issues involving corporate governance.

The IFC

The IFC began its work in Russia in 1991, focusing on the privatization of state-owned firms and farms near Nizhny Novgorod. At the request of Russian authorities, it prepared a manual on privatization, based on its experience with small-scale privatization in that city, for use elsewhere in the country. This led, the IFC reported, to the privatization of some 80 percent of the small enterprises in the country It also says it helped with the sale of 1,100 medium and large enterprises as well as the privatization of the trucking industry in many parts of the country. The IFC says that its land privatization and farm reorganization program had helped several hundred state and collective farms distribute land and property to their members.

In June 2000, the IFC's portfolio in Russia consisted of \$194 million in loans and \$117 million in equity investments. Manufacturing accounted for 55 percent of the total, followed by financial markets (21 percent), oil and gas (10 percent), and other activities (14 percent) (Figure 7). The financial crisis of 1998 seriously undermined many of the IFC's investments in Russia, particularly those in the banking and financial services sectors. By January 2001, however, the IFC had strengthened its portfolio in Russia by restructuring two large problem projects and writing down the value of several others.

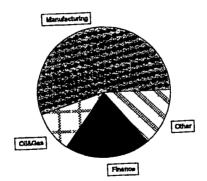


FIGURE 7.—THE IFC'S RUSSIAN PORTFOLIO

FIVE STAGES IN THE TRANSITION FROM SPECIAL CASE TO NORMAL COUNTRY

During the past decade, the EBRD, IFC, and MIGA have expanded the size of their operations in Russia as conditions permitted. Except perhaps for special effort to identify good project opportunities in Russia, these three agencies did not treat Russia as a special case and they did not change their standards or orientation as conditions changed. Their activities have focused on the private sector. Funds have been committed and disbursed for projects which the international agencies believed had substantial prospects for growth. For the most part, the level and scope of the three agencies reflect the changing attitudes of domestic and foreign investors in Russia. Total commitments grew rapidly in the first half of the decade, peaking in 1997. They fell rapidly in 1998, however, as the prelude to the August financial crisis and the crisis itself with default on foreign debts and a major devaluation of the Russian currency—caused a major shift in commercial conditions and investor attitudes. Since the crisis, the EBRD, IFC, and MIGA have considerably reduced the size of their operations in Russia. Most observers agree, however, that as conditions stabilize in that country commercial prospects will improve and the volume of activity for the three agencies will increase.

By contrast, the operations of the IMF and World Bank in Russia have been attuned much more acutely to the policy environment. The Fund and Bank have worked much more closely with the Russian Government in the design and implementation of macro-economic and structural policy change. In some ways, their programs in Russia have been both counter- and pro-cyclical. When things were becoming difficult in Russia, it seems, the IMF lent money to try to counter the undesirable trend. Then, when things seemed to be going better in Russia, the IMF lent more money to try to encourage the desirable trend.

When the economic situation was most precarious early in the decade, the IMF and World Bank lent substantial sums. The conditions for their loans during the first several years were relatively easy and they seem to have disbursed with limited regard to whether the Russians were complying with conditionality. In middecade, as prospects seemed to improve, the IMF and World Bank lent larger amounts in order to consolidate and accelerate the reform process. In 1995, the IMF and World Bank increased their assistance, their attention to compliance was more strict, and Russia met most of the loan terms. The IMF and World Bank continued to lend substantial sums during the next 3 years. However, they again seemed to be operating counter-cyclically. They disbursed funds even as the economic situation was becoming increasingly questionable and compliance with conditionality was incomplete. After the financial crisis of 1998, the IMF and World Bank seem to have reconsidered their approach to Russia. Except for project loans, they canceled all their outstanding loan commitments and they pared back the scope of their operations. In the future, the IMF and World Bank say they will treat Russia the same way they treat other large middle-income developing countries. As such, they will likely be reluctant to put large sums into Russia mainly to encourage the transition process and they will likely be more rigorous in their requirements for future loans.

DISBURSE REGARDLESS: 1992–1994

Synopsis

Between 1992 and 1994, the IMF and World Bank seem to have disbursed funds to Russia with few restrictions and little serious conditionality. During these 3 years, the IFIs committed themselves to lend \$7.73 billion to Russia—\$4 billion from the IMF, \$2.64 billion from the World Bank (of which \$1.96 billion is from IBRD and \$680 million is from the IFC), and \$1.09 billion from the EBRD. Of this, \$5.71 billion was disbursed almost right away—\$4 billion by the IMF and \$1.71 billion by the World Bank. Many of the conditions which the IMF and World Bank attached to their loans for Russia during these years were not very rigorous or demanding. Those for the World Bank were easily met and the IMF seemed to have disbursed without strict attention to Russia's performance vis-à-vis the standards in its loan agreements. On some occasions, the targets were changed or performance standards were adjusted in order to permit disbursement to continue.

IMF programs: 1992–1994

In 1992, the World Bank and IMF were under considerable pressure from the Bush Administration and other major governments to begin lending in order to stimulate the transition process and strengthen the hand of the Russian reformers. This put the IFIs in a difficult spot. It was increasingly clear that Russia could not qualify for regular IMF or IBRD loans. Russia's macro-economic situation was deteriorating. It was not in compliance with the modest goals of the shadow program. In mid-1992, the Yeltsin government pulled back from its program of reform in the face of strong opposition. Key members of the reform team were sacked, to assuage the opposition and maintain some headway on reform. The new president of the Central Bank of Russia, Viktor Gerashchenko, appointed in mid-1992, turned out to have theories of monetary policy which led him to flood Russia and other members of the ruble zone with cheap credit. This boosted inflation and lessened the pressure that market forces might have exerted toward enterprise reform.

Nevertheless, on August 5, 1992, the IMF approved a SDR 719 billion (\$1 billion) first credit tranche loan to Russia. The amount countries can borrow from the IMF is a multiple of their quota. Russia's quota in the IMF, at the time of its joining, was SDR 2.96 billion (then about \$4.3 billion). As countries move into the higher credit tranches, the conditions for access to IMF funds and the performance criteria for disbursement become increasingly stringent. This loan was not unprecedented. Most countries will want to borrow more than the first credit tranche can provide. However, some have limited their requests to this level. By borrowing only the amount allowed for a first credit tranche loan, countries need to meet only modest requirements for conditionality and they do not need to demonstrate compliance in order to receive loan disbursements. Even so, in the case of Russia, the negotiations for the first tranche loan dragged. To facilitate agreement, the Managing Director of the IMF, Michel Camdessus, flew to Moscow just before the start of the G-7 Summit Meeting in Munich in early July.⁴ The proceeds from the loan were made available right away. Russia agreed to reduce its budget deficit from 17 percent to 5 percent, but disbursement was not dependant on its achievement of this goal. This was less stringent than the 1 percent target in the shadow program. Russia also agreed to reduce its monthly inflation rate from 15 to 20 percent to 10 percent.⁵

⁴For the IMF's statement on the loan, see its press release number 92/60 dated August 5, 1992.

⁵For a detailed chronology of IMF loan programs in Russia from 1992 to 1999, see: U.S. General Accounting Office. International Monetary Fund: Approach Used to Establish and Monitory Conditions for Financial Assistance. Report to Congress NSIAD-99-168, June 1999, pp. 136-158. It provides a detailed summary of the goals of each program, Russian compliance, and actions taken by the IMF executive board. For a detailed review of the assistance programs in Russia sponsored by the IFIs, United States, and Europeans, see U.S. General Accounting Office. International Efforts to Aid Russia's Transition Have Had Mixed Results. GAO-01-8, November 2000.

It was not intended that the IMF's first tranche agreement with Russia would cause the G_{-7} countries to release the \$24 billion aid program they had announced. Officially, the \$24 billion assistance package—and the \$6 billion ruble stabilization fund which it contained—would be available only after Russia successfully negotiated a regular standby loan program with the IMF. Russia drew down the resources for the first credit loan by the end of 1992 and added them to its reserves. Russia's budget deficit and inflation rate did not shrink as planned, however, and Russia was almost immediately out of compliance with the terms of its first IMF loan. This severely constrained its eligibility for future IMF loans.

The IMF noted, in early 1993, that the economic problems confronting Russia were comparable to those faced by Japan and Germany after 1945.⁶ Russia's need for external assistance was also comparable. "Equally important," the IMF reported, however, "Russia must be willing and able to pursue economic policies that ensure that the external assistance has the desired effects." In particular, these included "measures to achieve macro-economic stability and rapid progress on a wide range of systemic reforms." Success in those areas, it said, would "create the conditions in which market mechanisms will eventually grow."

The IMF continued to resist pressure from its major member countries for expanded assistance for Russia. Russia was not in compliance with the goals of the first tranche loan and there were doubts at the time that Russia would be able to comply with any meaningful conditions the IMF placed on future loans. The IMF also was reluctant to set a precedent where the normal rules and standards governing lending were openly waived in the case of emergencies affecting "important" countries. Fund management worried that other large developing countries would claim that they too were "important" and they too faced crucial emergencies.

The G-7 found a way around this problem. During their meeting in Tokyo on April 14 and 15, 1993, the deputy finance ministers of the G-7 countries announced that a new IMF loan facility-the Systemic Transformation Facility (STF)-would be established.⁷ The STF was a response to the concern, as the G-7 carefully put it, that the IMF's regular loan conditionality did not provide enough flexibility for a positive response to the borrowing needs of Russia and other formerly socialist states. Though designed originally to benefit the Soviet successor states, eligibility was broadened to include other non-market economies (Albania, for example) as well.

The STF provided quick-disbursing loans to facilitate stabilization during the early stages of the transition process. The eligibility criteria were vague. Countries could borrow if they were experiencing "severe disruptions in their trade and payments due to a shift in world market pricing." The conditions for access to STF loans were also easier than those for regular loans. Countries had to

⁶John Odling-Smee and Henri Lorie. *The Economic Reform Process in Russia*. WP/93/55-EA, July 1, 1993. Odling-Smee heads the office at the IMF responsible for Russia. The report seems to have been prepared for presentation to the IMF executive board earlier in the year. ⁷Tokyo Summit Economic Declaration: A Strengthened Commitment to Jobs and Growth. Tokyo, July 9, 1993. The G-7 urged the international agencies, in the strongest possible terms, to provide more assistance to Russian. Available from http://www.g7.utoronto.ca/g7/summit/1993tokyo/communique/job.html.

demonstrate that they were trying to solve their balance-ofpayments problems and curb inflation and they had to submit a written statement describing the goals of their reform program and the steps they planned to take to attain those goals. The proceeds would be disbursed in two tranches—the first immediately and the second within 6 to 12 months.

On June 30, 1993, the IMF executive board approved an SDR 2.156 billion (\$3 billion) loan to Russia from the STF. The first tranche—SDR 1.078 billion (\$1.5 billion)—was disbursed right away. Conditions seemed to be improving in Russia at the time. In December 1992, Yeltsin had won a referendum and this gave the reformers some political clout to cut spending. In May 1993, the Russian Finance Ministry and CBR reached an agreement aimed at reducing the rate of inflation. Steps were also afoot to tighten the ruble zone. The CBR told other countries they must either leave the ruble zone or allow the Russian Government tight control over their monetary policies.

The Russian Government agreed, under terms of the STF agreement, that it would reduce its budget deficit to 5 percent of GDP and its monthly inflation rate to a "low single-digit level." These were, in effect, the unmet goals of the 1992 shadow program and the first tranche loan. The government and CBR promised not to make loans to clear inter-enterprise payment arrears. The government also agreed to accelerate reform in the areas of foreign trade, privatization, and the legal framework.

In March 1994, when the time came to release the second half of the STF loan, Russia was not in compliance. Nevertheless, Camdessus and Prime Minister Chernomyrdin reached agreement on terms for releasing the second tranche of the STF loan. Reportedly, Camdessus overruled his staff, which was his prerogative. He had strong backing from six of the G-7 governments, including the United States. The Russians agreed they would take strong action to implement the planned macro-economic and structural reforms. The inflation rate would be lowered to 7 percent monthly by the end of the year. The IMF relaxed (from 5 percent to 7 percent of GDP) the target for reducing the budget deficit. The government promised to improve its supervision of commercial banks, to establish a budgetary system devolving responsibilities to the regions, and to continue privatization. It also promised that, by July, shares would be auctioned for cash rather than vouchers and new commercial rules would be announced.

In December 1994, Camdessus outlined the Fund's views on the transition process in a speech before an economics meeting in Madrid.⁸ Gradualism was not an effective strategy for the transition to market economies, he said. Rather, rapid movement to liberalization, stabilization and structural reform was needed and those countries that moved furthest would come out best. Nevertheless, he acknowledged, the achievement of structural reforms would take a number of years and the transition process would have to take place within an imperfect framework. "The market economy must,

⁸Michel Camdessus. "Supporting Transition in Central and Eastern Europe: An Assessment and Lessons from the IMF's Five Years' Experience." Second Annual Francisco Fernández Ordóez Address, Madrid, December 21, 1993. IMF document 95/2.

as it were," he said, "move into a house that is still under construction."

The following March, Camdessus made another speech, expressing the view that Russia's transformation effort had reached a turning point. Progress to date on structural reform and macro-economic stabilization had been less than disappointing, he admitted.⁹ However, he said he had confidence that the Russian authorities would move vigorously in 1995 to reverse that trend.

World Bank programs: 1992–1994

The World Bank's first country assistance strategy (CAS) for Russia, approved by the executive board in 1993, specified that three areas should be given special emphasis in the Bank's loan program.¹⁰ Programs to promote private sector development, privatization and enterprise reform should be given high priority. Strong emphasis should be accorded to policy reform and the development of an agreed framework with the Russian Government into which future operations could be fitted. Finally, the 1993 CAS said that the Bank should work with the Russian authorities to develop programs that would help protect the most vulnerable members of society from the full pain of the transition process. These were all key structural reform included in the IMF loan programs approved during these years.

Despite the terms of the CAS, most of the funds the World Bank lent to Russia during this period went for balance-of-payments support or to increase oil production and oil exports. The day after the IMF made its first loan to Russia, the World Bank approved a \$600 million loan to ease Russia's balance-of-payments difficulties by financing needed imports. To qualify for disbursement, Russia merely had to demonstrate that \$350 million from the loan would be used for humanitarian imports and the other \$250 million for imports needed by the private sector. In June 1993, the World Bank approved a \$610 million loan for Russia to help rehabilitate its oil industry. A similar \$500 million loan was approved in June 1994.

All but \$160 million of the \$1.33 billion in project assistance the World Bank agreed to provide Russia at this time was approved about the time the second STF tranche was released in 1994. Of this, \$810 million sought to encourage enterprise reform, privatization, agricultural reform, land reform, and the development of financial markets. Many of these loans, however, ran into serious difficulties and many of the funds were not disbursed. One loan in 1992 sought to alleviate social needs through the establishment of unemployment insurance and employment services. It also encountered problems with implementation. A \$300 million loan for highway maintenance and rehabilitation, however, was completed without major delay. In late 1994, the Bank approved two other modest-sized loans. One for management and financial training was fully implemented but another for environmental management ran into serious problems and remains only half disbursed.

⁹Michel Camdessus. "Russia's Transformation Efforts at a Turning Point." Address to a Conference of the U.S.-Russia Business Council, Washington, DC, March 29, 1995. IMF document 95/5.

¹⁰The World Bank was unable to provide a copy of the 1993 CAS for Russia. The summary reported here is based on statements in press releases and other Bank documents issued between 1993 and 1997.

DISBURSE WITH COMPLIANCE: 1995

Synopsis

In 1995, the IFIs disbursed substantial sums to Russia and Russia substantially complied with their loan conditionality. In 1995, the IFIs approved loans for Russia totaling nearly \$9.5 billion. Of this, \$6.8 billion came from the IMF, \$1.62 billion from the IBRD, World Bank, and \$1.06 billion from the EBRD. Of this, \$7.4 billion was disbursed, including all the funds committed by the IMF and \$600 million fast disbursing assistance approved by the World Bank. The international agencies believed, at the time, that Russia had turned a corner and that economic growth would soon follow. Russia met most of the requirements of the 1995 IMF standby loan. In the blush of success following the perceived success of that program, the IMF approved a \$10 billion loan for Russia in February 1996. That loan (discussed in the next section) was much less successful. During 1995, the IFC approved \$65 million and the EBRD approved \$1.06 billion in assistance to Russian firms.

IMF operations: 1995

On April 11, 1999, the IMF executive board approved an SDR 4.31 billion (then about \$6.8 billion) standby loan of for Russia, a 12 month program. The IMF noted in its announcement that Russia's economic performance in 1994 was "disappointing." Efforts to reduce the budget deficit and inflation rate were "significantly off track" and the target for accumulating new foreign reserves was missed "by a wide margin." In fact, the budget deficit and inflation rate were twice the levels anticipated by the STF second tranche agreement. The IMF noted that the CBR had tightened monetary policy in late 1994 and early 1995, but it said this would not be sustainable unless major improvements were made in fiscal policy. In a very unusual step, the IMF specified that Russia's progress under the new loan plan would be monitored monthly and funds would be disbursed only with the consent of the IMF executive board.

The goals of the new standby loan echoed those earlier plans. Inflation was to be reduced to 1 percent monthly by the end of 1995. Credit and monetary policy would be tightened further and the government's budget deficit would be reduced to 6 percent of GDP. The government promised to use non-inflationary sources of financing in the future to cover the deficit. In 1994, Russia's real GDP declined by 15 percent. The new plan hoped to cut the decline to 9 percent in 1995.

The government also pledged to make a major effort to accelerate action on a wide range of structural reforms. Prominent were measures to liberalize the trade regime and oil sector. In particular, the restrictions on oil exports would be abolished. The government and CBR promised once again that they would not extend credits or loans to clear inter-enterprise debts. The government would find other means of resolving those pressures and breaking up the logiam hampering the mutual settlement of debts which Russian firms owed to one another. The government promised to continue cleaning up non-performing centralized credits and to more tightly monitor the financial situation of banks. It also promised to accelerate the process of land reform and to increase the efficiency of its social spending programs.

In March 1996, the IMF announced that it was very pleased with the success of the 1995 loan. Reflecting the high hopes it then had for the future, the IMF executive board approved a new SDR 6.9 billion (about \$10 billion) loan for Russia. Disbursements would take place over a 3 year period (1996-1998) and the repayments would stretch over a decade. This was the largest extended fund facility (EFF) loan the IMF had ever made and the second largest overall. The largest was the SDR 12.1 billion loan to Mexico approved in February 1995. After Mexico made an early repayment on that loan. Russia became the IMF's largest borrower, accounting for nearly one-fourth of the IMF loans and credits outstanding at the end of July 1996. Russia's compliance with the EFF loan is discussed in the next section of this paper.

The IMF reported that Russia's performance the previous year under the 1995 loan program had been quite satisfactory. Inflation had fallen to low single digit monthly rates by the end of 1995, the IMF reported. Signs of industrial recovery were visible. Real GDP remained nearly stable, shrinking only 4 percent in 1995 (not the 9 percent anticipated.). The IMF noted that Russia's balance-ofpayments surplus (current account) had widened from \$3.4 billion in 1994 to \$4.7 billion in 1995. Moreover, it said, the establishment of an exchange rate "corridor" for the ruble had helped stabilize exchange rate perceptions and was "generally judged to have been a success." On the structural front, the IMF acknowledged that Russia's performance was more uneven. The process of restructuring the banking sector was slow and the pace and scale of privatization was below expectations. Nevertheless, it concluded, Russia's overall progress had been significant. Stanley Fischer observed in June 2001¹¹ that Russia's compliance with the terms of the 1995 standby were "exemplary" and "for 9 of the 12 months Russia essentially met all the conditions." Previously an economic professor at MIT, Fischer had become First Deputy Managing Director of the Fund in September 1994. He became acting Managing Director of the IMF in early 2000.

In a paper published in early 1996, Fischer wrote ¹² that 1995 had been the key stabilization point for the Russian economy. According to his research, he said, growth usually occurs 2 years after the stabilization point is reached. However, he cautioned in the 1996 paper, governments must continue pursuing stabilization policies and structural reforms if growth is to continue. Establishing a pegged exchange rate for the currency was helpful, once stabilization had occurred, he said, but the situation was not sustainable without prudent government policy and further cuts in the fiscal deficit. In July 1995, Fischer noted with approval the Russian Government's decision to institute an exchange rate system where the value of the ruble would be kept within a certain range in relation

¹¹Stanley Fischer. The Russian Economy: Prospects and Retrospect. Speech at the Higher School of Economics, Moscow. June 19, 2001. Available from the IMF Web site. ¹²Stanley Fischer, Ratna Sahay and Carlos A. Vegh. "Stabilization and Growth in Transition Economies: the Early Experience." Journal of Economic Perspectives, 10:2 (Spring 1996), pp. 45– cc 66.

to the dollar.¹³ He observed later, however, in his June 2001 retrospective on the IMF's programs in Russia, that "the 1995 loan was very successful, but it did put in place the crawling band exchange rate that was a source of trouble in the future."

World Bank operations in Russia: 1995

In March 1995, 1 month before the IMF approved the new standby loan, the World Bank commenced a large new program of lending to Russia. That month, it approved a \$400 million loan to help restructure the housing sector in Russia through the establishment of a new marketplace for housing. During the 2 months following announcement of the IMF loan, the World Bank approved another \$1.13 billion in loans. This included a \$600 million loan on easy compliance terms to ease Russia's balance of payments by financing needed imports and \$99 million to address a major oil spill problem. All told, during 1995, the Bank approved \$1.62 billion in loans for Russia, its largest annual total to date.

The Bank's project loans in 1995 sought to promote growth and address key structural problems. In addition to the loan which sought to create a marketplace for housing, the Bank lent \$107 million to promote energy efficiency and \$329 million to improve urban transportation. It also approved two smaller loans to develop standards, identify prospective new loan projects, and to improve and modernize tax administration. As in 1992 through 1994, the World Bank did not accelerate its disbursements on these loans nor did it disburse regardless of compliance. However, in retrospect, it appears that—as in the earlier period—many of the Bank's projects were approved before conditions had matured to a point where they could be successfully implemented. A major portion of the funds for the housing and energy efficiency loans were canceled or never dis-bursed and most of the funds for the urban transport loan seem not to have been disbursed until 1998 or after. Likewise, a major portion of the funds for standards development or development of the Bank's loan portfolio were not spent until 1998 or remain unspent todav.

DISBURSE DESPITE RESISTANCE: 1996-MID 1998

Synopsis

Between 1996 and mid-1998, the IFIs disbursed substantial sums to Russia even though its compliance with conditionality was limited and their efforts to promote reform met with considerable resistance. Heavy spending before the 1996 election expanded Russia's fiscal deficit and stoked inflation. Yeltsin was reelected but the opponents of reform were strengthened also. The government's ability to deliver on its commitments for stabilization and structural reform diminished. Nevertheless, despite major difficulties with compliance, the IFIs provided Russia with substantial sums of balance-of-payments support. Between approval of the EFF loan in early 1996 and the onset of the financial crisis in mid-1998, the IMF disbursed approximately \$6.78 billion to Russia. The IMF suspended disbursements for the EFF program on several occasions,

¹³ IMF Management Welcomes Economic Progress Made by Russia; Exchange Rate Action Designed to Support Program. News Brief 95/17, July 6, 1995. Quotes positive remarks by Fischer.

releasing funds only when the Russian Government complied with certain conditions of the loan. That compliance often came slowly and in the face of considerable domestic resistance. Some of that compliance seems more technical than substantive. Meanwhile, the World Bank approved nearly \$5.14 billion in new loans for Russia. SALs accounted for \$3.5 billion of this total, all the proceeds being disbursed during 1996 and 1997. The Bank approved project loans totaling \$1.64 billion during these 2 years, mainly in 1996. In retrospect, an unusually large proportion of those loans encountered serious problems with implementation and the disbursement of a substantial share of their proceeds was canceled or considerably delayed. Meanwhile, during 1996 and 1997, the IFC approved \$28 million and the EBRD approved \$2.36 billion in assistance to Russian firms.

IMF programs: 1996–1998

The IMF agreed in March 1996 to lend Russia SDR 6.9 billion (\$10 billion) over the next 3 years. Disbursements for the new EFF loan would be monitored monthly, as had been the case for the prior loan. After October 1997, during the second year of the program, they would be made on a quarterly basis, as is usual for most IMF loans. Disbursements would be front-loaded, with 41 percent being available upon compliance in the first year, 34 percent in the second, and 25 percent in the third. The Russian Government said it did not intend to borrow again from the IMF once this program was completed.

The goals of the EFF program were basically the same as those for the previous IMF programs in Russia. There was more emphasis, however, on the need for structural or procedural reforms and—because it was a 3 year program—it was thought that Russia would have enough time to implement those reforms. Events proved, however, because of increased inflation as well as stronger resistance by the opposition, that achievement of these goals would remain a difficult task.

In the area of macro-economic policy, the government announced that it would take strong action to reduce the rate of inflation and the size of its budget deficit. Inflation would be reduced to a 1 percent monthly rate by year's end and would decline further, to a single-digit annual rate, in 1997. The government also declared that it would take the steps needed to maintain medium-term stability in Russia's balance of payments. Real GDP growth was expected to accelerate to 2.3 percent annually in 1996 and 5 percent in 1998 and 6 percent or more thereafter. Consequently, it was expected that Russia's current account balance of payments would swing into the negative in 1998, when higher growth would lead to more purchases from abroad. The Russian authorities said they would take measures to manage the expected situation without encouraging inflation. Further cuts in the government's budget deficit were a critical element of this strategy. The Russians agreed to reduce the deficit from 5 percent of GDP in 1995 to 4 percent in 1996 and 2 percent by 1998. They also agreed that it would take major steps to improve tax collections and reduce delinquencies and exemptions. This would require special efforts to overcome the political connections and favoritism which often facilitated tax evasion and tax avoidance of this type.

On the structural side, the government said it would make trade liberalization and accession to the World Trade Organization (WTO) a high priority. It would strengthen the banking system through improvements in the regulatory framework and closer attention to the financial health of banks. It would accelerate privatization while assuring greater transparency and fairness of the process. It would pursue agricultural reform, reducing the uncertainties of private farmers, expanding land reform, and allowing the full private ownership of land. The security markets would be reformed, improving the legal framework, reorganizing weak firms, and increasing the protection for outside investors. The government also announced that it would strengthen the social safety net by targeting assistance more specifically to those who needed it and using the resultant savings to enhance other social programs.

Despite these plans, most of the IMF's efforts in Russia during this period had to do with the government's difficulty in achieving the macro-economic goals of the EFF program. The government made some efforts toward addressing structural reform issues. However, the results achieved were not proportional to the goals outlined in the EFF program. The Fund was less vigorous in its efforts to secure Russian cooperation with the targets for structural reform than it was for those involving macro-economic stability.

In 1996, Russian economic performance and the government's economic policies fell well short of the expectations in the EFF plan. By July, the budget deficit was well over target. The IMF raised the annual target to 5.25 percent. Government spending had increased rapidly in the just-concluded presidential election campaign. There was little alternative but to increase the size of the federal budget to accommodate the higher cost of the government's earlier debt and the new debt payment obligations recently incurred.

In 1997 and 1998, however, the Russian Government continued to have problems with its fiscal deficit. Budget figures seemed to be prepared more to meet the IMF's deficit targets than to meet real budgetary needs. For example, the budget signed by Yeltsin in February 1997 projected a deficit equal to 3.5 percent of GDP. This was within the deficit target. The IMF urged the Russians, however, to include money in the budget to cover the government's accumulating unpaid interest obligations and federal wage and pension arrears. This would have widened the budget gap to nearly 7.5 percent of GDP, well over the target. The Russian authorities were not convinced by the IMF's approach to budgetary accounting.

The IMF suspended disbursement of the January installment of the EFF and Russia received no disbursements for the rest of the first quarter 1997. The most important threat to fiscal stability was not rising expenditures but shortfalls in tax receipts. The IMF suspended disbursements on the EFF loan in July and August 1996 until the government adopted a package of measures to increase revenues. The October 1996 tranche was delayed until December, when revenues increased by 38 percent. The November and December disbursements were delayed until February 1997, when the government showed that it had met the December monetary and fiscal targets and had taken steps to improve tax receipts. By the end of April 1997, though, Russia had drawn SDR 2.34 billion (\$3.22 billion) from the EFF line of credit. By April 1998, it had borrowed another SDR 1.5 billion (\$2.04 billion) and it got another SDR 1.12 billion (\$1.52 billion) in August 1998.

In May 1997, the government received word that tax receipts would be even lower for the year than expected. This would push the deficit well over the EFF target. The government sequestered (freezing or withholding from expenditure) more than one-fifth of the funds in the national budget in order to bring down spending. Tax evasion, inefficient collection methods, and widespread exemptions were taking their toll. To increase revenues and reduce the deficit, the government accelerated the privatization process. Income from this source more than doubled. However, many of the sales were beset with doubts about corruption and serious concern whether the prices paid reflected the underlying value of the firms.

By the end of 1997, with these increased receipts and the major spending cuts taken earlier, the government's budget deficit was 5.5 percent of GDP, slightly higher than the revised IMF target. The inflation rate for 1997 was 11 percent, down by half from the previous year but higher than the single-digit goal of the EFF program. Most analysts agreed that sequestering expenditures was not a sufficient method for achieving those targets. Among other things, expenditures on social programs had been slashed substantially. Most agreed that the shrinkage in budgetary outlays could not be sustained.

World Bank programs: 1996–1998

As noted, the World Bank reached new heights in the size of its loan program for Russia in 1996 and 1997. However, the overall composition of the Bank's program shifted as it put increased emphasis on programs addressing the needs of the overall economy and less on project loans.

In May 1996, Bank President James Wolfensohn echoed the view that Russia had turned a corner in its transition process. He told the press that conditions in Russia were much improved and the Bank would be active "supporting the major economic reforms which must be sustained for Russia to achieve transition to a market economy."¹⁴ A year later, the tone of the Bank's enthusiasm was somewhat subdued. Nevertheless, in September 1997, Johannes Linn, the World Bank's vice president for Europe and Central Asia, reported-while Russia's performance had been below its potential—the Bank was still optimistic about its prospects.¹⁵

In 1997, the Bank added a new component to its Russian program. Adopting a new CAS to replace that earlier adopted in 1993, the Bank said there should be more stress on structural adjustment and policy reform.¹⁶ Emphasis should also continue, though, on enterprise reform, institutional reform, and improvements in education and health. More effort should also be given to programs

 ¹⁴ World Bank, James Wolfensohn. Statement to the Press. Moscow. May 23, 1996.
 ¹⁵ World Bank Optimistic About Russia's Growth. (Announcing the SAL1 loan.) News Release No. 98/1492ECA. September 26, 1997.
 ¹⁶ World Bank Announces Russia Strategy for the Next Two Years. News Report No. 97/1379/ ECA, June 6, 1997. The 1997 CAS was also not released to the public but its main outlines were described here.

protecting the most vulnerable members of society from the effect of transition and sustaining the government's budget for social programs. Linn announced that the Bank's new emphasis on policy reform and adjustment lending in Russia would "demonstrate our clear recognition and full endorsement of the reform measures that are currently being implemented by the [Russian] government." 17

In 1997, the World Bank approved three large structural reform loans for Russia totaling \$2.2 billion. Two were regular structural adjustment loans (SALs) and the other was a social protection adjustment loan (SPAL). The two SALs were nearly identical, in their form and purpose, to the loans approved earlier by the IMF. The \$600 million from SAL1 was disbursed right away. The \$800 million for SAL2 was disbursed in two tranches, a few months apart.¹⁸ Russia agreed that it would take steps to accelerate privatization, private sector development, changes in bankruptcy law, reductions in the budget deficit, improvements in tax administration, reform of the banking and financial sectors, and improvements in the social safety net. The World Bank has not reported what Russia needed to do in order to have access to these loans. Given the speed with which they were disbursed, however, one may suspect that the performance requirements were not particularly demanding. It does not appear that Russia made major steps toward structural reform at the time it received disbursement of these funds.

The requirements for the SPAL were somewhat more rigorous. This loan was aimed at protecting the weakest members of Russian society against potential injury from the adjustment process. At \$800 million, it was the largest single loan ever made in the Europe and Central Asian region. It sought to strengthen Russia's social safety net and improve the way Russia targeted and implemented those programs.¹⁹ To qualify for disbursements, Russia had to demonstrate that a certain amount of social spending was included in its budget and those expenditures were being used effectively. In effect, the SPAL was a balance-of-payments support. The government could use the money from the SPAL to generate the rubles needed to fund the qualifying social expenditures, but it was not required to do so. The SPAL did not increase the amount spent for social programs, but it did help protect the existing programs against budget cuts. Social spending took a disproportionate share of the hits, in 1997 and 1998, as the government sequestered budget authority in order meet the IMF's targets on the budget deficit. Russia had some difficulty meeting all the requirements of the SPAL. The final \$250 million tranche, which had been scheduled for release in early 1998, was not disbursed until after 1999.

The World Bank also made two loans, totaling \$1.3 billion, to help restructure the Russian coal industry.²⁰ The first of these

 ¹⁷ World Bank Supports Russia's Reforms. December 19, 1997.
 ¹⁸ World Bank Announces Russia Strategy for the Next Two Years. News Release No. 97/1379/
 ECA, June 6, 1997. Project Information Document PIC5759. Russia-Second Structural Adjustment Loan (SAL2), December 23, 1997.
 ¹⁹ World Bank Loan Supports Russia's Social Reforms. News Release No. 97/1408/ECA, June 25, 1997. Project Information Document PID5638. Russia-Proposed Social Protection Adjustment Loan (SAL).

Loan (SPAL). June 12, 1997. ²⁰ The PID for Coal 1 is not available. However, the program's objectives are discussed in an-other publicly available technical document. Wo: d Bank Helps Reform Russia's Coal Industry. News Release No. 97/1225/ECA. Technical Annex T-6865-RU. Coal Sector Restructuring Imple-

(Coal 1), for \$500 million, was approved in 1996. In part, the two loans sought to ease pressure on the government's budget. Subsidies to the coal industry had been a major contributor to the deficit. In 1993, these subsidies had amounted to 1 percent of GDP. By 1995, they had been cut to one-sixth that level. The new coal loans aimed to reduce them substantially further. The loans aimed to create a competitive and sustainable coal industry by promoting commercialization and privatization of the mines. The loans were not intended to offset losses or to refurbishment of capital stock in the mines. To qualify for disbursement, the government would need to adopt a socially sustainable framework of assistance for coal communities, including social services and efforts to improve labor mobility. As with the two SALs and the SPAL, the government could use the proceeds from the Bank's two coal loans for any purpose if it could demonstrate that it was making the appropriate expenditures (in rubles) to sustain the specified service programs. The second tranche of Coal 2 was contingent, however, on satisfactory macro-economic performance. It was delayed for 2 years (until the end of 1998) and media reports in December 2001 indicate that the last portion was just being released.

Parallel with the new emphasis on adjustment loans, the World Bank also approved many project loans for Russia during 1996 and 1997 which addressed key concerns identified in the IMF's loan program and in the 1993 and 1997 country strategy documents. In 1996, \$1.27 billion was approved and in 1997 another \$286 million was authorized for this purpose. All told, \$608 million was approved for projects addressing social issues, such as education, health, and community social infrastructure. Another \$514 million was approved for projects aimed at private sector development and market reform, including loans for enterprise reform, enterprise housing divestiture, capital market development, and reform of the electrical sector. An additional \$350 million was approved for bridge rehabilitation and \$87 million for improvements in the country's legal system and its capacity for performing sound economic analysis.

It appears, however, once again, that the World Bank's efforts to encourage structural reform with projects may have been somewhat in advance of the projects' feasibility. All the major project loans approved during 1996 and 1997 encountered serious difficulties. In several instances, the resistance to reform was substantial. Several projects were terminated without ever being put into effect. Of the total amount approved, \$462 million was canceled outright and \$575 million—for some projects, almost the entire proceeds of the loan—remained undisbursed at the end of June 2001. Many of the issues the Bank sought to address through these loans—corporate governance, reform of the legal system, privatization of large enterprise, and the reform of banks and capital markets, for instance—were issues on which there remains today much disagreement between the Russian reformers and their opponents.

mentation Assistance Project, June 25, 1996. The goals for Coal 2 are discussed in the PID for that program. Project Information Document PID5852. Russia-Coal Sector Adjustment Loan II. October 29, 1997.

COMMIT IN THE FACE OF CRISIS: 1998

Synopsis

In 1998, the IMF and World Bank committed themselves to lend very large sums in a vain effort to prevent a looming economic crisis. By 1998, the Russian economic situation was precarious. Despite past commitments the government had made to the IFIs, Russia's fiscal and monetary performance was questionable and progress on structural reform was slow. Doubt grew in the market about Russia's economic prospects and pressure against the ruble increased. Previously, when the IMF and World Bank had approved major loans for Russia, they had strong reason to believe that the government would seek to implement the reform provisions of their loan agreement, even though they knew this effort might face stiff resistance. In 1998, however, the IMF approved new loans totaling \$11.2 billion and the World Bank agreed to lend \$1.5 billion-the largest credits either institution had ever approved for Russia. They did this, moreover, with little evidence that the government would be willing or able to pursue its planned program of reform. Very soon after the IMF and World Bank loans were approved, Russia defaulted on its debts and devalued its currency and the IMF and World Bank suspended disbursements on their recent loans. Despite Russia's economic troubles, investors retained some interest. In 1998, the IFC approved \$91 million in assistance (most of it likely, however, in the first-July to December 1997-half of the IFC fiscal year.) Approvals by the EBRD in calendar 1998 fell to \$304 million, by contrast, one-third the level of the prior year.

IMF programs: 1998

The Russian Government's budget plan for 1998 projected a fiscal deficit amounting to 4.8 percent of GDP, a figure that was again within the EFF deficit target. However, many outside experts questioned the assumptions underlying its projections and noted that the planned spending level was about the same as that for the 1997 sequestered budget. The government announced plans for strong new efforts to increase revenues and to cut federal spending further. It also announced plans in the 1998 program for major structural reforms.²¹

By mid-year, however, Russia was enmeshed in a major economic crisis. Many analysts doubted whether the government had the capacity or the will to pursue its announced plans. Revenue continued to fall; the government resorted to a pyramid-type borrowing scheme to cover the deficit. World oil prices declined, removing a major source of Russia's tax revenue and export income. The financial system was buffeted by uncertainty. Market confidence was deteriorating, in response to the country's precarious domestic conditions and contagion from the Asian financial crisis. The ruble was under heavy pressure in foreign exchange markets and the CBR

²¹Joint Communiqué of the Chairman of the Russian Federation and the Managing Director of the International Monetary Fund. February 19, 1998. Available from the IMF Web site.

was having great difficulty maintaining the specified exchange rate in the face of that pressure.²²

On June 11, the IMF made an announcement²³ clearly aimed at calming the market. The IMF executive board would meet in a week, a spokesman said, to release of the next tranche of the EFF loan if Russia took certain unspecified steps. It was also strongly implied that substantial new flows of IMF assistance would also be coming soon. Nine days later, the IMF executive board released the last tranche of the 1996 EFF loan. It also approved a new loan package for Russia totaling SDR 8.5 billion (\$11.2 billion). This included a new EFF loan for SDR 6.3 billion (\$8.3 billion) and an SDR 2.16 billion credit from the Compensatory and Contingency Financing Facility (CCFF).²⁴ The new EFF money would be available subject to regular EFF conditionality. The CCFF money would be available with little conditionality. Russia drew those funds right away.

The United States and other major member countries strongly supported the new loan program. One measure of their support was the source of the funds supporting the EFF credit. Instead of using its regular funds to finance the new EFF loan for Russia, the IMF was authorized to draw SDR 4 billion (\$5.3 billion) of the total from the General Agreement to Borrow (GAB). To activate the GAB, the IMF must have the explicit consent of its member countries. The United States provides one-fourth of those funds and other advanced industrial countries provide the remainder. This would be the first time the GAB had ever been activated for use by a non-participant.²⁵

The Russian authorities promised to take vigorous steps to address the turmoil in the financial markets and to restore public confidence. It would tighten the budget still further, bolster the CBR's foreign exchange reserves through new foreign financing, stretch out the maturity of its short-term debt, and secure the legislature's approval for numerous key structural reforms.²⁶

All of this, however, was to no avail. The government took none of the steps it had promised the IFIs. It had not even recommended to the legislature that key measures in its reform plan should be adopted. The government's budget difficulties continued to mount. Market confidence in government policy and the Russian economy continued to fall. Market pressure against the ruble reached new heights. The government was faced with a choice between unilaterally restructuring its debt or devaluing the currency.²⁷ Ultimately, it had to do both. On August 17-despite contrary assurances it had given to the international agencies and after it had pocketed

²²Cf. William Cooper, Russia's Economic Performance Entering the 21st Century, supra this volume.

²³ Russian Authorities and IMF Reach Understandings on 1998 Economic Policy Statement. News Brief 98/20, June 11, 1998.

²⁴ IMF Approves Augmentation of Russia Extended Arrangement and Credit under CCFF; Ac-tivates GAB. IMF press release No. 98/31.

²⁵See the IMF's description of the new Russian loan program in its 1999 Annual Report, p.

^{79.} ²⁶ IMF Management Welcomes Executive Board Support for Russia. News Brief 98/26, July

^{20, 1998.} Fischer was then serving temporarily as acting Managing Director of the IMF. ²⁷ In fact, the two choices are interlinked, as the Argentine crisis of November 2001 has dem-onstrated. Fischer observed in his June 2001 retrospective review that "You couldn't restructure the debt without being forced to devalue, and you couldn't devalue without being forced to restructure the debt.

the first disbursements on the new IFI loans—the government announced that it was suspending payment on its commercial and official debts and the CBR would no longer to support a specific value for the ruble. Quickly, the currency fell to about one-third its prior value. The Russian stock market collapsed. Most private savings were virtually wiped out. Inflation jumped, as prices sought to catch up with the new lower value of the ruble, and by December the rate had reached 84 percent for the year.

Shocking many investors and creditors, the IMF did not step in as expected with major new infusions of cash to sustain the ruble and cover Russia's debts. Rather, it suspended disbursements on its existing loan agreements for Russia. On March 25, 1999, the existing arrangements were canceled "at the request of the Russian authorities," as the IMF delicately phrased the news. At their termination, some SDR 1.12 billion remained undrawn from the 1996 EFF program and nothing had been used from the EFF loan approved in 1998.

World Bank programs: 1998

The World Bank's efforts in Russia during 1998 paralleled those of the IMF. On April 1, Wolfensohn told the U.S.-Russia Business Council that there had been real movement toward reform. "We're not only positive," he said, "but we are supporting our positive view with real financial resources and real commitment."²⁸ On July 13, 2 days after the IMF had made its announcement, World Bank management made a public statement aimed at quieting the markets. It announced that it would be accelerating disbursements on its existing projects in 1999 and its plan to award a large new adjustment loan for Russia in the very near future.

On August 6, the World Bank executive board approved a \$1.5 billion structural adjustment loan (SAL3) for Russia. It was the biggest loan the Bank had ever made in the Europe and Central Asian region.²⁹ Vice president Linn said the new loan would "generate greater transparency, secure greater fiscal accountability, foster competition, and improve corporate governance, all of which should help rebuild the confidence essential for achieving sustained growth in Russia." Even so, the Bank's country director for Russian programs cautioned that "strong implementation" of the reforms specified in SAL3 "will now be key to creating confidence in Russia's economic prospects." The new loan required that Russia push ahead vigorously with key structural reforms in several areas. Progress with the implementation of these reforms would improve the stability and productivity of the Russian economy and help instill new market support for the government's policies. Eleven days later, however, without implementing any of the promised SAL3 reforms, the Russian Government defaulted on its debts and de-valued its currency. The Bank immediately suspended further disbursements under the loan.

The World Bank approved one project loan for Russia in 1998, a \$400 million highway rehabilitation and maintenance credit ap-

²⁸James Wolfensohn. Address to the U.S.-Russia Business Council, April 1, 1998. Press Release No. 98/1711/ECA

²⁹World Bank Approves Largest-Ever Loan to Russia for Structural Reforms. News Release No. 99/1919/ECA, August 6, 1998.

proved in late December. Previously, transportation loans of this sort had been implemented with little serious difficulty, notwithstanding the problems the Bank might be encountering with its other structural reform loans. This project, however, was different. A key condition of the loan required an independent audit of the government's road fund and other similar trust accounts. Little progress was made in pursuit of the project and it was soon canceled without making any disbursements having been made from the account.

RECONSIDERATION: 1999–2001

Synopsis

After 1999, the IFIs began to seriously reconsider their approach to Russia. They terminated many of their loan programs and substantially curtailed their future plans. In 1999, the IMF and World Bank each made one more effort to encourage sound macroeconomic policy and structural reform in Russia. The IMF approved a \$4.5 billion standby loan for Russia and the World Bank disbursed \$100 million from the large SAL it had approved the previous year. Russia almost immediately fell out of compliance with both, however, and further disbursements were terminated. The IMF made no further loans. The World Bank approved project loans totaling \$698 million during the next 3 years. Most were for technical and institutional reform or for humanitarian and social purposes. Almost nothing (\$3 million) has been disbursed on these loans, however, and only two have become effective. New approvals by the IFC and EBRD remained low, reflecting the cautious view that investors were taking of the situation. The IFC approved \$123 million in new assistance during these 3 years while the EBRD approved \$582 million in 1999 and 2000. (Data for 2001 are not yet available.)

IMF programs: 1999–2001

The Russian economy rebounded in 1999, spurred by those two classic remedies for economic stagnation—devaluation and increased export income. The balance of payments (current account) had shifted from a \$2.7 billion deficit in early 1998 to a \$4.8 billion surplus in early 1999. In September 1999, the IMF staff reported ³⁰ that "the period since the last Article IV consultation with the Russian Federation [1998] has witnessed perhaps the greatest contrast in the fortunes of the economy since Russia became an independent state in 1992." Article IV of the IMF Articles of Agreement provides that the IMF will hold discussions annually with each of its members concerning economic conditions and economic issues affecting its economy.

On July 28, 1999, the executive board of the IMF approved a new SDR 3.3 billion (\$4.5 billion) standby loan for Russia.³¹ It would be a 17 month program, with seven equal disbursements, the first being released immediately. The board noted, in approving the loan, that it believed the crisis of 1998 was mainly due to failure

³⁰ Russian Federation: Recent Economic Developments. IMF Staff Country Report 99/100, September 1999.

³¹ IMF Approves Stand-by Credit for Russia. Press release 99/35, July 28, 1999.

by the government to come to grips with its fiscal problems and to implement structural reforms. The current situation gave Russia a promising opportunity to move forward with reforms. The board noted that the new loan program would have strict requirements in both areas. The government and CBR agreed that they would comply with the measures specified in the 1996 and 1998 EFF arrangements.³² The IMF stated later, in an article ³³ designed to respond to skepticism, that "Russia's current economic policies are deserving of IMF support." It noted that several of the reforms included in the 1998 plan had been put into effect by Russia's more recent governments.

The IMF executive board indicated, in a commentary released at the same time, that it believed Russia should try to normalize relations with its creditors. The IMF demonstrated again, as it had in 1998, that it would not be the debt collector or guarantor for foreign creditors. The IMF noted that Russia did not have enough resources to pay its defaulted debts and to service its foreign debt under present circumstances and it urged Russia to approach its Paris Club and London Club creditors for rescheduling and new debt relief.34

Sensitive to criticism that it was lending new money to a country that had just recently defaulted on its debts, the IMF announced that proceeds from the new loan could only be used to cover loan payments which were due to the IMF in the following 18 months. In effect, the money would not leave the IMF building but would be moved from one account (disbursements) to another (payments due) when appropriate. This announced procedure was mainly symbolic. Only if the IMF had actually expected the Russians to default on their IMF debt payments would the described scenario have been real. Money being fungible, the proceeds from the 1999 loan would have allowed Russia to use a comparable amount from its existing resources for other purposes.

The new standby lasted 2 months. Only about \$644 million-the initial first tranche-had been disbursed before the IMF suspended and then canceled the program.. Russia was out of compliance with the terms of the July 1999 agreement almost immediately. On December 7, 1999, Camdessus reviewed the status of the Russian program. Important progress had been made on the macro-economic side, he reported, but this had not been matched by similar progress in the area of structural reform. Several structural benchmarks set for the end of September remained unmet.35 "When remaining issues have been satisfactorily resolved," these Camdessus announced, "I expect to recommend completion of the

³² Statement of the Government of the Russian Federation and the Central Bank of Russia on Economic Policies, July 13, 1999. Available from the IMF Web site under the title Russian Federation Letter of Intent.

Federation Letter of Intent. ³³ "Why resume lending? Russia's current economic policies are deserving of IMF support." *IMF Survey* 28:17, August 30, 1999, pp. 273–274. ³⁴ IMF Concludes Article IV Consultation with Russia. PIN 99/67, August 2, 1999. The IMF board approved the actions reported in this PIN on July 28, 1999. ³⁵ In particular, he noted, the Russian Government needed to let contracts for financial man-agement reviews (meeting international standards) of the Pension Fund, Social Insurance Fund, *Medical Learners Evend* cond Road Fund It needed to submit to the Duma draft legislation for Medical Insurance Fund, and Road Fund. It needed to submit to the Duma draft legislation for reforming the bankruptcy law to prevent abuses and eliminate related forms of bank fraud. The Duma also needed to pass such legislation. These and several other matters were actions the government had pledged to take in connection with the 1999 standby loan but which were not vet completed.

review to the Executive Board." In effect, this suspended further action on the 1999 standby. The IMF executive board is very unlikely to initiate a program review or approve a disbursement without such a recommendation by IMF management.

In April 2000, the Russian authorities began making public suggestions that it might be time for the IMF to approve a new loan. The Russian press quoted Fischer as saying that the IMF hoped a new program of assistance to Russia might resume "in the near future." ³⁶ Russian officials indicated that they believed there should be "a change of conditions of the very principles of borrowing" from the IMF and World Bank, implying that new agreements should require less conditionality and more cash.³⁷ Russian press reports even suggested that IMF officials were already in Moscow working on the details for a new loan.³⁸

On April 28, World Bank vice president Linn diffused any speculation that a new IFI loan program was imminent. Russia's current economic recovery was due to temporary conditions he said. Over the long run, though, it needed to carry out reforms if it wanted to attract domestic and foreign investors. If Russia does not do this, he concluded, it should not expect to receive major new credit from the IFIs.³⁹ Most observers were quick to note that, if Russia were unable to arrange a new loan agreement with the IMF, it would not be able to secure debt relief through the Paris Club from its official creditors, the former being a prerequisite for the latter.

World Bank programs: 1999–2001

The World Bank also reduced the size of its loan program for Russia substantially after 1998. Exploring whether the Russian Government might be inclined to move ahead cautiously with the promised program of structural reforms, the Bank disbursed \$100 million in 1999. As with the IMF program, however, the Russians rapidly fell out of compliance with the revised terms of the SAL3 program. The World Bank suspended and then canceled the program with no further disbursements.

In mid-1999, the World Bank adopted a new CAS for Russia, replacing the one approved in 1997.⁴⁰ In effect, the new CAS repudiated its predecessor's heavy emphasis on adjustment lending and balance-of-payments support. Instead, the CAS said the Bank should put more emphasis on re-establishing the foundations for growth and reducing institutional barriers to growth. Responsibility should be shifted from the IBRD to the IFC for operations where funds are lent to commercial firms and for other commercial lending. There should be fewer investment projects, more emphasis on institutional development, and greater efforts to improve the performance of the Bank's existing portfolio, which had dipped

³⁶ "Putin's aide says Russia does better without IMF credits." ITAR/TASS, April 14, 2000, p1008104t6721.

³⁷ "Russians to address new World Bank borrowing principles." ITAR/TASS, April 17, 2000, p1008106t6932.

³⁸ "IBRD, IMF experts to fix cooperation programs with Russia." ITAR/TASS, April 24, 2000. P1008114t7733.

³⁹ "Russia needs structural reform for steady economic growth." ITAR/TASS, April 28, 2000, p1008119t8442.

⁴⁰ Memorandum of the President of the International Bank for Reconstruction and Development and the IFC to the Executive Directors on a Country Assistance Strategy of the World Bank Group for the Russian Federation. Report No. 19897–RU, December 1, 1999.

alarmingly after August 1998. The Bank should sharpen its focus on poverty reduction. It should also strive to improve its understanding of the Russian economy in order to improve the quality of its future policy advice.

Between 1999 and 2001, the World Bank approved eight projects for Russia totaling \$689 million, all of them strictly in accord with the goals of the 1999 CAS. Sixty million dollars was approved for improvements in official statistical and fiscal procedures. Another \$338 million was approved for projects with a social or humanitarian focus, such as clean water and sewerage, education, municipal heating, or amelioration of conditions for people living in de-pressed areas. Another \$60 million each was also authorized for sustainable forestry and urban transport. Only two of these projects-those for institutional reform-have become effective and only \$3 million has been disbursed. Most of the projects have not yet been officially signed. In some cases, it appears that necessary Russian legislation has not yet been adopted. The Bank seems to be putting a good deal of its effort in Russia into implementing the projects for Russia it approved in earlier years. Many of these address key structural reform issues and require the adoption of new policies or procedures before they can be fully put into effect.

Figure 5 shows that disbursements for World Bank project assistance in Russia have been proportionally smaller than those for Bank adjustment loans. In some respects, however, this gives an incomplete picture of the situation. Many of the Bank's projects have been delayed for technical reasons or because key policy changes have not yet been adopted. However, in most instances, Bank and Russian authorities believe these problems will be overcome and most of the proceeds for these loans eventually will be disbursed. If and when this occurs, the disbursement shares for these projects shown on Figure 5 will rise.

TREATING RUSSIA AS A NORMAL COUNTRY

In February 2000, at his last press conference as Managing Director, Camdessus observed that the illusion of quick transformations in Russia had been shattered.⁴¹ The strength of the resistance to reform there was unique. The IMF had been repeatedly disappointed, he noted, by insufficient efforts of the Russian authorities to implement agreed economic measures and by the lack of support from the state Duma. In April 2000, Fischer took a somewhat more positive but still skeptical view in his first major statement on Russia as the new IMF Acting Managing Director.42 He listed a number of needed reforms, noting that many or most had already been elements of prior programs financed by IMF loans. Russia's poor effort at implementation, he said, stemmed from a "failure to overcome fierce resistance from vested interests in the face of weak government consensus." There was no lack of good ideas about reform, he observed. "What is needed now is to translate this knowledge and energy," he said, "into a coherent reform strategy that is backed by strong public consensus and leader-

⁴¹Press conference by Michel Camdessus, April 8, 2000. Washington, DC Reported by ITAR/ TASS News Agency, February 14, 2000, p1008039t0176. ⁴²Stanley Fischer. Russian Economic Policy at the Start of the New Administration. Remarks to the conference at the State University: Higher School of Economics, Moscow, April 6, 2000.

ship, and that is implemented." (Emphasis in the original.) If that happens, he concluded, the IMF and the rest of the international community will be ready to help.43

In July 2001, World Bank vice president Linn summarized the Bank's current views on the Russian situation.44 In 2000, he noted, Russia had high economic growth (over 8 percent), large budget and trade surpluses, and a major increase in its international reserves. However, he noted, the situation was not sustainable, because it was being supported by high oil prices and a strongly undervalued currency. When oil prices fell and the ruble appreciated more toward a more appropriate value, he predicted, Russia's growth rate would decline. Over the long run, Linn urged, Russia needed deep institutional reform in its economy in order to achieve the high investment levels necessary for broad-based productivity and employment growth.45

Linn observed that the role of the international agencies in Russia would likely be much smaller in the future than it has been in the past. "Today," he asserted, "Russia requires much less foreign financial support than it did in the 1990s." Therefore, he said, the World Bank would focus more on analytical, legal, technical, and institutional concerns. In effect, Linn indicated, there would be fewer projects for infrastructure and enterprise reform and no broad loans for structural adjustment. The levels of World Bank aid seen in prior years were not likely to be seen again.

At some point during 1999, it appears, the IFIs and their major member countries changed their basic perception of Russia. Certainly, they had grounds for being disillusioned and disappointed by Russia's default and devaluation in 1998. Despite the willingness of the IFIs and others to pledge large sums to bolster their determination, the Russian Government, gave way and failed to change course or to pursue promised reforms. The echos from the shock in Russia reverberated around the world, putting many other emerging market economies—Brazil, for example—in peril and requiring major new commitments of funds by the IFIs.

Camdessus observed, in the month prior to the 1999 loan, that Russia needed to decide whether it wanted to complete its transi-tion to a full market economy.⁴⁶ Many key structural reforms remained to be accomplished, but there seemed to be reservations in some parts of Russian society as to whether they should be pur-

⁴³ For further discussion along this line, see: Russian Federation: Staff Report for the 2000 Article IV Consultation and Public Information Notice Following Consultation. IMF Staff Country Report No. 00/145, November 2000; IMF Concludes Post-Program Monitoring Discussion on the Russian Federation. PIN No. 01/68, July 18, 2001; and Russian Federation: Post-Program Monitoring Discussions-Staff Report; and Public Information Notice on the Executive Board Discussion. IMF Country Report No. 01/102, July 2001. All are available from the IMF Web site. ⁴⁴ Johannes F. Linn. Economic Situation and Outlook in Russia and Central Asia. Keynote Speech, 6th Berlin Financing Conference, Berlin, Germany, July 21-22, 2001. Available from World Bank Web site.

World Bank Web site.

⁴⁵In particular, Linn noted that more progress was needed with reforms in six areas. For the most part, they were the same structural reforms the IMF and World Bank had been stressing for years. They included (1) further reforms in the tax administration, treasury, and debt manfor years. They included (1) further reforms in the tax administration, treasury, and debt man-agement systems, (2) better corporate governance, including improvements in creditor and shareholder rights, (3) more predictable legal and regulatory treatment of foreign investors, (4) less involvement by government agencies— especial local and provincial authorities— in com-mercial and business matters, (5) a more effective judicial system, and (6) improvements in the banking and finance system. The government would also need to take steps to encourage foreign investment and curb the continued flight of Russian capital. ⁴⁶ Michel Camdessus. Russia: In Search of a Vision to Revitalize Reform. Address to the St. Petersburg Feonomic Forum Russia. June 16 1999

Petersburg Economic Forum, Russia, June 16, 1999.

sued. In this, he said, Russia was not unique. Russia had some special economic and political challenges as it emerged from 70 years of Soviet economic management. Nevertheless, he observed, "Russia faces a similar range of economic problems-macro-economic imbalances, incomplete structural reforms, weak system of governance, and heavy use of external borrowing-that were found in differing degrees in other countries in crisis.

Russia needed to take steps in several areas, he said, if it were to surmount its current difficulties. It needed to surmount the barter system and the culture of non-payment. The government needed to make a "clear and unambiguous commitment" to equity in society. Even more central, the state needed to adopt a role for itself that was more compatible with the needs of a market economy. Instead of trying to be the central actor in the economy, the state should establish and uphold of the laws and be the ultimate source of basic social protections. It should be the creator of the legal framework and the key regulator and monitor of the market's standards and practices. Equally important, he said, Russia needed to more clearly distinguish between the government and the institutions of the economy. In this, Camdessus observed, Russia was not alone. Many of its problems reflect "an almost universal syndrome of incestuous relationships between governments, banks and enterprises." Those who think that Russia is unique, he said, should look at the newspapers. All around the world, he observed, one sees demonstrations against "corruption, collusion, nepotism, criticism of "crony capitalism" and denunciations of "oligarchism."

Some of the change in the IFIs' view of Russia may have arisen as a consequence of the Russian Government's uncertain responsiveness to concerns arising from the FIMACO affair.⁴⁷ The CBR seemed to show little concern about whether its activities had credibility for major foreign countries. In late September 1999, as consideration was being given to a possible new disbursement on the 1999 IMF loan, the G-7 called for new mechanisms to monitor Russia's use of foreign loans. Specifically, it asked the CBR to undertake quarterly audits of its reserves. CBR Governor Gerashchenko reportedly said that he thought the idea was "stupid." ⁴⁸

In June 2001, the author interviewed the key managers of the IMF responsible for its Russian programs⁴⁹ in order to solicit their views on the current situation. They sought to minimize the sug-

⁴⁷ In that situation, the CBR diverted \$1.2 billion of money lent by the IMF to an offshore "In that situation, the CBR diverted \$1.2 billion of money lent by the IMF to an offshore account in the Channel Islands. In 1996, the funds were reportedly converted to rubles and used to purchase Russian Government bonds. The government was able to use the revenue from those bonds to avoid insolvency and to pay wage and pension arrears and make other key ex-penditures during the presidential election campaign. The CBR deceived the IMF as to status of that account, saying it could be counted among the country's foreign exchange reserves. Some critics are deeply concerned that money may have been stolen or used to benefit rich specu-lators. Other critics worry whether it is promer for IMF resources to be used improve President critics are deeply concerned that money may have been stolen or used to benefit rich specu-lators. Other critics worry whether it is proper for IMF resources to be used improve President Yeltsin's election prospects during a period when it seemed he might be defeated in his bid for reelection. CBR Governor Gerashchenko did not inspire confidence in his explanation of the af-fair, when he told the Duma that the placement of funds in FIMACO was merely an effort by the CBR to evade paying Russian taxes on the earnings, to hide assets from creditors who might otherwise be able to collect by lawsuit, and to get a better return on the money than it could get if the CBR managed the account itself. ⁴⁸Russia is Told to Sell its Offshore Banks—IMF Demand is in Wake of '96 Underreporting of Central-Bank Funds. *Wall Street Journal*, October 1, 1999, p. A13. ⁴⁹Interview with John Odling-Smee, Director, European II Department, and his deputy, Gérard Bélanger, by the author at the IMF, June 14, 2001.

gestion that the Russians might have been seeking new loans the year before. They were merely inquiring, the IMF managers said, whether the IMF might be willing to resume implementation of their earlier loan program. The Russian situation was complicated. On one hand, they observed, its current macro-economic situation and its balance-of-payments surplus are strong. It seems unlikely that Russia will need to approach the IMF for assistance or that the IMF would find such assistance appropriate. On the other hand, they agreed upon inquiry, the IMF is unlikely to lend until Russia begins implementing some of the structural reforms agreed to earlier.

This raised questions about the IMF's basic approach to Russia. Wasn't it vital that Russia move through the transition process, even if this meant compromise on structural reforms? Had the IMF limited its leverage and lessened its capacity for promoting change by its announcements that new loans would be available only when Russia began implementing needed structural reforms? Does this mean that-as long as it can keep its macro-economic situation strong-Russia would be able to postpone any further action on structural reforms? The IMF managers disagreed with the underlying premise of these questions. "Russia is a normal country," they reported. It is not unique and the IMF does not need special standards for its programs there. Many other countries are also postponing any need for action on structural reforms through good macroeconomic performance. Several major countries were mentioned. Some day, the IMF managers noted, these countries may find that their economic situation is deteriorating and they may ask the IMF for financial assistance. In that situation, for Russia and for other countries, the issue of structural reform will come up again, they said, and the prospective borrowers will know what they ought to do.

CONCLUDING COMMENTS

It seems likely that Russia will not be receiving major infusions of assistance from the IMF and the multilateral banks in the near future. In December 2001, the IMF's chief spokesman announced that Russia's current situation is "sustainable without need for recourse to the Fund or other points of external support." The Russian Finance Minister agreed that "We will not need IMF credits. Russia has enough of its own financial instruments which will be used to fulfill the budget."⁵⁰

After their disappointment of 1998, the international agencies may harbor some reservations about Russia's willingness to address the hard problems which remain. Russia's macro-economic situation is reasonably good, but it has not yet implemented many of the structural reforms it agreed to pursue in connection with the 1999 loan. The World Bank will continue funding projects, mainly those addressing social needs or institutional reform. According to its latest strategy paper, however, the Bank does not intend to pursue broad systematic reforms or major adjustment programs. The EBRD will be lending or investing where it sees opportunities, but is assistance will mainly target the private sector and not govern-

⁵⁰ "IMF does not expect Russia will need loans." Reuters, December 6, 2001.

ment programs. Much will depend in the future on the policies the Putin government pursues and the steps it takes toward structural change.

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There continues to be substantial debate as to whether Russia benefitted or suffered from its relationship with the IFIs. In large part, the question depends whether one believes that a market economy is preferable or whether some type of state-managed economic system is more to be desired. The IFIs played a significant role in the past decade urging Russia to move toward the former goal. Among the G-7 and other foreign aid donors, they helped assure that there was some minimal coherence in goals and expectations. No other donor sponsored an alternative program of economic policy reform with contrary goals or norms. During the 1990s, the ÎMF in particular sought to persuade the Russians to reduce the size of their budget deficit, to limit inflation, to improve fiscal and monetary procedures, and to undertake a broad range of structural reforms. The latter included privatization, elimination of subsidies for large former-state firms, closer regulation of the financial health and stability of the financial system, land and agricultural reform, and other matters. Most of these were at the heart of the political struggle then going on between Russian reformers and the opposition. Demonstrably, Russia failed to comply with the performance criteria in most of its IFI stabilization or adjustment programs. Toward the latter part of the decade, the budget deficit and rate of inflation came down substantially but macro-economic stability was still precarious. Achievement of many of the key structural reforms was often partial or incomplete.

Since late 1999, the IFIs have decided that Russia no longer needs special treatment. From the perspective of the IFIs (and from that of many of their major member countries), Russia is now a "normal" country and should be treated by the IFIs in the same manner as they treat other middle-income developing countries. Russia's current macro-economic situation is such that it does not need new IFI stabilization or SALs. Its performance in recent years with structural reform—the unmet commitments from prior loans—is such that it would likely not qualify for such loans even if it needed them. The IFIs will probably give substantial consideration, in any future discussion of new assistance plans, to the level of progress Russia will have made in the future with the implementation of such structural reforms.

Ο