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109TH CONGRESS }
2d Session

HOUSE OF REPRESENTATIVES

{ REPORT
109-726

**THE 2006 JOINT ECONOMIC
REPORT**

R E P O R T

OF THE

**JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES**

ON THE

**2006 ECONOMIC REPORT
OF THE PRESIDENT**

together with

**MINORITY VIEWS
AND
ADDITIONAL VIEWS**



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LETTER OF TRANSMITTAL

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC, December 8, 2006.

Hon. J. DENNIS HASTERT,
Speaker of the House, House of Representatives,
Washington, DC.

DEAR MR. SPEAKER: Pursuant to the requirements of the Employment Act of 1946, as amended, I hereby transmit the 2006 Joint Economic Report. The analyses and conclusions of this Report are to assist the several Committees of the Congress and its Members as they deal with economic issues and legislation pertaining thereto.

Sincerely,

JIM SAXTON,
Chairman.

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THE 2006 JOINT ECONOMIC REPORT

DECEMBER 8, 2006.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. SAXTON, from the Joint Economic Committee,
submitted the following

R E P O R T

together with

MINORITY VIEWS

AND

ADDITIONAL VIEWS

Report of the Joint Economic Committee on the 2006 Economic Report of the
President

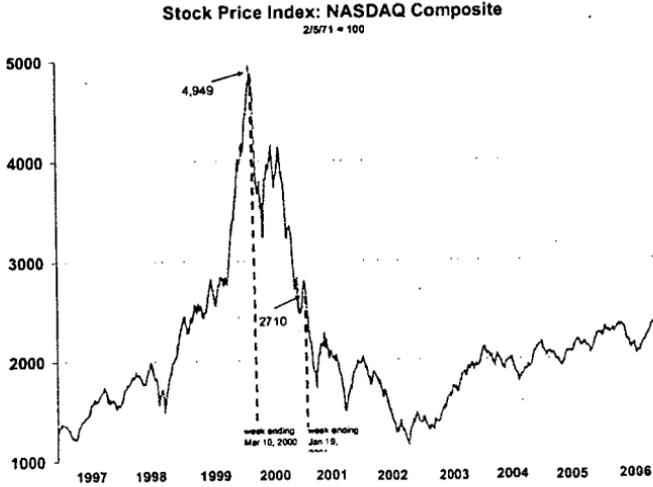
OVERVIEW OF U.S. MACROECONOMIC PERFORMANCE

INTRODUCTION AND BACKGROUND

This Report describes the macroeconomic performance of the U.S. economy since about 2003. Beginning at that time, the macroeconomy finally began to shake off the burdens of the adjustments required by the bursting stock market and investment bubbles. When an asset price (or stock market) bubble bursts, banks must contract their lending and consolidate their portfolios. Such adjustment is tantamount to a slowdown in investment: i.e., such a stock market adjustment is associated with a downward movement in investment. The stock market peak occurred in the spring of 2000. The Dow and Nasdaq stock price indices, for example, peaked in January and March 2000, respectively. Overall, then, stock market prices began to fall sharply in the spring of 2000. Notably, most of

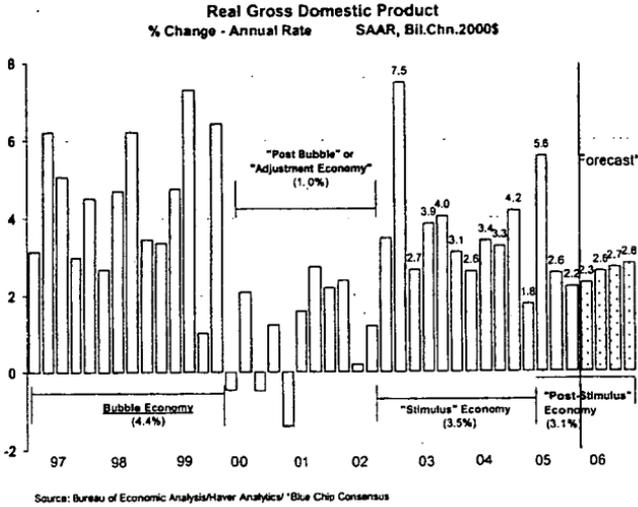
the Nasdaq's large decline took place before January 2001, and consequently, had nothing to do with the new Administration's economic policy (See Figure 1). As stock prices fell, the financial cost of investment increased and various measures of investment growth declined: i.e., declines in investment lead to declines in economic activity. The investment sector, then, played a very important role in influencing recent cyclical economic activity. The seeds of this unsustainable stock market bubble, however, were sown in the period before the spring of 2000, since the stock market bubble burst beginning in the first quarter of 2000.

Figure 1



Many economists have noted that the economic weakness of 2000–2001 (or the “Post Bubble” or “Adjustment Economy”) was inherited from earlier periods involving an asset-price contraction in the late 1990s. (See Figure 2).

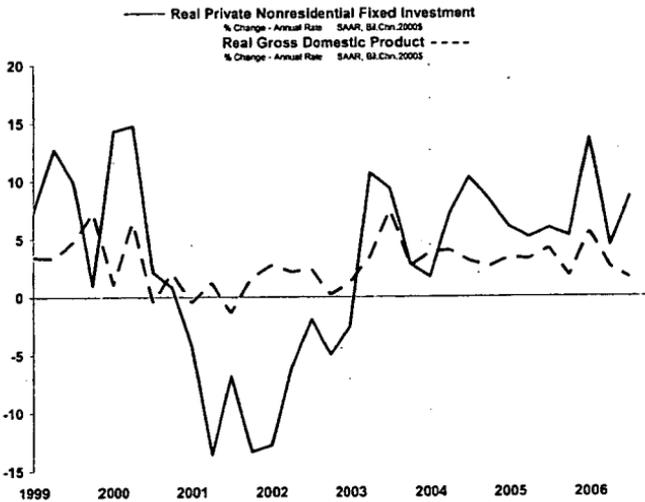
Figure 2



Furthermore, it became increasingly obvious that the economic and financial strength in the late 1990s was unsustainable, with a good bit of that strength borrowed heavily from the late 1990s “irrational exuberance” of sharp stock market and rapid balance sheet gains.

In sum, changes in the investment sector have been larger and more prominent than changes in most other sectors, including real GDP itself. The investment sector, for example, was significantly weaker than real GDP during downturns and significantly stronger than real GDP during recoveries. This relationship is depicted in figure 3.

Figure 3

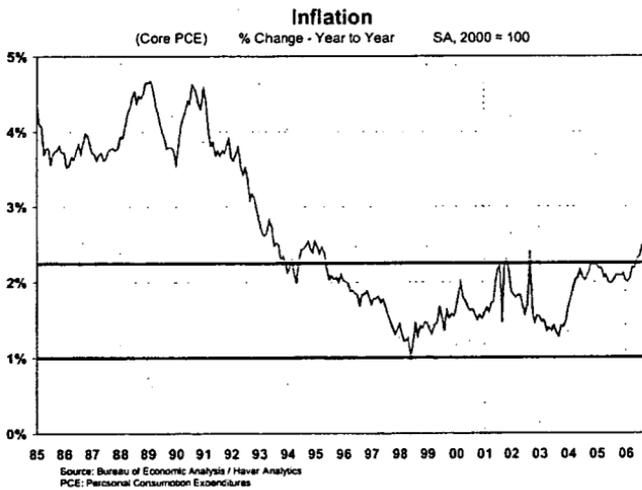


not yet produced the many serious problems pessimists have predicted, has led others (including former Fed Chairman Alan Greenspan) to contend that our real estate problems are mostly behind us.

In addition, optimists argue that there are a number of factors that will work to offset any weakness in real estate. Examples include healthy profits, declines in gasoline prices, (which will help consumers), declines in mortgage rates, and stock market advances.

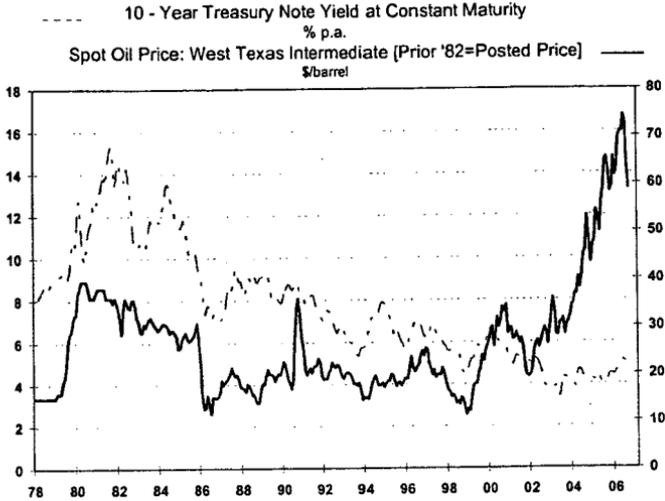
Another prominent current feature of the U.S. economy is the lower and more stable pace of inflation we have experienced. While most broad measures of inflation provide similar information, we nonetheless use the core PCE on a year-over-year basis, depicted in the accompanying figure. (See Figure 4). The persistently lower rate of inflation depicted there has helped to calm financial markets, reduce risk premiums, and improve the credibility of the monetary authority. This persistently lower rate of inflation has in turn fostered lower expectations of future inflation and, consequently helped to lower interest rates...

Figure 4



Another distinctive characteristic of the recent period should be mentioned since it corroborates the view presented here. In particular, during this recent period, and unlike the past, a large and rapid increase in oil prices was not followed by or associated with increases in inflationary expectations and long-term interest rates. (See figure 5). This implies that the Federal Reserve was using broad price policy guides or informal inflation targets and not monetizing the oil price increases like it had done in the past. In short, long-term rates were not being driven by changes in oil prices as in the past.

Figure 5



In short, the U.S. macroeconomy has established a remarkably solid record with measures of aggregate economic activity registering not only relatively healthy and persistent rapid growth figures, but exceptionally stable non-inflationary growth. These surprisingly strong results occurred in the face of a literal barrage of supply side shocks (discussed below) that were readily absorbed by an exceptionally resilient economy.

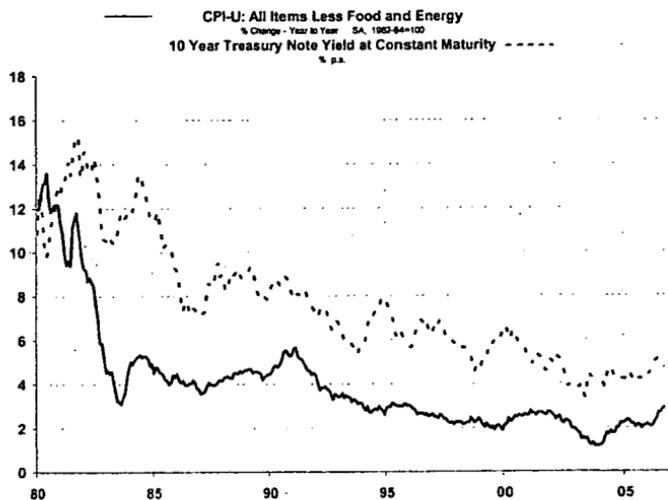
POLICY CONTRIBUTION

In light of this impressive record, particularly in the face of the many negative shocks absorbed by the economy: policymakers must ask, why has the economy performed so well? Put bluntly, the economy has advanced at a healthy, stable pace with little sign of meaningful inflation because of the economic policies that have been adopted. These policies will be briefly summarized.

Monetary policy

Through the adoption of flexible, informal inflation targeting strategy, monetary policy contributes to minimizing inflation, reducing the volatility of inflation, and anchoring the price system. Over time, the credible implementation of this strategy works to calm and stabilize markets, such as the money, capital, and foreign exchange markets. Some argue that this strategy also works to reduce macroeconomic volatility. This more stable set of markets works to promote economic growth. Recent monetary policy, then, has likely contributed in a number of ways to the workings of the macro economy. In particular, the credible, implicit inflation targeting approach works to lower inflation, lower the volatility of inflation, lower the volatility of economic activity, and promote economic growth. (See Figure 6).

Figure 6



TAX POLICY

Tax policy can play a major role in promoting investment or capital formation and consequently, economic growth. Accordingly, the tax policy endorsed by the Administration is, for the most part, focused on a limited number of objectives that often relate to economic growth.

In assessing initial economic conditions during the current expansion, it became obvious that investment and capital formation were weaker than desirable. The argument that with an entrenched income tax in place, saving, investment and capital formation were over-taxed and further, taxed multiple-times; was supported by the data. Accordingly, a tax program was proposed which lowered the tax rates on dividends and capital gains; and expanded expensing for business investment. More specifically, the "Jobs and Growth Tax Relief Act of 2003" was passed and contained a number of provisions, most notably, a reduction in both dividend and capital gains tax rates.¹

There were a number of reasons to lower these tax rates on capital:

- Removing some of the bias toward the multiple taxation of capital and investment.
- Lowering tax rates so as to affect behavior and promote additional incentives to save and invest.
- Removing some of tax burden's dead-weight loss.
- Maintaining the U.S. as an attractive investment outlet for international investors.
- And, most importantly, fostering capital formation so as to promote economic growth.

¹ The highest capital gains rate of 20 percent was lowered to 15 percent while the highest rate on dividend income was reduced from 35 percent to 15 percent. See Alan Auerbach and Kevin Hassett, "The 2003 Dividend Tax Cuts and the Value of the Firm: An Event Study," NBER working paper 11449, June 2005, p. 1.

As the data in figure 2 suggest, these tax cuts are associated with higher trend growth in business investment spending and increases in the value of stock market. The NIPA data, for example, suggest that after the 2003 tax cuts, various categories of non-residential fixed investment began trending up at more rapid rates. Similarly, most common measures of stock market value (c.g., Dow Jones, Nasdaq, or S&P) began advancing at a faster pace. In addition, since the tax cuts were implemented, the country has experienced higher economic growth, increases in payroll employment, lower unemployment, higher real after tax income and more tax revenue. In short, the timing of investment and stock market activity appear to be consistent with the proponents of the tax cuts.

Furthermore, a number of studies (and empirical evidence) support this contention.

The findings of several studies tend to support the view that changes in the tax law have significant impacts on economic activity and economic growth.

A review of the problems caused by high dividend taxes shows that the U.S. had the second highest dividend tax rate in the OECD. In light of this finding, lowering the dividend tax rate in the U.S. may be more potent than if undertaken elsewhere.

Furthermore, Auerbach and Hassett (2005) find strong evidence that the 2003 change in the dividend tax law had a significant impact on U.S. equity markets. Thus, reducing those forms of taxation that work to tax capital in multiple ways may result in a more rational system.

A similar view was outlined by Ben Bernanke (then CEA Chairman):

. . . tax legislation passed in 2003 provided incentives for businesses to expand their capital investments and reduce the cost of capital by lowering tax rates on dividends and capital gains . . . the effects are evident in the investment and employment data. From its trough in the first quarter of 2003, business fixed investment has increased over 21 percent, with the biggest gains coming in equipment and software.²

In sum, the macroeconomy has advanced sharply in recent years in part because of the contribution of a tax relief effort which lowered taxation on capital, promoted economic growth, and provided potent tax relief.

CONCLUSION

Over the last several years, economic data indicate that the economy has been robust and has advanced at a healthy pace. Our economy has weathered a barrage of negative supply shocks (including a stock market bubble-bursting, a terrorist attack, a severe hurricane followed by a severe flood, two wars, corporate scandals, and a sharp increase in the price of oil). Given this array of significant hurdles, the economy's performance is remarkable. Part of the reason for this performance relates to the contributions made by monetary policy's focus on price stability. This focus leads to lower inflation; lower volatility of inflation; and more stable economic

² Ben S. Bernanke, "The Economic Outlook", Chairman, President's Council of Economic Advisors, Testimony before the Joint Economic Committee, October 20, 2005, pp. 3-4.

growth. Another reason for this remarkable performance is the pro-growth tax policy that has been embraced and allowed to lower the cost of capital. A further contribution relates to our flexible price system, which has enhanced the economic resiliency we enjoy.

Consequently, the economic outlook remains positive: According to Federal Reserve and private economic forecasts, the economy is expected to grow at a healthy pace through 2006.

JIM SAXTON,
Chairman,
Joint Economic Committee.

ROBERT F. BENNETT,
Vice Chairman,
Joint Economic Committee.

REDUCING TAX IMPEDIMENTS TO CAPITAL FORMATION

INTRODUCTION AND SUMMARY

Recent tax reductions on income, dividends, and capital gains, together with expanded depreciation allowances, lowered taxation on savings and investment and hence on capital.¹ These cuts improved the structure of capital taxation. Nonetheless, the existence of a mostly income-tax base continues to impose a bias against savings, investment, and hence capital formation. This anti-capital bias of income taxation has long been understood by prominent economists (including John Stuart Mill, Alfred Marshall, A.C. Pigou, Irving Fisher, and Nicholas Kaldor) who explicitly recognized that bias and preferred expenditure taxation.² A host of more contemporary economists also recognize this bias and support an expenditure tax base.

Remedies for this bias in the form of wholesale restructuring of the tax code have been proposed in recent years: i.e., a flat tax, national sales tax, or consumed-income tax. All have advocates. But public choice theory suggests that there are important political obstacles to such sweeping reform. Consequently, instead of a one-time sweeping overhaul, an incremental approach to removing the tax bias against saving may prove to be more feasible politically. This paper delineates such an approach and examines the short- and long-run economic effects of reducing capital taxation. While the initial, short-term effects are straightforward and beneficial to capital, important secondary, longer-run effects, often overlooked and misunderstood are highlighted. In particular, several bodies of economic literature suggest that over time, important, substantial benefits of lower capital taxation are likely to accrue to labor and workers. In other words, over the long run, recent empirical evidence suggests that the benefit of reducing capital taxation may accrue to workers. Analogously, raising taxation of capital increases the burden on labor and, hence, hurts workers.

Indeed, Lawrence Summers (1981) emphasized this point. He noted that:

. . . shifting to consumption taxation would raise the lifetime utility of the representative consumer by the equivalent of about six year's income in the new steady state. These estimates dwarf estimates of the static welfare cost of taxation, and significantly exceed even extreme previous estimates of the dynamic loss.³

This implies that important economic interests of labor and capital are harmonious, not antagonistic, as much present-day opinion suggests.

¹ Most analysts or researchers refer to savings, investment, and capital accumulation in discussing analogous concepts. In this paper, we will refer to capital or rather capital accumulation as identifying savings and investment.

² See Appendix.

³ Lawrence H. Summers "Capital Taxation and Accumulation in a Life Cycle Growth Model," *The American Economic Review*, vol. 71, No. 4 (September 1981), 533-544.

BRIEF OVERVIEW

Recent macroeconomic activity indicates that the economy continues to expand with little sign of any major resurgence of inflation. In the third quarter of 2006, for example, the most recent data indicate that real GDP growth was up 3% on a year-over-year basis. Notably, the advances in real GDP have continued for 20 consecutive quarters. Further, the economy remains on track to grow at a rate of about 3% in 2006, as forecast by the Federal Reserve as well as the Consensus Blue Chip forecast. The accompanying chart (figure 2), highlights some of these facts.

The key components of real GDP support this analysis. Both consumer spending and non-residential fixed investment, for example, grew faster than GDP in the third quarter. Since they both grew faster than GDP, they made sizeable contributions to third quarter's growth. In addition, real non-residential fixed investment continues on track to register growth of about 8% for 2006. The equipment and software component of real non-residential fixed investment has been growing at 8.1% over the last three quarters and, as mentioned above, grew faster in the third quarter than in the second quarter. Moreover, one of investment's leading indicators, corporate profits, has been expanding quite rapidly; consensus forecasts have corporate profits expanding at better than 18% for 2006. Another leading indicator, capital good orders, continues to trend upward. These signs, then, auger well for future investment.

Another relevant consideration draws from the academic literature. In particular, that literature has thoroughly established that the volatility of U.S. GDP has fallen considerably for a number of years. This reduction of volatility means that the economy can not only grow faster than otherwise but that growth can be more stable than in the past. This phenomenon fosters a reduction in risk premiums and lowers long-term interest rates.

Significant improvement can also be seen in other sectors. For example, 6.9 million jobs have been added to the existing payrolls since August of 2003. The U.S. has gained many more jobs than key European economies. Similarly, the unemployment rate, now at 4.4%, is historically low. In fact, over the past 35 years, the unemployment rate has been below 4.4% fewer than 30 months. Further, the U.S. unemployment rate is lower than the rates of most European and other industrialized countries.

Over the last several years, the housing and real estate sectors have experienced "bubble-like" conditions. After increasing rapidly and persistently for a number of years, housing permits, starts, existing and new home sales, and other housing-related indicators breached new record territory. Real estate prices increased dramatically.

Many economists have predicted a "bubble-like" adjustment to this run-up in asset prices. Others point out that real-estate "bubbles" are largely regional and not national in nature. Therefore, there is little the national government can or should do to rectify these problems, aside from maintaining the central bank's role as a lender of last resort. Additionally, financial firms can better manage risk than was earlier the case. And bank portfolios are in better shape than they were previously. These considerations, together with the fact that the current decline in real estate asset prices has

THE EXISTING TAX STRUCTURE

Currently, the taxation of capital in the U.S. takes many different forms, making it difficult to measure, analyze, or assess capital taxation in the aggregate or policies dealing with such an aggregate. For example, since federal taxation, for the most part, has an income base, a host of capital income sources are taxed, all of which add layers of taxation on capital. Federal taxation of dividend income, interest income, capital gains, corporate income, and gift and estate transfers serve as illustrations. The tax treatment of depreciation is also relevant. All of these different taxes are forms of taxation on savings, investment, and thus on capital. State and local governments also add property and state income taxes to the list.

IMPLICATIONS

A key implication of the current hybrid tax structure is that the income tax base is necessarily biased against saving, investment, and hence, capital formation. An income tax that includes levies on various sources of capital income effectively taxes savings several times. In this structure, taxes are levied not only on current saving but also on the future returns to that saving. This structure, in effect, creates multiple layers of taxation on various forms of saving, whereas income consumed is only taxed once. As the late Norman Ture (1977) eloquently put it:

The bias against saving in the present tax system results from the fact that, with few exceptions, taxes are imposed both on the amount of current saving and on the future returns to such saving, whereas the tax falls only once on income used for consumption. Since the amount one saves today is the capitalized value of income one will receive in the future, the same future income stream is taxed at least twice. More realistically, it is taxed over and over again: the tax on capital gains, the corporation income tax, State and local income taxes, property taxes, estate, gift and inheritance taxes—all substantially add to the aggregate tax burden on saving. Saving uses of income are taxed far more heavily than anything else. The tax system, thereby, greatly increases the cost of saving and capital formation relative to the cost of consumption.⁴

Recognition of this bias of income taxation suggests that the base for taxation should be changed to expenditure from income.

SOME HISTORICAL BACKGROUND

The recognition that income taxation is necessarily biased against saving, investment, and capital formation and that taxation may be better based on consumption rather than income is not novel. This important observation has been recognized by generations of economists. Well known influential economists explicitly recognizing these points include John Stuart Mill, Alfred Marshall, A.C. Pigou, Irving Fisher, Nicholas Kaldor, and others. A brief

⁴Norman B. Ture and Kenneth Sanden, *The Effects of Tax Policy on Capital Formation*, Financial Executives Research Foundation, N.Y., 1977, p.60.

summary and documentation of their thought along these lines is presented in the Appendix. This summary demonstrates that these influential economists explicitly recognized the bias of income taxation against saving, investment, and capital formation and that these arguments critical of income taxation have a remarkably respectable ancestry dating from at least the mid-1800s.

Historical support for these ideas, however, runs much deeper than suggested by this brief summary or the documentation presented in the Appendix. Notably, the view outlined here is consistent with several important constructs of classical economic thought. First, for example, classical economists for the most part supported indirect rather than direct taxation.⁵ Indirect taxation, mostly tariffs and excise taxes, is largely consumption- or expenditure-based taxation that does not materially adversely impact savings, investment, or capital formation. Direct taxation, on the other hand, is made up largely of income or wage taxation, which adversely affects savings, investment, and economic growth. Thus, classical economists for the most part preferred expenditure rather than income taxation, analogous to the view spelled out above.

Second, classical economists always emphasized economic growth and the primacy of aggregate supply and production as epitomized in Say's Law, the cornerstone of classical economic thinking. The central theme of Say's Law is the primacy of aggregate supply: it is production and aggregate supply and not aggregate demand that creates wealth and economic growth. Capital formation was always seen as a critical factor in the growth process. These views were popularly summarized in phrases such as "people produce in order to consume," or "supply creates its own demand."

There are several relevant tax policy implications of Say's Law. The law, for example, implies that consumption is an effect and not a cause of production. Accordingly, while taxation of consumption doesn't materially affect production, taxation of production does adversely affect consumption. Thus, according to classical economists, expenditure taxation is preferable to taxes on production. Since Say's Law maintains that production and aggregate supply create wealth and economic growth rather than demand or expenditure, tax policies supportive of this view foster aggregate supply (rather than aggregate demand) and do *not* discourage production and capital formation by double taxation of savings. As Say himself argued:

The encouragement of mere consumption is no benefit to commerce; for the difficulty lies in supplying the means, not in stimulating the desire of consumption; and we have seen, that production alone, furnishes those means. Thus it is the aim of good government to stimulate production, of bad government to encourage consumption. . . . It is impossible to deny the conclusion, that the best taxes, or

⁵ See, for example, D.P. O'Brien, *The Classical Economists*, Clarendon Press, Oxford, 1975, pp. 245-259.

rather those that are least bad, are . . . such as are least injurious to reproduction.⁶

Say's Law, then, is consistent with both the view expressed above, and the contention that taxes should tax people on the basis of "what they take out of the common pool (consumption), rather than what they put into it (savings, investment, and capital formation)."

THE SUPPORT OF CONTEMPORARY ECONOMISTS

In addition to these prominent, earlier economists, a number of contemporary economists have embraced the view that income-based taxation is inherently biased against saving and associated with multiple taxation of saving resulting in lower capital formation and slower growth than would otherwise be the case. These economists for the most part support tax reform involving various forms of consumption-based taxation. A partial, incomplete list of these supporters have included, for example, Norman Ture, David Bradford, Glen Hubbard, Michael Boskin, Martin Feldstein, flat tax advocates such as Alvin Rabushka, Robert Hall, as well as many others.

These economists have supported and clarified the above-mentioned arguments and have added insights of their own. One notes, for example, that income taxation "skews relative prices in favor of consumption and against saving, and makes consumption more attractive than it should be and saving less attractive . . . (this) anti-saving bias (is) inherent in the use of income as a tax base."⁷

Several of these economists analyzed the current "segregated" corporate and individual tax systems and described several alternative ways these systems could be integrated, thereby eliminating forms of double (and multiple) taxation.⁸ Others developed tax reform proposals involving movement toward consumption-based from income-based taxation. In the process of developing such proposals, it was established that minimizing the economic distortion associated with multiple taxation of saving was a centerpiece of any such tax reform program.⁹

Over the years, several of these alternative, sweeping, wholesale tax reform proposals have evolved or emerged and differentiated themselves from competing alternatives. Each alternative has positive elements supporting it. These proposals and their various pros and cons have been thoroughly assessed by a number of authors.¹⁰ Each of the key proposals has distinguished supporters as well as political sponsors. In general, the most popular alternatives are some variant of a flat tax, a national sales tax, and a consumed-income tax. Each of these tax systems would improve the perform-

⁶ Jean Baptiste Say, *A Treatise on Political Economy*, Book III, Wells and Lilly, Boston, 1824, pp. 92, 196 (emphasis added).

⁷ Michael Schuyler, *Consumption Taxes: Promises and Problems*, Institute for Research on the Economics of Taxation, Washington, D.C., 1984, pp. 7; 11, 38 (parenthesis added).

⁸ See, for example, David Bradford, *Untangling the Income Tax*, Harvard University Press, London 1986; and U.S. Treasury Department, *Integration of the Individual and Corporate Tax Systems*, USGPO, Washington, D.C., 1992.

⁹ See Steve Entin, "Update from Washington on Fundamental Tax Restructuring," Institute for Research on the Economics of Taxation, July 18, 1995.

¹⁰ See, for example, Entin, *ibid.*; and the National Commission on Economic Growth and Tax Reform, January 1996.

ance of the economy so long as it replaced but was not added to the existing tax structure.¹¹

While these sweeping reform proposals are commendable and would work to improve economic performance, wholesale tax reform rarely, if ever, occurs. There are several reasons why major tax reform is so unusual and the status quo is so well-entrenched. Several of these explanations are provided by public choice analyses:

- **The opposition of various special interest groups:** Sweeping tax reform often involves the removal of special deductions, of exemptions, or of certain privileges (the product of years of lobbying efforts) that benefit important and well organized special interest groups. The costs of tax reform are often concentrated among special interests and the benefits often widely dispersed among the population. Accordingly, incentives are created that work to lower the probability of sweeping reform. In particular, special interests have incentives to organize, to lobby, to become well-informed, and generally to oppose sweeping reform: i.e., organized political opposition to reform is usually quite strong.¹² On the other hand, benefits are often widely dispersed. Many groups and general interests who stand to benefit from lower taxes on capital and saving are unorganized and diffuse. Sometimes they don't realize they benefit because the benefits are neither obvious nor transparent. The general population often has little incentive to become well-informed, to lobby, to organize, and generally to muster support for tax reform. Thus, political support for tax reform is sometimes relatively weak. In short, support for tax reform is difficult to organize whereas opposition is easier to muster.

- **The Absence of a Strong Consensus:** In situations where majority control is less than overwhelming, consensus (and bipartisan support) may be essential for passage of sweeping tax reform legislation. Such consensus may be especially difficult to muster in situations as fractious as today's. Further, while trade-offs are inevitable when significantly altering the tax code, in practice tax changes to ensure popular support should have significantly more beneficiaries than losers. This requirement may be especially difficult to muster in situations where a sizable portion of the public pays no income tax.

- **The System of Government in the U.S. is Institutionally "Conservative":** Another factor explaining why sweeping tax reform is unlikely to occur is that institutionally, the form of government in the U.S. is resistant to change and prone to support the status quo; in this sense, the system is "conservative". The non-parliamentary form of government, for example, is characterized by an elaborate system of checks and balances, two legislative houses, three branches of government, and decentralized powers, all of which serve as obstacles to rapid wholesale, dramatic change. Congress can be a cumbersome institution and its organization often requires super-majorities or a strong consensus to complete legislation. Consequently, Congress often ends up supporting only piecemeal, incremental change.

¹¹ See Entin, *op.cit.*, p.5.

¹² Several flat tax proposals, for example, remove the mortgage deduction, which elicits strong opposition from the mortgage and real estate industries.

In sum, a number of reasons explain why sweeping tax reform is unlikely to occur. As a consequence, instead of one-time wholesale sweeping reform, an incremental approach to lowering taxation on capital may be more politically feasible and in practice more likely to be successful. As Conlan et al. remarked, "incremental decisions are normally the path of least resistance where there is a pluralistic distribution of power."¹³

AN INCREMENTAL APPROACH

Many economists and activists concur that an incremental approach to lowering taxation on capital would likely be more viable politically than any grand attempt at one-time sweeping, wholesale reform.¹⁴ An incremental approach, however, needs to have clear objectives so that continual movement toward these goals is maintained over time. An incremental approach, for example, should focus on minimizing the most egregious economic distortions of the existing tax structure. The greatest economic benefit is provided by lowering taxes in those areas where taxes are most distortive. Currently, this would involve lowering taxation on those activities that are taxed highest because of double—or multiple—taxation on capital: i.e., lowering taxes on those activities with the highest rates and the narrowest base. Economic activity, after all, should be taxed as evenly and equally as possible. Since saving, investment, and capital formation are often taxed multiple times, these tax rates are generally higher than those on other economic activity such as consumption. Thus, saving, investment, and capital formation are prime candidates for further tax reduction.

More specifically, our system is hybrid in nature; some saving is taxed once, some twice, others three or four times. While the cost of capital may be low for some individual forms of capital, it is not low for the aggregate. Accordingly, an incremental approach to tax reduction would involve reducing or eliminating those forms of taxation comprising the multiple layers of taxation on saving, investment, and capital described above. Incrementally lowering taxation on capital would involve "peeling off" those layers of multiple taxation on saving, investment, and capital, thereby lowering the aggregate cost of capital.

Some incremental tax reduction, for example, might involve lowering taxation on any or all of the following: personal income, corporate income; interest income, dividend income, capital gains, gift and/or estate transfers. It might involve enhanced depreciation allowances and/or lower taxation on saving. It would, however, produce lower capital taxation in the aggregate. Given recent tax reduction on personal income, dividends, capital gains, depreciation allowances, together with the historic low saving rate in the U.S., direct tax relief for saving seems an especially appropriate choice at this time.

Directly reducing taxation on saving can take a number of forms. Over the years, a number of tax-deferred saving vehicles have been established, including for example, IRAs, Roth IRAs, 401k's,

¹³ Timothy J. Conlan, Margaret T. Wrightson, and David R. Beam, *Taxing Choices: The Politics of Tax Reform*, Congressional Quarterly Press, Washington, D.C., 1990, p. 231.

¹⁴ See, for example, Entin, *op. cit.*, p. 3, where he suggests that an incremental approach could make significant gains by dismantling multiple layers of taxation on capital.

Keough accounts, as well as more specialized saving plans.¹⁵ These saving vehicles can be expanded in several ways. In addition to expanding allowable contributions, age and income eligibility limits can be liberalized as a way of lowering taxes on saving and capital.

In recent years, the administration has proposed an expansion of tax exempt savings vehicles.¹⁶ This proposal would consolidate, simplify, and expand the tax exempt treatment of saving, while encouraging saving. More specifically, the administration's proposal would replace the many current forms of tax exempt savings accounts with three types:

(1) Lifetime saving accounts (LSAs), (2) Retirement savings accounts (RSAs), and (3) Employer Retirement Savings Accounts (ERSAs). These newly consolidated vehicles would operate like Roth IRAs: i.e., they would be "back loaded," so contributions would *not* be deductible but distributions and earnings would be. Interest and investment income would accumulate tax free and withdrawals would be tax free. Contribution limits for accounts would be increased substantially, exempting sizable portions of savings from taxation for most households. According to the original proposal, for example, the new LSA would allow annual contributions of \$7,500 per person or \$15,000 per family. Income caps for eligibility would be eliminated. The other new vehicles would allow for similar contributions so that overall, incentives to save would be bolstered considerably, while capital taxation would be significantly reduced. Given "the new investor class" whereby workers are savers and investors, owning IRA's, stocks, and pension funds, such tax reduction would to some extent directly benefit labor.

EFFECTS OF REDUCED TAXATION ON CAPITAL

Because taxation on saving, investment, and capital formation takes a number of different forms, it is often difficult to precisely quantify the aggregate macro effects of lower capital taxation. Analysis of the macro effects of lowering capital taxation often borrows from several related bodies of literature, including the tax incidence, optimal taxation, and the growth literature.

INITIAL EFFECTS

Most popular analyses of tax cuts on capital tend to focus on the initial, first-round effects that benefit capital, after-tax returns to capital, and capital owners. Today, capital owners increasingly are workers with pensions, IRAs, and or stocks in their portfolios. That is, more and more middle-class households own stocks, bonds, real estate and other assets in their pension funds, IRAs, and mutual funds. It is estimated, for example, that more than 50 percent of U.S. households own equities.¹⁷ Many of these individuals are en-

¹⁵ See, for example, James R. Storey, Paul J. Graney, "Retirement Plans with Individual Accounts: Federal Rules and Limits," Report for Congress, Congressional Research Service, Feb. 17, 2003.

¹⁶ See, for example, "Principles of Tax Reform," testimony of Michael J. Boskin before the Joint Economic Committee of the U.S. Congress, November 5, 2003, pp. 15-6, for a discussion of the Administration's tax proposals.

¹⁷ See, for example, *Equity Ownership in America 2005*, Investment Company Institute and the Securities Industry Association, pp. 1,7,8.

trepreneurs or small business owners. In short, there is an emerging "investor class" that increasingly includes middle-end and even some lower-income households.

Accordingly, "labor" and "capital" theoretically cannot be stereotypically categorized into distinct "air tight" compartments. Sharp distinctions between these categories is increasingly suspect. Instead, the categories are increasingly becoming "blurred"; labor and capital are gradually merging into one entity. As a consequence, the effects of taxes on capital no longer are confined to wealthy or upper-income households. Rather, reductions of taxation on capital increasingly impact middle-class investors or the entire "investor class."

In spite of these observations, however, the distinction between capital and labor remains appropriate for analytical purposes as in studies of the effects of capital taxation.

The initial effect of lower capital taxation, for example, is to increase the after-tax rate of return received by owners of capital. Higher rates of return on capital will improve incentives to save, invest, and accumulate capital. Conventional economic analysis maintains that lowering taxation on capital promotes capital formation, and helps both the stock market and owners of capital, some of whom may be wealthy. It is these *initial* effects that are highlighted and emphasized by the media and political pundits. Their analysis is often accompanied by assertions that the benefits of capital tax cuts go largely to a small sliver of the population, and come at the expense of labor and the working class. The interests of capital and labor are antagonistic in this view. Far from promoting growth, tax cuts on capital are often depicted as zero-sum in nature, allowing the rich to accumulate wealth relative to workers.¹⁸

A MORE COMPLETE PICTURE

These initial, first-round effects are partial and incomplete. They are misleading since they represent only part of the story and overlook important secondary effects. They are what the French political economist Bastiat referred to as "what is seen" as opposed to "what is not seen." As Bastiat argued, an acceptance of only these partial, first-round effects is a common error of economists.¹⁹

A more complete, comprehensive assessment is more general, taking into account the "not so obvious," indirect, secondary and longer-term effects impacting all groups. These effects were emphasized by classical economists but are often overlooked by recent

¹⁸ Proponents of this view contend that lowering Capital Taxation brings about shifts of funds out of taxable funds and into now lower-taxed capital. No new capital is created, only shifts in distributions occur.

¹⁹ Henry Hazlitt's paraphrasing of Bastiat is noteworthy:

"(A key fallacy) is the persistent tendency of men to see only the immediate effects of a given policy, or its effects only on a special group, and to neglect to inquire what the long-run effects of that policy will be not only on that special group but on all groups. It is the fallacy of overlooking secondary consequences.

"In this lies the whole difference between good economics and bad. The bad economist sees only what immediately strikes the eye; the good economist also looks beyond. The bad economist sees only the direct consequences of a proposed course; the good economist looks also at the longer and indirect consequences. The bad economist sees only what the effect of a given policy has been or will be on one particular group; the good economist inquires also what the effect of the policy will be on all groups."—Henry Hazlitt, *Economics in One Lesson*, Arlington House, N.Y., 1979, pp. 15–6 (parenthesis added).

analysis. The secondary effects of lower capital taxation can be very important, as they involve impacts on labor, productivity, wages, living standards, and economic growth.

As mentioned above, initial effects of capital taxation cuts raise the rate of return to capital, benefiting capital and its owners. With higher rates of return on capital, incentives to save and invest improve, fostering more capital formation. These effects, however, are only the initial effects of cuts in capital taxation. In particular, the increased formation of capital eventually bolsters the earnings of labor, as labor becomes more productive when it is combined with a larger stock of capital.²⁰

The effects of changes in the capital stock on labor, productivity, and other factors are explained by a fundamental principle of economics: namely, the law of variable proportions (or the law of diminishing returns). This law maintains that the greater the amount of capital combined with a given amount of labor, the greater is the marginal product of that labor. Similarly, the larger the capital-labor ratio, the lower is the marginal product of capital. Some important insights are illustrated by this important principle. Increasing the capital-labor ratio, for example, results in an increased demand for now more productive labor. In an efficient market system, the increased demand for labor services results in increases in both employment and real wage rates: i.e., higher standards of living for labor. While other factors influence labor productivity, there is a strong consensus that one of the most important determinants of labor productivity over time is the size of the capital stock with which people work.

So, in contrast to the analysts who focus exclusively on the initial effects of reductions in capital taxation and who contend that capital tax reduction benefits only the wealthy capital owners, more complete analysis suggests the benefits of reduction in capital taxation are more widespread. Cuts in taxation on capital can benefit labor in important ways. In particular, over time, a reduction in capital taxation fostering capital formation can importantly improve labor productivity, labor's wages, employment and thus labor income, living standards, and economic growth. Countries that are capital rich tend to have high living standards. More general analysis suggests that labor and capital are complements: that the economic interests of labor and capital are harmonious, not antagonistic, as suggested by the partial analysis described above. Policies that promote capital formation, therefore, likely will benefit labor. Indeed, even though workers may not own capital, they still can benefit (sometimes significantly) from its increase. In effect, benefits of reduced capital taxation shift over time from supplies of capital to supplies of labor.²¹

CORROBORATION

The above-described secondary effects which underscore the benefits of lower capital taxation accruing to labor are corroborated in

²⁰ See Richard E. Wagner, *Federal Transfer Taxation: A Study in Social Cost*, Institute for Research on the Economics of Taxation, 1993, pp. 10–11. The following paragraph follows the argument therein.

²¹ See Gary Becker, "The Dividend Tax Cut Will Get Better with Time," *Business Week*, February 10, 2003, p2 of 3.

several bodies of economic literature. This literature tends to support the view that the principal beneficiaries of tax reduction on capital are not only capital owners as maintained by much contemporary analysis.

TAX INCIDENCE LITERATURE

Studies of tax incidence determine how the burden of a tax is allocated among consumers, workers, and other factors of production. In so doing, the tax incidence literature provides a number of illustrations of the benefits of lowered capital taxation shifting to labor. As Kotlikoff and Summers contend in their survey of the tax incidence literature:

The distinctive contribution of economic analysis to the study of tax incidence has been the recognition that the burden of taxes is not necessarily borne by those upon whom they are levied. . . . Economics is at its best when it offers important insights that contradict initial, casual impressions. The theory of tax incidence provides a rich assortment of such insights. Tax incidence's basic lesson that . . . taxes on capital may be borne by workers. (is an example).²²

Similarly, Fullerton and Metcalf show in their survey that tax incidence analysis "begins with the very basic insight that the person who has the legal obligation to make a tax payment may not be the person whose welfare is reduced by the presence of the tax."²³ In short, this literature demonstrates that *economic incidence* is distinctly different from *statutory incidence* because changes in behavior alter the tax burden.

Further, this literature concedes that lower capital taxation may improve the welfare of labor. Indeed, this literature provides a number of examples of reduced capital taxation which is shifted so as to significantly benefit labor. These results are the product of a variety of methods, models, and differing assumptions or conditions. The results often depend, for example, on assumptions about factor elasticities, about economic openness, or about factor mobility. Similarly, the type of model employed (e.g., static, dynamic, general equilibrium, life-cycle, etc.) may significantly affect the results.²⁴ In addition to this literature, surveyed professional economists indicated they supported the view that a significant portion of the tax burden of corporate income taxation is shifted away from capital.²⁵

OTHER LITERATURE

Additional economic literature corroborates the view that secondary effects of capital tax cuts are important and often largely

²² Lawrence J. Kotlikoff and Lawrence H. Summers, "Tax Incidence," Chapter 16, *Handbook of Public Economics*, Volume II, edited by Alan Auerbach and Martin Feldstein, North Holland, N.Y., 1987, pp. 1043, 1088. (parenthesis added).

²³ See Fullerton, Don and Gilbert E. Metcalf, "Tax Incidence," National Bureau of Economic Research (NBER) Working Paper 8829, NBER, March 2002, p. 1.

²⁴ See Kotlikoff and Summers, *op. cit.*, pp. 1060, 1066, 1067, 1073. See also Fullerton and Metcalf, *op. cit.* (e.g., See citations about Feldstein. (1974), Judd (1985a), and Mutti and Grubert (1985).)

²⁵ See Fullerton and Metcalf, *op. cit.*, p. 29 (footnote).

accrue to labor. In particular, some authors contributing to the *optimal taxation literature* find that it is suboptimal for the economy to tax capital income in the long run.²⁶ This suggests that capital taxation should be reduced in order to benefit the macroeconomy, economic growth, and labor in the long run. Other researchers, notably Feldstein, find large welfare costs and deadweight losses associated with capital taxation. For example, Feldstein calculates "an enormous welfare cost associated with the taxation of capital income" as well as "a significant gain in welfare from a shift away from a capital income tax toward a wage tax."²⁷ Generally, "the more recent work on the welfare cost of capital income taxation carried out in the 1980s . . . tended to indicate that the welfare cost of capital income taxation was significant."²⁸

Researchers, notably Lucas, showed that lowering the capital income tax rate could permanently raise the economy's growth rate.²⁹

Growth literature shows that capital accumulation promotes growth and higher income per capita. It suggests that lowering the income tax rate on capital would not only boost growth, but also advance welfare, thereby ultimately benefiting workers. Some researchers also argue that capital taxation is suboptimal if capital is mobile internationally (and the economy open).³⁰ In this case, lowering the tax on the more mobile factor (capital) works to relieve the accumulated burden on the more immobile factor (labor) and thus works to benefit labor. And the literature is peppered with models which suggest that the benefits from lowering interest income taxation may be shifted substantially to workers: that a lowered capital taxation will foster capital accumulation which, when combined with labor, raises the wages received by workers.³¹

In sum, major categories of economic literature—the literature on tax incidence, on optimal taxation, and on economic growth—all strongly suggest that lowering taxation on capital may well have significant secondary effects that accrue to the benefit of labor or workers rather than exclusively to capital. Additionally, the movement toward reduced capital taxation can remain fully consistent with any desired degree of tax progressivity; adoption of consumption taxation does not in any way consign consumers to a more regressive tax system.³²

SUMMARY AND CONCLUSIONS

Recent tax reductions on income, dividends, and capital gains, together with expanded depreciation allowances, lowered taxation on capital. These cuts improved the current structure of capital taxation. Nonetheless, the existence of an income-tax base continues to impose a bias against savings, investment, and hence capital formation. This anti-capital bias of income taxation has long been un-

²⁶ See, for example, Raymond G. Batina and Toshihiro Ihori, *Consumption Tax Policy and the Taxation of Capital Income*, Oxford University Press, Oxford, 2000, p. 23. See, for example, citations for Arrow and Kurz (1970), Judd (1985), Chamley (1986), and later Lucas (1990).

²⁷ See Batina and Ihori, *op. cit.*, pp. 22, 53.

²⁸ See Batina, and Ihori *op. cit.*, pp. 87, 105.

²⁹ See *ibid.*, p.93. Eliminating capital income taxation would significantly boost the per capita capital stock according to Lucas (see Batina and Ihori, *ibid.*, p.105).

³⁰ *Ibid.*, p. 301.

³¹ *Ibid.*, p. 100.

³² The tax rate structure determines the degree of progressivity.

derstood by prominent economists (including John Stuart Mill, Alfred Marshall, A.C. Pigou, Irving Fisher, and Nicholas Kaldor) who explicitly recognized that bias and preferred expenditure taxation. A host of more contemporary economists also recognize this bias and support an expenditure tax base:

Remedies for this bias in the form of wholesale restructuring of the tax code have been proposed in recent years; e.g., a flat tax, national sales tax, or consumed-income taxation. All have advocates. But public choice theory suggests that there are well-known political obstacles to such sweeping reform. Consequently, instead of a one-time sweeping overhaul, an incremental approach to removing the tax bias against saving may prove to be more feasible politically. This paper delineates such an approach and examines the short- and long-run economic effects of reducing capital taxation. While the initial, short-term effects are relatively straightforward and beneficial to capital, important secondary, longer-run effects, often "unseen" and misunderstood, are highlighted. In particular, several bodies of economic literature suggest that important, substantial benefits of lower capital taxation are likely to accrue to labor and workers. This implies that important interests of labor and capital are importantly harmonious, not antagonistic, as much present-day opinion suggests. These mutual benefits often go unrecognized. For all of the reasons highlighted in this paper, there is strong support for making permanent recent reductions in capital taxation.

APPENDIX

EARLIER WRITERS

This appendix documents the historical recognition of the anti-saving bias of income taxation. The view that taxation should be based on an individual's expenditures or consumption rather than his income or earnings was voiced by Thomas Hobbes.¹ The essential idea he supported was that "an expenditure base would tax people according to the amount which they take out of the common pool, and not according to what they put into it."²

John Stuart Mill clearly spelled out important arguments against income-based taxation. He explicitly recognized that income taxation is biased against saving (and hence investment and capital formation) because of the multiple taxation of saving. Mill's support of consumption-based taxation was important because he and his principles were so influential. As Blaug emphasized:

All through the second half of the 19th century Mill's *Principles of Political Economy* was the undisputed bible of economists . . . as late as 1900 Mill's work was still the basic textbook in elementary courses in both British and American universities.³

In making the case for consumption-based taxation in this book, Mill clearly spelled out the biased nature of income taxation:

. . . the proper mode of assessing an income tax would be to tax only the part of income devoted to expenditure, exempting that which is saved. For when saved and invested . . . it thenceforth pays income tax on the interest or profit which it brings, notwithstanding that it has already been taxed on the principal. Unless, therefore, savings are exempted from income tax, the contributors are twice taxed on what they save, and only once on what they spend. . . .⁴ The difference thus created to the disadvantage of prudence and economy is not only impolitic but unjust. To tax the sum invested, and afterwards to tax also the proceeds of the investment, is to tax the same portion of the contributors means twice over . . . No income tax is really just from which savings are not exempted; and no income tax ought to be voted without that provision . . .

¹Thomas Hobbes, *Leviathan*, chapter XXX. Cited in Nicholas Kaldor, *An Expenditure Tax*, Unwin University Books, London, 1965.

²Nicholas Kaldor, *An Expenditure Tax*, Unwin University Books, London, 1965, p.11.

³Mark Blaug, *Economic Theory in Retrospect*, R.D. Irwin, Homewood, Ill., 1968, p. 180.

⁴John Stuart Mill, *Principles of Political Economy*, Augustus M. Kelley, Fairfield, 1909, p. 813.

. . . all sums saved from income and invested, should be exempt from the (income) tax.⁵

Alfred Marshall also supported consumption-based taxation and actually proposed a post-World War I expenditure tax.⁶ Another well-known economist, A.C. Pigou, contended that an income tax can be shown to be biased against saving and investment; accordingly, he argued that an expenditure tax is preferable to an income tax.⁷

Irving Fisher was another prominent economist who recognized that income taxation is biased against saving, investment, and capital formation, since savings is taxed multiple times. Echoing the arguments presented by Hobbes, Mill, and Marshall, Fisher stated that saving should be exempt from income taxation and that expenditure-based taxation is preferred. Fisher (1942) explicitly took note of earlier economists supporting this view in his book's extensive bibliography.⁸

In making his argument, Fisher noted that income taxation is flawed in several ways:

[income taxes] are unfair . . . because they impose double taxation (by taxing savings and their fruits) . . . they thus tax the producers of the nation's wealth more heavily than those who merely spend, especially the "idle rich" . . . By taxing the increase of capital, they kill the most important geese which lay the most important golden eggs . . . if a tax on the savings is added to a tax on the fruit of the savings, essentially the same thing is taxed twice.⁹

Fisher took note of several forms of multiple taxation on capital. For example, he stated:

. . . to tax the corporation on the profits which it distributes and, at the same time, to tax the stockholders personally on their dividends is to tax the same thing twice—it is double taxation.¹⁰

Fisher's book and his many other publications addressing this topic show the broadness and depth of his knowledge on this subject.¹¹

Recognizing the biased nature of income taxation, Nicholas Kaldor also made the case for expenditure-based taxation in a study stemming from his work at the Royal Commission on the Taxation of Profits and Income in the early 1950s. His arguments included all the points outlined above, but also highlighted several additional ones. Kaldor emphasized, for example, that "an expenditure base would tax people according to the amount which they take out of the common pool and not according to what they put

⁵ Mill, *ibid.* pp. 814–15, 829 (parenthesis added).

⁶ See Alfred Marshall, "The Equitable Distribution of Taxation (1917)," in *Memorials of Alfred Marshall* edited by A.C. Pigou, Augustus M. Kelley, N.Y., 1966, pp. 345–352.

⁷ A.C. Pigou, *A Study in Public Finance*, London, MacMillan & Co., 1947 (Third edition), chapter X.

⁸ Irving Fisher and Herbert Fisher, *Constructive Income Taxation*, Harper & Bros., New York, 1942.

⁹ *Ibid.*, p.3, p.56. [brackets added].

¹⁰ *Ibid.*, pp. 28–29.

¹¹ See his bibliography, *ibid.*, pp. 249–260.

into it.”¹² Kaldor also argued that income taxation is biased against risk bearing and, further, that:

The primary economic objective of the financial policy of the Government in a modern state . . . is . . . the maintenance of . . . an adequate rate of capital accumulation for steadily rising standards of living.¹³

In sum, the idea that income taxation is biased against saving, investment, and capital formation is not novel, but rather, has a remarkably respectable ancestry dating from at least the mid-1800s.

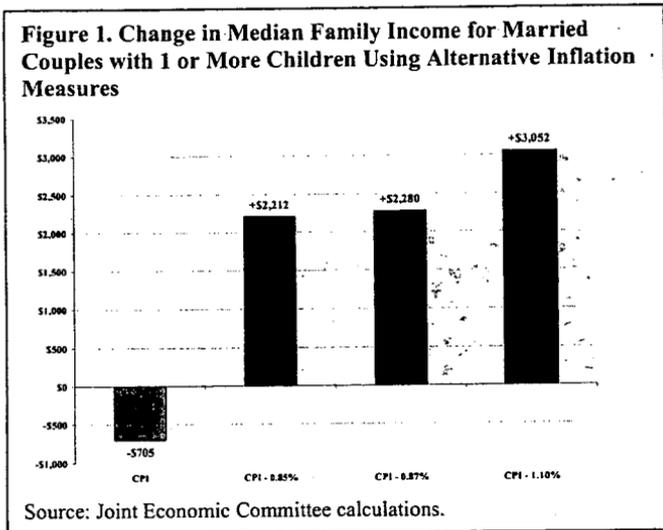
¹² Kaldor, *op.cit.*, p. 53.

¹³ *Ibid.*, pp. 173-4.

MEDIAN FAMILY INCOME AND INFLATION MISEASUREMENT

I. INTRODUCTION

It is widely recognized in the academic and research communities that the consumer price index (CPI) is a faulty measure of inflation and the cost-of-living. As a result, use of a flawed inflation measure appears to show real median family income dropping from 2000 to 2005, when in fact it has increased by between \$2,200 and \$3,000 (Figure 1). Since these are pre-tax data, calculations that take into account the effect of tax reductions since 2001 would show an even greater after-tax increase in family income. This paper is organized as follows. Section II briefly reviews the empirical evidence on the accuracy of the CPI and provides a range of estimates of the bias in the CPI. Section III presents real median family income using more accurate measures of inflation. Section IV summarizes the findings with a conclusion, followed by the Appendix with the methodology.



II. MISEASUREMENT AND BIAS IN THE CPI

Perhaps the mostly widely followed measure of inflation in the United States is the consumer price index (CPI). The CPI attempts to gauge the overall price level by measuring changes in consumer-level prices for a basket of goods and services. The CPI was first introduced in 1919 by the U.S. Department of Labor's Bureau of Labor Statistics (BLS).¹ The index underwent numerous methodological changes over its history, but by the early 1990s the index suffered from a number of persistent problems which caused the CPI to overstate the rate of change in the price level. A blue-ribbon panel, headed by economist Michael J. Boskin, issued a report in

¹U.S. Bureau of Labor Statistics, "Chapter 17. The Consumer Price Index: History of the CPI, 1919 to 2003," in BLS Handbook of Methods, online at http://www.bls.gov/opub/hom/homch17_d.htm, updated 4/10/2006.

1996 which identified the sources and magnitude of bias in the CPI.²

Since the Boskin report, BLS has implemented a number of changes in the methodology underlying the CPI, such as increased use of geometric means. Despite these changes, the CPI continues to significantly overstate the price level. As BLS's own economists have noted, "these changes have not had an important quantitative effect on the [CPI] All Items index."³

The debate over the accuracy of the CPI is not just an academic one. Numerous indicators are converted from nominal terms to inflation-adjusted dollars using the CPI. One of the most closely watched measures of economic well-being in the U.S. is the Census Bureau's median income figures. In order to make meaningful comparisons over time the Bureau employs a variant of the CPI known as the CPI-U-RS. Because the CPI is used to adjust income data for inflation, the persistence of a bias in the index remains an important policy issue.

Robert Gordon, one of the leading experts on the CPI, concluded in a May 2006 study that despite changes implemented by the BLS, the upward bias in the CPI remained quite large. Although BLS adopted some of the changes recommended by the Boskin report, the subsequent experience has led Gordon to re-estimate the importance of some of the factors still affecting CPI bias. In particular, he found that upper-level substitution bias played a more important role than originally thought. On balance, Gordon estimated that "today's bias is at least 1.0 percent per year or perhaps even higher."⁴ After estimating the various causes of CPI bias, Gordon reported that the sum of the estimates yields a total bias of 1.10 percent per year.⁵

Boskin himself revisited the issue of CPI bias in a 2005 article, reaching similar conclusions as Gordon. Boskin's article observed that inflation is inherently difficult to measure for a number of reasons. Not only are new goods and services introduced frequently, but relative prices change purchase patterns. Moreover, the sheer size of the economy is itself an obstacle to accuracy:

There are literally hundreds of thousands of goods and services available in rich industrialized modern market economies. A single supermarket may contain 30,000 differently priced items, and a WalMart store over 40,000, so measuring in a single index what happened to prices in a single store can be quite difficult. Doing so for the entire economy is vastly more complex. As we have become richer, demand has increasingly shifted to services away from

²Michael J. Boskin, Ellen R. Dulberger, Robert J. Gordon, Zvi Griliches, and Dale Jorgenson, "Toward a More Accurate Measure of the Cost of Living," Final Report of the Advisory Commission to Study the Consumer Price Index, Committee on Finance, U.S. Senate (December 4, 1996).

³David S. Johnson, Stephen B. Reed and Kenneth J. Stewart, "Price Measurement in the United States: A Decade after the Boskin Report," Monthly Labor Review 129, no. 5 (May 2006): 17.

⁴Robert J. Gordon, "The Boskin Commission Report: A Retrospective One Decade Later," National Bureau of Economic Research, Working Paper 12311 (June 2006).

⁵Ibid., 3.

goods, and to characteristics of goods and services such as enhanced quality, more variety, and greater convenience.⁶

As Boskin noted, the economy has become more service-oriented than in decades past, “when a larger fraction of economic activity consisted of easier-to-measure items such as tons of steel and bushels of wheat.”⁷ On balance, Boskin concluded that the current CPI bias remains significant, “likely being on the order of 80 or 90 basis points.”⁸

Other researchers have reported similar findings. In a comprehensive review of the issue published in the prestigious *Journal of Economic Literature*, David Lebow and Jeremy Rudd found a significant bias in the CPI. After accounting for changes made by BLS and applying new methodologies, the authors “conclude that the CPI is currently and prospectively overstating the true rate of change in the cost of living by about 0.9 percentage point per year.”⁹ The authors also found “the single largest source of bias to be the CPI’s inadequate accounting for quality improvements and the introduction of new items.”¹⁰

Researchers generally identify four main sources of bias in the CPI. Lebow and Rudd identify and discuss a fifth source: weighting. A detailed treatment of all these sources, however, is beyond the scope of this paper.¹¹ The following points briefly describe the different causes of bias.

- Upper-level substitution occurs when consumers shift from one product to a different product due to a change in relative prices. For example, if the price of apples increases, consumers may elect to buy more bananas in place of apples.

- Lower-level substitution occurs when consumers shift from one type of a product to different type of the same product due to a price change. For example, if the price of Red Delicious apples increases, consumers may start buying Granny Smith apples instead.

- Outlet substitution occurs when consumer change the place or vendor of purchase due to a price increase. For example, if the price of Levi jeans increases at Macy’s, consumers could choose to buy the same jeans at WalMart or J.C. Penny’s.

- New products and quality change can cause CPI to overstate inflation because a higher price does not reflect a new product or improved quality. For example, if the price for an MRI scan rises, the CPI might not take into account the fact that the new scanner provides more precise images. Although the cost of the scan may be higher, the higher price does not reflect the fact that the scan is more valuable.

- Weighting bias results from the way surveyed prices are weighted in the CPI formula. Weights are derived from a consumer survey which is subject to errors due to respondents’ memory of purchases, accuracy of respondents’ estimates, and problems inher-

⁶Michael J. Boskin, “Causes and Consequences of Bias in the Consumer Price Index as a Measure of the Cost of Living,” *Atlantic Economic Journal* 33, no. 1 (March 2005): 5.

⁷Ibid.

⁸Ibid.

⁹David E. Lebow and Jeremy B. Rudd, “Measurement Error in the Consumer Price Index: Where Do We Stand?” *Journal of Economic Literature* 41, no. 1 (March 2003): 160.

¹⁰Ibid.

¹¹A more detailed discussion of sources of bias in the CPI can be found in Lebow and Rudd, 163–191.

ent to household surveys (e.g., response rates, small sample size, etc.).

Table 1 displays the magnitude of each source of bias as estimated by the researchers discussed above, as well as the overall size of the upward bias in the CPI. Although there are some differences in the estimated magnitude of individual sources of bias, there is remarkable consistency in the overall size of the bias. Thus, recent research by leading experts points to a bias in the CPI of between +0.80 to +1.1 percentage point per year.

Table 1. Sources of Bias in the CPI

| | Lebow | | |
|-----------------------------|--------------------|--------------------|--------------------|
| | Gordon | & Rudd | Boskin |
| Upper level substitution | 0.15 | 0.30 | 0.30 - .040 |
| Lower level substitution | 0.25 | 0.05 | — [†] |
| Outlet substitution | 0.10 | 0.05 | 0.10 |
| New products/Quality change | 0.60 | 0.37 | 0.40 |
| Weighting [‡] | NA [‡] | 0.10 | NA [‡] |
| Total | 1.10 | 0.87 | 0.80 - 0.90 |
| Range | 0.80 - 1.60 | 0.30 - 1.40 | |

[†] Boskin estimates lower level substitution bias as "small."

[‡] Neither Gordon nor Boskin provide an estimate of bias due to weighting error alone.

Source: Gordon; Lebow and Rudd; and Boskin.

Confirmation of the problems in the CPI comes from the Federal Reserve itself. During his tenure as Chairman, Alan Greenspan stopped using the CPI as its primary inflation indicator. Greenspan stated that the personal consumption expenditures (PCE) index was a superior measure of inflation. However, even the PCE has problems which, according to Greenspan, result in an upward bias in its measurement of inflation by 0.5 to 1.0 percentage point.¹²

III. REAL MEDIAN FAMILY INCOME

The U.S. Census Bureau publishes data each year on median income for a variety of family and household types.¹³ The present analysis focuses on median income for one particular unit: married-couple families with one or more children. In many ways, this is the prototypical middle-income American family. In 2005 there were an estimated 27.1 million married-couple families with one or more children under the age of 18, consisting of 114 million persons.¹⁴ Close to two-fifths (38.5 percent) of U.S. residents lived in

¹² Alan Greenspan, "The Economic Outlook," Testimony to the Joint Economic Committee, U.S. Congress, 11/3/05.

¹³ The median is generally considered the best measure of the typical or middle value in a group. In the present context, the median is that point which divides the number of families in half, with one-half falling above the median and one-half below.

¹⁴ U.S. Census Bureau, Table F-4, "presence of Related Children Under 18 Years Old—Married Couple Families, by Total Money Income in 2005," online at http://pubdb3.census.gov/macro/032006/faminc/new04_001.htm.

such families.¹⁵ These families also bear a significant portion of the federal income tax burden. Based on 2004 tax data (the most recent available), joint returns of married persons that have at least one dependent accounted for 39 percent of all income taxes, with the average taxable return paying \$16,418 in federal income tax.¹⁶

To allow comparisons between different years, the Census Bureau adjusts previous years' nominal estimates using a version of the CPI.¹⁷ Because the CPI overstates inflation, adjustments based on the CPI are likewise biased. Thus, the Census Bureau's estimates for real median family income lead to inaccurate conclusions. A correct comparison of income over time requires the use of a corrected CPI. When the CPI is corrected for its known bias, as estimated by the researchers in the previous section, a more accurate picture emerges of changes in median family income.

The present analysis attempts to correct for the recognized bias in the CPI by using the estimates of the bias reported by Gordon, Boskin, and Lebow and Rudd. For Gordon, the analysis uses his estimate of 1.1 percentage point, while for Lebow and Rudd it applies their estimate of 0.87 percentage point. Since Boskin provides a range of 0.80 to 0.90, this analysis uses the midpoint of his range, or 0.85 percentage point. For each of estimate, the analysis subtracts the researcher's estimate from the annual percentage change in the CPI-U-RS to arrive at a revised and corrected inflation index. The corrected index is then used to adjust nominal income amounts to 2005 real dollars.

Table 2 presents calculations showing median family income in constant 2005 dollars, where the inflation adjustment was made using the uncorrected CPI-U-RS and three variations of a corrected CPI-U-RS. Each correction variation corresponds to one of the three studies discussed in Section II above. As can be seen, the results differ markedly in both magnitude and direction depending on whether a corrected CPI is used or not. When the CPI is used without correcting for the known bias, it appears that median income for married couple families with one or more children has fallen by \$705, or -1.0 percent, between 2000 and 2005. However, if the bias in the CPI is taken into account and corrected, median income clearly increases. Median family income for married couples with one or more children rose by between \$2,212 (using Boskin's estimate of the CPI bias) to \$3,052 (using Gordon's estimate).

¹⁵ U.S. Census Bureau, *Statistical Abstract of the United States: 2006* (Washington, DC: Government Printing Office, 2006), 9.

¹⁶ U.S. Department of the Treasury, Internal Revenue Service, Statistics of Income division, *Individual Income Tax Returns Publication 1304 for 2004*, "Table 1.2: All Returns: Adjusted Gross Income, Exemptions, Deductions, and Tax Items," and "Table 2.4: All Returns: Exemptions by Type and Number of Exemptions," available online at http://www.irs.gov/taxstats/indtaxstats/article/0,,id=134951,00.html#_pt1.

¹⁷ The Census Bureau uses a version of the CPI known as the CPI-U-RS. Although there are some differences between the CPI-U-RS and the more common CPI-U, the two series closely mirror each other. Between 2000 and 2005, the CPI-U increased by a total of 13.41 percent, compared to a 13.36 percent increase for the CPI-U-RS. For more information on the CPI-U-RS, see: U.S. Department of Labor, Bureau of Labor Statistics, "BLS Statement on the Use of the CPI-U-RS," online at <http://www.bls.gov/epi/cpiurstx.htm>.

APPENDIX: METHODOLOGY

Incorporating adjustments to the CPI and calculating real values require several steps. Table 3 presents the data and calculations underlying the analysis in this paper.¹ The first step is to start with nominal income amounts and an uncorrected CPI-U-RS index (or CPI for short).² From the uncorrected CPI, one can calculate the annual percentage change in the base index as well as constant dollar amounts.

In order to incorporate an adjustment to the CPI for the estimated bias, there are essentially four steps to complete, illustrated here with the Boskin bias estimate. First, since the bias causes the CPI to overstate the rate of inflation, adjustments should lower the annual percent change in the index. Thus, 85 basis points are subtracted from the uncorrected CPI annual change each year (e.g., $3.34 - 85 = 2.49$). This step produces a revised series of annual percent change. Second, the 1999 CPI value of 0.854 is then "grown" each year by the revised percent change values, yielding a new, corrected index. Third, because the analysis seeks to put all dollar amounts in 2005 terms, the corrected index must be rebased to 2005 dollars. This is accomplished by dividing the corrected index through by the 2005 value. Finally, real income values can then be calculated using a CPI corrected by Boskin's estimate of the CPI bias. These steps are subsequently repeated for Lebow and Rudd's and Gordon's estimates of the CPI bias.

¹One value that has been omitted from the table to simplify presentation is the uncorrected CPI value for 1999, which is 0.854. This value is necessary to calculate annual change in the CPI for 2000.

²These data can be obtained from the Census Bureau directly, as cited in note 14, and at: U.S. Census Bureau, "Annual Average Consumer Price Index Research Series Using Current Methods (CPI-U-RS)—All Items: 1947 to 2005," online at <http://www.census.gov/hhes/www/income/income05/cpiurs.html>.

Table 1. Detailed Calculations for Inflation Adjustments and Real Median Income

| | 2000 | 2001 | 2002 | 2003 |
|--|----------|----------|----------|----------|
| Nominal income | \$63,126 | \$65,203 | \$65,399 | \$66,419 |
| Uncorrected CPI-U-RS | | | | |
| CPI-U-RS index | 0.882 | 0.907 | 0.921 | 0.942 |
| CPI-U-RS annual change | 3.34% | 2.79% | 1.59% | 2.29% |
| Real income (2005\$) | \$71,558 | \$71,905 | \$70,992 | \$70,485 |
| CPI-U-RS Adjusted Using Boskin's Bias Estimate (-0.85%) | | | | |
| Adjusted annual change | 2.49% | 1.94% | 0.74% | 1.44% |
| Revised CPI-U-RS index | 0.875 | 0.892 | 0.898 | 0.911 |
| Index rebased to 2005 | 0.920 | 0.938 | 0.944 | 0.958 |
| Real income (2005\$) | \$68,641 | \$69,549 | \$69,246 | \$69,327 |
| CPI-U-RS Adjusted Using Lebow & Rudd's Bias Estimate (-0.87%) | | | | |
| Adjusted annual change | 2.47% | 1.92% | 0.72% | 1.42% |
| Revised CPI-U-RS index | 0.875 | 0.892 | 0.898 | 0.911 |
| Index rebased to 2005 | 0.921 | 0.938 | 0.945 | 0.958 |
| Real income (2005\$) | \$68,573 | \$69,494 | \$69,205 | \$69,299 |
| CPI-U-RS Adjusted Using Gordon's Bias Estimate (-1.10%) | | | | |
| Adjusted annual | 2.24% | 1.69% | 0.49% | 1.19% |

COSTS AND CONSEQUENCES OF THE FEDERAL ESTATE TAX

EXECUTIVE SUMMARY

This study examines the arguments for and against the federal estate tax, finding that benefits of the tax are often overstated, and in any case are far smaller than the documented costs. On balance, the analysis finds that the costs imposed by the estate tax outweigh any potential benefits that the tax might produce. In light of this finding, there is no compelling reason to keep the tax, and a number of reasons to reduce or abolish it.

Arguments for the estate tax

- *Inequality:* The paper draws on a large body of theoretical and empirical research showing the estate tax is an ineffective tool for fighting wealth and income inequality. As one noted liberal economist has said, "The reformer eyeing the estate tax as a means to reduce inequality had best look elsewhere."

- *Charitable Giving:* Recent research indicates that the charitable deduction exerts only a modest, if any, stimulative effect. In fact, the estate tax may actually be a significant barrier to charitable giving, as estate taxes crowd out charitable bequests.

- *Tax Revenue:* The estate tax clearly results in some losses in the federal income tax, meaning that the true net revenue of the estate tax is less than the official, static measures of its revenue yield. Although the exact magnitude of the effect is not known, some research suggests that repeal of the estate tax will not result in a revenue loss for the federal government.

Costs of the estate tax

- *Economic Growth:* The estate tax exerts a negative effect on the economy by generating extremely high compliance costs, introducing economic inefficiencies, and by reducing the stock of capital in the economy. The present study estimates that the estate tax has reduced the stock of capital in the economy by approximately \$847 billion.

- *Small Business:* The estate tax has a negative influence on entrepreneurial activity by hindering entry into self-employment and by breaking up family-run businesses. Family-run firms and farms particularly feel the pinch of the estate tax because they are less likely to have the liquid resources needed to meet their estate tax liabilities.

- *Social Mobility:* Because the estate tax disrupts the transmission of family wealth to succeeding generations, the estate tax hinders upward income mobility. One study estimates that the estate tax will consume 11 to 13 percent of African-American wealth over the next 50 years. With the number of minority-run businesses surging in recent years, the estate tax will come to affect more and more such firms.

- *Fairness, Simplicity and Efficiency:* The large number of tax avoidance options means that the tax burden is distributed unfairly among payers of the tax, is unnecessarily complicated, and will distort taxpayer behavior. As two liberal economists have noted, "tax liabilities depend on the skill of the estate planner, rather than on capacity to pay."

- *Environment:* A 2001 study found that approximately 2.6 million acres of forest land must be harvested each year to pay for the estate tax. Another 1.3 million acres must be sold to raise funds to pay estate taxes, of which close to one-third (29 percent) is either developed or converted to other uses.

ASSESSING THE FEDERAL ESTATE TAX: COSTS AND BENEFITS

I. INTRODUCTION

Benjamin Franklin observed over 200 years ago that “in this world nothing can be said to be certain, except death and taxes.”¹ Death and taxes may indeed be inevitable, but the simultaneous convergence of the two in the federal estate tax has produced one of the most contentious components of the federal tax code. Part of this debate is driven by the very nature of the estate tax itself. Many people simply find it objectionable as a matter of principle to tax the savings someone has accumulated over his or her lifetime, most of which have already been previously subjected to the income tax at least once. That the estate tax is imposed upon the death of a loved one only exacerbates the grief of loss.

This study examines the arguments for and against the federal estate tax to find that benefits of the tax are often overstated, and in any case are far smaller than the documented costs. Supporters of the tax defend it on the grounds that it reduces inequality, encourages charitable giving, and raises much needed tax revenue. However, this paper identifies a large body of theoretical and empirical research showing the estate tax is an ineffective tool for fighting wealth and income inequality. With respect to charitable giving, the available evidence does not support the contention that people are greatly motivated by tax incentives when making gifts from their estates. Even the \$25 billion the tax raised in 2005 is overstated because it fails to take into account income tax losses that result from the multitude of estate tax avoidance strategies.

The rather small potential benefits of the estate tax stand in sharp contrast to large and significant costs of the tax. The estate tax discourages savings and capital accumulation, thus impeding economic growth. Small businesses and innovation suffer as well, as the estate tax reduces funds available for investment and employment, and destabilizes the business at a vulnerable moment, the death of the founder or current leader of the enterprise. Since the owning of a small business is the key means for lower- and middle-income families to accumulate wealth, the estate tax also hinders economic mobility. Even the environment is harmed by the estate tax, since the enormous liquidity demands of the tax force owners to sell and develop environmentally-sensitive habitats in order to meet their estate tax obligations. On top of all these costs, the estate tax lacks the basic features of good tax policy due to its complexity and lack of equity.

When the costs of the estate tax are paired with the benefits, the mismatch is easy to discern, with the costs far exceeding the benefits. On balance, then, this study finds that the costs imposed by

¹John Bartlett, *Familiar Quotations*, 16th ed. (Boston, MA: Little, Brown and Company, 1992), 310.

the estate tax outweigh any benefits that the tax might produce. In light of this finding, there is no compelling reason to keep the tax, and a number of reasons to reduce or abolish it. To preview the results of the present analysis, consider the conclusion drawn by Henry Aaron and Alicia Munnell, two prominent liberal economists, in their study of the estate tax:

In short, the estate and gift taxes in the United States have failed to achieve their intended purposes: They raise little revenue. They impose large excess burdens. They are unfair.²

This paper updates and extends two previous Joint Economic Committee studies on the estate tax.³ The current report builds on the previous studies to reflect more recent data and legislation. Readers wishing additional information on the various arguments for and against estate taxation should consult the earlier studies.

II. OVERVIEW OF THE FEDERAL ESTATE TAX

The estate tax, also known as the death tax, is a tax imposed on transfers of savings made at the holder's death. Three times in this nation's history a federal death tax has been imposed only to be repealed shortly thereafter.⁴ In each instance, the tax was implemented to provide revenue on a short-term basis to finance military activities (1797–1802, 1862–1870, and 1898–1902). With the advent of World War I, the federal estate tax was reintroduced for a fourth time in 1916 and has existed ever since. Many states also impose their own death taxes.

The modern estate tax regime began in 1976, when legislation implemented a unified system of wealth transfer taxes. The unified system consists of three separate taxes: the estate tax, the gift tax, and the generation-skipping transfer (GST) tax.⁵ Estate and gift taxes are imposed on transfers made at death and during life, respectively. Tax liabilities are a function of taxable assets, less any deductions, above the exemption amount. The GST tax is generally imposed on asset transfers that skip a generation (e.g., from grandparents to grandchildren) above the exemption amount. Throughout this paper, estate tax is used to refer to this unified system of taxing intergenerational transfers.

An important feature of the estate tax is the step-up in basis for transferred assets. The basis of an asset is used as its cost for the purpose of calculating capital gains. Under the unified wealth transfer tax system, when a decedent transfers an asset to an heir, the asset's basis is increased, or stepped-up, to its current market value. The effect of this step-up is to exempt from capital gains taxation the amount of the step-up.

²The authors, however, favor reforming the estate tax, not repealing it. Henry J. Aaron and Alicia H. Munnell, "Reassessing the Role for Wealth Transfer Taxes," *National Tax Journal* 45, no. 2 (June 1992): 138.

³Dan Miller, *The Economics of the Estate Tax*, U.S. Congress, Joint Economic Committee (December 1998); and Dan Miller, *The Economics of the Estate Tax: An Update*, U.S. Congress, Joint Economic Committee (June 2003).

⁴The term death refers to all taxes imposed at death. Estates taxes are levied on a deceased's estates, while inheritances taxes are paid by the recipients of transfers.

⁵For additional information, see John R. Luckey, "Federal Estate, Gift, and Generation-Skipping Taxes: A Description of Current Law," Congressional Research Service, Report 95-416A (updated January 5, 2005).

Table 2. Real Median Family Income for Married Couple Families with 1 or More Children

| | CPI-U-RS | CPI Correction | | |
|------------------------|---------------|-----------------|-----------------|-----------------|
| | | -0.85% | -0.87% | -1.10% |
| 2000 | \$71,558 | \$68,641 | \$68,573 | \$67,801 |
| 2001 | \$71,905 | \$69,549 | \$69,494 | \$68,867 |
| 2002 | \$70,992 | \$69,246 | \$69,205 | \$68,737 |
| 2003 | \$70,485 | \$69,327 | \$69,299 | \$68,988 |
| 2004 | \$70,085 | \$69,509 | \$69,495 | \$69,339 |
| 2005 | \$70,853 | \$70,853 | \$70,853 | \$70,853 |
| Net change (\$) | -\$705 | +\$2,212 | +\$2,280 | +\$3,052 |
| Net change (%) | -1.0% | +3.2% | +3.3% | +4.5% |

Note: Amounts are in 2005 dollars.

Source: U.S. Census-Bureau and Joint Economic Committee calculations

IV. CONCLUSION

It is widely recognized that the CPI overstates the rate of inflation. This bias in the CPI was studied in depth by the 1996 Boskin Commission. Ten years later, additional research has led to better estimates of the size and persistence of the bias. Recent research has yielded estimates of the current annual CPI bias that include 0.80 to 0.90 percentage point (Boskin), 0.87 percentage point (Lebow and Rudd), and 1.1 percentage point (Gordon).

When a corrected measure of inflation is used, median income displays solid growth. For married couple families with one or more children, the net gain in median income ranges from \$2,212 to \$3,052, or +3.2 percentage points to +4.5 percentage points (in 2005 dollars). These figures stand in stark opposition to the alleged decline in family income, a result only obtained by using a flawed measure of inflation. If the effect of recent tax reductions were included, the after-tax income gains would be even stronger.

The 2001 Economic Growth and Tax Relief Reconciliation Act (EGTRRA) implemented, among other things, a gradual reduction in federal estate taxes, beginning in 2002 and culminating in full repeal in 2010 (Table 2).⁶ For the estate tax, the exemption amount is gradually increased to \$3.5 million and the top estate tax rate is lowered to 45 percent between 2002 and 2009. The GST tax exemption amount is eventually raised to \$3.5 million by 2009. For gifts, the annual exclusion amount continues to be adjusted for inflation (\$12,000 in 2006), subject to a cap of \$1 million in tax-free lifetime gift transfers. Also effective in 2010, gift taxes will be cut to equal the top applicable income tax rate, and the GST tax will be repealed. EGTRRA replaces the step-up in basis with a modified carryover basis in 2010, with taxable gains subject to an exemption of up to \$4.3 million (\$1.3 million for any heirs, plus an additional \$3 million for transfers to spouses).⁷

Table 2. Effective Estate Tax Rates & Exemptions for the Estate, GST and Gift Taxes

| Fiscal Year | Effective Estate Tax Rates | | Exemption Amount | GST Tax Exemption | Gift Tax Exclusion |
|--------------|-------------------------------------|------|------------------|-------------------|--------------------|
| | Starting | Top | | | |
| 2001 | 37% | 60%* | \$675,000 | \$1.06 million | \$10,000 |
| 2002 | 41% | 50% | \$1 million | \$1.1 million | \$11,000 |
| 2003 | 41% | 49% | \$1 million | \$1.12 million | \$11,000 |
| 2004 | 45% | 48% | \$1.5 million | \$1.5 million | \$11,000 |
| 2005 | 45% | 47% | \$1.5 million | \$1.5 million | \$11,000 |
| 2006 | 46% | 46% | \$2 million | \$2 million | \$12,000 |
| 2007 | 45% | 45% | \$2 million | \$2 million | † |
| 2008 | 45% | 45% | \$2 million | \$2 million | † |
| 2009 | 45% | 45% | \$3.5 million | \$3.5 million | † |
| 2010 | -- Estate and GST Taxes Repealed -- | | | | † |
| 2011 & After | 41% | 60%* | \$1 million | † | † |

* The top statutory rate is 55 percent, plus there is a 5 percent surtax for taxable estates of \$10.0 million to \$17.2 million. EGTRRA repealed the surtax for 2002 to 2010.

† The gift tax exclusion is adjusted annually for inflation, and the GST exemption will resume inflation adjustment in 2011.

The estate tax reduction and repeal set forth by EGTRRA, however, contains a sunset provision. Starting in 2011, the legislation repealing the estate tax expires and the estate tax system is restored to the pre-2001 law, with the exemption amount previously scheduled to increase to \$1 million. Congress is currently considering a permanent repeal of the estate tax.⁸

III. ARGUMENTS FOR ESTATE TAXATION

Advocates of the estate tax generally rely on three different arguments to support the tax. First, supporters claim the estate tax is necessary to reduce inequality. Second, estate tax advocates con-

⁶ Public Law No: 107-16. Table 7 at the end of the paper presents the rate structure of the estate tax in greater detail. Nonna A. Noto, "Calculating Estate Tax Liability during the Estate Tax Phasedown Period 2001-2009," Congressional Research Service, Report RL31092 (updated April 1, 2005).

⁷ For additional detail, see Nonna A. Noto, "Estate and Gift Tax Law: Changes under the Economic Growth and Tax Relief Reconciliation Act of 2001," Congressional Research Service, Report RL31061 (updated January 29, 2002).

⁸ The U.S. House of Representatives passed H.R. 8, the Death Tax Repeal Permanency Act of 2005, on April 13, 2005 by a vote of 272 to 162.

tend that the deduction for charitable bequests induces substantial giving to nonprofit organizations. Finally, supporters argue that the \$28 billion the tax is expected to raise in fiscal year 2006 warrants the estate tax's existence.

A. Inequality and the distribution of wealth, income and consumption

Perhaps the most common argument made in favor of the estate tax is that it reduces income and wealth inequality. Supporters of the estate tax maintain that since the high tax rates apply only to the "rich," the tax should unambiguously reduce inequality. This assertion actually relies on two assumptions: normatively, that high estate tax rates are consistent with a liberal political philosophy; and empirically, that high estate tax rates do in fact reduce inequality.

Both of these assumptions are flawed. First, the estate tax fails on liberal and progressive grounds because it discourages work and savings in favor of conspicuous consumption. The liberal philosophical argument against the estate tax has been articulated by legal scholar Edward McCaffery of the University of Southern California Law School, who is a "self-acknowledged liberal (in the modern sense of the term), who believes that it is appropriate for the government to distribute or redistribute resources from rich to poor."⁹ McCaffery argues that the estate tax undermines the very concepts of fairness and equality that liberals ought to support:

Liberals should think that a death tax encourages behaviors that a liberal society ought not to like—high-end leisure, encrusted forms of ownership, aggressive inter vivos giving—while discouraging the socially beneficial behaviors of work, savings, and thrift. . . .

The material equality that a liberal should care about is precisely equality in consumption or lifestyle. What we should all want our wealthiest, most economically productive citizens to do is to continue to work and save, not spend it all on themselves or stop working and consume leisure time. Yet once again a death tax is precisely backwards on this—liberal—score.¹⁰

On the second assumption, there is little evidence that the estate tax actually reduces inequality to any substantive degree. A large body of empirical and theoretical research has emerged showing that inheritance either is not a major source of inequality, or that government policies aimed at breaking up inheritance are likely to be ineffective. There are five reasons for such findings.

First, there is only a weak correlation between wealth and income. For example, a person can be very wealthy but have little or negative income (or vice versa). An article published in the Federal Reserve Bank of Minneapolis's *Quarterly Review* found that many low-income households have substantial amounts of wealth, and vice versa. For example, the average wealth of the bottom 1

⁹ Edward J. McCaffery and Richard E. Wagner, "A Declaration of Independence from Death Taxation: A Bipartisan Appeal," Public Interest Institute, Policy Study (July 2000), 4. See also, Edward J. McCaffery, "The Uneasy Case for Wealth Transfer Taxation," *Yale Law Journal* 104, no. 2 (November 1994): 283–365.

¹⁰ McCaffery and Wagner, 6, 18–19.

percent of the income distribution is enough to place such a household in the top wealth quintile.¹¹ Conversely, households in the bottom 1 percent of the wealth distribution have an average income that places them in the middle of the income distribution.¹² One reason for such results is the life-cycle of income and savings: as workers enter retirement, their income falls dramatically while their asset levels are relatively high. In addition, some wealthy households may have transitory business losses or losses in capital income that temporarily place them at the bottom of the income distribution. Thus, a reduction of wealth transfers can have only a limited impact on the distribution of earnings.

Alan Blinder, a member of President Bill Clinton's Council of Economic Advisers, found that only about 2 percent of inequality was attributable to the unequal distribution of inherited wealth, leading him to conclude that "a radical reform of inheritance policies can accomplish comparatively little income redistribution."¹³ Elsewhere Blinder has written that "The reformer eyeing the estate tax as a means to reduce inequality had best look elsewhere."¹⁴

Second, efforts to curtail savings transfers induce wealth holders to increase their consumption, thereby increasing the inequality of consumption. Joseph Stiglitz, who served as Chairman of President Clinton's Council of Economic Advisers, has found that, taking into account the long-term impact on capital accumulation, the estate tax may ultimately increase income inequality. Even if the government acts to offset these capital accumulation effects, Stiglitz argued that the "desirability of the estate tax may still be questioned, not only because of the distortions which it introduces but also because it may actually increase inequality in the distribution of consumption."¹⁵

Stiglitz further argued that inheritances actually decrease inequality: because inheritances redistribute income within families, they may decrease inequality in lifetime consumption.¹⁶ In yet another analysis, Stiglitz concluded that "it would seem clear that inheritances are unambiguously equality increasing" in terms of consumption, and an argument can be made that inheritances reduce inequality of income and wealth as well.¹⁷ The conclusions reached by Blinder and Stiglitz have been replicated by numerous other researchers.¹⁸

Third, empirical and theoretical research on intergenerational wealth transfers has repeatedly found that such transfers have rel-

¹¹ Santiago Budría Rodríguez, Javier Díaz-Giménez, Vincenzo Quadrini and José-Víctor Ríos-Rull, "Updated Facts on the U.S. Distributions of Earnings, Income, and Wealth," Federal Reserve Bank of Minneapolis, Quarterly Review 26, no. 3 (Summer 2002): 6.

¹² *Ibid.*

¹³ Alan S. Blinder, *Toward an Economic Theory of Income Distribution* (Cambridge, MA: MIT Press, 1974).

¹⁴ Alan S. Blinder, "Inequality and Mobility in the Distribution of Wealth," *Kyklos* 29 (1976): 618-9.

¹⁵ Joseph E. Stiglitz, "Notes on Estate Taxes, Redistribution, and the Concept of Balanced Growth Path Incidence," *Journal of Political Economy* 86, no. 2 (1978): S137-S150.

¹⁶ David L. Bevan and Joseph E. Stiglitz, "Intergenerational Transfers and Inequality," *Greek Economic Review* 1, no. 1 (August 1979): 13.

¹⁷ Joseph E. Stiglitz, "Equality, Taxation and Inheritance," in *Personal Income Distribution: Proceedings of a Conference Held by the International Economic Association, Noordwijk aan Zee, Netherlands, April 18-23, 1977*, eds. Wilhelm Krelle and Anthony F. Shorrocks, 283 (New York, NY: North-Holland Publishing Company, 1978).

¹⁸ For a review of additional research, see the discussion of Davies (1982), Hugget (1996), and Verbit (1978) in Miller, *The Economics of the Estate Tax*, 6.

atively little impact on the distribution of income and wealth. For example, a theoretical model of wealth distribution by Jagadeesh Gokhale and Laurence Kotlikoff found that bequests actually reduce wealth inequality.¹⁹ Shinichi Nishiyama, in a technical paper from the Congressional Budget Office, simulated the effect of a 100 percent estate and gift tax, concluding that income and wealth inequality would be no better, and by some measures worse, than the baseline estimate.²⁰ In a similar vein, Edward Wolff's analysis of wealth distribution led him to write:

The most surprising finding is that inheritances and other wealth transfers tend to be equalizing in terms of the distribution of household wealth. Indeed, the addition of wealth transfers to other sources of household wealth has had a sizable effect on reducing the inequality of wealth. . . . Oddly enough, though wealth inequality has risen in the United States between 1983 and 1998, the increase may have been even greater were it not for the mitigating effects of inheritances and gifts.²¹

Fourth, the considerable degree of wealth and income mobility in society means that government efforts to redistribute wealth will necessarily meet with limited success. Many U.S. households move up and down the income and wealth ladder. For example, one study found that between 1966 and 1981, more than half of all households changed wealth quintiles.²² Another study reported that one-third of households in the bottom wealth quintile move up to a higher wealth quintile after just five years.²³

To illustrate the degree of wealth mobility, consider the results of a study by economists Kerwin Kofi Charles and Erik Hurst, published in the *Journal of Political Economy*.²⁴ That study found robust movement up and down wealth quintiles across generations. Figure 2 displays the percent of families that changed wealth quintiles from one generation to the next. For example, close to two-thirds (64 percent) of children of parents in the poorest wealth quintile (i.e., poorest fifth of families) ended up in a higher wealth quintile than their parents.²⁵ Likewise, children of parents in the wealthiest quintile had a 64 percent chance of being in a different wealth quintile than their parents.²⁵ In other words, for every person who remains in the same wealth quintile as their parents, two to three change to a different quintile.

¹⁹ Jagadeesh Gokhale and Laurence J. Kotlikoff, "Simulating the Transmission of Wealth Inequality," *American Economic Review* 92, no. 2 (May 2002): 265–269.

²⁰ Shinichi Nishiyama, "Bequests, Inter Vivos Transfers, and Wealth Distribution," Congressional Budget Office, Technical Paper Series 2000–8 (December 2000), 22–23.

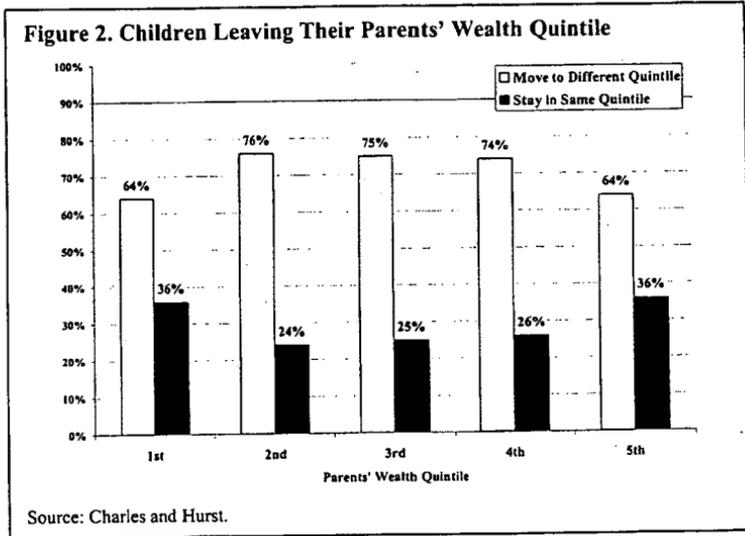
²¹ However, Wolff also writes that "the current structure of the estate tax is quite good from the standpoint of equity." Edward N. Wolff, "Bequests, Saving, and Wealth Inequality: Inheritances and Wealth Inequality, 1989–1998," *American Economic Review* 92, no. 2 (May 2002): 263.

²² Nancy A. Jianakoplos and Paul L. Menchik, "Wealth Mobility," *Review of Economics and Statistics* 79, no. 1 (February 1997): 18–31.

²³ Ana Castaneda, Javier Diaz-Giménez and José-Victor Ríos-Rull, "Accounting for the U.S. Earnings and Wealth Inequality" *Journal of Political Economy* 111, no. 4 (August 2003): 848.

²⁴ Kerwin Kofi Charles and Erik Hurst, "The Correlation of Wealth across Generations," *Journal of Political Economy* 111, no. 6 (December 2003): 1155–1182.

²⁵ Similar results were found by Executive Office of the President, Council of Economic Advisers, *The Annual Report of the Council of Economic Advisers* (Washington, DC: Government Printing Office, 2003), 199.



Thus, not only do children in poorer households move up the wealth distribution, but children in wealthier households move down. Alexis de Tocqueville observed this phenomenon back in 1835, when he wrote “wealth circulates with inconceivable rapidity, and experience shows that it is rare to find two succeeding generations in the full enjoyment of it.”²⁶ More recently, there is evidence of such patterns in the Forbes annual list of the richest Americans. For example, of the original top 400 richest persons who made the first list in 1982, only 50 names—just 13 percent—were still on the list in 2004.²⁷ In fact, many of the famous fortunes in America from the early twentieth century did not have a single family member left on the 2004 list, including such notable families as DuPont, Mellon and Rockefeller.²⁸

The fifth reason that the estate tax is likely to be ineffective at reducing inequality is that most wealthy households did not become wealthy because of inheritances. Numerous studies confirm the conclusion that inheritances are not a major source of wealth for many of the wealthy. A survey of wealthy investors by Prince & Associates found that just 7 percent of respondents identified inheritance as the source of their wealth.²⁹ In *The Millionaire Next Door*, authors Thomas Stanley and William Danko report that 81 percent of millionaires are first-generation rich, and just 14 percent cite inheritance as the source of their wealth.³⁰ A 1989 study that examined the top 10 percent of the income distribution found that only 9 to 12 percent of such households attributed more than half

²⁶ Alexis de Tocqueville, *Democracy in America—Volume I* (1835; reprint, New York: Vintage Books, 1945), 53.

²⁷ Maria Elena Lagomasino, “How to Stay Rich,” *Forbes*, 10/11/04, online at <http://www.forbes.com/400richest/>.

²⁸ Peter Newcomb, “Family Fortunes,” *Forbes*, 10/11/04, online at <http://www.forbes.com/400richest/>.

²⁹ “Majority of Rich Investors Made Fortunes through Hard Work According to Private Asset Management Study,” *Business Wire*, 6/14/94.

³⁰ Thomas J. Stanley and William D. Danko, *The Millionaire Next Door: The Surprising Secrets of America's Wealthy* (Atlanta, GA: Longstreet Press, 1996), 16, 32.

of their wealth to gifts and inheritances.³¹ RAND economist James P. Smith has found that inheritances account for less than 8 percent of the wealth in the wealthiest 5 percent of households.³² Among Forbes' 2003 list of the top 100 richest Americans, inheritance is the source of wealth for just 8 percent, compared to 76 percent who made the list through entrepreneurship (Table 3).³³ In a survey of households worth at least \$5 million done for Deutsche Bank Private Banking, respondents estimated that on average 18 percent of their wealth came from inheritance or gifts, and that in the combined pool of wealth of all surveyed households, less than 11 percent originated from inheritance.³⁴ While the exact point estimates differ from study to study, they are remarkably consistent in showing that less than 20 percent of the assets of the wealthy originates from inheritance.

| Source of Wealth | Number of Persons | Net Worth | |
|------------------|-------------------|----------------|---------------|
| | | Billions | Percent |
| Inheritance | 8 | \$18.8 | 3.0% |
| Finance | 16 | \$99.4 | 15.9% |
| Entrepreneurship | 76 | \$506.7 | 81.1% |
| Communications | 12 | \$70.4 | 11.3% |
| Entertainment | 3 | \$9.5 | 1.5% |
| Industry | 13 | \$72.7 | 11.6% |
| New Economy | 12 | \$152.7 | 24.4% |
| Oil | 6 | \$19.8 | 3.2% |
| Real Estate | 9 | \$28.4 | 4.5% |
| Retailing | 21 | \$153.2 | 24.5% |
| Total | 100 | \$624.9 | 100.0% |

Source: *Forbes* and Samuelson and Nordhaus.

The fact that four out of five millionaires are first-generation rich raises the question: if inheritance is not the source of their wealth, how did these individuals become millionaires? The data in Table 3 already demonstrate the central importance of entrepreneurship. In addition, Stanley and Danko show that a primary mechanism of achieving wealth is for families to manage their money effectively and lead a frugal lifestyle. Contrary to conventional wisdom, most millionaires do not lead high-priced lifestyles. For example, the typical millionaire has never spent more than \$400 on a suit and paid just \$24,800 for his current automobile.³⁵

³¹ Michael D. Hurd and Gabriella Mundaca, "The Importance of Gifts and Inheritances among the Affluent," in *The Measurement of Saving, Investment, and Wealth*, eds. Robert E. Lipsey and Helen Stone Tice, 737-763 (Chicago, IL: University of Chicago Press, 1989).

³² James P. Smith, "Inheritances and Bequests," in *Wealth, Work, and Health*, ed. James P. Smith and Robert J. Willis, 121-149 (Ann Arbor, MI: University of Michigan Press, 1999), 137.

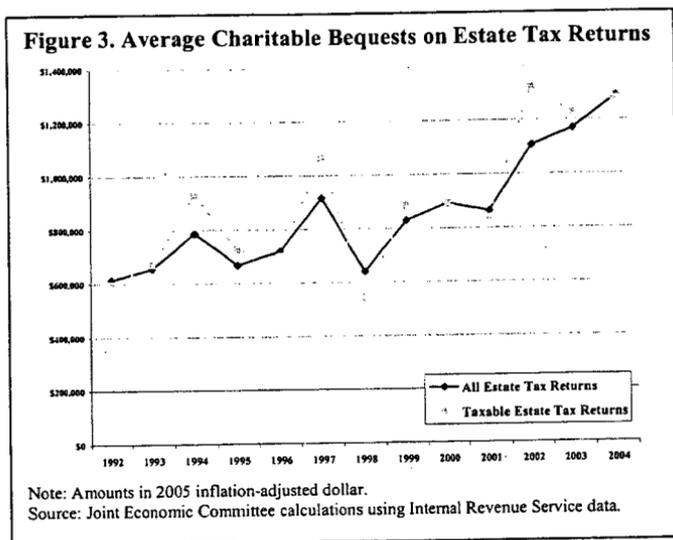
³³ Analysis of October 2003 *Forbes* data in Paul A. Samuelson and William D. Nordhaus, *Microeconomics*, 18th ed. (Boston, MA: McGraw Hill, 2005), 388.

³⁴ Paul G. Schervish and John J. Havens, "Extended Report of the Wealth with Responsibility Study," Social Welfare Research Institute, Boston College (March 2001), 10.

³⁵ Stanley and Danko, 31, 112.

B. Charitable contributions

Another objection to a reduction in the estate tax is that it would reduce contributions to charitable organizations. Because the estate tax allows individuals to deduct from their taxable estate any bequests to charitable organizations, there is a significant tax advantage to donate money at one's death. Reducing the tax on estates, the argument goes, could cause people to donate less money to charity. Recent research on this subject, however, indicates that the charitable tax deduction exerts only a modest, if any, stimulative effect. Although the charitable deduction may affect the timing of donations, it may not significantly alter the overall level of giving.



Despite the substantial tax benefits, a casual review of the data provides little evidence that tax incentives greatly affect charitable bequests. According to IRS data, only 18.5 percent of taxable estate tax returns actually made a charitable bequest on returns filed in 2004.³⁶ In other words, four out of five taxable estate tax returns did *not* take advantage of the price benefit of a charitable bequest. Given the steep marginal tax rates of the estate tax, one might expect charitable bequests to be much more common. Remarkably, a similar percentage—22 percent—of households nationwide (most of whom do not receive tax benefits from charitable bequests) have either already included a charitable bequest in their will (8 percent) or are considering doing so (14 percent).³⁷

In addition to looking at patterns of giving among estate tax returns, it is useful to consider patterns of charitable giving over time. Proponents of the estate tax assert that all else being equal,

³⁶The term "taxable estate tax returns" refers to returns that actually paid some amount of estate tax. Joint Economic Committee calculations based on data from Internal Revenue Service, "Estate Tax Returns for 2005," online at <http://www.irs.gov/taxstats/indtaxstats/article/0,,id=96442,00.html>.

³⁷Scott R. Lumpkin, "A New Perspective on Philanthropy: Planned Giving in the United States," *Trusts & Estates* 140, no. 6 (June 2001): 14–17, 48.

a reduction in estate taxes reduces the tax benefit of charitable bequests and should result in lower bequest levels. The estate tax reductions that began in 2002 provide an opportunity to test this assertion.

The picture is somewhat complicated, however, by the fact that EGTRAA requires fewer estates to file returns. Some estates that no longer are required to file returns may still be making charitable bequests, but those gifts are not included in IRS data. Between 2001 and 2004 the number of estate tax returns filed with the IRS fell 42 percent, and the aggregate value of gross estates on those returns dropped by \$23 billion (16 percent) in inflation-adjusted dollars. In light of these numbers, it is perhaps not surprising that total charitable bequests on estate tax returns fell \$2.3 billion between 2001 and 2004, though the decline among taxable estates was just \$923 million (in 2005 dollars). An additional consideration is that there are significant fluctuations from year to year unrelated to changes in tax policy. Looking over a 46 year time period (1959 to 2004), total charitable bequests are closely correlated with overall charitable giving.³⁸

Nonetheless, the evidence suggests that the impact of the estate tax reductions has been mild or even non-existent. In fact, the 2005 edition of *Giving USA*, published annually by the AAFRC Trust for Philanthropy (an organization that seeks to advance philanthropy), reported that "Despite predictions, there has been no observed impact on charitable giving from the gradual change in estate tax filing requirements."³⁹ A number of facts are consistent with such a conclusion. First, the total amount of charitable bequests in nominal dollars, on and off of estate tax returns, was exactly the same in 2001 (before EGTRAA) and 2004: \$19.8 billion.⁴⁰ Second, the size of the average charitable bequest on estate tax returns has increased significantly, rising more than 40 percent between 2001 and 2004 (Figure 3).⁴¹ Third, bequests as a share of gross estate have increased after EGTRAA, growing from 7.4 percent over 1999–2001, compared to 7.9 percent for 2002–2004; among taxable returns, the share rose from 7.4 percent to 8.5 percent.⁴² Finally, the percent of estate tax returns that made a charitable bequest rose from 16.9 percent for the period 1999–2001 to 17.7 percent for the period 2002–2004; for taxable returns, the rates were 20.6 percent and 21.2 percent, respectively.⁴³ As noted above, IRS data do not tell the whole story, since the data exclude charitable bequests by estates no longer subject to the estate tax.

Notably, these changes generally follow the same patterns across different estate sizes. For example, among taxable returns, total bequests for estates greater than \$5 million declined just eight tenths of a percentage point; bequests were also similar for estates greater

³⁸ The correlation statistic between the two data series is 0.990. The data being compared are total charitable giving from all sources and all charitable bequests (including those from decedents who did not file an estate tax return). JEC calculation using data from AAFRC Trust for Philanthropy, *Giving USA 2005* (New York, NY: AAFRC Trust for Philanthropy, 2005), 194–195.

³⁹ *Ibid.*, 29.

⁴⁰ In constant terms, the change between 2001 and 2004 was a drop of 6.2 percent. AAFRC Trust for Philanthropy, 194.

⁴¹ Joint Economic Committee calculations based on data from Internal Revenue Service, "Estate Tax Returns," (various years), online at <http://www.irs.gov/taxstats/indtaxstats/article/0,,id=96442,00.html>.

⁴² *Ibid.*

⁴³ *Ibid.*

than \$10 million. Likewise, the increases in the percent of estates leaving a bequest and bequests as share of estates are all concentrated in the larger estates (the very estates most likely to face the highest marginal rates, and which therefore might be expected to be most responsive to rate reductions).

To a certain degree, even these numbers overstate the scope of charitable giving, as a very small number of estates account for the vast majority of bequests to charity. The most recent data indicate that the wealthiest 0.5 percent of decedents in the U.S. accounted for 76 percent of all charitable bequests made in 2004. In fact, a mere 0.011 percent of decedents (272 estate tax returns out of 2.4 million deaths) accounted for close to one-third (31 percent) of all charitable bequests that year.⁴⁴ This concentration of charitable bequests among a very few decedents raises the question of why some wealthy estates make very large donations, while others make none at all.

The evident answer to this question is that gifts to charity are influenced by factors other than tax benefits, such as altruism or amount of after-tax wealth. As Boston College researcher Paul Schervish has observed, "Charitable giving, while spurred on by increased material wherewithal, is advanced even more by increased spiritual wherewithal."⁴⁵ Survey data show that charitable intent outweighs tax incentives as a motivation for charitable bequests. For example, in one survey of very wealthy families, the number one factor cited by respondents as likely to increase charitable giving was "Find worthy cause that you feel passionate about."⁴⁶ Other research bears out such findings.⁴⁷

Formal research into the impact of a reduction in estate taxes generally finds that there are two opposite effects. First, there is an increase in the tax price of making a donation, which dampens the tax benefits of giving. Second, there is an increase in the amount of after-tax wealth, which boosts giving by augmenting available resources. Debate over the impact of estate tax repeal on charitable giving generally boils down to which of these two effects dominates. Some research has found that the charitable deduction significantly increases charitable bequests.⁴⁸ One study even predicted repealing the estate tax would reduce charitable bequests by between 22 percent and 37 percent.⁴⁹

Other research, however, suggests that the stimulative effect of the charitable deduction is not as large. For example, a 2000 study by economist David Joulfaian found that charitable giving is highly sensitive to after-tax wealth. The net impact of the estate tax on

⁴⁴ A similar pattern holds over the last five years as well. Joint Economic Committee calculations based on data from AAFRC Trust for Philanthropy; Internal Revenue Service; and U.S. Department of Health and Human Services, Center for Disease Control, National Vital Statistics Reports 53, no. 21 (June 28, 2005), data updated 2/15/2006, 1.

⁴⁵ Paul G. Schervish, "Wealth and Philanthropy," in *Philanthropy in America: A Comprehensive Historical Encyclopedia*, ed. Dwight F. Burlingame, 507 (Santa Barbara, CA: ABC-CLIO, 2004).

⁴⁶ Schervish and Havens, 27.

⁴⁷ See, for instance, Len Scholl, "Successful Charitable Planning Starts with an Understanding of Client Motivations," *National Underwriter: Life & Health* 108, no. 47 (December 13, 2004): 14-15; and Janice H. Burrill, "The Effects of Estate Tax 'Repeal' on Philanthropy," *Trusts & Estates* 140, no. 10 (October 2001): 20-26.

⁴⁸ See, for example, Michael J. Brunetti, "The Estate Tax and Charitable Bequests: Elasticity Estimates Using Probate Records," *National Tax Journal* 63, no. 2 (June 2005): 165-188.

⁴⁹ Jon M. Bakija and William Gale, "Effects of Estate Tax Reform on Charitable Giving," *Urban-Brookings Tax Policy Center* (July 2003).

charitable bequests is difficult to quantify, leading Joulfaian to suggest that “the estate tax has a modest effect on giving.”⁵⁰ In a 2005 study from the U.S. Treasury Department’s Office of Tax Analysis, Joulfaian utilized more recent data to find that the estate tax “has little effect on bequests.”⁵¹ That study went on to conclude:

The estimated effects of estate taxation vary considerably depending on whether behavior and estate planning reflect the current or expected tax regimes. If donors are assumed to respond to the tax regime in place at the date of death, then estate tax repeal would lead to a small reduction in bequests. On the other hand, **if donors plan with the future tax regime in mind, then estate tax repeal may lead to a small increase in gifts.**⁵² (emphasis added)

One of the most revealing studies on this subject found that individuals who gave generously during their life gave little at death, while those who gave little during life tended to give much more at death.⁵³ In brief, this research suggests that tax incentives play a relatively limited role in determining total lifetime giving. Tax incentives may induce some donors to give their contributions earlier in life, but on balance, it appears that tax incentives (both income and estate) do not greatly alter the total amount of charitable giving made over an individual’s lifetime.

Table 4. Desired & Expected Distribution of Estates

| | • Expected | • Desired | • Difference |
|-----------|------------|-----------|--------------|
| • Heirs | • 47% | • 64% | • +17% |
| • Taxes | • 37% | • 9% | • -28% |
| • Charity | • 16% | • 26% | • +10% |
| • Other | • 0% | • 1% | • +1% |

Source: Schervish and Havens.

The estate tax may actually be a significant barrier to charitable giving, as estate taxes crowd out charitable bequests. Decisions about charitable bequests typically are made on the basis of after-tax wealth. If an estate faces a large tax liability, then there are fewer resources left over to allocate between heirs and charities. An increase in after-tax wealth could, therefore, offset, in part or in whole, the effect of losing the tax benefit of giving.

Survey evidence supports this perspective. A survey of wealthy households (net worth of at least \$5 million) found that respondents expected to distribute 16 percent of their estates to charity and 37 percent to taxes (Table 4). However, respondents also indicated how they would prefer to distribute their wealth, with 26 per-

⁵⁰ David Joulfaian, “Estate Taxes and Charitable Bequests by the Wealthy,” National Bureau of Economic Research, Working Paper 7663 (April 2000), 21.

⁵¹ David Joulfaian, “Estate Taxes and Charitable Bequests: Evidence from Two Tax Regimes,” U.S. Department of Treasury, Office of Tax Analysis, OTA Paper 92 (March 2005), 19.

⁵² *Ibid.*, 20.

⁵³ Eugene Steuerle, “Charitable Giving Patterns of the Wealthy,” in *America’s Wealth and the Future of Foundations*, ed. Teresa Odendahl, 203–221 (New York, NY: The Foundation Center, 1987).

cent going to charity and just 9 percent to taxes. In other words, for a \$10 million estate, the wealth holder might expect to leave \$1.6 million to charity. In the absence of excessive estate taxation, the amount going to charity would increase more than 60 percent to \$2.6 million.⁵⁴

C. Federal revenue

A third objection to cutting estate taxes is the loss of government revenue. The estate tax accounts for a relatively small portion of federal revenue. Although the \$28 billion that the estate tax is expected to raise in 2006 is hardly insignificant, it amounts to only 1.2 percent of the \$2.3 trillion in total receipts (Figure 4). Over the next five years (2006–2010), the Congressional Budget Office estimates that estate tax revenue will account for 1.0 percent of total revenue.⁵⁵

In a curious twist of analysis, the Joint Committee on Taxation (JCT) has estimated that the total revenue loss from estate tax repeal would actually exceed the revenue the tax raises. At the time of JCT's analysis, the estate tax was expected to raise \$218 billion over 2011 to 2015 (the years when the current reduction and repeal of the estate tax expires).⁵⁶ However, JCT estimates that over that same time period repeal would lose \$281 billion.⁵⁷ In other words, the revenue lost from estate tax repeal equals 129 percent of the actual revenue that it is supposed to raise.⁵⁸ This appears to be the same as pouring 13 gallons of water out of a 10 gallon jug.

⁵⁴ Schervish and Havens, 35.

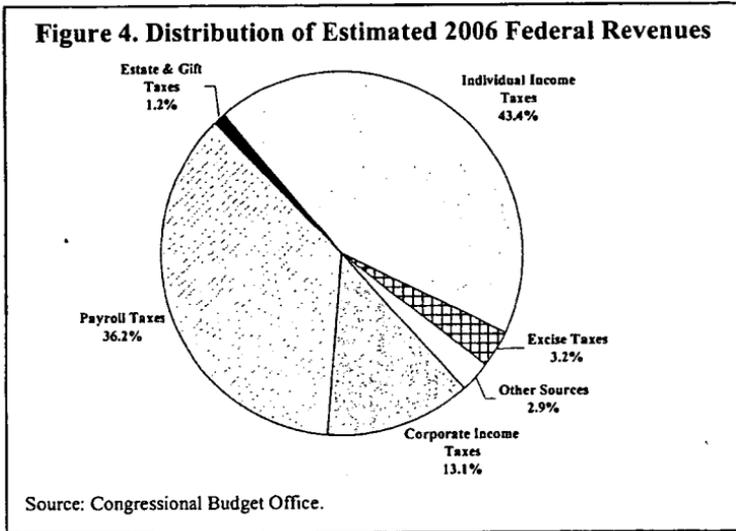
⁵⁵ U.S. Congress, Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 2007–2016* (Washington, DC: Congressional Budget Office, 2005), 84.

⁵⁶ U.S. Congress, Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 2006–2015* (Washington, DC: Congressional Budget Office, 2005), 78.

⁵⁷ The JCT maintains that estate tax repeal would also reduce capital gains revenue. U.S. Congress, Joint Committee on Taxation, "Estimated Budget Effects of the Revenue Provisions Contained in the President's Fiscal Year 2006 Budget Proposal," JCX-10-05 (3/9/2005)

⁵⁸ For a critique of JCT's methodology, see Daniel Clifton, "Learning from History: JCT's Static Score Can Not Determine the Real Revenue Effect of Repealing the Estate Tax," *American Family Business Institute* (July 2005).

Figure 4. Distribution of Estimated 2006 Federal Revenues



Notwithstanding JCT's peculiar methods of accounting, there is abundant evidence that the estate tax, along with its high compliance costs and impact on capital accumulation, may actually cause income tax revenue losses for the federal government. In addition, the primary payers of the estate tax, the wealthy, tend to be well-educated about and willing to engage in extensive tax avoidance strategies.⁵⁹ In fact, the estate tax affords so many avoidance and minimization opportunities that some observers have dubbed it a "voluntary tax."⁶⁰ It is difficult for any tax to assess accumulated savings and capital because such holdings can be manipulated through tax-free transfers and favorable asset valuation.

Estate taxes, as well, are ultimately self-defeating in the sense that they simply encourage consumption of savings rather than leaving bequests. This fact led Joseph Stiglitz, chairman of President Clinton's Council of Economic Advisers, to conclude that,

Of course, prohibitively high inheritance tax rates generate no revenue; they simply force the individual to consume his income during his lifetime.⁶¹
(emphasis added)

The impact of the estate tax on overall revenues primarily comes from reduced wealth accumulation (or increased consumption) and increased tax avoidance efforts. These factors impact revenue through the inefficiencies and distortions introduced by the estate tax, which in turn, reduce the amount of taxable income and wealth in the economy, thereby depressing federal tax revenue.

⁵⁹ See generally Munnell, *infra* note 75; and Wojcieh Kopczuk and Joel Slemrod, "The Impact of the Estate Tax on the Wealth Accumulation and Avoidance Behavior of Donors," National Bureau of Economic Research, Working Paper 7690 (October 2000).

⁶⁰ See George Cooper, *A Voluntary Tax?: New Perspectives on Sophisticated Estate Tax Avoidance* (Washington, DC: Brookings Institution, 1979); and Edward J. McCaffery, "A Voluntary Tax? Revisited," in *Proceedings: 93rd Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association*, November 9–11, 2000, ed. James R. Hines, Jr., 268–274 (Washington, DC: National Tax Association, 2001).

⁶¹ Bevan and Stiglitz, 21.

The impact of these effects is most apparent in the negative impact on income tax revenue. Most assets generate some degree of taxable income: stocks are taxed on their dividends and realized capital gains, checking and savings accounts produce taxable interest, annuities typically yield income that is at least partially taxable, and many bonds generate taxable interest. If taxable asset levels are lowered due to the estate (either from reduced savings or increased avoidance), then the income and other taxes are also reduced.

A study by Stanford University economist Douglas Bernheim examined the impact of just one aspect of tax avoidance: the tax-induced shifting of resources from parents to heirs. In general, income tax revenue is lost whenever assets are transferred from parents in high income tax brackets to children (who typically face lower tax rates) or to tax-exempt organizations through charitable bequests and family trusts. Through an analysis of estate tax returns under different assumptions and tax regimes, Bernheim found that the income tax revenue loss associated with these factors is very large relative to the revenue raised by the estate tax. In sum, Bernheim concluded:

Although it is very difficult to estimate these effects precisely, **in recent years true estate tax revenues may well have been negative.**⁶² (emphasis added)

Additional research shows that tax rates have a significant impact on such giving to heirs. Bernheim and others have found that such inter vivos giving is "highly responsive to applicable gift and estate tax rates."⁶³ Joulfaian also has reached results that "demonstrate that taxes have significant effects on the timing of transfers."⁶⁴ These findings lend credence to the contention that the estate tax results in at least some revenue loss under the income tax due to premature transfers to heirs.

In addition, a growing body of literature examines the effect of the estate tax on the size of estates reported to the IRS. Most recently, David Joulfaian, of the U.S. Treasury's Office of Tax Analysis, has published evidence that suggests that "estate taxes have a dampening effect on the reported size of taxable estates."⁶⁵ Analyzing data from a 50 year period (1949–2001), Joulfaian estimates that the estate tax reduces the size of reported estates by 14 percent.

To put the 14 percent estimate in perspective, consider that for 2004, total taxable estates reported to the IRS amounted to approximately \$108 billion. If that amount reflects the 14 percent reduction estimated by Joulfaian, then the true level of taxable es-

⁶² B. Douglas Bernheim, "Does the Estate Tax Raise Revenue?" in *Tax Policy and the Economy*, vol. 1, ed. Lawrence H. Summers, 113–138 (Cambridge, MA: MIT Press, 1987).

⁶³ B. Douglas Bernheim, Robert J. Lemke and John Karl Scholz, "Do Estate and Gift Taxes Affect the Timing of Private Transfers," National Bureau of Economic Research, Working Paper 8333 (June 2001), i.

⁶⁴ David Joulfaian, "Choosing Between Gifts And Bequests: How Taxes Affect the Timing of Wealth Transfers," U.S. Department of the Treasury, Office of Tax Analysis, OTA Paper 86 (May 2000), 23.

⁶⁵ David Joulfaian, "The Behavioral Response of Wealth Accumulation to Estate Taxation: Time Series Evidence," Office of Tax Analysis, U.S. Department of the Treasury, OTA Paper 96, (November 2005), 1.

tates was actually \$125 billion. In other words, the estate tax itself reduced the reported level of estates by \$17.5 billion.

In another study on the subject, Wojciech Kopczuk and Joel Slemrod examined the size of reported estates and summary measures of the estate tax rate structure. Looking at data from 1916 to 1996, they found that higher rates are “generally negatively related to the reported aggregate net worth of the top estates as a fraction of national wealth,” a finding that is consistent with the notion that estate taxes reduce wealth accumulation and increase tax avoidance.⁶⁶ The authors go on to report a negative relationship between marginal estate taxes and the reported net worth of estates, concluding:

When we investigate measures of the tax rate that prevailed during one’s lifetime rather than at death, the estimated negative behavioral response to estate taxes is more pronounced. In particular, the marginal tax rate at the age of 45 dominates all other measures, and the estimated elasticity with respect to (one minus) the tax rate is 0.16, and is statistically significant. Such a number is also economically significant, because it implies that an estate tax rate of 50 percent would reduce the reported net worth of the richest half of the population by 10.5 percent when its effect is fully realized many years later.⁶⁷

In yet another study, Kenneth Chapman, Govind Hariharan and Lawrence Southwick, Jr. found evidence that higher estate tax rates result in reduced asset levels. Following significant rate increases in 1941 and 1977, estate tax revenue as a share of GDP decreased. In contrast, after rates were lowered in 1984, revenue as a share of GDP increased.⁶⁸ A regression analysis of revenue data and tax rates provided “evidence that tax revenues from the estate tax declined during periods of higher tax rates, which suggests that individuals may be reducing the amount of their bequeathable (taxable) estates in response to the higher taxes.”⁶⁹ In other words, the evidence indicates that higher tax rates are associated with a smaller amount of taxable assets. This finding reinforces the findings of Joulfaian and Kopczuk and Slemrod reported above.

Other research has quantified the true revenue effect from repeal of the estate tax. The CONSAD Research Corporation developed a computer simulation model to estimate the revenue impact of permanent estate tax repeal coupled with limited step-up in basis for the calculation of estates’ capital gains realizations.⁷⁰ The

⁶⁶ Wojciech Kopczuk and Joel Slemrod, “Wealth Accumulation and Avoidance Behavior,” in *Rethinking Estate and Gift Taxation*, eds. William G. Gales, James R. Hines, Jr. and Joel Slemrod, 338–339 (Washington, DC: Brookings Institution Press, 2001).

⁶⁷ *Ibid.*, 339.

⁶⁸ Under the Economic Recovery Act of 1981 and subsequent legislation, top statutory estate tax rates were gradually reduced from 70 percent to 55 percent. The year 1984 marks the completion of the rate phase down.

⁶⁹ Kenneth Chapman, Govind Hariharan and Lawrence Southwick, Jr., “Estate Taxes and Asset Accumulation,” *Family Business Review* 9, no. 3 (Fall 1996): 267.

⁷⁰ Under the proposal reviewed by CONSAD, assets would receive no step-up in basis. Instead, heirs would receive a \$1.3 million exemption from capital gains taxes, but everything above that level would be taxed at the capital gains tax rate when the assets are sold.

CONSAD model predicts such a proposal would yield a net gain to the U.S. Treasury:

Those results demonstrate that immediate repeal of the estate tax and adoption of the specified limited step-up in basis will generate a cumulative net increase in government tax revenues equal to \$38.0 billion over the period from 2003 through 2012. That net increase will consist of \$231.2 billion in additional revenues from the capital gains tax and the personal income tax, which will more than offset the forgone \$193.0 billion in estate tax revenues.⁷¹

The conclusion to be made from this collection of research is that the estate tax clearly results in losses in federal income tax revenues. Even aside from economic loss caused by reduced asset accumulation, the true net revenue of the estate tax to the federal treasury is less than the official, static measures of its revenue yield. Although the exact magnitude of the effect is not known, the research of Bernheim and CONSAD supports the contention that repeal of the estate tax will not result in a revenue loss for the federal government (and may even result in a net revenue gain).

IV. ARGUMENTS AGAINST ESTATE TAXATION

Opposition to the estate tax generally emphasizes five negative effects of the tax. The five arguments considered here are that the estate tax: inhibits capital accumulation and economic growth; threatens the survival of family businesses and depresses entrepreneurial activity; hinders income and wealth mobility; violates the principles of good tax policy, such as simplicity and fairness; and adversely impacts the conservation of environmentally sensitive land.

A. Economic growth

Of all taxes imposed by the federal government, the estate tax is one of the most harmful to economic growth when measured on a per-dollar-of-revenue-raised basis.⁷² Although relatively small in terms of revenue raised, the estate tax exerts a disproportionately negative impact on the economy. At its basest level, the estate tax adds yet another layer to the already heavy taxation of savings and investment. Most of these savings have already been previously subjected to the income tax at least once.

The negative economic effects primarily manifest in three ways. First, the estate tax has excessively high compliance costs. Although it is possible to largely avoid estate taxes, doing so requires substantial expenditures and undesired allocation of resources.⁷³ Alicia Munnell, a member of President Clinton's Council of Economic Advisers, estimated that the costs of complying with estate tax laws are roughly the same size as the revenue raised. Specifi-

⁷¹ Wilbur A. Steger and Frederick H. Rueter, "The Effects on Government Revenues from Repealing the Federal Estate Tax and Limiting the Step-Up in Basis for Taxing Capital Gains," (Pittsburgh, PA: CONSAD Research Corporation, 2003), 4.

⁷² Of course, the true net revenue yield of the estate tax may be significantly closer to zero. If so, the ratio of costs to revenue raised is much higher.

⁷³ See supra note 60.

cally, in an article co-authored with Henry Aaron, Munnell wrote that

In the United States, resources spent on avoiding wealth transfer taxes are of the same general magnitude as the [revenue] yield, suggesting that the ratio of excess burden to revenue of wealth transfer taxes is among the highest of all taxes.⁷⁴

Elsewhere, Munnell has written:

The compliance, or more appropriately, the avoidance costs of the transfer tax system may well approach the revenue yield.⁷⁵

The estate tax is expected to raise \$28 billion in fiscal year 2006. If the estate tax generates \$1 in compliance costs for every \$1 in revenue, then the aggregate cost of the estate tax would amount to roughly \$56 billion in 2005: \$28 billion in revenue costs and \$28 billion in avoidance costs. Thus, for every dollar of tax revenue raised by the estate tax, another dollar is wasted simply to comply with or avoid the tax.

A 2001 report from Douglas Holtz-Eakin (former Director of the Congressional Budget Office) and Donald Marples provides estimates of the distortion costs of the estate tax that are consistent with the figures above. Holtz-Eakin and Marples report that the distortion costs of the estate tax are equivalent to approximately 26 percent of pre-retirement savings.⁷⁶ Over the years 2001–2005, these costs averaged \$34 billion per year.⁷⁷

Second, the estate tax results in significant economic inefficiencies. For example, Holtz-Eakin and Marples have found that replacing the estate tax with a simple capital income tax would increase economic efficiency.⁷⁸ A 1988 study by Roger Gordon and Joel Slemrod found that differences in the rate of taxation on capital exacerbate distortions caused by the tax system.⁷⁹ In tandem with the high compliance costs, the distortions caused by the estate tax decrease economic efficiency and serve as a negative influence on economic growth.

Finally, the estate tax is a tax on capital, and ultimately reduces the amount of capital in the economy. This effect results both from reduced incentives to save and invest, and because the tax forces privately held assets to be liquidated and transferred to governmental control. Wealth that would otherwise serve productive uses in the economy as capital assets shifts to consumption-intensive

⁷⁴ Aaron and Munnell, 139.

⁷⁵ Alicia H. Munnell, "Wealth Transfer Taxation: The Relative Role for Estate and Income Taxes," *New England Economic Review*, Federal Reserve Bank of Boston (November/December 1988): 19.

⁷⁶ Douglas Holtz-Eakin and Donald Marples, "Estate Taxes, Labor Supply, and Economic Efficiency," *Special Report*, American Council for Capital Formation (January 2001).

⁷⁷ Joint Economic Committee calculations using the methodology described in Holtz-Eakin and Marples, "Estate Taxes," *supra* note 76; and inflation-adjusted (2005 dollars) data from U.S. Department of Commerce, Bureau of Economic Analysis, "Personal Income and Its Disposition," Tables 2.1 and 1.1.9, online at <http://www.bea.gov/bea/dn/nipaweb/index.asp>.

⁷⁸ Douglas Holtz-Eakin and Donald Marples, "Distortion Costs of Taxing Wealth Accumulation: Income Versus Estate Taxes," National Bureau of Economic Research, Working Paper 8261 (April 2001), 21.

⁷⁹ Roger H. Gordon and Joel Slemrod, "Do We Collect Any Revenue from Taxing Capital Income," in *Tax Policy and the Economy*, vol. 2, ed. Lawrence H. Summers, 89–130 (Cambridge, MA: MIT Press, 1988).

government uses. Holtz-Eakin and Marples, for example, have reported a clear and significant negative relationship between capital accumulation and estate taxes.⁸⁰ Similarly, James Poterba, an economist at the Massachusetts Institute of Technology, has estimated that the federal estate tax increases the effective tax burden on capital income by 1.3 to 1.9 percentage points.⁸¹

By reducing the after-tax return on investment, the estate tax encourages consumption and discourages savings, which in turn cause the capital stock to grow at a slower rate. To illustrate this effect, consider a situation where parents must choose between leaving an asset to their children or consuming it themselves. When faced with a 46 percent marginal tax rate, the "price" of bequeathing \$1 is \$1.85 (i.e., in order for an heir to receive \$1, the decedent must leave \$1.85 in pre-tax assets). Alternatively, the parents could consume significantly more of that \$1.85 for their own benefit. In the presence of high marginal estate tax rates, the decision between consumption and saving is significantly biased in favor of consumption. In his public finance textbook, Stiglitz, while admitting to some ambiguity, argues that on balance estate taxes "probably" reduce savings.⁸²

In addition, the U.S. imposes one of the heaviest tax burdens on estates among industrialized economies. According to an American Council for Capital Formation survey of 50 nations, the average tax rate on estates is just 24 percent.⁸³ With a top estate tax rate of 46 percent in 2006, family businesses and intergenerational transfers are at a significant disadvantage internationally. Only Japan and South Korea have steeper tax rates on estates than the U.S. Nearly half the countries surveyed—including Canada, China, Australia, Mexico, Russia, India, Sweden and Switzerland—have no death tax whatsoever.

A comprehensive estimate of all the negative impacts of the estate tax on the economy is beyond the scope of this paper. However, an econometric framework is available for analyzing the effect of the estate tax on the existing capital stock. According to published research, every \$1 reduction in the annual flow of intergenerational transfers is associated with a corresponding loss of roughly \$39 in the long-run amount of capital in the economy.⁸⁴ The 1998 Joint Economic Committee study *The Economics of the Estate Tax* estimated that the effect of the estate tax on capital accumulation in 1995 was a loss of approximately \$497 billion. Using the same methodology, but with updated data, the present study estimates that the estate tax has reduced the stock of capital in the

⁸⁰Holtz-Eakin and Marples, "Distortion Costs of Taxing Wealth Accumulation." See also Kopczuk and Slemrod, "Wealth Accumulation."

⁸¹James Poterba, "The Estate Tax and After-Tax Investment Returns," University of Michigan, Office of Tax Policy Research, Working Paper 98-11 (December 1997), 17, 40.

⁸²Joseph E. Stiglitz, *Economics of the Public Sector*, 1st ed. (New York: W.W. Norton & Company, 1986), 487.

⁸³American Council for Capital Formation, "New International Survey Shows U.S. Death Tax Rates among Highest," Special Report (July 2005), online at <http://www.accf.org>.

⁸⁴Laurence J. Kotlikoff and Lawrence H. Summers, "The Role of Intergenerational Transfers in Aggregate Capital Accumulation," *Journal of Political Economy* 89; no. 4 (1981): 706-732; and Laurence J. Kotlikoff and Lawrence H. Summers, "The Contribution of Intergenerational Transfers to Total Wealth: A Reply," in *Modelling the Accumulation and Distribution of Wealth*, eds. Denis Kessler and André Masson, 53-76 (Oxford, England: Clarendon Press, 1988).

economy by approximately \$847 billion, or 3.8 percent.⁸⁵ To put this figure in perspective, the estate tax raised \$761 billion (in inflation-adjusted dollars) over 1942 to 2001. While it is likely that some of these tax payments would have been consumed instead of saved, it is also likely that considerably more resources would have been transferred intergenerationally due to increased saving, reduced compliance costs and compounding. The estimate of lost capital does not account for any of the incentive, compliance or distortion effects noted above.

Thus, if the estate tax had not existed over the last several decades, the amount of capital in the economy would be nearly \$850 billion higher. Since capital is a fundamental ingredient for economic growth, the loss of such capital reduces economic output. Although the exact magnitude of the impact on economic growth is difficult to assess, the direction of the effect is unambiguously negative.⁸⁶

B. Family businesses and entrepreneurial activity

In addition to the aggregate effect on capital accumulation and economic efficiency, the estate tax exerts a strongly negative influence on entrepreneurial activity. Entrepreneurship infuses the economy with risk-takers willing to exploit new technologies and enables families to achieve upward income mobility. By hindering entry into self-employment and by breaking up family-run businesses, the estate tax inhibits economic efficiency and stifles innovation.

Prior to EGTRRA, the tax code offered family businesses some limited estate tax relief. The chief provision was a deduction for qualified family-owned businesses that allowed such firms to shelter up to \$1.3 million from estate taxation. However, EGTRRA repealed this provision effective in 2004, when the unified credit increased to allow all estates to shield \$1.5 million in assets, thus superseding the older provision. Other provisions preserved in EGTRRA for family-run businesses include the ability to apply to the IRS to pay estate tax bills in installments over 14 years. This feature is useful for family farms, which may be asset-rich but cash-poor. Family businesses may also attempt to apply special valuation rules to their enterprise, which allow them to be valued at their current actual usage (subject to caps on the reduction in value), rather than at a potentially more valuable usage. EGTRRA made it easier for family businesses to qualify for these benefits.

Although these tax provisions provide some relief, they are often inadequate to prevent the estate tax from breaking up many family businesses. A 2005 article in *Tax Notes* dissects estate tax relief targeted at family businesses to find that such provisions are of limited value. The complexity of the relevant laws and regulations

⁸⁵The estimate of \$847 billion represents the long-run increase in private fixed assets that would exist in 2001 if the estate tax did not exist. The estimate was calculated as the steady-state amount of capital that would result if all estate tax payments were instead passed from one generation to the next. For a more detailed description of the methodology used to quantify the impact on capital accumulation, see the Methodology Appendix in Miller, *The Economics of the Estate Tax*, 36–39.

⁸⁶Nishiyama (*supra* note 20) provides an alternative perspective confirming this finding. Simulating the effect of a 100 percent estate and gift tax, Nishiyama found that gross national product (GNP) would drop by between 3.6 percent and 4.9 percent. National wealth would fall even further, declining 11 percent to 16 percent.

is sufficient to deter many law firms from even considering seeking such relief for their clients.⁸⁷

The actual usage patterns of the family business provisions reflect this conclusion. Prior to EGTRRA, there were three provisions primarily aimed at providing relief to small and family-owned businesses: special "current use" valuation (Internal Revenue Code sec. 2032A), an additional exemption for qualified family-owned businesses (sec. 2057), and extended payment period (sec. 6166). In 1999, there were 103,979 estate tax returns filed, of which 11,0196 returns included a closely-held business interest.⁸⁸ Of these firms, just 225 estates took advantage of the special use valuation, and 888 made use of the exemption for family business; a relatively meager 524 returns elected to use the extended payment option.⁸⁹

IRS data indicate that between 1995 and 2004, more than 37,000 estates that paid estate taxes included closely-held businesses among their assets, and that these closely-held business assets were worth a cumulative total of \$67 billion in 2005 dollars.⁹⁰ In addition, taxable estate tax returns included 24,000 with farm assets, 50,000 with limited partnerships, and nearly 28,000 with other noncorporate businesses over the last ten years (Figure 5).⁹¹ The assets in these three categories had a cumulative value of \$37 billion. Thus, tens of thousands of small and family businesses, worth \$104 billion, were subject to the estate tax over the last ten years. These data clearly indicate that the estate tax has broad and significant costs for thousands of family businesses.

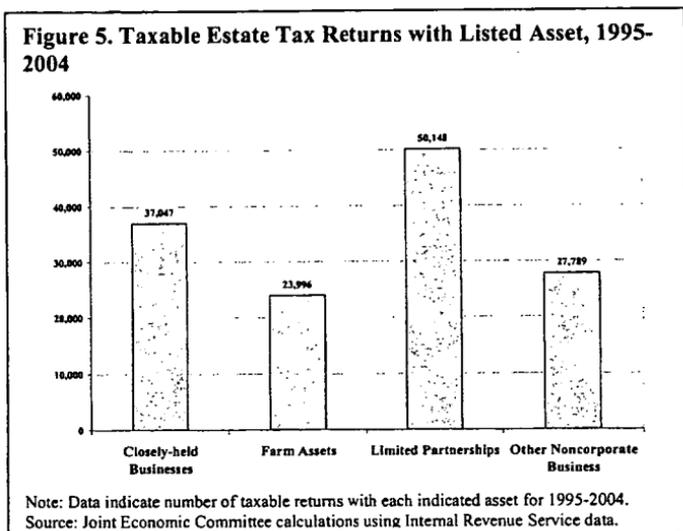
⁸⁷ William W. Beach, Harold I. Apolinsky and Craig M. Stephens, "Targeted Family Business Carveout Fails to Avoid Estate Tax," *Tax Notes* (4/18/2005): 365-368.

⁸⁸ Internal Revenue Service.

⁸⁹ U.S. Congress, Joint Committee on Taxation, *Description and Analysis of Present Law and Proposals Relating to Federal Estate and Gift Taxation*, JCX-14-01 (3/14/2001), 34.

⁹⁰ This is a conservative estimate of the number of firms affected by the estate tax since it ignores businesses that did not pay estates taxes, either because they expended enough resources to avoid the tax or because the costs of estate planning impeded the growth of such firms. Joint Economic Committee calculations based on data from Internal Revenue Service.

⁹¹ Note that these tax data only list farm assets and do not include the value of farmland (which is included in the broad category of real estate assets). However, since the presence of farm assets likely correlates closely with farm businesses, the number of taxable returns with farm assets is a reasonable proxy for the number of farm businesses.



Survey data suggest that the estate tax continues to be a primary reason why small businesses fail to survive beyond one generation. Close to two-thirds (64 percent) of respondents in one survey of family businesses reported that the estate tax makes survival of the business more difficult.⁹² In other surveys, 87 percent of black-owned firms and 93 percent of manufacturing firms responded that the estate tax was an impediment to survival.⁹³ A survey of family business owners by Prince & Associates found that 98 percent of heirs cited “needed to raise funds to pay estate taxes” when asked why family businesses fail.⁹⁴ Even if only a small percentage of the 550,000 small businesses that fail annually are attributable to the estate taxes, the cumulative number affected over time could be substantial.⁹⁵ In the context of the survey and tax data described here, it is easy to see how the estate tax has contributed to the failure of thousands of small and family-run businesses.

Estate tax planning is crucial for the succession of family businesses to the next generation. The presence of the estate tax already makes such succession planning unnecessarily complicated and painful. Yet the current situation in which the level of estate taxation is uncertain precludes sound planning. As the law now stands, the estate tax will slowly be phased out over the next few years until it is completely repealed in 2010. However, effective January 1, 2011, the repeal itself is revoked, and the estate tax re-

⁹² Joseph H. Astrachan and Roger Tutterow, “The Effect of Estate Taxes on Family Business: Survey Results,” *Family Business Review* 9, no. 3 (Fall 1996): 303-314.

⁹³ Joseph H. Astrachan and Craig E. Aronoff, “A Report on the Impact of the Federal Estate Tax: A Study of Two Industry Groups” (Marietta, GA: Kennesaw State College, Family Enterprise Center, 1995).

⁹⁴ Russ Alan Prince and Karen Maru File, *Marketing to Family Business Owners* (Cincinnati, OH: National Underwriter, 1995), 35.

⁹⁵ Also, there were an estimated 23.7 million small businesses in 2003. Joint Economic Committee calculations using 1999-2003 data from U.S. Small Business Administration, Office of Advocacy, *The Small Business Economy* (Washington, DC: Government Printing Office, 2004), and data online at <http://www.sba.gov/advo/index.html>.

turns to the level that existed in 2001. Thus, a difference in death of just a single day could mean the difference between no estate tax at all or extremely punitive taxation.

The estate tax represents a significant barrier to small and family-run businesses. Research showing this fact comes from Holtz-Eakin and Marples, who wrote in 2001 (prior to the estate tax phase-down and repeal in EGTRRA):

The study shows that entrepreneurs face an expected estate tax liability that is typically nearly five times as large as that of non-entrepreneurs. Of course, one might immediately suspect that entrepreneurs, especially those who survive to later in their working careers, are simply more successful. The data, however, show that simply having greater wealth is not the whole story; instead, entrepreneurs face significantly higher average and marginal tax rates because of the type of investments they make.⁹⁶ (emphasis added)

Not only do entrepreneurs face higher tax rates, but they are also less likely to have the resources needed to meet their estate tax liabilities. Facing high estate tax rates, many business owners purchase life insurance to provide their heirs with additional liquid resources to pay the estate tax. However, even the addition of life insurance payments leaves businesses with insufficient resources. Researchers Holtz-Eakin, John W. Phillips and Harvey Rosen, writing in a 1999 study, reported:

Our results suggest that owners of businesses buy more [life] insurance than other individuals, but even together with the liquid assets in their portfolios, there is insufficient money to cover estate taxes.⁹⁷

The principal reason that estate taxes cause such disruption to family businesses is that they impose large cash demands on firms that generally have limited access to liquid assets. For example, the typical small business owner has 60 percent of the family net worth invested in the business.⁹⁸ Smaller firms, typically lacking access to capital from financial markets, may be unable to obtain the optimal amount of capital to finance their investments. Intergenerational transfers function, in essence, as a sort of internal financing mechanism. To the degree that estate taxes reduce or limit intergenerational transfers, they also reduce the amount of financing available for investment in small or family-run enterprises.

Inheritances play an important role in alleviating the liquidity constraints that impede the formation and success of small businesses. A 1994 study found that individuals who receive an inheritance are more likely to become self-employed, and those who are

⁹⁶ Holtz-Eakin and Marples, "Estate Taxes, Labor Supply, and Economic Efficiency," 4.

⁹⁷ Douglas Holtz-Eakin, John W. Phillips and Harvey S. Rosen, "Estate Taxes, Life Insurance, and Small Business," National Bureau of Economic Research, Working Paper 7360 (September 1999), 23.

⁹⁸ John L. Ward, Drew Mendoza, Joseph H. Astrachan, and Craig E. Aronoff, "Family Business: The Effect of Estate Taxes" (Chicago, IL: Center for Family Business and Family Enterprise Center, 1995), 29.

already self-employed are more likely to remain so.⁹⁹ Overall, the authors estimate that receiving a \$270,000 inheritance results in a 1.3 percentage point increase in survival probability and a 20 percent increase in gross receipts.¹⁰⁰ Larger inheritances would further improve survival probabilities.

C. Social mobility

The estate tax also has consequences for social mobility. Limiting intergenerational transfers impedes the ability of families to climb the economic ladder from one generation to the next. For many parents, bequeathing accumulated savings to their children may allow the succeeding generation to move into higher wealth or income groups. For others, passing on the family business creates the opportunities needed for heirs to improve their economic well-being.

To the degree that the estate tax disrupts the transmission of family wealth to succeeding generations, the estate tax hinders upward income mobility. Entrepreneurship is a key means by which lower-income households move to a higher income class. For instance, one study found that low-wealth workers who become self-employed are more than twice as likely to move to a higher wealth class than are individuals who continue traditional work.¹⁰¹ Research shows that blacks are more likely to become self-employed if their parents are self-employed, and that self-employed black and Hispanic men have higher long-run earnings than their wage and salary counterparts.¹⁰² By making it more difficult for minorities to continue a family business, the harmful effects of estate taxes are magnified for black-, Hispanic- and Asian-owned enterprises.

Key black business leaders have advocated estate tax repeal, arguing that it is only since the Civil Rights Act of 1964 that blacks have been able to accumulate wealth. Robert L. Johnson, the founder of Black Entertainment Television and contributor to Democrat political causes, has even argued that "Elimination of the estate tax will help close the wealth gap in this nation between African-American families and white families."¹⁰³ Oprah Winfrey has lamented the negative aspects of the estate tax on her TV show, saying "I think it's irritating that once I die, 55% of my money goes to the United States government . . . You know why that's irritating? Because you would have already paid nearly 50%."¹⁰⁴ Harry C. Alford, the president and CEO of the National Black

⁹⁹ Douglas Holtz-Eakin, David Joulfaian and Harvey S. Rosen, "Sticking It Out: Entrepreneurial Survival and Liquidity Constraints," *Journal of Political Economy* 102, no. 1 (February 1994): 68-71.

¹⁰⁰ Holtz-Eakin, Joulfaian and Rosen estimate the effect to be \$150,000 in 1985 dollars. When adjusted for inflation (using the consumer price index), that amount translates to \$272,258 in 2005 dollars.

¹⁰¹ Vincenzo Quadri, "Entrepreneurship, Saving and Social Mobility," Federal Reserve Bank of Minneapolis, Discussion Paper 116 (March 1997).

¹⁰² Robert W. Fairlie, "The Absence of the African-American Owned Business: An Analysis of the Dynamics of Self-Employment," *Journal of Labor Economics* 17, no. 1 (January 1999): 80-108; and Robert W. Fairlie, "Does Business Ownership Provide a Source of Upward Mobility for Blacks and Hispanics?" in *Public Policy and the Economics of Entrepreneurship*, ed. Douglas Holtz-Eakin and Harvey S. Rosen, 153-179 (Cambridge, MA, MIT Press, 2004).

¹⁰³ Ernest Holsendolph, "Bush Picks up Unexpected Ally in BET founder," *The Atlanta Journal and Constitution*, 8/26/2001. See also "African-American Business Leaders Call for End to Estate Tax," *New Pittsburgh Courier*, 4/11/2001.

¹⁰⁴ Oprah Winfrey, as quoted in Editorial, "Death's Taxes," *Wall Street Journal* (7/28/1999).

Chamber of Commerce, summed up the importance of wealth accumulation for the black community:

We, as a people, have been freed from physical slavery for over 134 years and we have yet to begin building wealth. We cannot begin utilizing all of the advantages of this free economy until we have gained enough wealth to actively participate. It's just not civil rights; civil rights can get you dignity and respect but we need more. It's just not political empowerment; look at Zimbabwe or South Africa where we now have enormous political empowerment but, yet, no power due to lack of Black wealth. Civil rights and political clout are nice but economic empowerment will get you freedom and authority. Freedom and authority are the keys to earthly happiness. . . .

Getting rid of the 'death tax' will start to create a needed legacy and begin a cycle of wealth building for Blacks in this country. That would be a great start to breaking the economic chains that bind us.¹⁰⁵

A similar sentiment has been expressed by leaders in the Hispanic community. The significance of passing a family business to the next generation was the subject of a 2004 article in *Hispanic Trends* by J.R. Gonzales, former president of the Hispanic Chamber of Commerce:

What's happening here is that as Hispanics begin achieving the American Dream, they become more focused on keeping it—passing their hard-earned success to the next generation. While other issues continue to be of concern—immigration, health care and education, in particular—new issues like repeal of the Death Tax begin to move forward.

These Hispanic business owners have undertaken enormous financial risk: often, they were forced to borrow from friends and family to build their businesses and keep them afloat, and they feel a unique responsibility, as Hispanics, to pass on what they've built to their children.¹⁰⁶

A 2004 study by Boston College researchers John Havens and Paul Schervish shows that much African-American wealth will be subject to the estate tax: 29 percent of African-American wealth is now held in estates worth \$1 million or more.¹⁰⁷ African-Americans are also increasingly likely to be subject to the estate tax, with the number of estates worth at least \$1 million increasing by more than 130 percent over the next generation.¹⁰⁸ The authors further estimate that over 2001–2055, African-American households are likely to pay between \$192 billion and \$257 billion in federal estate

¹⁰⁵ Harry C. Alford, "Blacks Should Help In Doing Away with the 'DEATH TAX,'" National Black Chamber of Commerce, online at <http://www.nationalbcc.org/editorials/article.asp?id=62&scope=editorials> [accessed 4/19/06].

¹⁰⁶ J.R. Gonzales, "The Death Tax: A Menace to Entrepreneurship," *Hispanic Trends* (October 31, 2004).

¹⁰⁷ John J. Havens and Paul G. Schervish, "Wealth Transfer Estimates for African American Households," Boston College, Center on Wealth and Philanthropy (October 2004), 19.

¹⁰⁸ *Ibid.*, Table 10.

taxes.¹⁰⁹ Put another way, the estate tax will wipe out between 11 and 13 percent of all African-American wealth.

Recent data from the U.S. Census Bureau also suggest that minority-owned businesses are increasingly likely to be affected by the estate tax. Census Bureau data show that the number of Hispanic-, black- and Asian-owned business grew rapidly between 1997 and 2002, greatly exceeding the growth rate for the rest of U.S. businesses.¹¹⁰ As can be seen in Table 5, the number of Hispanic-owned firms grew by 31 percent between 1997 and 2002. Over the same time period, the number of black-owned firms jumped by a dramatic 45 percent, and Asian firms rose 23.7 percent. These growth rates far outpace the 6.7 percent rate for the rest of U.S. businesses. These data imply that more minority-owned firms will be affected by the estate tax in the future.

Table 5. Growth of Minority-Owned Businesses

| | 1997 | 2002 | Change |
|--------------|------------|------------|--------|
| Hispanic | 1,199,896 | 1,573,600 | 31.1% |
| Black | 823,499 | 1,197,661 | 45.4% |
| Asian | 893,590 | 1,105,329 | 23.7% |
| Rest of U.S. | 17,904,949 | 19,098,095 | 6.7% |

Source: Author's calculations and U.S. Census Bureau.

Ironically, the more successful Asian-, Hispanic- and black-owned firms are the very ones to be hit hardest by the estate tax.

For many low-income minority or ethnic groups, the estate tax represents an obstacle to successful family businesses. In a 2004 survey of Hispanic business owners by the Impacto Group, two out of three (66 percent) respondents said the estate tax affects their ability to meet company goals by distracting their attention and wasting resources.¹¹¹ Half of all respondents in that survey report knowing of a Hispanic small business that has experienced hardship because of the estate tax liability, including "selling off" equipment or the business. One quarter of respondents said they themselves would sell part of the business to pay the tax, and 10 percent would delay expansion of the business. In addition, as previously noted, 87 percent of black-owned firms in a 1995 survey responded that the estate tax was an impediment to survival.¹¹²

The experiences of many of the 200-plus black newspapers in the U.S. illustrate this point. Many of these firms are family-run businesses that are struggling to maintain circulation and are under-

¹⁰⁹ *Ibid.*, 16-17.

¹¹⁰ Data on business ownership come from the 2002 Economic Census, Survey of Business Owners. The data presented come from three different sources, all published by the U.S. Census Bureau: Black-Owned Firms: 2002, SB02-00CS-BLK (4/18/06); Hispanic-Owned Firms: 2002, SB02-00CS-HISP (3/21/06); and "Preliminary Estimates of Business Ownership by Gender, Hispanic or Latino Origin, and Race: 2002" (7/28/05), available online at <http://www.census.gov/csd/sbo/>.

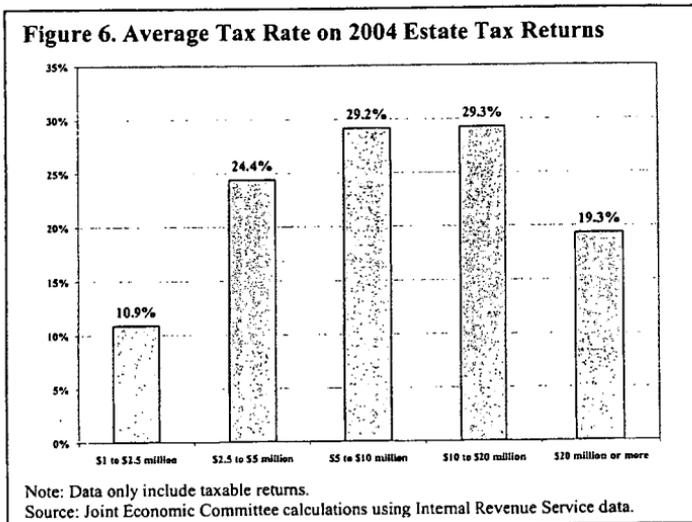
¹¹¹ Impacto Group LLC, "Five-State Executive Interview Study of 100+ Hispanic Family-Owned Businesses on Federal Estate Taxes" (Washington, DC: Impacto Group LLC, 7/14/2004).

¹¹² Astrachan and Aronoff.

financed.¹¹³ For example, The Chicago Defender, founded in 1905, was one of the leading African-American newspapers in the U.S. for much of the twentieth century. In 1997, however, the owner and publisher of the newspaper, John Sengstacke, died and left a \$3 million estate tax liability that the family could not afford. The paper was in serious danger of going under until a nephew of the owner came forward with a proposal to buy the paper.¹¹⁴ Although The Chicago Defender survived, its story demonstrates how the estate tax can threaten the survival of family-businesses with marginal financial health.

D. Fairness, simplicity and efficiency

The estate tax violates the three principles of good tax policy: equity (fairness), simplicity and efficiency. The large number of tax avoidance options permitted under the estate tax means that the tax will result in a tax burden distributed unfairly among payers of the tax, will be unnecessarily complicated, and will significantly distort taxpayer behavior.



In terms of equity and simplicity, the existence of so many loopholes virtually guarantees that the estate tax will violate the principles of horizontal and vertical equity, as well as that of simplicity. An individual worth \$5 million can not only pay less in estate taxes than other individuals worth \$5 million, but can pay less than those worth \$1 million. According to IRS data for 2004 returns, the average estate tax rate for the largest estates (gross estates over \$20 million) is actually lower than the average tax rate for estates in the \$2.5 to \$5 million range (Figure 6).¹¹⁵ This aspect of estate taxation was summarized by Munnell, who wrote:

¹¹³ Kathy Bergen, "Black Papers Fight for Life; Population Grows, but Readership, Ads in Decline," Chicago Tribune, 8/4/2002.

¹¹⁴ Mark J. Konkol, "Judge Gives Approval to Sale of Defender," Chicago Sun-Times, 5/2/2002.

¹¹⁵ Joint Economic Committee calculations based on data from Internal Revenue Service.

Horizontal and vertical equity considerations have disappeared in the estate and gift area; **tax liabilities depend on the skill of the estate planner, rather than on capacity to pay.**¹¹⁶ (emphasis added)

An efficient tax is one that raises a given amount of revenue while causing the least distortion in behavior. An efficient tax should not impede economic growth or change the way people behave. As previously noted, Aaron and Munnell estimate that the compliance costs of the estate tax are roughly the same size as the amount of revenue raised:

In the United States, resources spent on avoiding wealth transfer taxes are of the same general magnitude as the [revenue] yield, suggesting that the ratio of excess burden to revenue of wealth transfer taxes is among the highest of all taxes.¹¹⁷

In 2006, the estate and gift taxes are expected to raise \$28 billion. However, if the ratio of revenue to costs equals one, then the true cost to the economy of these taxes will be closer to \$56 billion. In other words, for every \$1 removed from the economy to pay estate taxes, another \$1 is wasted in order to comply with or legally avoid the tax. The estate tax also causes changes in savings, investment and consumption behavior.¹¹⁸ Measured in these terms, the estate tax is highly inefficient.

E. Environmental conservation

An often overlooked aspect of the estate tax is its harmful effect on the environment. The impact manifests when heirs are forced to divide up or develop environmentally sensitive land in order to pay estate taxes. The problem of estate taxation faced by private landowners was addressed in 1995's *The Keystone Report*, the collective efforts of environmentalists, landowners, business groups, and government agencies to identify and recommend solutions to the problems that private landowners face in conserving threatened and endangered species and habitats. With regard to estate taxes, *The Keystone Report* found that:

Federal estate tax requirements are a major obstacle for private landowners whose land stewardship has been sensitive to its environmental value and who would like to be able to pass on their land to their heirs without destroying that value. The imposition of federal estate taxes often forces large parcels of environmentally valuable land to be broken up into smaller, less environmentally valuable parcels. Some of the best remaining habitat for endangered species is put at risk in this manner.¹¹⁹

When the time comes to pay estate taxes, real estate assets often generate a substantial tax liability that can only be paid by developing the land. The impact is most apparent for natural habitats

¹¹⁶Munnell, 18.

¹¹⁷Aaron and Munnell, 139.

¹¹⁸For examples of distortions, see *supra* notes * to §, †, *, †, §, *, and §, and accompanying text.

¹¹⁹Keystone Center, *The Keystone Dialogue on Incentives for Private Landowners to Protect Endangered Species—Final Report* (Washington, DC: Keystone Center, 1995), 26.

that are destroyed. Endangered species are affected as well, since half of all listed species are primarily found on privately-owned land.¹²⁰ These effects of estate taxation led Michael Bean of The Nature Conservancy to label the estate tax as "highly regressive in the sense that it encourages the destruction of ecologically important land in private ownership."¹²¹

A 2001 analysis of estates and rural land holdings found that estate taxes have a significant impact on land use. According to this study, conducted prior to EGTRRA, approximately 2.6 million acres of forest land must be harvested each year to pay for the estate tax.¹²² Another 1.3 million acres must be sold to raise funds to pay estate taxes, of which close to one-third (29 percent) is either developed or converted to other uses. Moreover, 36 percent of forest estates incur an estate tax liability, a rate far higher than the overall rate in the U.S. population. The estate tax undoubtedly is bad for environmentally-important habitats and is a serious impediment to preserving endangered and threatened species.

In recognition of the adverse environmental impact of taxing estates, the federal tax code grants limited estate tax relief for qualifying conservation easements, land that is set aside for environmental conservation. Land owners are exempt from paying estate taxes on the value of land that is lost due to the conservation easement (subject to several requirements). The Taxpayer Relief Act of 1997 granted estates that donate such easements an additional tax deduction worth 40 percent (up to a maximum of \$500,000) of the remaining value of the land. EGTRRA further assisted conservation efforts by repealing a key limit on land eligibility, making more land eligible to qualify as a conservation easement.¹²³

Table 6. Use of Conservation Easements, 200-2004

| Year | Number of Conservation Easements | Number of Estate Tax Returns | Percent of Returns with Easements |
|--------------|---|-------------------------------------|--|
| 2000 | 43 | 108,322 | 0.040% |
| 2001 | 63 | 108,112 | 0.058% |
| 2002 | 32 | 98,359 | 0.033% |
| 2003 | 48 | 66,044 | 0.073% |
| 2004 | 46 | 62,718 | 0.073% |
| Total | 232 | 443,555 | 0.052% |

Source: IRS data.

¹²⁰ U.S. Fish & Wildlife Service, Endangered Species Program, "Our Endangered Species Program and How It Works with Landowners" (May 2003), online <http://www.fws.gov/endangered/landowner/index.html>.

¹²¹ Michael J. Bean, "Shelter from the Storm," *The New Democrat* (April 1997).

¹²² John Greene, Tamara Cushing, Steve Bullard, and Ted Beauvis, "Effect of the Federal Estate Tax on Rural Land Holdings in the U.S.," in *Forest Policy for Private Forestry: Global and Regional Challenges*, eds. Lawrence D. Teeter, Benjamin Cashore and Dao Zhang, 211-218 (New York, NY: CABI Publishing, 2003).

¹²³ Public Law No.: 105-34.

Unfortunately the potential benefits of conservation easements are curtailed by a number of restrictions and limitations that discourage or prevent land owners from taking advantage of them. The restrictions that land owners must meet in order to qualify for a conservation include the overall value of the exclusion amount relative to the size of the estate, how long the decedent owned the land and whether or not the land acquisition was debt-financed. Other considerations, which might discourage use of a conservation easement, include the exclusion of the value of any development rights and the inability to step-up the land's basis.

Ultimately, the benefit of conservation easements should be measured by their actual usage. Data from the IRS indicate that very few estates actually take advantage of the conservation easement. In 2004, just 46 estates out of 62,718 estate tax returns (0.07 percent) set aside land for conservation easements (Table 6).¹²⁴ Over the last five years (2000–2004), the total number of conservation easements was just 232 out of 443,000 returns (0.05 percent). The value of deductions for conservation easement is also small, just \$11.7 million in 2004, or 0.004 percent of the value of all estate returns reported that year.

As these data suggest, the conservation easement provisions fall considerably short of remedying the tax's adverse environmental impact. Even with the limited conservation easement now in place, many estates will not, for a variety of reasons, take advantage of the option. Although many environmentalists would prefer expanding conservation easement options rather than complete repeal of the estate tax, it is nonetheless clear that the federal estate tax harmful to endangered and threatened species and their habitats.

V. CONCLUSION

This study documents the extensive costs associated with the federal estate tax. The detrimental effects of the estate tax are grossly disproportionate to the modest amount federal revenue it raises (if it raises any net revenue at all). Estate taxes result in a large amount of wasted economic activity. Over its lifetime, the presence of the estate tax has cost the economy roughly \$850 billion in capital stock. Moreover, the estate tax destabilizes family businesses at one of their most vulnerable points, the succession from one generation to the next. Not only have the enormous liquidity demands of the estate tax have contributed to the break up of thousands of small businesses, but the tax also inhibits income and wealth mobility. Lastly, the estate tax threatens the destruction of environmentally sensitive land. In generating these outcomes, the estate tax violates the basic principles of a good tax system—simplicity, fairness and efficiency.

If the estate tax generated sufficiently large benefits, then an argument could be made to justify its existence. However, the weight of evidence indicates that the estate tax lacks sufficiently redeeming qualities. A large and growing body of theoretical and empirical research supports the contention that the estate tax does little, if anything, to reduce inequality. In addition, research indicates that

¹²⁴ Internal Revenue Service, Statistics of Income Division, unpublished data provided by Martha Eller Gangi, 4/3/06.

the deduction for charitable bequests stimulates little or no additional giving. Even the \$28 billion in revenue it raises is misleading, since estate tax avoidance activities likely generate substantial revenue losses under the income tax. In short, the estate tax is characterized by significant economic, social and environmental costs, yet generates little in the way of measurable benefits.

The estate tax is an unnecessary feature of the current federal tax system. The estate tax's punitive tax rates are not only the highest of all federal taxes, but are imposed at the most inappropriate of times—the death of a loved one. As if mourning such a loss were not enough, the federal government worsens the pain by seeking to confiscate up to one-half of all the decedent's savings, very often accumulated through hard work, frugality, deferred consumption and entrepreneurship. This final injurious grievance simply strengthens the conclusion that the estate tax generates costs to taxpayers, the economy and the environment that far exceed any potential benefits that it might arguably produce. Based on the facts and analysis presented here, there is no compelling reason to even have a permanent estate tax, and a number of reasons to eliminate the tax altogether. Death and taxes may indeed be inevitable, but there is no reason the two have to converge simultaneously.

Table 7. Estate Tax Rates Before, During and After EGTRRA, 2001-2011†

| | 2001 | 2002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2011+ |
|-----|---------|-------|-----|-----|-----|-----|-----|-----|-----|---|-------|
| | \$0.675 | \$1.0 | 0 | 0 | 0 | 2 | 2 | 2 | 5 | 7 | \$1.0 |
| 37% | | | | | | | | | | | N/A |
| 39% | | | | | | | | | | | N/A |
| 41% | | 41% | 41% | | | | | | | | 41% |
| 43% | | 43% | 43% | | | | | | | | 43% |
| 45% | | 45% | 45% | 45% | 45% | | | | | | 45% |
| 49% | | 49% | 49% | 48% | 47% | 46% | 45% | 45% | | | 49% |
| 53% | | 50% | 49% | 48% | 47% | 46% | 45% | 45% | | | 53% |
| 55% | | 50% | 49% | 48% | 47% | 46% | 45% | 45% | 45% | | 55% |
| 60% | | 50% | 49% | 48% | 47% | 46% | 45% | 45% | 45% | | 60% |
| 55% | | 50% | 49% | 48% | 47% | 46% | 45% | 45% | 45% | | 55% |

DATA TABLES AND FIGURES

† Under EGTRRA, the estate tax is phased down during 2002-2009 and is completely repealed for 2010. In 2011, the estate tax provisions of EGTRRA expire, returning the exemption and rates set forth by pre-EGTRRA law.

‡ Taxable estate equals total estate less any deductions. Table does not show inframarginal rates rendered ineffective by the exclusion amount.

* Prior to EGTRRA, taxable estates worth \$10 to \$17.184 million were subject to an additional 5 percent surtax. The purpose of the surtax was to eliminate the benefits of inframarginal rates (i.e., starting at \$10 million, taxable estates start to lose the benefits of tax rates less than the top statutory rate).

Source: Nonna A. Noto, "Calculating Estate Tax Liability during the Estate Tax Phasedown Period 2001-2009," Congressional Research Service, Report RL31092 (updated April 1, 2005).

| Taxable |
|----------------------------|
| Less than \$750,000 to \$1 |
| \$1 - \$1.25 |
| \$1.25 - \$1.5 |
| \$1.5 - \$2 |
| \$2 - \$2.5 |
| \$2.5 - \$3 |
| \$3 - \$10 million |
| \$10 - \$17.184 |
| More than |

Figure 7. Estate Tax Revenues, 1940-2005.



Source: Office of Management and Budget

Table 8. Estate and Gift Tax Revenue, 1940-2006.

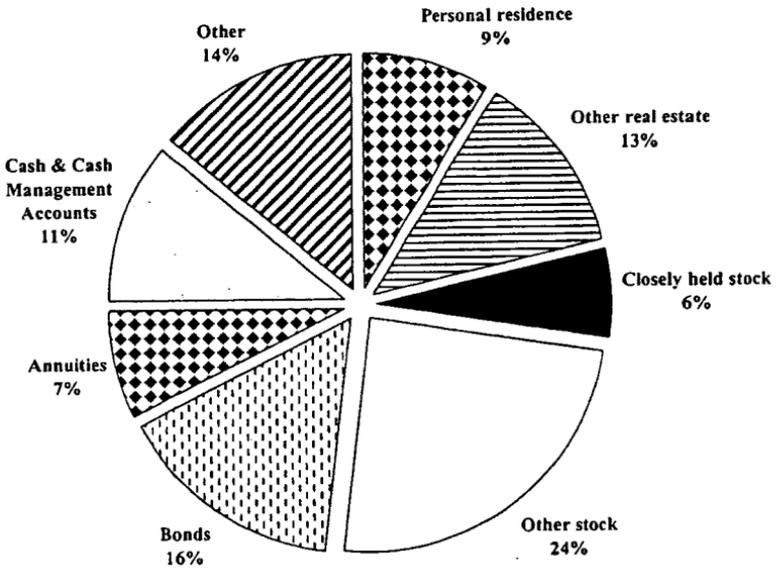
| Fiscal Year | Revenue | | Fiscal Year | Revenue | |
|----------------|---------|---------------|----------------|----------|---------------|
| | Nominal | Real (2005\$) | | Nominal | Real (2005\$) |
| 1940 | \$353 | \$4,924 | 1974 | \$5,035 | \$19,946 |
| 1941 | \$403 | \$5,345 | 1975 | \$4,611 | \$16,738 |
| 1942 | \$420 | \$5,025 | 1976 | \$5,216 | \$17,895 |
| 1943 | \$441 | \$4,971 | TQ* | \$1,455 | \$4,951 |
| 1944 | \$507 | \$5,634 | 1977 | \$7,327 | \$23,613 |
| 1945 | \$637 | \$6,921 | 1978 | \$5,285 | \$15,825 |
| 1946 | \$668 | \$6,690 | 1979 | \$5,411 | \$14,561 |
| 1947 | \$771 | \$6,745 | 1980 | \$6,389 | \$15,147 |
| 1948 | \$890 | \$7,235 | 1981 | \$6,787 | \$14,578 |
| 1949 | \$780 | \$6,394 | 1982 | \$7,991 | \$16,172 |
| 1950 | \$698 | \$5,662 | 1983 | \$6,053 | \$11,866 |
| 1951 | \$708 | \$5,323 | 1984 | \$6,010 | \$11,300 |
| 1952 | \$818 | \$6,017 | 1985 | \$6,422 | \$11,659 |
| 1953 | \$881 | \$6,426 | 1986 | \$6,958 | \$12,399 |
| 1954 | \$934 | \$6,787 | 1987 | \$7,493 | \$12,879 |
| 1955 | \$924 | \$6,740 | 1988 | \$7,594 | \$12,542 |
| 1956 | \$1,161 | \$8,344 | 1989 | \$8,745 | \$13,773 |
| 1957 | \$1,365 | \$9,487 | 1990 | \$11,500 | \$17,191 |
| 1958 | \$1,393 | \$9,430 | 1991 | \$11,138 | \$15,971 |
| 1959 | \$1,333 | \$8,939 | 1992 | \$11,143 | \$15,508 |
| 1960 | \$1,606 | \$10,605 | 1993 | \$12,577 | \$17,001 |
| 1961 | \$1,896 | \$12,384 | 1994 | \$15,225 | \$20,064 |
| 1962 | \$2,016 | \$13,016 | 1995 | \$14,763 | \$18,919 |
| 1963 | \$2,167 | \$13,831 | 1996 | \$17,189 | \$21,403 |
| 1964 | \$2,394 | \$15,070 | 1997 | \$19,845 | \$24,144 |
| 1965 | \$2,716 | \$16,839 | 1998 | \$24,076 | \$28,842 |
| 1966 | \$3,066 | \$18,453 | 1999 | \$27,782 | \$32,573 |
| 1967 | \$2,978 | \$17,439 | 2000 | \$29,010 | \$32,906 |
| 1968 | \$3,051 | \$17,135 | 2001 | \$28,400 | \$31,323 |
| 1969 | \$3,491 | \$18,590 | 2002 | \$26,507 | \$28,780 |
| 1970 | \$3,644 | \$18,330 | 2003 | \$21,959 | \$23,311 |
| 1971 | \$3,735 | \$18,011 | 2004 | \$24,831 | \$25,676 |
| 1972 | \$5,436 | \$25,383 | 2005 | \$24,764 | \$24,764 |
| 1973 | \$4,917 | \$21,628 | 2006† | \$27,523 | NA |

Note: Adjustments for inflation were made using the CPI.

* TQ stands for transition quarter, when the federal government shifted the start of the fiscal year from June 1 to October 1.

† Projected.

Source: Office of Management and Budget.

Figure 8. Distribution of Assets, All Estate Tax Returns 2004.

Source: Internal Revenue Service.

BIBLIOGRAPHY

- AAFRC Trust for Philanthropy. *Giving USA 2005*. New York, NY: AAFRC Trust for Philanthropy, 2005.
- Aaron, Henry J. and Alicia H. Munnell. "Reassessing the Role for Wealth Transfer Taxes." *National Tax Journal* 45, no. 2 (June 1992): 119–143.
- American Council for Capital Formation. "New International Survey Shows—U.S. Death Tax Rates among Highest." Special Report (July 2005). Online at <http://www.accf.org>.
- Astrachan, Joseph H. and Craig E. Aronoff. "A Report on the Impact of the Federal Estate Tax: A Study of Two Industry Groups." Marietta, GA: Kennesaw State College, Family Enterprise Center, 1995.
- Astrachan, Joseph H. and Roger Tutterow. "The Effect of Estate Taxes on Family Business: Survey Results." *Family Business Review* 9, no. 3 (Fall 1996): 303–314.
- Bakija, Jon M. and William Gale. "Effects of Estate Tax Reform on Charitable Giving." Urban-Brookings Tax Policy Center (July 2003).
- Bartlett, John. *Familiar Quotations*. 16th ed. Boston, MA: Little, Brown and Company, 1992.
- Beach, William W., Harold I. Apolinsky and Craig M. Stephens. "Targeted Family Business Carveout Fails to Avoid Estate Tax." *Tax Notes* (4/18/2005): 365–368.
- Bernheim, B. Douglas. "Does the Estate Tax Raise Revenue?" In *Tax Policy and the Economy*, vol. 1, edited by Lawrence H. Summers, 113–138. Cambridge, MA: MIT Press, 1987.
- Bernheim, B. Douglas, Robert J. Lemke and John Karl Scholz. "Do Estate and Gift Taxes Affect the Timing of Private Transfers?" National Bureau of Economic Research, Working Paper 8333 (June 2001).
- Bevan, David L. and Joseph E. Stiglitz. "Intergenerational Transfers and Inequality." *Greek Economic Review* 1, no. 1 (August 1979): 8–26.
- Blinder, Alan S. "Inequality and Mobility in the Distribution of Wealth." *Kyklos* 29 (1976): 607–638.
- . *Toward an Economic Theory of Income Distribution*. Cambridge, MA: MIT Press, 1974.
- Brunetti, Michael J. "The Estate Tax and Charitable Bequests: Elasticity Estimates Using Probate Records." *National Tax Journal* 63, no. 2 (June 2005): 165–188.
- Burrill, Janice H. "The Effects of Estate Tax 'Repeal' on Philanthropy." *Trusts & Estates* 140, no. 10 (October 2001): 20–26.
- Chapman, Kenneth Govind Hariharan and Lawrence Southwick, Jr. "Estate Taxes and Asset Accumulation." *Family Business Review* 9, no. 3 (Fall 1996): 253–268.

- Castañeda, Ana, Javier Díaz-Giménez and José-Víctor Ríos-Rull. "Accounting for the U.S. Earnings and Wealth Inequality." *Journal of Political Economy* 111, no. 4 (August 2003): 818–857.
- Charles, Kerwin Kofi and Erik Hurst. "The Correlation of Wealth across Generations." *Journal of Political Economy* 111, no. 6 (December 2003): 1155–1182.
- Clifton, Daniel. "Learning from History: JCT's Static Score Can Not Determine the Real Revenue Effect of Repealing the Estate Tax." American Family Business Institute (July 2005).
- Cooper, George. *A Voluntary Tax?: New Perspectives on Sophisticated Estate Tax Avoidance*. Washington, DC: Brookings Institution, 1979.
- Davies, James B. "The Relative Importance of Inheritance and Other Factors on Economic Inequality." *Quarterly Journal of Economics* 97, no. 3 (1982): 471–498.
- Executive Office of the President, Council of Economic Advisers. *The Annual Report of the Council of Economic Advisers*. Washington, DC: Government Printing Office, 2003.
- . *Budget of the U.S. Government, Fiscal Year 2007—Historical Tables*. Washington, DC: Government Printing Office, 2006.
- Fairlie, Robert W. "The Absence of the African-American Owned Business: An Analysis of the Dynamic of Self-Employment." *Journal of Labor Economics* 17, no. 1 (January 1999): 80–108.
- . "Does Business Ownership Provide a Source of Upward Mobility for Blacks and Hispanics?" In *Public Policy and the Economics of Entrepreneurship*. Edited by Douglas Holtz-Eakin and Harvey S. Rosen, 153–179. Cambridge, MA, MIT Press, 2004.
- Gokhale, Jagadeesh and Laurence J. Kotlikoff. "Simulating the Transmission of Wealth Inequality." *American Economic Review* 92, no. 2 (May 2002): 265–269.
- Gordon, Roger H. and Joel Slemrod. "Do We Collect Any Revenue from Taxing Capital Income." In *Tax Policy and the Economy*, vol. 2, edited by Lawrence H. Summers, 89–130. Cambridge, MA: MIT Press, 1988.
- Greene, John, Tamara Cushing, Steve Bullard and Ted Beauvis. "Effect of the Federal Estate Tax on Rural Land Holdings in the U.S." In *Forest Policy for Private Forestry: Global and Regional Challenges*, edited by Lawrence D. Teeter, Benjamin Cashore and Dao Zhang, 211–218. New York, NY: CABI Publishing, 2003.
- Havens, John J. and Paul G. Schervish. "Wealth Transfer Estimates for African American Households." Boston College, Center on Wealth and Philanthropy (October 2004).
- Holtz-Eakin, Douglas, David Joulfaian and Harvey S. Rosen. "Sticking It Out: Entrepreneurial Survival and Liquidity Constraints." *Journal of Political Economy* 102, no. 1 (February 1994): 53–75.
- Holtz-Eakin, Douglas and Donald Marples. "Distortion Costs of Taxing Wealth Accumulation: Income Versus Estate Taxes." National Bureau of Economic Research, Working Paper 8261 (April 2001).
- . "Estate Taxes, Labor Supply, and Economic Efficiency." Special Report, American Council for Capital Formation (January 2001).

- Holtz-Eakin, Douglas, John W. Phillips and Harvey S. Rosen. "Estate Taxes, Life Insurance, and Small Business." National Bureau of Economic Research, Working Paper 7360 (September 1999).
- Hugget, Mark. "Wealth Distribution in Life-Cycle Economies." *Journal of Monetary Economics* 38, no. 3 (December 1996): 469–494.
- Hurd, Michael D. and Gabriella Mundaca. "The Importance of Gifts and Inheritances among the Affluent." In *The Measurement of Saving, Investment, and Wealth*, edited by Robert E. Lipsey and Helen Stone Tice, 737–763. Chicago, IL: University of Chicago Press, 1989.
- Impacto Group LLC. "Five-State Executive Interview Study of 100+ Hispanic Family-Owned Businesses on Federal Estate Taxes." Washington, DC: Impacto Group LLC, 7/14/2004.
- Internal Revenue Service. "Estate Tax Returns." Various years. Online at <http://www.irs.gov/taxstats/indtaxstats/article/0,,id=96442,00.html>.
- Internal Revenue Service, Statistics of Income Division. Unpublished data provided by Martha Eller Gangi. 4/3/06.
- Jianakoplos, Nancy A. and Paul L. Menchik. "Wealth Mobility." *Review of Economics and Statistics* 79, no. 1 (February 1997): 18–31.
- Joulfaian, David. "The Behavioral Response of Wealth Accumulation to Estate Taxation: Time Series Evidence." Office of Tax Analysis. U.S. Department of the Treasury. OTA Paper 96. (November 2005).
- . "Choosing Between Gifts And Bequests: How Taxes Affect the Timing of Wealth Transfers." U.S. Department of Treasury, Office of Tax Analysis, OTA Paper 86 (May 2000).
- . "Estate Taxes and Charitable Bequests by the Wealthy." National Bureau of Economic Research, Working Paper 7663 (April 2000).
- . "Estate Taxes and Charitable Bequests: Evidence from Two Tax Regimes." U.S. Department of Treasury, Office of Tax Analysis, OTA Paper 92 (March 2005).
- Keystone Center. *The Keystone Dialogue on Incentives for Private Landowners to Protect Endangered Species—Final Report*. Washington, DC: Keystone Center, 1995.
- Kopczuk, Wojcieh and Joel Slemrod. "The Impact of the Estate Tax on the Wealth Accumulation and Avoidance Behavior of Donors." National Bureau of Economic Research, Working Paper 7690 (October 2000).
- . "Wealth Accumulation and Avoidance Behavior." In *Rethinking Estate and Gift Taxation*, edited by William G. Gales, James R. Hines, Jr. and Joel Slemrod, 299–343. Washington, DC: Brookings Institution Press, 2001.
- Kotlikoff, Laurence J. and Lawrence H. Summers. "The Contribution of Intergenerational Transfers to Total Wealth: A Reply." In *Modelling the Accumulation and Distribution of Wealth*, edited by Denis Kessler and André Masson, 53–76. Oxford, England: Clarendon Press, 1988.

- . "The Role of Intergenerational Transfers in Aggregate Capital Accumulation." *Journal of Political Economy* 89, no. 4 (1981): 706–732.
- Luckey, John R. "Federal Estate, Gift, and Generation-Skipping Taxes: A Description of Current Law." Congressional Research Service, Report 95–416A (updated January 5, 2005).
- Lumpkin, Scott R. "A New Perspective on Philanthropy: Planned Giving in the United States." *Trusts & Estates* 140, no. 6 (June 2001): 14–17, 48.
- McCaffery, Edward J. "The Uneasy Case for Wealth Transfer Taxation." *Yale Law Journal* 104, no. 2 (November 1994): 283–365.
- . "A Voluntary Tax? Revisited." In *Proceedings: 93rd Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association, November 9–11, 2000*, edited by James R. Hines, Jr., 268–274. Washington, DC: National Tax Association, 2001.
- McCaffery, Edward J. and Richard E. Wagner. "A Declaration of Independence from Death Taxation: A Bipartisan Appeal." Public Interest Institute, Policy Study (July 2000).
- Miller, Dan. *The Economics of the Estate Tax*. U.S. Congress, Joint Economic Committee (December 1998).
- . *The Economics of the Estate Tax: An Update*. U.S. Congress, Joint Economic Committee (June 2003).
- Munnell, Alicia H. "Wealth Transfer Taxation: The Relative Role for Estate and Income Taxes." *New England Economic Review*, Federal Reserve Bank of Boston (November/December 1988): 3–28.
- Nishiyama, Shinichi. "Bequests, Inter Vivos Transfers, and Wealth Distribution." Congressional Budget Office, Technical Paper Series 2000–8 (December 2000).
- Noto, Nonna A. "Calculating Estate Tax Liability during the Estate Tax Phasedown Period 2001–2009." Congressional Research Service, Report RL31092 (updated April 1, 2005).
- . "Estate and Gift Tax Law: Changes under the Economic Growth and Tax Relief Reconciliation Act of 2001." Congressional Research Service, Report RL31061 (updated January 29, 2002).
- Poterba, James. "The Estate Tax and After-Tax Investment Returns." University of Michigan, Office of Tax Policy Research, Working Paper 98–11 (December 1997).
- Prince, Russ Alan and Karen Maru File. *Marketing to Family Business Owners*. Cincinnati, OH: National Underwriter, 1995.
- Quadrini, Vincenzo. "Entrepreneurship, Saving and Social Mobility." Federal Reserve Bank of Minneapolis, Discussion Paper 116 (March 1997).
- Rodríguez, Santiago Budría, Javier Díaz-Giménez, Vincenzo Quadrini and José-Víctor Ríos-Rull. "Updated Facts on the U.S. Distributions of Earnings, Income, and Wealth." Federal Reserve Bank of Minneapolis, *Quarterly Review* 26, no. 3 (Summer 2002): 2–35.
- Samuelson, Paul A. and William D. Nordhaus. *Microeconomics*. 18th ed. Boston, MA: McGraw Hill, 2005.
- Schervish, Paul G. "Wealth and Philanthropy." In *Philanthropy in America: A Comprehensive Historical Encyclopedia*, edited by

- Dwight F. Burlingame, 505–509. Santa Barbara, CA: ABC-CLIO, 2004.
- Schervish, Paul G. and John J. Havens. "Extended Report of the Wealth with Responsibility Study." Social Welfare Research Institute, Boston College (March 2001).
- Scholl, Len. "Successful Charitable Planning Starts with an Understanding of Client Motivations." *National Underwriter: Life & Health* 108, no. 47 (December 13, 2004): 14–15.
- Smith, James P. "Inheritances and Bequests." In *Wealth, Work, and Health*, edited by James P. Smith and Robert J. Willis, 121–149. Ann Arbor, MI: University of Michigan Press, 1999.
- Stanley, Thomas J. and William D. Danko. *The Millionaire Next Door: The Surprising Secrets of America's Wealthy*. Atlanta, GA: Longstreet Press, 1996.
- Steger, Wilbur A. and Frederick H. Rueter. "The Effects on Government Revenues from Repealing the Federal Estate Tax and Limiting the Step-Up in Basis for Taxing Capital Gains." Pittsburgh, PA: CONSAD Research Corporation, 2003.
- Steuerle, Eugene. "Charitable Giving Patterns of the Wealthy." In *America's Wealth and the Future of Foundations*, edited by Teresa Odendahl, 203–221. New York, NY: The Foundation Center, 1987.
- Stiglitz, Joseph E. *Economics of the Public Sector*. 1st ed. New York: W.W. Norton & Company, 1986.
- . "Equality, Taxation and Inheritance." In *Personal Income Distribution: Proceedings of a Conference Held by the International Economic Association, Noordwijk aan Zee, Netherlands*, April 18–23, 1977, edited by Wilhelm Krelle and Anthony F. Shorrocks, 271–303. New York, NY: North-Holland Publishing Company, 1978.
- . "Notes on Estate Taxes, Redistribution, and the Concept of Balanced Growth Path Incidence." *Journal of Political Economy* 86, no. 2 (1978): S137–S150.
- Tocqueville, Alexis de. *Democracy in America—Volume I*. 1835. Reprint, New York, NY: Vintage Books, 1945.
- U.S. Census Bureau. *Black-Owned Firms: 2002*. SB02-00CS-BLK, 4/18/06. Online at <http://www.census.gov/csd/sbo/>.
- U.S. Census Bureau. *Hispanic-Owned Firms: 2002*. SB02-00CS-HISP, 3/21/06. Online at <http://www.census.gov/csd/sbo/>.
- . "Preliminary Estimates of Business Ownership by Gender, Hispanic or Latino Origin, and Race: 2002." 7/28/05. Online at <http://www.census.gov/csd/sbo/>.
- U.S. Congress, Congressional Budget Office. *The Economic and Budget Outlook: Fiscal Years 2006–2015*. Washington, DC: Congressional Budget Office, 2005.
- . *The Economic and Budget Outlook: Fiscal Years 2007–2016*. Washington, DC: Congressional Budget Office, 2006.
- U.S. Congress, Joint Committee on Taxation. *Description and Analysis of Present Law and Proposals Relating to Federal Estate and Gift Taxation*. JCX-14-01 (3/14/2001).
- . "Estimated Budget Effects of the Revenue Provisions Contained in the President's Fiscal Year 2006 Budget Proposal." JCX-10-05 (3/9/2005).

- U.S. Department of Commerce, Bureau of Economic Analysis. "Personal Income and Its Disposition." Tables 2.1 and 1.1.9. Online at <http://www.bea.gov/bea/dn/nipaweb/index.asp>.
- U.S. Department of Health and Human Services, Center for Disease Control. *National Vital Statistics Reports* 53, no. 21 (June 28, 2005). Data updated 2/15/2006.
- U.S. Fish & Wildlife Service, Endangered Species Program. "Our Endangered Species Program and How It Works with Landowners." May 2003. Online at <http://www.fws.gov/endangered/landowner/index.html>.
- U.S. Small Business Administration, Office of Advocacy. *The Small Business Economy*. Washington, DC: Government Printing Office, 2004.
- Verbit, G.P. "Do Estate and Gift Taxes Affect Wealth Distribution?" *Trusts & Estates* 117, no. 10 (October 1978): 598–616.
- Ward, John L., Drew Mendoza, Joseph H. Astrachan, and Craig E. Aronoff. "Family Business: The Effect of Estate Taxes." Chicago, IL and Marietta, GA: Center for Family Business and Family Enterprise Center, 1995.
- Wolff, Edward N. "Bequests, Saving, and Wealth Inequality: Inheritances and Wealth Inequality, 1989–1998." *American Economic Review* 92, no. 2 (May 2002): 260–264.

FIVE CHALLENGES THAT CHINA MUST OVERCOME TO SUSTAIN ECONOMIC GROWTH

I. INTRODUCTION

Since 1979, reform has transformed the People's Republic of China (PRC) from an impoverished autarkic socialist economy into a vibrant mixed economy that is open to international trade and investment. This study describes the genesis of economic reform under Paramount Leader Deng Xiaoping from 1979 to 1992 and reviews the subsequent performance of the Chinese economy.

Despite its success, the PRC confronts five serious challenges that it must overcome to sustain rapid economic growth in the future:

- unfavorable demographics;
- corruption and a weak rule of law;
- financially distressed state-owned enterprises (SOEs) and state-influenced enterprises (SIEs);
- a dysfunctional financial system; and
- domestic and international imbalances.

The PRC's response to these challenges will, of course, determine the future performance of the Chinese economy. However, since the Chinese economy is so large and well integrated into the global economy, the performance of the Chinese economy will also affect the performance of the United States and other economies throughout the world.

So far, the PRC's approach to reform has been incremental. This study concludes that this incremental approach may be reaching the limits of its effectiveness. The economic challenges that the PRC now faces are deeply interrelated. A more comprehensive approach to reform is needed.

II. GENESIS OF ECONOMIC REFORM

Between 1979 and 1992, the Communist Party of China (CPC) lost its political legitimacy. The excesses of the Cultural Revolution repulsed the Chinese people and eroded their belief in communism as an ideology.¹ The contrast between the rapid development of the Japanese, South Korean, and other market-oriented economies in northeast and southeast Asia and the lack of development in the Chinese economy demonstrated the failure of communism as an economic system. Finally, the fall of the Berlin Wall in 1989 and the dissolution of the Soviet Union in 1991 undermined their confidence in communism as a political system.

Paramount Leader Deng Xiaoping was determined to preserve the communist regime in the PRC. After careful study, Deng identified several policy errors that contributed to the failure of the Soviet Union and its satellites:

¹On May 16, 1966, Chairman Mao Zedong launched the Great Proletarian Cultural Revolution to regain some of the political power that he had lost to CPC rivals after the economic disaster of the Great Leap Forward. During the next two years, Mao's wife, Jiang Qing, and other supporters organized the Red Guards to seize control of party organizations and government organs. Because of this power struggle, millions of Chinese died, were imprisoned, or were injured. Although Mao officially terminated the Cultural Revolution in 1969, historians date the end of the Cultural Revolution to the arrest of the Gang of Four (i.e., Jiang Qing and three of her associates, Zhang Chunqiao, Yao Wenyuan, and Wang Hongwen) in 1976.

- The Soviet economy could not sustain the costs of the Soviet Union's global military confrontation with the United States during the Cold War.

- The liberalization of the political system in Soviet Union and its satellites before economic reforms could produce prosperity allowed dissatisfied electorates to vote the communists out of power.

To regain political legitimacy, Deng decided that the CPC must transform its image, so that the Chinese people would perceive the CPC as the provider of their economic prosperity. Deng realized that an autarkic socialist economy could not deliver prosperity. Therefore, Deng concluded that the PRC had to adopt market-oriented economic policies and institutions and open itself to international trade and investment.

While immediate and sweeping policy changes would have sped the transformation of the PRC into a market economy, a "big bang" approach to reform would have also caused severe short-term dislocations during the transition. Unlike the former Soviet satellites, the CPC could have not blamed these transition costs on a previous regime. Moreover, any overt rejection of communism may have triggered a coup attempt among hardliners within the CPC.

Therefore, Deng decided to introduce economic policy changes gradually. Experiments were to be conducted in special economic zones, revised on the basis of results, and then adopted throughout the PRC. This incremental approach to reform would allow the CPC leadership sufficient time to isolate and neutralize opponents and to redefine communism. Indeed, the CPC has subsequently displayed remarkable ideological flexibility (e.g., describing market economics as socialism with Chinese characteristics).

During his trip to southern China during the spring of 1992, Deng proclaimed a "bargain" that still guides the PRC today:

- Domestically, the PRC would liberalize the economy to provide prosperity to the Chinese people, while the PRC would suppress political dissent.

- Internationally, the PRC would pursue "peaceful development" by:

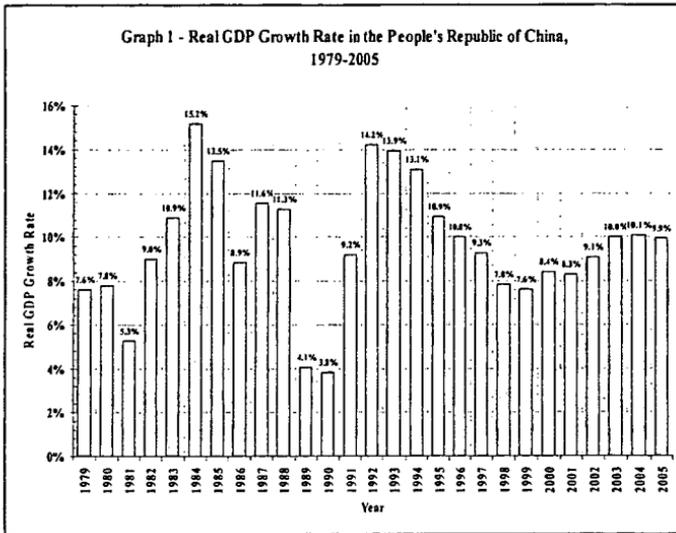
- opening itself to international trade and investment;
- being a "good neighbor" in Asia;
- avoiding direct military confrontations with the United States; and
- securing access to oil and other natural resources even if the PRC must deal with rogue regimes.

The PRC rejected the failed import-substitution development strategies that India and Latin America had pursued in the 1970s and 1980s and instead copied the successful export-promotion development strategies of the Japanese, South Korean, and other economies in northeast and southeast Asia. The PRC relied on exports and foreign direct investment to:

- introduce the price system;
- correctly align domestic incentives; and
- import needed management skills and technology.

The PRC sought to exploit its comparative advantage in abundant low-cost labor with:

- labor-intensive manufacturing of low-tech goods (e.g., apparel, footwear, sporting goods, and toys) for export; and
- labor-intensive final assembly of medium-tech consumer electronics and information technology products from imported parts for export.



III. RESULTS OF ECONOMIC REFORM

Reform has boosted the PRC's economy and improved the living standards of its people. Real GDP growth averaged 9.7 percent from 1979 to 2005 (see Graph 1).² In the first half of 2006, the Chinese economy grew at an annualized rate of 10.9 percent. This growth has lifted 400 million Chinese out of poverty.³

Reform has made the PRC a major trading power. In 1979, the PRC accounted for 1.3 percent of the world's two-way trade in goods (see Graph 2).⁴ Real growth in the PRC's two-way trade in goods averaged 13.7 percent from 1979 to 2005.⁵ By 2005, the PRC accounted for 8.8 percent of the world's two-way trade in goods (see Graph 2).⁶

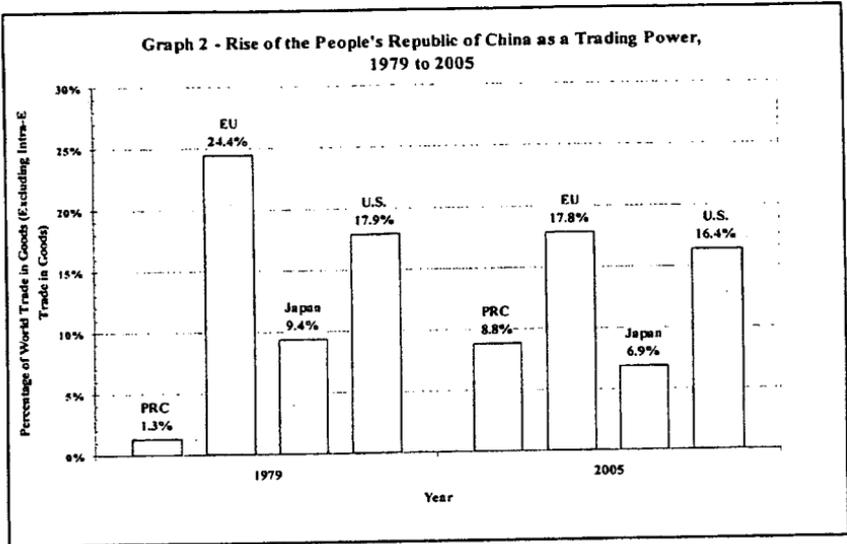
² China National Bureau of Statistics/Haver Analytics.

³ [U]sing the World Bank's \$1 per day income standard, the number of poor is estimated to have dropped from about 490 million to 88 million over the same period, a decline in poverty incidence from 49 percent in 1981 to 6.9 percent in 2002. World Bank, Shanghai Poverty Conference: Case Study Summary (2004).

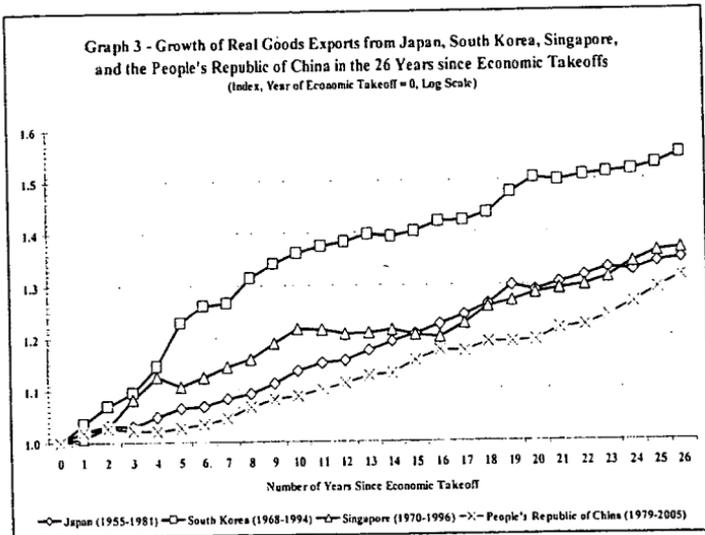
⁴ Excludes intra-European Union goods trade. Author's calculation based on International Monetary Fund/Haver Analytics data.

⁵ International Monetary Fund/Haver Analytics.

⁶ Excludes intra-European Union goods trade. Author's calculation based on International Monetary Fund/Haver Analytics data.



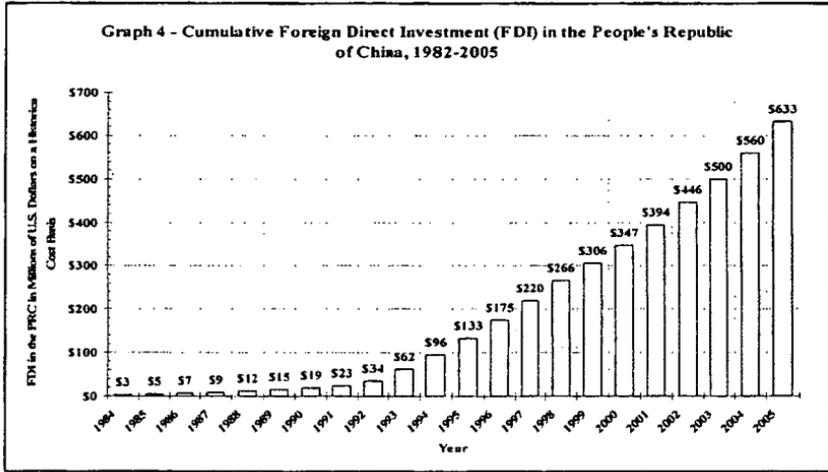
While the PRC's trade performance may seem outstanding, it is actually quite typical for economies in northeast and southeast Asia that followed an export-promotion development strategy. During the twenty-six years after the takeoff of their economies, Japan, South Korea, and Singapore had similar or better trade performances than the PRC (see Graph 3).⁷



The PRC's heavy reliance on foreign direct investment (FDI) distinguishes its development strategy and its post-takeoff performance from other populous economies in northeast and southeast

⁷ Author's calculation based on International Monetary Fund/Haver Analytics data.

Asia.⁸ From 1979 to 2005, the PRC received a cumulative \$633 billion of FDI on a historical cost basis (see Graph 4).⁹



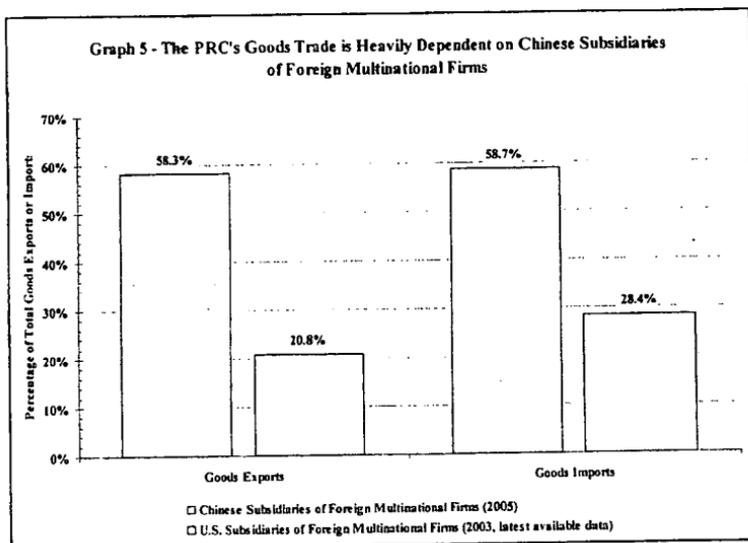
The Chinese subsidiaries of foreign multinational firms produced 19.1 percent of the PRC's value-added for industrial firms in 2003 (the last year in which comprehensive firm-level data are available)¹⁰ and accounted for 58.3 percent of the PRC's exports of goods and 58.7 percent of its imports of goods in 2005 (see Graph 5).¹¹ Unlike Japan or South Korea twenty-six years after the take-off of their economies, the PRC has spawned relatively few Chinese multinational firms that manufacture own-design, own-brand goods for global markets.

⁸The "city-state" economies of Hong Kong and Singapore are also heavily reliant on foreign direct investment.

⁹China National Bureau of Statistics/Haver Analytics.

¹⁰OECD Economic Survey: China (Paris: Organization for Economic Cooperation and Development, 2005): 133.

¹¹China National Bureau of Statistics/Haver Analytics.



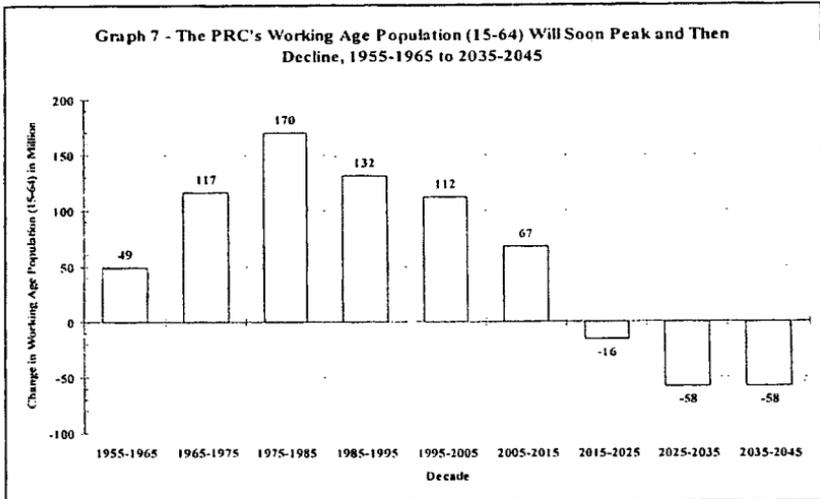
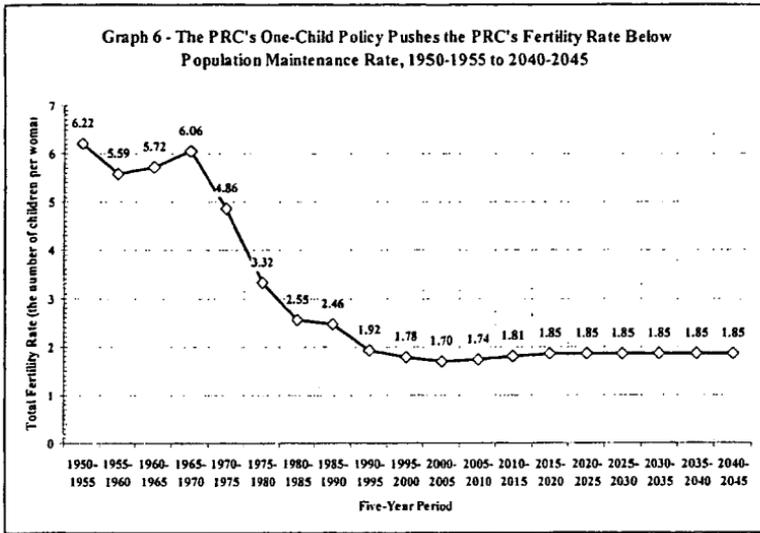
IV. UNFAVORABLE DEMOGRAPHICS

The first challenge that the PRC must overcome is unfavorable demographics. Without significant immigration, the PRC's declining fertility rate will cause its working-age population to peak in 2015 and then decline. Simultaneously, the PRC's increasing longevity rate will swell both the number of the elderly and the elderly as a percentage of total population.

A. Declining labor force

Because of the PRC's one-child policy and rising per capita income, the PRC's fertility rate fell to 1.70 per woman during 2000–2005—well below the population maintenance rate (see Graph 6). Consequently, the PRC's working-age population (ages 15–64) will peak in 2015 and then begin to shrink (see Graph 7).¹²

¹²United Nations Population Division, World Populations Prospects: The 2004 Revision Population Database, <http://esa.un.org/unpp/p2k0data.asp>.



In major cities, the economic boom has already created a shortage of highly skilled workers and professionals, boosting their real compensation. The Financial Times recently reported:

Five years ago, to employ an engineer in China cost a tenth of the figure in the U.S., says Michael Marks, chairman of Flextronics, a U.S.-listed company that is the world's second biggest contract manufacturer for the electronics industry. "Today the difference is only half."¹³

Real compensation for less skilled or unskilled workers has also begun to grow, but at a slower pace. Because of higher labor costs,

¹³Peter Marsh, "Foreign Makers Find Advantages on More Familiar Turf," Financial Times (May 7, 2006).

the “China price”—the price that major retailers (e.g., Walmart, Carefour) are willing to pay to their suppliers based on the cost of importing similar goods from China—increased for the first time in 2005.¹⁴

Currently, the PRC has a “floating population” of about 140 million unemployed or underemployed people. At the PRC’s current growth rate, however, these “floaters” will be fully absorbed into the economy by 2015.

Consequently, the PRC cannot remain a low-wage economy. After 2015, labor shortages should significantly increase the real compensation of all Chinese workers. This will force the PRC to shed many of its current jobs in labor-intensive industries and assembly operations. To foster continued economic growth, the PRC will need to climb the “development ladder” by

- encouraging Chinese firms to develop their own brands and designs;
- switching from labor-intensive to capital-intensive manufacturing; and
- expanding the service sector.

B. Graying population

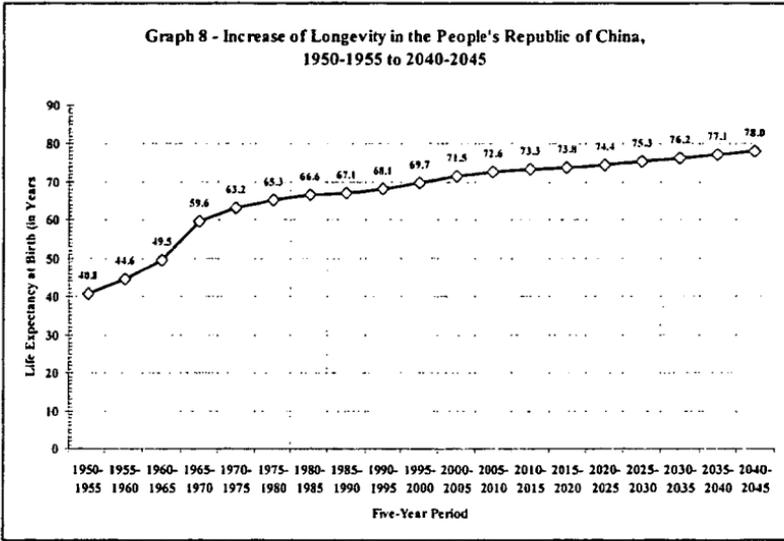
Higher living standards have boosted the PRC’s life expectancy at birth to 71.5 years during 2000–05 (see Graph 8).¹⁵ Since the increase in longevity is expected to continue, the PRC’s elderly population should increase from 100 million, or 7.6 percent of the total population, to 320 million, or 23.0 percent of the total population, in 2045.¹⁶ Consequently, the elderly support ratio (i.e., the ratio of elderly Chinese to working-age Chinese) is expected to drop from 9.3 in 2005 to 2.7 in 2045 (see Graph 9).¹⁷

¹⁴Tom Mitchell, “How China is Handling Cost Rises by Boosting Value,” *Financial Times* (May 7, 2006).

¹⁵United Nations Population Division, *World Populations Prospects: The 2004 Revision Population Database* (2004). Found at: <http://esa.un.org/unpp/p2k0data.asp>.

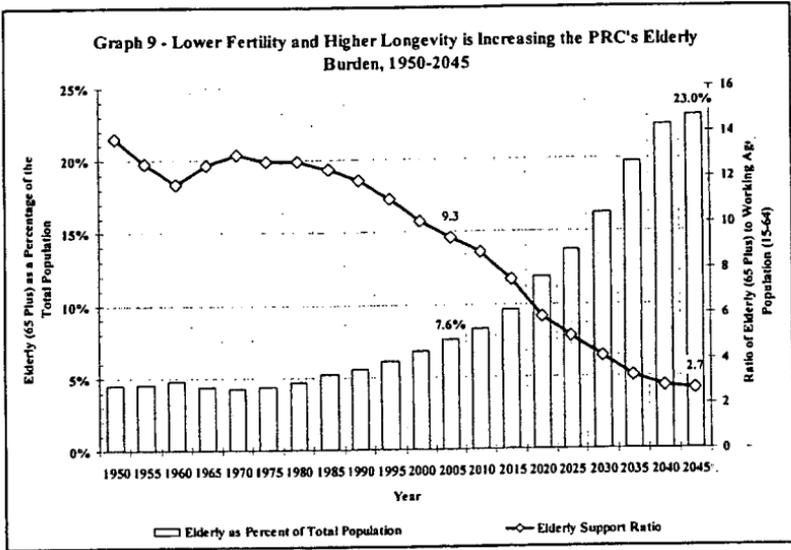
¹⁶Author’s calculation based on the United Nations Population Division data.

¹⁷*Ibid.*



Unlike other major economies, the PRC lacks a comprehensive system of either government old-age pensions or private retirement saving plans. Reform eliminated Mao's "iron rice bowl" system under which state-owned enterprises provided their workers with comprehensive social-welfare benefits. Today, only 15 percent of urban workers are eligible for government old-age pensions.¹⁸ Few private retirement plans are available. Consequently, the elderly must rely on their own savings or their family for retirement income.

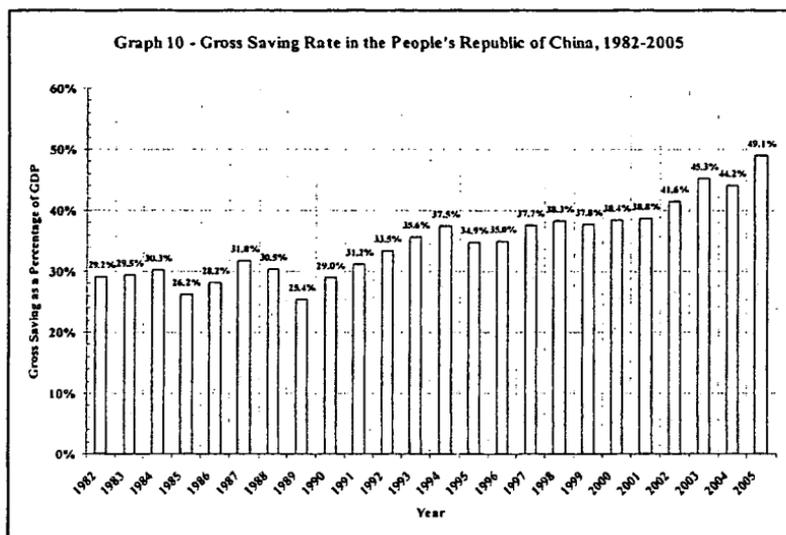
¹⁸The PRC has a pay-as-you-go defined benefit old-age pension plan for urban workers in the formal sector. Employers pay a payroll tax equal to 20 percent of an employee's base wage or salary. Covered employees are eligible for an old-age pension of 20 percent of the average wage in their locality after (1) completing fifteen years of service and (2) reaching the age of 60 for men, 50 for woman in manual labor, and 55 for other women. In addition, employees must contribute an additional 8 percent of their base wage or salary to defined contribution plans, of which 5 percentage points goes to a government notional plan and 3 percentage points goes to individual accounts. Upon retirement, annuity payments from the government notional plan are based an employee's notional balance divided by 120. Urban workers in the informal sector, rural workers, and self-employed individuals are not eligible for any of these plans.



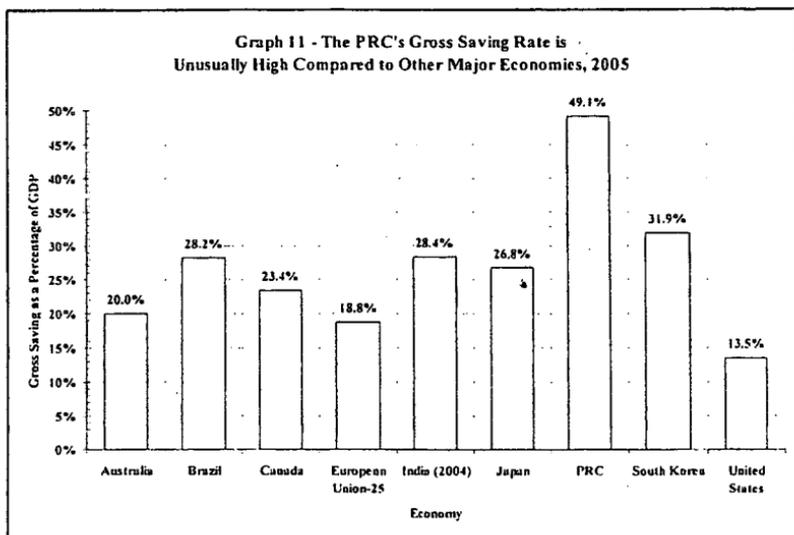
The lack of a government social safety net and the limited availability of consumer credit, insurance products, and private retirement plans drive Chinese households to save prodigious sums. In 2005, the PRC's gross saving rate was 49.1 percent of GDP (see Graph 10).¹⁹ The PRC's gross saving rate is extraordinarily high compared to other major economies (see Graph 11). Until the PRC develops a comprehensive social safety net and deepens its market for financial services, Chinese households are unlikely to reduce their extraordinarily high saving rate. Consequently, the PRC may incur difficulties shifting from export-led to domestic consumption-driven economic growth.

¹⁹ Author's calculation based upon data from China National Bureau of Statistics/Haver Analytics.

Graph 10 - Gross Saving Rate in the People's Republic of China, 1982-2005



Graph 11 - The PRC's Gross Saving Rate is Unusually High Compared to Other Major Economies, 2005



V. CORRUPTION AND A WEAK RULE OF LAW

The PRC has adopted a “rule by law,” but still lacks a “rule of law.” Although there have been significant procedural improvements in the drafting of legislation, many Chinese laws and regulations²⁰ still lack clarity, their enforcement may be arbitrary, and courts are subject to political influence. Consequently, property rights are insecure.

²⁰ Central and subsidiary governments now publish proposed laws and regulations and provide time for public comments before enactment. Public hearings have caused officials to modify some proposed laws and regulations.

Individuals and private firms must rely on *guanxi* (i.e., connections) with officials to protect themselves and their property. During the last quarter century, economic reform has produced a de facto political decentralization that has allowed officials to exploit their *guanxi* to enrich themselves and their families through corruption.

While the PRC is nominally a unitary state, it has many levels of subsidiary government—provinces, prefectures, cities, counties; towns, and villages. The central government is quite small, employing about 500,000 of the estimated 36 million working in governmental functions.²¹

The PRC's government is organized as a matrix. Each department in the central government is paired with similar departments in subsidiary governments. Policy is vertical (i.e., the heads of central government departments in Beijing determine policy and direct its implementation through similar departments in subsidiary governments), but administration is horizontal (i.e., the heads of subsidiary governments make personnel decisions and fund the operations of all departments in their subsidiaries).

Under Mao, the PRC's government functioned as a hierarchal structure since the central government tightly controlled the economy. Reform has allowed local party leaders to acquire great wealth through legitimate business investments and various corrupt payments. Both legitimate tax receipts from a booming economy and corrupt payments have also reduced the financial dependency of subsidiary governments on central government transfers. Together these changes have limited the central government's ability to implement policy changes and control corrupt practices. Employees in local departments may have greater loyalty to local government officials and party leaders than to department heads in Beijing. The Chinese use an old proverb to describe this problem; "The mountain is high, and the emperor is far away."

Corruption is both widespread and costly in the PRC. Transparency International reported that the PRC scored 3.2 on its Corruption Perceptions Index 2005 (10 is corruption-free).²² Chinese economist Angang Hu²³ estimated that corruption costs the PRC's government an amount to equal 15 percent of GDP in lost revenue and skimmed funds.²⁴ The China Economic Quarterly (2005) reported that provincial and local government officials extracted the equivalent of 91 percent of the profits of private firms in 2003 through non-tax costs, including fees, *tanpai* (i.e., forced expenditures on unwanted provincial or local goods or services), or *zhaodai* (i.e., the entertainment of provincial or local government officials).²⁵

Indigenous creative industries could create new high-skill, high-wage jobs to replace the low-skill, low-wage jobs in labor-intensive manufacturing and assembly operations that the PRC is likely to

²¹ China in the Global Economy, "Civil Service Reform in China" (Paris: Organization for Economic Cooperation and Development, 2005): 55–60.

²² Transparency International Corruptions Practices Index 2005, found at <http://transparency.org>.

²³ The family name of this Chinese economist is listed last, according to western fashion.

²⁴ Julie Chao, "China is Losing Battle with Corruption," Milwaukee Journal Sentinel (December 8, 2002).

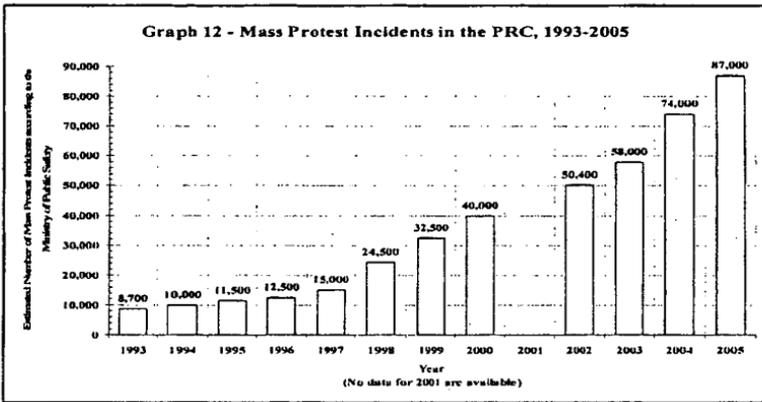
²⁵ China Economic Quarterly (First Quarter 2005): 48.

lose in future years. However, corruption stifles the development of indigenous creative industries that depend on secure intellectual property rights.

Corruption, particularly the uncompensated seizure of land for development, fuels growing unrest. The reported number of mass protests soared ten-fold over twelve years, reaching 87,000 protests in 2005 (see Graph 12).²⁶ The central government has responded to the growing number of mass protests by:

- acknowledging problems;
- appeasing ordinary protestors by making superficial changes (e.g., dismissing and prosecuting corrupt local officials); and
- punishing protest leaders to prevent local protests from coalescing into a national movement.

So far, the central government has been able to contain local protests. How successful this strategy will be in future is difficult to predict.



VI. FINANCIALLY DISTRESSED STATE-OWNED ENTERPRISES AND STATE-INFLUENCED ENTERPRISES

Early economic reforms that introduced the price system and profit incentives to the SOEs did not significantly improve their performance. Consequently, President Jiang Zemin announced the *zhuada fangxiao* policy (i.e., grab the big, dump the small) at the Fifteenth Party Congress in 1997. Under this policy, the central government retained ownership of state-owned enterprises that:

- produce defense goods and services;
- are in industrial sectors targeted for economic development; or
- are hopelessly insolvent, but employ millions.

The central government has transformed many of the large state-owned enterprises that it had retained into shareholding enterprises by issuing minority shares to investors. While shareholding enterprises exhibit many of the characteristics of private corporations, the central government still exercises effective control over their operations. At year-end 2005, the central government still

²⁶ Found at:
Data_Domestic_Sociopolitical.PDF.

<http://www.chinabalancesheet.com/Documents/>

controlled 66 percent of the market value of all shareholding enterprises through non-marketable shares. In the Australian Financial Review, Stephen Wyatt concluded:

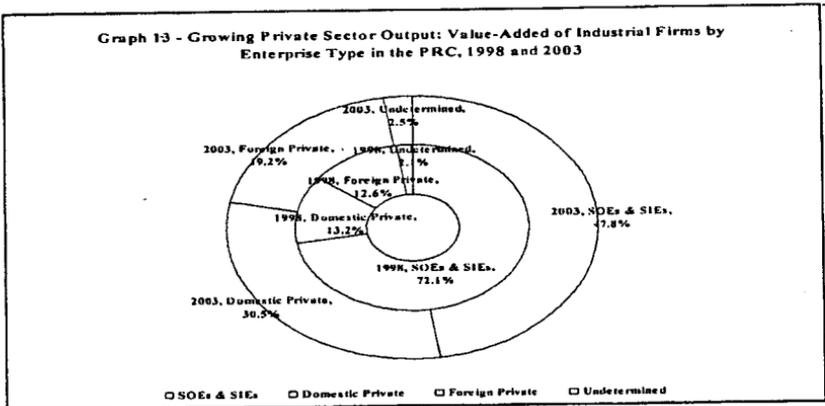
In fact, the entire privatization of China's state-owned enterprises is still more hype than reality. . . . The government's strategy is still to list minority shares in state-owned groups in order to raise capital and import better governance while ultimately retaining control . . .²⁷

The remaining small- and medium-sized state-owned enterprises were converted into a variety of state-influenced enterprises:

- Township and village enterprises (TVEs) in rural areas;
- Cooperative enterprises owned by their employees;
- Collective enterprises owned by provincial governments and local governments in urban areas;
- Private domestic enterprises often sold to officials or their families; and
- Joint enterprises owned by a state-owned enterprise in conjunction with another type of enterprises.

SOEs and SIEs remain a major part of the PRC's economy:

- Producing 47.8 percent of the value-added among industrial firms in the PRC during 2003 (see Graph 13);²⁸



- Employing 99.8 million in urban areas during 2005 (see Graph 14);²⁹
- Employing 142.7 million in rural areas during 2005 (see Graph 15)³⁰ and
- Accounting for 74.1 percent of the PRC's investment in fixed assets during 2005 (see Graph 16)³¹ SOEs and SIEs are a significant source of patronage for the CPC. In 2003, SOEs and SIEs employed 5.3 million party members as executives or senior managers.³²

²⁷ Stephen Wyatt, "Privatization More Hype than Reality," Australian Financial Review (June 7, 2005).

²⁸ OECD Survey: 126.

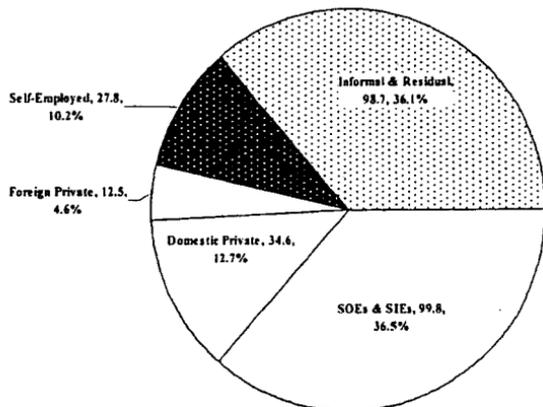
²⁹ China National Bureau of Statistics/Haver Analytics.

³⁰ Ibid.

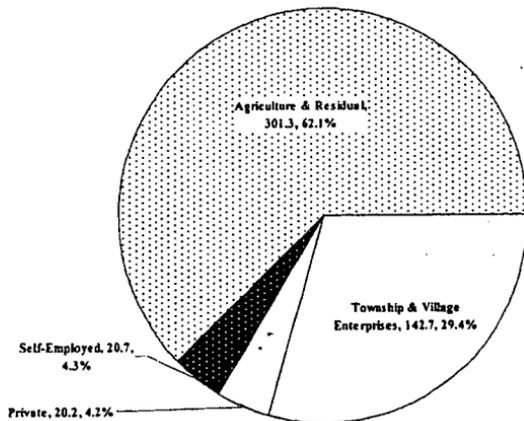
³¹ Author's calculation based on data from China National Bureau of Statistics/Haver Analytics.

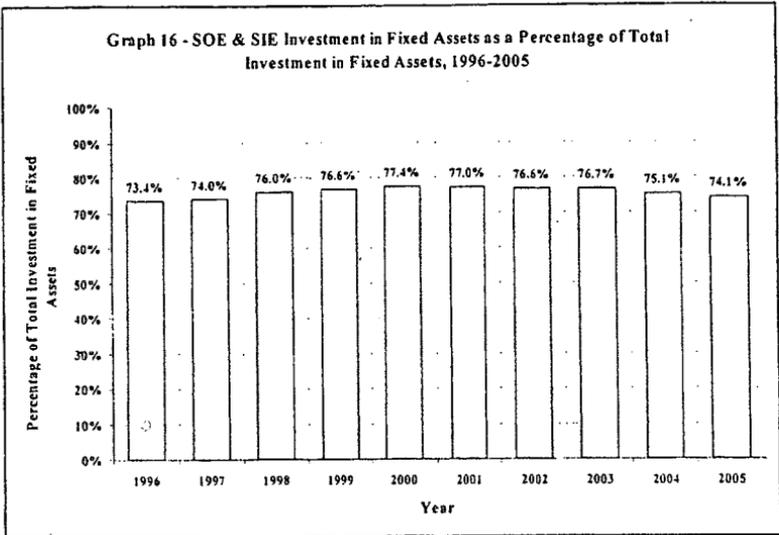
³² Minxi Pei, "Politics Blamed for China's Trillion-Dollar Bad Debts," The Australian (May 9, 2006). Found at <http://www.theaustralian.news.com/printpage/0,5942,19067992,00.html>.

Graph 14 - Employment in Urban China, 2005
(in millions and as a percentage of total urban employment)

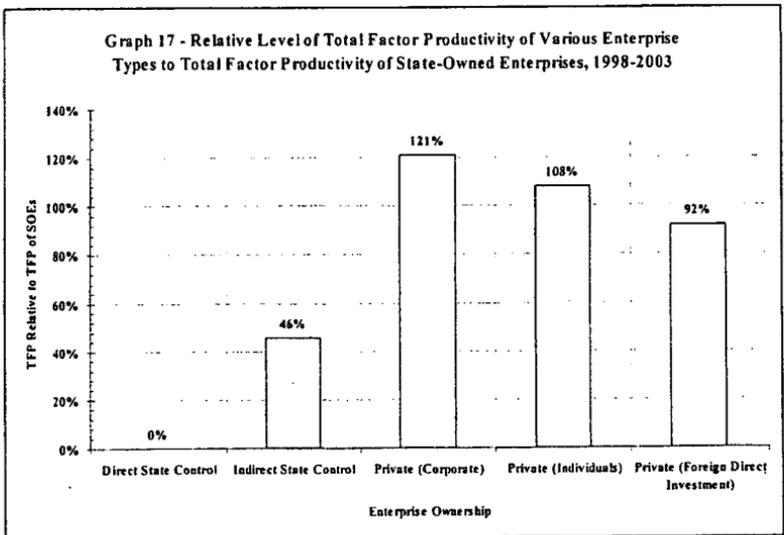


Graph 15 - Employment in Rural China, 2005
(in millions and as a percentage of total rural employment)





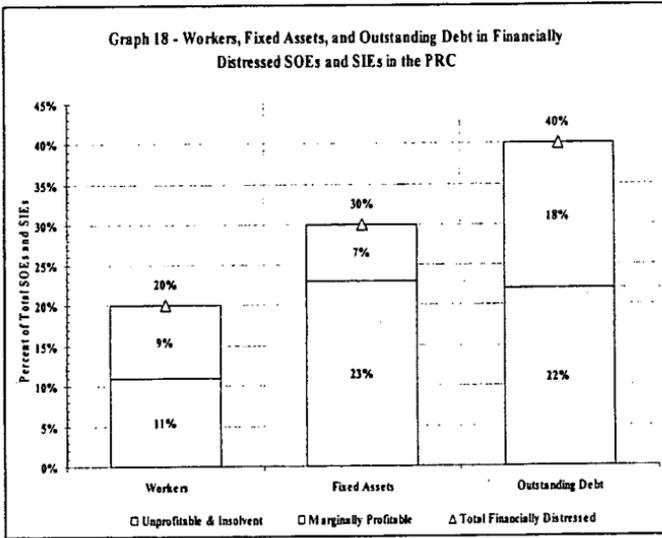
However, SOEs and SIEs are notoriously inefficient. The Organization for Economic Cooperation and Development (OECD) measured the total factor productivity (TFP) in a broad cross-section of firms in the PRC. TFP refers to the portion of the increase in economic output that cannot be attributed to increases in the quantity or the quality of factor inputs. Thus, TFP represents the gains in output from efficiency and innovation. The OECD found that the TFP of private Chinese firms and Chinese subsidiaries of foreign multinational firms is double the TFP of SOEs and one and one-half times the TFP of SIEs during 1998–2003 after controlling for size, location, and industry (see Graph 17).³³



³³ OECD Survey: 86.

Consequently, the average return on equity was 6.7 percent in all SOEs during 2003.³⁴ Moreover, the OECD found insolvent or unprofitable SOEs and SIEs accounted for 11 percent of the workers, 23 percent of the fixed assets, and 22 percent of the outstanding debt in all SOEs and SIEs. Marginally profitable SOEs and SIEs accounted for 9 percent of the workers, 7 percent of the fixed assets, and 18 percent of the outstanding debt in all SOEs and SIEs. When combined, these financially distressed SOEs and SIEs accounted for 20 percent of the workers, 30 percent of the fixed assets, and 40 percent of the outstanding debt in all SOEs and SIEs (see Graph 18).³⁵

SOEs and SIEs use their *guanxi* to secure favorable regulations and preferential access to loans from Chinese banks and other depository institutions. Consequently, many SOEs and SIEs face a "soft budget constraint" (i.e. Chinese banks and other depository institutions lend to the SOEs and SIEs without regard to their ability to repay their loans). Non-market loans allow many financially distressed SOEs and SIEs to continue operations and invest in new fixed assets when market discipline would force these SOEs and SIEs to shutter operations or to forego the acquisition of fixed assets.



VII. A DYSFUNCTIONAL FINANCIAL SYSTEM

A. Bank-centric, state-directed financial system

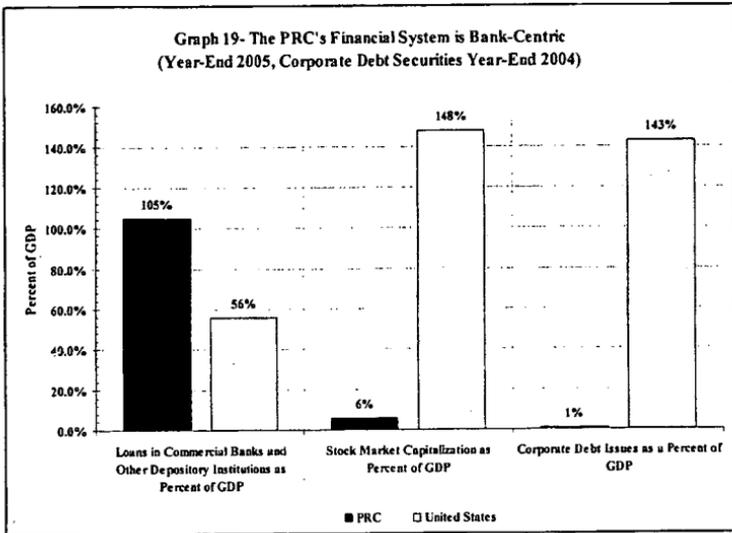
The PRC's financial system is very bank-centric. At year-end 2004, corporate debt issues amounted to 1 percent of GDP in China compared to 143 percent of GDP in the United States.³⁶ At year-end 2005, equity issues (marketable shares) amounted to 6 percent of GDP in China compared to 148 percent of GDP in the United

³⁴ OECD Survey: 105.

³⁵ OECD Survey: 102-104.

³⁶ OECD Survey: 42; author's calculation based on data from World Federation of Exchanges and U.S. Bureau of Economic Analysis/Haver Analytics.

States;³⁷ and loans at banks and other depository institutions amounted to 105 percent of GDP in China compared to 56 percent of GDP in the United States (see Graph 19).³⁸



Banking assets are highly concentrated in the PRC (see Graph 20). The four major state-owned commercial banks—the Agricultural Bank of China, the Bank of China, China Construction Bank, and the Industrial Commercial Bank of China—controlled 57.1 percent of banking assets at year-end 2005.³⁹ Twelve joint stock commercial banks⁴⁰ controlled another 16.8 percent of banking assets at year-end 2005.⁴¹

³⁷ Author calculation based on data from China Securities Regulatory Commission/Haver Analytics, China National Bureau of Statistics/Haver Analytics, New York Stock Exchange and NASDAQ/Haver Analytics, and U.S. Bureau of Economic Analysis/Haver Analytics.

³⁸ Author's calculation based on data from the People's Bank of China/Haver Analytics, China National Bureau of Statistics/Haver Analytics, Federal Reserve Flow of Funds/Haver Analytics, and U.S. Bureau of Economic Analysis/Haver Analytics.

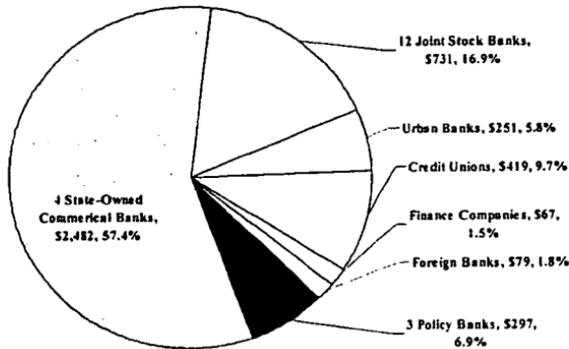
³⁹ Ibid.

⁴⁰ The twelve joint stock commercial banks are:

1. Bank of Communications
2. CITIC Bank
3. Everbright Bank
4. Evergrowing Bank
5. Hua Xia Bank
6. Guangdong Development Bank
7. Shenzhen Development Bank
8. China Merchants Bank
9. Shanghai and Pudong Development Bank
10. Industrial Bank
11. Minsheng Bank
12. Zheshang Bank

⁴¹ Author's calculation based on data from People's Bank of China/Haver Analytics.

Graph 20 - Banking is Concentrated in the PRC
 Assets in Types of Banks and Other Depository Institutions in Billions of U.S. Dollars and as a Percentage of Assets in All Banks and Other Depository Institutions as of Year-End 2005



Despite some progress in developing credit evaluation and risk management skills, non-market criteria may still influence over one-half of lending decisions. This occurs through both *guanxi* loans⁴² and policy loans.⁴³ Non-market lending affects the overall composition of the loan portfolios in Chinese banks and other depository institutions. While banks in other economies extend most of their loans to households and small- to medium-sized private firms, 64.5 percent of outstanding loans in the PRC at year-end 2005 were extended to SOEs and SIEs (see Graph 21).⁴⁴

Centrally directed industrial policy still governs the issuance of debt and equity securities in the PRC. The State Council—the equivalent of the President's cabinet in the United States—must approve the issuance of all equity securities on Chinese stock exchanges. The National Development and Reform Commission, which is the PRC's industry policy agency and reports to the State Council, must approve the issuance of all corporate debt securities. Consequently, nearly all of the proceeds from corporate debt and equity issues in the PRC have gone to SOEs and SIEs.⁴⁵

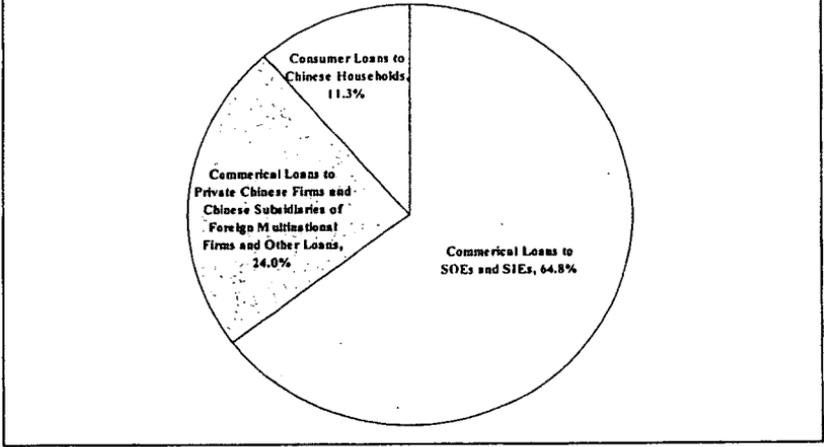
⁴² *Guanxi* lending refers to loans that banks make to individuals, firms, organizations, or governments based on personal relationships between bank officers and borrowers. Under *guanxi* lending, banks grant borrowers larger loans, lower interest rates, or more favorable terms than banks would willingly grant to borrowers without a personal relationship.

⁴³ Policy lending refers to loans that banks make to individuals, firms, organizations, or governments based on government regulations or suasion rather than market criteria. Under policy lending, banks grant borrowers larger loans, lower interest rates, or more favorable terms than banks would willingly grant in the absence of government regulation or suasion.

⁴⁴ Author's calculation based on data from People's Bank of China/Haver Analytics. Allocation of commercial loans to SOEs and SIEs and to private firms based on Diana Farrell et al., *Putting China's Capital to Work: The Value of Financial System Reform* (McKinsey Global Institute, May 2006): 11.

⁴⁵ *Ibid.*: 15.

Graph 21 - Outstanding Loans by Type as a Percentage of Total Outstanding Loans at Banks and Other Depository Institutions in the PRC, Year-End 2005



B. Economic costs of non-market allocation of financing

In a recent study of the PRC's financial system, Farrell et al. (2006) found that the non-market allocation of financing harms the Chinese economy in two ways:

- Non-market allocation of financing reduced the potential size of the PRC's GDP by \$321 billion a year or about 14 percent of its current GDP;⁴⁶ and
- Non-market allocation of financing has slashed the average real return on savings in the PRC to a mere 0.5 percent over the last decade. This compares to an average real return on savings in the United States of 3.1 percent over the same period.⁴⁷

C. Nonperforming loans

Chinese banks and other depository institutions had a large legacy of nonperforming loans from non-market lending to SOEs and SIEs prior to 1999. Approximately \$170 billion of nonperforming loans have been transferred from the four major state-owned commercial banks to four asset management companies during 1999 and 2000.⁴⁸ So far, the asset management companies have disposed of 67 percent of these nonperforming loans, recovering about 21 cents on \$1 of face value. Another \$136 billion of nonperforming loans have been transferred to asset management companies during the last two years.

⁴⁶ Ibid: 81.

⁴⁷ Ibid: 90-91.

⁴⁸ The PRC's central government established asset management companies to liquidate nonperforming loans. The PRC modeled their asset management companies on the Resolution Trust Corporation. Congress established the Resolution Trust Corporation in 1989 through the Financial Institutions Reform, Recovery, and Enforcement Act. The Resolution Trust Corporation liquidated the nonperforming loans and other assets of saving and loan associations that had been declared insolvent.

Both Chinese officials and private economists acknowledge that the PRC has done a good job in identifying and resolving pre-1999 nonperforming loans in Chinese banks and other depository institutions. However, Chinese officials and private economists disagree about the current size of the nonperforming loan problem in the PRC. In particular, Chinese officials and private economists have differences of opinion on how many loans made by Chinese banks and other depository institutions since 1998 are now or will become nonperforming loans.

The China Banking Regulatory Commission reported that nonperforming loans in commercial banks have fallen to \$164 billion, or 6.6 percent of GDP as of March 31, 2006.⁴⁹ Nonperforming loans in other depository institutions amounted to \$42 billion, or 1.7 percent of GDP as of March 31, 2006.⁵⁰

In a widely publicized study, Ernst & Young estimated that nonperforming loans amounted to \$911 billion, or 41 percent of GDP at year-end 2005.⁵¹ The People's Bank of China and the China Banking Regulatory Commission vigorously disputed the Ernst & Young estimate. Under pressure from Chinese officials, Ernst & Young, which audits the Bank of China and the Industrial Commercial Bank of China, withdrew its study nine days after its release.⁵²

However, the withdrawn Ernst & Young estimate is broadly in line with other private estimates. As of March 31, 2006, for example, Fitch Ratings estimated that commercial banks and other depository institutions had another \$270 billion of problem loans in addition to \$164 billion of officially reported nonperforming loans in commercial banks, \$42 billion of officially reported nonperforming loans in other depository institutions, and \$197 billion of nonperforming loans remaining in the asset management companies.⁵³ If all of the estimated problem loans become nonperforming, then nonperforming loans would equal \$673 billion, or 27.3 percent of GDP as of March 31, 2006.

Because of insecure property rights, capricious zoning, arbitrary inspections, and widespread corruption, individuals and private firms without strong *guanxi* with the government and party officials cannot easily participate in the real estate industry. Thus, most construction firms and developers in the PRC are SOEs or SIEs. Real estate speculation is now rampant in major Chinese cities. On June 13, 2006, *Business Week* recently reported:

People's Bank of China deputy governor Wu Xiaoling has warned publicly that the value of total private and com-

⁴⁹ Author's calculations based on data from China Banking Regulatory Commission/China National Bureau of Statistics/Haver Analytics.

⁵⁰ Charlene Chu, Lynda Lin, Kate Lin, and David Marshall, "China: Taking Stock of Banking System Nonperforming Loans," Fitch Ratings (May 30, 2006). Found at <http://www.fitchratings.com/dtp/pdf2-06/bchi3005.pdf>.

⁵¹ Global Nonperforming Loan Report, Ernst & Young (May 3, 2006): 14. Author's calculation of nonperforming loans as a percent of GDP.

⁵² Elaine Kurtenbach, "Ernst & Young Nixes Report Putting China's Potential Nonperforming Loans at US\$911 Billion," *Financial Times* (May 15, 2006). Found at http://search.ft.com/search?ArticleId=060515009128&query=Ernst+%26+Yong+China&vsc_appld=powerSearch&offset=0&resultsToShow=10&vsc_su_bjectConcept=&vsc_companyConcept=&state=More&vsc_publicationGroups=TOPWFT&searchCat=-1.

⁵³ Charlene Chu, Lynda Lin, Kate Lin, and David Marshall, "China: Taking Stock of Banking System Nonperforming Loans," Fitch Ratings (May 30, 2006). Found at <http://www.fitchratings.com/dtp/pdf2-06/bchi3005.pdf>.

mercial investment in real estate shot up from about 2.5 percent of total gross domestic product in 2001 to 8.6 percent in 2005. Real estate bubbles will affect the economy and people's lives seriously, especially when bubbles burst,⁵⁴

In the last few years, Chinese banks and other depository institutions have aggressively lent to SOEs and SIEs for construction and real estate development. This explosive loan growth may be creating mountains of new nonperforming loans in Chinese banks and other depository institutions that bank and government officials have not yet recognized.

D. Recapitalization

To recapitalize ailing banks, the PRC's central bank, the People's Bank of China, injected \$60 billion of foreign exchange reserves into the four major state-owned commercial banks between 2003 and 2005. During 2005, foreign financial services firms invested \$18 billion in minority shares in Chinese banks (see Table 1).

An initial public offering (IPO) of 13 percent of the shares raised \$9.2 billion for the China Construction Bank in October 2005, while an IPO of 10.5 percent of the shares raised \$9.7 billion for the Bank of China in May 2006. During the rest of 2006, IPOs are expected to raise about \$10 billion for the Industrial Commercial Bank of China, \$2 billion for the China Merchants Bank, \$1 billion for the Minsheng Bank, and \$1 billion for the CITIC Bank.

Table 1.—Foreign Direct Investment in Chinese Banks

| Chinese Banks | Foreign Investors | Ownership |
|--|---|-------------------------------|
| Industrial Commercial Bank of China | Goldman Sachs, American Express, & Allianz Group. | 10% |
| China Construction Bank | Bank of America | 8.67% (may increase to 19.9%) |
| | Temasek Holdings | 5.98% |
| Bank of China | Royal Bank of Scotland | 10% |
| | Merrill Lynch, Li Ka-Shing, & Temasek Holdings. | 10% |
| | UBS | 1.6% |
| | Asian Development Bank | 0.24% |
| Bank of Communications | HSBC | 19.9% |
| Shanghai Pudong Development Bank | Citigroup | 4.6% (may increase to 24.9%) |
| Minsheng Bank | IFC | 0.93% |
| | Temasek Holdings | 3.9% |
| Industrial Bank | Hang Seng Bank | 15.98% |
| | IFC | 4% |
| | Singapore Investment | 5% |
| Hu Xia Bank | Deutsche Bank | 9.9% |
| | Sai Oppenheim | 4.08% |
| | Pangaea Capital Management | 6.9% |
| Shenzhen Development Bank | Newbridge Capital | 17.98% (will drop) |
| | GE Capital | 7.3% (pending) |
| Guangdong Development Bank | Citigroup | Seeking 85% |
| Beijing Bank | ING Group | 19.9% |
| | IFC | 5% |
| Shanghai Bank | HSBC | 8% |
| | IFC | 7% |
| Nanjing City Commercial Bank | IFC | 5% |
| | BNP | 19.2% |

⁵⁴Brian Bremner, "China: Big Economy, Bigger Peril?" Business Week (June 13, 2006). Found at: http://www.businessweek.com/globalbiz/content/jun2006/gb20060613-16805_0.htm.

Table 1.—Foreign Direct Investment in Chinese Banks—Continued

| Chinese Banks | Foreign Investors | Ownership |
|-------------------------------------|--------------------------------------|-----------|
| Tiajin Bohai Bank | Standard Chartered | 19.99% |
| Hangzhou City Commercial Bank | Commonwealth Bank of Australia | 19.99% |
| Jinan City Commercial Bank | Commonwealth Bank of Australia | 11% |
| Xian City Commercial Bank | IFC | 2.5% |
| | Bank of Nova Scotia | 2.5% |
| Ping An Bank | HSBC | 27% |
| Nanchong City Commercial Bank | DEG | 10% |
| | SIDT | 3.3% |
| Ningbo City Commercial Bank | Oversea-Chinese Banking Corp. | 12.2% |

In March 2006, the Economist Intelligence Unit observed:

[Q]uestions remain over whether risk management standards in the banking sector have improved in a way that would prevent such problems from re-emerging. One particular problem is the government's strong control over lending patterns, which encourages capital to be allocated on the basis of policy rather than profit.⁵⁵ Senior PRC officials face a conundrum. If the government were to cede its control over Chinese banks, they would curtail their non-market lending and strengthen their balance sheets. Market lending would use Chinese saving more efficiently. Consequently, the PRC's long-term real GDP growth would be higher, and Chinese households would earn a better return on their savings. However, curtailing non-market lending would cause many financially distressed SOEs and SIEs to fail, leading to higher unemployment in the short run. These short-term dislocations could break the "bargain" that has kept the CPC in power.

Non-market lending may buy political stability for a time. However, in its accession agreement with the World Trade Organization, the PRC committed to open its domestic banking market to foreign banks in 2007, allowing them make loans to and receive deposits from all Chinese households and firms in yuan. Implementing this commitment will create a viable alternative to Chinese banks and other depository institutions for Chinese households and firms.

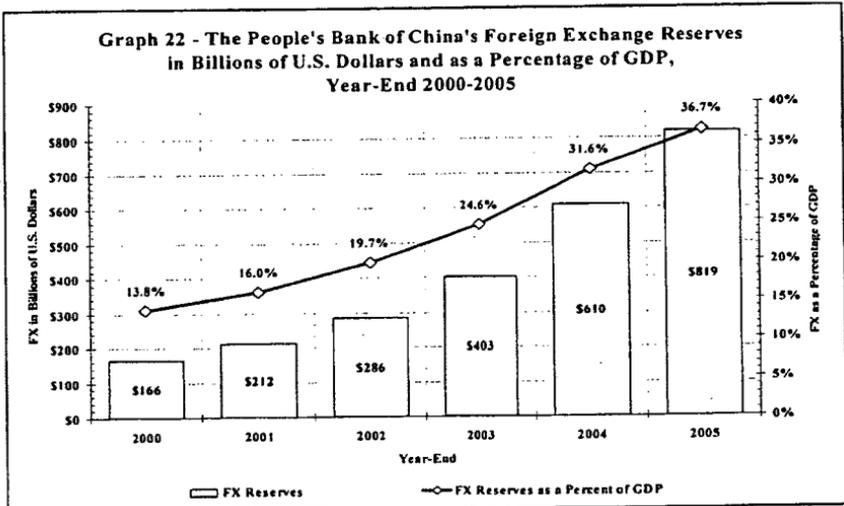
Unlike the United States, the central government does not insure deposits in Chinese banks and other depository institutions. If financial weaknesses are allowed to fester, runs, in which a large number of depositors suddenly attempt to withdraw all of their funds from Chinese banks and place them in "safer" foreign banks, could soon occur. Runs could cause some Chinese banks to fail. To avert a financial panic and a possible recession, the People's Bank of China and the central government would likely be forced to bail out failing banks.

⁵⁵ Economist Intelligence Unit (2006): 30.

VIII. DOMESTIC AND INTERNATIONAL IMBALANCES

On July 21, 2005, the PRC broke its previous peg with the U.S. dollar, revalued the renminbi⁵⁶ by 2.1 percent, and instituted an adjustable exchange rate tied to a basket of currencies including the U.S. dollar. Prior to this change, the People's Bank of China actively intervened in foreign exchange markets to maintain the peg of the renminbi to U.S. dollar. Nevertheless, the People's Bank of China continued to actively intervene to limit any appreciation of the renminbi against the U.S. dollar. One year after this change, the renminbi has appreciated by only 3.56 percent against the U.S. dollar (from 1 yuan equal to 12.0824 U.S. cents on July 21, 2005, to 1 yuan equal to 12.5128 U.S. cents on July 20, 2006).⁵⁷

Graph 22 shows the accumulation of foreign exchange reserves in terms of both U.S. dollars and as a percentage of the PRC's GDP. By year-end 2005, the People's Bank of China accumulated \$819 billion, or 36.8 percent of GDP, in foreign exchange reserves. Through June 2006, the People's Bank of China accumulated foreign exchange reserves of \$941 billion, an increase of 14.9 percent in just six months.⁵⁸



Interventions of the People's Bank of China suppress the foreign exchange value of the renminbi below a market-determined level. In November 2005, Morris Goldstein at the Institute for International Economics estimated that the renminbi was undervalued by between 20 percent and 40 percent using an underlying balance approach and by between 20 percent and 30 percent using a global payments balance approach. This is broadly in line with the major-

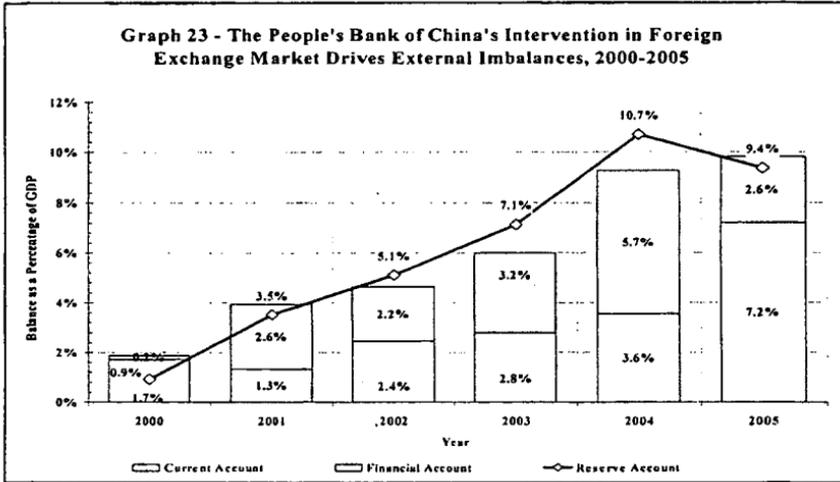
⁵⁶In the United States, "dollar" is both the name of the U.S. currency and of its unit of account. In the People's Republic of China, the "renminbi" is the name of the PRC's currency, and "yuan" is the name of the PRC's unit of account.

⁵⁷Equivalently, the U.S. dollar has depreciated by only 3.44 percent against the renminbi (from \$1 equal to 8.2765 yuan on July 21, 2005, to \$1 equal to 7.9918 yuan on July 20, 2006). Federal Reserve Bank of New York/Haver Analytics.

⁵⁸People's Bank of China, State Administration of Foreign Exchange, and China National Bureau of Statistics /Haver Analytics.

ity of private sector estimates.⁵⁹ This exchange rate policy contributes to both domestic and international balances.

Graph 23 shows how the interventions of the People's Bank of China drive the PRC's external imbalances. In the absence of official intervention, the sign on the current account balance and the financial account balance should be opposite. However, during the last six years, the PRC has run both current account surpluses (in horizontal stripe) and financial account surpluses (in vertical stripe). Official intervention through the reserve account (as represented by the solid black line with diamonds) has made current account and financial account surpluses possible simultaneously.



A. Underconsumption and dependency on export-led growth

Chinese farmers are notoriously inefficient. The average productivity of a Chinese farmer is one-sixteenth of the average productivity of other Chinese workers. This widening productivity gap is increase income inequality between urban and rural areas in the PRC. The OECD reported that the average income of urban workers was three times the average income of rural workers.⁶⁰

Chinese farmers may lease agricultural land from local governments for up to 30 years.⁶¹ Unlike residential, commercial, or industrial lessees, however, agricultural lessees may not mortgage or transfer their leases. Moreover, a survey found that only 13 percent of agricultural leases forbid local officials from reallocating land during the term of a lease.⁶² If agricultural lessees were to stop farming and move to a city, they would forfeit their leases, and

⁵⁹ Morris Goldstein, *Renminbi Controversies*, Prepared for the Conference on Monetary Institutions and Economic Development, Cato Institute, November 3, 2005, revised December 2005): 1-4.

⁶⁰ OECD Survey: 44-45.

⁶¹ The implementation of 30-year leasing is not universal and varies widely both among and within provinces. A survey found that only one-third of the villages in eleven provinces had implemented 30-year leasing. In the remaining villages, half of the agricultural land was leased on a long-term basis, while the remainder was leased through annual actions. OECD Survey: 113.

⁶² OECD Survey: 113.

their land would be redistributed to other farmers.⁶³ Consequently, Chinese farmers have neither the ability nor the incentive to invest in fixed assets that would improve their productivity and increase their income.

Under its accession agreement with the World Trade Organization, the PRC agreed to open its domestic market to agricultural imports. If the renminbi were to appreciate rapidly and substantially, many Chinese farmers would not be able to compete with cheaper agricultural imports and would cease farming.

Because millions of Chinese are still employed in agriculture, currency appreciation could trigger mass unemployment and political instability in rural areas. On May 16, 2006, Business Week reported:

To the Chinese government, the agricultural industry and small farm villages are the biggest political issue," says former Japanese financial diplomat Eisuke Sakakibara.⁶⁴

Under the "harmonious society" policy, President Hu Jintao is trying to increase rural income and provide alternative employment for displaced farmers by abolishing the two-thousand-year-old agricultural tax, expanding micro-financing for starting small businesses, and investing in mega-projects in rural areas. Consequently, Hu wants the renminbi to appreciate very slowly until the benefits of these measures become apparent.

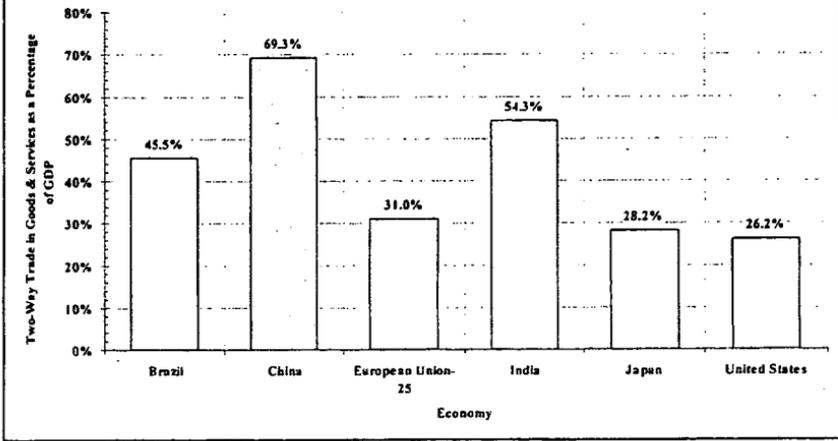
However, this exchange rate policy creates profound imbalances in the rest of the PRC's economy. Intervention reduces the real incomes of Chinese workers and their consumption of imported goods and services. Consequently, the PRC cannot rely on domestic consumption to drive its economic expansion. The PRC remains overly dependent on exports and investment for economic growth.

Consequently, the PRC's two-way trade as a percent of its GDP is far higher than other populous economies (see Graph 24).

⁶³In some cases, farmers may change their residential registration to a nearby village without losing their leases. However, these lessees may be required to pay additional fees to their local government to retain their leases. OECD Survey: 113.

⁶⁴Brian Bremner, "Controlling China's Runaway Growth," Business Week (May 16, 2006). Found at: http://www.businessweek.com/globalbiz/content/may2006/gb20060516_457180.htm.

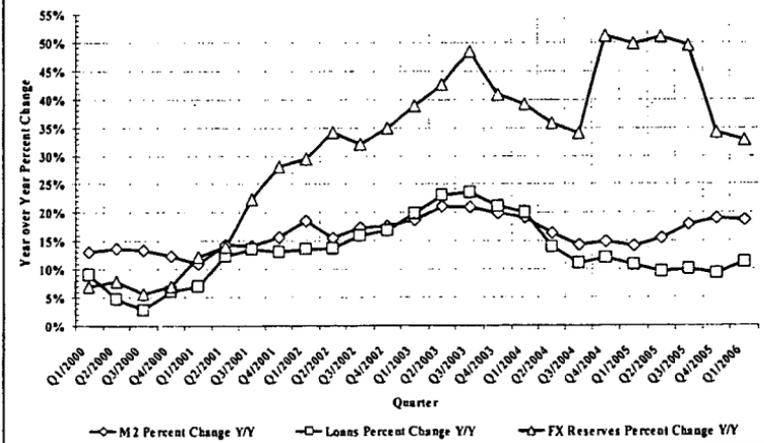
Graph 24 - Two-Way Trade in Goods & Services as a Percentage of GDP in Major Populous Economies, 2005



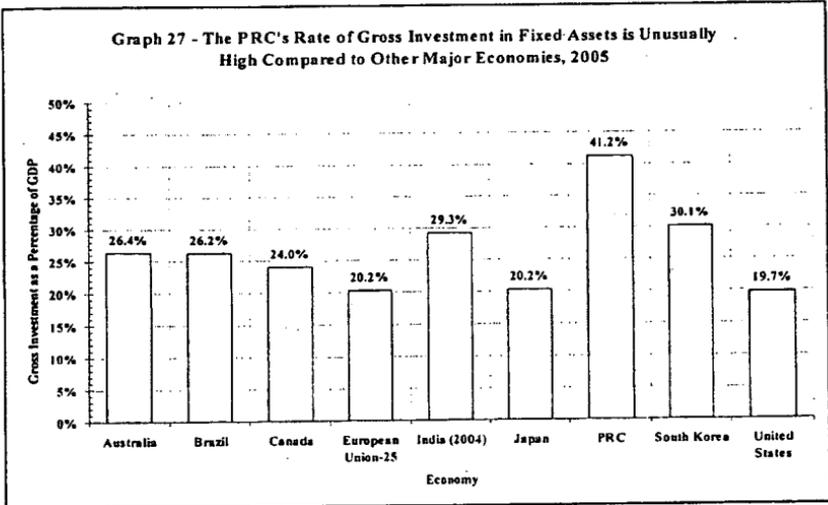
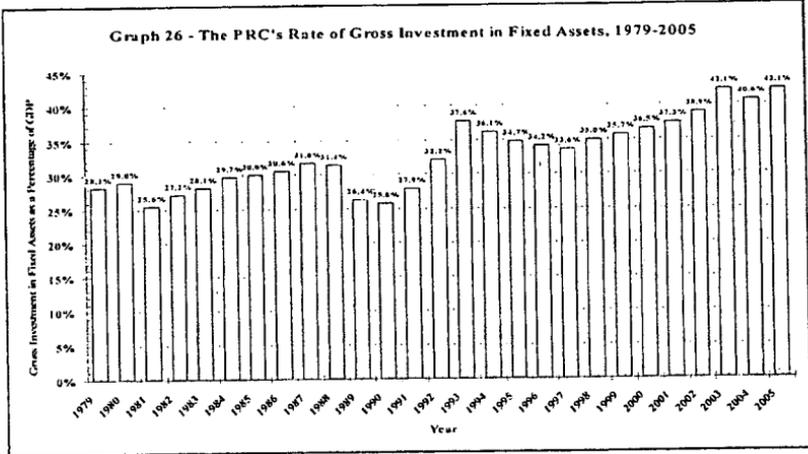
B. Overinvestment and malinvestment

While the People's Bank of China has tried to sterilize its interventions, the International Monetary Fund reported that China was only able to mop-up about half of the excess liquidity through bond sales. The remainder of this excess liquidity has contributed to rapid growth in both M2 and loans since 2000. The International Monetary Fund noted that the loan growth would have been even higher without the administrative interventions of the People's Bank of China and the China Banking Regulatory Commission (see Graph 25).

Graph 25 - Year over Year Percent Changes in M2, Loans, and Foreign Exchange Reserves, Q1/2000 - Q1/2006



The combination of (1) excessive liquidity from interventions that has not been fully sterilized and (2) guanxi loans and policy loans extended by Chinese banks has channeled funds to SOEs and SIEs, which invest in fixed assets. This aggressive lending helped to boost the PRC's rate of gross investment in fixed assets to 42.1 percent of GDP in 2005 (see Graph 26).⁶⁵ The PRC's gross investment rate is far higher than other major economies (see Graph 27):



Although the PRC's non-market allocation of financing may boost production and investment in the short term, the PRC's economic growth is sustainable over the long term if, and only if, firms:

- produce goods and services that the market demands; and
- invest in fixed assets that have a positive net present value.⁶⁶

⁶⁵ Author's calculations based on data from China National Bureau of Statistics/Haver Analytics.

⁶⁶ Net present value is the expected future revenues from an investment discounted by a rate that reflects the real interest rate, expected future inflation, and the risk associated with such

The rapid accumulation of fixed assets by the SOEs and the SIEs suggests that overinvestment (i.e., the acquisition of too many fixed assets for producing goods and services given expected future demand) and malinvestment (i.e., the acquisition of the wrong types of fixed assets for producing goods and services to meet expected future demand) may be occurring in the PRC. According to the Economist Intelligence Unit, "Oversupply has driven down prices in many industries, such as vehicles, steel, and aluminum."⁶⁷ Moreover, the Economist Intelligence Unit reported:

Government officials have long warned of oversupply in the [steel] sector, and in December 2005 the head of the National Development and Reform Commission, Ma Kai, declared that oversupply had led steel prices to decline to 2003 levels, with the prices of some steel products falling below cost. (This was a serious admission for a Chinese official, as it could pave the way for anti-dumping suits in China's steel export markets.)⁶⁸

An economic boom caused by overinvestment and malinvestment is not sustainable. The inevitable liquidation of overinvestment and malinvestment could cause a recession in the PRC and slow economic growth in the rest of the world.

To keep the renminbi undervalued, the People's Bank of China exchanges yuan for the U.S. dollars that the PRC's current and financial account surpluses pump into the Chinese economy. This intervention leaves Chinese banks and other depository institutions flush with cash. To remain profitable, Chinese banks are lending their excess deposits.

Senior PRC officials are clearly concerned that the excessive lending is fueling an overinvestment and malinvestment bubble. Fearing that higher interest rates would attract more foreign capital, the People's Bank of China is reluctant to increase interest rates significantly to curb the rapid growth of domestic bank loans and the resulting inflation of an investment bubble. Instead, senior officials are relying on moral suasion and regulatory changes to moderate loan growth. On June 16, 2006, the Financial Times reported that the State Council had issued a series of edicts intended to curb the rapid growth of bank lending and new investments in real estate development. The article observed:

The root cause of the liquidity bubble, say economists, is China's managed currency, which has only appreciated by about 3 percent against the dollar since last July's decision to end a decade-long peg to the greenback.⁶⁹

Without a significant appreciation in the renminbi, private economists doubt that such administrative measures will have a significant effect.

investment less the current and future costs (also discounted) associated with the same investment.

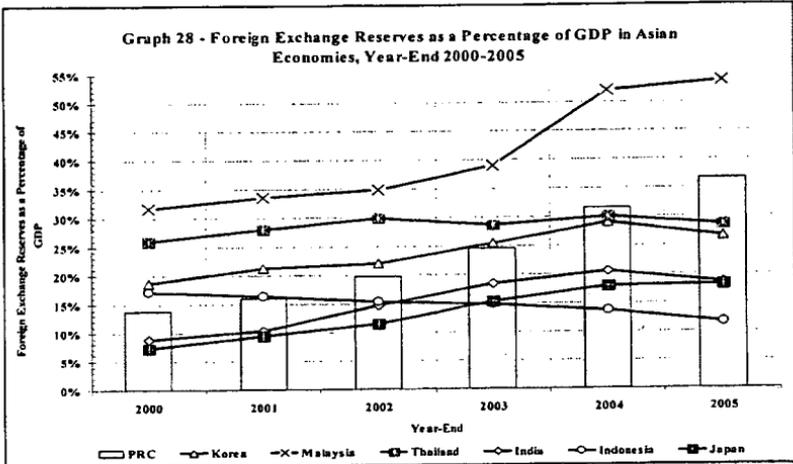
⁶⁷ Economist Intelligence Unit (2006): 25.

⁶⁸ Economist Intelligence Unit (March 2006): 25–26.

⁶⁹ Richard McGregor, "Beijing Reins in Lending in Bid to Cool Growth," Financial Times (June 16, 2006).

C. International imbalances

Because other developing Asian economies have labor-intensive industries and assembly operations that compete with the PRC, central banks in these economies fear that currency appreciation would put local firms or local subsidiaries of foreign multinational firms at a competitive disadvantage against Chinese firms or Chinese subsidiaries of foreign multinational firms. Thus, other developing Asian economies have mimicked the PRC's exchange rate policy (see Graph 28).



The People's Bank of China and central banks in other developing Asian economies use their accumulated foreign exchange to buy foreign debt securities, mainly U.S. Treasuries and Agencies, creating a non-market financial inflow into the United States. Given the accounting relationship between the current account and the capital and financial accounts, this non-market financial inflow increases the foreign exchange value of the U.S. dollar, the U.S. current account deficit, and the U.S. financial account surplus above market-determined levels. According to some economists, if the PRC and other developing Asian economies were to float their currencies, the U.S. current account deficit could decline by up to 10 percent.⁷⁰

IX. ANALYSIS

The PRC's current policies may not support a long-term continuation of the rapid growth that the Chinese economy has enjoyed in recent years. Because of the growing size of the Chinese economy and its deep integration through investment and trade flows with the rest of the world, a recession in the PRC would have adverse effects on the global economy.

The CPC's desire to retain power drove economic reform and shaped its contours. Senior officials are well aware that the PRC confronts a number of interrelated challenges to continued economic growth:

⁷⁰ C. Fred Bergsten, "Clash of the Titans," Newsweek (international edition), April 24, 2006.

- A smaller working-age population will reduce China's labor supply. The combination of a higher labor demand and a smaller labor supply will inevitably increase the real compensation for all Chinese workers. Consequently, the PRC's current comparative advantage of low-cost labor will erode. The PRC will begin to shed many of the low-wage jobs in labor-intensive manufacturing and assembly operations that it has gained. To sustain economic growth and create high-wage replacement jobs, the PRC must climb the development ladder.

- The PRC currently faces a shortage of professionals and highly skilled workers. To alleviate this shortage, the PRC has increased the number of colleges and universities by 61.0 percent from 1,075 in 1990 to 1,731 in 2004 and quadrupled the number of students in post-secondary education.⁷¹ However, this rapid expansion in the number of students appears to have undermined the quality of the post-secondary education that many students are receiving. Only about 10 percent of Chinese graduates receiving engineering degrees, for example, possess the minimum skills necessary for employment with U.S. engineering firms.⁷² As the PRC begins to climb the development ladder, the demand for professionals and highly skilled workers will increase dramatically. The quality problems with the Chinese workforce may decelerate the PRC's economic growth rate.

- Corruption and the weak protection of intellectual property rights may retard the development of Chinese firms in creative industries that would help the PRC climb the development ladder.

- The PRC's rapidly aging population poses additional problems. The lack of a social safety net, along with the limited availability of private retirement plans, consumer credit, and insurance products, drive Chinese households to save prodigiously. The resulting extraordinarily high gross saving rate hampers the PRC's ability to transition from export-led to domestic consumption-driven growth.

- SOEs and SIEs are generally inefficient. Many financially distressed SOEs and SIEs need large subsidies to survive. Guanxi loans and policy loans to subsidize financial distressed SOEs and SIEs have been a major cause of the nonperforming loan problem in Chinese banks and other depository institutions. Guanxi loans have also encouraged SOEs and SIEs to invest heavily in construction and real estate development. Many of these investments are speculative. A tidal wave of new nonperforming loans in Chinese banks and other depository institutions may now be forming.

- Non-market lending to SOEs and SIEs reduces the amount of credit available to Chinese households and private businesses, lowers the PRC's potential growth rate, and hinders the PRC's transition from export-led to domestic consumption-driven growth.

⁷¹ Economist Intelligence Unit (March 2005): 20.

⁷² Guy de Jonquieres, "The Critical Skills Gap," *Financial Times* (June 12, 2006).

- An undervalued renminbi creates excess liquidity in state-influenced Chinese banks and other depository institutions. Excess liquidity encourages bankers to lend aggressively. In turn, easy credit encourages SOEs and SIEs that are insulated from price signals and profitability constraints to make speculative investments in fixed assets. The nexus among an undervalued exchange rate, state-influenced Chinese banks, and SOEs and SIEs is apparently creating widespread overinvestment and malinvestment in the PRC. This is especially true in the real estate sector. Such an investment bubble is unsustainable over the long term.

- An undervalued renminbi also fans protectionist sentiment abroad. Protectionism is particularly dangerous for the PRC, whose economic growth has been extraordinarily dependent on exports and foreign direct investment.

- The absence of secure and transferable property rights in agricultural land and the limited availability of credit inhibit Chinese farmers from making the investments in fixed assets necessary to increase low agricultural productivity and raise rural incomes. The wide and growing income gap between rural and urban China is fueling social tensions. Because inefficient Chinese farmers cannot compete with cheaper agricultural imports if the foreign exchange value of the renminbi were to increase substantially, senior officials have resisted any substantial increase in the foreign exchange value of the renminbi. However, this official reluctance is simultaneously inflating an investment bubble domestically and creating unsustainable imbalances internationally, which together threaten the PRC's rapid economic growth.

Senior officials fear that comprehensive reforms to resolve these interrelated challenges would cause significant economic dislocations and increase unemployment and political unrest in the short run and could weaken the CPC's sway over the Chinese economy in the long run. Consequently, senior officials have responded with incremental policy changes. However, the PRC may be reaching the limits of the effectiveness of its incremental approach to reform.

The PRC must begin to climb the development ladder as Japan, South Korea, and Singapore have done and southeast Asian economies such as Malaysia and Thailand are doing. The distortions from an undervalued exchange rate, non-market lending, overinvestment, and malinvestment—particularly by the SOEs and SIEs and in the real estate sector—are interrelated. The economic imbalances created by these distortions, along with rising disgust at widespread corruption, are fueling social unrest, especially in rural China. Consequently, a more comprehensive approach to solving these problems is needed.

To quell social unrest, the PRC must curb corruption, strengthen the rule of law, and narrow the productivity and income gaps between workers in rural and urban China. To avoid a nasty recession, the PRC must begin to reduce some of the growing imbalances in its economy. Simultaneous reforms of the PRC's agricultural land policies, its financial services sector, and its foreign exchange rate regime are necessary to resolve these festering problems and sustain rapid economic growth.

X. CONCLUSION

Although the Chinese economy is booming, the PRC faces five major challenges to sustain rapid economic growth in the future:

- unfavorable demographics;
- corruption and a weak rule of law;
- financially distressed SOEs and SIEs;
- a dysfunctional financial system; and
- domestic and international imbalances.

The PRC's response to these challenges will, of course, determine the future performance of the Chinese economy. However, since the Chinese economy is so large and well integrated into the global economy, the performance of the Chinese economy will also affect the performance of the United States and other economies in the world.

So far, the PRC's approach to reform has been incremental. This incremental approach may be reaching the limits of its effectiveness. The challenges that the PRC now faces are deeply inter-related. A more comprehensive approach to reform is needed.

RANKING MINORITY MEMBER'S
VIEWS AND LINKS TO MINORITY
REPORTS

RANKING MINORITY MEMBER'S VIEWS AND LINKS TO MINORITY REPORTS

I. OVERVIEW

In 2006, President Bush and his supporters claimed that the economy was doing well and that all Americans were benefiting from his policies. For many Americans, however, those claims rang hollow because their own incomes were not growing fast enough to keep up with higher costs for energy, health care, and other critical expenditures, and they were not confident about their economic future.

A disconnect between aggregate indicators of economic performance and the experience of typical American families has been a feature of the economy under President Bush. While corporate profits and executive pay rebounded after the dot.com collapse and the 2001 recession, the wages and incomes of most Americans did not. Since 2001, the economy has grown but the benefits of economic growth and productivity have shown up in the bottom lines of companies and in the incomes of highly compensated individuals—not in the paychecks of most workers.

For the most part, the Bush Administration and the Republican majority in the Congress have been blind to the challenges facing American families struggling with high energy prices, rising health care expenses, and the mounting costs of sending their kids to college. A rare exception came only recently when Treasury Secretary Paulson, shortly after taking office, acknowledged that,

... we still have challenges, and amid this country's strong economic expansion, many Americans simply aren't feeling the benefits. Many aren't seeing significant increases in their take-home pay. Their increases in wages are being eaten up by high energy prices and rising health-care costs, among others.

Instead of pursuing policies that address those problems, however, the Administration has espoused policies such as repeal of the estate tax and Social Security privatization that aggravate underlying market trends toward widening income inequality and increasing income insecurity. At the same time, they have opposed policies such as increasing the minimum wage.

In 2006 the Bush Administration and the Republican majority in the Congress once again pursued budget and tax policies that added to the deficit, lowered taxes for the well-to-do, and reduced spending for programs that benefit middle- and lower-income families. The major tax legislation enacted, for example, was a \$70 billion tax reconciliation bill that extended dividend and capital gains provisions that were not set to expire for at least two years and that mainly benefit high-income taxpayers. Yet that legislation made only a temporary one-year fix to the alternative minimum

tax (AMT) and failed to extend popular expiring provisions such as the R&D tax credit.

The Republican majority tried several times to eliminate or substantially scale back the federal estate tax, the most progressive tax currently on the books. Had that effort been successful it would have added almost \$1 trillion to the federal debt in the first ten years after going into effect. At one point, the Majority tried to achieve near elimination of the estate tax by holding hostage a long-overdue increase in the minimum wage and the extension of several popular tax measures that were due to expire.

That ploy failed, but an increase in the minimum wage will have to wait until the Democratic-controlled 110th Congress convenes in January. Unless the 109th Congress acts in its final lame-duck week, so too will the extension of tax measures such as the deduction for qualified tuition and related expenses, the deduction for state and local sales tax, the research and development credit, the work opportunity and the welfare-to-work credits, the deduction for expenses of school teachers, and the election to treat combat pay as earned income for the earned income credit.

The United States is at war and yet there is no sense of the shared sacrifice that has united this country in past conflicts. Ironically, the estate tax was first adopted in the nineteenth century to pay for government shortfalls due to wartime spending. Our military families are making tremendous sacrifices, and too many of them have made the ultimate sacrifice in service to our country. With \$320 billion appropriated or pending for Iraq operations to date and the number of service men and women killed approaching 3,000, the human and financial tolls are each more staggering than imagined.

The country faces mounting war costs of about \$10 billion per month, the impending retirement of the baby boom generation, and deficits as far as the eye can see. Yet the Bush Administration has focused its efforts on bettering the lives of those that need it the least while leaving hard working families further behind.

The President's tax cuts are a drain on national saving and our children and grandchildren will pay the price. The personal saving rate, which these tax cuts were presumably designed to stimulate, has been going down and is now negative. On average, people are spending more than their current income. To be sure, soaring corporate profits and retained earnings have boosted the business part of private saving. But this is offset by budget deficits, which these tax cuts will only increase.

Ultimately, the result of the Administration's irresponsible fiscal policy is that many domestic priorities get shortchanged. We need a change in direction for the majority of American families to share in the benefits of economic growth and productivity and to secure the country's economic future.

II. THE ECONOMY IN 2006

In early 2006, the U.S. economy rebounded from the previous year's hurricanes and continued its business-cycle recovery from the 2001 recession. However, weakness in the housing market became an increasing drag on growth in the second and third quarters of the year. Because other sectors such as business investment

and net exports did not provide sufficient offsetting strength, economic growth slowed to a rate below what most forecasters think is a pace consistent with achieving and maintaining full employment.

Inflation was a worry as energy prices rose sharply through the first eight months of the year. However, energy price declines in September and October produced a fall in the overall consumer price index (CPI) and an easing of concerns about underlying ("core") consumer price inflation.

Monetary policy reached a critical juncture in 2006. The Federal Reserve switched from a policy of gradually raising interest rates to one of holding rates constant as economic growth moderated. The Fed has indicated that it will be sensitive to incoming data on the outlook for both economic growth and inflation in setting the course of monetary policy going forward.

The budget deficit declined more than expected in 2006. Nevertheless, the deficit remains large, the budget outlook going forward has not improved, and the country has an unsustainable payments imbalance with the rest of the world. The consequences of large federal budget deficits have been depressed national saving and increased borrowing from the rest of the world. Low national saving and the need to pay back foreign borrowing with interest means future national income will be lower than if we were financing our national investment with our own national saving.

Economic growth

The economy slowed during the first three quarters of 2006. Most forecasters recognized that the first-quarter's growth rate of 5.6 percent at an annual rate was a temporary spurt that reflected an economic rebound from the Gulf Coast hurricanes and other special factors that had tempered growth late in 2005. The sharpness of the subsequent slowing, however, may have been greater than many forecasters were expecting. The economy grew at a 2.6 percent annual rate in the second quarter and then slowed even more sharply to just a 2.2 percent annual rate in the third quarter. That pace is well below the 3 to 3½ percent range that most economists, including Fed Chairman Bernanke, believe is sustainable without generating inflationary pressures.

The key contributor to the growth slowdown was residential investment, which plunged at an 18.0 percent annual rate in the third quarter after falling 11.1 percent in the second quarter. That decline in new housing investment subtracted 0.7 percentage point from the overall growth rate in the second quarter and 1.2 percentage points from the overall growth rate in the third quarter.

Employment and wages

After fluctuating in the 4.6 to 4.8 percent range for the first nine months of 2006, the unemployment rate dipped unexpectedly to 4.4 percent in October. Other labor market indicators, however, suggested caution before concluding that there has been any significant tightening of the labor market.

First, the decline in the unemployment rate was not matched by increased entry into the labor force that might indicate greater confidence in finding a job. In fact, both the fraction of the population

working or looking for work (the labor force participation rate) and the proportion of the population with a job (the employment-to-population ratio) remained a full percentage point lower than they were at the start of the 2001 recession.

Second, employers added just 92,000 jobs to their payrolls in October, when 125,000 to 140,000 jobs per month are needed to keep pace with normal growth in the labor force. In the six months ending in October payroll employment growth averaged just 138,000 jobs per month. The unemployment rate and payroll employment come from two separate surveys that do not always agree, but most experts think that payroll job growth is the better indicator of the strength of the labor market.

Finally, the stagnation of real (inflation-adjusted) wages over most of the recovery from the 2001 recession does not point to a tight labor market. Productivity (output per hour) has grown at a healthy 2.8 percent annual rate during the recovery from the 2001 recession, but real hourly compensation of employees (wages plus benefits) has grown at less than half that rate (1.3 percent annually). Historically, growth in real hourly compensation has tended to grow roughly in line with productivity.

Benefit costs have grown much faster than wages and salaries, not because employers are providing more generous benefits but because health insurance costs are rising and employers have had to make contributions to restore the solvency of their pension plans. Those higher benefit costs are squeezing take home pay. From August 2003, when job losses peaked, until August 2006, real average hourly earnings fell 1.4 percent. Recent sharp declines in inflation have pushed up real wages but the overall picture since January 2001 remains one of stagnation.

Inflation and monetary policy

After rising 3 percent in the first eight months of 2006, the consumer price index declined by 0.5 percent in September and another 0.5 percent in October. Energy prices were the driving force in the rise and subsequent decline of the CPI. Consumer energy prices rose 14.4 percent in the first eight months of this year, and then fell 7.2 percent in September and another 7.0 percent in October. Nevertheless, energy prices remain high. In October 2006, consumer energy prices were 35 percent higher than they were in January 2001, while the overall consumer price index was 14.9 percent higher.

The core CPI, which excludes the volatile food and energy prices, rose at a 2.8 percent annual rate in the first 10 months of 2006. That rate is higher than what the Fed would be comfortable with on a long-term sustained basis, but core inflation has moderated over the course of the year. Four months of 0.3 percent increases from March through June, were followed by three months of 0.2 percent increases, and the core CPI rose just 0.1 percent in October.

In the fall of 2006, the Fed still sees inflation pressures as likely to moderate over time, in part because the economy is slowing. Recent declines in energy prices reduce the chance that energy prices will feed into future core inflation. Wages have not been a source of inflationary pressure so far in the recovery from the 2001 recession.

sion. Nominal wages have picked up some recently, but Federal Reserve Chairman Bernanke has said that growth in real wages is not incompatible with stable inflation. With profit margins unusually high, companies can absorb increases in real wages without raising prices excessively.

The Fed has cautioned that it still sees some inflation risks. The challenge it faces is that if it raises interest rates further to keep inflationary trends and expectations from rising, it could choke off the economic expansion, slowing job growth further, and leaving working Americans with only meager gains in take home pay with which to cover their already high energy, tuition, and health care bills.

Fiscal policy

The federal budget deficit for fiscal year 2006 was \$248 billion. That is smaller than the deficit in the preceding three years and smaller than the estimate in the President's January budget. However, it is still one of the largest deficits on record in nominal dollars. More importantly, the reduction in the deficit does not reflect explicit deficit-reduction efforts on the part of the Bush Administration. The overwhelming majority of policy actions by the Bush Administration and the Republican majority in the Congress have added to the deficit not lowered it.

Tax revenues grew in fiscal year 2006, as they always do in a business-cycle expansion. Revenues also came in higher than expected for other reasons unrelated to policy actions. Nevertheless, the real story of the budget under President Bush continues to be a deterioration compared with the situation he inherited. The \$5.6 trillion 2002–2011 budget surplus that was being projected when President Bush took office in January 2001 has turned into a deficit over that same period projected to be at least \$2.9 trillion.

The direct consequence of those large federal budget deficits has been to reduce government saving. Neither the tax cuts nor anything else has stimulated an offsetting increase in private saving, hence national saving has declined as well. Because foreigners, including foreign governments, continued to be willing to lend to the United States and acquire U.S. assets, the United States was able to draw on foreign saving to make up for the loss of national saving. Without that foreign borrowing, long-term interest rates would have been much higher. However, the returns from investment financed by foreign saving mainly go to the foreign investors and not to raising future U.S. national income.

At some point, the United States will have to pay for the irresponsible budget policies of the last six years. That day of reckoning has been postponed by our ability to draw on foreign saving. If the rest of the world suddenly decides that the risks from investing its savings in the United States outweigh the benefits, there could be a run on the dollar, a sharp increase in U.S. interest rates, and possibly an international financial crisis. Even if the rest of the world continues to lend to the United States, the U.S. external debt will continue to mount and interest on that debt will have to be paid out of future national income.

III. THE BUSH ECONOMIC RECORD

Throughout the year the JEC Democrats have issued fact sheets and economic policy briefs documenting the discrepancy between the claims of the Bush Administration about how well the economy is doing and the experience of ordinary middle class and working families. The following are some of the salient facts about the Bush Administration's economic record.

Unemployment and job growth

Through November 2006, unemployment remains higher than it was when President Bush took office in January 2001, and job creation has been lackluster. In particular:

- 688,000 more people are unemployed.
- The unemployment rate is up 0.2 percentage point to 4.4 percent.
- Long-term unemployment (26 weeks or more) is 60 percent larger at 1.1 million.
- Job growth has averaged just 49,000 jobs per month—and just 31,000 per month in the private sector (monthly growth of 125,000 to 150,000 is necessary to absorb a growing labor force).
- 2.9 million manufacturing jobs have been lost.

Job losses continued until August 2003 and did not regain their pre-recession level until February 2005—the most protracted jobs slump since the 1930s. Job growth from August 2003 through October 2006 averaged just 159,000 jobs per month, whereas it was common to see job gains of 200,000 to 300,000 in the expansion of the 1990s. In the six months ending in October 2006, monthly job growth averaged just 138,000.

Wages and other measures of economic well-being

Most American families have seen their standard of living erode on President Bush's watch. American workers have seen their productivity grow at a very strong rate, but productivity and economic growth have not translated into higher real wages. Income gains have been concentrated at the top of the income distribution, while poverty and economic insecurity have increased. In particular, since President Bush took office:

- The median usual weekly earnings of full-time wage and salary workers have declined by 0.9 percent after inflation.
- Median household income has declined by \$1,273 or 2.7 percent after inflation.
- 5.4 million more people live in poverty, for a total of 37 million people in poverty.
- 1.3 million more children live in poverty, for a total of 12.9 million children in poverty.
- 6.8 million more people lack health insurance, for a total of 46.6 million uninsured.
- 3.7 million fewer workers have an employer-sponsored retirement plan.

A legacy of deficits and debt

When President Bush took office, the federal budget was in surplus and the national debt was declining. Under President Bush, however:

- A \$128 billion federal budget surplus in FY 2001 turned into a \$248 billion deficit in FY 2006.
- A \$5.6 trillion 10-year projected surplus from 2002 to 2011 has turned into a projected deficit of at least \$2.9 trillion.
- Federal debt issued to finance budget deficits rose by \$1.5 trillion.

The broad economic indicators preferred by President Bush show that the economy has experienced a business cycle recovery from the 2001 recession, with strong productivity and rising output. However, most American workers have not seen the benefits of that recovery in their paychecks. Now, with the economy slowing before it has produced an improved standard of living for the typical American family, people have a right to ask of the Bush economic record, "Is that all there is?"

IV. LINKS TO MINORITY REPORTS

The following reports were issued by the Joint Economic Committee Democrats in 2006:

Is That All There Is? The Bush Economic Record From the Perspective of Working Families. November 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Releases/isthatallthereis.pdf>

The Way We Were: Comparing the Bush Economy with the Clinton Economy. November 2006 Link: <http://www.jec.senate.gov/democrats/Documents/Reports/BushIsNoClinton03.nov2006.pdf>

Relying on the Kindness of Strangers: Foreign Holdings of U.S. Treasury Debt. November 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/foreigndebtkindnessofstrangers.pdf>

Losing Ground: The Middle Class in the Bush Economy. September 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/losinggroundthemiddleclasssep2006.pdf>

Some Perspective on Bush Administration Economic Claims. September 2006. Link: http://www.jec.senate.gov/democrats/Documents/Reports/HBCJECJointDoc2_9sep2006.pdf

Poverty Rate Unchanged From 2004, Up Since 2000. August 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/poverty2006.pdf>

The Number of Americans Without Health Insurance Rose for the Fifth Year in a Row in 2005. August 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/healthinsurance2006.pdf>

Household Income Up Slightly in 2005, But Down Since 2000. August 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/income2006.pdf>

Strange Bedfellows: Minimum Wage Workers and the Wealthy. August 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/estatetax2.pdf>

We'll Be Forever in Their Debt: The Economic Consequences of Irresponsible Budget Policy. June 2006 Link: <http://www.jec.senate.gov/democrats/Documents/Reports/weillbeintheirdebt.pdf>

www.jec.senate.gov/democrats/Documents/Reports/debtandtaxes2006.pdf

Who Will Pay for Repealing the Estate Tax? June 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/whowillpayestatetax2006.pdf>

Highlights of the 2006 Social Security Trustees' Report. May 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/sstrustees2006.pdf>

Highlights of the 2006 Medicare Trustees' Report. May 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/medicaretrustees2006.pdf>

How Strong Is the Economic Recovery and Is Everyone Benefiting? April 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/busheconomyapr2006.pdf>

An Overview of the Gender Earnings Gap. April 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/earningsgap25apr2006.pdf>

Measuring Poverty. April 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/memapr2006.pdf>

Administration's Health Insurance Tax Credit Proposal Fails to Provide a Real Solution to the Uninsured. Updated April 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/hitaxcredit17apr2006.pdf>

Fact Sheet: The Impact on Families of the FY 2007 House Budget Resolution. Updated April 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/housebudgetfactsapr2006.pdf>

Administration's Health Insurance Proposals: A Boon to the Healthy and Wealthy but No Help for the Uninsured. Updated April 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/hsas05apr2006.pdf>

The Effects of the President's Social Security Proposal on Women. March 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/womenandpriv30mar2006.pdf>

The Impact on Families of the President's Fiscal Year 2007 Budget Proposals. March 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/fy2007budgetmar2006.pdf>

The President's Savings Proposals: Bigger Tax Breaks but Less National Saving. Updated February 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/presidentssavingsacounts14feb2006.pdf>

Association Health Plans: The Wrong Medicine for Small Businesses' Health Insurance Ills and no Help for the Uninsured. February 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/ahpreportfeb2006.pdf>

Administration's Proposed Tax Deduction for High-Deductible Health Insurance: A Boon to the Healthy and Wealthy but No Help for the Uninsured. January 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/hsas31jan2006.pdf>

The Bush Economy: The Facts Behind the White House Facts. January 2006. Link: <http://www.jec.senate.gov/democrats/Documents/Reports/sotu2006.pdf>

ADDITIONAL VIEWS OF
VICE CHAIRMAN ROBERT F. BENNETT

OVERVIEW OF CURRENT AND RECENT MACROECONOMIC CONDITIONS

The economic expansion continues to mature. Unemployment, inflation, and long-term interest rates remain low by historical standards. Employment growth and healthy growth in the inflation-adjusted (real) gross domestic product (GDP) continued throughout the past year. The economy began 2006 with rapid growth, perhaps reflecting an alteration of timing of economic activities in the aftermath of last year's devastating hurricanes. Growth has slowed over the past two quarters, partly a reflection of significant adjustments in the housing sector, but remains healthy. Most forecasters view the recent slowdown as temporary, with real GDP growth expected to return to around 3.0%, at an annualized rate, by the end of next year.

Recent economic conditions display striking contrasts to conditions prevailing prior to enactment of pro-growth tax relief under the Jobs and Growth Tax Relief Reconciliation Act of 2003, enacted in May of 2003. Highlights of the contrasts include:

- GDP growth averaging a robust 3.6% following the enactment of tax relief, in contrast to the tepid average of 1.3% from the first quarter of 2001 through the second quarter of 2003.
- Growth in real business fixed investment averaging 6.9% following the enactment of tax relief, in contrast to an average 5.6% rate of decline from the first quarter of 2001 through the second quarter of 2003.
- A decline in the unemployment rate from a recent peak of 6.3% in June of 2003 to 4.4% in October of 2006
- Healthy average monthly gains in payroll employment of 166,000 per month from June of 2003 through October of 2006, in contrast to an average monthly loss of 91,000 between January of 2001 and May of 2003.
- Strong gains in equity markets following the enactment of tax relief, in contrast to losses prior to relief: the Dow Jones Industrial Average has risen 39% between early June of 2003 and December 5 of 2006, in contrast to a 16% decline between the beginning of 2001 and early June of 2003; the NASDAQ has risen 54% between early June of 2003 and December 5 of 2006, in contrast to a 31% decline between the beginning of 2001 and early June of 2003.
- The Institute for Supply Management (ISM) indexes of manufacturing and non-manufacturing (service sector) activities, which signal expansion when above 50 and contraction when below 50, displayed robust expansions following tax relief, in contrast to displays of contraction or tepid growth prior to tax relief; the ISM manufacturing index has averaged a robust 57 since June of 2003, in contrast to a contraction-signaling average of 48 from the beginning of 2001 through May of 2003; the ISM index of non-manufacturing activity has averaged a robust 61 since June of 2003, in con-

trast to a much more moderate expansion-signaling average of 52 from the beginning of 2001 through May of 2003.

While correlations do not imply causality, there has been a clear and striking turnaround in a wide array of economic indicators from signals of contraction or tepid growth prior to enactment of the pro-growth tax relief in 2003 to signals of strong expansion and robust growth following tax relief.

Despite the recent slowing of growth and corrections in the nation's housing market, I am encouraged by the direction the economy is heading in terms of growth and opportunity. This does not mean that the economy will not face challenges in the months and years ahead, but it does mean that recent economic policy decisions have paid dividends for the nation's citizens.

ECONOMIC GROWTH MODERATED RECENTLY

Following very rapid 5.6% annualized growth in real GDP in the first quarter of 2006, growth slowed to a still-healthy 2.6% rate in the second quarter and below-trend growth of 2.2% in the third quarter. A significant portion of the GDP growth slowdown can be attributed to slowing of the housing market from an exceptional, record-setting pace from 2003 through most of 2005. Residential investment has declined for four straight quarters, pulling overall GDP growth down. In the second quarter of 2006, residential investment fell by 11%; in the third quarter, it fell by 18%. Uncertainty remains concerning how long the housing market correction will take, whether housing prices will decline substantially, and what effects the correction might have on consumer spending and on overall employment growth.

Prior to the recent housing market correction, as new and existing home sales repeatedly set record levels and double digit rates of home price appreciation were recorded, rapid increases in housing valuations likely helped support consumer spending. As households perceived large wealth gains in housing, they were, perhaps more easily than in the past due to financial innovations, able to tap into home equity to help support consumption spending. A risk of significant slowing of consumer spending exists if the wealth effect works in the other direction because of substantial home value declines.

Thus far, however, substantial declines in housing values have not been observed. And many analysts, including former Federal Reserve Chairman Alan Greenspan, believe that much of the correction in the housing sector is behind us. Others, however, believe there is more of a correction to come. In any event, consumer spending, which accounts for roughly 70% of GDP, has remained healthy throughout the expansion.

CONSUMER SPENDING HAS REMAINED RESILIENT

Growth in consumer spending has remained resilient, averaging a 3.1% annualized rate since the beginning of 2001, despite a sequence of adverse shocks to the economy including the tragedy of September 11, 2001, the aftermath of corporate accounting scandals, two wars, devastating hurricanes, and a prolonged period of significant increases in energy costs. Support for consumer spending has come from, among other factors, expanding employment

and growth in disposable (after-tax) income. Growth in consumer spending averaged a healthy 2.9% annualized rate between the beginning of 2001 and the enactment of pro-growth tax relief in 2003; it has averaged a robust 3.5% following the enactment of tax relief which helped Americans keep more of their hard-earned incomes for use in private consumption, investment, and saving.

IMPROVING INFLATION OUTLOOK

Increases in energy prices over the past four years dominated on the inflation front. Inflation in the overall (headline) consumer price index (CPI) in some months ran above 4.0% on a year-over-year basis, often led by large increases in the rate of inflation in the energy-price component of the CPI. Inflation in the "core" CPI, which excludes volatile energy and food prices and is used partly to gauge the extent to which energy price increases are feeding into more general inflation in prices of other goods and services, has remain relatively benign. Core consumer price inflation has, however, risen above what most consider the Federal Reserve's comfort zone. Core CPI inflation neared 3.0% in the fall of 2006 and inflation in the core personal consumption expenditures (PCE) price index, one of the Federal Reserve's preferred measures of consumer prices, ran close to 2.5%. Many regard the ceiling on the Federal Reserve's comfort zone for core PCE inflation to be around 2.0%, so inflation is still a concern for the Federal Reserve, as well as consumers.

THE FED PAUSED ON ITS TIGHTENING CAMPAIGN

Beginning in October of 2006, the Federal Reserve ended its tightening policy that consisted of increases in its target for overnight interest rates. The Fed had raised its overnight interest rate target from the 45-year low of 1.00% in 17 quarter-point increments beginning in late June of 2004 and ending in early August of 2006. In the last three meetings of the Federal Open Market Committee, the Federal Reserve's monetary policymaking committee, the Fed decided to keep its overnight interest rate at 5.25%. Despite rising short-term interest rates, long-term nominal interest rates have not increased significantly and remain low by historical standards.

ENERGY PRICES HAVE RETREATED

A notable feature of recent economic developments is the decline, on balance, in energy prices since the summer of 2006. Energy prices rose significantly from the beginning of 2004 through the summer of 2006; the spot price of a barrel of West Texas Intermediate crude oil, for example, rose by 117% from the beginning of 2004, when the price was around \$34 a barrel, to over \$74 a barrel by July of 2006. Since the summer of 2006, however, energy prices have receded; the spot price of a barrel of West Texas Intermediate crude oil, for example, has retreated from the \$74 a barrel level in July to below \$60 in November. Reductions in energy costs help ease concerns about acceleration in inflation and help increase the purchasing power of wages, salaries, and incomes of Americans.

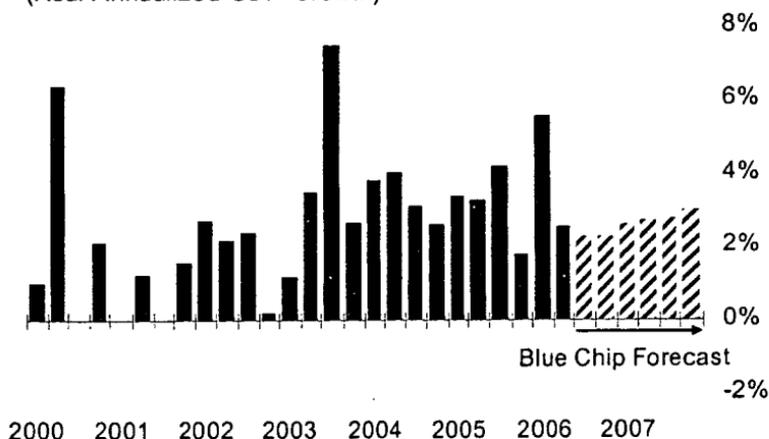
FEATURES OF THE ECONOMY SINCE 2001

Growth in real GDP has averaged a healthy 2.6% annualized rate since the beginning of 2001 and has averaged a robust 3.6% since the enactment of pro-growth tax relief in 2003. There have been 20 consecutive quarters of growth in real GDP through the third quarter of 2006.

GDP growth has recently slowed from the very rapid 5.6% of the first quarter of 2006, down to a still-healthy 2.6% in the second quarter and 2.2% in the third quarter. Slowing in the housing sector of the economy has contributed significantly to the recent growth slowdown; indeed, residential investment declined by 11.0% in the second quarter of 2006 and by 18% in the third quarter. Forecasters see growth gradually accelerating next year, reaching a healthy 3.0% annualized rate by the end of the year.

Economic Growth Since 2000

(Real Annualized GDP Growth)

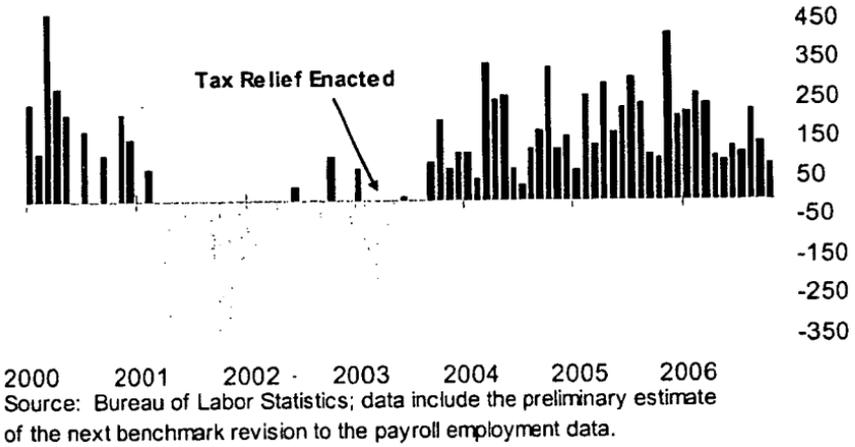


Source: Bureau of Labor

Consumer spending, which accounts for around 70% of economic activity, has remained resilient since the beginning of 2001, despite numerous negative shocks to the economy. Growth in inflation-adjusted consumer spending has averaged 3.1% since the beginning of 2001, and an even more impressive average of 3.5% since the enactment of pro-growth tax relief in 2003.

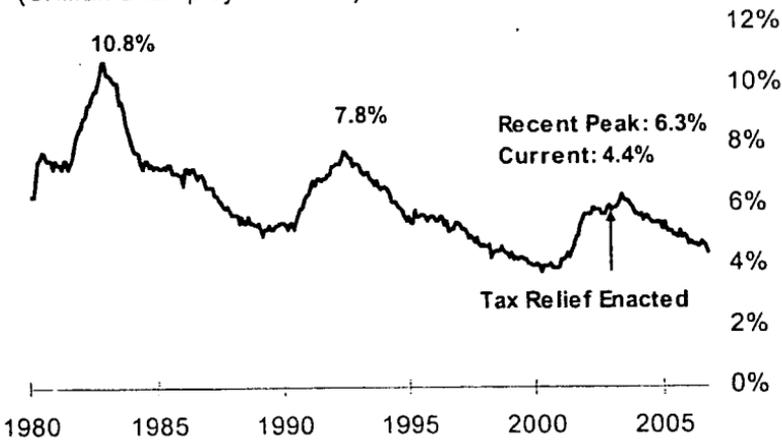
ated in the nation's labor markets. Payroll job gains have averaged over 166,000 per month since the enactment of tax relief in 2003, above the threshold that many believe must be crossed for job creation to exceed growth in the population. In marked contrast, from the beginning of 2001 through May of 2003, prior to the pro-growth tax relief enacted in 2003, there was an average loss of 91,000 payroll jobs per month.

Over 6.8 Million Jobs in Past 38 Months
(Change in employment, in thousands)



The unemployment rate in October 2006 was 4.4%, below the recent peak of 6.3% in June of 2003. The 4.4% unemployment rate is also below the averages of each of the 1950 (4.5%), 1960s (4.8%), 1970s (6.2%), 1980s (7.3%), and 1990s (5.8%).

Unemployment Rate Below Previous Peaks
(Civilian unemployment rate)



Source: Bureau of Labor Statistics

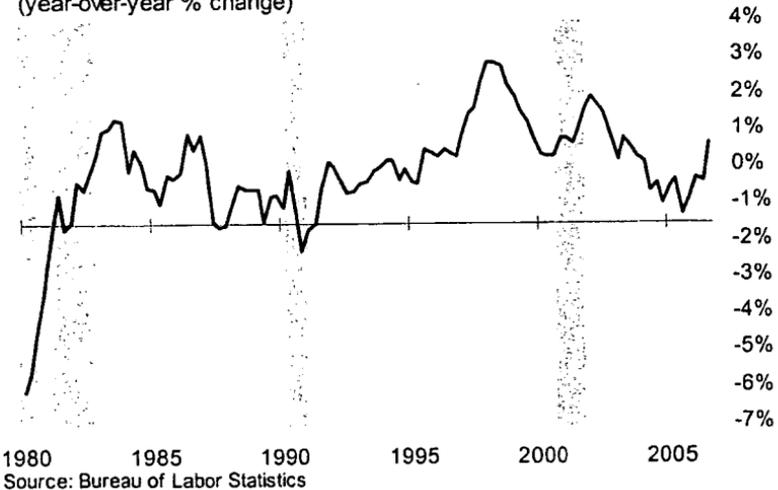
WAGES, SALARIES, AND BENEFITS

Escalating energy costs witnessed over the past few years have served to erode the purchasing power of wages and salaries. Consider, for example, average hourly earnings. There were, for several quarters, declines in the inflation-adjusted (real) value of those earnings caused largely by escalations in energy costs. Recent reductions in energy costs have helped restore positive growth in real earnings. It is useful to keep in mind that average hourly earnings is a very incomplete measure of worker compensation that ignores around 20% of the workforce by measuring only earnings of non-supervisory workers and ignores around 30% of overall worker compensation by measuring only wages and salaries and not including benefits.

More comprehensive measures of compensation accruing to American workers, that include benefits as well as wages and salaries, show that workers have made real gains since the beginning of 2001, which means that there has been positive growth in the amount of goods and services they can purchase with their overall compensation. For example, in inflation-adjusted terms, compensation measured in the National Income and Product Accounts has grown on a year-over-year basis at an average 1.65% pace since the beginning of 2001. Growth in the real wage and salary component of overall compensation has averaged 1.01%, while growth in the benefits component (supplements to wages and salaries) has grown at a very robust average 4.61% pace since the beginning of 2001.

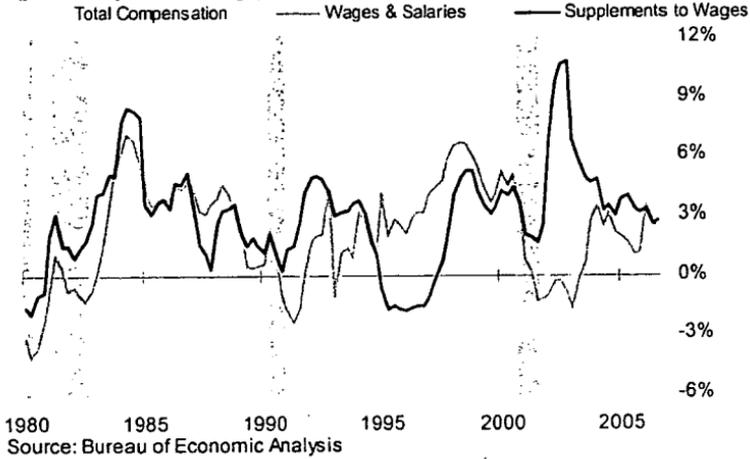
Growth in Real Hourly Earnings

(year-over-year % change)



National Income and Product Accounts Real Employee Compensation and Components

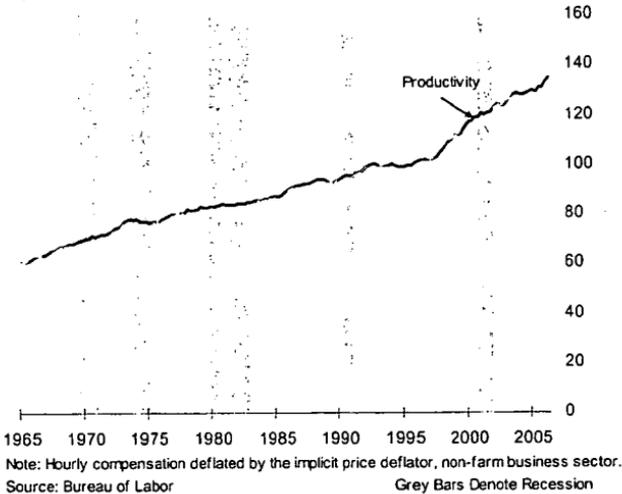
(year-over-year % change)



A key to increases in living standards is growth in productivity, as the next chart clearly illustrates. Pro-growth tax relief, such as that enacted in 2003, lays a solid foundation to facilitate continued strong growth in the productivity of American workers. That growth ultimately boosts workers' wages, salaries, benefits, and living standards.

Productivity and Real Compensation Growth Together

(Index 1992=100)



HEALTHY PRODUCTIVITY GROWTH

From the beginning of 2001 through the third quarter of 2006, year-over-year growth in labor productivity—output per hour in the non-farm business sector—averaged 3.0%. This is well above the

2.0% average of the 1990s and above the long-term average of 2.3% from the beginning of 1948 through the third quarter of 2006.

HEALTHY EXPANSION OF BUSINESS ACTIVITY

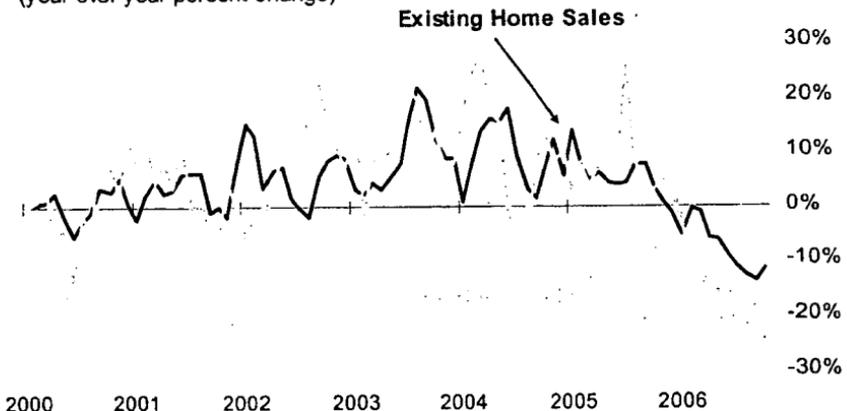
Economic activity in both the manufacturing and the service sectors of the economy remains healthy, according to surveys by the Institute for Supply Management (ISM). The ISM index of manufacturing activity had been above a value of 50, indicating expansion in the manufacturing sector, for 42 consecutive months beginning in May 2003 when tax relief was enacted. The index edged down to 49.5 in November of 2006, the first sign of a slight contraction in manufacturing for 42 months. The ISM index of non-manufacturing (service sector) activity has remained above 50 for 44 consecutive months beginning in April of 2003. Capacity utilization in the industrial sector (manufacturing, mining, and utilities), after hitting a near-term low of 73.9% in December of 2001, has trended upward to over 82.0% for five consecutive months through October of 2006, moving into line with long-run historical norms.

THE HOUSING MARKET CORRECTION

New home sales and existing home sales have fallen on a year-over-year basis for 10 and 11 consecutive months, respectively, through October of 2006, with some months showing significant double-digit rates of decline. However, levels of activity remain high by historical standards, and recent declines in sales follow significant and persistent increases in the period 2003 through 2005. Housing starts and building permits have shown significant declines in the second half of 2006, as builders cut back on construction activity to work off recent growth in inventories of unsold homes.

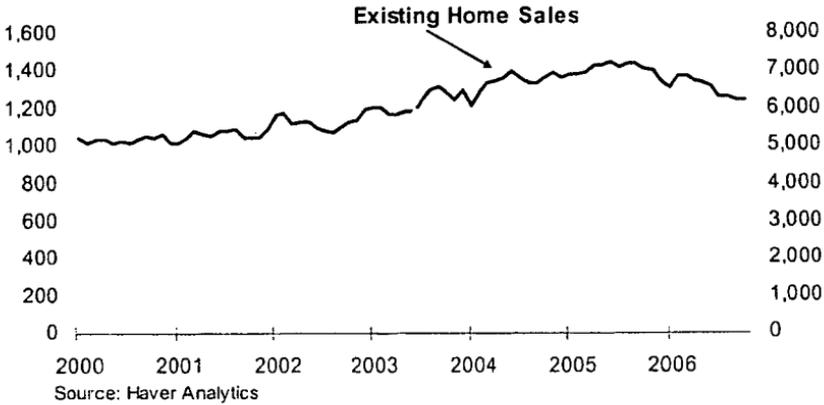
Existing and New Home Sales Growth since 2000

(year-over-year percent change)



Source: Haver Analytics

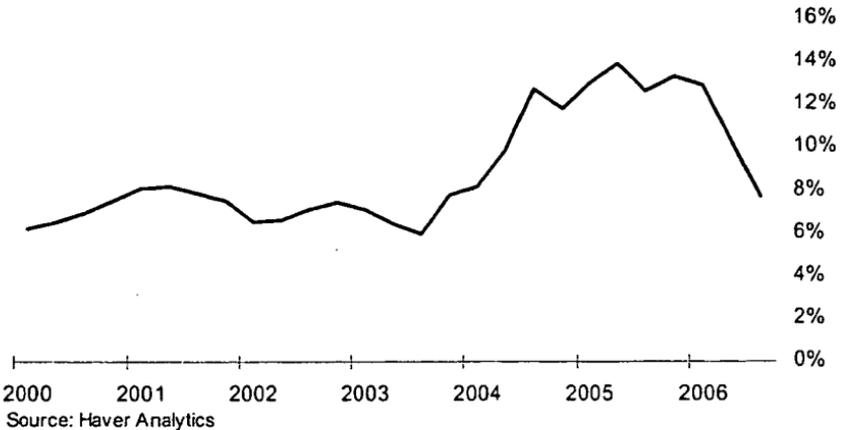
Existing and New Home Sales Levels since 2000 (thousands of houses)



According to the house price index compiled by the Office of Federal Housing Enterprise Oversight, year-over-year home price appreciation has slowed from the double digit rates observed between the fourth quarter of 2004 and the second quarter of 2006 to 7.7% in the third quarter of 2006. Year-over-year growth in the National Association of Realtor's measure of median prices of existing homes has shown price declines in three consecutive months through October of 2006, in contrast to double digit increases observed throughout most of 2005.

OFHEO Home Price Index Appreciation

(year-over-year percent change)



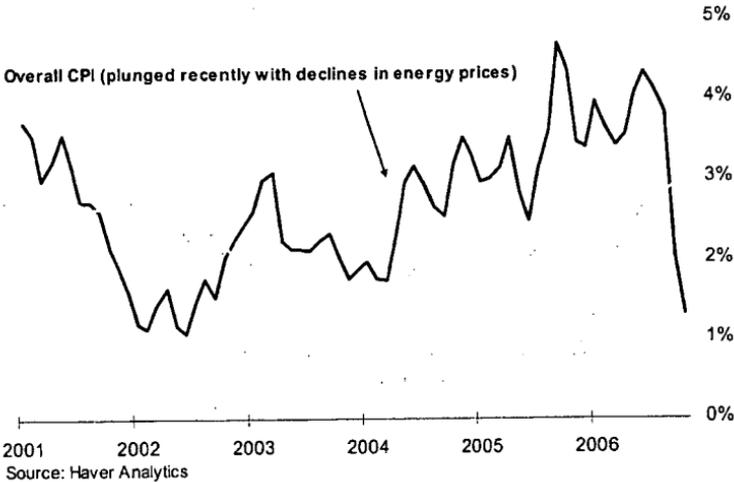
LOW INFLATION DESPITE RUN-UPS IN ENERGY COSTS

Consumer price inflation, measured by the year-over-year percent change in the CPI, has remained low by historical standards throughout most of the ongoing economic expansion. Accelerating energy prices caused acceleration of overall CPI inflation, pushing

inflation above 4.0% during some months of 2005 and 2006. Recent easing of energy prices has helped pull overall CPI inflation from a recent peak of 4.3% in June of 2006 to 1.3% in October. Inflation in core consumer prices, which exclude volatile energy and food prices, has remained low throughout the current expansion. Core CPI inflation and core PCE inflation began 2006 at around 2.0% but those inflation measures rose, to close to 3.0% in September for the core CPI and around 2.4% for the core PCE. Those core measures of consumer price inflation eased in October of 2006, and the Fed anticipates further easing as effects of recent favorable energy developments and of recent slowing of economic activity take hold. The Fed remains, however, alert to upside risks for future acceleration of inflation.

Consumer Price Inflation

(year-over-year percent change in consumer price index [CPI])

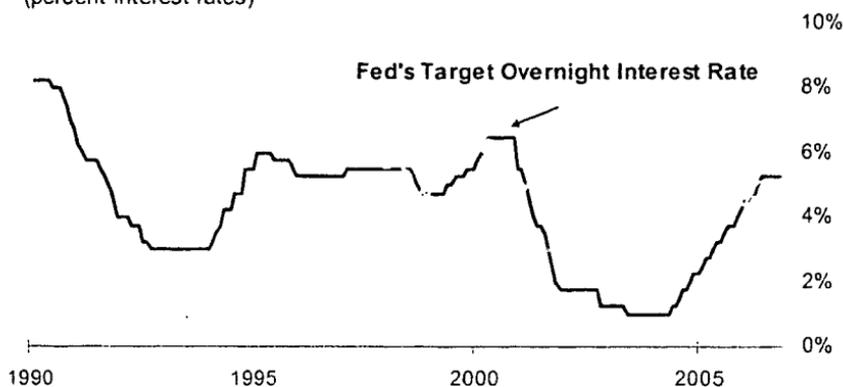


RISING SHORT-TERM INTEREST RATES, LOW LONG-TERM RATES

While the Fed has raised its target for overnight interest rates from 1.00% at the end of June 2004 to the current 5.25%, long-term interest rates have barely moved on balance. The nominal yield on a 10-year constant maturity Treasury note, for example, averaged 4.73% in June of 2004 and averaged 4.60% in November of 2006. The persistence of relatively low long-term interest rates is an ongoing area of economic research to establish the important contributing factors.

Long-Term Rates Low, Despite Fed Tightening

(percent interest rates)



Source: Haver Analytics

To some extent, the low long-term rates could reflect reductions in term and inflation-risk premiums demanded by investors, perhaps a partial reflection of gains in Federal Reserve credibility for keeping inflation low and less volatile than in the past. To some extent, the low long-term rates could reflect what Federal Reserve Chairman Ben Bernanke has called a global “savings glut,” with investors in some economies, such as in Asia and oil-exporting countries, having an excess of savings relative to investment. Those investors then, perhaps, decide that the best opportunities for the excess savings lie in the strong, liquid, and relatively low-risk financial markets of the United States. The relatively strong demand for U.S. assets exerts upward pressure on the prices of those assets and, correspondingly, downward pressure on their rates of return.

Whatever the reason for the relatively low long-term interest rates, they have been carefully analyzed by economic analysts because longer-term interest rates have been below short-term interest rates, a phenomenon known as an “inverted yield curve.” Analysts are alert in the presence of an inverted yield curve because, in the past, such a condition has presaged recession. To the extent that Fed Chairman Bernanke’s “global savings glut” hypothesis holds true, current conditions do not carry the signal of a possible recession ahead as like conditions have in the past. Some support for Bernanke’s position comes from observing that inversion of the yield curve is not currently unique to financial markets in the United States. Similar conditions currently hold in a number of industrialized economies.

INTERNATIONAL DEVELOPMENTS

From the beginning of 2001 through early December of 2006, the trade-weighted value of the U.S. dollar has depreciated by around 12.5%. Vis-à-vis the euro, the dollar has depreciated by 37.5% during the same period; vis-à-vis the yen, the dollar has not changed significantly in the period.

Many believe that further depreciation of the dollar will be necessary given that the U.S. trade deficit is large and growing relative to GDP. A declining dollar makes imports more costly and

less competitive in U.S. markets and makes U.S. exports more competitive in world markets.

Trade deficits have helped fuel historically high U.S. current account deficits. The current account deficit, after hitting a near-term low as a percent of GDP of 3.5% in the fourth quarter of 2001, rose to 7.0% of GDP by the fourth quarter of 2005, and has since retreated to around 6.6% of GDP. The current account deficit means that U.S. savings are not sufficient to fund U.S. investment; on the other hand, it also reflects the fact that investors abroad continue to view the U.S. as a particularly attractive place to invest.

Prospects for U.S. exports of goods and services have improved recently, with a pickup in growth in the euro-zone, after years of tepid growth, along with seven consecutive quarters of growth in Japan's economy through the third quarter of 2006.

THE FEDERAL BUDGET

The federal government recorded a total budget deficit of \$248 billion in fiscal year 2006, \$71 billion below the deficit incurred in 2005. The 2006 deficit was 1.9% of GDP, down from 2.6% in 2005. Federal government receipts in fiscal year 2006 rose by 11.8% relative to fiscal year 2005, the second highest percentage increase since 1981. In fiscal year 2005, receipts rose by 14.6%. Receipts as a share of GDP rose to 18.4% in fiscal year 2006, above the average of 18.2% experienced since 1965. Outlays, too, rose in 2006—by 7.4% over their 2005 levels. Outlays reached a 10-year high in 2006 at 20.3% of GDP, just slightly below the long-run average of 20.5% between 1965 and 2005.

Despite the recent favorable swings in the government's fiscal position, the threat to stability in longer-term government finances comes from projected runaway growth in mandatory spending, including Social Security, Medicare, and Medicaid. The relatively certain demographic outlook involves large-scale retirement of the "baby boom" generation, meaning fewer workers per beneficiary in Social Security. Currently, 3.25 workers contribute to the Social Security system per beneficiary. The number of beneficiaries by 2030 will have doubled and the ratio of workers to beneficiaries will have fallen to 2.00. At the same time, Medicare spending per beneficiary is expected to rise with increases in the costs of medical care. In fiscal year 2005, federal outlays for Social Security, Medicare, and Medicaid amounted to around 8% of GDP. Projections by the Office of Management and Budget suggest that this share will rise to 13% by 2030.

The nation faces important questions as it examines whether promises imbedded in the Social Security system, Medicare, and Medicaid are sustainable, given budget and social priorities. Many fear that these systems may have committed more resources to the baby boom generation than they can realistically deliver without imposing massive burdens on younger generations. If those commitments are untenable, then making changes to the promises should come sooner rather than later, giving people as much time as possible to plan their work, savings, and retirement plans.

THE OUTLOOK

Recent economic data show that economic growth has slowed over the course of 2006, partly reflecting a cooling of the housing market. Looking forward, most forecasters see a gradual return to annualized growth of around 3.0% by the end of next year. Inflation pressures have been easing, assisted by lower energy prices, contained inflation expectations, and cumulative effects of monetary policy actions and other factors restraining the aggregate demand for goods and services in the economy. Unemployment and long-term interest rates remain low by historical standards, and job and compensation growth continue.

Of course, some risks and uncertainties remain. The extent to which the housing market correction is behind us or has a way to go remains uncertain. Continued rapid growth in China, India, and other countries may continue to put upward pressure on prices of key inputs such as oil and commodities. The global risks of terrorism and unrest in the Middle East also remain. There are uncertainties concerning effects of near-term budget pressures that will increasingly be felt from the demographic tidal wave of baby-boomer retirees in conjunction with existing entitlement promises.

Despite our nation's challenges, we maintain our confidence in the economy's ability to expand and provide improved job opportunities for all Americans. We must work to insure that fiscal and regulatory burdens do not hinder economic growth and job creation and we must continue to fight efforts toward protectionism against our trading partners that would prevent Americans from benefiting from the gains of free and fair trade.

Senator ROBERT F. BENNETT,
Vice Chairman.

