Congressional Testimony

A muscular multilateralism to engage China on trade

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This testimony draws upon my forthcoming book, "Eclipse: Living in the Shadow of China's Economic Dominance," my article in Foreign Affairs with Aaditya Mattoo, From Doha to the Next Bretton Woods" and my forthcoming paper with him, "A China Round of Trade Negotiations."[1] Underlined text indicates links to supplementary material.

Summary and Recommendations

1.In the post-World War II period, open trade, by lowering prices, increasing consumer choice, and promoting exports, has been a force for economic prosperity for the United States. Creating and maintaining an open trading system, which has helped countries around the world to improve their living standards, has been one of the major achievements of the United States and its global leadership. Trade with China has also been, on balance, good for the United States, and overwhelmingly good for China.

2. But increased global integration can impose distributional costs domestically on certain relatively lower-skilled workers and certain communities. Certain aspects of China's trade, notably its exchange rate policy, have also had adverse effects for the US which are pronounced in the current climate of high unemployment and under-utilization of resources.

3. For the United States, international competitiveness begins at home. For the medium run, this enatils strengthening American technological capability and leadership, improving the education system, and creating a regulatory climate that fosters entrepreneurship and innovation. For the short run, the best way of coping with the adverse effects of trade is to strengthen the social safety net through assistance for those affected by trade and other technology-driven developments. This would also shore up political support for open trade at a time when this support is dwindling even amongst those traditionally in favor of free trade.

4. The United States must also engage internationally to maintain the current rules-based multilateral system. This is especially critical if the United States is to transition toward a growth model that is less reliant on consumption and more on investment and exports, and meet the export goals set by President Obama. Moreover, United States has substantial comparative advantage in tradable services, which could be further exploited through market opening abroad.

[1] "A China Round of Multilateral Trade negotiations?" forthcoming Peterson Institute for International Economics.

5. China will be a critical part of this international engagement. But China has become too economically dominant for the United States to engage with China on its own. That is one of the major changes that has occurred in the world economy over the last decade. Fortunately, the desire and concern to ensure that China's rise will remain a force for good is widely shared amongst other industrial and developing countries. This provides an opportunity for the United States to lead a collective effort—muscular multilateralism—to engage with China on trade issues. Moreover, because China's economic development has benefited enormously from an open trade system, it will have a stake in preserving it.

6. A concrete way to realize this is to move beyond the Doha Round to start a new round of multilateral trade negotiations—a possible "China Round"—that would focus on the issues—exchange rates, government procurement, services, technology policy, commodities, and climate change—which are particularly crucial for China's trade relations with the US and with other large trading nations.

1. Background

Benefits of trade

Weak economic conditions in the United States, including slow economic growth, high and persistent unemployment, shrinking manufacturing sector, stagnating median income, and worsening conditions at the bottom of the income spectrum, are once again raising questions about the role of international trade. Concerns about trade in general and trade with China come from different quarters.

But before we examine these concerns, it is worth emphasizing the important and first-order fact about trade. Growing trade has been associated with and led to sustained increases in the economic prosperity of the United States and the world. In fact, China is the best example of a country that has reaped the opportunities created by trade and propelled itself to an astonishingly dynamic growth trajectory (Figures 1a, b, and c). These opportunities owed in no small measure to the fact that the United States exercised leadership and created an open economic system after World War II.

Keeping that system open continues to be in the interest of the United States. It is a testament to the key positive role of open global markets that even those who have raised concerns about its possible adverse effects, would reject call for any reversal of the process of trade liberalization and a retreat into protectionism by the United States. As Paul Krugman (2008; 107) wrote: "Just to be clear: even if growing trade has in fact had significant distributional effects, that is a long way from saying that calls for import protection are justified."

The benefits from trade for the United States are several. As Broda and Weinstein (2006) showed in an important paper that trade increases the range of products available to consumers. The benefits from this increased product variety from U. S. imports has been an important source of gains from trade to consumers which they estimated at 2.6 percent of GDP.

Grossman and Rossi-Hansberg (2008) showed that offshoring could enhance productivity and lead to greater profits and employment. More recently, Bloom, Draca, and Van Reenen (2011) showed that although trade decreased employment in sectors more exposed to Chinese import competition, productivity, patenting, R&D and IT all rose in firms who were more exposed to increases in Chinese imports. They estimate that China could account for around 15% of the overall technical change, and that this effect appears to be increasing over time. This suggests that increased import competition with China has caused a significant technological upgrading in firms in the affected industries through both faster diffusion and innovation.

My colleague Gary Hufbauer (Bradford, Greico and Hufbauer, 2005) has estimated that trade adds about $1 trillion to the US economy, which is about twenty times the costs, stemming from job and earnings losses.

Costs and concerns

Even if the overall benefits of trade are positive, they can give rise to a number of adverse effects. And even if the costs are relatively small in magnitude their impact tends to be concentrated on the relatively less-skilled and concentrated geographically.

Samuelson (2004) argued that the rise of developing countries such as China and India could compromise living standards in the United States because they move up the technology ladder and provide competition for US exports, which reduces their price to the detriment of the United States.

Krugman (2008) has focused on the impact of imports from developing countries, and China in particular, on the distribution of income in the United States and wages of less-skilled workers. His conclusion is that, “It is likely that the rapid growth of trade since the early 1990s has had significant distributional effects,” and more specifically that “it is probably true that this increase (in manufactured imports from developing countries)…has been a force for greater inequality in the United States and other developed countries” (Krugman 2008, 134-135).

Blinder (2009) has drawn attention to the employment and wage consequences of the outsourcing that has been facilitated by technological change and trade in services. He estimates that between 22 and 29 percent of all US jobs will be offshored or offshorable within the next decade or two.

And recently, Summers (2008a and b) has highlighted the problems stemming from increasing capital mobility. Hyper-mobile US capital creates a double whammy for American workers: first, as companies flee in search of cheaper labor abroad, American workers become less productive (because they have less capital to work with) and hence receive lower wages; the “exit” option for capital also reduces its incentive to invest in domestic labor. Second, capital mobility also impairs the ability of domestic policy to respond to labor’s problem through redistribution because of an erosion in the tax base as countries compete to attract capital by reducing their tax rates.

The empirical evidence on these various concerns tends to be mixed. A still unresolved question is the relative contribution of technological progress, which has favored relatively skilled workers, and that of increasing globalization in causing the distributional changes that have been observed in the United States.

Edwards and Lawrence (2011) [2] dismiss Samuelson's concern because they show that the products exported by China and other emerging market economies are still substantially less sophisticated than US exports. Therefore, they argue, there is not a significant amount of trade competition on the export side between the US and the emerging markets.

In a recent paper, Autor, Dorn and Hanson (2010) show that rising exposure to Chinese imports increases unemployment, lowers labor force participation, and reduces wages in local labor markets. They estimate that it explains one-quarter of the contemporaneous aggregate decline in U.S. manufacturing employment. Transfer benefits payments for unemployment, disability, retirement, and healthcare also rise sharply in exposed labor markets. The deadweight loss of financing these transfers is one to two-thirds as large as U.S. gains from trade with China. They estimate that rising exposure to Chinese import competition explains about 16 percent of the U.S. manufacturing employment decline between 1991 and 2000, and 27 percent of the decline between 2000 and 2007.

Spence and Hlatshwayo (2011) argue that almost all the increase in employment of 27.3 million jobs in the United States between 1990 and 2008 was in the non-tradable sectors because of much faster productivity growth in the manufacturing and tradable sectors. Edwards and Lawrence (forthcoming), however, argue that the decline in the share of manufacturing in employment is almost entirely due to faster productivity growth in manufacturing. This productivity growth reduces employment but it also leads to a fall in prices which does not lead to an adequate increase in demand for manufacturing goods so that aggregate spending on manufacturing does not offset the productivity growth. They strongly suggest that the productivity increase is overwhelmingly a result of technology rather than trade and globalization.

On the impact of offshoring, the evidence is mixed. Amiti and Wei (2009) provide evidence for the effects of both service and material offshoring on domestic productivity growth. Using US Bureau of Labor Statistics data from 1992-2000, they find that service offshoring has a significant positive effect on labor productivity growth, accounting for approximately 10 percent of average growth in this factor. Liu and Treffler (2008) analyze the impact of not only offshoring but also inshoring--the sale of services produced in the US to unaffiliated buyers in China and India|. They find that the total net effect of inshoring and offshoring is positive. However, for those workers in industries exposed to offshoring and those workers who are less educated the effect can go either way.

Ebenstein, Harrison, McMillan, and Phillips (2009), find that offshoring has had large, significant effects on occupation-specific wages for routine workers. Expansion in offshore employment in low-income locations is associated with wage reductions for routine workers. However, offshore activity in high- income locations is positively correlated with routine wages.

A particular concern with trade arises in the current economic context characterized by large scale unemployment and under-utilization of resources in the United States. In this situation of insufficient demand, the US trade deficit represents a problem because it serves to reduce demand for domestically produced manufacturing goods. Insofar as some of this deficit is due to

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[2] "Rising Tide: Is Growth in Emerging Economies Good for the United States?" forthcoming Peterson Institute for International Economics.

the currency policies of foreign trading partners such as China, the issue assumes particular salience.

Edwards and Lawrence (2011) estimate, for example, that eliminating the trade deficit in US manufacturing would result in a one-off increase in manufacturing employment of about 2 million jobs (or 12 percent of manufacturing employment in 2009 or 1.3 percent of total employment).

Similarly, my colleague William Cline (2010) estimates that the elimination of the Chinese currency undervaluation, which he and John Williamson (2011) calculate today at about 15 percent would improve the US current account deficit by about $60 billion and add about 500,000 jobs. The undervaluation estimate would be greater if the assumption that China could continue running a current account surplus of 3 percent of GDP were changed to assuming that the current account would need to be in balance. These estimates, of course, have uncertainty surrounding them related to underlying assumptions about the responsiveness of exporters and importers to price changes.

It must be noted that the Chinese currency has remained undervalued for some time. Figure 2 shows where the Chinese currency should have been under reasonable assumptions and where it actually has been. The gap between the two has been substantial and widening which has resulted in the steady accumulation of foreign exchange reserves from about $xx billion in 2001 to nearly $3.2 trillion today.

2. Domestic response to distributional consequences of trade

Exposure to trade, even if beneficial in the aggregate, creates distributional and political costs. Very few would recommend erecting trade barriers as a response to these costs. As Spence and Hlatshwayo (2011) put it: “In principal, one could restrict access to the domestic market by foreign suppliers. This generally falls under the heading of protectionism, risks reciprocal action, and sets an escalating pattern almost certain to cause more harm than good. Further, it raises prices for many goods for the whole population. It is not a good idea when carried out aggressively on a broad front. The G20 is right to caution repeatedly about widening protectionism. A preferable approach is to accept globalization but to look for domestic policies that will reduce the distributional impact at home.” In short, international competitiveness begins at home.

What might these domestic policies be? Clearly, they would have to include policies that restore American competitiveness in the medium term by boosting the supply side of the economy. These include restoring the American lead in education, investing in R&D and infrastructure, and reforming the tax code.

In addition, attention must also be devoted to the temporary costs—economic and non-economic, to individuals and communities—that can arise from trade. In a recent Brookings paper, Davis and von Wachter (2011) find that the loss of a job during a recession leads to a life-time reduction in earnings (in present value terms) of 20 percent. Clearly, assistance in the form of support and training for those suffering dislocations must be addressed. Ideally, there must be a comprehensive strategy that responds to economic dislocation regardless of the causes—trade or otherwise—along the lines proposed by Howard Rosen (2008). This is supported by the analysis of Autor et. al. (2010) who suggest that there is greater reliance on the general safety net even where trade is the cause of dislocation. They show that in those areas in the United States that are affected by Chinese imports, the dollar increase in per capita social security disability payments was thirty times as large as trade adjustment assistance.

But if improvements in the broader safety net prove politically infeasible to implement in the short run, specific steps to deal with trade-related adjustment costs need to be considered. Strengthening the current TAA, for example, by extending coverage to workers in the service sector and to communities, affected not just by increased imports but also due to offshoring would be a good place to start.

Public support for free trade seems to be declining in the United States. Public support for free trade agreements is at its lowest point in thirteen years, according to the Pew Center. For example, in 2009, those who supported free trade agreements exceeded those against by a margin of 11 percentage points. In 2010, this was reversed with those against exceeding those in favor by 8 percentage points. Surprisingly, amongst republican leaning voters, the turnaround was even more dramatic: the margin in favor of free trade agreements was 7 percentage points in 2009 and in 2010 the margin against was 26 percentage points.

Public support for trade liberalization is stronger if assistance is provided to firms, workers, and communities affected adversely by trade. This assistance—whether targeted or as part of a more strengthened safety net—seems a worthwhile investment for the larger good of maintaining open markets globally especially at a time of fraying support for openness.

3. International response: Maintaining an open rules-based system

In fact, more than ever before the United States needs open markets internationally. The crisis has made clear that the United States needs to move away from reliance on consumption to reliance on investment and exports as a more sustainable growth strategy. The need for open markets will also be critical to achieving President Obama's goals of doubling US exports within five years.

There is another reason why an open system is in the interest of the United States. While all the focus of trade's impact is on manufacturing, my colleague Brad Jensen (2011) argues in his new book that there are enormous unexploited international opportunities for the United States in services. This analysis provides a fresh perspective on the offshoring debate that concerns services more than manufacturing.

For example, he shows that tradable services accounts for a larger share of employment (14 percent) than manufacturing (less than 10 percent); that tradable services delivers higher paid jobs that manufacturing ($56,000 in services versus $46,000 in manufacturing); that the United States has significant comparative advantage because tradable services are more skill-intensive than manufacturing and reflected in the fact that the United States has run consistent surpluses in trade in services compared to large deficits in goods; and that overseas markets for services still remain relatively closed, creating significant market access opportunities for the United States.

4. Engaging China: diminishing effectiveness of unilateral and bilateral approaches

In the current environment, one of the main sources of friction in international trade relates to China's exchange rate. My colleague Nick Lardy has observed that China's current account surplus has declined from its peak of over 10 percent in 2007 to 5.2 percent in 2010 but notes that uncertainty remains about its future evolution. Nevertheless, as noted above, the renminbi might be undervalued by about 15 percent against the dollar. At a time of slack resources domestically, eliminating this policy distortion could increase manufacturing jobs in the US.

For a number of domestic reasons China will want to change its exchange rate policies. These include: the need to re-balance growth away from foreign to domestic demand; to bring down high inflation; to avoid adding to the already high stock ($3.2 trillion) of foreign exchange reserves because of the additional losses that will accrue when the renminbi eventually appreciates; and to make the renminbi an international currency, which would require opening its capital account. But these changes might not happen quickly enough to help the unemployment and manufacturing situation in the US. So, how should the United States seek to change China's policy? My colleague C. Fred Bergsten (2011) has made a number of useful suggestions on the exchange rate in particular.

My main message, however, is that the United States cannot do it alone because China has become an economically dominant power, a position that will only get reinforced over time. In my book, *Eclipse: Living in the Shadow of China's Economic Dominance*, I construct a measure of economic dominance that combines GDP, trade and external financial strength. Based on some conservative assumptions, I project this forward to 2030. I find that China's economic dominance more imminent, broader in scope, and larger in magnitude than anyone currently imagines. China's dominance could be comparable to that of the British Empire in 1870, and the United States in the aftermath of World War II (see Figure 3 below). By 2030, China's GDP (average of market exchange rate and PPP exchange rate) and trade will be one and a half times that of the United States. One manifestation of such dominance relates to the currency. I predict that because of China's sharply rising GDP and trade, and the fact that it is the world's largest creditor, the renminbi might even surpass the dollar as the world's premier reserve currency by the end of this decade or soon thereafter (see my Financial Times article).

This dominance has already manifested itself in US-China relations. The United States has been consistently seeking to change China's exchange rate policy but with little success. That reason is intimately associated with China's economic dominance. The United States has threatened unilateral trade actions but has been unable to translate these threats into any meaningful legislative action. The initiative by Senators Chuck Schumer (D-NY) and Bob Graham (D-FL) in 2005 to impose across-the-board tariffs on imports from China never saw the light of day. And the bill passed by the House of Representatives in October 2010 is weak in that it would affect a small fraction of China's imports.

This inability to act also reflects the growing inter-twining and deepening of the US-China trade relationship. Action against China does not command broad support in the United States: labor may be in favor of tough actions against China's undervalued exchange rate, but capital—that is, US firms—are at best ambiguous. US firms that are invested in or do business with China are either vulnerable to Chinese retaliatory action, such as the threat of being denied access to Chinese government procurement contracts, or more broadly concerned about the consequences of escalating trade conflict and its impact on business conditions. The balance of power in the US-China relationship is especially striking given that it was only about a decade ago that the

United States was able to persuade China to open its agriculture, goods, and services market as part of China's accession to the WTO.

5. Multilateralism as the way forward

With China's growing size, the balance of negotiating power is shifting toward China. The key argument for multilateralism is that there will be enough combined heft among China's trading partners such that negotiating with China can be more balanced. This is particularly true in the case of China's exchange rate, where a number of emerging market economies have concerns similar to those of the United States. For example, emerging market countries such as Brazil, India, Turkey, Korea, Mexico, Vietnam and Bangladesh, feel the adverse effects of China's exchange rate policy even more so than the United States because they compete more closely with China than the United States and Europe, whose source of comparative advantage is very different from China's. In a forthcoming paper, Aaditya Mattoo, Prachi Mihsra and I show that there can be substantial competitive consequences for these emerging market economies especially in products where they compete more closely with China. Some of these countries have taken recourse to anti-dumping actions as a way of coping with import surges from China.

Forging a coalition with these countries represents an alternative way of engaging China rather than the bilateral route that so far has proved ineffective. This will not be easy because so far the affected countries have not been willing to speak up, mindful of their bilateral relationships with China. And, until recently, US diplomatic efforts have been insufficient because of the belief that it could deal with China on its own.

But one reason why multilateralism could work is because China would incur the opprobrium of working against not just rich but poor countries, and hence against the entire financial and trading system. More broadly, though, China—with its unusually high dependence on trade for improving living standards and completing the process of catching up with industrial countries—will have a vested interest in an open trading system and hence acting, even leading, to preserve it. And if the renminbi ascends to become an international reserve currency, China might be reluctant to lose the prestige, and any associated benefit, that comes with that status by disrupting financial and trade relations in any serious way.

Evidence consistent with China's stake in multilateralism comes from the WTO dispute settlement process. It is encouraging that China is becoming more of a routine participant in this process both as an initiator of disputes and as a respondent. It is also encouraging that so far, China has largely agreed to comply with the terms of WTO dispute settlement proceedings. For example, as Hufbauer and Woollacott (2010) have documented, of the eight cases brought by the United States, three have been resolved by a memorandum of understanding, two are pending decision, and in three China has alleged compliance with the decision of the Dispute Settlement Body. China's actual compliance will take some time to ascertain, and there is always scope for circumventing actions—especially in China's case given the vast amount of economic activity controlled or directed by the state. But all the indications are that China takes its WTO commitments seriously.

The potential advantage of the multilateral approach is illustrated in relation to China and rare earths. China currently mines nearly 95 percent of the world's production of rare earths and has been tightening these restrictions to deprive foreign companies and countries access to these rare earths that are vital inputs in a variety of products—lighting, batteries, and cars. In July, a WTO dispute settlement panel ruled that China's export restrictions on certain raw materials such as bauxite, coke, fluorspar, magnesium, manganese, silicon carbide, silicon metal, yellow phosphorus and zinc were inconsistent with the WTO and China's Protocol of Accession to it, and that the measures could not be justified under the exceptions in Article XX. (http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds394_e.htm). This dispute is not finished yet but the judgement, which relates to raw materials not rare earths, could nevertheless have potential precedential value in any future dispute that China's trading partners might bring challenging China's restrictive policies on exports of rare earths.

5. A China Round of trade negotiations

One way to signal that the world community recognizes the need to deal with a dominant China in the future, and to do so multilaterally, would be to put to bed the Doha Round and embark on a new round of trade negotiations (Mattoo and Subramanian, 2009 and forthcoming). The aim of such a "China Round" would in fact be to anchor China, to the maximum extent possible, in the multilateral trading system.

One of the virtues of the GATT/WTO has been its ability historically to respond to major developments in the trading system. These include (1) promoting liberalization in the immediate aftermath of World War II in the first few rounds of tariff negotiations; (2) diluting the effects of discriminatory European integration by way of MFN tariff cuts in the Kennedy Round; (3) addressing the competitiveness threat against a backdrop of US decline from a then-rising Japan, which was achieved in the Tokyo Round through disciplines on subsidies and through permissiveness in the use of contingent protection against imports; (4) bringing into the multilateral fold major developing countries as they became economically important, and adding new areas such as intellectual property and services that had become sources of comparative advantage for the industrial countries, as achieved at the Uruguay Round by creating a greater symmetry of obligations between all members and by developing new rules on intellectual property and services; and (5) responding to the emergence of China as a big market access opportunity by securing unprecedentedly large policy liberalization by China in agriculture, manufacturing, and services, in the context of its WTO accession.

Having responded to China as an opportunity, the next major development on the trading horizon is China as a potential threat. A China Round is thus a natural for the WTO and one consistent with its history. It would mirror the Tokyo Round, which had as one of its main objectives the accommodation of a then-rising Japan in a manner that minimized the risks to the system.

What might an agenda look like for a China Round? In Mattoo and Subramanian (forthcoming), we spell out a possible agenda in detail, which might potentially cover a number of items in which China's role will be crucial and where China's trading partners have a big stake. The subjects should include: undervalued exchange rates, restriction of access to essential commodities such as agricultural products, raw materials and rare earths; government procurement, technical standards; and trade and climate change.

As in previous rounds of multilateral negotiations, the aim would be to create a balanced package where China would have to "give" by way of liberalizing its own policies in return for others offering commitments of interest to China. The greater the number of China's partners that participate, the better the prospects that China would have an incentive to engage in it and the more the stigma for China if it were to distance itself from the exercise.

One example where there might be scope for mutually beneficial gains to the US and China from opening relates to government procurement. China's government procurement market is estimated to about $1 trillion and a substantial portion of that could be brought under WTO disciplines. China too would gain, for example, if other countries did not impose restrictions on energy and food.

One important corollary of the need to engage China multilaterally is for the US and other countries to be cautious about engaging bilaterally on trade issues with China. If the basic problem is the imbalance of leverage arising from China's size, bilateralism will by definition be less effective than multilateralism. Also enforcement will be more difficult under bilateral agreements because China's incentive to abide by multilateral rules will be stronger than to abide by a series of bilateral agreements

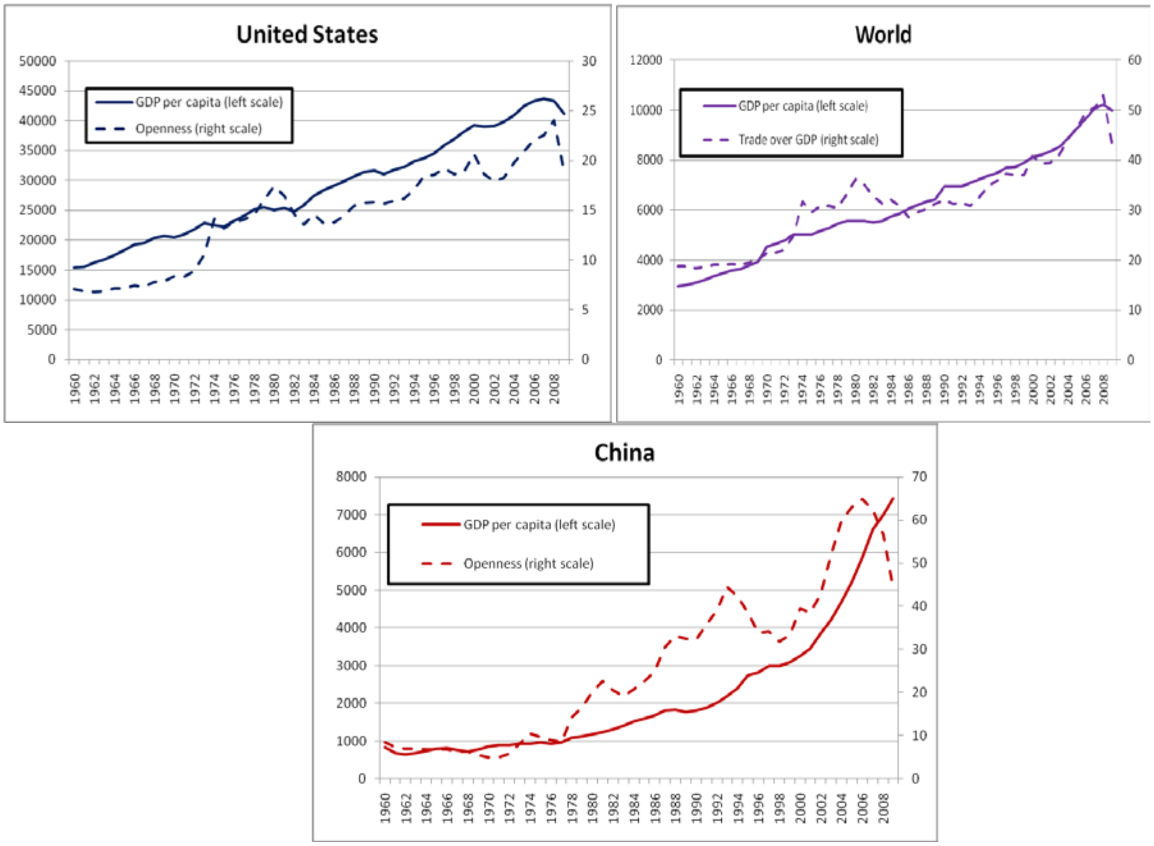
The reputational costs and the effectiveness and legitimacy of enforcement would be a more effective deterrent in a multilateral context than regionally or bilaterally. It is the opprobrium that is associated with being a deviant from the global norm—rather than a bilateral one—that is the most valuable weapon that the world can deploy in tying China today in a way that minimizes the prospects of an aggressively dominant China in the future.

But what should be done about the Doha Round? It is becoming increasingly clear that the failure to complete the Doha Round might itself reflect China's growing dominance. In a recent paper, Mattoo, Ng, and Subramanian (2011) argued that China looms especially large in the markets of major trading partners in sectors where protection is greatest. Liberalization under the Doha agenda, especially in the politically charged, high-tariff sectors, is increasingly about other countries opening their markets to Chinese exports. And China's major trading partners are disinclined to do so. This disinclination is exacerbated by the strong political perception that China's export success has been achieved, and continues to be sustained, in part by an undervalued exchange rate.

That speaks strongly to creating a broad trade agenda that would address these key underlying issues rather than continue with the Doha Round. A China Round could thus revitalize the multilateral trading system. It might not succeed but it must be tried. Not least because, the alternatives—the US acting on its own or the Doha Round—have not worked.

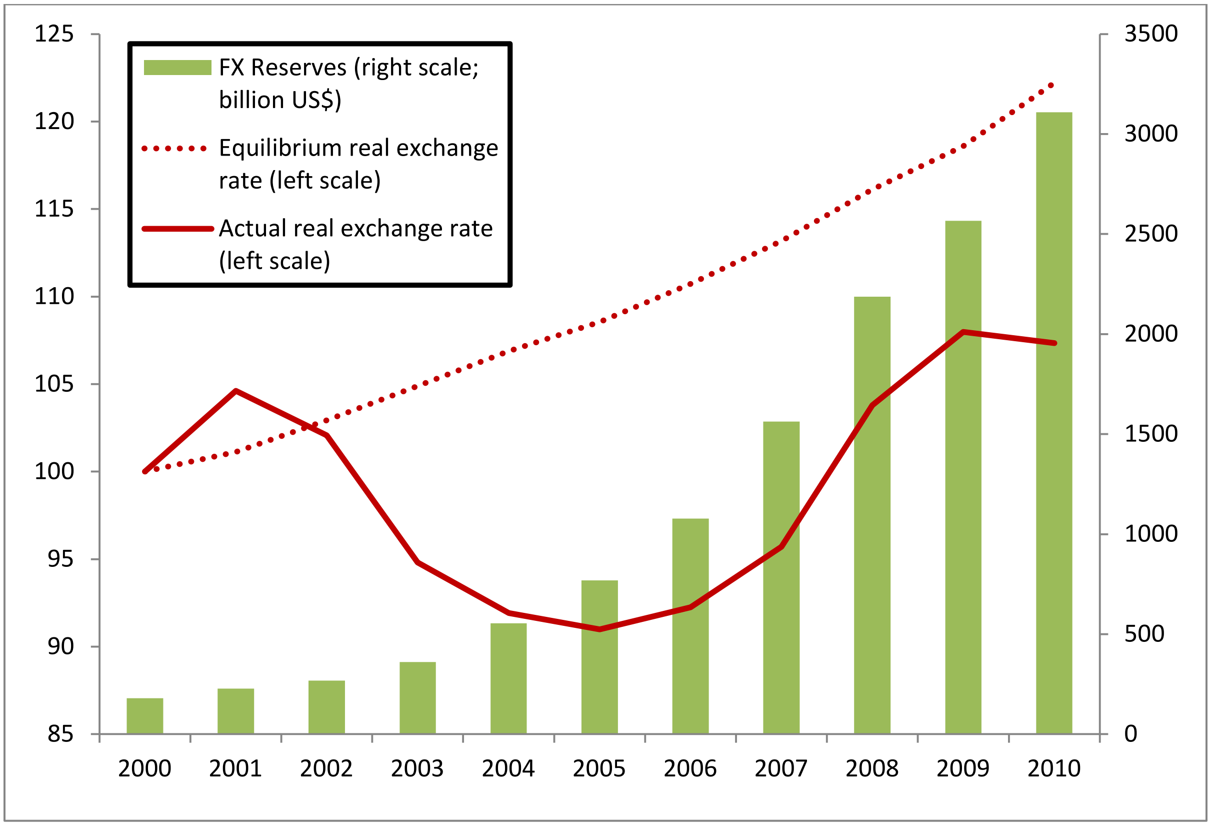
Figure 1: Trade Openness and Standards of Living, 1960-2010

(GDP per capita in constant PPP dollars; Openness is ratio of merchandise trade to GDP)



Sources: World Development Indicators (World Bank) and Penn World Tables, version 7.0.

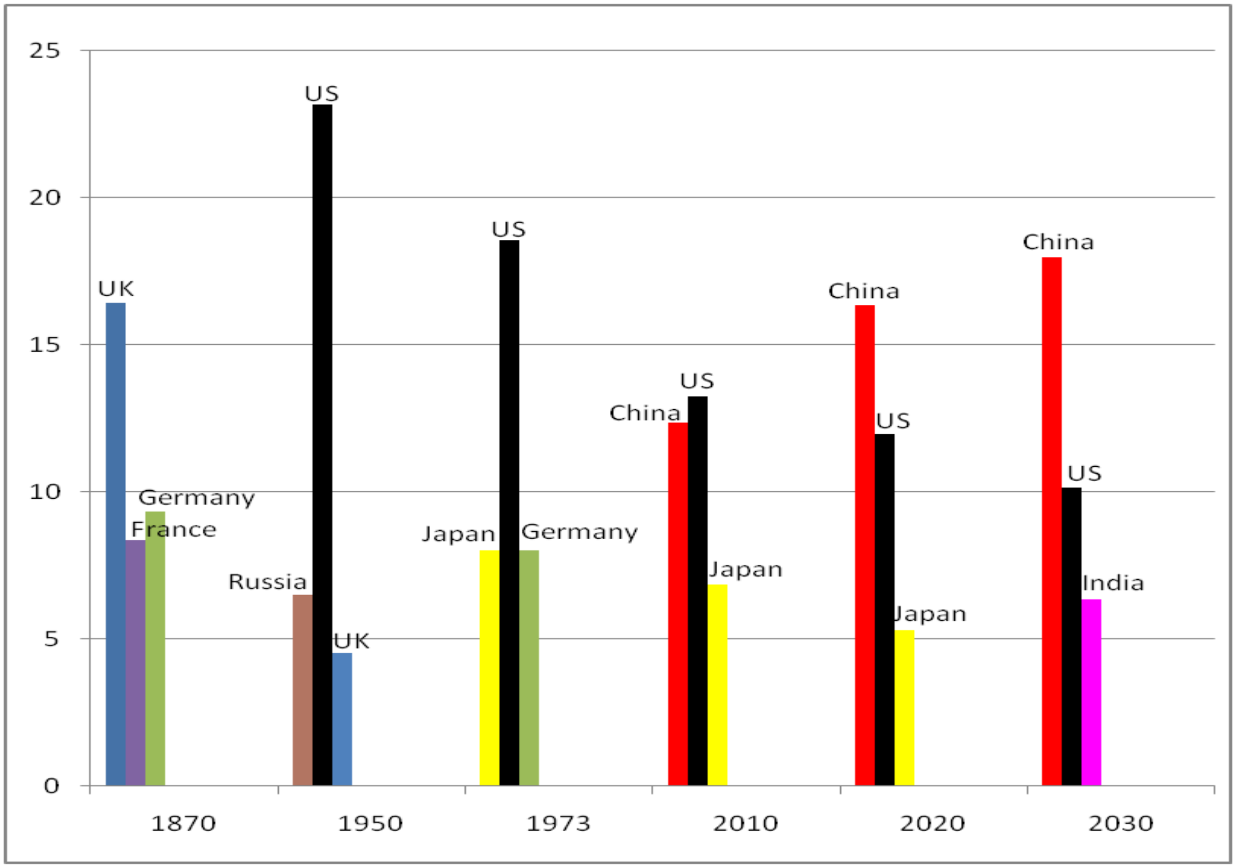
Figure 2. Chinese Currency Undervaluation and Foreign Exchange Reserve Accumulation, 2000-2010



The line "equilibrium exchange rate" —or where the exchange rate should have been under reasonable assumptions—is calculated by assuming that China's real exchange rate should appreciate every year by 0.25 times the difference in per capita growth rate between China and the rest of the world. This assumption reflects the so-called Balassa-Samuelson effect and is one way of calculating theoretical exchange rate movements.

Sources: Bank for International Settlements for the exchange rate; Peoples Bank of China for foreign exchange reserves; and World Development Indicators (World Bank) for growth.

Figure 3: Economic dominance index from 1870-2030 for the top three countries



Notes: This index is weighted average of the share of a country in world GDP, trade, and in world net exports of capital. The index ranges from 0 to 100 percent (for creditors) but could assume negative values for net debtors. The weights for this figure are 0.6 for GDP (split equally between GDP measured at market and purchasing power parity exchange rates, respectively; 0.35 for trade; and 0.05 for net exports of capital.

Source: Subramanian (2011).