Conflicts in the U.S.-China Economic Relationship: Opposite Sides of the Same Coin?

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Abstract

In recent years, discussions between the governments of China and the United States have centered on each country's external imbalances, large trade surpluses for China and deficits for the United States, and the need for structural reforms to achieve more sustainable patterns of growth in future years. This paper argues that reductions in external imbalances suggest that some restructuring has occurred. However, a more detailed examination of economic developments within each country offers less basis for optimism. China has experienced a large appreciation of its real exchange rate and an external surplus less than half that of the years preceding the global recession. However, the domestic counterpart has been even-higher rates of investment as opposed to lower rates of saving and a more sustainable growth of public and private consumption. For the United States, a reduction in the external deficit has been associated with an extreme contraction of domestic investment rather than increased saving. It is noteworthy that the economic trade between the two countries has become even more unbalanced than in the years before the recession, and the bilateral deficit now accounts for two-thirds of the U.S. global current account deficit.

The concluding section argues that further reduction in the trade deficit through the expansion of U.S. exporting capabilities is critical to its future performance. The section discusses policy changes that would slow the process of shifting production facilities out of the United States and promote improved export competitiveness. Those measures include further devaluation of the dollar, reform of corporate taxation, and increased investments in education and physical infrastructure.

For many years the economic dialogue between American and Chinese economic officials has centered on the imbalance of the bilateral trade between the two countries and the divergent trends of their relative performances in the global economy. During the 2000s, China's exceptional growth was propelled by its oversized external trade surpluses–largest with the United States– that fueled charges of mercantilist behavior as China accumulated ever-larger financial reserves. In contrast, the United States was perceived as being on a consumption binge, with a low saving rate and a large trade deficit that were symptomatic of a country living well beyond its means.

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Recently, an extensive volume of research and policy debate has stressed the need for China to broaden the basis of its economic growth model to incorporate a greater emphasis on the development of domestic markets in the future. The disruption of financial markets and the slowing of growth in the advanced economies after the 2008-2009 crisis highlighted the risks to China of its excessive dependence on external markets. The study, *China 2030*, is one of the most complete discussions of the policy changes required to develop a more sustainable and balanced economy going forward. It emphasizes many themes that have received strong support outside of China: the acceleration of the development of a market-based economy, expanding the role of China's consumers, and further liberalization of the external sector.

At the same time there has been far less emphasis on the structural changes the United States must undertake to improve its trade performance as part of its efforts to recovery from the recession. Just as China has relied too much on external trade at the expense of developing a market-based domestic economy, the United States focused on its own domestic consumption boom and took little action to reverse the decline in its global competitiveness and the growing evidence that it has become an unattractive location for production. Leading U.S. corporations have shifted large portions of their production overseas, and come to view the United States primarily in terms of its importance as a market.

This paper begins with a discussion of recent changes in the Chinese economy and the prescriptions for economic reforms needed to maintain a high growth rate in the future. However, the primary focus is on the structural imbalances within the U.S. economy and evidence of its weak export performance, particularly with respect to trade with China. Thus, the objective is to outline the structural changes to restore employment in the economy.

Rebalancing China's Growth

In the immediate aftermath of the global financial crisis, China was properly congratulated for the speed and magnitude of its economic stimulus, and many believed that it had emerged from the global downturn unscathed. However, more recently, economic growth has slowed, and the continued weakness of the global economy has made it difficult to maintain the former reliance on exports as a primary driver of growth. There is a growing recognition of the need to develop a more balanced approach that strives to revert back to the focus on reform and growth of the domestic economy, which characterized China in the years prior to its

admission into the WTO. That is a central theme of *China 2030*, and similar studies calling for a shift in China's growth strategy.[2]

Over the past several decades, China emerged as an extreme example of the East Asian model of economic development. It emphasizes rapid rates of capital accumulation, the drawing of underutilized labor out of agriculture, and the rapid upgrading (or copying) of the technologies available in more developed economies. It also adopted an authoritarian pro-business regime that has suppressed labor demands, channeled financial flows into capital accumulation, and used industrial policies to promote exports. While China has prospered under that model, it has reached the point that it is in need of some major adjustments.

Trade. China's extraordinary growth performance has now stretched over three decades. But for much of that period, trade was not a primary driver of growth, as the economic reforms focused on the domestic economy. In the decade prior to China's admission to the WTO in late 2001, trade was a relatively stable share of GDP: merchandise exports averaged 20 percent of GDP and imports 18 percent. However, as shown in figure 1, exports soared to a remarkable 35 percent of GDP by 2006, imports leveled out below 30 percent and the trade surplus reached 7½ percent in 2007. The explanation for the surge of export growth in the 2000s remains a bit of a puzzle. Many of China's trade partners believed that they had extracted a high price for its admission into the WTO.

China was impacted by the 2008-09 financial crisis, but only through the trade channel when its exports fell in parallel with the collapse of global trade. It was largely isolated from the crash of the global financial system. Fiscal stimulus was remarkably successful in restoring domestic growth in 2010-11, except the share of exports in GDP has remained well below the 2006-07 peak and the trade surplus has narrowed dramatically (figure 1). From the external perspective, China appears to have achieved a substantial rebalancing of its economy in line with the stated goals of the G-20. On the other hand, it is important to note that China's exports have continued to rise as a share of the global total, albeit at a reduced rate–from only 2 percent in 1990 to 4 percent in 2000 and exceeding 10 percent by 2010.

It is instructive to divide China's trade regime into two distinct components–processing trade and normal trade–that have been evolving in different ways. About half of China's trade is accounted for by processing activities, which are based on the duty-free import of goods to be

[2] Other examples are Woo and others (2012), and Lardy (2012).

assembled and re-exported. The distinguishing features of processing trade are the low contribution of domestic value-added and its domination by foreign-invested enterprises. The processing trade is dominated by foreign invested firms (80%) and it is increasingly focused on the importation of sophisticated parts and components from other countries in East Asia, and using them to assemble computers, telecommunications equipment, and other high-tech goods. The exports are widely diversified by recipient country, but the United States is the largest single destination.

As shown in table 1, the share of processed exports in total exports has declined from about 55 percent of the total in 2004 to about 44 percent in 2011. It reflects China's intermediary role in an Asian supply chain in which component parts come into China from the rest of East Asia and are re-exported. However, processing imports have slowed in line with processed exports, and processing trade now accounts for China's entire trade surplus. Meanwhile, the balance of normal trade has fluctuated over the years and has moved into substantial deficit since 2008.[3]

The distinction between the processing and normal trade components is important to evaluate the importance of trade as a driver in China's overall growth. The trade sector is certainly very large by the standards of other large countries; but, as highlighted in a recent paper by Koopman, Wang, and Wei (2012), the domestic value-added content of processed exports is much lower than that of normal exports (table 2). They used a detailed input-output table to estimated the foreign and domestic content of exports, and found a sharp contrast in the 1990s when the domestic content of the processed exports was only about 20 percent compared to 90 percent for normal exports. The two components have become more similar over time: the domestic share of processed goods has steadily grown as the foreign firms have increased their reliance of local sources for the components, and the domestic producers of normal exports have increased their use of foreign inputs. However, the domestic content of processed exports is still less than half that of normal exports.

The sizable role of processing trade also complicates the analysis of the effects of exchange rate changes. Most studies find the expected negative relationship between the real

[3] China's processing trade is an integral part of a larger regional production network as companies in Asia that had long exported to the United States moved their assemble work to China. Morrison (2012) shows that US imports from the Pacific Rim countries, including China, have been a nearly constant share of U.S. manufacturing imports since 1990, but that China's share of that trade rose from 8 percent in 1990 to 55 percent by 2011.

exchange rate and normal trade, but the impact on processing trade is complicated by the additional need to take account of exchange rate changes for the component suppliers elsewhere in Asia: a joint appreciation will have a much larger effect than that of China's alone (Ahmed (2009), Thornbecke (2011). Finally, the rising domestic content of processing trade suggests the exchange-rate elasticity of exports is increasing over time.

Further evidence of China's changing external situation is provided by the rise in the exchange rate, particularly when contrasted with the falling US rate, as shown in figure 2. Since the end of 2005, the real trade-weighted value of the RMB has appreciated by 15 percent and the dollar has fallen by 7 percent. Some of the effects on processing trade have been offset by large coincident declines in the exchange rates of Korea and Taiwan, two large component suppliers.

Domestic. It is harder to find evidence of rebalancing within the domestic economy, comparable to that on the external side. We expect the current account balance to move in tandem with narrowing of the gap between national saving and investment; but thus far, the fall in the current account surplus is the result of further increases in what was already an extraordinary rate of investment, rather than a reduced rate of saving (figure 3).[4] There is little evidence of a restructuring of demand toward a successful promotion of consumption over investment.

The current rate of investment already seems excessive from a traditional long-run growth perspective in which the capital stock is expected to grow in line with output. A rising capital-output ratio should imply a falling rate of profit. Using the historical average of 10 percent growth in output, a capital depreciation of 5 percent per annum, and the current capital-output ratio of about 2.5, the warranted investment rate would be about 38 percent of GDP. That is well below the 48 percent average investment rate of the last three years, and it would be even lower (32 percent) if the long-term sustainable growth should be as low as 8 percent per annum.

On the other hand, the rate of return to capital has been extraordinary in China and there is little visible evidence of a decline in recent years (Bai and others, 2006). Capital has undoubtedly been wasted in some sectors, but the evidence that China is seriously over-invested is mixed. For example, even though China has experienced a boom in high-income residential housing and an enormous run-up of urban land prices, it continues to have a large deficiency of

[4] Except for statistical discrepancies, the external current account (CA) and the balance between domestic saving and investment (S-I) are elements of an identity: $CA \equiv S - I$. But, the elements are all highly endogenous and the causal effects flow in both directions.

affordable low-income public housing. While there may be a need to shift the composition of investment away from the large export-oriented enterprises, an expansion of markets for domestic consumption will introduce its own investment demands. Finally, a slowing of investment without a commensurate fall in saving would intensify pressures to revert back to an emphasis on large trade surpluses. A program to rebalance the economy towards the domestic sectors needs to start with a rise in consumption (lower saving), not reduced investment.

Data from the flow-of-funds do provide a more detailed look at the sources of the surge in saving in the mid-2000s, but the accounts are only available through 2009. And despite the attention directed to the high rate of saving by households, the recent rise in saving was broadly-based with roughly equal contributions by corporations, governments and households (figure 4). The data of figure 4 do not fully reflect the extent of the increase in household saving because of a large decline in the portion of aggregate income distributed to households (figure 5). The household share has fallen by 8 percentage points from its peak in 1997, owing to the decline in the labor share of national income, reduced interest and dividend income, and lower net transfer income.[5] Yet, despite the fall in its income share, the household sector has raised its average saving rate from 31 percent of its own income in 2002 to 40 percent in 2009.

China's saving rate is an outlier even by the standards of other East Asian economies that reported very high saving rates during their previous episodes of rapid economic growth (Kuijs, 2006). Part of the explanation is the extraordinary pace of overall growth: internationally, there is a strong positive correlation between income growth and the saving rate that results from the lag in adjusting living standards to rapid changes in income. Ma and Yi (2010) summarize a large volume of research that focuses on the sources of the rise in the saving rate over the last decade. They indentify a number of secular trends and institutional factors that they believe have contributed. They include the rapid urbanization, the compressed pace of decline in the child-dependency rate, and the growth of private home ownership. In addition, a sustained period of surplus labor and the shedding of excess workers in the state enterprises promoted strong gains in both public and private enterprise profits. Since, the enterprises pay out a low percentage of their profits in dividends, the rise in the profit share has raised the overall saving rate.

[5] The lower net transfer payments reflect an increase in contributions for the public pension that were instituted after introduction of a new system in 1995.

Government saving also rose sharply as a share of national income after 2000. That reflected an improvement in government revenues and a scaling back of the share of GNI devoted to public consumption programs. It included a shift of emphasis in the government budget toward investment, particularly in infrastructure, and away from consumption. Some of the higher saving can also be attributed to the build-up of pension fund assets. The success of the investments in infrastructure may enable a shift back to public consumption in areas such as education and health care. That would suggest a reduction in the government component of saving in future years.

The surge in household saving is the most puzzling aspect of the post-2002 developments. It is particularly surprising in view of household limited participation in the overall income gains. Studies point to the declining public provision of education, health, and housing services as part of the restructuring of the public sector, increased income uncertainty, and a lagged response to rapid income growth. Demographic factors appear to have played a minor role.

In order to increase the role of household consumption, households will need to receive a larger share of national income, and their own rate of saving will need to decline. Thus far, there is limited evidence of either of these developments, though there was a modest rise in the household income share in 2009. In the short-term, an increase in the consumption share of GDP is more likely to be the result of a shift in government spending, away from infrastructure investment toward increased outlays on education and health care, reversing some of the pattern of the 2000s.

The United States in China

Surprisingly, the United States is not heavily involved in the Chinese economy. While exports to China have been growing rapidly in recent years, that growth has not matched the expansion of the overall import market, and the U.S. share continues to fall, from 11.4 percent in 2001 to 7.7 percent in 2011.[6] Both the European Union and Japan export more to China, but they too have suffered an erosion of market share as China's trade with other emerging markets expands even more rapidly. Furthermore, direct investments in China have remained at about 3 percent of the U.S. global total. The rate of return on those investments have consistently

[6] This estimate is based on the merchandise trade reports of China and includes net imports of Hong Kong and the mainland. The estimates from the United states and China's other trading partners imply a smaller 2011 share of 6.8 %, but a smaller decline over the 2000s . Martin (2011) provides a summary of the research on differences in reported trade between the United States and China.

exceeded those of U.S. investments in other countries, but some of the areas of strong U.S. involvement, such as finance and insurance, are still constrained in China.

Manufacturing activity has declined in the United Sates, but it has not been a simple process of moving production facilities to China. Instead, many American firms have shifted away from the prior model of large integrated production units in order to focus on product design and marketing. Thus, they contract with firms that are part of the regional production network in Asia, and undertake little of their own production. Apple computing is a leading example of such a company: it owns no large production facilities in the United States or elsewhere, preferring to contract with companies in Taiwan and Korea who assemble the products in China. But, by controlling key elements in the value chain, Apple extracts most of the value. Similar networks have become common in the market for personal computers. In contrast, Mattel has also closed all of its production facilities in the United States, but continues to operate factories throughout Asia.

Furthermore, from China's perspective, the United States is an important but not dominant export market. Exports to the United States were 20 percent of the total in 2011, about the same as the US share of global GDP, but the proportion of China's trade going to the United States has fallen substantially since 2001 when it accounted for 29 percent. The bilateral trade flow is of reduced importance to a rapidly growing China with potential for growth with other emerging markets. China has a large trade surplus with the United States, but many of the exports are in the processing sector where the value added benefits to China are limited.

In general, analysts prefer to adopt a multinational perspective on trade as opposed to an emphasis on the bilateral relationships, but over the past decade the magnitude of the US-China bilateral imbalance has reached extreme levels, and it is hard to ignore the dominant role that China plays in the area distribution of the U.S. external deficit. The distribution of the U.S. current account balance by major region is summarized in table 3. In 2000, the U.S. current account deficit reached $400 billion. About half of the deficit was with Asia, and. the bilateral imbalance with China represented only about a fifth of the total. By 2005, the total had grown to $750 billion and the United States had transaction deficits with nearly every region of the world, and the China share had grown to about 30 percent. In the latter half of the decade, a depreciation of the exchange rate and the recession both contributed to a substantial improvement in the external balance, and the current account deficit fell back below $500 billion.

The United States now has a surplus or near balance with nearly all of the major regions with the exception of China and the major oil producers. And the deficit in oil trade may recede in future years as the United States develops its domestic shale oil and gas supplies. However, the deficit on transactions with China has continued to expand to about $300 billion and it now represents a startling two-thirds of the total.

In part, the imbalance with China has grown because China has invested its large exchange reserves in U.S. bonds, and the interest payments are a substantial component of China's surplus. However, it is primarily the result of continued growth in imports from China that are now three times larger than U.S. exports to China. Because the magnitude of the initial difference in trade was so large, it continues to rise even though U.S. exports to China are now growing faster than imports in percentage terms.

Rebalancing the U.S. Economy

In contrast to the extraordinary growth of the Chinese economy, the United States has seen its economic performance deteriorate in several dimensions over the past decade. And in many respects, its problems are the opposite of those of China. Americans consume too much of their income, perpetually living beyond their means in both the private and public sectors. And for several decades, U.S. firms have devoted little attention to developing their export potential, preferring to focus on a strong domestic market. The decline is particularly marked on the external side.

External. The United States has had two major episodes of current account imbalances, one in the early 1980s and the current episode, as shown in the top panel of figure 6. The 1980s' experience was dominated by a large rise in the real exchange rate in the first half of the decade that priced many American products out of the global market. But it quickly reversed and returned to its former value by 1988. In response to the exchange rate gyrations, the current account swung into large deficit and back to a small surplus by 1990. In subsequent years, however, the U.S. external balance steadily deteriorated, reaching its largest current account deficit in 2006 at $800 billion, or 6 percent of GDP. The exchange rate began to depreciate in 2002 (figure 2), and the cumulative drop reached 30 percent prior to the onset of the financial crisis in the fall of 2008, which triggered a rush back into the safety of dollar-denominated assets and a partial reversal of the prior depreciation. But, the exchange rate remains well below its prior peak, and the current account deficit has receded to about 3 percent of GDP, half the

magnitude of 2006. The ongoing weakness of the domestic economy plays a major role in limiting the size of the deficit, which would rise substantially should the economy return to full employment.

The cumulative costs of the trade deficits are evident in the bottom panel of figure 6, which shows the net foreign investment position. In 1980, the United States was the world's largest creditor nation with net assets of about 10 percent of GDP. Today, it is the world's largest debtor. After three decades of current account deficits, the net indebtedness exceeds $8 trillion or about 25 percent of GDP. It is that feature that most clearly correlates with the suggestion that Americans are living beyond their means: a pattern of rising indebtedness relative to income that is not sustainable in the long run.

Furthermore, the international data suggests that the United States suffers from a deterioration of its competitive position in global markets, and a steady loss of market share. U.S. exports of both merchandise and commercial services peaked as shares of the global total both peaked in 2000, at 12 and 19 percent respectively, and have fallen substantially since then (figure 7). The merchandise trade shares is now below 10 percent and the services share has fallen to 14 percent. The decline in services is particularly surprising because it has long been seen as an area of U.S advantage and the United States still records a surplus relative to its own imports.

Finally, advanced technology products (ATP), particularly in the area of information and communications technologies, fueled the economic boom of the 1990s and a surge of productivity; and ATP exports exceeded imports by an average of 20 percent. By 2011, however, the U.S. trade balance in ATP has swung into large deficit and imports are now about a third larger than exports. While U.S. firms remain competitive in generating IT innovations, and in managing global production chains, they have shifted many of their production facilities (and employment) to other countries or contracted with Asian suppliers.[7]

Domestic Economy. The domestic counterpart to the external imbalance is most evident in the shift of resources into household consumption. Prior to 1980, the consumption share

[7] The most comparable international concept is the measure of high-technology exports shown in the United Nations Comtrade database for exports of products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery. The United States share of high-technology exports has fallen from 20 percent of the global trade in the late-1990s to 8 percent in 2010. China has replaced the United States as the largest single exporter with 20 percent of the total.

fluctuated about 62 percent of GDP, rising during recessions when investment was weak and receding during period of strong growth in the rest of the economy. Since 1980, however, there has been a large and sustained rise in the consumption share, as shown in figure 8, and it now exceeds 70 percent of GDP. Prior to the recession, the consumption boom was financed largely by the trade deficit, slightly lower rates of investment and reduced direct government purchases. Much of the increase is reflected in the extraordinary share of GDP that the United States devotes to health care, now approaching 20 percent. Although it is financed through employer-provided health insurance and government programs, all health expenditures (outside of investment and large parts of R&D) are allocated to household consumption in the national accounts with an associated inclusion of private health insurance payments and government-provided medical care as income of the household sector.

An alternative perspective is provided by an examination of the balance of saving and investment as outlined in table 4. I have followed the convention of a focus on net saving (deducting capital depreciation from both saving and income) as opposed to the gross saving rates reported for China; however, it has little influence on the trends, and overall depreciation is about 12 percent of national income.[8] It is evident from the table that the secular fall in saving is concentrated in the household sector. Government has frequently displayed a negative rate of saving; but until the financial crisis, the deficit was small. Similarly corporate saving was a small and stable share of GDP historically, but it has increased in the United States and other countries in recent years. Domestic investment was a slowly falling share of GDP up to the financial crisis, but it has now collapsed to unprecedented low levels.

A full explanation for the diminished rate of household saving remains controversial; but much of it can be traced to the exceptional capital gains of the 1990s and 2000s in both equity and housing markets that led Americans to think that they were richer than they were. It was also a period of very easy credit conditions that encouraged high levels of debt. Americans did increase their saving in the immediate aftermath of the financial crisis, but they are gradually reverting to the old ways and the saving rate is drifting back down. The most striking aspect of the table is that the United States has reported a negative rate of national saving for the past four years, as the large government deficit fully offsets private sector saving. Yet, that outcome is

[8] The focus on net income and saving provides a better measure of the resources available for consumption and captures a U.S. shift toward less durable, shorter-lived capital with a faster rate of depreciation. However, it does require detailed information on types of capital purchases.

compatible with a shrinking of the current account deficit because of an equally large collapse of domestic investment.

Because the relationship between the external trade balance and rates of domestic saving and investment are based on an identity, it is difficult to specify the direction of causation. However, it is notable that the large current account deficits arose during a period of strong U.S. growth and unprecedentedly low rates of unemployment. If the trade deficit were driven by foreign factors, we would have expected to see problems of low demand and unemployment. Thus, it appears that the domestic imbalances, rather than unfair foreign trade practices, largely drove the change in the external deficit over the past two decades.

Economic Recovery. Although the underlying situations may be a bit different, one is struck by the comparisons of the evolution of the Japanese economy after the collapse of its asset market bubble in the early 1990s and the current condition of the United States. Both countries have largely exhausted the use of monetary policy as a tool of recovery, and both are faced with unsustainable high levels of government budget deficits. Even more striking, both countries face similar political problems of an inability to develop a coherent program for recovery that would achieve sustained public support. Both countries interpreted the initial economic decline as a typical business cycle and applied a typical Keynesian policy response, while ignoring evidence of accumulating structural problems. The political campaign was marked by a notable lack of proposals to deal with the ongoing economic stagnation.

The dilemma faced by the United States is summarized in figure 9. Potential GDP–the level of output associated with an unemployment rate of 5½ percent– is shown by the heavy black line and is projected to expand at a 2.2 percent annual rate for the remainder of the decade, only marginally below the rate of the 2000s. The level of actual GDP equaled or exceeded potential in the years prior to the crisis, dropped 7 percent below potential at the height of the recession, and has gradually narrowed to a gap of 5½ percent by mid-2012. The Congressional Budget Office is now projecting a recession for 2013 under an unlikely scenario in which the Congress and the President are unable to achieve a compromise on the future budget and extreme fiscal restraint is introduced in early 2013. But even if they do avoid the fiscal extreme, growth is projected to only parallel that of potential GDP, and unemployment will remain in the neighborhood of 8 percent for several years into the future.

Policymakers are faced with a conflicted set of economic policy options as they try to choose between proposals for more fiscal stimulus–either additional tax reductions or added expenditures–or a more immediate program of deficit reduction. However, it is difficult to outline a favorable future evolution of the economy under either policy prescription. Large fiscal deficits cannot be sustained indefinitely; and as illustrated by the experience of Japan, the effort to reverse the stimulus in the future will lead to a symmetric reduction in aggregate demand. Japan has seen its net public debt rise from near zero to over 150 percent of GDP with no sustained recovery. Similarly, the U.K. and the Euro Area illustrate the immediate recessionary impact of efforts to address the fiscal imbalance as the first priority. The election has produced no public consensus, and the political parties and their major economic advisors remain deeply divided on which objective to pursue.

It is important to recognize that the United States is no longer faced with a standard *cyclical* shortfall of demand, and the current 5½ percent output gap reflects deeper problems in the structure of aggregate demand.[9] Housing demand will recover, but it will not and should not return to the bubble conditions of the mid-2000s. And, far from being weak, consumption is being supported at an unsustainable share of GDP (figure 8) by large tax reductions and government transfers that have boosted household disposable income to an artificially high level.[10] When those programs are scaled back, consumption will be a lower share of GDP. Furthermore, business investment is unlikely to expand beyond its current share of GDP without the prospect for greater aggregate growth in future years. In summary, it is difficult to foresee a situation in which increased *domestic* demand will expand to fill the current output gap. Instead, a return to a full employment level of output is likely to be conditional on the expansion of export markets and elimination of the remaining current account deficit. The United States can no longer afford the debt finance that perpetual trade deficits entail. Thus, a primary focus of economic recovery should be on strengthening the export focus of the U.S. economy. Higher levels of export demand will induce increased investment to expand capacity, and the rise in employment and incomes will leverage a higher level of consumption.

[9] Furthermore, evidence that the weak recovery cannot be attributed to structural problems in U.S. labor markets is provided in Lazear and Spletzer, 2012) and the additional articles that they cite.

[10] In the national accounts, primary incomes are those payments to the factors of production before the deduction of taxes and the addition of government transfers. For the United States, the share of disposable income to primary income has increased from 93.6 percent in 2006 before the onset of the recession to 100 percent in 2011.

The continued pattern of the largest U.S. corporations shifting their production to Asia suggests that the United States has become an unattractive location for production in a world of increasing capital and entrepreneurial mobility. Apple Computer, for example, is still thought of as America's largest corporation, but it has closed its domestic factories, and it interacts with the U.S. primarily as its largest market and a location for some of its R&D. Equity in such corporations is now held by investors in a wide range of countries. They are for practical purposes global corporations free to search for the most favorable locations for production. In the 1990s and 2000s, this shift of production mattered little to the United States as it appeared to face few problems in creating local employment.

In recent years, the situation has changed dramatically as the United States now confronts a global economy with intense national competition for jobs, and in a continued weak global economy, the competition can only intensify. Americans need to focus on this competitive aspect of the location of economic activity and its associated employment opportunities.

What type of changes would be required? First, after a decade of an overvalued exchange rate, the cost of American products and their production are widely perceived as too high. One answer is to raise U.S. saving on a long-term basis to reduce the demand for foreign finance, lowering the value of the dollar. That would immediately improve the attractiveness of U.S. products. Recessions are never a good time to initiate such changes, and they need to be phased in, but the exchange rate is the fundamental regulator of demand for a nation's products, and the United States has ignored for too long the costs of an over-valued currency.

Second, the United States has become an outlier with respect to its tax on corporate income. Perhaps that did not matter in past decades; but in a world of high capital mobility, effective tax rates in excess of the benefits that residency provides are an oft-mentioned factor behind decisions with regard to choosing business locations. The U.S. has the highest corporate tax within the OECD and it exceeds the OECD average of 25 percent by more than 10 percentage points. Most countries have come to understand the desirability of taxing consumption within their borders as opposed to production, and have shifted to a value-added tax. The United States will need to reexamine its position on corporate taxation, and sharply reduce the effective tax rate.

Third, in past decades, the United States could justify its high wage rates with the argument the U.S. workforce was better educated and more productive than that of other

countries. That is no longer the case. In the OECD compendium of statistics, *Education at a Glanc*e (OECD, 2011), the United States ranked at the top of the distribution of countries based on educational attainment among those age 55-64. That ranking among older persons reflects the earlier U.S. domination. But a focus on younger persons age 25-34 highlights the extent to which other countries have caught-up and surpassed the U.S. performance. The United States is only marginally above the OECD average, and well below countries like Canada, Japan, and Korea. Furthermore, U.S. 15-year-olds rank 25th in math and 17th in science in PISA scores among OECD nations. In fact, U.S. businesses seemingly have come to accept the superior foreign performance and lobby for an expansion of H-1 visas for high skilled immigrants. However, that can only be a short-term fix, as many recipients of H-1 visas, once trained, will seek to go home. Nor does it address the problem of job skills for domestic students. The United States needs to expand its investments in higher education and develop a new mechanism for the financing of higher education beyond the growing reliance on student debt. It also lags behind many other countries in developing effective vocational education and job training programs.

Similarly, the country suffers from a deteriorating physical infrastructure that raises the costs of production and limits the location of export activities. The extraordinarily low level of current interest rates suggests that now is an ideal time to borrow funds to finance the repair and modernization of those systems. The adoption of such a program is constrained by a concern that it is simply an excuse for added deficit spending. That issue can be addressed within a capital budget framework in which each investment is financed with amortized debt for which a portion comes due in each year and is repaid with an explicit tax or dedicated revenue source over the duration of the bond issue. Such financing, if matched by a credible dedicated revenue source, would not add to concerns about an unmanageable level of general fund debt. The program is particularly attractive in the present context of the need for further economic stimulus.

One positive development has been the expansion of the nation's capacity to produce energy from shale. It will reduce the country's requirements for imported oil and potentially expand the domestic production of some chemicals that utilize large amounts of hydrocarbons as the basic input. It also provides a inexpensive source of relatively clean energy for both heat and electrical generation. Low energy costs would provide a significant incentive to the expansion of production facilities within the United States.

Finally, the global treatment and enforcement of intellectual property rights has been promoted by some as critical to a strengthening of U.S. export performance, and it has emerged as among the most contentious of differences between the United States and China. It is a difficult issue that has a long history dating back several centuries to when Great Britain was the technology leader and the United States endeavored to catch up. At the time, it was the United States that was accused of stealing the new technologies and Great Britain who struggled to keep its secrets.

In recent years the patent and copyright systems have been greatly expanded and they have become an increasing source of conflict between both market players and countries. It is clear that the system has become very suboptimal for a variety of reasons. It was originally designed to promote innovation and in some areas where innovations can be easily duplicated, such as pharmaceuticals, it plays a critical role. But in other cases, the patent system has become a tool by which large companies battle one another in a highly litigious process based on the accumulation of large portfolios of relatively trivial, low-quality patents as a legal threat to competitors or as a means of heading off their challenges. The whole construct seems likely to drive out smaller innovators and create various oligopolies designed to slow a process of incremental innovation. Companies that previously sought to stay ahead by innovating faster than their competitors now use patents more as a weapon and basis for seeking economic rents from others. In the international context, developing countries perceive the demands of the advanced countries to spend increasing amounts of their resources to enforce the system as equivalent to a tax, and in many cases it may be little more than an effort by 'first movers' to capitalize their advantage.

The system of protection of intellectual property seems headed for inevitable reform both within the major countries and in terms of an internationally enforceable system. However, increased enforcement of intellectual property rights is unlikely to be a key to future U.S. economic performance. The returns to innovation remain high and there is little evidence the violations at the margin have negatively affected the incentives. Any effort to expand the range of rent-seeking behavior within an expanding global market is likely to have as many negative as positive implications.

In summary, the expansion of U.S. exporting capabilities is critical to its future performance. The doubling of exports over a five-year period was an important aspect of the

National Export Initiative that was announced by the Obama Administration at the beginning of 2010. Unfortunately, it is unlikely to be realized, and it suffered from a shortfall of suggestions of how to achieve the goal. Yet, it is recognition by the government of the need to strengthen United States export capability. Perhaps it can build on that starting point to undertake more real change.

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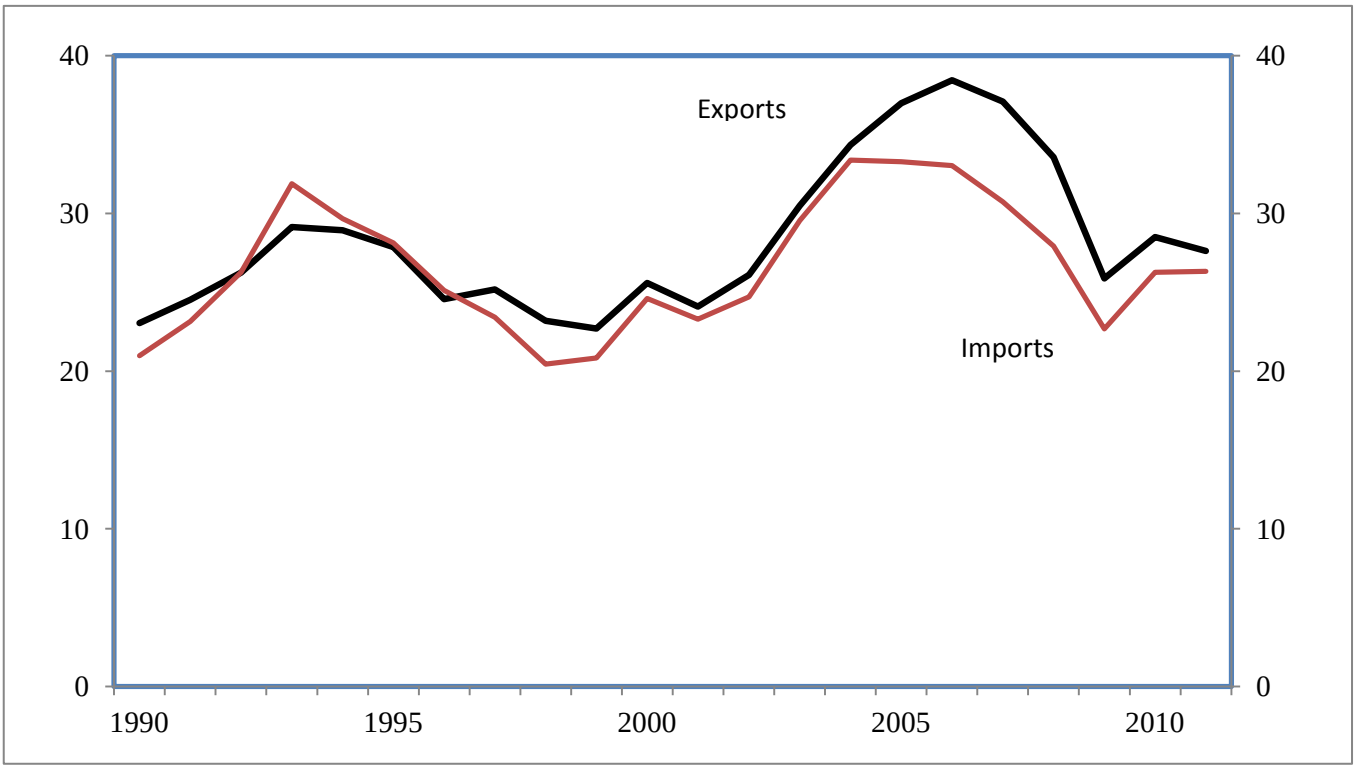
Figure. 1 All China Merchandise Trade, 1990-2011

Percent of GDP



Source: International Monetary Fund, *Direction of Trade Statistics* (DOTS), World Bank, *World Development Indicators* (WDI).

Table 1. Components of China's Merchandise Trade, 1993-20011.

percent of GDP

Year	Processing Exports	Processing Imports	Balance	Normal Exports	Normal Imports	Balance
1993	10.0	8.3	1.8	10.8	15.3	-4.5
1994	10.2	8.5	1.7	11.4	12.2	-0.8
1995	10.1	8.0	2.1	10.3	10.1	0.2
1996	9.9	7.3	2.6	7.8	9.0	-1.1
1997	10.5	7.4	3.1	8.7	7.5	1.2
1998	10.2	6.7	3.5	7.8	7.0	0.7
1999	10.2	6.8	3.4	7.8	8.5	-0.7
2000	11.5	7.7	3.8	9.3	11.1	-1.8
2001	11.1	7.1	4.0	9.0	11.3	-2.3
2002	12.4	8.4	4.0	10.0	11.9	-1.9
2003	14.7	9.9	4.8	12.0	15.2	-3.2
2004	17.0	11.5	5.5	13.7	17.6	-3.8
2005	18.5	12.1	6.3	15.3	17.1	-1.8
2006	18.8	11.9	7.0	16.9	17.3	-0.4
2007	17.7	10.6	7.1	17.2	16.8	0.4
2008	14.9	8.4	6.6	16.7	16.7	0.0
2009	11.8	6.5	5.3	12.3	13.7	-1.3
2010	12.5	7.0	5.4	14.2	16.5	-2.3
2011	11.4	6.4	5.0	14.6	17.4	-2.8

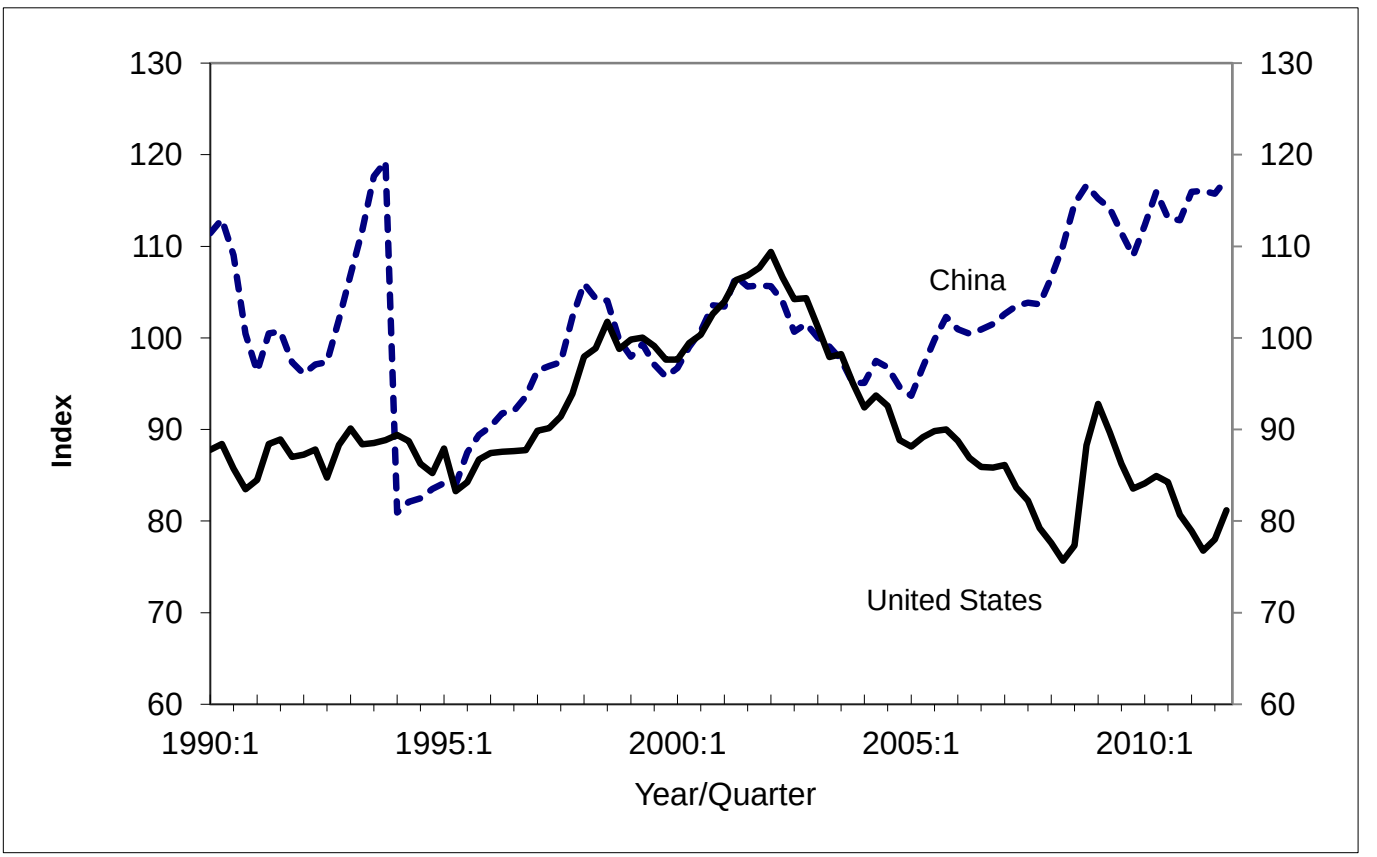
Source: China Customs

Table 2. Domestic and Foreign Value-Added in Processing and Normal Exports
percent of exports

	Normal Exports			Processing Exports		
	1997	2002	2007	1997	2002	2007
All Merchandise Exports						
Total foreign value-added	5.2	10.4	16.0	79.0	74.6	62.7
Total domestic value-added	94.8	89.6	84.0	21.0	25.4	37.3
Manufactured Goods Exports						
Total foreign value-added	5.5	11.0	16.4	79.4	75.2	63.0
Total domestic value-added	94.5	89.0	83.6	20.7	24.8	37.0

Source: Koopman, Wang and Wei (2012).

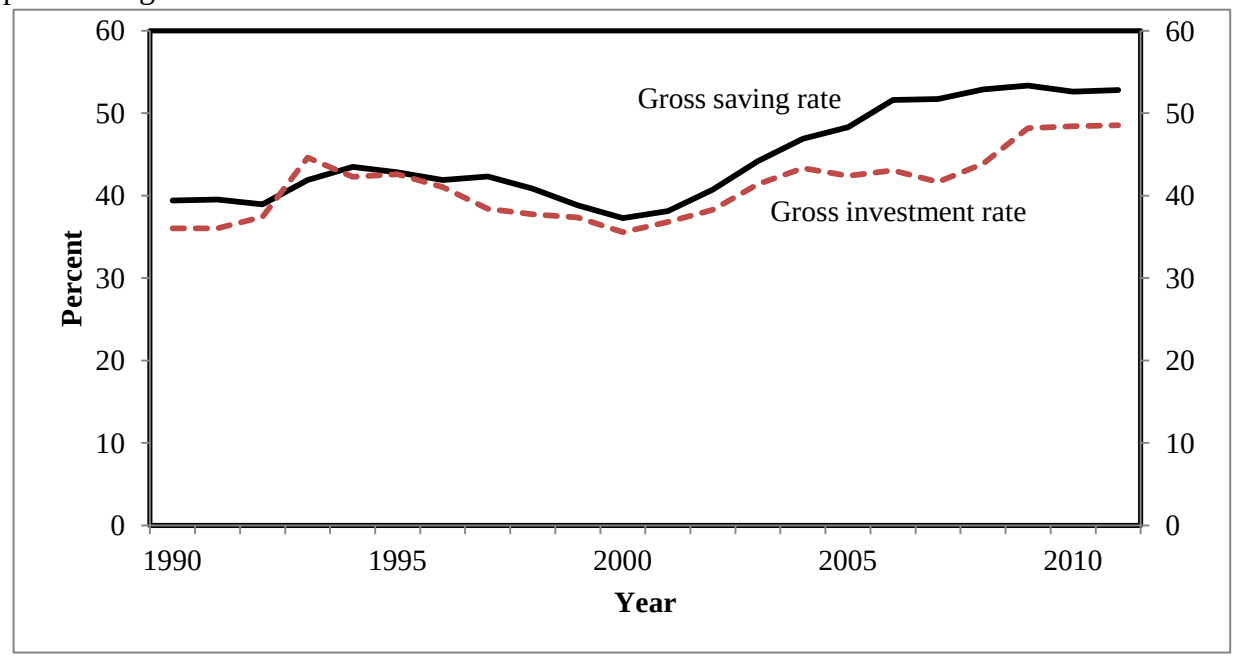
Figure 2. Trade-Weighted Real Exchange Rate, China and the United States, 1990-20



Source: JPMorgan.

Figure 3. Gross Saving and Investment, China, 1990-2011

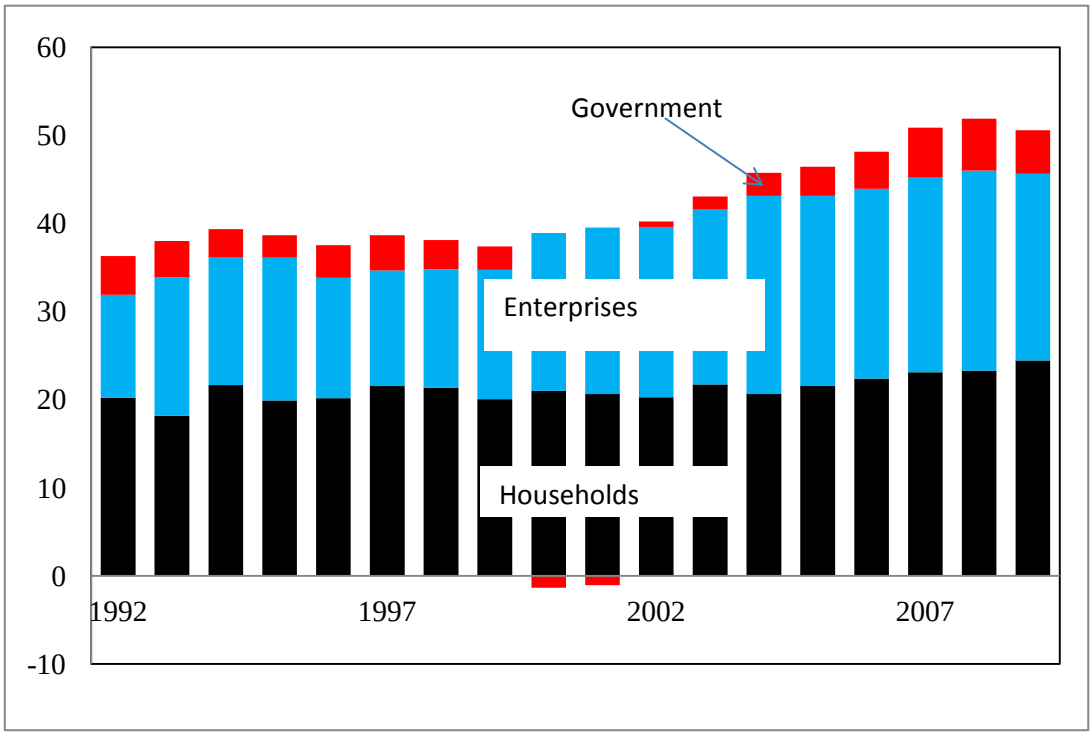
percent of gross national income



Source: World Bank, *World Development Indicators* .

Figure 4. Gross Saving by Institutional Sector, 1992-2009

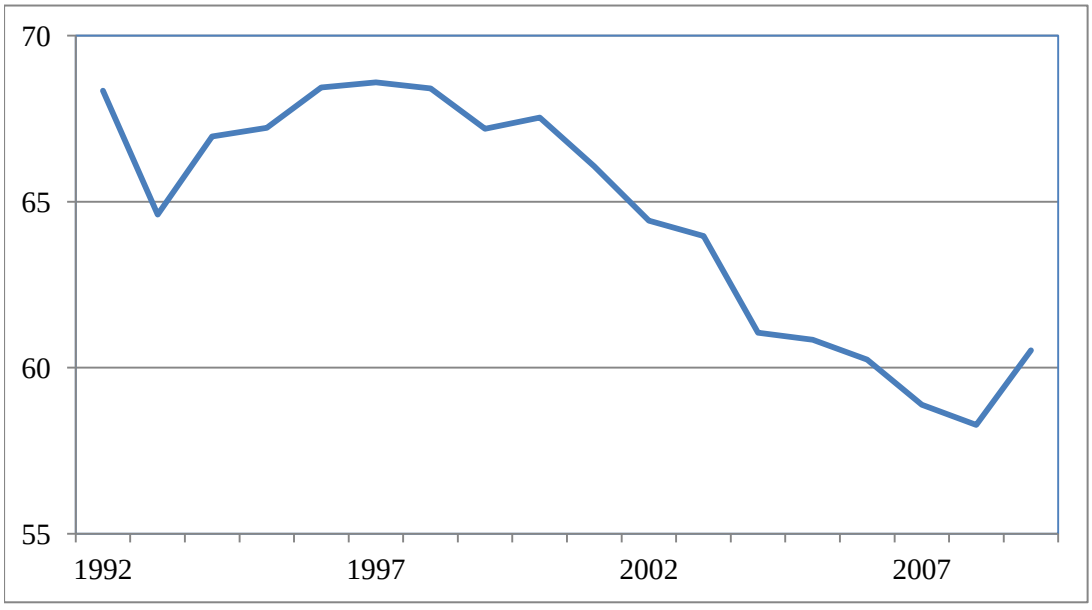
percent of national disposable income



Source: National Bureau of Statistics of China, *China Statistical Yearbook 2012* . There may be a small break in the data series in 2000. The 2012 yearbook reported revisions back to 2000, but they may extend further.

Figure 5. Household Disposable Income, 1992-2009.

percent of national disposable income.



Source: National Bureau of Statistics of China, *China Statistical Yearbook 2012* .

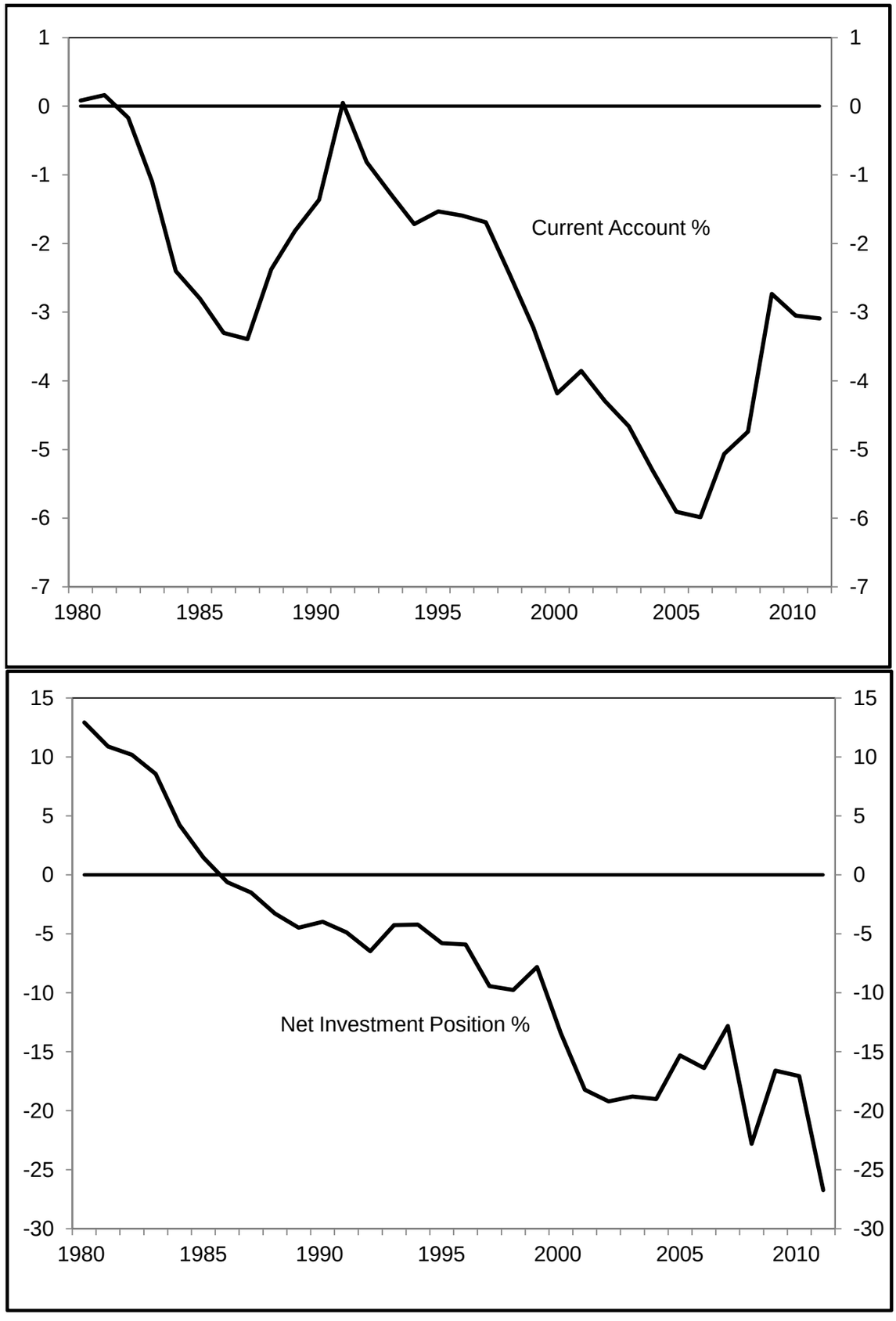
Table 3. Distribution of U.S. Current Account Balance,2000-2011
billions of dollars

Item	2000	2005	2011	Change 2011-2005
Current Account				
Total	-416	-746	-466	280
Asia	-247	-378	-395	-18
China	-88	-219	-315	-96
Hong Kong	3	9	35	26
Other Asia	-163	-162	-84	78
Canada	-28	-51	27	78
Latin America	-36	-101	16	117
Europe	-74	-127	-13	114
Middle East	-24	-49	-45	4
Africa	-18	-50	-63	-13
Other	11	10	8	-2

Source: Bureau of Economic Analysis, U.S. International Transactions Accounts.

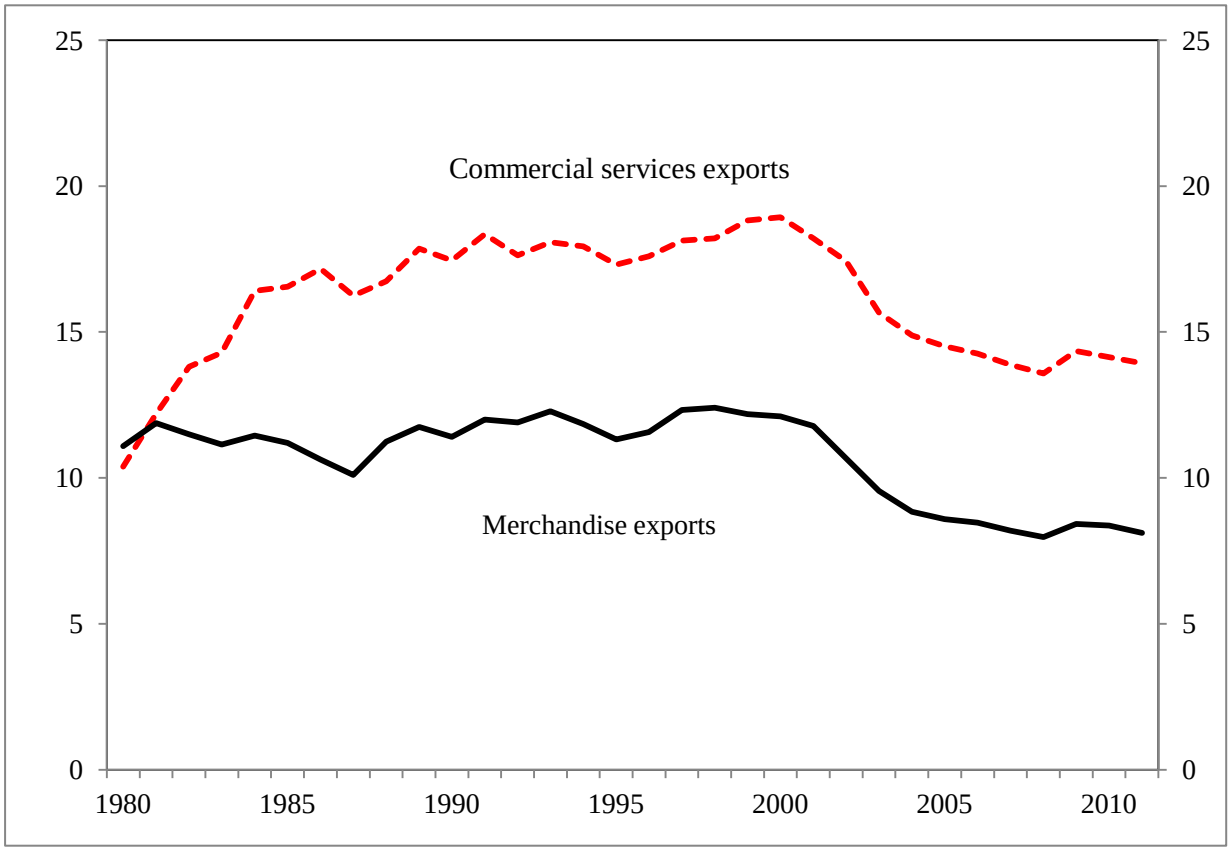
Figure 6. Stock and Flow Measures of the US External Balance, 1980–2011

Percent of GDP



Source: Bureau of Economic Analysis, Balance of Payments and International Investment Position.

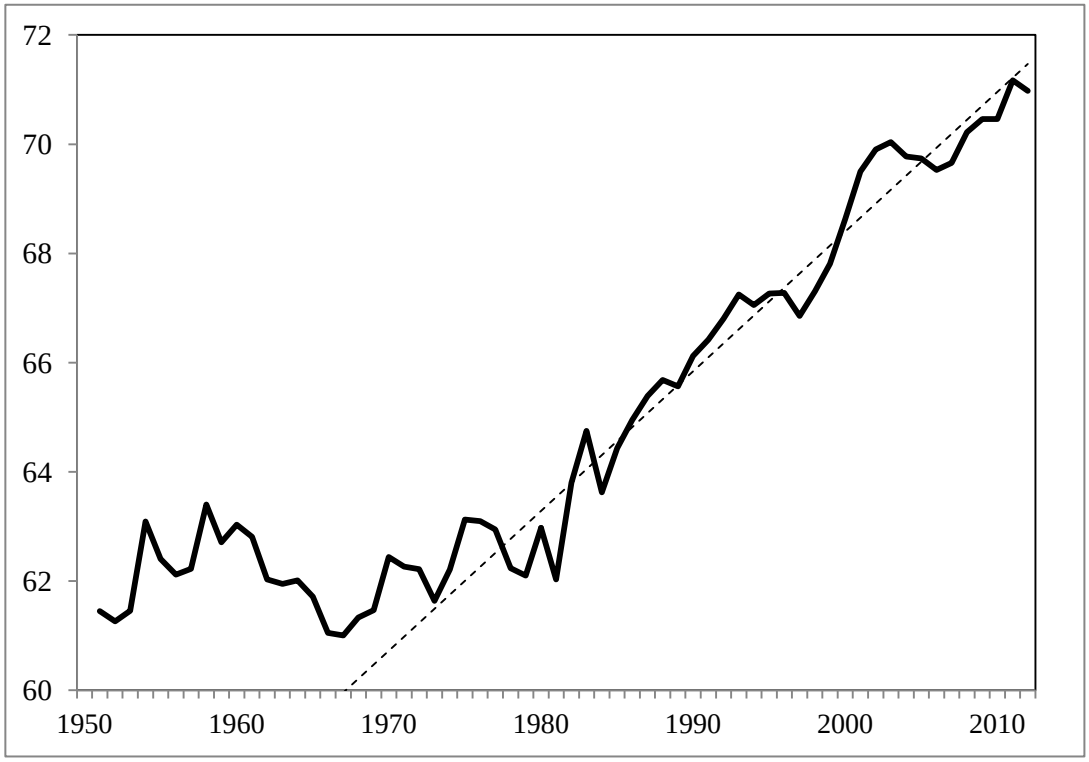
Figure 7. U.S. Exports, Merchandise and Commercial Services, 1980-2011
percent of global total



Source: World Trade Organisation, *Statistical Database*

Figure 8. Personal Consumption as a Share of GDP, 1951-2012

percent or GDP



Source: table 1.1.5 of the national accounts and author caclulations.

Table 4. Components of National Saving, 1960-2012

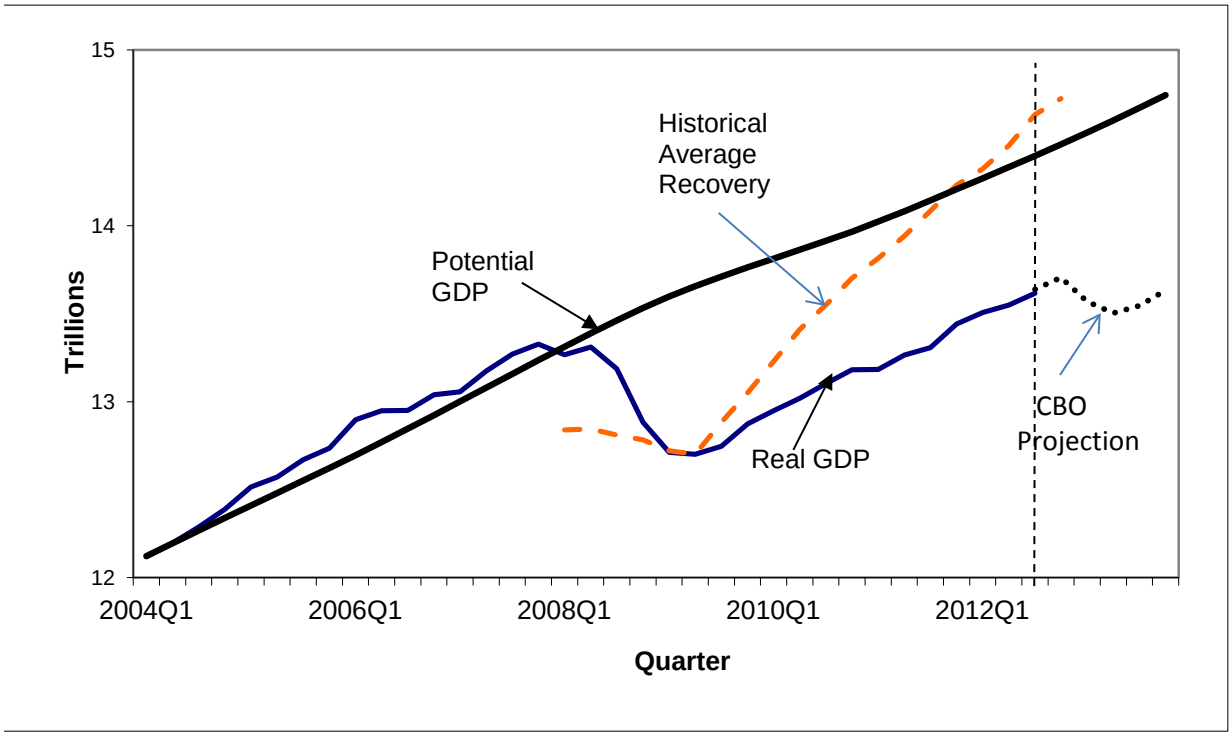
percent of national income

Item	1960-79	1980-89	1990-99	2000-08	2009-11	2012
Net Saving	10.9	6.3	5.7	3.2	-1.4	-0.2
Government	0.0	-3.5	-2.0	-2.3	-10.7	-8.8
Private	10.9	9.8	7.7	5.5	9.3	8.6
Corporate	3.9	2.9	3.2	2.8	5.2	5.3
Households	7.0	6.9	4.5	2.6	4.1	3.3
Net Domestic Investment	11.2	9.4	8.1	8.1	2.5	3.7
Government	2.1	1.6	1.2	1.3	1.3	0.8
Private	9.2	7.8	6.9	6.7	1.2	2.9
Current Account	0.4	-2.1	-1.8	-5.5	-3.4	-3.8

Source: Bureau of Economic Anaysis web site, national income accounts tables 1.7.5 and 5.1.

Figure 9. Actual and Potential GDP, 2004-2013

trillions of dollars



Source: Congressional Budget Office,Bureau of Economic Analysis, and author's estimates