Challenges to the U.S. Economy: Economic Imbalances in a Growing Economy

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Paper prepared for the Research Conference of the Tokyo Club Foundation for Global Studies

Major Issues for the World Economy Looking to 2005

Hotel Okura
Tokyo

8-9 November 2004

Abstract

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This paper examines the economic situation faced by U.S. economic policymakers in the second Bush Administration. The first section focuses on the outlook for the economy over the next several years. It highlights the important role of investment demand in forecasts of continued expansion of the domestic economy, and the fundamental strength of the supply side of the United States economy. Productivity growth continues to be very rapid, with most of the recent improvement being due to improvements in the service-producing industries. Inflation remains low despite increases in energy prices, and the United States has a relatively favorable outlook compared to other industrial countries. The major short-term risks are associated with potential disruptions of the world energy markets.

Despite the outlook for continued growth, the United States is confronted with two severe imbalances: large and sustained fiscal deficits and a growing external imbalance. This paper traces the sources of the dramatic change in the fiscal situation that has occurred in recent years, and points to a future of large chronic budget deficits. However, I argue that from a strictly domestic perspective, the budget deficits are sustainable, and the Congress and the President are unlikely to undertake any significant corrective actions.

On the other hand, the continued growth of the external current account deficit raises much more serious concerns since it is doubtful that the current path of growing deficits can be sustained. The paper reviews the domestic and external factors that have contributed to the steady growth in the deficit in recent years, and examines the domestic and international economic implications of the options for scaling the deficit back to more manageable dimensions. The U.S. external deficit is a severe challenge for future U.S. policymakers, but also for a global economy that has become very dependent on continuation of the U.S. trade deficit. It is in this context of a potential external crisis that the future U.S. government may be forced to take action to reduce the fiscal deficit and contract the nation’s excessive rate of consumption.

Draft November 20, 2004
Tokyo Club for Global Studies

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Over the past decade, the United States has played the role of the economic engine for growth in the global economy. From its own perspective, the 1990s were the best of times, as both output and employment grew rapidly. Productivity growth surged in the last half of the decade, propelled by the rapid innovations in the new information and communications industries and the rush to adopt those technologies in U.S. service-producing industries. The United States also achieved a combination of low inflation and unemployment that seemed unreachable at the beginning of the decade. On both the demand and supply sides, the economy performed with admirable vigor.

At the same time, the United States took on an increasingly large role in ensuring continued expansion of the global economy. The 1990s was a decade in which both Europe and Japan were focused on their own internal economic problems. In the Mexican crisis of 1994-95 and again in the Asian crisis of 1997, the openness of the U.S. market played a key role in promoting economic recovery. In both cases the pattern was the same: a sharp devaluation and a subsequent surge of exports to the industrial economies, but particularly to the United States. For example, in the three-year period of 1997-2000, U.S. imports of goods from developing Asia surged by 41 percent ($90 billion), compared to 26 percent (33 billion) for Japan, and 27 percent (45 billion) for the European Union. Between 1997 and 2000, the balance of U.S. trade in goods and services with the rest of the world declined by over $270 billion.

Much of this ended in 2001, when the boom in capital spending suddenly reversed. The 'new economy' in particular fell on hard times. Output of high-tech capital (computers and communications equipment), which had been growing at a 40 percent annual rate, fell

by 8 percent during 2001. The NASDAQ equity index, dominated by the high-technology firms, dropped to less that half of it peak value, and many of the most famous internet firms went into bankruptcy. The resulting recession was relatively mild by historical standards, but long and drawn out.

Most recently, the U.S. economy has begun a modest recovery. Growth is projected at 3½-4 percent in 2004 and 2005, roughly paralleling the growth of potential output. This has occurred against the backdrop of a more vigorous expansion of the global economy, led by strong growth in a broad range of Asian economies from Japan to India.

However, recovery does not imply a return to the buoyant economy of the 1990s. There are ongoing concerns that will limit the strength of the recovery. First, short-term forecasts of U.S. growth are narrowly based on renewed investment spending, and it and the global economy are very vulnerable to a disruption of energy supplies. In addition, the recovery is taking place against the backdrop of severe economic imbalances in the United States: deficits in both the federal government budget and the current account that are widely perceive as unsustainable. Given these problems, the economy will present severe challenges to American political leaders regardless of who wins the election.

These economic concerns are examined in more detail in the remainder of this paper. The next section addresses the short-term economic outlook and developments on the supply side of the economy. Section two reviews the U.S. fiscal situation and the sustainability of large budget deficits. The third section is devoted to an evaluation of the current account deficit and the potential for a severe disruptive of the global economy.

Current Outlook

The U.S. recession was brought on by an extreme collapse of business investment, albeit from the inflated levels of the late 1990s; and the modest nature of the recovery largely reflects continued weakness in the investment sector. Figure 1 shows a comparison of the growth in output and investment relative to the average of past business cycles. The recovery in GDP is slower than the average of post-WWII business cycle recoveries, but comparable to the anemic expansion of 1992-93. The largest contrast is in the behavior of business investment, shown in the lower panel. The decline was larger than in past cycles and the recovery has been much weaker and more drawn-out.

Business investment is also the dominant issue in forecasts for 2005. Private consumption and housing demand have remained at high levels throughout the recession and recovery, leaving little potential for a post-recession surge – particularly since the household saving rate is already near zero. Stimulus measures from both fiscal and monetary policy have also been largely exhausted, and there is little expectation of a near-term improvement in the trade balance. In fact, with an ongoing deficit in excess of 5 percent of GDP, the trade sector exerts a large drag on the economy. Thus, any future spur to growth would have to come from increased investment. The optimists point to significant improvements in the financial condition of the business sector -- large cash flows and reduced debt -- and rising rates of capacity utilization. The pessimists stress the lack of a major innovations in the IT sector, continued financial difficulties in communications and airlines, and low occupancy rates in nonresidential real estate.

Furthermore, the recovery seem especially disappointing from the perspective of job growth. As shown in figure 2, the growth in employment has been unusually modest in the early years of this expansion, giving rise to the tag of 'jobless recovery,' a term first used in the early 1990s. The weak employment gains have also lead to a renewed public concern with the global competition for jobs; but this time with a focus on service-sector jobs, or what has come to be called 'offshoring.' However, most of the job losses can be traced directly to the collapse of investment in IT. The employment losses in 2000-2003 were largest in the capital-goods producing portions of manufacturing and business services (table 1), two sectors that were heavily involved in the domestic boom in information technology. Changes in trade flows have had only a modest impact on employment changes since 2000 (Baily and Lawrence, 2004). While the expanded capability to provide some services over electronic networks may become significant in the future, the offshoring of jobs has been a minor factor in accounting for the slow growth of employment in the current recovery.

Instead, the unusually large gap between output growth and employment gains can be traced to a surge of gains in labor productivity. The improvement was first evident after 1995 (figure 3) and was concentrated in service-producing industries, such as retail and wholesale trade, brokerage services, business services, and medical care (Triplett and Bosworth, 2004). The acceleration was about one percentage point per year, from 1.4

percent per year in 1973-95 to 2.4 percent in 1995-2001. After 2001, the growth rate rose further to an annual rate of 4.3 percent through mid-2004. Again, the preliminary data suggest that the surge was concentrated in the service-producing industries. The gains in service-sector productivity are related to several factors, but the reliance of these industries on the new information and communications technologies (ICT) is of particular importance. The emergence of productivity enhancements in services has opened up new opportunities for growth of the U.S. economy in future years; yet, productivity growth of this magnitude sets a very high bar for output growth in order to generate overall job growth.

The productivity gains were also unusual in the extent to which they fell through to increases in capital income, with little or no evidence of an acceleration of real wage growth. However, as shown in the lower panel of figure 3, some of that departure between productivity and wage growth was simply a reversal of the reduction of the profit share in 19952000. An acceleration of real wage growth is limited to the 1997-2000 period of tight labor markets. Perhaps more important from workers' perspective, real wages have grown much less when measured against consumer prices, rather than output prices. That is, workers have experienced a significant erosion of their terms-of-trade, as the prices of the products they consume (housing and medical care) have risen faster than the prices of the products they produce (computers).

The major short-term risk to continued growth of the U.S. and global economy is the tight conditions that exist in world energy markets. This reflects both strong demand for crude oil against uncertainties of supply from the Middle East, and tight capacity constraints for refined petroleum products in the United States. Europe is more exposed than the United States to imported oil, but the economic effects have been largely negated by exchange rate appreciation. Japan can also offset some of the effects because of its high levels of energy efficiency and declining reliance on petroleum. Thus, the economic risks are greatest for the United States and the developing economies (International Energy Agency, 2004).

In summary, the U.S. economy seems on course for continued recovery with output growth of 3½-4 percent, which would be consistent with unemployment remaining at current levels. The economy seems particularly strong from a supply-side perspective with

rapid growth in labor productivity. The problems and risks are on the demand side of the economy where large trade and budget deficits and low household saving leave the economy very dependent on continued growth in business investment and stability in energy markets. However, most of the concern about the U.S. economic situation centers around the obvious imbalances of large budget and current account deficits.

Fiscal Imbalances

The U.S. fiscal situation has fluctuated over an extraordinary range over the last decade. As recently as 1995, the Congressional Budget Office was projecting long-run budget deficits, in excess of 3 percent of GDP, that would grow continuously into the future; yet by 2000, it had shifted its perspective with projections of large and growing surpluses. Today, the government is back where it started the prior decade, faced again with the likelihood of large future deficits. Figure 4 highlights that cycle by showing the evolution of the budget projections for FY2005, beginning in 1995 when the CBO first began to publish 10-year estimates. The budget balance for 2005 swings from a deficit of $470 billion in the 1995 projection to a surplus of $430 billion in the 2001 budget documents, before reversing course to a current forecast of a $350 billion deficit.

In the 1990s, the Clinton Administration tried to shift the mix of fiscal and monetary policy, using the budget to promote longer-term economic growth through increased national saving, and leaving to monetary policy the primary responsibility for short-run stabilization. It did so through restraint of spending and some legislated tax increases, but much of its success on the budget side reflected a series of fortuitous economic developments.

Table 2 provides a perspective on the sources of the changed budget outlook. It reports the revisions in the budget outlook for FY2005, beginning with the first projection in 1995, right through to the latest estimate published in September of 2004. In accounting for its revisions, CBO distinguishes among the effects of new legislation, a changed economic outlook, and technical revisions. The revisions up to 2001 were dominated by unanticipated changes in the economic outlook -- as faster growth boosted tax revenues -- and technical revisions that can be traced largely to an unexpected rise in the effective tax rate because of large capital gains tax receipts.

However, a simple focus on revisions in the CBO projections may overstate the randomness of the fiscal outcomes. The CBO projections are based on current law at the time they are made, and CBO is required to use a very restrictive standard of zero real growth in discretionary spending. Since the Congress seldom achieves this goal in practice, projections of spending are almost always revised up. An alternative standard, shown in figure 5, that focuses on expenditures and revenues as a share of GDP gives greater credit to reductions in the expenditure share in the 1992-2000 period, as well as the large and unanticipated rise in the effective tax rate.

After the 2000 election, everything changes as the expenditure share rises and revenues fall by much more than just the loss of capital gains receipts. Early in his term, President Bush used the projections of fiscal surpluses to justify large tax reductions. The surpluses in turn proved to be ephemeral when the economy fell in to recession and the stock market bubble burst. However, The Bush Administration also lost control of the expenditure side of the budget in part because of the cost of the war and subsequent occupation of Iraq. The budget deficit soared to $422 billion (3.6 percent of GDP), and the progress of the 1990s in restoring fiscal balance was largely undone.

On the other hand, the challenge of dealing with the recession should not be overlooked. Although forecasts of recession were not a primary motivation for the initial round of tax reductions, the duration of the recession and the ineffectiveness of monetary policy argue that the Bush Administration's fiscal policy was extraordinarily well-timed. Without action on the fiscal side, the United States and the global economy might have plunged into a far more severe recession. The fiscal policy has been criticized because the tax cuts were not explicitly temporary, but temporary taxes changes have usually played a minor role in past fiscal actions.[1] Many critics have also objected to the distributional pattern of the tax changes, arguing that a larger proportion should have gone to the low and middle-income persons. While there may be social reasons for advocating such a policy, an examination of the changes in income and consumption over the 2000-2004 suggests that the stimulative effect of the tax cuts equaled or exceeded that of past fiscal actions.

[1] Blinder (1981) argued that tax cuts that were proposed as temporary have had about half the impact on aggregate demand as equal-sized permanent tax changes.

The 2001-2004 episode will continue to stand out as a prime counterexample to prior arguments that fiscal policy is an ineffective and unnecessary tool of stabilization policy.[2] While their timing may have been fortuitous, the fiscal policy actions of the past few years played a very important role in preventing a far larger recession. In a recent review, Alan Blinder (2004) concluded that the argument against counter-cyclical fiscal policy had gone too far; and, although monetary policy may be enough in normal times, fiscal policy is still a valuable supplement in times of severe recession.

Fiscal Outlook.

On the surface, the CBO budget projections also suggest that there should be little concern about the future direction of policy. As shown by the solid line in figure 5, the projections imply a steady decline in the budget deficit from about -3.6 percent in FY2004 to -0.5 percent by FY2012. However, most budget analysts would argue that the current CBO baseline is a misleading indicator of future budget trends. First, although it incorporates continued expenditures in Iraq, it understates the likely growth in other discretionary spending. The alternative expenditure line in figure 5 assumes that the current share of discretionary spending in GDP (excluding expenditure in Iraq) is maintained in future years.

Furthermore, the CBO baseline assumes that the tax reductions of 2001-2003 will expire and that the effective tax rate (tax revenue/GDP) will return to the high levels of the late 1990s. It may be reasonable to project some increase since the current rate is well below its historical average of 18 percent of GDP, but few observers expect the tax cuts to be fully reversed. The government will also come under strong pressure to do something about the Alternative Minimum Tax (AMT), which was originally targeted on high-income taxpayers with large tax deductions. Because the AMT tax structure is not adjusted for inflation, it will begin to impact a growing number of taxpayers with incomes in the range of $100,000. Under one option in which the Congress extends both the tax reductions and indexes the AMT for inflation, most of the projected rise in the effective tax

[2] The argument against discretionary fiscal policy is summarized in Feldstein (2002).

rate would be wiped out.[3] As shown in figure 5, this alternative budget would leave the deficit at an ongoing 3½-4 percent of GDP.

Finally, the total budget includes the social insurance retirement accounts, which currently generate large fiscal surpluses. The social security account, which includes the old age pension and disability programs, has a current surplus equal to 1.3 percent of GDP, growing to 1.6 percent at the end of the 10-year projection period of CBO. Excluding this retirement account yields a persistent budget deficit of about 5 percent of GDP in future years.

Fiscal sustainability.

In considering the long-run implications of the budget deficit, some analysts focus of the concept of a sustainable budget deficit by which they mean a deficit consistent with a constant debt-to-GDP ratio over time. It is quite easy to derive the analytics of this relationship by distinguishing between interest payments on the public debt and the primary budget deficit (excluding interest payment). The debt-to-GDP ratio, d, is given by

(1) $d = d_{t-1}(1+i)/(1+g) - p$ [4], where

i = interest rate on public debt,

g = the growth rate, and

p = the primary budget balance-to-GDP ratio.

Hence, if the interest rate exceeds the growth of GDP, stability requires that the primary budget balance be positive; but if the growth rate is larger, a small primary deficit would be compatible with stability. In the CBO projections, nominal GDP is projected to grow by about 5 percent annually, and the projected interest rate on government debt is a similar 5 percent. Thus, stability would require rough balance in the primary budget. In the CBO baseline budget projections, the primary balance will go into surplus by about 2010, the debt-to-GDP ratio would peak at about 40 percent of GDP and then begin to decline.

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[3] The alternative assumes the minimum income for the AMT is maintain at its 2004 level and indexed for inflation. The AMT is discussed in more detail in CBO (2004b) and Burman and others (2004).

[4] The growth of the public debt is defined by $D_t = D_{t-1} \bullet (1+i) - P$, and the path of GDP by $G_t = G_{t-1} \bullet (1+g)$.

However, if as argued above the CBO baseline is too optimistic, the alternative implies a sustained primary deficit of 3 percent of GDP and a steady growth of the debt-to-GDP ratio to about 60 percent of GDP by 2015.

The United States also faces a fiscal challenge in the years beyond the CBO projection period. The effects of population aging in the United States lag behind those of other countries; but spending on Medicare (elderly) and Medicaid (poor) are projected to rise from the current 4 percent of GDP to 8 percent by 2030 and 12 percent by 2050. The problems of Social Security are considerably less severe, with the expenditure share rising from today's 4 percent of GDP to 6 percent in 2050. The Social Security system will continue to run a surplus until 2025, but then draw down and exhaust the trust fund by 2040.[5]

The chronic nature of the budget deficits played a surprisingly small role in the Presidential election. Vice President Cheney went so far as to allege that budget deficits don't matter; and both Presidential candidates were unwilling to spell out a detailed program of how they would deal with them, since it would have to involve unpopular tax increases or expenditure program cuts. Even among economists, there is considerable debate about the economic consequences. Certainly, the projected debt-to-GDP ratio should not raise major short-run concerns about the willingness of the government to meet its interest obligations.

Instead, the negative economic consequences of budget deficits must center around their potential for raising interest rates and crowding out the domestic investment required to maintain growth. The standard model asserts that government deficits reduce national saving, and in a relatively closed economy, the result is a higher level of interest rates and reduced investment. The counterargument points first to Ricardian Equivalence, which asserts that variations in the fiscal balance will be offset by compensating changes in private saving. Second, even with a reduction in national saving, an increasingly open global capital market and free trade across national borders imply that an increased flow of

[5] Long term projections are available from CBO (2003) and the Social Security Administration at: http://www.ssa.gov/OACT/TR/TR04/lrIndex.html. Despite the dominant role of medical care, most of the discussion of change focuses around social security. Presumably, this reflects the greater appeal of some of the pension reform proposals, such as individual accounts, compared to the rationing of medical care.

foreign saving could provide the offset with relatively minor interest rate changes. These views represent the extremes of a continuum, and reality is somewhere in the middle.

Although many observers of households' behavior question the concept of Ricardian Equivalence, the empirical studies consistently find some degree of negative correlation between private saving and the public sector budget deficit. A recent cross-national study of OECD countries found an offset of about 50 percent (de Mello and others, 2004).[6] The second issue of the impact of the budget deficit on interest rates has also generated a significant body of recent research. Laubach (2003) finds that a one percentage point increase in the projected deficit-to-GDP ratio raises forward long-term interest rates by between 24 and 40 basis points. Engen and Hubbard (2004) argue for a slightly smaller effect of 18-24 basis points. Gale and Orzag (2004) contend that the impact is closer to the top of the range suggested by Laubach. One might think that even these historical studies overstate the magnitude of future interest rate effects, because capital markets are becoming more global over time.

Most macroeconomic models would suggest that these magnitudes of change in interest rates imply only marginal 'crowding-out' effects on investment. In a recent set of scenarios aimed at correcting the U.S. current account deficit, the OECD concludes that a program of fiscal consolidation would actually lower investment in the medium term (OECD, 1993).[7] While a substantial portion of the fiscal restraint would be offset by lower private saving (something that seems a little hard to believe in the present context of near zero saving rates), it would reduce domestic demand. Even though the OECD study incorporates an active monetary policy to reduce short-term interest rates to zero, domestic output and investment decline over the six-year period that they consider. One lesson is that it is difficult to resolve the fiscal problems in a weak economy. As argued above, the fiscal correction of the 1990s took place against the backdrop of strong private sector growth, a significant contrast with the current situation.

In summary, the United States has fallen back into the situation that it faced in the 1980s and early 1990s, chronic budget deficits and endless political arguments as the

[6] Gale and Orzag (2004) provide a survey of past work with an emphasis on the United States. They reach a conclusion of a slightly smaller offset than is reported by the de Mello and others paper.

[7] See Brook and others (2004) for additional details.

President and the Congress struggle with competing approaches to deficit reduction. However, deficits of the projected magnitude do not suggest economic or political crisis over the next decade. The government will meet its interest payments, and the debt-to-GDP ratio will steadily rise. Just as in the 1990s, an effective policy to reduce the deficit is likely to await a stronger economy in which some of the negative short-run consequences can be avoided. This scenario of inaction could be interrupted, however, by a crisis originating in U.S. economic relations with the rest of the world.

External Imbalances

While one might be concerned but relatively relaxed about the budget deficits, it is not clear that the same can be said of the balance on transactions with the rest of the world. While as with the budget deficit there is no reason to fear a near-term crisis of credibility over issues of ability-to-pay, the financing of the current account deficit involves an extra complication of large exchange rate risks for foreign investors. At current rates of dollar asset accumulation, foreign investors may soon fear that they are over-invested in dollars, creating greater difficulties of financing the current account deficit. A declining dollar would make immediate the risks of capital loss; and the concern is that it might trigger a series of self-fulfilling rounds of capital flight and exchange rate declines.

Figure 6 provides an overview of the external balance. The deficit in current account (shown in the top panel) is expected to exceed 6 percent of GDP by yearend, with a total deficit for 2004 of $650 billion. It has continued to deteriorate despite a 15 percent decline in the trade-weighted real exchange rate from its peak in early 2002.[8] Just twenty years ago, the United States was the world's largest creditor nation; today, it is the largest debtor by a wide margin. The net investment position at the end of 2003 was -$2.4 trillion with replacement cost valuation of direct investment assets and liabilities (-22 percent of GDP) and a similar -$2.6 trillion with a market valuation.

The domestic counterpart of the external imbalance is shown in the saving-investment balance of table 3. The United States has experienced a major decline in

[8] The real exchange rate shown in the chart is the trade-weighted index of JPMorgan. It has weights that are very similar to those of an index constructed by the Federal Reserve Board, but it is based on wholesale prices instead of consumer prices, and it is available for a large number of other countries.

national saving that originated with the budget deficit of the early 1980s; but in subsequent years, the largest decline has been in private saving – specifically household saving.[9] For a period of time in the late 1990s, the drop in private saving was offset by a greatly improved public-sector balance. However, as discussed in the prior section, the public sector has now fallen back into chronic deficits. In the late 1990s, the current account deficit could be related to strong domestic investment; but even though investment has fallen dramatically in recent years, the deterioration of saving has been even larger. Clearly, while the current account and public sector deficits are related, they should not be viewed as twins; other components of the saving-investment balance have undergone equally large changes.

On the external side, the current account imbalance is reflected in the rise of the real exchange rate in figure 6. In addition, many analysts point to an income elasticity for imports that exceeds the foreign income elasticity for U.S. exports. Thus, unless growth in the rest of the world exceeds that of the United States or the real exchange rate continually depreciates, the trade balance steadily worsens. Hooper and others (2000) report long-run income elasticities of 0.8 and 1.8 for exports and imports respectively, a magnitude of difference they find only for the United Kingdom.[10] The high import elasticity for the United States seems even more significant when account is taken of the acceleration of the U.S. growth rate after 1995. The asymmetric income elasticities have led Catherine Mann (2003) to project a continued decline in the current account balance. In her baseline case, the deficit reaches 10 percent of GDP by 2010 because of both deterioration in the trade balance and the growing cost of interest payments on the increasingly negative net investment position.

The broad distribution of the current account surpluses of other countries that are

[9] In a recent paper (Bosworth, 2004), I argued that much of the decline in the household saving during the 1990s can be traced to a maturing of the system of private pension funds, with a consequent increase in benefit payments. In addition, the decline in the discretionary component of saving predates the sharp rise of housing and equity prices. I conclude that the household saving rate is unlikely to recover in the near future.

[10] This pattern was first documented in Houthakker and Magee (1969), and since then there have been a variety of potential explanations. Krugman (1989) argued that it might be attributed to supply effects in the rapidly growing economies that export to the Untied States. Gagnon (2003) has produced some supporting evidence. Mann (2003) argues that the discrepancy exists only for goods and that the elasticities are more comparable for services, an area of strong U.S. comparative advantage. Her overall elasticities are 1.4 and 2.0.

the counterparts to the U.S. deficit are shown in table 4. Essentially, every major country and region of the world has a large surplus. And although many commentators like to highlight the role of emerging Asia and China in particular, the bulk of the offsetting surpluses are in the other industrial countries and the oil-producing countries of the Middle East. Surprisingly, the Euro-zone countries have seen an increase in their current account surpluses in spite of the currency appreciation.

The composition of the U.S. net investment position, using replacement cost valuations for direct investments, is shown in figure 7.[11] U.S. assets abroad are currently about $7 trillion (60 percent of GDP), and are dominated by private FDI and holding of marketable securities. The non-marketable assets are heavily dominated by cross-border banking relationships. Foreign-owned assets in the United States amount to $9.6 trillion, and consist primarily of private sector claims, but official reserves account for about 13 percent of the total.

Total foreign financial inflows have averaged over $800 in recent years, the amount needed to finance the current account plus ongoing U.S. investments abroad. There has been a shift in the composition of the inflows toward foreign official holdings as many governments – particularly in Asia – added to their reserve holdings. They have accounted for about a fourth of the inflow in recent years, twice the historical average; but the largest growth has been in private purchases of marketable securities, which total about $4 trillion, and FDI.[12] An important characteristic of the claims on the United States is that they largely denominated in U.S. dollars. Thus, a depreciation of the dollar will impose large capital losses on foreign investors. In that respect, the United States is unique relative to other debtor countries: foreign investors, not Americans, bear the greatest risk of exchange rate changes.

Sustainable Deficits.

[11] The net investment position is reported using three alternative cost bases for FDI: historical cost, current (replacement) costs and market value. The net position is similar using both current cost and market value, and I have used current cost in all the references to assets and liabilities.

[12] The public discussion often puts a greater emphasis on the role of foreign official institutions by relating their purchases to the current account rather than the total of the current account plus U.S. outflows. That share is nearly twice the number cited above.

Just as with the budget, much of the discussion of the sustainability of the external deficit focuses on the net investment position, and in particular, the foreign debt-to-GDP ratio. However, it is not evident that the same comparison is appropriate. First, it is not completely accurate to refer to the net investment position as foreign debt, since a significant portion the foreign claims represent ownership of high-yield real assets, rather than debt. For much of the last decade, the U.S. was widely viewed as a particularly attractive destination for capital, with rising investment and rates of return in the private sector. In contrast to the early 1980s, the appreciation of the exchange rate and the reemergence of the current account deficit can be characterized as being induced by push factors from abroad, based on perceptions of a very strong U.S. economy combined with weak economic performance in much of the rest of the world. In the early 1980s, high interest rates in the United States pulled in funds from abroad, but in the late 1990s the inflows occurred against the backdrop of stable or declining U.S. interest rates.

Second, despite a substantial negative net asset position, the United States has continued to show a positive net flow of capital income, reporting a higher rate of return on its assets abroad than foreigners earn in the United States. As shown in figure 8, the phenomenon is limited to a large differential for reported earnings on FDI. The foreign and domestic returns on other assets are virtually identical and move in line with market interest rates. Mataloni (2000) provides a detailed examination of what appears to be a low rate of return on foreign direct investment in the United States. His research, plus his survey of the work of others, provides only limited explanations for the low returns relative to other companies in the United States, although partial explanations involve low market shares and startup costs. On the other side, U.S. firms report high foreign profits in part for tax reasons, using transfer prices to shift profits abroad.[13] Mataloni presents evidence that the distribution of foreign firms by rate of return is not correlated with propensities to import from their parent company, but that is only an indirect test of the influence of tax factors.

Going forward, maintenance of a current account deficit at 5 percent of GDP

[13] The United States has a relatively high tax on corporate income, but until recently, it provided very generous treatment of income earned abroad. High returns have been particularly evident for U.S. firms operating in Puerto Rico and Ireland.

implies that the net foreign liability would exceed 50 percent of GDP by about 2015. An even more pessimistic projection would allow for a net outflow of capital income payments on that debt, paralleling the earlier distinction between the primary budget deficit and net interest payments. In that case, the current account deficit would continue to grow and liabilities would approach 70 percent of GDP after 10 years.[14] However, such a path of an ever-rising external deficit would only be supported by further deterioration in the domestic saving-investment balance.

There are widely varying views about the sustainability of this scenario in future years. U.S. officials, particularly at the Federal Reserve, have argued that it can continue for some time, but others are more pessimistic.[15] There is agreement that the basic pattern cannot continue indefinitely, but will the adjustment follow the relatively benign pattern of 1985-90, when the exchange rate declined over a three-year period and the current account steadily improved between 1985 and 1990? Or will it follow the path of sharp depreciation and recession, a la the experience of many past currency crises in other countries (Edwards, 2004)?

The most worrisome aspect is the large proportion of the financial flows that are concentrated in highly liquid assets. As emphasized in the survey by Edwards (2004), recent research on current account adjustments has emphasized the role of "sudden stops" of net capital inflows: an abrupt termination of net financial inflows as investors seek to avoid exchange rate losses or other disruptions of payment flows. That research gives greater emphasis to portfolio models of capital allocation decisions that are made based on expected returns and risk. Changes in risk perceptions, particularly with respect to exchange rates, can lead to large and very sudden reversals of capital flows. Nor is the threat of such reversals limited to foreign investor, since expectations of an imminent exchange rate change would affect the decisions of both domestic and foreign investors.

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[14] I assume that U.S. and foreign FDI grow in parallel and that the differential in the rate of return continues. That suggests that the growth in net indebtedness will be concentrated in the non-FDI accounts where the rate of return basically tracks market interest rates. With a nominal interest rate of 3 percent, net capital income payments would turn negative within the next three years, adding to the basic deficit. While the change in the net indebtedness may seem small after 10 years, the implied steady-state debt-to-GDP ratio rises from 1.0 in the first case to 2.6.

[15] See speeches by Gramlich (2004), Greenspan (2044), Kohn (2004), and CBO (2004c). For the more pessimistic view see Mann(2004) and Obstfeld and Rogoff (2004).

No one has been able to predict the timing of such shifts in perceptions. However, there can be not doubt that the U.S. current account must ultimately adjust; and when that occurs, the change in the exchange rate will be large. A frequently-used estimate of the required exchange rate change, based on empirical estimates of price elasticities for U.S. exports and imports, associates a ten percent decline in the trade-weighted dollar with an improvement in the current account of one percent of GDP (Godley and others, 2004). A U.S. current account deficit, consistent with stabilizing the debt-to-GDP over the next decade, would need to average less that two percent of GDP. That should lead to expectations of an exchange rate decline of at least 30 percent.[16]

Adjustment scenarios

A policy of reducing the U.S. current account deficit in future years involves two separate but equally important policy changes. First, from the domestic side, there would need to be a significant increase in the saving-investment balance to free up domestic resources as the counterpart of a reduced net inflow of foreign resources. In a practical sense, this is likely to involve actions to reduce the public deficit, since few policies exist by which policymakers could alter private saving and an improved balance that comes from a scaling back of investment would have negative implications for future growth. In contrast to the earlier suggestion that a continued fiscal deficit was tolerable from a strictly domestic perspective, it plays a more critical role in the consideration of the external balance.

Second, the freeing up of domestic resources would need to be accompanied by a change in the real exchange rate in order to channel those resources into global markets. Without the shift in relative prices, reduced domestic consumption would simply translate into lower levels of production and income.

The difficult aspect of any adjustment program is to find a means of coordinating these two components. In past years, it was common to argue that the second would follow automatically from the first: reduced demand would lead to lower interest rates relative to

[16] With estimated price elasticities in the range of unity for both exports and imports, all of the change in nominal values will be on the export side. Since exports are only 10 percent of U.S. GDP, it is relatively easy to justify even larger exchange rate declines.

those abroad and a decline in the exchange rate. However, as was so evident in the last recession, changes in the external sector provide only a minor offset to a reduction in domestic demand. Given the dependency of many economies on the U.S. market, a recession in the United States translated into an equally pronounced slowing of growth in the global economy and reduced investment opportunities. The result is a relatively small movement in the real exchange rate.

Thus, we need to add a third element of an adjustment program: significant economic stimulus in other countries that have grown too dependent on a consumption boom in the United States to sustain their own economies. The coordination of all three of these elements is an extraordinarily complex undertaking.

The most extensive investigation of the quantitative implications of efforts to narrow the U.S. current account deficit is that of the OECD (2004).[17] They examine both the domestic saving-investment and exchange rate elements of adjustment. The basic results of their analysis are summarized in table 5. First, they evaluate two alternative changes in the exchange rate without attempting to define how they might occur. One alternative assumes an immediate first-year depreciation of 30 percent against other OECD currencies. The alternative postulates a broader decline of 22 percent against all currencies. They have equivalent effects on the U.S. trade-weighted exchange rate.

As shown in columns (1) and (2) the two options have very similar effects on the U.S. economy. The depreciation raises inflation and the monetary authorities respond by raising interest rates. The result is a crowding out of domestic investment to make room for an improvement in the trade balance of about two percent of GDP. Both options have a mildly negative effect on the U.S. output. The choice between a narrow or broad depreciation has greater implications for European and Japan. If the rest of Asia also appreciated against the United States, the extent of change in Japan's trade-weighted exchange rate would be much less. The result is smaller effects on the trade balance, GDP, and the price level. The adjustment has less net impact on Europe, both because its trade with the United States is a smaller portion of the total and because it has more room to use interest rate reductions to offset the negative effects.

[17] Some additional details are available in Brook and others (2004).

Column (3) reports on the impact of fiscal consolidation where the U.S. budget balance shifts by a large six percent of GDP, going from deficit to surplus over a six-year period. As discussed earlier, the fiscal change is large because of an assumed effect from Recardian Equivalence: the decline in private saving offsets more than half of the fiscal consolidation. The fiscal restraint has a strong negative effect on domestic demand that cannot be fully offset by an easing of monetary policy. The negative effects on Japan are similar to those from the currency depreciation since the decline in U.S. GDP reduces export demand. Similarly, the decline in imports lowers output in Europe, but because there is a smaller impact on the price level, monetary policy is assumed to provide less of an offset that with currency appreciation.[18]

Finally, column (4) shows the results of combining fiscal adjustment with a change in the exchange rate. Both actions are scaled back to yield approximately the same change in the U.S. trade balance shown in the prior scenarios: the change in the budget balance is limited to four percent of GDP and the exchange rate depreciation is reduced by half. As a result, the adjustment is significantly easier for the United States, but its trading partners lose both from the decline in U.S. income and their own exchange rate appreciation.

The OECD analysis is sobering in showing how difficult an adjustment of the U.S. external imbalance is likely to be. The simulations suggest that an easing of U.S. domestic monetary policy is never sufficient to offset fiscal consolidation of the magnitude required to correct the current account. Thus, a corrective policy involves an inevitable contraction of U.S. demand and output over a period of time, something that is unacceptable to political leaders except on the occasion of an economic crisis. At the same time, the implied loss to U.S. trading partners highlights the extent to which the current imbalance is a challenge to both sides. The U.S. deficit is an important stimulus to economic activity in the rest of the world. Unless other countries are willing to respond with offsetting stimulus actions of their own, a rapid correction of the U.S. imbalance runs the risk of precipitating recession in both the United States and the world economy.

From the U.S. perspective, the ideal scenario is a gradual decline in the value of the

[18] The fiscal simulation assumes no induced change in the exchange rate because of difficulties of modeling exchange rate behavior.

dollar that strengthens the domestic economy and makes easier the policy of fiscal consolidation. If it were gradual, the exchange rate change would have manageable effects on domestic inflation. However, that same policy causes problems for the rest of the world since it is likely to initiate a period of intense intervention in exchange markets and efforts to manage competitive devaluations against one another. The alternative is a more abrupt adjustment as private investors come to realize that the exchange rate adjustment is large and immediate. That outcome would force U.S. monetary policy into a more restrictive policy aimed at restraining inflation and restoring confidence in U.S. financial markets.

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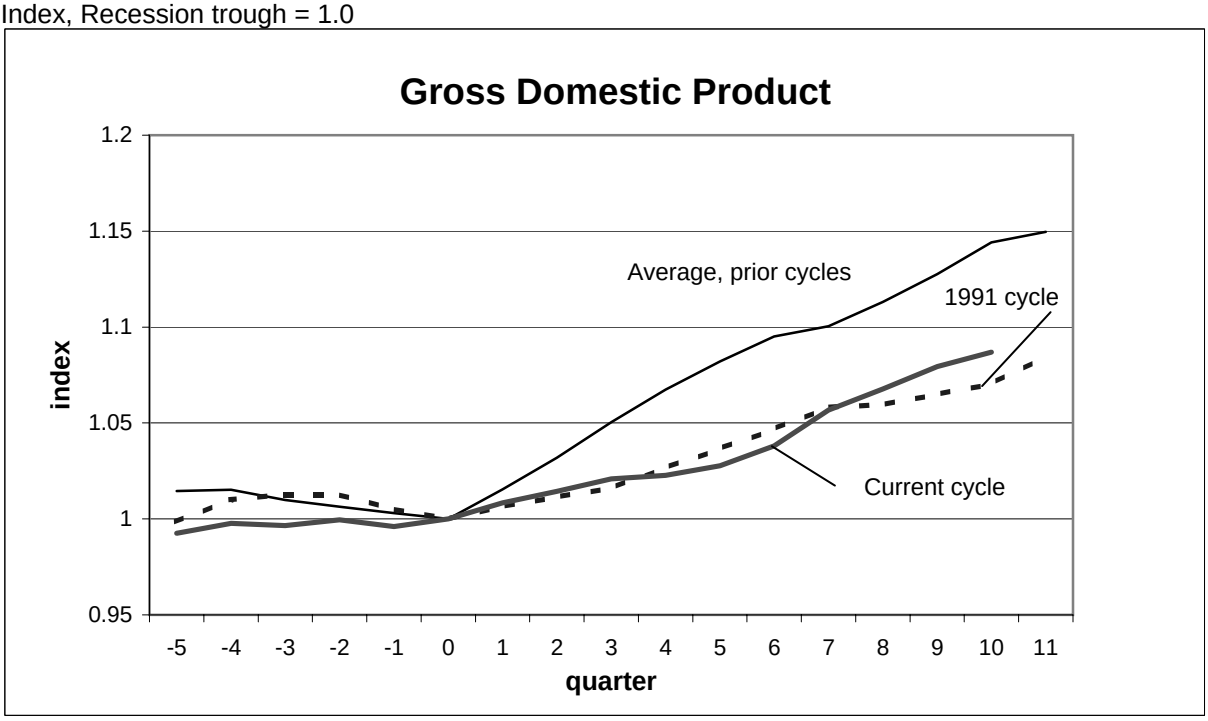
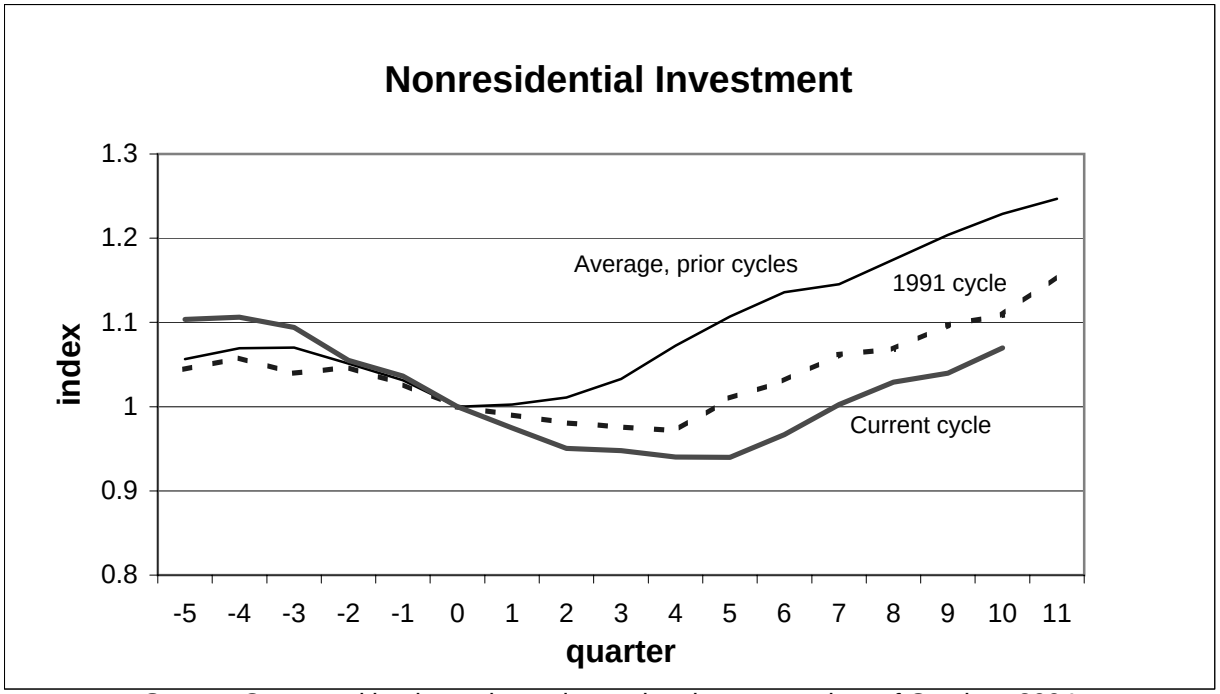
Figure 1. Recovery from Business-Cycle Recesions, 1954-2004

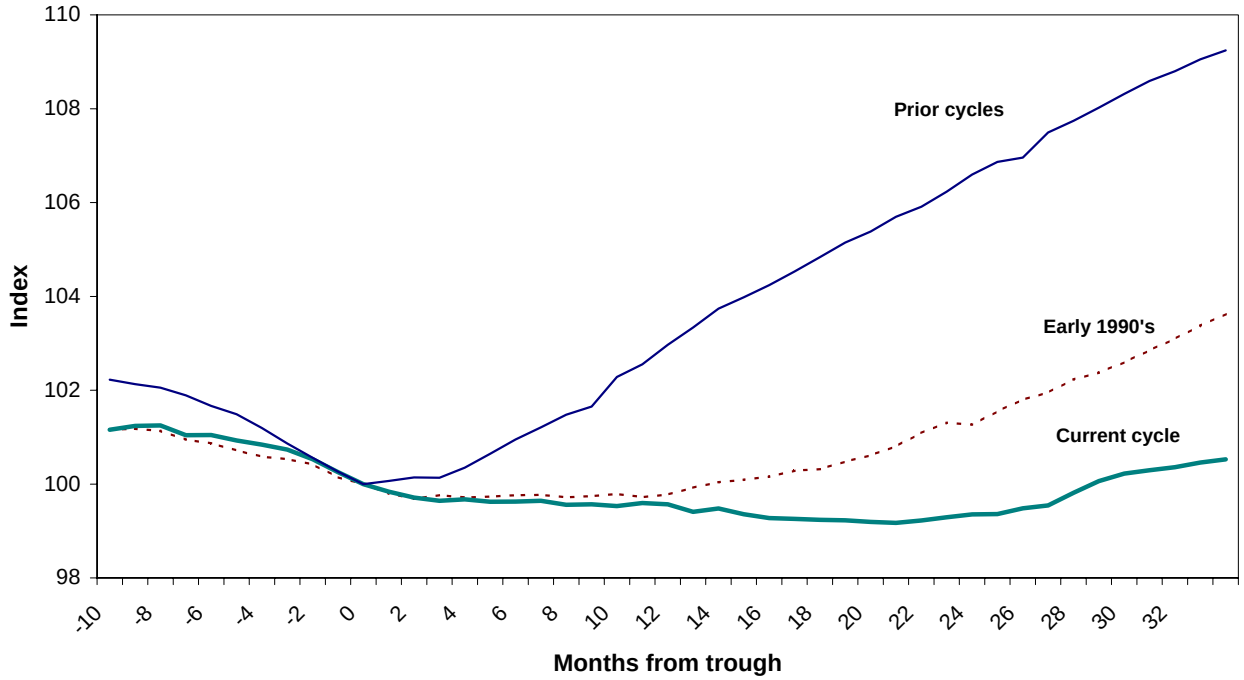
Index, Recession trough = 1.0





Source: Computed by the author using national accounts data of October, 2004 and NBER reference cycle dates.

Figure 2. Total Employment Change Since Recession Trough



Source: Computed by the author from the Current Employment Survey as of October, 2004

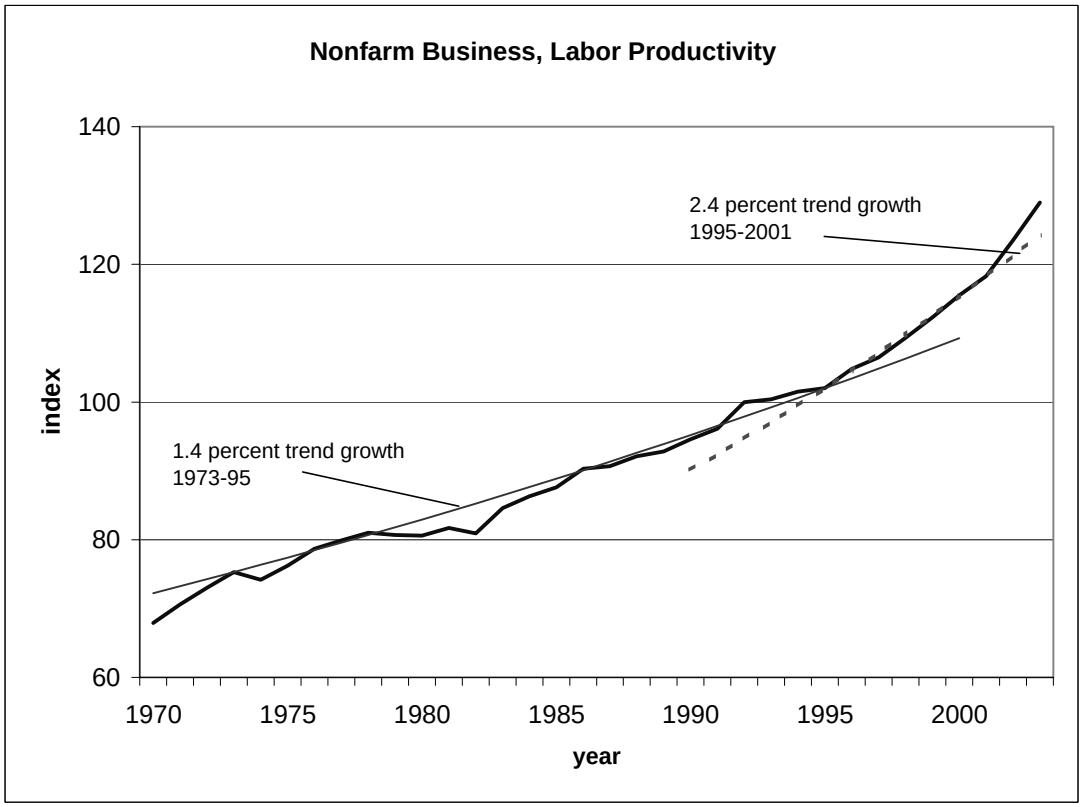
Table 1. Average Annual Employment Change by Major Sector, 1990-2003

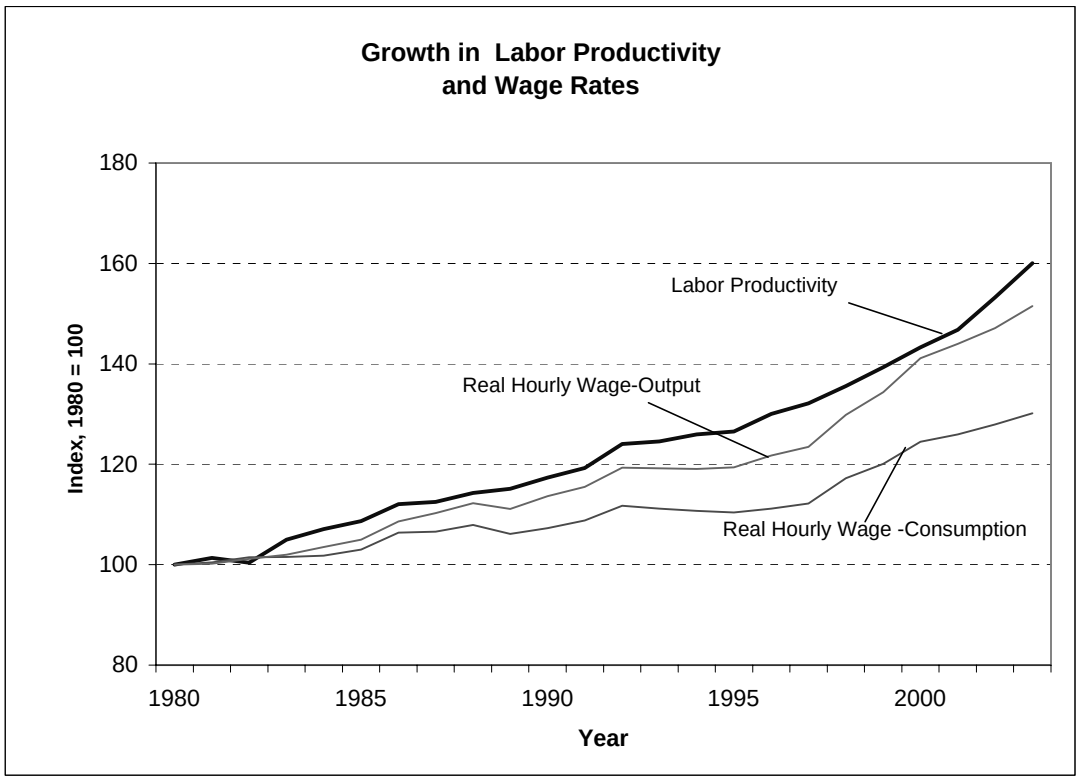
By NAICS super sector, thousands of workers

	Employment	Employment Change				
	2003	1990-2000	1995-2000	2000-2003	Acceleration	2004
	(1)	(2)	(3)	(4)	(4)-(3)	
Construction	6,722	152	303	-22	-324	209
Manufacturing	14,525	-43	4	-913	-917	-141
Wholesale Trade	5,606	66	100	-109	-209	59
Retail Trade	14,912	210	277	-123	-399	110
Transportation and Warehousing	4,177	93	115	-78	-192	58
Utilities	581	-14	-13	-7	6	3
Information	3,198	94	158	-144	-302	-48
Financial Activities	7,974	107	172	96	-76	115
Professional and Business Services	15,997	582	764	-223	-987	542
Educational and Health Services	16,577	413	364	489	125	373
Leisure and Hospitality	12,125	257	272	88	-185	240
Other Services	5,393	91	119	75	-44	27
Government	21,575	238	272	262	-10	66
Natural Resources and Mining	571	-17	-8	-9	-1	22
Total	129,932	2230	2898	-618	-3516	1635

Source: Bureau of Labor Statistics, Current Employment Survey Statistics. Estimate for 2004 is September.

Figure 3. Labor Productivity and Real Wages, 1970-2000

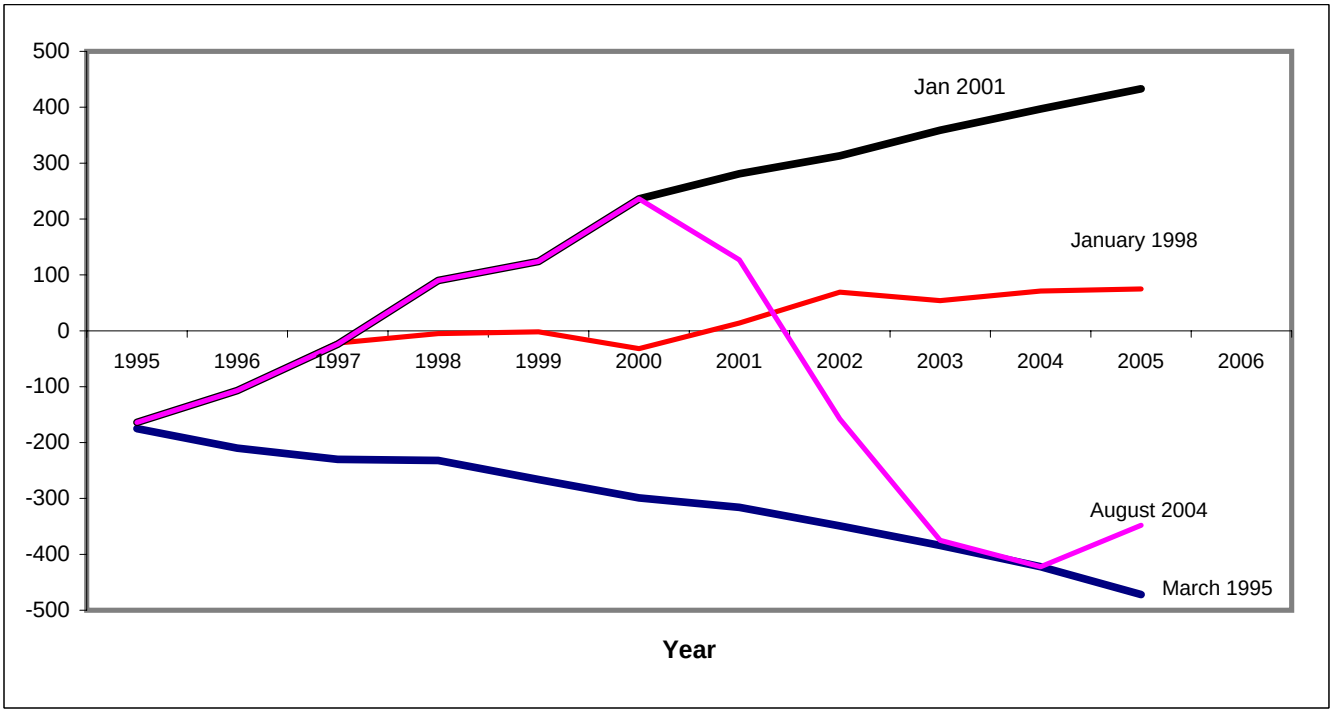




Source: Bureau of Labor Statistics. 2004. *Productivity and Costs: Second Quarter* .

Figure 4. Congressional Budget Office Projections, Unified Budget, 1995-2004

billions of dollars



Source: Congressional Budget Office, *Budget and Economic Outlook* , various issues.

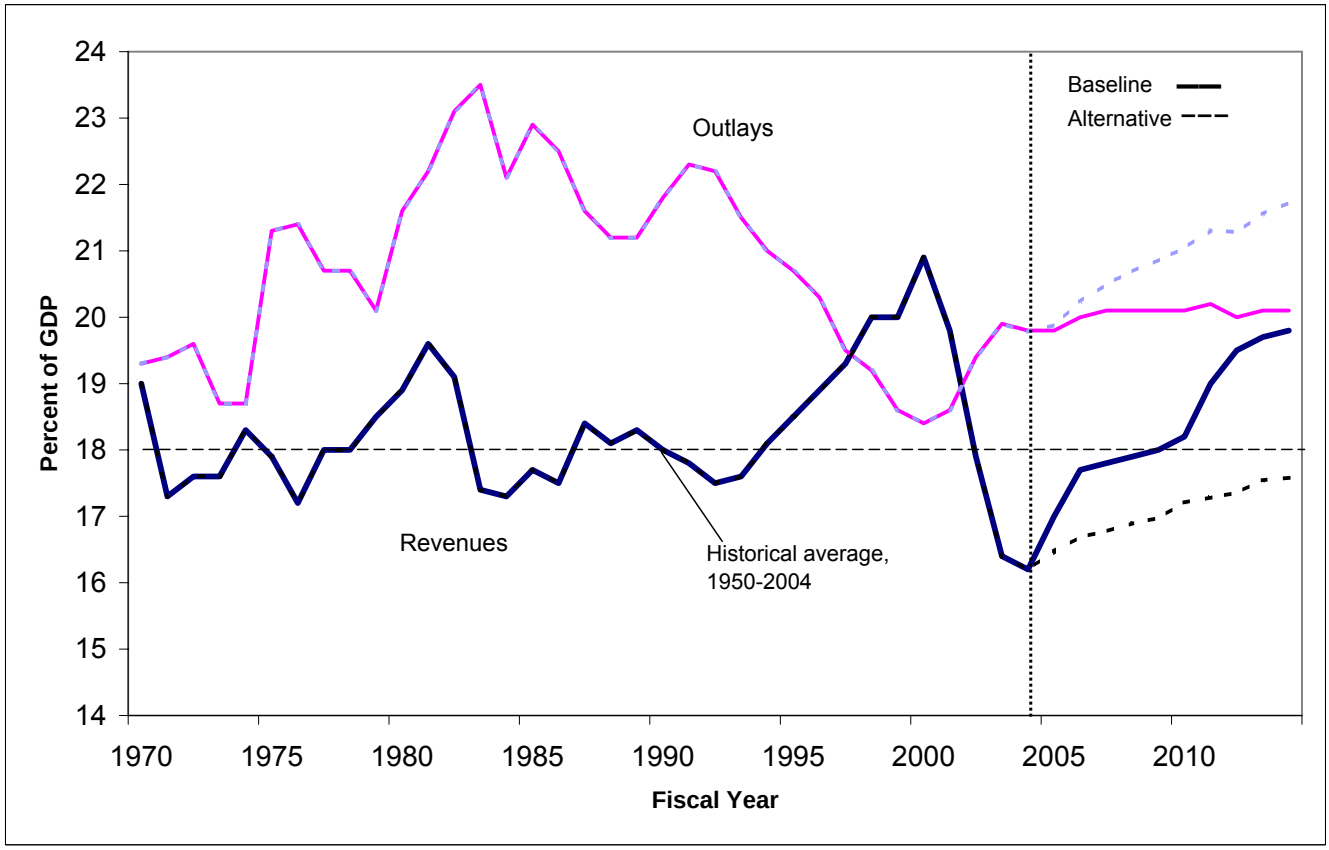
Table 2. Budget Projections for Fiscal Year, 2005, and Changes

billions of dollars

Projection Year	Initial Balance	Revisions			Revised Balance
		Legislative	Economic	Technical	
1995					-405
1996	-405	28	39	84	-254
1997	-255	95	151	85	75
1998	75	-3	65	120	256
1999	256	-11	86	47	376
2000	379	-66	55	65	433
2001	433	-197	-81	-51	103
2002	103	-64	2	-114	-73
2003	-73	-219	35	-104	-362
2004	-362	-23	24	15	-363
Changes:					
1995-2000		43	396	401	838
200--2004		-503	-20	-254	-796

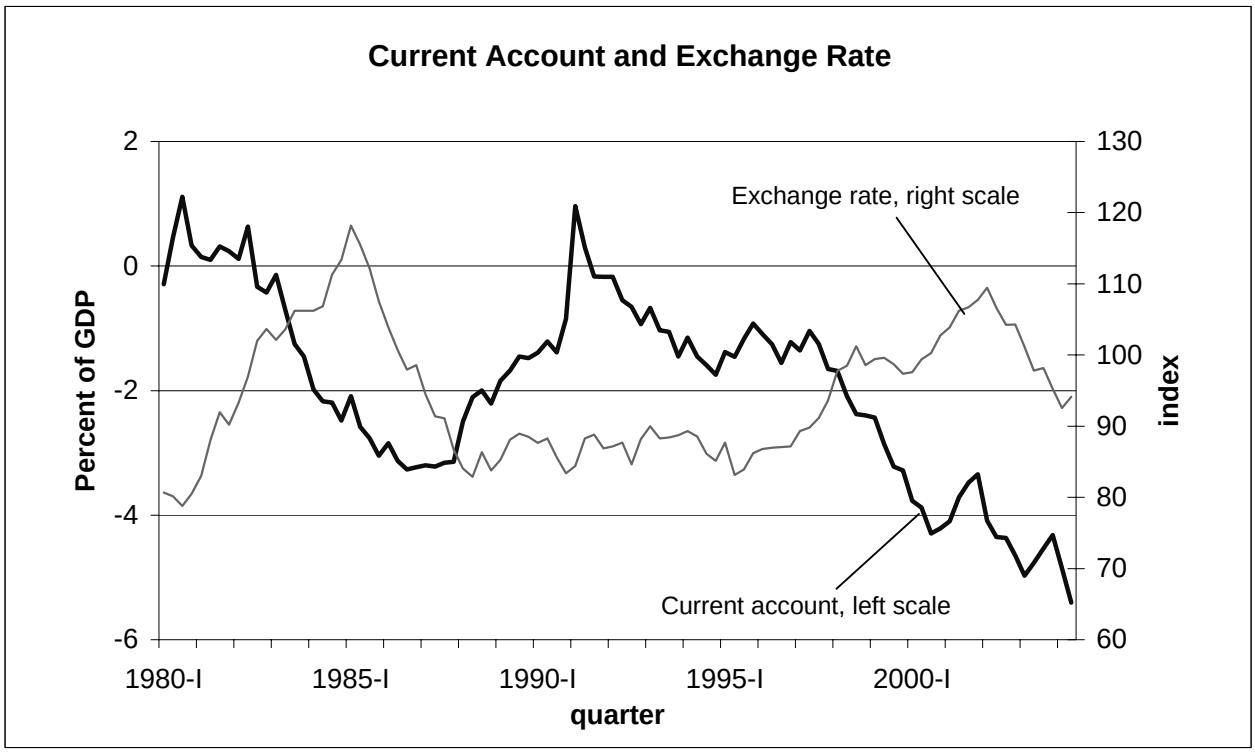
Source: Congressional Budget Office, *Budget and Economic Outlook* , various issues.

Figure 5. Federal Revenues and Outlays, 1970-2014



Source: Congressional Budget Office, 2004c. The Baseline assumes current law. The alternative budget incomrporates the modifications described in the text and reported in table 1.6 of the CBO publication.

Figure 6. External Balance of the United States, 1980-2004



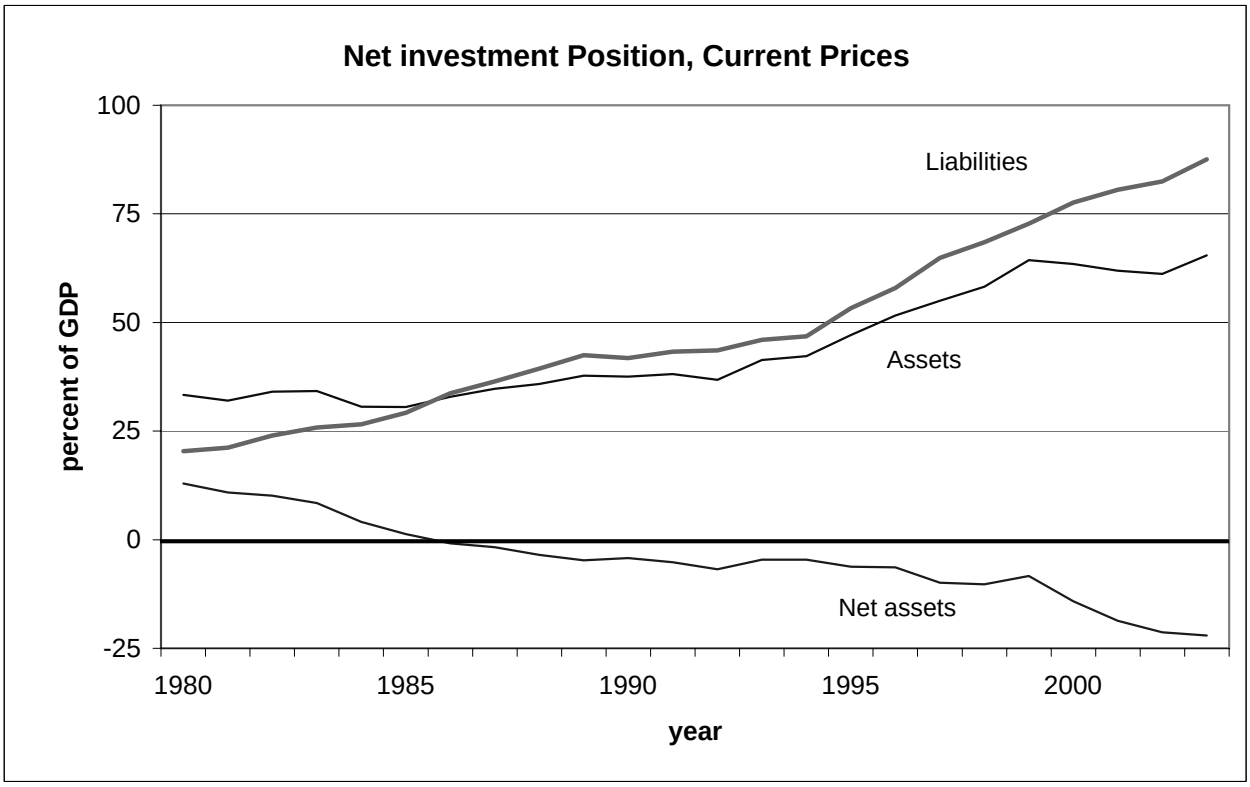


Table 3. Net Saving and Investment by Sector, 1960-2003

Percent of national income

Sector	1961-80	1981-90	1991-95	1996-2000	2001	2002	2003
Net National Saving	10.8	6.7	4.0	6.6	4.2	2.0	1.4
Private	11.0	10.3	8.0	5.8	3.6	5.0	5.2
Household	7.1	7.3	5.1	2.7	1.5	1.7	1.1
Government	-0.2	-3.6	-4.1	0.8	0.6	-3.0	-3.8
Net Domestic Investment	11.2	9.3	6.9	9.3	7.3	6.7	6.9
Private	9.2	7.7	5.6	8.2	6.0	5.3	5.5
Government	2.0	1.6	1.2	1.1	1.3	1.5	1.5
Current Account	0.5	-1.9	-1.0	-2.7	-4.1	-5.0	-5.3
Statistical discrepancy	0.8	0.7	1.9	0.1	-1.0	-0.2	0.3
Capital consumption	11.7	13.8	13.6	13.4	14.3	14.1	14.0

Source: Bureau of Economic Analysis, Department of Commerce, National Income and Product Accounts

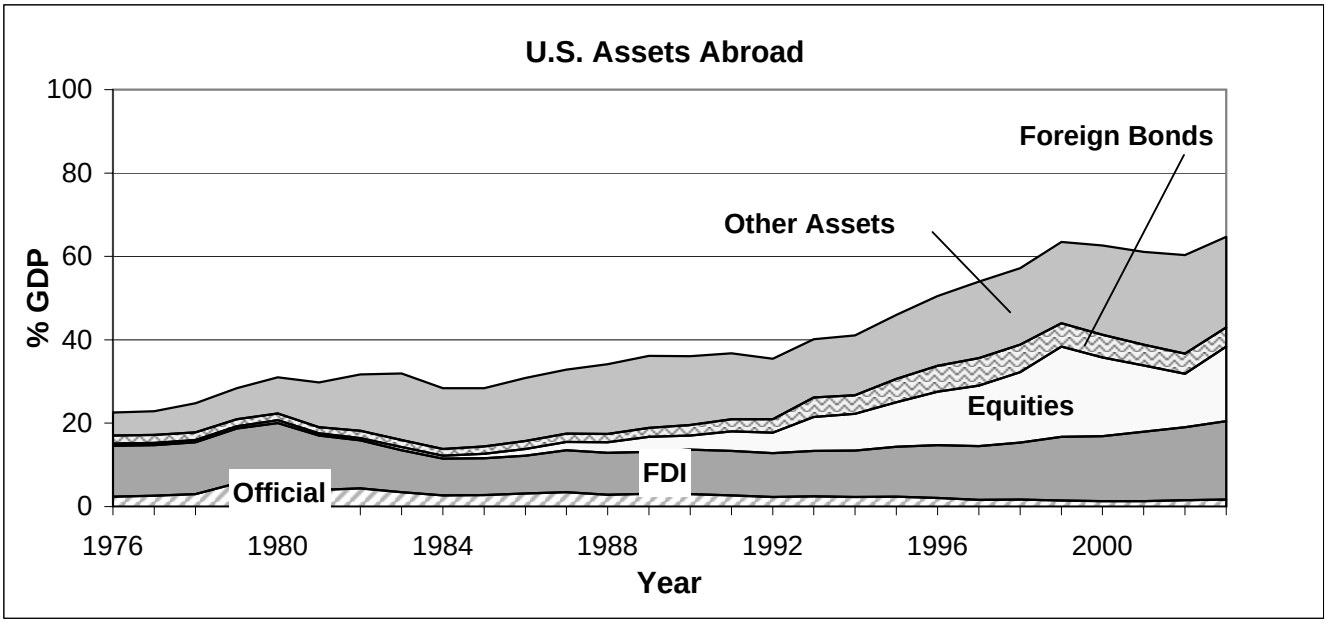
Net saving excludes capital consumption allowances

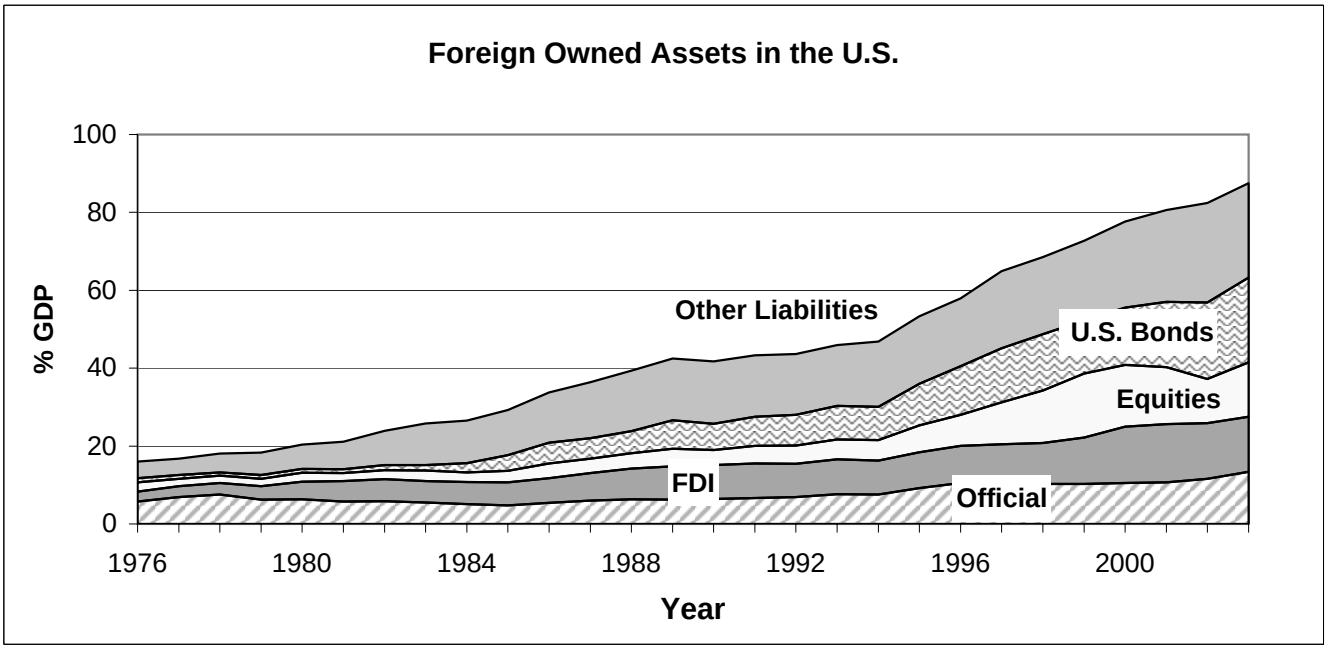
Table 4. Summary of Payments Balances on Current Account, 1996-2004
(Billions of US dollars)

Country/Region	1998-2002 average	2003	2004
United States	**-355.9**	**-530.7**	**-631.3**
Advanced economies (excl. U.S.)	**207.4**	**284.1**	**365.2**
Euro area	24.9	25.5	72.2
Japan	110.7	136.2	159.4
Other advanced economies	15.9	36.0	48.6
Newly industrialized Asian economies	55.9	86.4	85.0
Emerging market countries	**15.0**	**148.9**	**201.3**
Africa	-7.2	-0.4	2.8
Central and Eastern Europe	-23.8	-35.1	-44.2
Commonwealth of Independent States	24.5	36.6	61.4
Developing Asia	50.3	85.9	68.8
China	24.1	38.5	49.5
India	-2.2	3.4	0.2
Middle East	24.6	57.6	103.5
Western Hemisphere	-53.5	4.4	9.0
Residual	-133.5	-97.7	-64.8

Source: International Monetary Fund, *World Economic Outlook* , September 2004

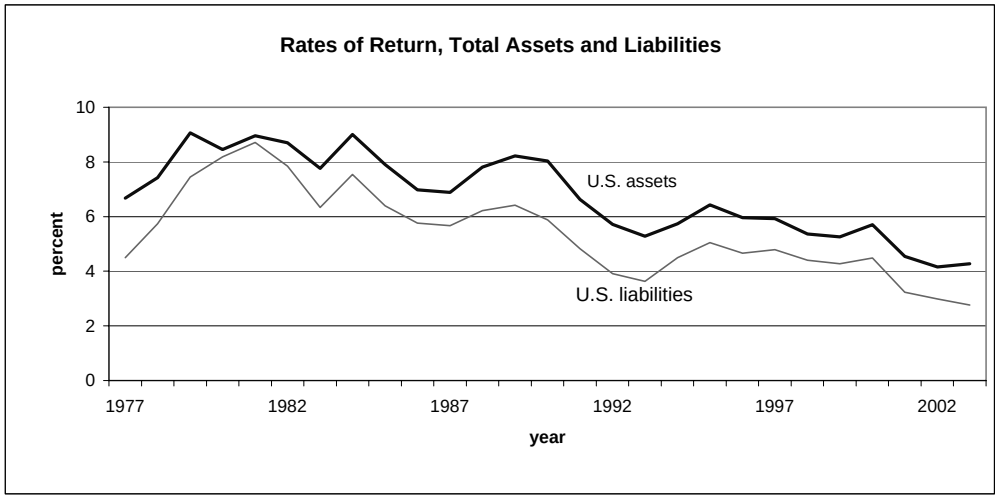
Figure 7. United States Net Investment Position, 1976-2003

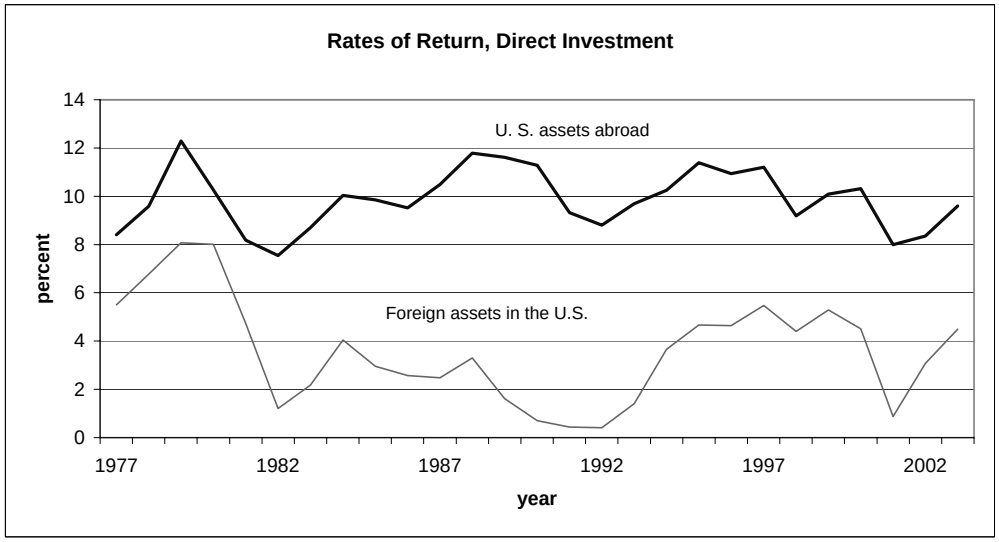


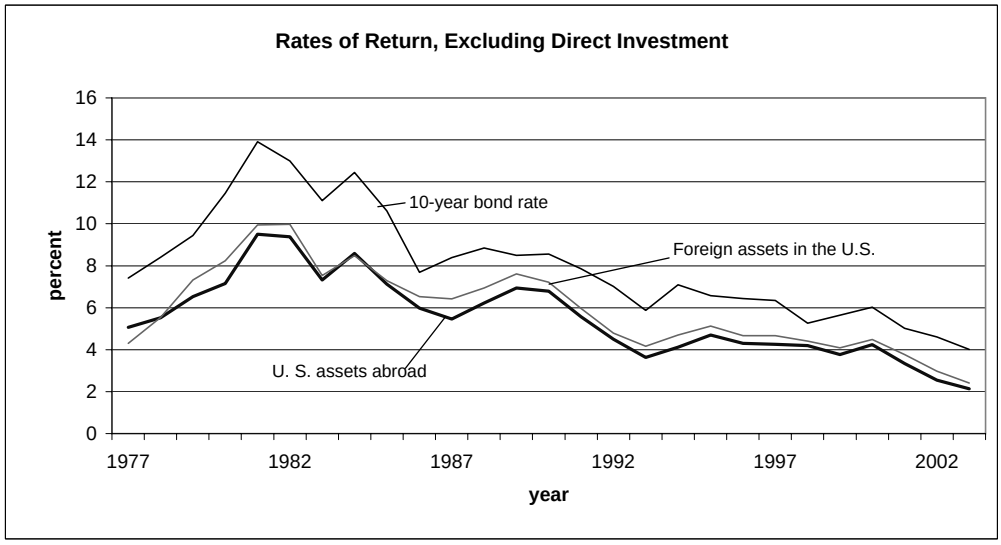


Source: U.S. Bureau of Economic Analysis, *International Invesatment Position* (June, 2004)

Figure 8. Rates of Return on U.S. Foreign Assets and Liabilities, 1977-2003







Source: Bureau of Economic Analysis, *U. S. Balance of Payments* and *Net Investment Position*.

Table 5. Fiscal Consolidation and Dollar Depreciation Scenarios: Key Results

level relative to baseline

Country/Adjustment Category	End point (2009): Scenario Relative to the Baseline			
	OECD exchange rates adjust[a]	All exchange rates adjust[a]	Fiscal scenario only[b]	Fiscal plus exchange rate[c]
	(1)	(2)	(3)	(4)
United States				
Real GDP (level)	-0.5	-0.3	-4.5	-3.2
Prices (price level)[b]	7.6	5.1	1.5	3.1
Government net lending[c]	-	-	5.9	4.2
Private saving[c]	-	-	-3.8	-1.9
Trade balance	2.0	1.9	2.1	2.1
Current account balance[c]	1.4	1.3	2.6	2.5
Short-term interest rates[d]	3.0	3.0	-5.4	-3.0
Japan				
Real GDP (level)	-2.1	-1.4	-2.0	-2.2
Prices (price level)[b]	-5.7	-1.7	-2.7	-5.0
Current account balance[c]	-2.0	-0.8	-1.3	-2.0
Short-term interest rates[d]	0.0	0.0	0.0	0.0
Euro area				
Real GDP (level)	-0.2	-0.1	-0.4	-0.5
Prices (price level)[b]	-1.2	-0.6	1.0	-0.4
Current account balance[c]	-1.5	-1.6	-1.5	-1.8
Short-term interest rates[d]	-1.5	-0.5	-1.5	-2.3

Source: OECD (2004)

a) Column (1) incorportes a 30 percent depreciation against the OECD economies. Column (2) is a 22,5 percent depreciation agaianst all currencies.

b) The "fiscal only" scenario involves an increase in direct and indirect tax revenues of 3 and 1.5 percent of nominal GDP respectively, and a cut in public expenditures of 1.5 percent of real GDP.

c) The "fiscal plus exchange rate" scenario involves a 15 percent dollar depreciation relative to OECD country exchange rates, an increase in direct tax revenues of 2 percent of nominal GDP, and a cut in public expenditures of 2 percent of real GDP. Prices refer to the consumption deflator.

d) In percent of GDP.

e) Percent.