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CAN THE GROWTH IN THE U.S. CURRENT ACCOUNT DEFICIT BE SUSTAINED? THE GROWING BURDEN OF SERVICING FOREIGN-OWNED U.S. DEBT

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Introduction

Can the growth in the U.S. current account deficit be sustained? How does the flow of deficits feed the stock of debt? And how will the burden of servicing this debt affect future deficits and economic growth? These are some of the questions we address in this Strategic Analysis.

The U.S. current account deficit has been steadily growing since the early 1990s. By the end of 2005, it stood at almost 7 percent of GDP. The deficit increased from \$185.4 billion in the third quarter of 2005 to \$224.9 billion in the fourth quarter (BEA 2006b). For the year, the U.S. current account deficit increased over 20 percent, from \$668.1 billion in 2004 to \$804.9 billion in 2005. After years of current account deficits, U.S. foreign liabilities now exceed U.S. foreign assets by nearly \$2.5 trillion. Yet, despite the deterioration in the U.S. position, income on foreign assets almost matches the income on foreign liabilities. Because net income flows to the United States remain neutral, the burden of servicing the external debt appears inconsequential to some. But appearances can be misleading. We take issue with the view that just because income flows are currently neutral, there is little reason for concern. If interest rates continue to rise, the current account deficit will continue to worsen. In this Strategic Analysis, we examine views on the effect the current account deficit and the net international investment position of the United States will have on future growth. We focus on the cost of funding debt and the structure of U.S. assets relative to U.S.

The authors wish to acknowledge comments from Anwar M. Shaikh and Wynne Godley. All errors remain with the authors.

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liabilities. We find that temporary policy measures have masked the future costs of servicing foreign-owned U.S. debt.

Views vary as to whether the growth in the current account deficit presages trouble for the U.S. economy. Our colleague Wynne Godley has been warning of the dangers inherent in running trade deficits for some time. Godley points out that the growing external debt of the United States matters for the same reason a growing debt matters to any entity: a growing debt generates a growing debt service burden (1995, p. 11). He warns that the outflow from servicing the foreign debt acts as a "kind of hemorrhage from the circular flow of national income" (p. 13). In Levy Institute Policy Notes and Strategic Analyses that date back many years, Godley has stressed that the longer these deficits persist, the more difficult the eventual correction will be.

Nouriel Roubini and Brad Setser point out that interest payments on existing external debt have not been much of a burden on the U.S. economy, because of low interest rates and the willingness of external investors to finance the large U.S. current account deficit (2004, p. 3). They suggest that the accumulation of reserves by Asian central bankers is financing a growing share of the U.S. current account deficit. They note that private investors will be less willing to finance the ongoing current account deficits at low interest rates, and contend that stability hinges on the willingness of Asian central bankers to step in during a crisis (pp. 6–9).

Terry McKinley (2006) emphasizes the interdependence of the world economy and the implications of structural adjustment. He argues that the rise in U.S. expenditures has been made possible by the saving of developing countries. Others, including William R. Cline (2005), emphasize structural factors, such as the earnings on U.S. foreign assets exceeding earnings on U.S. foreign liabilities, to explain the imbalance. Cline acknowledges that if foreign investors and central banks were to curb their financing, it could lead to a "wrenching" impact on the U.S. economy. But he argues that the stability of U.S. financial markets, with their associated legal guarantees and transparency, make the United States an attractive place for foreign investors (p. 49). He contends that the lower risk of U.S. assets helps explain the lower rates of return.

Among U.S. policymakers, the prevailing view is that the source of the current account deficit stems from abroad, that little can or should be done in the United States, and that markets will benignly resolve imbalances. A few Federal Reserve officials argue that the trade deficit exists because of a global savings glut. While they concede that the glut has less to do with market mechanisms and more to do with policy initiatives of foreign governments, they do not believe that the trade deficit reflects inadequate economic policies within the United States.

Ben S. Bernanke (2005) is one of those who locate the principal cause of the U.S. current account deficit abroad. Recently, as chairman of the Federal Reserve, Bernanke has offered a number of compelling reasons for the downward pressure on long-term yields (2006, pp. 3–5). Among them, he cites a stable inflation outlook, increased currency market intervention by foreign governments, and a decrease in the supply of long-duration securities.

While accepting that foreign government policies are largely responsible for the current global imbalances, Federal Reserve officials also believe that it will be markets rather than government policy that will benignly unwind these imbalances, with little effect on the U.S. economy. Federal Reserve Governor Donald L. Kohn (2005), speaking at The Levy Economics Institute last year, remarked: "In all likelihood, adjustments toward reduced imbalances in the United States and globally will be handled well by markets without, by themselves, disrupting the good, overall performance of the U.S. economy—provided, of course, that the Federal Reserve reacts appropriately to foster price and economic stability." Bernanke also envisions a smooth adjustment (2005, p. 9).

While U.S. policymakers choose not to take action, foreign central bankers openly express their concern. In particular, Asian central bankers express doubt about the sustainability of growing imbalances. Toshihiko Fukui, governor of the Bank of Japan, suggested in October 2004 that global imbalances risk the stability of the international financial system. The willingness of Asian monetary authorities to intervene in currency markets to prop up the dollar may be limited. Fukui notes that in accumulating so many dollars, Asian central banks are running the risk of putting all their "eggs in one basket" (2004, p. 2). This, coupled with a "sudden shift in sentiment over the dollar," could lead to problems. Joseph Yam (2004), chief executive of the Hong Kong Monetary Authority, notes that Asian central banks have accumulated huge reserve positions, primarily in U.S. dollars.

Some European bankers share the concern among Asian central bankers. Jürgen Stark, vice president of the Deutsche Bundesbank, suggests that the magnitude of the coming adjustment is "significantly larger" than those of the past (2005, p. 2). While foreign bankers are calling for changes in U.S. economic policy, U.S. monetary authorities downplay the significance of any impending adjustment. Fukui says, "Policymakers must reassure the market that they are not letting imbalances get out of hand" (2004, p. 2). He says: "Without changes in the conduct of economic policy this would also mean that the existing global current account imbalances would become even more pronounced." Others, such as Dr. Y. V. Reddy, governor of the Reserve Bank of India, say the possibilities of disruptive global currency adjustments are high, and that there is a need for "bold leadership" to correct global imbalances in an orderly manner (2004, p. 1).

Federal Reserve economists Matthew Higgins, Thomas Klitgaard, and Cedric Tille (2005) break out the assets and liabilities of the U.S. international investment position and their corresponding flows, and conclude that a series of fortunate, and possibly temporary, events have prevented a deterioration in U.S. net income receipts. They note that much of the buildup in U.S. liabilities has taken the form of interest-bearing assets (p. 12). They contend that the superior return the United States earns on foreign direct investment and the drop in global interest rates have masked potential changes in payment flows (p. 17).

Until recently, the debate over the current account balance focused primarily on whether the impending adjustment would be benign or potentially damaging to the U.S. and world economies. Nobody was questioning whether or not an adjustment to the U.S current account balance was forthcoming (Altig 2005). Richard Hausmann and Frederico Sturzenegger (2005), at the Kennedy School of Government at Harvard University, have taken a far-out position and suggested that no such adjustment is imminent. They argue that all accounting systems are arbitrary, and contend that assets and liabilities have been systematically mismeasured: measurement error has created "dark matter" that will keep global financial markets from running into a crisis. They suggest that accounting conventions are inadequate and propose to measure assets by the income they generate (p. 9). Because the United States received a net income of \$30 billion on its financial portfolio, they contend that it is a net creditor.

In this Strategic Analysis, we show that net income outflows are artificially low, largely because of temporary events and policies that may be in the process of reversing. The potential problems in income outflows stem from past trade deficits. Since the mid 1970s, the United States has imported more than it has exported. Figure 1 shows the ratio of exported to imported goods and services in historical dollars for every quarter since 1960. Since the late 1990s, this ratio has fallen from .80 to .66. This dramatic falloff suggests that current trends are unsustainable.

Figure 1 Export-Import Ratio of Goods and Services



Source: Bureau of Economic Analysis

Imports as a percent of GDP have grown rapidly, representing about 16 percent of GDP at the end of 2005. Exports have been flat since 2000, and represented just over 10 percent of GDP at the close of 2005. Yet, as Figure 2 shows, the balance on income has not followed the downward trend in the balance on goods and services. Why hasn't the accumulated debt stemming from past trade deficits dramatically changed income flows? As we will show later, several reasons help explain why the balance on income flows remains near zero—including low interest rates and the shorter maturities of debt instruments.





Balance on Goods and Services

Source: Bureau of Economic Analysis

As a result of the growing U.S. current account deficit, credit market instruments and equity held by foreigners as a share of U.S. financial assets have grown rapidly in recent years. There has been a steady increase in U.S. assets held by foreigners since the early 1970s, when foreigners held less than 2 percent of the total dollar value of the U.S. credit market. Today, they hold almost 14 percent (Federal Reserve Board of Governors 2006). A similar pattern exists for the U.S. equity market. In the early 1990s, the share of the total dollar value of the U.S. equity market held by foreigners was less than 4 percent. Today, foreigners hold over 12 percent.

U.S. assets exceeded U.S. liabilities until the late 1980s. Since that time, liabilities have exceeded assets. The acquisition of domestic assets by the rest of the world provides funding in U.S. capital markets. Figure 3 shows that U.S. ownership of foreign interest-bearing assets as a percent of GDP has grown modestly. In contrast, foreign ownership of U.S. interestbearing assets has grown rapidly, particularly since 1999. At the end of 2004, foreign ownership of U.S. interest-bearing assets stood at over 60 percent of GDP, while U.S. ownership of foreign interest-bearing assets was just over 30 percent. Because the bulk of foreign-owned securities are credit market assets, the current account deficit is becoming more sensitive to changes in interest rates.

Figure 3 U.S. and Foreign Interest-Bearing Assets as Percent of GDP



Source: Bureau of Economic Analysis





Source: Bureau of Economic Analysis

Despite the growth in foreign-owned interest-bearing assets, interest income payments and receipts have fallen in relation to GDP. Figure 4 shows both U.S. interest payments to foreigners and U.S. interest receipts from foreigners as a percent of GDP. This figure shows the falloff after 2000—a falloff that occurred despite rapid growth in the stock of interestbearing assets shown in Figure 3. The apparent incongruence between the recent growth in foreign ownership of interestbearing assets and the recent decline in U.S interest payments to foreigners is explained by the dramatic decline in interest rates since 2000.

The cost of funding U.S. credit market debt has also declined considerably in the last five years. To estimate the cost of funding debt, we use U.S. Bureau of Economic Analysis (BEA) data and take the annual flow of interest divided by the average stock of debt (over a two-year period) measured at current costs. In the mid 1980s, the funding costs of debt were around 8 percent. These costs hovered near 6 percent from the mid 1990s to 2000, but from 2000 to 2004, they dropped considerably. This is shown in Figure 5. The separation of the two lines shows that the funding cost for the United States relative to that of foreigners rose modestly. In 2004, the funding cost was around 3.02 percent for the United States, and a little over 2.59 percent for foreign credit market assets in the United States.

Figure 5 Estimated Cost of Funds



Interest Payments / Foreign-Owned Credit Market Assets in United States
Interest Receipts / U.S.-Owned Credit Market Assets Abroad

Source: Bureau of Economic Analysis



Figure 6 Federal Funds Rate and U.S. Treasury Yields

Sources: Federal Reserve Board of Governors and Department of the Treasury

The movement in market interest rates explains much of the falloff in funding costs since 2000. The Federal Reserve aggressively targeted the federal funds rate beginning in early 2001. The movement in this rate is shown in Figure 6. The drop in the federal funds rate affected the yields on short-term debt, as reflected in the U.S. Department of the Treasury's published data on yields. Beginning in 2001, short-term interest rates fell dramatically. As shown in Figure 6, six-month Treasury yields fell from over 6 percent in 2000 to 1 percent in 2003, with the Treasury yields closely following the movement in the federal funds rate.

Figure 7 Average Maturity of Outstanding and Newly Issued U.S. Government Debt



Source: Department of the Treasury

Another reason for the falloff in U.S. funding costs has been the shift in the instruments used to fund the U.S. national debt. In recent years, the funding policy of the Treasury has changed. Figure 7 shows the average maturity of total outstanding and newly issued U.S. government debt. Prior to 2000, the average maturity of newly issued debt never fell below 50 months. After 2000, it fell to well below 30 months. The average maturity of newly issued debt dropped considerably in the first quarter of 2002. At that time, newly issued debt had an average maturity of 25.48 months. This, along with debt that is rolling over, has had the effect of lowering the overall maturity of debt. In the fourth quarter of 2005, the average maturity for all U.S. government debt dropped to 53.36 months-the lowest level since the second quarter of 1984. Although the Treasury has reintroduced the 30-year bond and has begun funding more with long-term debt, the average maturity of newly issued debt remained well below 40 months in the most recent quarter. Maturity lengths should stabilize as the benefit offered by funding with low short-term interest rates disappears.

Other financial entities, such as banks and hedge funds, also often look to fund a good deal of their long-term assets with short-term liabilities. Although prudent banking requires that long-term assets be funded with long-term liabilities, the financial incentives of expanding the net interest margin by funding long-term debt with commercial paper are enticing.

Table 1 shows the projected income effect from a change in the cost of funding. We use 2004 estimates for credit market assets and liabilities. At the end of 2004, U.S.-owned credit market assets were worth approximately \$3.97 trillion. Foreign-owned credit market assets in the United States amounted to \$7.56 trillion. If the cost of debt were to rise to 5 percent from 2004 levels of around 3 percent, we would expect interest receipts to rise from \$103 billion to near \$199 billion. Income payments would rise from \$228 billion to \$378 billion. The net income flow would deteriorate by an additional \$54.39 billion. If the cost of debt were to rise from 2004 levels to 6, 7, or 8 percent, the net income flow would deteriorate by \$90.33, \$126.27, or \$162.21 billion, respectively.

Based on 2004 data, we estimate that for each percentagepoint rise in funding costs, an additional \$36 billion will be added to the current account deficit. If U.S. debt were to be viewed as riskier than foreign debt, and the cost of funding were to rise relative to foreign debt, the effect would be even more pronounced. Moreover, foreign ownership of U.S. credit market assets has grown considerably since the end of 2004, and much of the new U.S. debt has been funded with shortterm maturities, which means that funding costs for the United States should rise more rapidly than in the past.

Our econometrics shows that an increase in the federal funds rate will affect the ex-post return on U.S. assets held abroad slowly. We found that an increase of 100 basis points implies an increase in the ex-post return of about 75 basis points, with a mean lag of about two years. Accordingly, while the federal funds rate increased from 2.9 percent in the second quarter of 2005 to 4.4 percent in the first quarter of 2006, the ex-post return on U.S. assets held abroad increased by only 0.4 percent over the same

period. In other words, the effects of recent increases in interest rates still have not markedly affected the income-flow statistics.

Another reason the balance on income has remained near zero in the last few years is that foreign central banks have accumulated large U.S. dollar-denominated reserves earning low returns. Figure 8 shows Treasury and agency securities held by foreign central banks as a percent of U.S. GDP. The willingness of foreign central banks to continue this policy may soon end. Government officials in China have been suggesting that China may soon stop accumulating U.S. dollars in their foreign exchange reserves.





Sources: Federal Reserve Flow of Funds and Bureau of Economic Analysis

Table	1.	Actual	and	Projected	Interest	Income Flows	Based on	2004 Assets*
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	Income Flows					
	2004	4 Projected				
U.S. Cost of Funding (Percent)	2.59	4.00	5.00	6.00	7.00	8.00
Foreign Cost of Funding (Percent)	3.02	4.00	5.00	6.00	7.00	8.00
U.S. Interest Receipts (Billions)	\$103	\$159	\$199	\$238	\$278	\$318
U.S. Interest Payments (Billions)	\$228	\$303	\$378	\$454	\$530	\$605
Net Interest Income Flows (Billions)	-\$125	-\$144	-\$180	-\$216	-\$252	-\$288
Relative to 2004 (Billions)		-\$18	-\$54	-\$90	-\$126	-\$162

*Based on foreign credit market assets held by United States of \$3.97 trillion and \$7.56 trillion in U.S. credit market assets held abroad

Sources: Bureau of Economic Analysis and authors' calculations

U.S. Government funding of debt with short-term securities, low interest rates, and the buildup of foreign central bank reserves have so far prevented income flows from contributing to the current account deficit.

Scenarios

Our scenario analysis is based on the same premises we used to make the projections in our September 2005 Strategic Analysis. At that time, we used information from the first half of 2005, and noted that if output in the United States grew sufficiently to keep unemployment constant, the deficit in the current account would likely worsen. We projected that the current account deficit would reach 7.5 percent of GDP by the end of the decade. Our projection was conditional on the assumption that the private sector's net financial balance, which was negative 2.6 percent of GDP in the second quarter of 2005, would slowly move back to zero over the next five years through a deceleration in the growth rate of household borrowing. We projected that this would eventually flatten household debt relative to income, which was at the time at historic highs. Since the external sector's contribution to aggregate demand was negative, a slowdown in private sector borrowing and expenditure implied that government spending would be required to fuel growth. We estimated that the general government deficit would also reach 8.5 percent of GDP by the end of the decade.

None of the unsustainable trends we highlighted changed in the last part of 2005. On the contrary, the private sector balance, after a small reduction in the third quarter, set a new record: negative 3.2 percent of GDP at year-end. Household debt rose to 90 percent of GDP, or 107 percent of private sector income. Oil prices, which rose through the third quarter of 2005, leveled off at the end of the year, leading to an increase in oil imports of about 0.5 percent of GDP in the last part of 2005. This increase contributed to the deterioration of the current account balance, which fell to negative 6.9 percent of GDP by year-end. If we look at the current account balance components in Figure 9, we see that, excluding oil imports, the deficit has leveled off with respect to GDP.

In the past, net income flows have provided a positive contribution to the current account balance, since the net return on foreign investment has exceeded net interest outflows on interestbearing assets. However, interest rates have risen. Foreign debt

Figure 9 Current Account Balance



- Current Account Balance without Oil and without Income Flows

- Current Account Balance

Source: Bureau of Economic Analysis

has increased. And, the benefits of positive income flows for the United States have now come to an end. The latest figures on income flows show that inflows and outflows are roughly equal. We expect net interest payments to foreigners to grow, and net payments on direct investment to remain stable.

At the end of 2005, the U.S. economy continued to grow on an unbalanced path. It follows that new projections using the same assumptions as in our previous analysis will show worse outcomes, since the starting points-for both the external deficit and private sector debt-are higher than six months ago. We have repeated our exercise, again assuming that private sector borrowing-and household borrowing in particularslowly declines and brings the private sector back to balance by the end of the decade. This implies that household debt will level off at about 102 percent of GDP. We expect nonfinancial business debt to stabilize at 68 percent of GDP. We also assume no devaluation of the dollar and no further increase in the relative price of oil. We assume a moderate increase in the federal funds rate of about 130 basis points in the next year. Our estimates show that this will lead to a moderate increase in interest rates paid on U.S. assets held abroad, which will contribute to the worsening of the current account balance. Aligning our model to obtain the same growth path projected by the Congressional Budget Office (CBO) in its January 2006 report-a path that implies stable unemployment-we find that if net exports and private sector expenditure do not provide the fuel for growth, such an expansionary path can be obtained only through a further relaxation of fiscal policy. Accordingly, we project that the combined government deficit will have to reach a record 9 percent of GDP by 2010. Our projections are shown in Figure 10. We also project that the current account balance will have to grow to 9.8 percent of GDP by 2010 for the CBO projections to hold—a much larger figure than the one we estimated six months ago. We do not believe this scenario to be a likely outcome.

Figure 10 Scenario with CBO Growth Path and Slowing Private Sector Borrowing: Main Sector Balances



Sources: Bureau of Economic Analysis and authors' calculations

Figure 11 Scenario with CBO GDP Growth Path: **Main Sector Balances**



Current Account Balance

In contrast to the CBO projections, private sector borrowing and domestic demand have been rising rapidly. The most recent GDP release from the BEA shows that while disposable personal income has increased by only 3.8 percent, consumption expenditure has increased by 5.5 percent. Fixed investment, both residential and nonresidential, is also apparently booming. Since domestic demand is growing more rapidly than income, it must be the case that private sector borrowing is still increasing. We have therefore updated our estimates for an alternative growth path, one in which the government deficit is now assumed to follow the projections in the last CBO report. We simulate our model to calculate the amount of borrowing from the private sector necessary to finance domestic demand, so that GDP growth follows the path projected by the CBO. The results for the main sector balances are reported in Figure 11. In this scenario, the government sector slowly moves back to balance, but the increase in borrowing will continue to push the private sector into the red, with net acquisition of financial assets reaching an all-time-high deficit of about 7 percent of GDP and the debt-to-income ratio for the personal sector growing exponentially as a ratio to GDP. Although this scenario may seem more likely in the short run, it will steadily increase the risk of default for the U.S. private and financial sectors.

Conclusion

In this Strategic Analysis, we have examined the views of U.S. and foreign policymakers on global imbalances and the current position of the U.S. economy in terms of income flows. While foreign policymakers have been pressing for policy changes, U.S. policymakers have been passive about taking action to stem global imbalances. Some of those outside the policymaking world have viewed with skepticism the position that markets will benignly resolve global imbalances. But now, even some of the skeptics, such as Stephen Roach (2006) of Morgan Stanley, are warming to the benign resolution view-but for different reasons. Roach contends that the G7 and the International Monetary Fund are developing a "framework" that may provide the basis for a collective resolution to the problem of global imbalances. But, as we have shown, these imbalances are growing. Moreover, the actions of U.S. policymakers over the last few years have focused on temporary measures that have had the effect of masking rather than resolving future problems,

Sources: Bureau of Economic Analysis and authors' calculations

particularly with respect to income flows. The Federal Reserve's 2001 initiatives to lower the federal funds rate, the Treasury Department's moves to fund government debt with short-term securities, and the substantial buildup of U.S. dollars by foreign central bankers at low interest rates over the last few years have effectively prevented a significant deterioration in U.S. net income receipts. As interest rates rise—as the Treasury begins to extend the maturity of its newly issued securities, as old debt is refinanced at higher rates, and as foreign central bankers limit and diversify their treasury reserves—the burden of servicing U.S. debt owned by foreigners will begin to manifest in an even greater deterioration in the current account balance.

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