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CAN GLOBAL IMBALANCES CONTINUE? POLICIES FOR THE U.S. ECONOMY

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In this new Strategic Analysis, we review what we believe is the most important economic issue facing policymakers in the United States and abroad: the prospect of a growth recession in the United States linked to imbalances in the U.S. current account, government, and private sector deficits. The current account balance, which is a deduction from U.S. aggregate demand, has been rising steadily for some time and is now likely to be above 6.5 percent of GDP. The government balance has improved, again giving no stimulus to demand, which has therefore relied entirely on a large and growing private sector deficit. A rapidly cooling housing market is one of the signs that this growth path is likely to break down.

We focus first on the current account deficit. Our analysis suggests that a necessary and sufficient condition for addressing this problem without incurring dire consequences is sufficient export growth. To achieve this, foreign saving has to fall, especially in Europe and East Asia; U.S. saving has to rise; and some mechanism, such as a change in relative prices, should be put in place to help the previous two phenomena translate into an improvement in the U.S. balance of trade.

We turn next to the ever-rising growth in private sector debt. As long as interest rates were moving downward, a larger debt was consistent with stable interest payments, relative to income. Since interest rates have now stabilized or increased, debt service is taking an increasing share of households' disposable income, a development that may have negative impacts on consumer demand.

The Three Balances: A Summary of the Issues

The Levy Institute has long pointed out (Godley and Izurieta 2001) that the current account and private sector imbalances would eventually bring the economy to an unsustainable position, unless

The authors thank Wynne Godley for his penetrating comments. The authors are, of course, responsible for any remaining errors.

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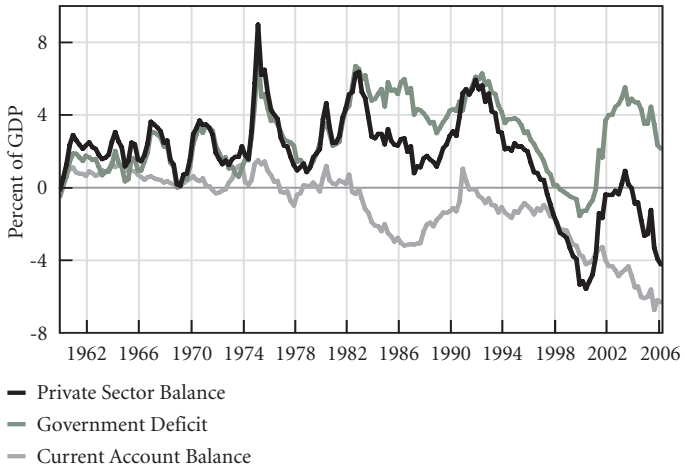
corrective actions were taken. Today, the current account imbalance is being widely discussed, although most commentators attribute it to excessive saving rates abroad, rather than to an inadequate saving rate at home.

Figure 1 **Balances of the Main Sectors in Historical Perspective**



Sources: Bureau of Economic Analysis and authorsí calculations

In this section, we provide some background on the issues that have seemed most crucial to us for some time but are only now gaining wider attention, such as the current account deficit.[1] A long-festering problem, the current account deficit is the amount by which imports exceed exports, plus the balance of cross-border flows of certain forms of income, such as interest payments. As long as the nation runs a current account deficit, it must sell assets to the rest of the world to finance a portion of its imports and international income payments. The United States has been running deficits on the current account since the early 1990s, and in the final quarter of last year, the deficit reached a record 6.8 percent of GDP, as seen in Figure 1. After a tiny reversal in the first quarter of this year, the balance resumed its fall in the second quarter, reaching a deficit of approximately 6.4 percent at an annual rate. Monthly data are not available for the current account balance, but the trade deficit reached $64 billion in September, an indication that no change in the trend is near. Preliminary estimates of the current account deficit for the third quarter show no signs of improvement.

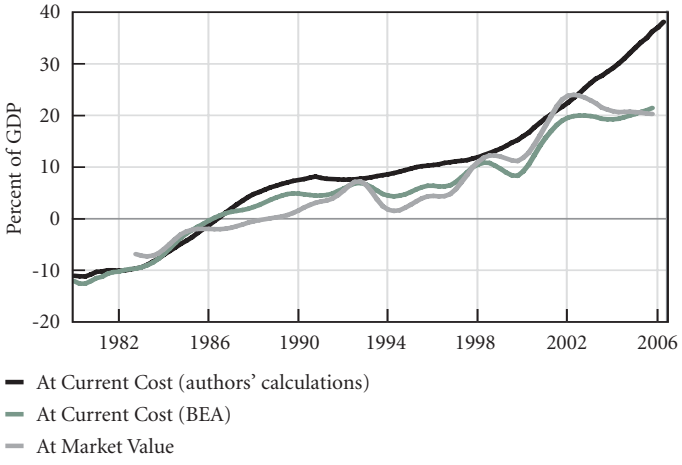
The accounting identity linking the current account balance with the balances of the government and the private sector provides the operational framework that allows us to consider strategic prospects for the U.S. economy. It is: current account balance=private sector balance+government balance.

This relationship essentially says that a nation's net borrowing or lending to other countries is accounted for entirely by the net borrowing or lending of the government and private sectors. Of course, the latter includes the personal and corporate sectors. Hence, it is not surprising that both the private and government sectors have been deeply in deficit in recent years. Figure 1 shows that the private sector balance has plunged since 2003. The government deficit fell below zero late in the Clinton administration (deficits appear as positive numbers in the figure), rose as the nation fell into recession and the Bush administration's Keynesian fiscal policy stance went into effect, and has followed a downward trend in recent years.

The Current Account Deficit: Recent Data and Commentary

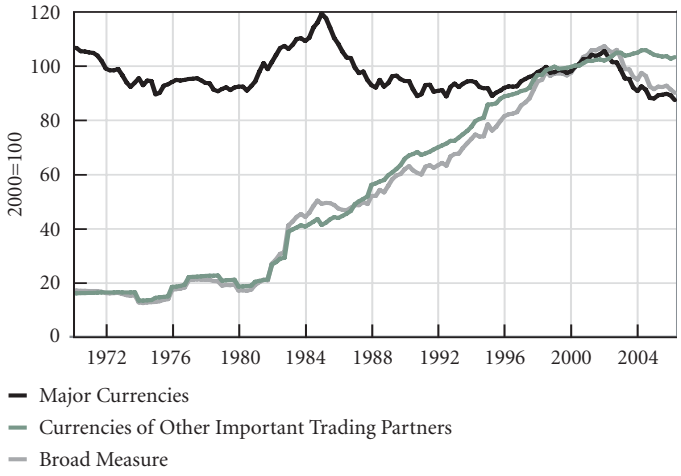
The total U.S. debt relative to GDP, as shown in Figure 2, rose almost continuously up to 2002, when it stabilized due to the fall in the dollar (Figure 3). Figure 2 includes several measures of total U.S. net debt. One is our calculation of the sum of past current account balances. The justification for the use of this figure is obvious: one's total debt could be very roughly approximated

Figure 2 **Net Foreign Debt**



Sources: Bureau of Economic Analysis (BEA) and authors' calculations

Figure 3 **Measures of U.S. Dollar Exchange Rate**



Sources: Federal Reserve and authors' calculations

by the cumulative amount one has borrowed over time. The other lines are the commonly cited Bureau of Economic Analysis (BEA) data on the U.S. "net investment position," with direct investment calculated at current cost and at market value. The latter two measures differ because the market value of securities is affected by fluctuations in equity markets. The discrepancy between our measure and the BEA's current-cost figure amounts to roughly $1.8 trillion at the end of 2005. The key problem in reconciling these two series is that they are based on entirely separate forms of data: the net investment position is calculated using surveys of custodians in the United States who hold securities on behalf of foreign investors; the capital account balance is based on information provided by brokers who sell securities to foreigners. Other differences arise in accounting for real estate transfers. Finally, our estimate of total indebtedness is not affected by changes in the value of the U.S. dollar. The BEA net investment position measures, on the other hand, fall with a dollar devaluation. The reason is that most U.S. assets abroad are held in foreign currency, so their dollar value increases as the dollar devalues, while U.S. debt is denominated in dollars and is therefore not affected by movements in the exchange rate. This phenomenon is reflected in the figure by the fact that the net national debt has flattened out in recent years, according to BEA measures, as the dollar has fallen in value.[2]

There is no general consensus that a large and rising U.S. current account deficit poses a threat requiring a policy response. The imbalance will pose a threat if it makes U.S. assets unattractive to foreign investors—who may fear a dollar devaluation—and hence generates a rise in U.S. interest rates, which in turn depresses domestic demand and growth. The ultimate outcome might then be a recession in the United States that spreads to its trading partners and the world. A devaluation of the dollar might also affect U.S. inflation via an increase in import prices, again triggering a restrictive monetary policy. We discuss the mechanics of this scenario below, but it is important to note the diverse views that exist on the topic of the current account balance and the potential for a devaluation.

Commentators disagree on several points. First, they disagree about the linkage between the U.S. external imbalance and the value of the U.S. dollar and whether the deficit will generate a dollar devaluation. Second, they argue over the linkage between a dollar devaluation and the rise in U.S. inflation and interest rates. Third, they have not come to an agreement about whether the external imbalance arose in the first place because of problems abroad or in the United States. If the deficit reflects problems abroad—as some commentators argue—no action should be taken in the United States. These commentators believe that the external imbalance is generated by unattractive capital markets in East Asia, which create excess demand for U.S. financial assets. Heightened demand for U.S. securities, in turn, keeps the dollar strong, leading to a deficit in the U.S. balance of trade. Finally, the experts quarrel about whether the imbalances will self-correct through the unaided action of free markets or require policy intervention.

Federal Reserve officials have been focusing primarily on inflation; when they address the issue of the current account deficit, they remain sanguine. Recent speeches by Richard Fisher, Michael Moskow, and Janet Yellen, the heads of the Dallas, Chicago, and San Francisco Federal Reserve Banks, respectively, and Donald Kohn, vice chairman of the Board of Governors, have heavily emphasized the risks of inflation and the housing market (Fisher 2006; Kohn 2006a; Moskow 2006; Yellen 2006), reflecting the belief of most central bankers that price stability is their primary responsibility. On the other hand, Kohn (2006b) has devoted attention to the current account deficit. He warns that the U.S. saving rate will inevitably rise in the coming years, reducing the imbalance. He also warns of a possible international sell-off of dollar-denominated bonds. Kohn still emphasizes the importance of containing inflation, arguing that a loss of price stability could undermine demand for the dollar, just as it did in the early 1970s.

The current account imbalance was not the main topic of discussion at the annual Jackson Hole meeting of central bankers in August, but it was brought up by Martin Feldstein of Harvard University (2006), who staked out a similar position to that of the International Monetary Fund (IMF) (2006). He stated that the adjustment back toward balance will be accompanied by at least one of two changes: a fall in demand for U.S. assets or a fall in the value of the dollar (pp. 10–11). He believes that in the near future, the Fed might face a dilemma: higher interest rates would be needed to fight the inflationary effects of devaluation, while weak demand would appear to call for looser policy.

Nouriel Roubini and Brad Setser (2005) have shown that the perennial imbalances are fed largely by purchases of dollars by foreign central banks, undertaken to prevent a devaluation. Moreover, private investors abroad, who hold part of the foreign debt, have been encouraged by the commitment of central banks to prop up the value of U.S. securities. Hence, the dollar has been supported artificially, not by the intrinsic value of U.S. securities. Should central banks slow their accumulation of U.S. reserves, private actors could quickly follow their lead (p. 9). Drawing an analogy to the "prisoners' dilemma" of game theory, Roubini and Setser point out that smaller central banks' collective interest in maintaining the value of the dollar might lose out to their individual interests in protecting their wealth, should banks become convinced that a massive "run for the exits" was imminent (p. 25).

Increasingly, high officials in international financial institutions have sounded the alarm about the current account deficit. In a recent report, the IMF pointed out that "past experience suggests that high current account deficits relative to GDP have typically not been sustained for long periods" (2006, p. 13). The report notes several factors pointing in the direction of a prompt adjustment—including the falling U.S. exchange rate, stronger growth in U.S. exports, positive news on the federal deficit, and stronger growth in Japan and the euro area—but observes that the current account deficit remains stubbornly high.

Like the Fed officials mentioned earlier, the IMF report argues that a "gradual, orderly unwinding" is most likely (2006, p. 16). It states that the unwinding process may be accomplished spontaneously by the market, rather than by government intervention. In concert with some official documents of the Bush administration, the report argues that the current account deficit is being driven not by imports but by the attractiveness of U.S. assets, which is due to superior productivity growth and deeper, more highly developed financial markets (pp. 33–37). However, the report also includes a scenario in which there is a reduced world appetite for U.S. assets. The "disruptive adjustment scenario" described by the IMF includes a two-year period with an average economic growth rate of 1 percent, with even worse outcomes possible, including a major disruption of financial markets or a wave of damaging protectionism. In recent speeches, Rodrigo de Rato, managing director of the Fund, has also warned of a disruptive adjustment (2006a, 2006b, 2006c).

In a recent paper, Richard H. Clarida, Manuela Goretti, and Mark P. Taylor express optimism about the sustainability of large current account deficits, even though the deficit is currently above the estimated threshold beyond which adjustment has historically taken place (2006). First, as we pointed out above, since most U.S. debt is denominated in dollars and most U.S. foreign assets are denominated in foreign currency, the country's net asset position (assets minus liabilities) rises upon a devaluation. Second, the United States has received relatively high returns on its outward direct investment. Third, the world economy has seen a "glut" of savings relative to investment opportunities in recent years. Thus, while Clarida, Goretti, and Taylor acknowledge that the current account deficit cannot balloon out of control indefinitely, they argue that there are clear explanations for the lack of an adjustment up to this point. However, it is not clear to us that historical experience can offer much guidance in today's unprecedented economic climate.

Wynne Godley and Marc Lavoie recently clarified an important implication of current account balances, using a relatively simple, stock-flow consistent model (2005–06). It is often asserted that when China receives a positive flow of reserves from the United States, it risks a bout of inflation. The reason is that when the central bank buys dollars with its own currency, the domestic supply of yuan rises. The only way to prevent a pernicious rise in the Chinese money supply is for the Chinese central bank to sell bonds to domestic holders of its currency, "soaking up" the "extra" yuan. Godley and Lavoie show that the latter process, known in the economics literature as "sterilization," can occur naturally, as a byproduct of interest rate targeting by the Chinese central bank. This finding suggests an emphasis on other consequences of imbalances is warranted: if current Chinese policy runs into trouble, it will not likely come

in the form of "excess" money. But while heavy Chinese purchases of dollars may continue for a long while without triggering inflation, we remain convinced, for other reasons, that an endless accumulation of dollars in foreign central banks cannot occur.

Some crucial data can be brought to bear on the issues discussed in this section. Figure 3 shows the paths of the exchange rate of the dollar against three baskets of currencies: the "major" currencies, which include most of the Western industrialized countries and Japan; the currencies of "other important" trading partners, which include many emerging markets and China; and a "broad" measure, combining both "major" and "other" nations' currencies.

Some progress has been made toward a devaluation, as shown in Figure 3. First, the dollar has been falling against the major currencies for some time, with a brief respite in 2005. Second, the kind of abrupt drop feared by many analysts has not materialized so far. While the dollar has fallen significantly against the major currencies, its exchange rate with other currencies remains stable.

Potentially, a devaluation is both part of the problem and part of the solution to chronic current account imbalances. It is a potential problem because it could raise interest rates and, hence, the cost of servicing the national debt. The scenario that worries some observers involves a sudden collapse in the dollar, rather than an orderly adjustment. Concern about the dollar could lead investors to dump dollar-denominated assets, forcing down their prices. Since interest rates move inversely with the price of bonds, U.S. business and the federal government would then have to pay more to borrow. An additional worry is that a lower exchange rate makes foreign goods more expensive to those whose incomes come in the form of dollars, feeding inflation.

On the other hand, a devaluation is potentially part of the solution to the nation's strategic predicament because goods and services produced by the United States become cheaper for citizens of other countries when dollars become cheaper. Also, higher import prices discourage U.S. citizens from purchasing imports, with the beneficial effect of increasing demand for domestically produced goods. Finally, a devaluation improves the U.S. net asset position—the value of its foreign assets minus its foreign liabilities, translated into dollars.

A numerical example provides a sense of the magnitude of this last beneficial effect of a devaluation. Since U.S. assets—mostly denominated in foreign currency—are equal to approximately 90 percent of GDP, a 20 percent devaluation over 4 years would increase the value of these assets by $2 trillion, or 18 percent of GDP. The net debt would then fall by roughly the same amount. Interest payments on U.S. assets abroad would also rise in terms of dollars.

Hence, a devaluation has some ill effects, but it is one of the few tonics available to force an improvement in the current account balance and the U.S. net asset position. As long as it occurs gradually, a crash in financial markets and a sharp rise in interest rates would be avoided.

Our own concerns about the three balances focus less on inflation and disorderly adjustments, instead emphasizing issues of aggregate demand. Private sector and government borrowing have been the motor driving the American economy; when borrowing drops, demand for goods and services in the United States and its trading partners will fall, raising the specter of recession.

Too Late for Reform?

Many proposals have been made for measures to deal with the international imbalances discussed above. Any potential remedy must cause three events to occur: foreign saving must fall, U.S. saving must rise, and the dollar will have to fall. The third change, as explained in an earlier section, will be needed to help bring about the first two.

De Rato (2006c) cites efforts at the IMF to initiate multilateral meetings to address this problem through coordinated efforts. We have long advocated a multilateral solution, though we are not sure that the will exists to achieve this (Godley, Izurieta, and Zezza 2004; Godley et al. 2005, p. 2). An appropriate international approach might involve cooperative efforts to improve demand for imported goods in nations that are now selling more goods abroad than they are buying and to devalue the dollar.

Such proposals are constructive, but many officials are emphasizing what we regard as less promising solutions. The IMF report is typical in many ways. It lists a number of proposals: efforts to boost U.S. national saving, including cuts in the federal budget deficit; "structural reforms" in Japan and Europe; increased domestic demand in emerging Asia (consumption in China and investment elsewhere); greater exchange rate flexibility; and increased spending by oil exporters (2006, pp. 28–29).

Of these prescriptions, we support exchange rate flexibility and increased demand abroad, but we doubt the effectiveness of structural reforms. Also, although we expect that at some point the household sector will have to repair its fragile balance sheet, we believe the inevitable adjustment in domestic saving could have bad effects as well as good ones, specifically with regard to aggregate demand. For this reason, export demand will remain crucial.

The term "structural reforms" generally refers to efforts to scale back social programs, labor market protections, and regulation, in order to spur domestic investment. Many believe reforms would enable Europe and Japan to attract more foreign capital. The evidence that such measures reduce unemployment is weak (Howell et al. 2006). By reducing wages, reforms may depress world demand for goods and services, including U.S. exports, and cause surplus nations to become even more reliant upon exports to fuel their economies.

Another measure supported by the IMF and many other commentators is a reduction in government budget deficits. By the accounting identity, if the private sector balance remains constant, a fall in the government deficit improves the current account balance. But the private sector balance may not remain constant. Hence, a fall in the government budget deficit can come at the cost of a rising private sector deficit, failing to improve the current account balance (Barbosa-Filho et al. 2005). Another problem with a fiscal solution is that it can have a depressing effect on aggregate demand, a development that could lead to a recession, with large attendant social costs.

A devaluation, on the other hand, offers a way out of the current account bind, without stifling aggregate demand. The way forward, we believe, will involve orderly devaluation, stimulative macroeconomic policy abroad, and an increase in the saving of U.S. households. If a devaluation remains elusive, nonselective tariffs could be used as a last resort, as we have argued before (Godley, Papadimitriou, Dos Santos, and Zezza 2005). Finally, looser monetary policy might help, as we explain below. Many other proffered solutions, by themselves, will not bring about the necessary adjustment without sending the economy into a tailspin.

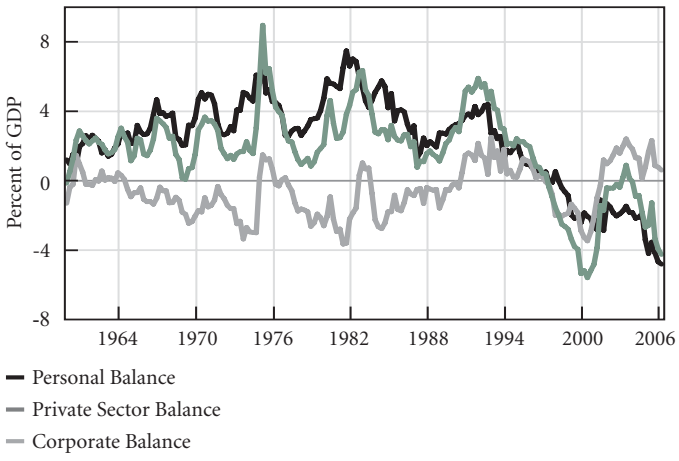
The Private Sector Balance: The Risks Ahead

Figure 4 shows the private sector counterpart of the budget deficit, broken into its two components, personal and corporate. The entire deficit of this sector is accounted for by its personal component, with the corporate sector actually running a surplus. A close-up view of the personal sector's borrowing is revealed in Figure 5, where this time the denominator is a proxy for households' ability to pay off debt—their disposable income. Borrowing has fallen by this measure over the last two quarters, though in the past, sharp falls in borrowing have often been followed closely by increases. Nonetheless, borrowing remains very high by historical standards. Figure 6 shows the stock of household debt as a ratio to the same relevant flow: personal disposable income. Recall Godley and Francis Cripps's (1983) key insight: stocks do not increase relative to flows forever.

A further indication of the pressure mounting on the U.S. consumer is the debt-service ratio, which is the cost of servicing debt, divided by disposable income. This figure has been rising steadily since the first quarter of 2005 and now stands at 14.10 percent.

We must emphasize that our primary concern about the rising level of debt is the one emphasized by the late Levy Institute economist Hyman P. Minsky: the possibility of an aftermath in which there is such a dearth of spending that the economy goes into a recession and individual households are

Figure 4 **Private Sector Balance and Its Components**

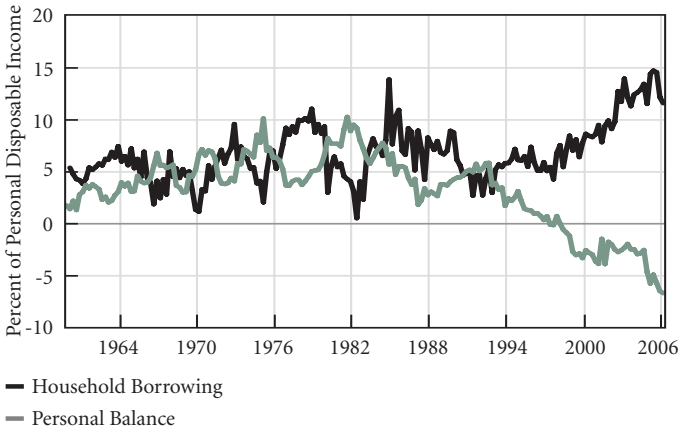


Sources: Bureau of Economic Analysis, Federal Reserve, and authors' calculations

caught in a vise of financial obligations and insufficient income (1986, chapter 9).

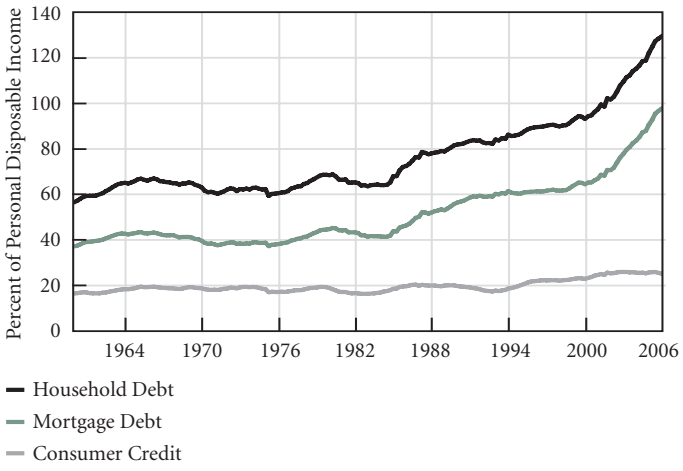
This brings us to the issue of housing. In January 2006, we wrote about the role of housing-related debt in the finances of private households and the potential effect of a fall in house prices on the net worth of the household sector (Papadimitriou, Chilcote, and Zezza 2006). Partly because residential housing investment has accounted for 30 percent of gross private investment and 5 percent of total domestic output over the last 25 years (Krainer 2006), we still believe that developments in this sector will be crucial in the months to come. Unfortunately, the period since January has brought only further confirmation that a major downturn in the residential real estate sector is coming.

Figure 5 Personal Balance and Household Borrowing



Sources: Bureau of Economic Analysis, Federal Reserve, and authors' calculations

Figure 6 Household Debt and Its Components



Sources: Bureau of Economic Analysis, Federal Reserve, and authors' calculations

The rise in housing price indexes has decelerated rapidly. Two main indexes match data on sales of the same home over time. One of these indexes, constructed by the Office of Housing Enterprise and Oversight, shows an appreciation of 1.17 percent in the second quarter of 2006 over the previous quarter. The decline in the quarterly rate of housing price increases was the sharpest since the index was first calculated in 1975. The second index, developed by Karl E. Case and Robert J. Shiller and calculated by Standard and Poor's, shows that while housing inflation was 20.4 percent in the 12 months ending in July 2004, the rate of increase in prices slowed to 8.2 percent in the 12 months ending in June 2006. Six of the 10 cities in the Case/Shiller–Standard and Poor's index actually saw declines between May and June.

More recent data are available for *new* home prices. Commerce Department data show that the median price of a new home fell 9.7 percent from September 2005 to September 2006, the largest drop in 35 years (Associated Press 2006b).

So far, no free fall has occurred, at least according to the more reliable, resale data. But there are important differences between the housing market and markets for financial securities (Case and Shiller 2006). Financial markets clear almost instantaneously, with no unsold inventories. Hence, if there is a large-scale sell-off, prices fall very quickly, so that every seller can find a buyer. On the other hand, if the housing market faces a decline in demand, it may be felt first as a rise in unsold inventories, as sellers hold on to their properties rather than accept a low price. Until inventories are worked off, prices may not fall drastically. This may be one reason why quantity indicators, such as the volume of unsold inventories, have historically served as superior leading indicators of slumps in residential construction (Krainer 2006).

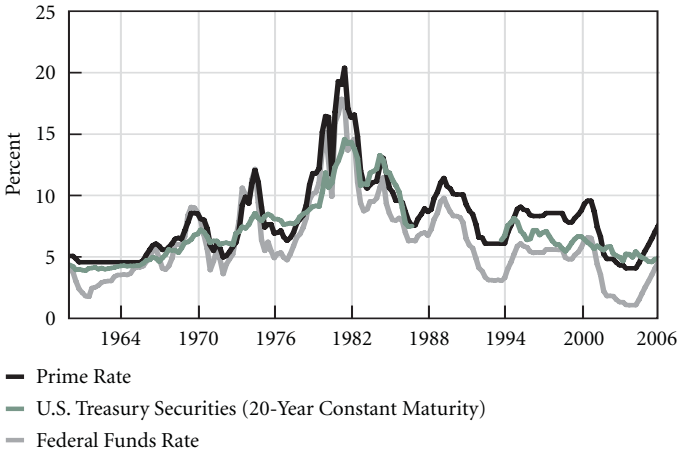
And those indicators are not hopeful. Sales of existing homes fell by 4.1 percent from June to July, according to the National Association of Realtors. The same report showed that the inventory of unsold homes rose to a record high of 3.86 million in July. Fed chair Ben S. Bernanke stated in late July that the decline in the housing market appeared so far to be "orderly," but that the Fed is "watching [the risk of a housing slowdown] very carefully" (Associated Press 2006a). Recently it was reported that housing starts fell 6 percent in August from a month earlier (Gerena-Morales 2006).

In our January Strategic Analysis, we calculated that a 10 percent drop in housing prices would reduce homeowners' equity by nearly $2 trillion. This is a larger impact than a 10 percent drop in the stock market. As we pointed out in the previous analysis, property values are important for more than one reason. In the Levy Institute macro model and in most other models, household net worth, including housing equity, is an important variable driving consumer expenditures. Economists believe this is so for several reasons. First, higher net worth simply provides more wherewithal to make purchases. According to standard macroeconomics textbooks, when people's homes rise in value, they feel richer and are likely to spend more. Second, housing wealth can be leveraged as collateral to spend with borrowed money. Third, as a corollary of the second point, when collateral is rising in value, banks' portfolios of loans have a higher value, other things being equal. In the event that a borrower defaults, the bank can recover its loss by selling the collateral. Thus, it is probably no accident that the housing market run-up has been accompanied by the borrowing binge of U.S. households shown in Figure 5, which is largely accounted for by loans collateralized with home equity.

For several reasons, the economy is more vulnerable than it has been in the past to falling home prices. Never before has an economic expansion been so dependent on home equity loans and cash-out mortgage refinancing. Problems with defaults could arise owing to a wave of interest rate increases in variable-rate mortgages, which have become increasingly popular in the last five years or so (Darlin 2006). Interest rates on variable-rate mortgages generally "reset" after three, five, seven, or ten years. With rising interest rates, many homeowners holding variable-rate mortgages will face higher payments—unless they refinance their loans, paying them off more slowly to compensate for higher interest rates. But if the market value of the home falls below the amount of the mortgage, refinancing will prove impossible, and the homeowner may have no choice but to sell. Such sales would have the tendency to put further downward pressure on home prices. Thus, rising interest rates and falling property values could have a synergistic negative effect on household expenditure, a possibility explored in our scenario analysis.

As seen in Figure 7, short-term interest rates have risen about 4.25 percent over the last two and a half years. As of now, longer-term rates, such as mortgage rates, have not risen as fast, and in fact, many long-term rates are actually below short-term ones. The effects of monetary policy will depend upon how far

Figure 7 Selected Interest Rates



Source: Federal Reserve

and how fast long rates adjust as the effects of federal funds rate hikes work their way through the financial markets. Many expect the Fed to begin lowering interest rates by next year, but as we have seen, most Fed officials remain vexed by the possibility of renewed inflation, a somewhat overdrawn concern that has tied their hands for the moment.

Having laid out the case for a housing-led decline in the economy, we must note one positive development in recent months: the rise of the stock market to all-time highs (at least by some measures). While more households hold significant amounts of home equity than significant amounts of stocks, a healthy equity market is capable of mollifying the impact of housing market torpor. But no one can be assured that the equity markets will not fall as well.

Baseline Scenario: CBO Budget Deficit and Growth Assumptions with No Devaluation

How will all these trends play out over the next few years? We now analyze certain scenarios, based upon varying assumptions, using the Levy Institute macro model. The idea is not to make a forecast, but to explore the possibilities that exist in several different hypothetical situations.

The first scenario is based upon the CBO's (2006) rather optimistic view. We adopt that agency's projections for the growth rate of economic output, inflation, and fiscal policy: real GDP growth will be 3.5 percent in 2006 and 3.0 percent in 2007 to 2010; Consumer Price Index (CPI) inflation will be 3.5

Table 1 Baseline Forecasts

	GDP Growth (percent)					Inflation (percent change in GDP deflator)				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
Eurozone	2.3	1.8	2.5	2.5	2.5	2.2	2.1	2.0	2.0	2.0
BRICs										
Brazil	3.6	4.0	4.0	4.0	4.0	4.7	4.0	3.0	2.0	2.0
Russia	6.5	6.5	4.8	4.5	4.0	15.6	8.9	8.0	7.5	7.0
India	8.3	7.3	7.0	6.5	6.0	5.1	4.7	4.0	3.0	2.0
China	10.0	10.0	9.0	8.0	7.0	1.5	2.2	2.0	2.0	2.0
Other ASEAN										
Hong Kong	6.0	5.5	5.0	4.5	4.0	0.0	1.3	2.0	2.0	2.0
Indonesia	5.2	6.0	5.5	5.0	4.5	13.3	6.1	5.0	4.0	3.0
Japan	2.8	2.3	2.0	2.0	2.0	0.4	0.8	1.0	1.5	2.0
Korea	5.0	4.3	4.0	4.0	4.0	-1.6	1.6	2.0	2.0	2.0
Malaysia	5.5	5.7	5.0	4.5	4.0	3.4	0.8	2.0	2.0	2.0
Philippines	5.0	5.4	5.0	4.5	4.0	6.2	4.9	4.0	3.0	2.0
Singapore	6.9	4.5	4.0	4.0	4.0	2.1	2.3	2.0	2.0	2.0
Taiwan	4.0	4.2	4.0	4.0	4.0	0.0	0.5	1.0	1.5	2.0
Other Major U.S. Trade Partners										
Australia	3.2	3.3	3.0	3.0	3.0	3.2	2.7	2.0	2.0	2.0
Canada	3.1	2.8	3.0	3.0	3.0	2.3	2.1	2.0	2.0	2.0
Mexico	4.0	3.5	4.0	4.0	4.0	3.9	3.2	2.5	2.0	2.0
United Kingdom	2.6	2.5	2.5	2.5	2.5	2.2	2.1	2.0	2.0	2.0

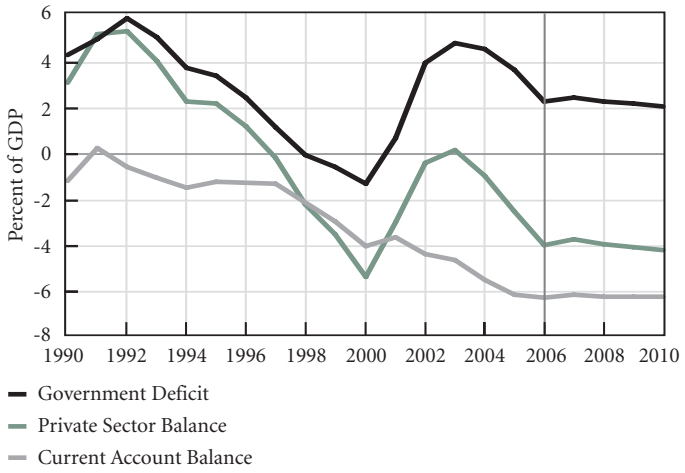
Sources: The Economist, September 16–22, 2006*; IMF World Economic Outlook,* September 2006*;* authors' projections

percent this year, 2.5 percent in 2007, and 2.2 percent in the next three years; and the government deficit will be stable. In addition, the projection assumes stable interest and exchange rates, in order to concentrate on other factors. We allow corporate borrowing to maintain its current trend. Taking as given the government deficit projected by the CBO, we calculate the necessary increase in private expenditure, fueled by household borrowing, that would be required to achieve the growth path assumed by the CBO. Our assumptions for economic growth abroad are shown in Table 1.

Our projections for the three financial balances, based on these assumptions, are shown in Figure 8. Because growth in the United States will lag that of our trading partners, U.S. exports will rise much faster than imports, stabilizing the current account deficit. This pattern has already emerged in 2006. Specifically, the current account balance will hover around 6.2 to 6.3 percent in 2007 to 2010. Combined with the CBO's projection of a stable ratio of the government balance to GDP, this implies that all three balances will flatten out over the next four years. The government deficit will reach about 2.3 percent in 2006 and fall to around 2.0 percent in 2010, and the private sector deficit improves by around .25 percent in 2007, then gradually rises about half a percentage point to a deficit of over 4 percent.

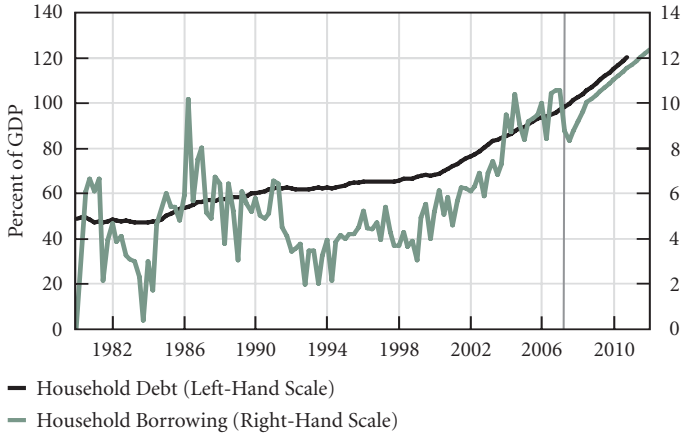
Is this growth path sustainable? For any debtor, if borrowing grows faster than income, the debt-to-income ratio will rise without limit, eventually leading to default. This dynamic is the result of simple accounting and does not require any theoretical assumptions. Consider the following simplified assumptions: a

Figure 8 Main Sector Balances in Baseline Scenario



Sources: Bureau of Economic Analysis and authors' calculations

Figure 9 Household Debt and Borrowing in Baseline Scenario



Sources: Federal Reserve, Bureau of Economic Analysis, and authors' calculations

current stock of debt at 20 percent of GDP; GDP growing at 3 percent per annum; and a current account balance of negative 6 percent of GDP. These figures approximate actual data for the U.S. economy. Together, they imply that the ratio of debt to GDP will rise at 5 percent per year, reaching 50 percent by the end of the simulation period in 2010.

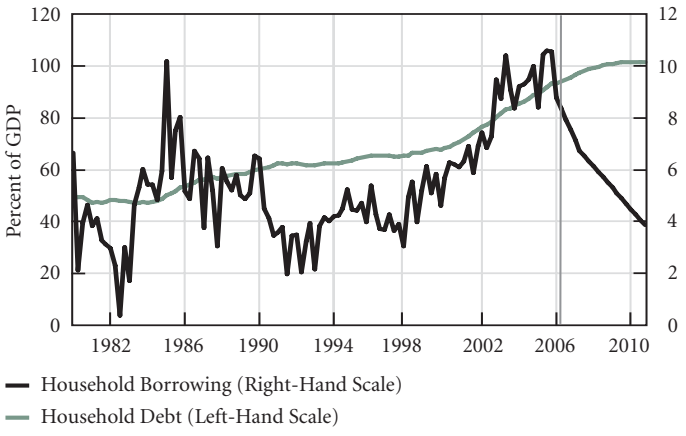
Figure 9 illustrates the sharp rise in household borrowing and debt required, under the baseline assumptions, to reach the growth rates and budget deficits posited by the CBO. If anything, this projection makes the baseline scenario seem even more implausible than the path of the private sector balance alone would suggest. As we have pointed out, the likely coming decline in home values would make such loan growth unlikely.

Alternative Scenario 1: Less Household Borrowing and Continued International Inaction

Since it seems unlikely that household debt will continue to expand rapidly, we next consider a scenario in which it is assumed that the private sector experiences a retrenchment. Specifically, we assume that the drop in household borrowing that took place in the first two quarters of this year will continue, bringing borrowing down to its early-1990s level and stabilizing household debt. This path—a decline of roughly 8 percent of GDP relative to the baseline scenario—can be seen in Figure 10. As stated above, a reduction in borrowing is a likely consequence of a downward trend in real estate values, which may have already begun, and of the already staggering ratios of debt-service payments to income. This alternative scenario assumes the same rates of inflation and world GDP growth as in the baseline.

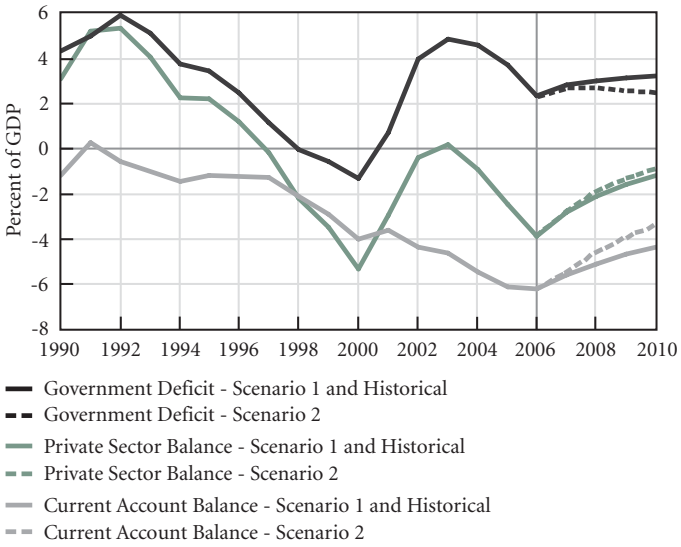
The slow but steady drop in domestic demand would, according to our projections, lead to a moderate growth recession, with GDP growth falling below 2 percent through 2007, then rising to about 2.3 percent. Unemployment could become a much more serious problem. As shown in Figure 11, both the current account balance and the private sector balance would improve dramatically in this scenario: the private sector balance

Figure 10 Household Debt and Borrowing in Scenarios 1 and 2



Sources: Federal Reserve, Bureau of Economic Analysis, and authors' calculations

Figure 11 Main Sector Balances under Alternative Assumptions



Sources: Bureau of Economic Analysis and authors' calculations

would reach -1.2 percent in 2010, while the current account balance would improve to -4.4 percent.

Projections by Goldman Sachs show a "decoupling" of growth in the United States from that in the rest of the world, meaning that the rest of the world will not be greatly affected by the U.S. slowdown (2006, p. 1). Goldman Sachs expects a decoupling partly because any U.S. slowdown will likely be concentrated in housing and related industries, which are less closely linked with foreign economies than other sectors. We follow the "decoupling hypothesis" by letting GDP growth in U.S. trading partners stay the same as in Table 1.

Alternative Scenario 2: A Slump in Domestic Borrowing with Strong Growth Abroad and Further Devaluation

What would it take to generate a better growth outcome for the United States? In our second alternative scenario, we investigate the consequences of more optimistic growth assumptions in the rest of the world. We drop the hypothesis that growth will slow in developing countries and assume faster growth in the euro area. This set of assumptions is shown in Table 2. Faster growth worldwide has a tendency to increase demand for U.S. exports, allowing an improvement in the current account balance, with smaller cuts in U.S. import demand. We assume that the weight

Table 2 Alternative Assumptions for World GDP Growth

	GDP Growth (percent)				
	2006	2007	2008	2009	2010
Eurozone	2.3	2.5	3.0	3.0	3.0
BRICs					
Brazil	3.6	4.0	4.0	4.0	4.0
Russia	6.5	6.5	6.5	6.5	6.5
India	8.3	7.3	7.3	7.3	7.3
China	10.0	10.0	9.0	9.0	9.0
Other ASEAN					
Hong Kong	6.0	5.5	5.5	5.5	5.5
Indonesia	5.2	6.0	6.0	6.0	6.0
Japan	2.8	2.3	2.5	3.0	3.0
Korea	5.0	4.5	4.5	4.5	4.5
Malaysia	5.5	5.7	5.0	5.0	5.0
Philippines	5.0	5.4	5.0	5.0	5.0
Singapore	6.9	5.0	5.0	5.0	5.0
Taiwan	4.0	4.2	4.0	4.0	4.0
Other Major U.S. Trade Partners					
Australia	3.2	3.3	3.0	3.0	3.0
Canada	3.1	2.8	3.0	3.0	3.0
Mexico	4.0	3.5	4.0	4.0	4.0
United Kingdom	2.6	2.5	3.0	3.0	3.0

Source: See text

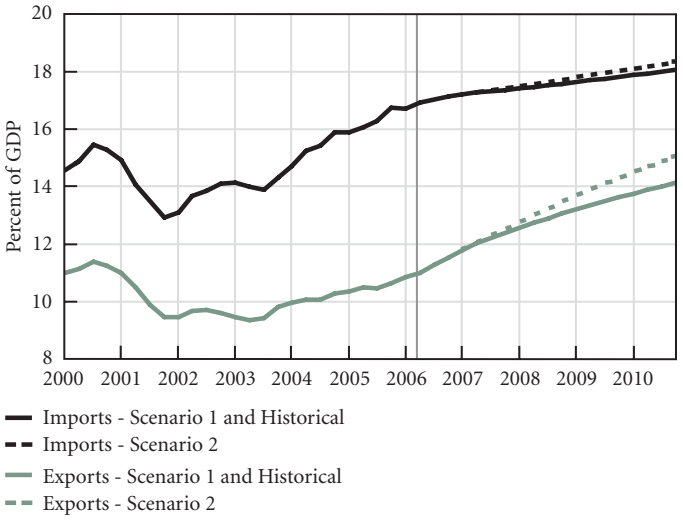
of each U.S. trading partner in U.S. exports remains the same as in 2006. The effects of our simulation would thus be strengthened if the share of U.S. exports going to fast-growing countries increased.

We also assume that the dollar will lose 10 percent of its value per year against the pound and euro during the next two years. We suppose that the dollar will depreciate 5 percent per year against the Chinese yuan and the currencies of our other main Asian trading partners. The simulation is done under the assumption that the devaluation of the dollar will not have an adverse effect on inflation in the United States. We retain the assumption that household borrowing contracts, as in the previous scenario.

The results of the simulation of Alternative Scenario 2 are also shown in Figure 11. As in the previous scenario, GDP growth

falls to about 1.6 percent, but it returns toward its trend level (around 2.8 percent) much more rapidly. Unsurprisingly, given our favorable assumptions about world growth and the falling dollar, the current account moves toward balance faster than in the previous scenario, rising from -6.3 percent in 2006 to -5.5 percent the following year, and then to -4.7 percent, -4.0 percent, and -3.4 percent. As Figure 12 shows, this more rapid improvement in the current account balance is driven by stronger export growth; relative to GDP, exports are nearly 1 percent higher in this scenario by the end of the simulation period. The recovery in the current account balance is reflected by a steady rise of the private sector balance from -3.9 percent in 2006 to -.9 percent in 2010. Finally, though the government deficit is higher than in the baseline scenario, it shows an improvement over Alternative Scenario 1.

Figure 12 Components of Trade under Alternative Assumptions



Sources: Bureau of Economic Analysis and authors' calculations

For reasons we have already discussed, the current account balance might improve even faster and by a larger amount in this scenario than our simulations indicate. A devaluation lowers the dollar value of net foreign debt. Furthermore, income flows from these assets, measured in dollars, also rise. Our second alternative simulation does not take into account these additional benefits of a devaluation.

But how would a dollar devaluation be brought about? As discussed in previous sections, for given interest rates, international demand for U.S. assets is strong enough to offset the supply of dollars generated by the growing U.S. trade deficit. A decline in U.S. interest rates may therefore be beneficial: it will reduce the attractiveness of U.S. bonds to foreign investors, paving the way for a dollar devaluation. Meanwhile, it would reduce the burden of interest payments on the consumer, possibly moderating the inevitable drop in borrowing that we model in the last two scenarios.

This simulation also demonstrates that faster growth and a devaluation would have very significant beneficial effects for the economy's most serious problems, although these measures will not offset the expected drop in private demand simulated in our previous scenario. If the U.S. targets for growth and unemployment depicted in our baseline are to be met, a more expansionary fiscal policy should be pursued. We believe that there is ample room for more expansionary fiscal and monetary policies in Asia and Europe to help achieve an acceleration and a movement toward correction of the world imbalances.

Concluding Remarks

This strategic analysis has explored some possibilities for the U.S. economy over the next several years. Both our analysis of world and national opinion and our simulations make it clear that a growth recession is a very strong possibility, particularly in light of the indebted condition of the U.S. consumer. On the upside, our second alternative scenario shows the power of favorable events in the international environment: further dollar devaluation and relatively high growth in the euro area and the developing world. But these events may not occur without internationally coordinated policy action, something we have repeatedly advocated. There is also significant downside risk, as seen in the baseline and first alternative scenarios. All of our scenarios in this analysis use relatively conservative assumptions regarding interest rates, oil prices, asset prices, and exchange rates. Should these prove overly optimistic, our analysis indicates a serious probability of a recession. Even though we cannot precisely forecast the timing, it behooves us all to be ready for it and to have considered policies to deal with it.

We must be clear about the time scale to which our analysis applies. We are not short-term forecasters, though we will look vacuous if we do not take some kind of view about prospects over the next two years—as a byproduct of taking a view about strategic prospects over the next four to five years.

Up to now, it has been our view and that of others that the external deficit has been a danger to the United States, mainly for the same reason that all agents with rising indebtedness are in danger—namely, that debts have to be serviced. If debts did not have to be serviced, they would not matter at all; the debtor would, in effect, have received a gift. There has also been a lot of concern that the deficit (which requires the United States to borrow $2 billion per day, among other consequences) would eventually cause a "disorderly" collapse in the dollar.

But what has actually happened over the last few years, contrary to what we expected, is that the large and rising deficits have *not* resulted in much increase in U.S. net debt (as a percent of GDP). This is due to revaluations (partly the result of relatively small dollar devaluations) and (partly for the same reason) the fact that deficits have *not* caused the net flow of interest payments to deteriorate. These net flows remain obstinately close to zero.

There has been no disorderly collapse in the dollar because the surplus countries have deliberately been accumulating dollar assets on a vast scale. They have done this precisely to prevent their currencies from appreciating (and, therefore, to prevent the dollar from falling too much) because, for mercantilist reasons, they want to increase their net exports of manufactures. (There is no analogy with the deficits of weak or developing economies, which do have to service and repay their debts.)

Is there any reason to suppose that this situation will change during the next five years? Obviously, the situation may change, as we have suggested, but we certainly should not base our message on any strong presumption that it will. There is always the possibility that there will be a big fall in the dollar, but would this really matter? There would be some advantages if this happened. Net export demand would rise. The net foreign investment position and net flows of interest would benefit hugely. There would be some addition to inflation but it probably would not be that large (a very large fall in the dollar occurred in the mid-1980s without any great adverse consequences). Nominal interest rates would go up, however, which would aggravate the private debt position.

The bottom line, so far, is that concern about global imbalances is largely misplaced when considering the next four to five years.

What would not be misplaced, however, would be concern that the deficit, taken by itself, is subtracting 6.5 percent from total demand, and that the show is therefore being kept on the road only because personal income less personal expenditure (including investment, i.e., net saving) is deeply negative.

It is our view that as housing equity falls, the debt/income ratio will rise less fast or even fall. This would cause a big drop in net lending, leading to recession, from which there is no reason to expect a "bounce back," because the saving ratio would only be returning to normal.

Is it realistic to suppose that there could be a renewed stimulus from fiscal policy? We do not think this possibility should be ruled out; the arguments against it are almost entirely "political." Faced with stubbornly rising unemployment, the government might be forced into it, and we think this should be explicitly recognized. Otherwise, there would be no solution other than to raise net export demand. But how? A 25 to 30 percent devaluation (disorderly or not) might be the only answer. However, this too might be difficult to bring about.

Notes

1. See, for example, Godley 2000 and Godley, Papadimitriou, Dos Santos, and Zezza 2005.
2. Gros (2006) discusses the discrepancies in greater detail and argues that the balance of payments data is probably the best measure of the indebtedness of the United States, and we note that Gros gives an even higher estimate of the foreign debt than we report.

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