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# *Strategic Analysis*

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August 2004

## PROSPECTS AND POLICIES FOR THE U.S. ECONOMY

### Why Net Exports Must Now Be the Motor for U.S. Growth<sup>1</sup>

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#### **Introduction**

The U.S. economy has grown reasonably fast since the second half of 2003, and the general expectation seems to be that satisfactory growth will continue more or less indefinitely. This paper argues that the expansion may, indeed, continue through 2004 and for some time beyond. But with both government and external deficits large and the private sector heavily indebted, satisfactory growth in the medium term cannot be achieved without a major, sustained, and discontinuous increase in net export demand. It is doubtful whether this will happen spontaneously, and it certainly will not happen without a cut in the domestic absorption of goods and services by the United States, which would impart a deflationary impulse to the rest of the world.

We make no short-term forecast. Instead, using a model rooted in a consistent system of stock and flow variables, we trace out a range of possible medium-term scenarios in order to evaluate strategic predicaments and policy options without being at all precise about timing.

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## Method

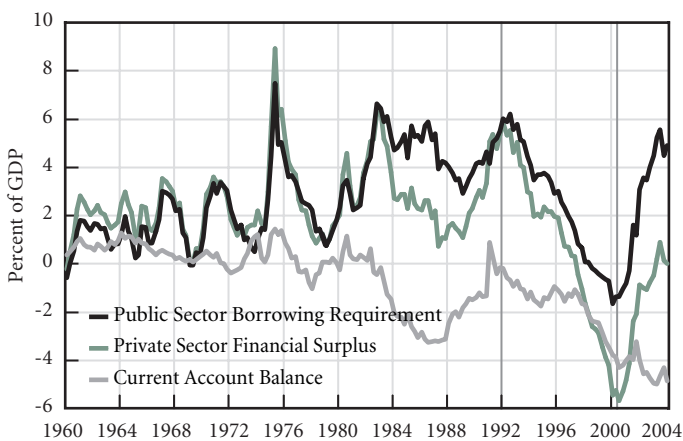
Our analysis, as usual,<sup>2</sup> will be structured around the evolution of the financial balances (total receipts less total outlays) of the three major sectors (government, external, and private) that make up the economy and which, by the laws of accounting logic, must invariably sum to zero.<sup>3</sup>

$$PNS = PSBR + BP$$

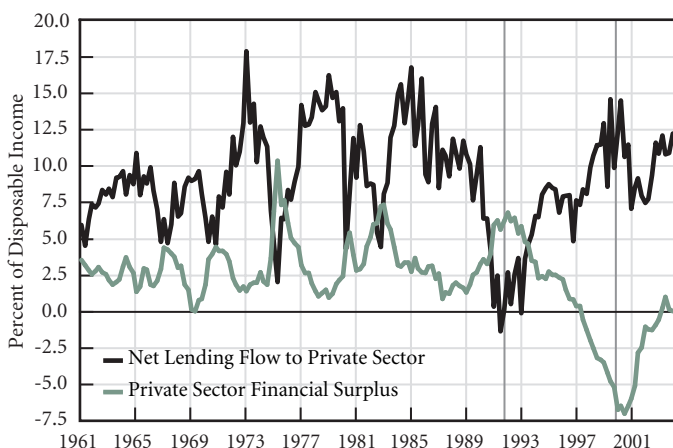
where *PNS* is the private sector's financial surplus (that is, saving in excess of investment or "net saving"), *PSBR* is the public sector borrowing requirement, or *deficit* of the general government, and *BP* is the current balance of payments.

The history of these balances (expressed as shares of GDP) is illustrated in Figure 1. Note that a government *deficit* and a balance of payments *surplus* both create assets for the private

**Figure 1 Financial Balances of the Main Sectors of the U.S. Economy<sup>4</sup>**



**Figure 2 Private Sector Surplus and Lending in Historic Perspective**



sector; this explains our choice of signs. The figure clearly shows that the private balance (written as a surplus) is equal to the government balance written as a deficit plus the current account surplus. These balances, which describe a system of identities measured *ex post*, become informative only when backed up by an account, or, preferably, a whole model, of how the economy works; otherwise the numbers are ambiguous. For instance, a rise in the external balance combined with a fall in the government balance could be generated by an exogenous increase in exports, in which case the underlying story would be one of expansion; or it could be generated by a cut in the fiscal stance, which would denote contraction. A useful discussion of the economic implications of budget deficits and saving and investment behavior cannot be conducted simply in terms of *ex post* balances.

In the present instance, the recent pattern of balances has a clear interpretation. It will be recalled that throughout the long "Goldilocks" boom, which brought steady growth between 1992 and 2000 (and which is marked in the figure by vertical lines), the deficit of the government and the current account balance were both falling rapidly, thereby exercising a strong negative effect on aggregate demand. Accordingly, it is fair to conclude that the expansion was essentially driven, in a causal sense, by the fall in the private balance, that is, a rise in private expenditure relative to income. As the figure shows, private expenditure rose in excess of income by an amount equal to 12 percent of GDP—a far larger rise than ever before—thereby creating a record private financial deficit.

Figure 2 shows how the increase in the private deficit was, naturally enough, financed by continuous increases in net lending to the nonfinancial private sector, causing a record rise in the ratio of private debt to income, to record levels. In the later stages of the boom, the growth of demand had clearly become unbalanced in an unsustainable way; the private balance would at some stage revert towards its mean, implying a large fall in private expenditure relative to income. So it was fair to conclude that there would have to be a revolution in the fiscal policy stance if a major recession were to be avoided; there would also, at some stage, have to be a reversal of the adverse trend in the balance of payments.

And so it turned out. Since 2000, there has been a large recovery in the private balance (that is, a fall in private expenditure relative to income), though this balance is still well below its historical average. This would have caused a severe recession without a simultaneous transformation in the fiscal

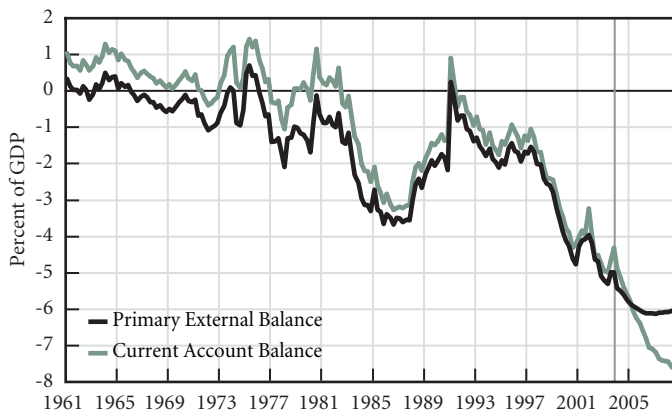
policy stance. The recession was short and shallow, but only because of a huge rise in government spending relative to receipts, while the cut in interest rates enabled the personal sector to go on borrowing a great deal. Meanwhile, notwithstanding the slowdown—from which there has been a partial recovery—the current account deficit has continued to increase remorselessly, exceeding 5 percent of GDP in the first quarter of 2003 with a continued deterioration since then.<sup>5</sup>

Our strategy for assessing medium-term prospects is first to *assume* that GDP will expand between the beginning of 2004 and the end of 2008 at an average rate of 3.2 percent per annum (which is assumed to be the growth rate of productive potential), not because we think this is the most likely outcome, but so that we can identify possible obstacles in the way of its being achieved.

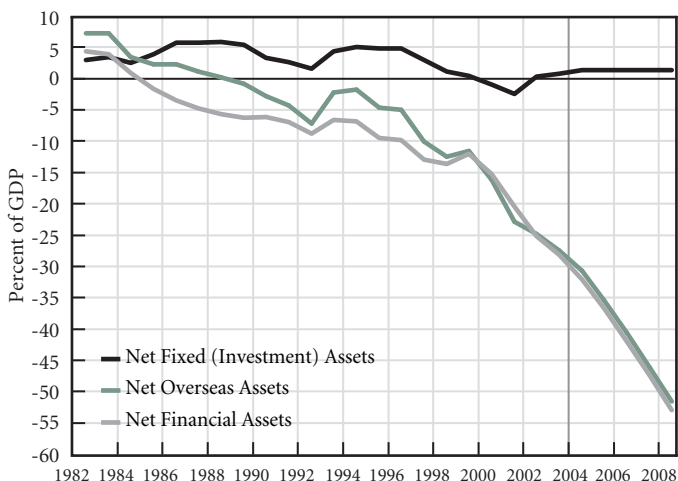
The dark line in Figure 3 indicates a plausible path for the primary balance of payments (the balance of trade plus remittances but excluding property income) between now and 2008, on the further assumptions that the growth of (non-U.S.) world output rises to an average rate of 4 percent per annum between now and 2008<sup>6</sup> and that there is no further change in the exchange rate. It may seem surprising that the primary balance (expressed as a share of GDP) deteriorates so little after the second quarter of 2004, in view of the remorseless decline that has been taking place ever since 1991. This rather optimistic-looking projection comes about largely as the lagged response to the 9 percent devaluation of the Fed’s “broad” real dollar index, which occurred between the beginning of 2002 and the second quarter of 2004.<sup>7</sup>

Our estimate of the effect of devaluation on the balance of trade is based on a number of econometric experiments that seem to confirm that this effect is quite large.<sup>8</sup> Our main findings, which for the most part<sup>9</sup> correspond reasonably well with those of other researchers, are that a 10-percent devaluation eventually results in a deterioration in the terms of trade (the ratio of the price of exports to that of imports, both measured in dollars) of roughly 4 percent—a rise of about 7.5 percent in import prices, combined with a rise of about 3.5 percent in export prices, implying a fall in export prices denominated in foreign currency of about 6.5 percent. The price elasticity of demand for both exports and imports appears to be around 1. The elasticity of demand for non-oil imports, with respect to domestic demand, has been put at 1.7, while that for exports, with respect to world output, is 1.4. These numbers imply that

**Figure 3 External Balances, Historic and Projected, According to Baseline**



**Figure 4 Asset Position of the United States, Historic and Projected, According to Baseline**

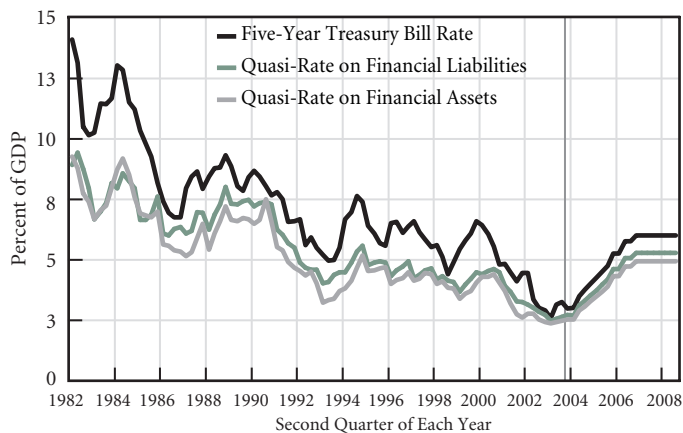


the eventual effect on the trade balance of a 10 percent devaluation (assuming output to be fixed) would be equal to about one percent of GDP. These results are obviously very uncertain. They could be vitiated by the large changes in the pattern of international trade that have recently occurred, while the log-linear form of our equations could result in error, particularly if the devaluation were large.

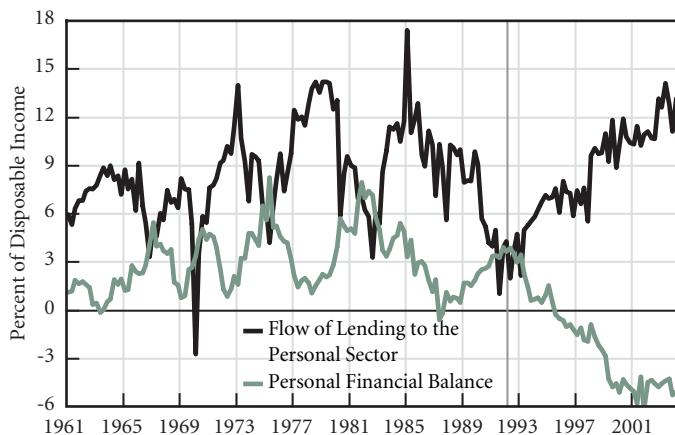
The implications (for the current balance as a whole) of our base-run projection of the primary balance are quite startling, but they follow mechanically from the increase in net overseas liabilities, together with the assumption that the relevant rate of interest rises from 3 percent at present to some 5.5 percent in 2008.

The green line in Figure 4 describes the history of total net overseas assets, which reached minus 30 percent of GDP at the beginning of 2004; the two other lines break this down exhaustively, into direct and financial investment. The black line shows how net stocks of direct investment have fluctuated narrowly around zero. The gray line shows the net stock of all other overseas assets, which (obviously, in view of what happened to net direct investment) have moved closely in line with the total. For projection purposes, we assumed that net direct investment will remain slightly positive. Hence, the net stock of financial assets falls each year by the full amount of the overall current account deficit, reaching nearly 55 percent of GDP in 2008.

**Figure 5 Federal Reserve's Rate of Interest of Reference and Calculated Rates on Foreign Assets**



**Figure 6 Financial Surplus and Lending to the Personal Sector**



The (messy) average rate of interest paid on financial liabilities<sup>10</sup> has, in the past, followed the three-month Treasury bill rate quite closely, although in recent quarters, when the three-month rate was so very low, this “quasi-interest rate” has been about 3 percent, which is close to the five-year bill rate. If, as is now generally expected, interest rates rise significantly, there seems no escape from the conclusion<sup>11</sup> that the net flow of interest payments will shortly collapse into deep negative territory, to about -2 percent of GDP at the end of the projection period. Figure 5 shows the history of the five-year Treasury bill rate, together with the quasi-interest rates on overseas assets and liabilities; it also illustrates the assumptions that we have made about the future course of these rates.

It is difficult to know how to project net income from direct investment. Although the net stock of direct investment has been close to zero, the United States has received a positive net income because the return on U.S. assets abroad, for reasons that are not entirely understood,<sup>12</sup> has consistently exceeded that on foreign-owned direct investments in the United States. *Faute de mieux* we have assumed that this positive net income stays constant as a proportion of GDP.

The conclusion of this section, already illustrated in Figure 3, is that, with growth at 3.2 percent per annum and no further devaluation of the dollar, we would expect to see the current account deficit rise to about 7.5 percent of GDP in four years' time.

### Completing the Base-Run Projection

What would happen to private net saving (PNS) under the circumstances we are imagining? Observe first that, as shown in Figure 1, the PNS had only recovered to about zero in the first half of 2004, well below its long-term average of 1.8 percent. Accordingly, we start off with a general presumption that the PNS will continue to rise in the medium term. But the aggregate figures are not easy to interpret because the net saving of the personal sector has moved in a strikingly different way from that of (nonfinancial) corporations.

Figure 6 shows how the net saving of the personal sector has fallen by a uniquely large amount since 1992, declining to nearly 6 percent of personal disposable income in 2001—a record low from which no real recovery has occurred. The fall in net saving was accompanied by a rising flow of net lending, which has continued unsteadily right up to the present time,

generating an accelerating growth in personal indebtedness, which reached a record 140 percent of disposable income in the first quarter of 2004. At the same time, the Fed's broad measure of households' financial obligations to service debt has been hovering around 18.5 percent of income—a record proportion, notwithstanding very low rates of interest.

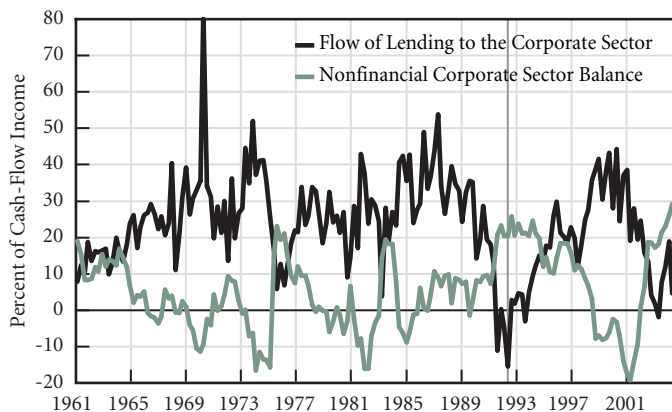
It seems unlikely that personal borrowing at a rate that is now supplementing disposable income to the tune of 13 percent will continue much longer, particularly if interest rates continue to rise. Consequently, we expect personal net saving, currently 6 percentage points below its historic average, to rise significantly through the projection period.

By contrast, net saving by nonfinancial corporations (Figure 7) has already risen a great deal, with record surpluses in recent quarters, though these were not on a scale that made up for the deficits of the personal sector. For our base run we have made the assumption, illustrated in Figure 8, that net saving by the private sector as a whole rises very moderately without reverting fully to its mean.<sup>13</sup>

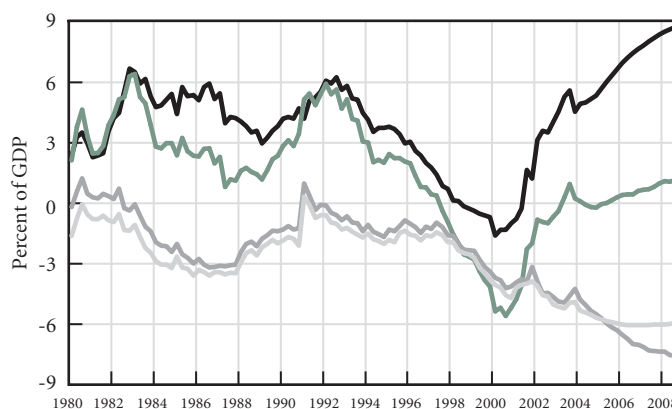
The figure also shows how our base-run projections for the balance of payments and private net saving, taken together, carry the striking implication that the general government deficit would have to rise to nearly 9 percent of GDP between now and 2008. It is not always easy to remember that this figure is implied *logically* by the other two balances. If the balance of payments deficit (given 3.2 percent growth and no further devaluation) were to rise to more than 7 percent of GDP, and private net saving were to rise to something over one percent, then the rise to nearly 9 percent in the government deficit (with its corollary that public debt would rise to 60 percent of GDP) follows ineluctably. The operational meaning of this is that unless the government were to loosen the fiscal stance (compared with what it is now), the postulated 3.2 percent rate of expansion would not be achieved. How much fiscal refutation would be required? A significant impetus, rising to more than one percent of GDP, would follow from a rise in interest payments consequent on the growth in public debt. But discretionary measures, rising to perhaps 2.5 percent of GDP, would probably also be required. Anything less would result in inadequate growth.

Only a moment's reflection is needed to see that the situation described in this base run could not be allowed to develop, particularly in view of the firm commitments by both presidential candidates to cut the existing deficit in half. The "U turn" in fiscal policy that occurred in 2000–2004

**Figure 7 Financial Surplus and Lending to the Nonfinancial Corporate Sector**



**Figure 8 The Main Balances Projected, According to Baseline**

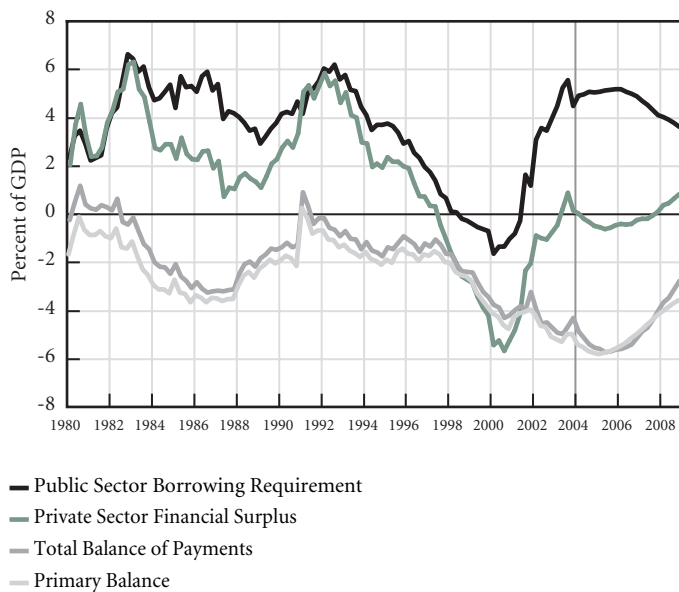


— Public Sector Borrowing Requirement  
 — Private Sector Financial Surplus  
 — Current Account Balance  
 — Primary Account Balance

makes one a bit cynical, remembering all the hype surrounding the budget surpluses achieved in the Clinton years. However, a government deficit ratio equal to 9 percent of GDP, combined with interest rates in excess of 5 percent, would send the internal *and* the external debts hurtling towards 100 percent of GDP, with more to come after that. And, if there is anyone who considers a 9-percent budget deficit to be tolerable, what about 15 percent, or 30 percent? It has to stop somewhere. The longer the debt and deficit ratios go on rising, the larger and more painful the adjustment will be when the tide eventually turns.



**Figure 9 The Main Balances Projected, When Growth Is Achieved by Devaluation**



A final point regarding the base run. Our intention has been to make conservative assumptions, in order to avoid accusations of exaggeration. Our opinion, nevertheless, is that the rise in the private balance could easily be larger than we have assumed. It could, for instance, easily rise to its historical norm—or even higher. If this happened, the government deficit would have to be higher *pro tanto*.

### Ringling the Changes

There is only one remedy for the rather disastrous situation envisioned in our base run. A sustained rise in net export demand must soon become the motor for U.S. growth. The obvious way to bring this about is to contrive a large, further devaluation of the dollar. This may not be as easy as it sounds.

Figure 9 displays a scenario in which the dollar is assumed to fall, from now on, by 5 percent per annum, making a total (real) devaluation of 33 percent between the beginning of 2002 and the end of 2008, while net saving by the private sector is the same as in the base run. In deriving these numbers, we have taken account of the fact that the improvement in the U.S. balance would have a perceptibly adverse effect on growth in the rest of the world, bringing it down from 4 percent on average to 3.6 percent. The overall effect, according to our model, would bring about a very large improvement in the current

balance of payments. The primary balance improves as a consequence of the change in relative prices caused by the devaluation. In addition, a large improvement in the flow of factor income payments seems likely, because the dollar devaluation raises the value of U.S. holdings of foreign equities and foreign direct investment, together with the income flows that this generates. This situation would be an interesting reversal of the usual one, in which debtor countries that devalue find their net overseas asset position deteriorating because their liabilities are denominated in foreign currency.

Figure 9 shows how the revaluation of overseas assets has the effect of completely eliminating the net outflow of factor income from the United States. Indeed, the deficit in the current account, by our reckoning, is slightly lower than the deficit in the primary balance at the end of the period.

Figure 10 shows how the postulated devaluation reduces the net foreign “debt” of the United States, denominated in dollars, notwithstanding the fact that the current account balance remains in deficit.

A solution of the kind shown in Figure 9 is probably what many people assume to be automatically in prospect. At some good moment (they may suppose), without any government intervention, the balance of payments will right itself spontaneously. This lack of concern is possibly engendered by textbook models such as the Mundell-Fleming model and, more recently, the dynamic, general-equilibrium models that have swept the academic profession and even penetrated major international institutions. We take the opposite view, rejecting, as irrelevant, any model that generates an automatic correction by virtue of the assumptions on which it is constructed.

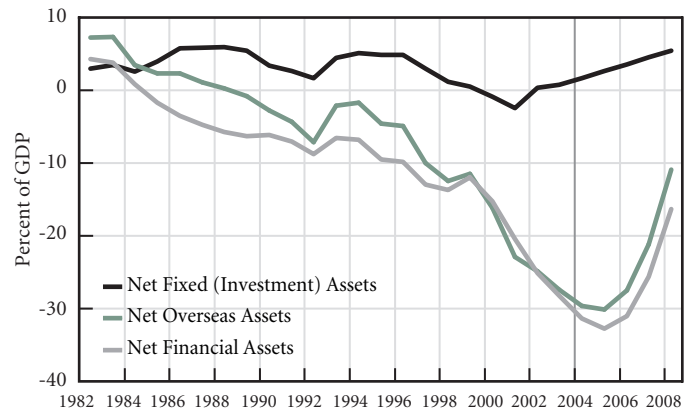
There are two reasons why an effective devaluation, such as that illustrated in Figure 9, may be difficult to achieve. First, during the last few years, the non-U.S. world has become heavily dependent on the increasing U.S. deficit as a motor for growth. In order to protect their “low” rates of exchange, foreign countries, notably Japan and China, have accumulated enormous foreign exchange reserves. In our view there is no inherent constraint on the continuation of this process. Nor is there any reason to suppose, in particular, that the accumulation of reserves by foreign central banks generates an uncontrollable increase in their stock of domestic money. On the contrary, if surplus countries are happy to exchange goods and services, not for imports but for what Martin Wolf of the *Financial Times* once called “expensive pieces of paper,” a

mutual process whereby surplus countries purchase reserve assets that deficit countries are happy to sell can be entirely self-contained.<sup>14</sup> The sale by Japanese firms of exports abroad need create no more domestic money than sales of consumption or investment goods at home.

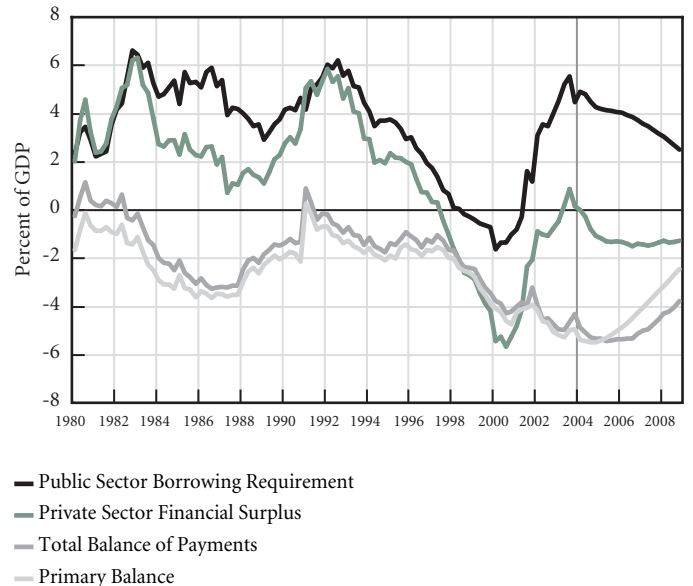
The Pacific Rim countries must somehow be persuaded to allow their currencies to appreciate, seemingly against their own perception of what is in their best interests. But there is no obvious way to force them to do this. It is always possible that global financial market forces will move in with overwhelming power, but again there is no certainty as to when or whether this will happen. The position is not quite the same with regard to Europe because, as Fred Bergsten pointed out in his evidence to Congress on June 25, there has already been a substantial appreciation of the euro, and euroland would justifiably resist any further movement in this direction.<sup>15</sup> In our view the need for a major realignment of currencies has become so pressing that the U.S. authorities should consider forcing the issue by imposing a temporary import surcharge comparable with that imposed in 1971, prior to the Smithsonian agreement.

The second obstacle to moving toward the balanced growth illustrated in Figure 9 resides in the transfer problem. The flip side of its external deficit is that the United States has been absorbing at least 5 percent more goods and services than it has been producing, generating a substantial improvement to its citizens' standard of living. But any lessening of the deficit (given output) must reduce domestic absorption by an equivalent amount. The scale of the transfer problem emerges directly from the Figure 9 simulation. If the fiscal restriction were to take the form of increased taxation plus lower transfer payments, the consequence could be, notwithstanding that the economy as a whole grows 3.2 percent per annum, that private expenditure (consumption and investment combined) could grow only at an average rate of 2 percent over the next five years. Such a slow growth rate over five years has occurred only twice before during the postwar period. The assumed addition to net exports as a result of the devaluation, taken by itself, would add substantially to aggregate demand and output, taking the ex-ante growth rate to some 4.5 percent over the next four years—well above the growth of productive potential. The simulation illustrated in the figure thus assumes that fiscal policy is tightened so as to bring the average growth rate back down to 3.2 percent.

**Figure 10 Asset Position of the United States, Projected When Growth Is Achieved by Devaluation**



**Figure 11 The Main Balances Projected, If the Government Deficit Were Cut in Half**



### Policies That Would Only Cut the Budget Deficit

Much of the public discussion in the United States concerning public finance (including commitments by both presidential candidates) appears to assume that the budget deficit can be cut without making any difference to aggregate demand and output.<sup>16</sup> As this view<sup>17</sup> is, in our opinion, very seriously mistaken, we include one more simulation in which we impose a program of fiscal restriction (without any further devaluation) on the base-run projection, on a scale that reduces the government deficit by a half in 2008. The results are shown in Figure 11.

Figure 11 has a disturbing resemblance to Figure 9, which showed a dream scenario in which there was a satisfactory rate of export-led growth, with both government and external deficits declining in a satisfactory way. This resemblance underscores the importance of using the financial balance method of analysis only in conjunction with a model of how the various configurations are being generated. In the case illustrated in Figure 11, the fall in the government deficit is being driven by a rise in tax rates coupled with a reduction in public expenditure on goods and services. The improvement in the balance of payments comes about because the growth of U.S. output is reduced from 3.2 percent on average to 1.2 percent—the slowest in postwar history.<sup>18</sup>

### Peroration

We have made a serious attempt to put numbers on a variety of possible medium-term scenarios in order to assess the scale of the strategic predicament facing the United States and, by implication, the rest of the world. We can bring no precision to the timing of future events, our methods are crude, and our predictions, even in a conditional sense, will certainly be wrong. What is not in question is that imbalances of many different kinds have already been allowed to build up on an unprecedented scale. Trends and processes have developed which *cannot* continue for much longer and that may not correct themselves spontaneously in an orderly way. The authorities in the United States and in the rest of the world should therefore be giving active consideration to preemptive action, preferably in collaboration with one another.

### Notes

1. The authors are grateful to Bill Martin for penetrating comments.
2. This paper is the latest in a series of strategic analyses (Godley 2003; 2001; 1999a,b; Godley and Izurieta 2004; 2003; 2002a,b; 2001; Izurieta 2003; Papadimitriou, Shaikh, Dos Santos, and Zezza 2004). Their preparation has been rather like taking repeated photographs of a slowly moving train, with a great deal of overlap and repetition.
3.  $Y = PX + G + X - IM$ ; where Y is GDP, PX is private expenditure, G is government expenditure, X is exports, and IM is imports. Subtracting taxes, T, government

transfers, TRG, and foreign transfers, TRF, from both sides and rearranging:

$$Y - T + TRG + TRF - PX = [G - T + TRG] + [X - IM + TRF] \quad Y - PNS = PSBR + BP$$

4. All figures presented in this paper are the authors' calculations and model forecasts. Historic figures are from the Bureau of Economic Analysis (BEA)'s National Income and Product Accounts (NIPA) and International Transactions, and from the Federal Reserve's "Flow of Funds of the United States."
5. This piece of history reveals a major difference between the (implied) philosophies of the U.S. and U.K. authorities, despite a superficial resemblance. With its huge balance of payments deficit, the United States could not have avoided a recession, if it had been following Chancellor Gordon Brown's Golden Rule.
6. This figure seems in accord with today's consensus view.
7. If we run a model simulation using the counterfactual assumption that the exchange rate remained constant at its end 2001 level, leaving everything else unchanged, the primary deficit continues to increase rapidly, reaching nearly 7 percent at the end of the projection period.
8. A paper on this subject by Claudio Dos Santos, Anwar Shaikh, and Gennaro Zezza is in preparation and will shortly be published by The Levy Economics Institute ([www.levy.org](http://www.levy.org)).
9. But our estimate of the price elasticity of demand for imports is well below that reported in Hooper, Johnson, and Marquez (1998). If our estimate is too high, the devaluation required to put things right would be even larger than we have assumed in the following section.
10. That is, the total flow of payments divided by the total stock of liabilities
11. On two previous occasions we have made conditional predictions of this kind, only to be overtaken by huge revisions to the figures in a direction favorable to the overall current balance. These revisions have been so large (and incomprehensible) that overall, the United States is now said to have a positive net inflow of factor income (equal to 0.5 percent of GDP), while the total net stock of overseas assets is about 30 percent negative.
12. See Mataloni (2000).
13. Although private net saving has fluctuated a good deal, its movements have not been unintelligible—any more



than have changes in the personal saving ratio, which has fluctuated even more. For a preliminary econometric analysis of private net saving (or, rather, the relationship between total private expenditure and private disposable income, net credit flows, and asset prices) that has served us quite well so far, see the appendices to Godley (1999b), which also contain a brief description of the models we use.

14. For a simple formal model of how this process may occur automatically, see Godley and Lavoie (2004). This process is sometimes referred to as “sterilization,” and is often claimed to be unsustainable. The model shows how this “sterilization” occurs endogenously, and it also shows that there is no limit to it when foreign central banks are accumulating (rather than losing) foreign reserves, that is, U.S. assets. See also Taylor (2004).
15. Yet euroland still has an obligation to generate domestic growth by expansionary policies, even if these conflict with the (perverse and deeply mistaken) Maastricht rules for fiscal policy.
16. See, for instance, Gramlich (2004), where strategies for reducing the deficit are discussed without any mention of the effect on demand and output.
17. It is a view supported by a great deal of influential theoretical work that teaches that real output is determined by supply conditions alone.
18. We are not incorporating in this simulation likely changes in world output and private sector borrowing and spending, which would compromise economic growth even further.

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