PROSPECTS AND POLICIES FOR THE US ECONOMY

WHY NET EXPORTS MUST NOW BE THE MOTOR FOR U.S. GROWTH[¨]

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INTRODUCTION

The US 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 the government and external deficits both so large and the private sector so heavily indebted, satisfactory growth in the medium term cannot be achieved without a large, 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 domestic absorption of goods and services by the US 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.

METHOD

Our analysis, as usual[1], will be structured around the evolution of the financial balances (total receipts less total outlays) of the three major sectors (government, external and private) which make up the economy and which, by the laws of accounting logic, must invariably sum to zero[2].

$$PNS = PSBR + BP$$

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

Chart 1: Financial Balances of the Main Sectors of the U.S. Economy[3]

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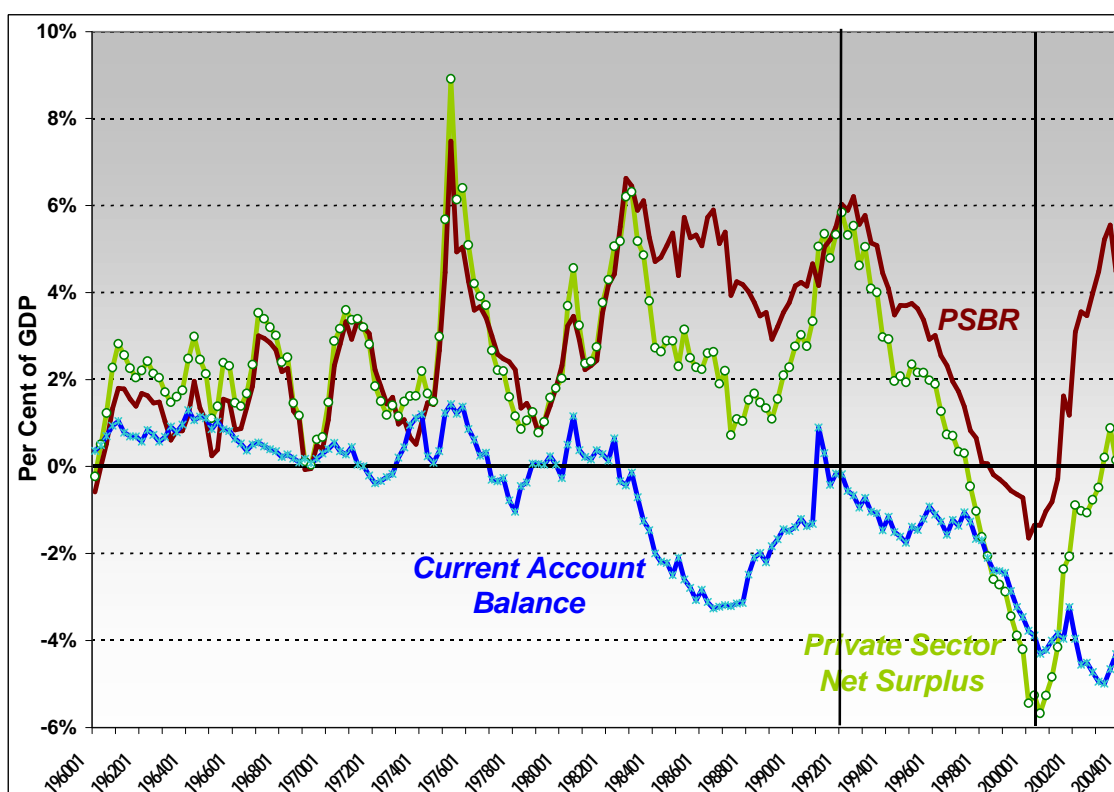
[1]   This paper is the latest in quite a long series of strategic analyses (Godley 2003, 2001, 1999a,b; Godley & Izurieta, 2004; 2003, 2002a,b, 2001; Izurieta, 2003; Papadimitriou, Shaikh, Dos Santos & Zezza, 2004; etc.). Their preparation has been rather like taking repeated photographs of a slowly moving train; with a great deal of overlap and repetition.

[2] $Y = PX + G + X - IM$; where Y is GDP, PX is private expenditure, G is government expenditure, X is imports and IM is imports. Subtracting taxes, T, government transfers, TRG, and foreign transfers, TRF, from both sides and rearranging:

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

[3]   All charts 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 Production Accounts (NIPA) and International Transactions, and from the Federal Reserve's 'Flow of Funds of the U.S.'

The history of these balances (expressed as shares of GDP) is illustrated in Chart 1. Note that a government *deficit* and a balance of payments *surplus* both create assets for the private sector; this explains our choice of signs. The chart 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*, only become informative 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[4], which would denote contraction. A useful discussion of the economic implications of budget deficits and saving and investment behaviour 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 chart 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 chart shows, private expenditure rose in excess of income by an amount equal to 12% of GDP – a far larger rise than ever before - thereby creating a record private financial deficit.

Chart 2: Private Sector Surplus and Lending in Historic Perspective

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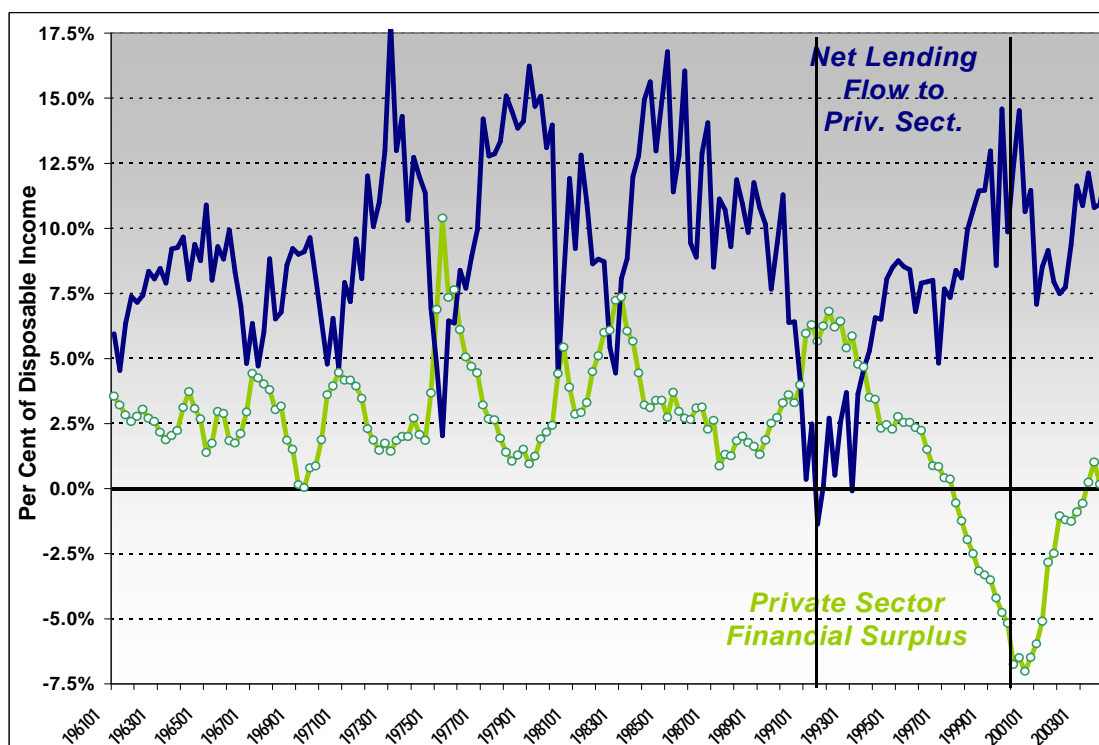
[4]   The fiscal stance is defined as the ratio of the cyclically adjusted deficit to GDP.

Chart 2 shows how the increase in the private deficit was, naturally enough, financed by continuous increases in net lending to the non-financial private sector, causing a record rise in the ratio of private debt to income, to record levels. In the later stages of the boom it became clear that the growth of demand had become unbalanced in a way that was unsustainable; 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 stance of fiscal policy if a major recession was to be avoided; there would also, at some stage, have to be a reversal in 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 if there had not been a transformation in the stance of fiscal policy. The recession was short and shallow, but only because of a huge rise in government expenditure relative to receipts, while the cut in interest rates enabled the personal sector to go on borrowing a great deal. Meanwhile, notwithstanding the slow-down, from which there has been a partial recovery, the balance of payments deficit has continued to increase remorselessly, exceeding 5% of GDP in the first quarter of 2003 with a continued deterioration since then[5].

Our strategy for assessing medium term prospects is first to *assume* that the GDP will expand between the beginning of 2004 and the end of 2008 at an average rate of 3.2% per annum (hopefully 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.

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[5] This piece of history reveals a major difference between the (implied) philosophies of the US and UK authorities although there is a superficial resemblance. With its huge balance of payments deficit the US could not have avoided a recession if it had been following Chancellor Gordon Brown's Golden Rule.

Chart 3: External Balances. Historic and Projected According to Baseline.
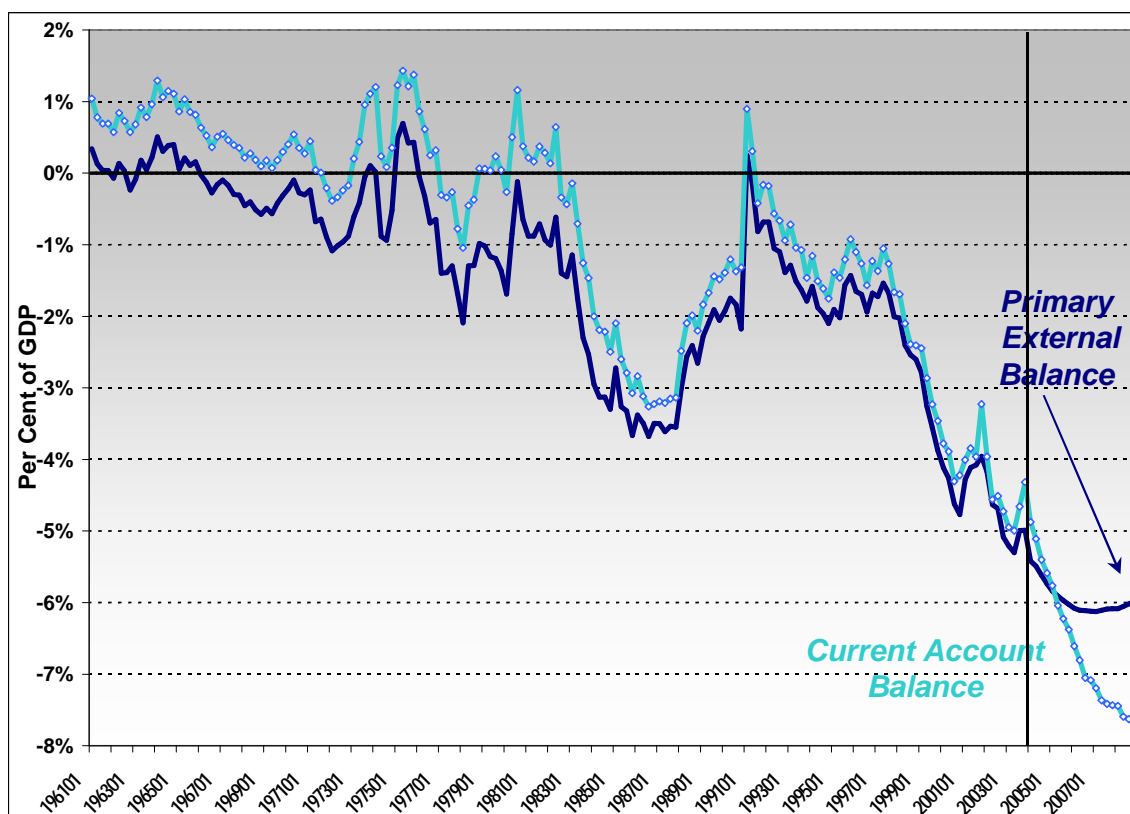
The solid line in Chart 3 indicates a plausible path for the primary balance of payments (the balance of trade plus remittances but excluding property income) between now and 2008, on the further assumptions that the growth of (non-US) world output rises to an average rate of 4% per annum between now and 2008[6] 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 which has been taking place ever since 1991. This rather optimistic-looking projection comes about largely as the lagged response to the 9% devaluation of the Fed's 'broad' real dollar index which occurred between the beginning of 2002 and the second quarter of 2004[7].

Our estimate of the effect of devaluation on the balance of trade is based on a number of econometric experiments which seem to confirm that this effect is quite large[8]. Our

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[6]   This figure seems to 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% at the end of the projection period.

[8]   A paper on this subject by Claudio dos Santos, Anwar Shaikh and Gennaro Zezza is in course of preparation and will shortly be published by the Levy Economics Institute (www.levy.org).

main findings, which mostly[9] correspond reasonably well with those of other researchers, are that a 10% 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%; - a rise of about 7.5% in import prices combined with a rise of about 3.5% in export prices, implying a fall in export prices denominated in foreign currency of about 6.5%. 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 the eventual effect on the trade balance of a 10% devaluation (assuming output to be fixed) would be equal to about 1% of GDP. These results are obviously very uncertain. They could be vitiated by the large changes in the pattern of international trade which 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 follow mechanically from the increase in net overseas liabilities together with the assumption that the relevant rate of interest rises from 3% at present to some 5.5% in 2008.

Chart 4: Asset Position of the U.S. Historic and Projected According to Baseline

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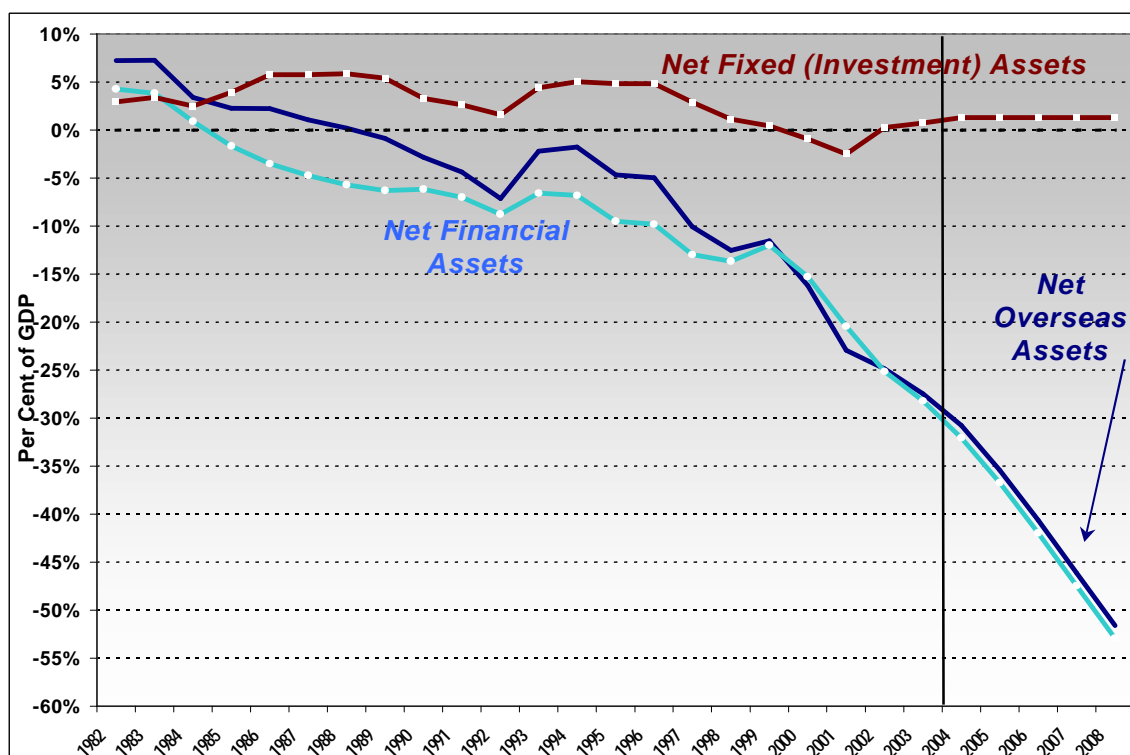
9   But our estimate of the price elasticity of demand for imports is well below that reported in Hooper, Johnson and Marquez (1998). If our estimate is too high, the devaluation required to put things right would be even larger than we have assumed in the following section.

The solid line shown in Chart 4 describes the history of total net overseas assets, which reached minus 30% of GDP at the beginning of 2004, while the two dotted lines break this down exhaustively into direct and financial investment. The upper dotted line shows how net stocks of direct investment have fluctuated narrowly around zero. The lower dotted 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% of GDP in 2008.

Chart 5: FED's Rate of Interest of Reference & Calculated Rates on Foreign Assets
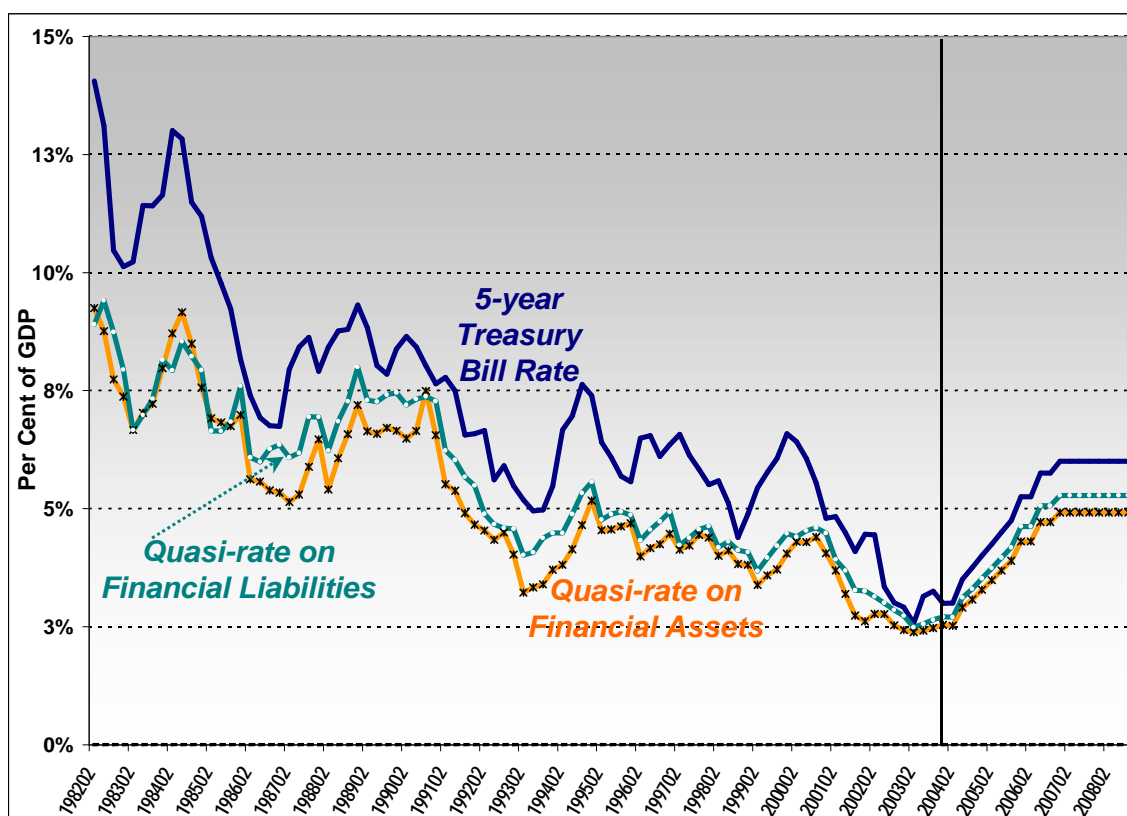
The (messy) average rate of interest paid on financial liabilities[10] has, in the past, followed the three month Treasury bill rate quite closely although in recent quarters, when the three month rate was so very low, this "quasi-interest rate" has been about 3%, which is close to the five-year bill rate. If, as is now generally expected, interest

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[10]   That is, the total flow of payments divided by the total stock of liabilities

rates rise significantly there seems no escape from the conclusion[11] that the net flow of interest payments will shortly collapse into deep negative territory, to about -2% of GDP at the end of the projection period. Chart 5 shows the history of the 5-year Treasury bill rate, together with the quasi-interest rates on overseas assets and liabilities; it also illustrates the assumptions which 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 US has received a positive net income because the return on US assets abroad, for reasons that are not entirely understood[12], has consistently exceeded that on foreign owned direct investments in the US. *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 Chart 3, is that, with growth at 3.2% per annum and no further devaluation of the dollar, we would expect to see the current account deficit rise to about 7.5% 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 Chart 1, the PNS had only recovered to about zero in the first half of 2004, well below its long term average of 1.8%. 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 (non-financial) corporations.

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[11]   Yet 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 favourable to the overall current balance. These revisions have been so large (and incomprehensible) that overall the US is now said to have a positive net inflow of factor income (equal to 0.5% of GDP) while the total net stock of overseas assets is about 30% *negative.*

[12]   See Mataloni (2000).

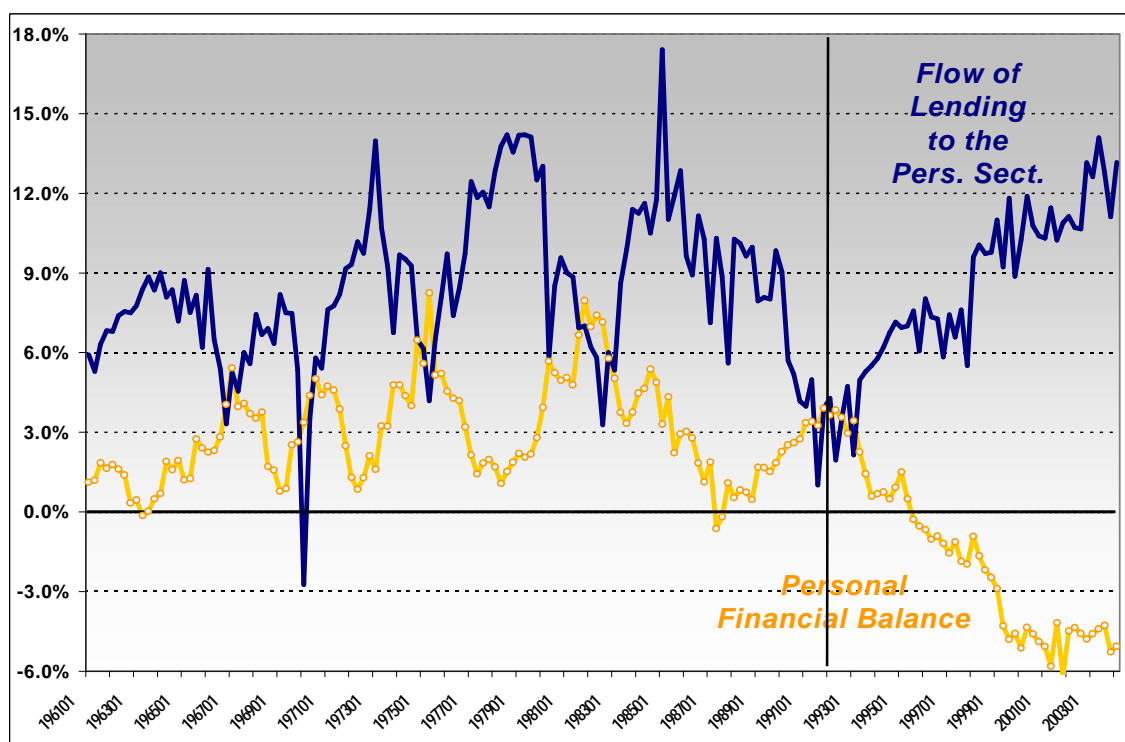**Chart 6: Financial Surplus and Lending to the Personal Sector**

Chart 6 shows how the net saving of the personal sector has fallen by a uniquely large amount since 1992 reaching nearly *minus* 6% of personal disposable income in 2001 - a record low from which there has not yet been any real recovery. 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% 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% of income – a record proportion notwithstanding the very low rates of interest.

It seems unlikely that personal borrowing at a rate which is now supplementing disposable income to the tune of 13%, 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.

Chart 7: Financial Surplus and Lending to the Non-Financial Corporate Sector
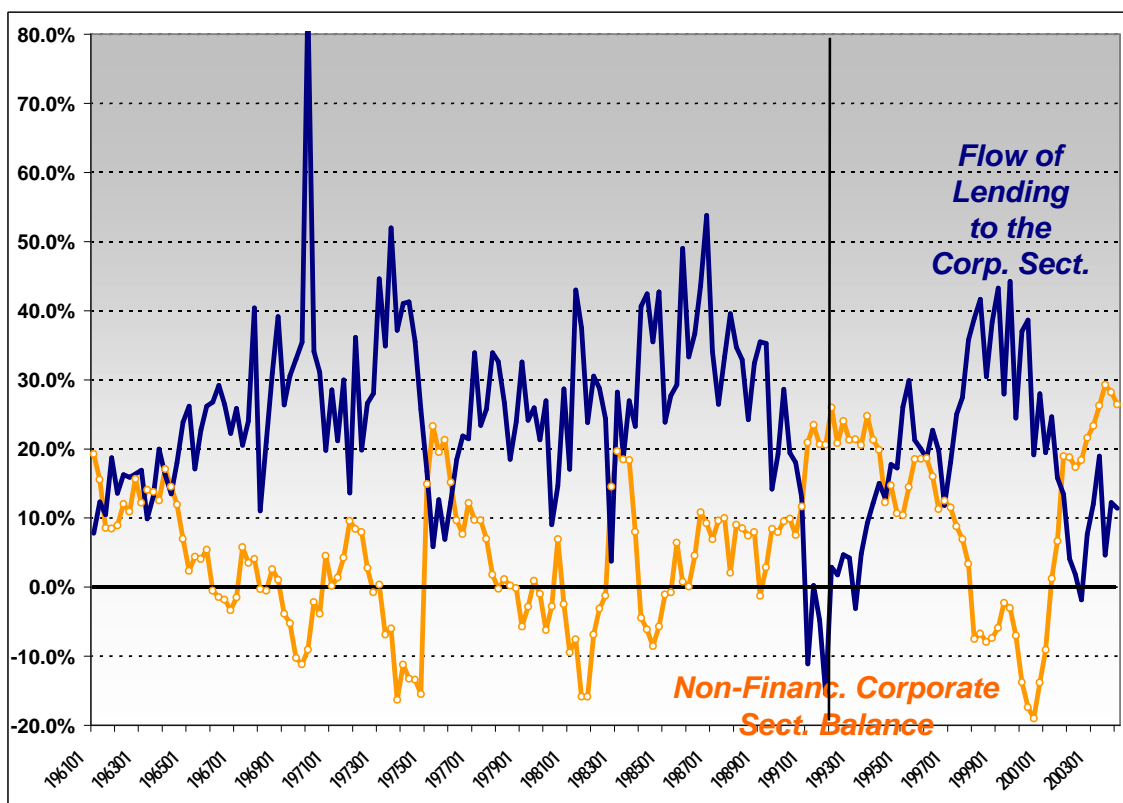
By contrast net saving by non-financial corporations (see Chart 7) has already risen a great deal, with record surpluses in recent quarters, though these were not on a scale which made up for the deficits of the personal sector.

Chart 8: The Main Balances Projected According to Baseline
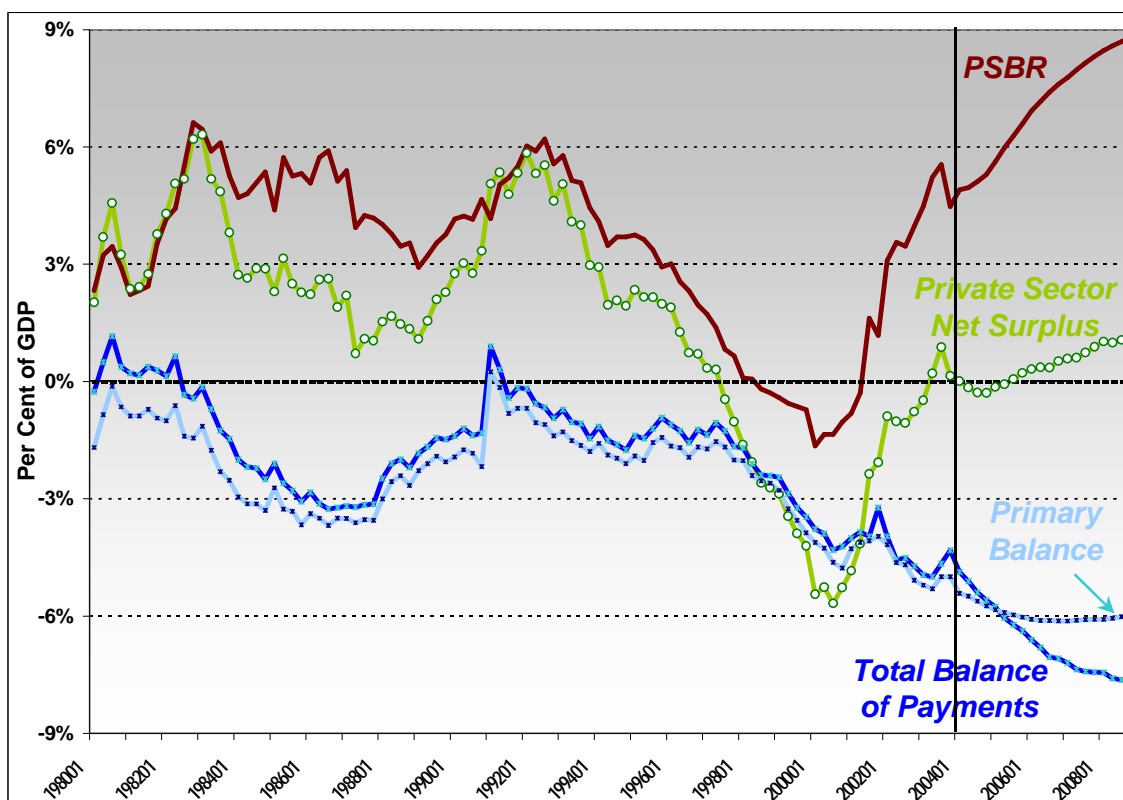
For our base run we have made the assumption, illustrated in Chart 8, that net saving by the private sector as a whole rises very moderately but without reverting fully to its mean[13].

The chart 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% 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% growth and no further devaluation) were to rise to more than 7% of GDP and private net saving were to rise to something over 1%, then the rise to nearly 9% in the government deficit (with its corollary that public debt would rise to 60% 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% rate of expansion would not be achieved. How much fiscal reflation would be required? A significant impetus rising

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[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) which has served us quite well so far, see the appendices to Godley (1999b) which also contain a brief description of the models we use.

to more than 1% of GDP would follow from the rise in interest payments consequent on the growth in public debt. But discretionary measures large enough to rise the cyclically adjusted deficit by 2.5% of GDP would eventually be required. Anything less would result in inadequate growth.

Yet it only takes a moment's reflection 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 which occurred in 2000-2004 makes one a bit cynical remembering all the hype surrounding the budget surpluses achieved in the Clinton years. However, a government deficit equal to 9% of GDP, combined with the interest rates in excess of 5% will send the internal and external debts hurtling to more than 100% of GDP, with more to come after that. If there is anyone who considers a 9% budget deficit to be tolerable, what about 15% or 30%? It has to stop somewhere. The longer the deficit goes on rising the larger and more painful the adjustment will be when the tide eventually turns.

A final point regarding the base run. It has been our intention to make conservative assumptions in order to avoid any accusations of extremism. 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.*

RINGING 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 US growth. The obvious way to bring this about is to contrive a large further devaluation of the dollar. But this may not be as easy as it sounds.

Chart 9 (below) displays a scenario in which the dollar is assumed to fall, from now on, by 5% per annum making a total (real) devaluation of 33% 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 US's balance would have a perceptibly adverse effect on growth in the rest of the world bringing it down from 4% on average to 3.6%. The overall effect, according to our model, is to 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. But it seems likely, in addition, that there would be a large improvement in the flow of factor income payments because the dollar devaluation raises the value of US holdings of foreign equities and foreign direct investment together with the income flows which this generates – an interesting reversal of the usual situation where debtor countries which devalue find their net overseas asset position deteriorating because their liabilities are denominated in foreign currency.

Chart 9: The Main Balances Projected When Growth Is Achieved by Devaluation
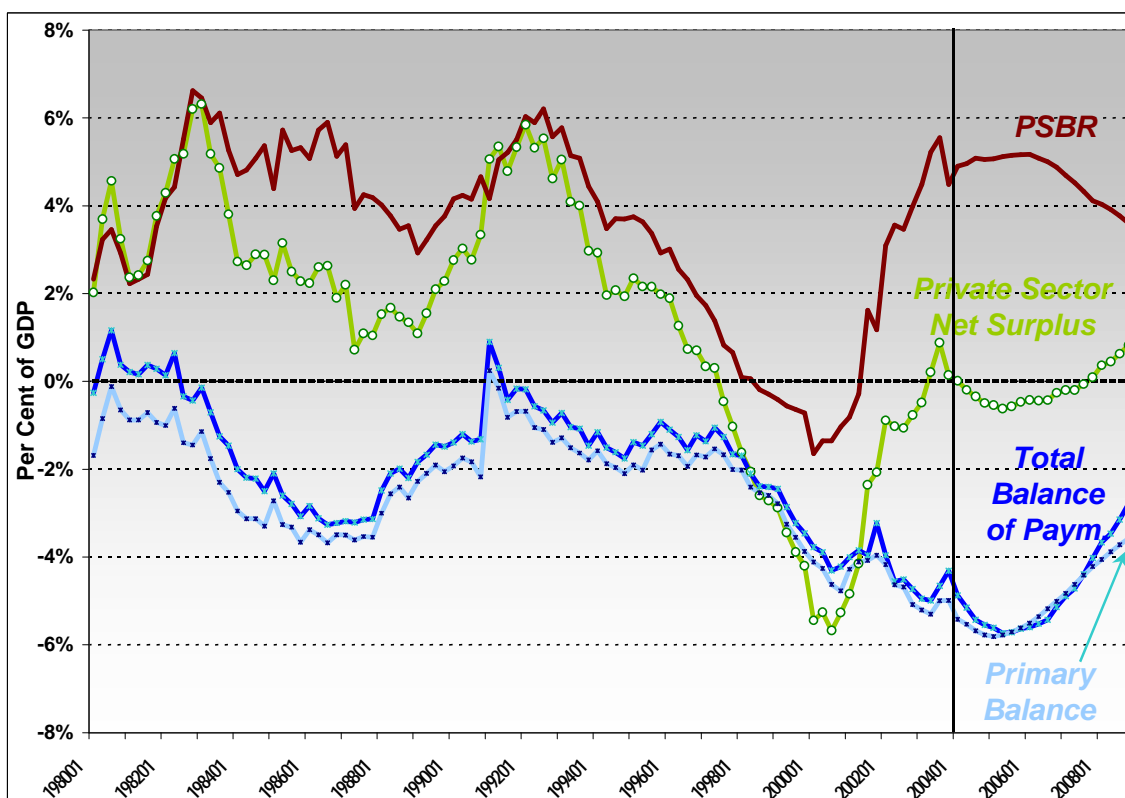

Chart 9 shows how the revaluation of overseas assets has the effect of completely eliminating the net outflow of factor income from the US. Indeed the deficit in the current account, by our reckoning, is slightly lower than the deficit in the primary balance at the end of the period.

Chart 10: Asset Position of the U.S. Projected When Growth is Achieved by Devaluation
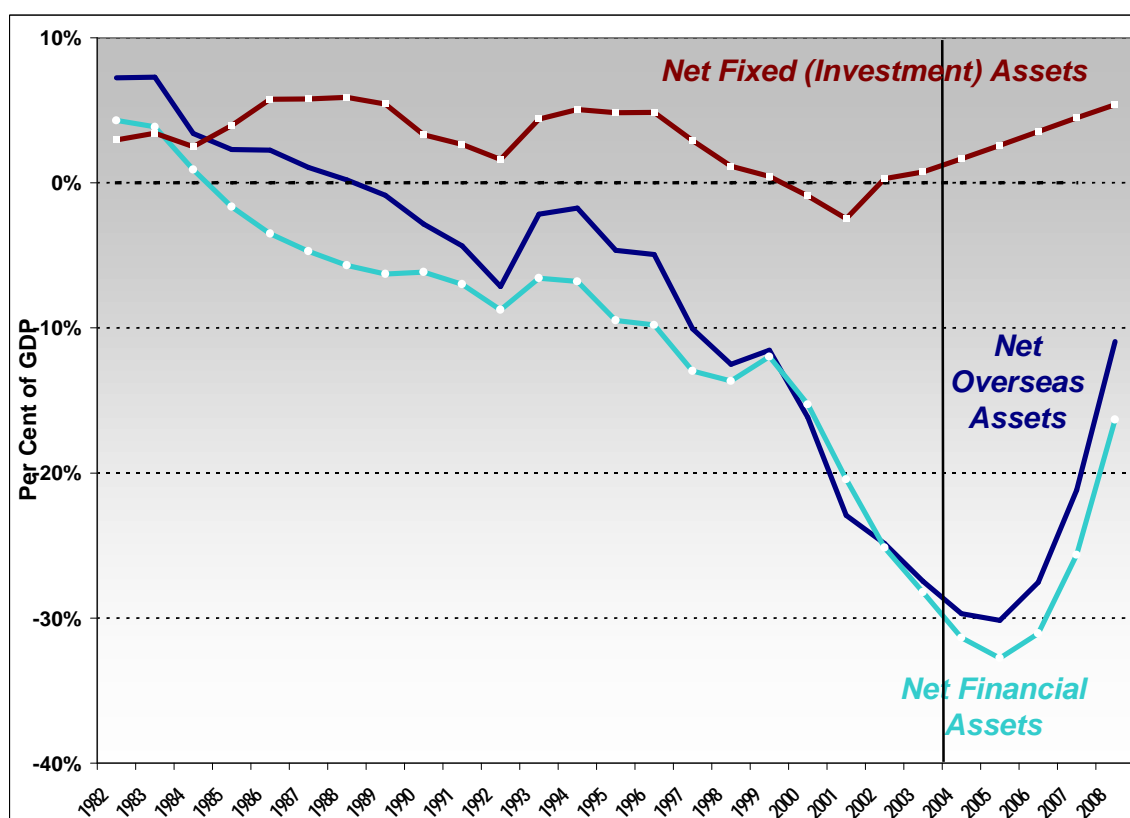

Chart 10 shows how the postulated devaluation reduces the net foreign 'debt' of the US denominated in dollars notwithstanding the fact that the current account balance remains in deficit.

A solution of the kind shown in Chart 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 which have swept the academic profession and even penetrated major international institutions. But we take the opposite view rejecting, as irrelevant, any model which 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 Chart 9, may be difficult to achieve. First, the non-US world during the last few years has become heavily dependent on the US's growing 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. There is no 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 which deficit countries are happy to sell, can be entirely self-contained[14]. 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 have somehow to 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 in which they can be forced to do this. It is always possible that global financial market forces will move in with overwhelming force 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[15]. In our view the need for a major realignment of currencies has become so pressing that the US 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 towards the balanced growth illustrated in Chart 9 resides in the transfer problem. The flip side of her external deficit is that the US has been absorbing at least 5% more goods and services than she has been producing, generating a substantial addition to the American people's standard of living. But any improvement in the deficit (given output) must reduce domestic absorption by an equivalent amount. The scale of the transfer problem emerges directly from the Chart 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% per annum, that private expenditure (consumption and investment combined) could only grow at an average rate of 2% between now and the end of 2008. Such a slow growth rate has only occurred twice before during the post-war 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 5% over the next four and a half years -well above the growth of productive potential. So the simulation illustrated in the chart assumes that fiscal policy is tightened so as to bring the average growth rate back down to 3.2%.

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[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 it is often claimed that such sterilization is 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 US 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.

POLICIES WHICH WOULD ONLY CUT THE BUDGET DEFICIT

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

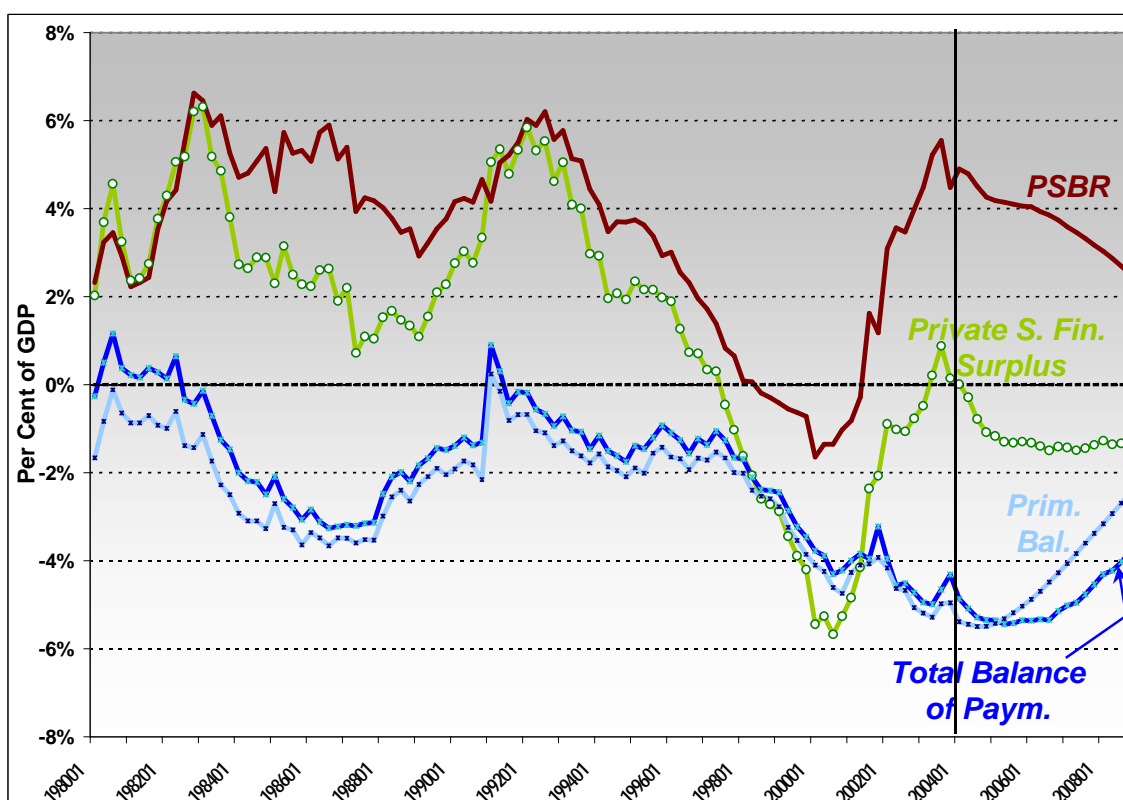*Chart 11: The Main Balances Projected if the Government Deficit Was Cut in Half*

Chart 11 has a disturbing resemblance to Chart 9, which showed a dream scenario in which there was satisfactory rate of export-led growth, with the government and external deficits both declining in a satisfactory way. But this resemblance underlines 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 Chart 11, the fall in the government deficit is being driven by a rise in tax rates coupled with a reduction in public expenditure. The improvement in the balance of

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[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 which teaches that real output is determined by supply conditions alone.

payments comes about because the growth of US output is reduced from 3.2% on average to 1.2% --the slowest in post-war history[18].

PERORATION

We have made a serious attempt to put numbers on a variety of possible medium scenarios in order to assess the scale of the strategic predicament facing the US 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 which may not correct themselves spontaneously in an orderly way. The authorities in the US and in the rest of the world should be therefore be giving active consideration to pre-emptive action, preferably in collaboration with one another.

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[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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