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IN GROWTH-RECESSION TIMES ?**

**AN APPRAISAL OF U.S. MAIN IMBALANCES
AND IMPLICATIONS FOR THE WORLD ECONOMY**

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Comments and suggestions are welcome.

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Abstract

This study challenges the conventional story of an U.S. economy experiencing the longest expansion and shortest recession in the post-war period, now advancing through a slow, sturdy recovery. It characterizes the present state of the world economy as a growth-recession and draws plausible scenarios for the U.S. economy and their implications for the rest of the world.

The thread of the argument emerges from an appraisal of the unique configuration of demand and accumulation of debt by the main sectors of the U.S. economy. This analysis stresses that rather than a virtuous expansion during the 1990s, the entire model was based on unsustainable driving forces. After 2000Q2 economic growth fell progressively below potential, failing to generate sufficient employment. Prospects of a US-led worldwide recovery are inconsistent with the unprecedented and unsustainable debt exposure of main sectors of the US economy.

Should this appraisal prove prescient, a further pursuit of free market globalization would be deemed counter-productive. The central case we put forward as antidote to the risk of such a global impasse would be the reinstatement of the appropriateness of fiscal policy in tandem with properly regulated credit and external sectors, co-ordinated worldwide.

SLOW RECOVERY FABLE IN GROWTH-RECESSION TIMES?

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INTRODUCTION

Contrary to rumours of recovery, the world economy remains in the doldrums¹. Rather than making headway, the U.S. is keeping its head just above water. With it, most countries around the globe seem to be treading water as well. The supposed recovery in the U.S. is yielding the worst employment growth ever recorded by the Bureau of Labor Statistics². Rates of unemployment in Euroland and Japan are worse than seen in many decades. Sub-trend economic growth and technical recessions are becoming pervasive, pushing out even further the long-awaited development of the peripheral economies.

◆ *This paper draws extensively on research shared with Wynne Godley at the Cambridge Endowment for Research in Finance, CERF, University of Cambridge, and it benefits from his pioneering insights and continual observations. Core to this appraisal of the U.S. and world economies is the analytical framework developed by Godley and associates at the early stage of the Cambridge Economic Policy Group. Estimates of the world economy use the Alphametrics © Trade Model. Usual disclaimer applies.*

¹ Second quarter figures show that the Eurozone is stagnating, with Germany, Italy and The Netherlands in technical recession (unemployment rate in the Euro area averaged nine per cent in June this year). Highlighted 'good-performers' show YoY growth rates of 1.6% in Japan, 1.8% in the UK and 2.5 % in the U.S. (half of it being actually an increase of military defence). For the most part, employment has not risen over the last three years. In the U.S., the 'fastest growing' economy, over nine million are unemployed, with 3 million jobs having disappeared during the current administration. In the developing world, more than 50 nations grew poorer over the last decade (UNDP, HDR 2003).

² Bernstein and Mishel (2003) "Labor Market Left Behind", Washington, EPI.

Throughout the 1992-2000 boom in the U.S., a number of studies pioneered by Godley and associates showed that the largest economy of the world was taking in water via unrelenting albeit unsustainable imbalances³. The public sector balance shifted from a normal state of deficit to a surplus (thus subtracting demand). Likewise, net export demand got increasingly negative. The sole driving force during the 1992-2000 period was private sector spending, fuelled by lending and realizations of foreign purchases of U.S. assets. An unravelling was long in the making but just did not actually surface until mid-2000.

In mid-2000 the first signs of weakening private demand emerged. A downturn could have been more severe but for the sheer scale by which the fiscal stance was relaxed. In previous model simulations we were hesitant to assign a precise number to the magnitude of fiscal expansion that would be needed to offset the demand deficiency. And yet, no one (including us) would have conceived plausible a fiscal relaxation of \$ 638 Bn (6% of today's GDP) as happened between 2000Q3 and 2003Q2⁴. However, as of writing and now three years into the unravelling, the US economy has not recovered properly, since the private sector continues to withdraw from the demand stream and net export demand continues its downward trend, now in uncharted territory.

At present, the official story of a recovery seems to break ground. Notably, the Congressional Budget Office (CBO)'s latest update (26 August 2003) goes by the conditional forecast of 2.2% and 3.8% economic growth in 2003 and 2004 respectively (3.3% thereafter). In our view, these are not credible forecasts as they imply either a renewal of private sector demand fuelled by lending; or a spontaneous increase in net export demand.

If indeed a recovery in the US does not materialize, there will be implications for the rest of the world, long reliant on the U.S. as importer of last resort. A likely, further weakening of US consumer demand would leave many economies with no surf to ride on. If however the U.S. aims at gaining net export demand by devaluation (and perhaps import protection), the surfing lot would actually be facing a countercurrent.

³ Godley (2003, 2002; 2001a,b; 2000; 1999a,b; 1995), Izurieta (2003, 2002), Godley & Izurieta (2002a,b; 2001a,b); Godley & McCarthy (1998), Godley & Martin (1999); Godley & Wray (1999); Papadimitriou, D., and L. R. Wray (2001).

⁴ This estimate, based on official NIPA figures, represents the *general government* deficit, and thus differs from studies which often refer to the *Federal* budget only. Alternatively, Baker and Rosnick (2003) propose a 'core' measure of the budget which focuses on the part financed by the general government revenue (excluding programmes that are financed by their own stream). Using such measure would prove much more useful at the moment of assessing its sustainability.

ANALYSIS OF THE RECENT PAST: FROM EXPANSION TO GROWTH-RECESSION

The departure from the 1991 slump marked a volte-face of economic management in the U.S. Fiscal policy backed away, with monetary policy playing a distant monitoring role. Driven by private spending and stock-market exuberance, an uncontrolled explosion of debt fuelled the boom, which had to be unravelled at some point. Beyond the inflection point of 2000Q3, the short-lived technical recession is not giving way to a recovery but to a growth-recession, since the unravelling of the expansion period is still incomplete.

The achievements of the boom were not exceptional

Looking at the facts the recent expansion was not unique either in regard to its duration or to its achievements (Godley, 2003; Izurieta, 2003). At the 2000Q2 peak the average rate of GDP growth over the previous eight-and-a-half years was 3.8%. This is only half a percentage point above the average over any eight-and-a-half years since WW2, and is certainly well below the average of the first 25 post-war years. Productivity growth of 2.1% (measured over the same cycle) was also half a percentage point higher than the post-war average, despite IT-driven breakthroughs. Finally, the 4% rate of unemployment in 2000, even if never so low in the previous three decades, was still higher than those experienced in economic upswings before the 1970s.

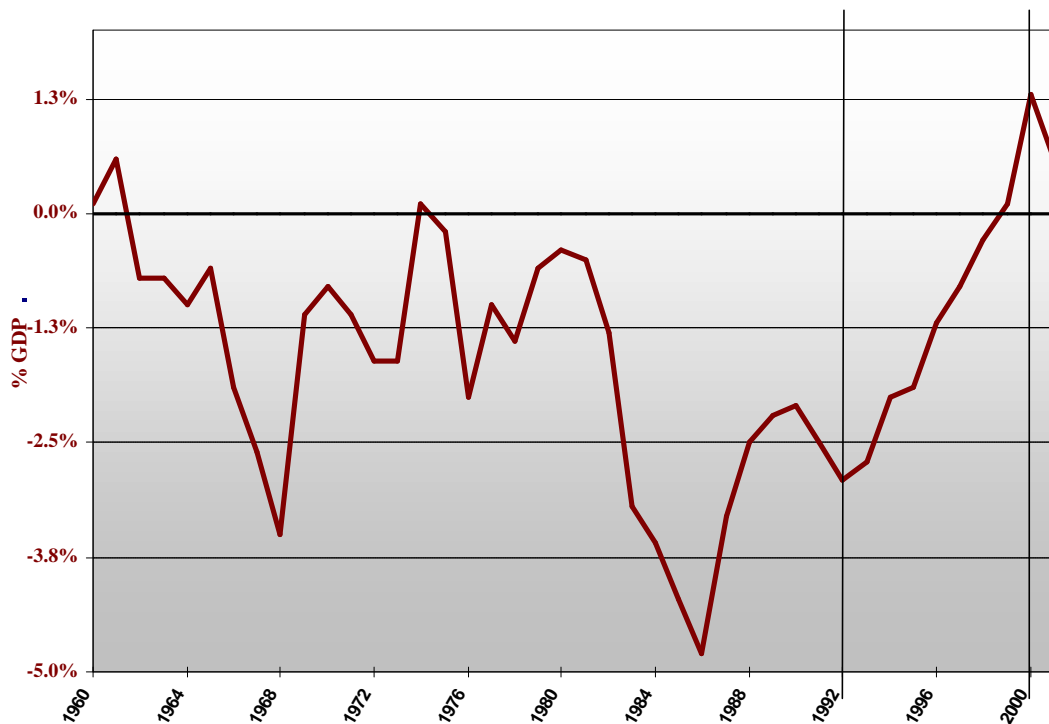
The policy retreat was unique

The unprecedented configuration of aggregate demand in the US emerged in the context of a policy retreat⁵. Most notably, the commitment to tight fiscal policy as a discipline for success, though not new in theory, was this time implemented with tenacity. Chart 1 below shows the *standardised general government surplus*, estimated by the CBO (2002), which is a measure of how much policy has tightened the budget after discounting the effects of the cycle (re tax collection, unemployment benefits, etc.). A rising trend, as is the case between the lines marking the period 1992-2000, denotes a policy-determined, tighter rein on fiscal policy. The *standardized* surplus at the 2000 peak was a record. Assuming that surpluses will continue to grow in future, officials expected an eventual elimination of public debt⁶.

⁵ Fiscal, monetary and exchange rate policies were wholly removed. Monetary intervention was relegated only after the upward revision of Treasury Bond rates to about 5%, at the take-off of the post-1991 recovery. The consensus about floating exchange rates was uncontroversial, in the U.S. at least, due to the virtually ubiquitous acceptance of dollar-reserves as substitute for gold.

⁶ CBO (2001, January, pp.18). The "*net indebtedness*" of the public sector would be expected to turn *negative* by 2009. For an academic discussion of the implications of a public sector in net asset position for monetary policy, see Cecchetti (2002).

Chart 1: Standardised Budget Surplus as per cent of Potential GDP



Our concern with the swing in fiscal stance is rooted on the empirical and theoretical evidence that an economy cannot grow in the absence of sustained (and sustainable) exogenous forces of demand. Godley and McCarthy (1998) have demonstrated that long term GDP growth follows the pace of the fiscal stance (measured as the total flow of fiscal injections divided by the tax rate)⁷. For the open economy, an analogous ‘augmented fiscal stance’ (which combines the flow of government expenditure with that of exports as ratio to the tax rate and import propensity) determines the growth of aggregate demand. That is, for an economy to grow, both demands (government spending and exports) ought to be stronger than their leakages combined (taxes and imports)⁸.

Nevertheless, in the 1990s the U.S. economy was growing above trend while both fiscal and net export demand were moving in the opposite direction. As such, the negative force of the ‘augmented fiscal stance’ was more than offset by private sector demand, as detailed below.

⁷ In the simplest case of a balanced budget in a closed system, we have $G=T$ (where G is total government expenditure and T is tax revenue). If the overall tax rate is $t=T/GDP$, it follows that $GDP=G/t$. Thus, in a closed economy moving towards stationary equilibrium (where all stock as well as flow variables are constant) the GDP would be tracking the fiscal stance G/t .

⁸ Government and external balances combined yield $G+X=T+M$ (where X and M are exports and imports). Define the import propensity $m=M/GDP$ and thus the ‘augmented fiscal stance’ tracks GDP growth by the (steady state) relation $GDP=(G+X)/(t+m)$.

Private sector spending was the driving force

A straightforward way to shed light on the dynamics of growth in the U.S. and uncover its limits is by depicting the structure of aggregate demand⁹. By manipulation of the national accounting identity we reach a useful expression which highlights the relationship between net demands of the three main sectors:

$$\underbrace{[Y - T - PX]}_{\text{Private Sector Balance}} \equiv \underbrace{[G - T]}_{\text{Government Deficit}} + \underbrace{[X - M + NF]}_{\text{Current Account Balance}}$$

where Y is national income, T tax revenue, PX consumption and capital expenditure of the private sector, G government total spending, X exports, M imports and NF factor payments¹⁰. The two terms in brackets of the *right hand side* are the net demands of the government and the external sectors, respectively. They also represent financial ‘flow-balances’: G-T is the general government *deficit* and X-M+NF is the current account *surplus*. Similarly, the *left hand side* identifies the financial *balance* of the private sector, i.e. disposable income (Y-T) minus *total* private expenditure. Thus, net saving equals the net acquisition of financial assets, i.e. ‘lending’ to any of the other (two) sectors.

Since this relation holds by accounting identity, any two of the net demands (or financial balances) necessarily implies the third. In normal times economic growth is sustained by net demands of the public or the external sector, while the private sector, by spending within income, generates financial wealth (i.e. ‘lending’ to other sectors). This pattern prevailed throughout the post-war period, but then turned dramatically after 1992.

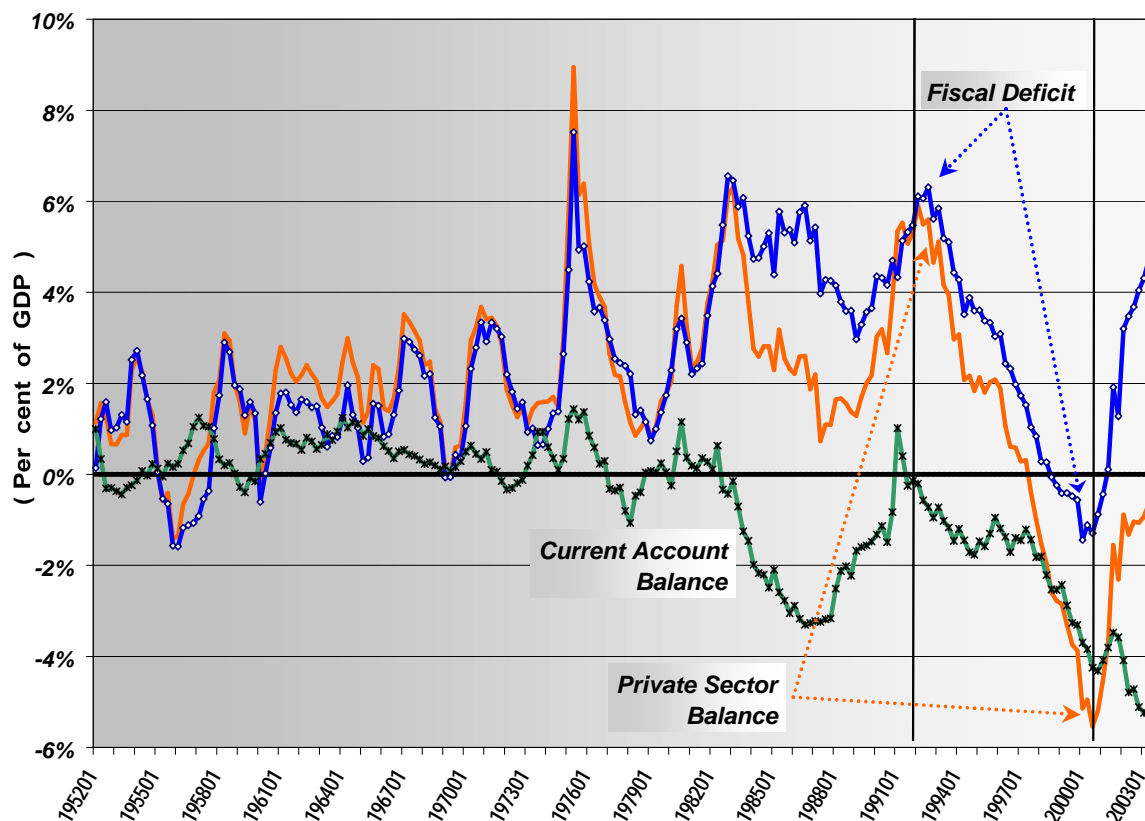
Chart 2 below replicates the relation between these three balances for the U.S. economy over the last half-century. Vertical bars mark the 1992Q2-2000Q3 period. The three balances moved South and reached negative, uncharted territory. The government sector and foreigners were withdrawing spending, in net terms, and in doing so they were either

⁹ This approach was first used by Godley and colleagues of the CEPG, in the 1970s. However, most analysts had centred on the growth-accounting literature and the merits of productivity. Yet, the recurrent evidence of ‘output gap’ in the U.S. and elsewhere seems to validate an analysis from the perspective of aggregate demand. Interested readers may benefit from W. Martin’s study (2002), which evaluates the prospects for productivity and profits by considering, as a most likely scenario, the case of endemic demand deficiency in the U.S. By now the ‘three-balances’ approach appears in publications of organizations such as the Bank of England, the Bank for International Settlements, and also the press (Financial Times, Economist, Guardian, etc.)

¹⁰ Take the national accounting identity $Y = PX + G + (X - M + NF)$ and deduct taxes so as to get $Y - T = PX + (G - T) + (X - M + NF)$ and then shift the PX term to the LHS.

destroying financial wealth or acquiring domestic financial assets. Meanwhile, by accounting logic, the private sector was spending at a faster rate than income (hence the negative slope). As such it was the single net positive force of demand driving the economy. The scale of this should not pass unnoticed. The shift from a positive 6% of GDP to a negative 6% of GDP represents an addition to the demand stream equivalent to \$ 1.250 Bn at today's prices. But to the same extent the private sector as a whole was depleting financial wealth and eventually becoming a net borrower.

Chart 2: Financial Balances of the Main Sectors of the U.S. Economy



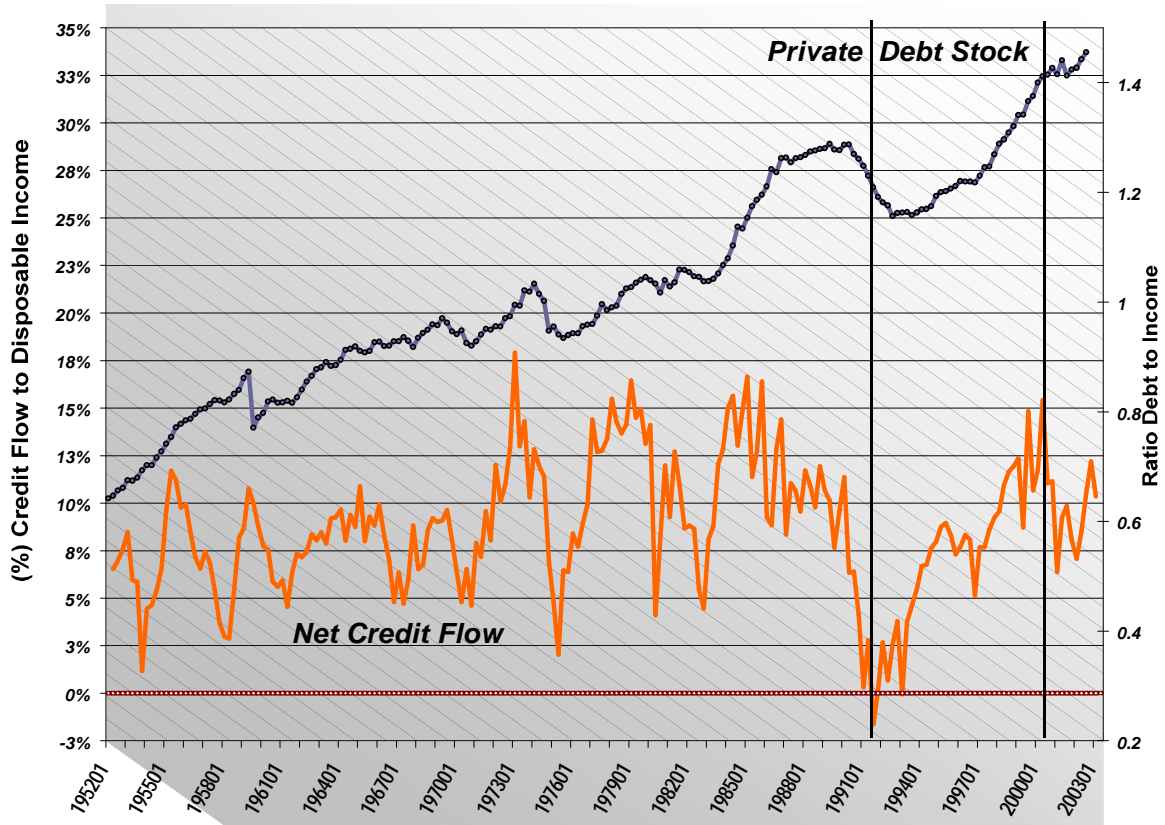
Unsustainable growth of lending

Chart 3 shows the flow of net lending to the private sector (LHS scale) and the stock of debt (RHS scale), both in proportion to disposable income¹¹. The vertical lines enclose the 1992-2000 period. The *flow* of net lending was rising throughout the expansion, and it was this that generated the increase of private spending which drove the boom. But the upward trend of the lending flow is actually a *rise in the rise* of the stock of debt. The debt stock reached

¹¹ A negatively sloped flow of lending does not necessarily imply a decrease of the debt stock (a positive value of the flow is an addition to debt). Further, there is no strict one-to-one correlation between flows and additions to stock, due to holding gains and measurement issues.

record levels in 1998Q3, and kept going upwards. Our central proposition is that this was unsustainable and had to stop at some point.

Chart 3: Net Flow of Lending and Debt Stock of the Private Sector



Indeed, the abrupt end of the boom in 2000Q3, manifested primarily by the fall in investment, coincided with the turn around of the *flow* of credit¹². The decrease of the lending flow, notably for the business sector which adjusted first, weakened aggregate demand and broke the boom. To be sure, chart 2 confirms the swift change of direction of the private sector balance at that point. However, it has not yet reached positive territory (at about minus 0.5 % of GDP it is still 3% of GDP short from its historical average of plus 2.5% of GDP). A further withdrawal from the spending stream seems to us inevitable (which is another way of stating that the lending flow will slow down even further) because the *stock* of debt cannot rise forever.

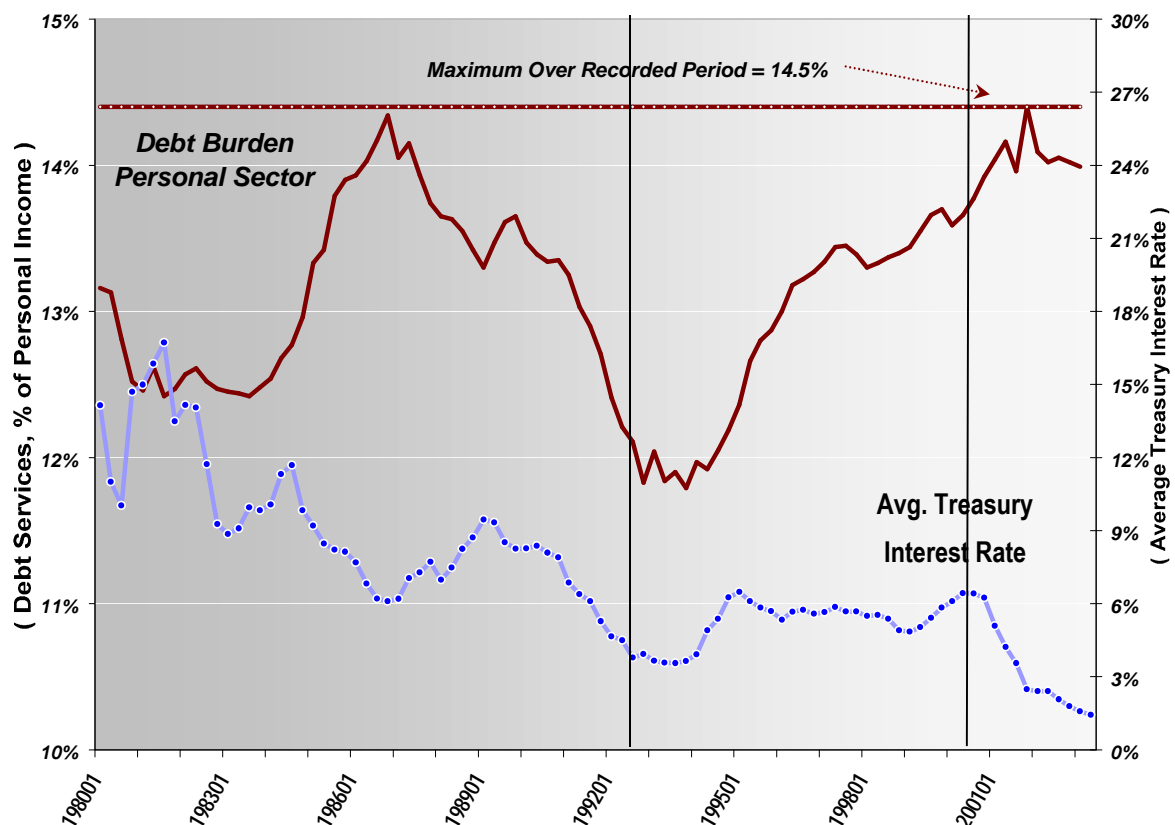
Our claim regarding an imminent flattening or fall of the debt stock runs counter to the intuition that debtors will not change behaviour until the flow of repayments (*'debt burden'*)

¹² The flow of lending shown in the chart is for the aggregate private sector (corporations and households). Corporations adjusted first, and it was actually the fall in investment which broke the boom. The adjustment in the personal sector is still incomplete.

constrains them from taking on more debt. So, the argument goes, in a declining interest rate environment that would not be likely to happen. Let us explore this hypothesis.

Chart 4 shows the debt burden (interest plus repayments) of households as published by the Fed (data for business is unavailable) on the LHS scale, and the average of interest rates of Treasury bonds (RHS scale). Vertical lines mark the period of the boom. During such time interest rates were lower than any other period before, and yet the burden kept increasing. Moreover, after 2000Q3 interest rates were falling rapidly, and the debt burden kept rising, eventually reaching its record. As of writing, it is only marginally lower than the peak, even if the interest rate is at its lowest in the last 50 years. Far from being complacent with low interest rates, one could argue that monetary easing is a stimulus of the wrong kind. It encourages more debt, fuelling rather than moderating an already unsustainable process. The debt burden remains critically high. Furthermore, the potentially perverse effect of debt repayments in a deflationary environment is not yet accounted for.

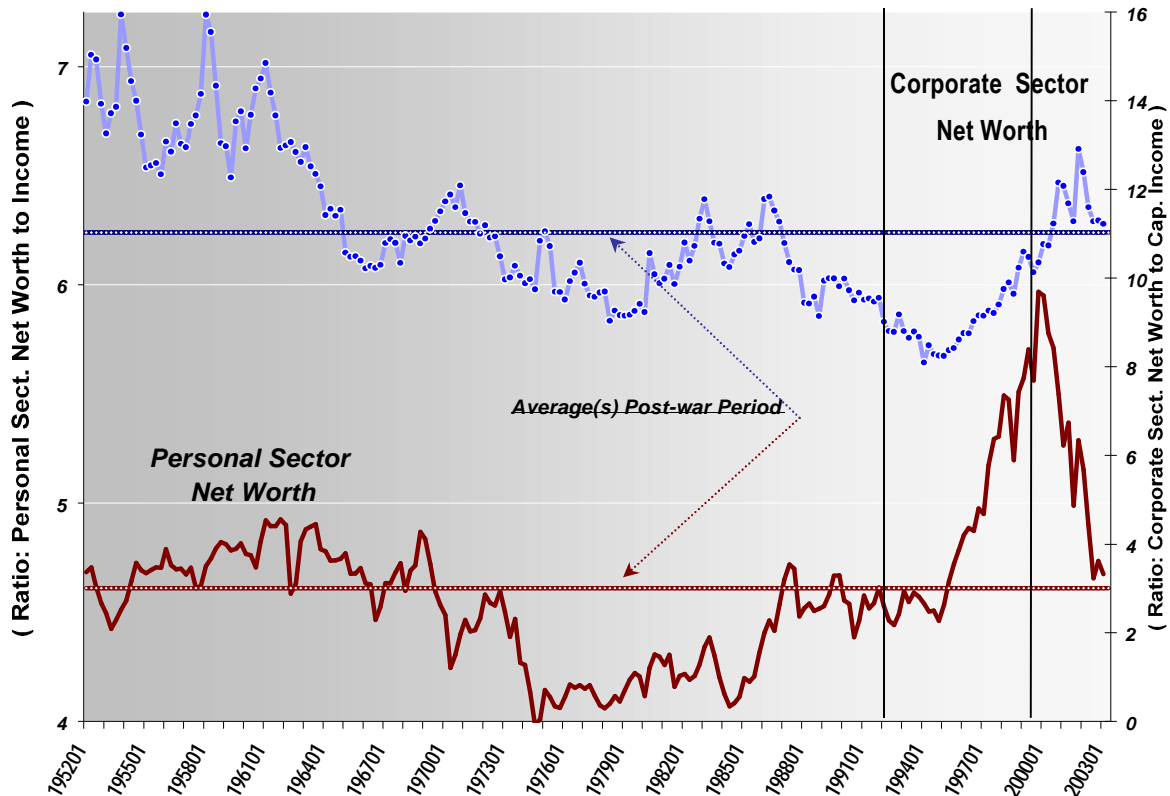
Chart 4: Debt Burden of Households and the Evolution of Interest Rates



Credit market analysts tend to dismiss our concern of an imminent stop of the rise of private debt by looking at balance-sheet strength and arguing that private borrowers are gaining record net worth positions due to real estate and stock market appreciation. But market valuations, unlike real growth in assets, can also be misleading. As chart 5 shows, the rise of

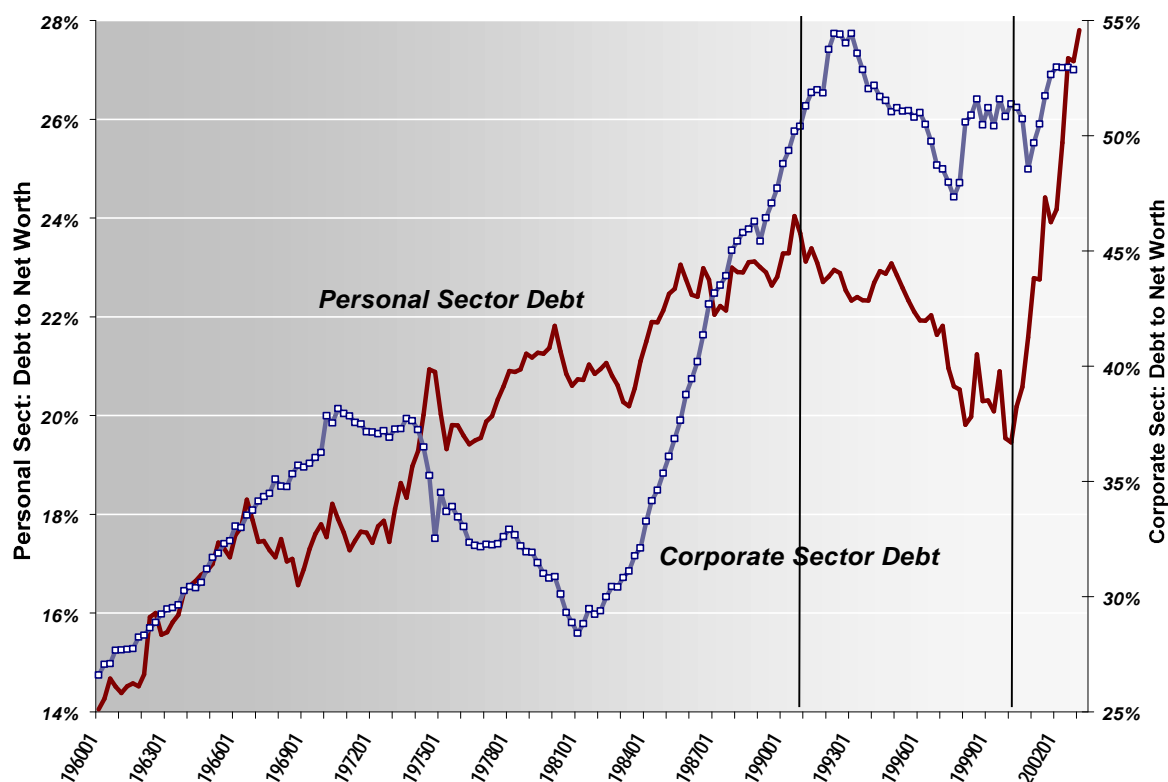
net worth of both business and households started to reverse after the 2000Q2 peak¹³. As of writing, both sectors' net worth in relation to income are back to their long run average. The probability of a fall of house prices, which would shake households' solvency, should not be ruled out.

Chart 5: Net Worth at Market Value as Ratio to Income



At the risk of labouring the point we stress our predicament by displaying another indicator. Chart 6 shows the stock of debt of the personal (LHS scale) and corporate (RHS scale) sectors relative to their respective net worth. The lending boom is neatly captured, between vertical bars, by negative slopes. Despite the fact that debt (numerator) was rising, an even faster rise of net worth served to relax borrowers and lenders alike. However, particularly for the personal sector, the subsequent rise of the stock of debt relative to net worth was staggering. Without going into catastrophic implications, these facts at the very least indicate that a resumption of demand growth in the U.S. cannot possibly rely on a further expansion of debt-led private spending. There must be another force of demand.

¹³ Corporations managed to postpone (but not avert) the decline by rapidly reducing their exposure and re-structuring balance sheets with the first signs of a fall in sales.

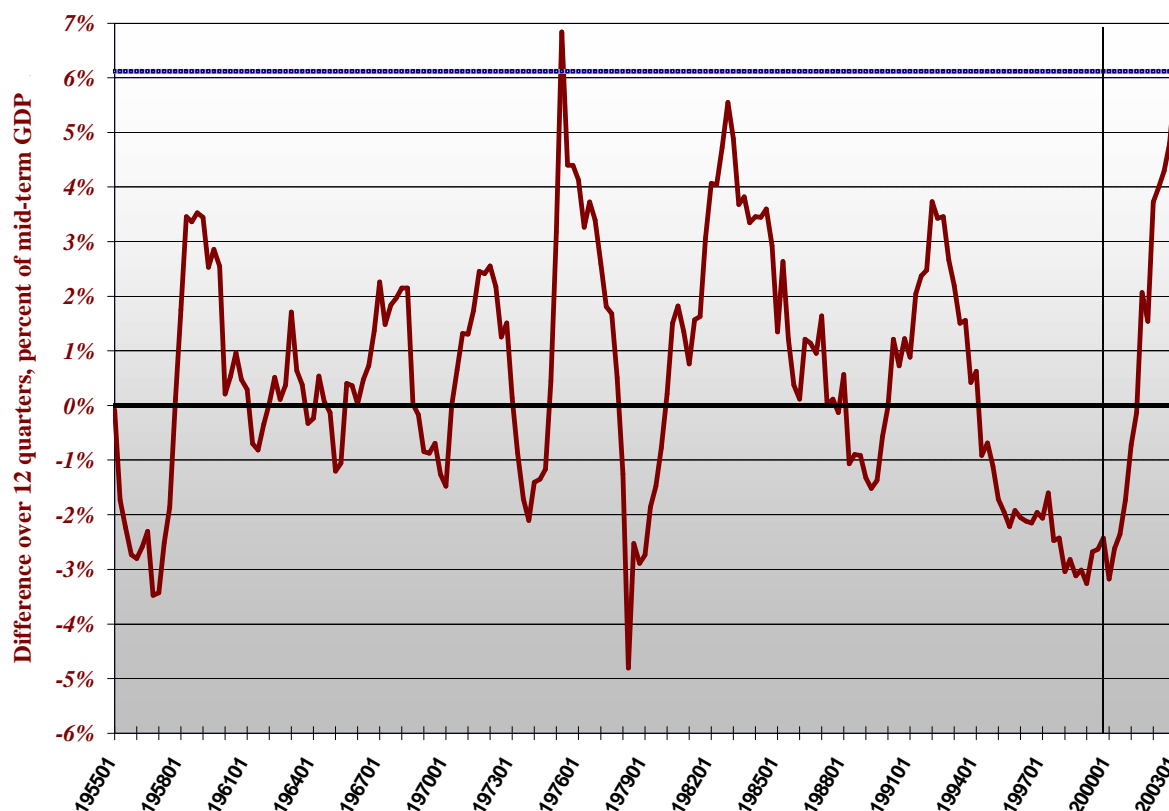
Chart 6: Stock of Debt Relative to Net Worth

Fiscal policy to the rescue

The thrust of our analysis of the recent boom in the U.S. was that when private spending ceased being the driving force of the entire economy a long-lasting recession would follow, unless other forces of demand came to the rescue. However, the fall of investment, output and stock prices in mid-2000 did not materialize into a severe, long-lasting recession.

Chart 2 showed that the fiscal stance was relaxed on a large scale, coincident with the swing of private demand, and it was this turn around towards deficit which moderated a long-lasting contraction. Such a shift was partly caused by a weaker economy, but not entirely. Chart 1 confirms that, corrected for the cycle, the budget turned upside-down after 2000. Chart 7 (below) illustrates fiscal policy swings throughout the post-war period. It shows the change in general government deficit over any three-year period, as a percent of mid-term GDP. Thus, the 2003Q2 data point shows how much the fiscal stance was relaxed relative to 2000Q2: 6.12% of GDP, nearly an absolute record¹⁴.

¹⁴ To make proper sense of this figure as an indication of ex-ante, policy-determined injections, one should take away the effect of the (recessionary) cycle as well as 'technical changes'. As done in the past (Godley and Izurieta, 2002; Izurieta, 2002), and based on estimates provided by

Chart 7: Increases in Government Deficits over Three-year Periods Relative to GDP

Unfortunately, the discussion about such a relaxation has been obscured in at least three respects. One, it is seen as a short-term, ‘fine-tuning’ device to avoid the recession. It is implied that the fiscal stance should be tightened once the recovery takes off. This is misleading. The fiscal stance (or the ‘augmented fiscal stance’, as proposed above) should be allowed to grow, structurally, at par with the expected, long term GDP path. A second issue is whether the chosen instruments (security and military spending, regressive tax breaks, etc.) are targeting the problem of shortages of demand. In this respect, we stress that the arithmetic of aggregate demand clearly reveals that the current return to fiscal deficits in the US economy averted what otherwise would have been a severe recession. Admittedly, tax breaks directed to lower income earners, or the provision of services and infrastructure have a demonstrably greater multiplier effect in the stimulation of demand. A third debatable issue is whether such an expansionary move was unnecessarily large, as we address below.

the CBO (2003, pp.21), the nominal shift of \$ 620 Bn would be discounted by about 120 Bn in technical changes and about 125 Bn for the cycle, turning into a \$ 375 Bn effective fiscal expansion.

Was fiscal policy alone effective?

What will it take to compensate for the deficiency of demand as the private sector returns towards balance? Looking at Chart 2, the turn around of public sector net spending after 2000Q2 was, at first sight, of a similar scale as the withdrawal of private net demand. However, such a relaxation of the fiscal stance may not have been sufficiently strong. The U.S. economy is still stalled in a growth-recession, unable to bring back to the labour force nearly 3 million people who were expelled during this period¹⁵.

After accounting for the impact of the economic slow-down on the budget, we estimate that the effective, ex-ante relaxation was about 4% of GDP¹⁶. This falls short, by about 1.5% of GDP, of the 5.5% shift of the private sector (from -6% to -0.5% of GDP). Furthermore the current account *deficit* moved from 3.8 % of GDP at the peak of the boom to 5.2% in 2003Q2. Thus, by assembling the various pieces, the US still suffers from a shortage of aggregate demand in the order of 2.5 to 3% of GDP. And, the adjustment of the private sector is still incomplete. Were the private balance to return to its historic norm of 2.5% of GDP, then the required demand injection would be twice as large; ie. in the order of 5 to 6 per cent of GDP.

The current account deficit as a drag on aggregate demand

The deterioration of the balance of payments can be interpreted, in part, as a result of faster growth in the U.S during the boom. Another factor may be the 'strong-dollar' policy. In a previous study we showed that a big part of the external deficit was in manufacturing, which was itself the result of an almost continuous fall in the value of imports relative to GDP. More recently, through the period of growth-recession and relatively weaker dollar, the balance of payments has continued its decline. There is no doubt that the sluggish world economy was partly responsible. Prices, especially higher costs of oil imports, matter as

¹⁵ The Economic Policy Institute (2003) characterizes this period as the 'worst recovery ever recorded by the Bureau of Labor Statistics, which began tracking monthly unemployment since 1939'. It notes that since the recession was officially declared over, unemployment continued to trend upward, reaching 6.2% in July 2003. Further, it illustrates that there are three unemployed people for every job opening; that some two million workers have stopped looking for work; and that underemployed workers –those working fewer hours than they want or in a job for which they are overqualified- reached 10.2% in July 2003.

¹⁶ We omit a quantification of the inefficiencies inherent to the chosen policy instruments, since we are, at this point, unable to estimate its impact. See Aschauer (1990), Perelman (2002).

well. Equally important are foreigner's portfolio preferences for dollar assets, as well as central banks' policy choices (especially China, Japan and East Asia)¹⁷.

This evidence exacerbates our main concern about the external sector; namely that it is, and will probably continue to be a drag on demand. A component of the external balance that is becoming more important is factor payments on the external debt position of the U.S. The net debt position of the U.S. reached 25% of GDP in 2002. As shown in Chart 8, this is almost entirely due to an increasingly large deterioration in the form of financial assets, which moved from zero in the mid-1980s to 25% of GDP in 2002. The other broad category is net stocks of direct investment which is slowly sliding and has fluctuated around zero in recent years.

Chart 8: Broad Categories of the Net Liability Position of the U.S., at market value

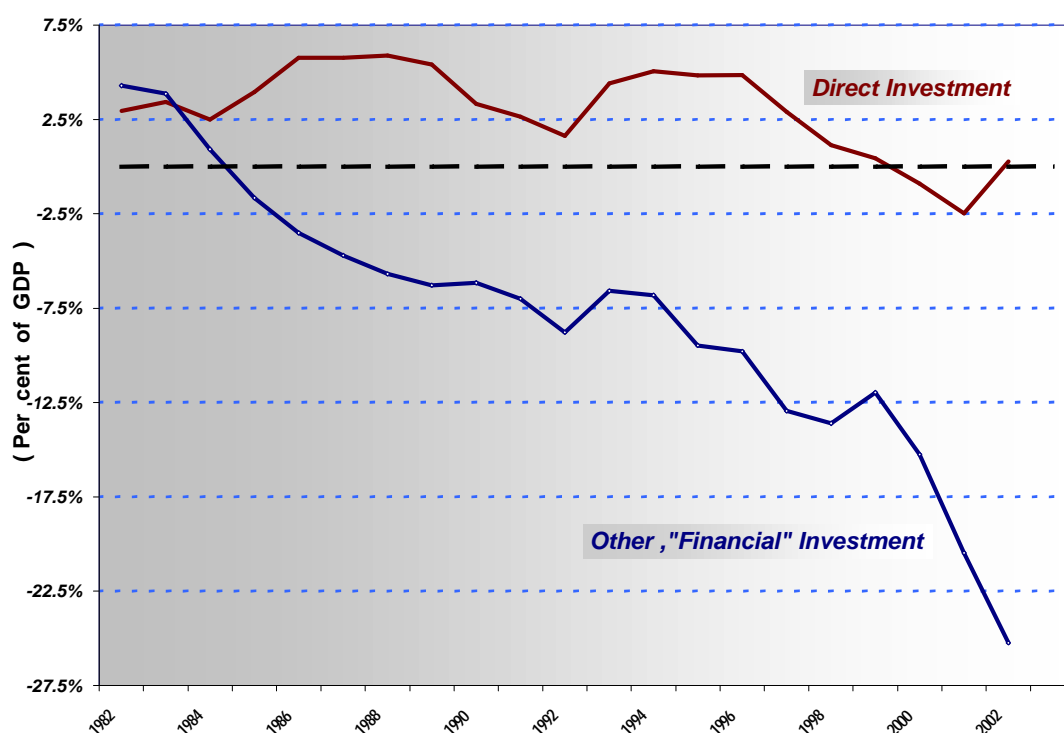
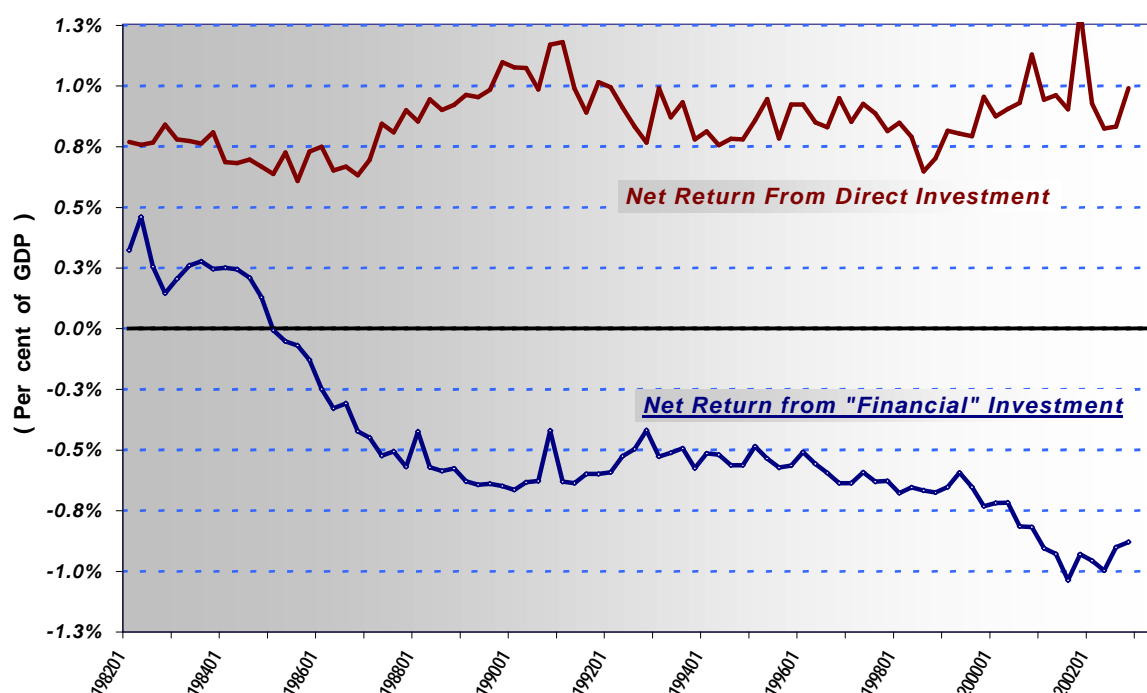


Chart 9 below shows the net flows of factor payments associated with each category of asset.

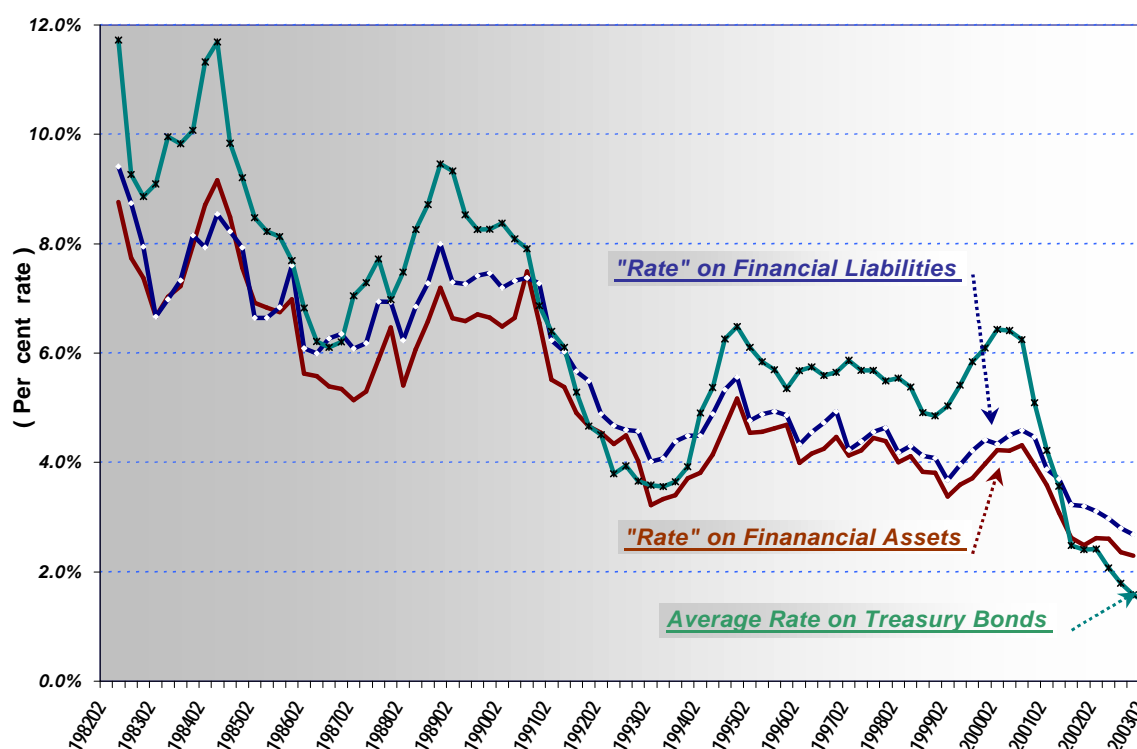
¹⁷ See Hensley & Mellman (2003) for an analysis of the US balance of payments in regard to portfolio allocations. See also D'Arista (2003) for an evaluation of the changing patterns in international position. For a theoretical discussion on the accumulation of dollar reserves overseas, see Godley's "open economy model using two economies viewed as a closed system" (forthcoming).

Chart 9: Net Inflows of Foreign Income of the U.S.

The net return from direct investment is positive and stable, around 0.9% of GDP, despite the fact that the net stock of direct investment is now around zero. This seems to be a well-recognized fact¹⁸, and its underlying causes are beyond the scope of our analysis. Unless the stock of direct investment diverges significantly from its current patterns, we would continue to assume that net returns will remain roughly stable. On the other hand, the outflow of payments on net financial assets is less stable than appears at first sight. The increases of outflows roughly follow the deterioration of the stock position. Yet, the outflow of payments seems to have stabilized in the last couple of years, despite the sharp increase of the debt position. Rather than a stabilization of debt services costs *per se*, this apparent mismatch between the growing stock of debt and a stable outflow can be almost entirely explained by the evolution of interest rates, as suggested in Chart 10.

¹⁸ See, for example, Economic Report of the President, 2003, pp. 61 ff.

Chart 10: "Rates" of Return on Financial Stocks Compared with Treasury Bond Rates



The chart shows our calculated 'quasi-'rates of return on financial assets and liabilities; each obtained by dividing the flow of payment by the opening stock at the beginning of the period. It is no surprise that the 'quasi-'rate on liabilities is close to, but slightly higher than that on assets. The third line is the average of Treasury bonds rates¹⁹. It traces quite accurately both calculated rates of return on financial investment. This is a very useful finding, since it informs us that debt payments abroad have been tempered by the large fall in interest rates, despite the fact that the net stock of debt actually increased. Most importantly, this can be used to make inferences about the future. In short, by estimating the stock position of the U.S. *vis-à-vis* the rest of the world (which will be derived from accumulation of current account deficits) we can obtain a rough approximation of the net outflow of payments for a range of interest rates on Treasury bills.²⁰ We incorporate this into our following analysis of scenarios for the future.

¹⁹ There is no perceptible difference if we take the rate on 3-months Treasury bonds, as done in previous studies. By using the average we are, in advance, checking for possibly growing differences of interest rates along the yield curve.

²⁰ This insight, originally proposed by W. Godley in his seminal "Seven Unsustainable Processes..." (1999), and reiterated in successive publications, remains so far broadly overlooked.

SCENARIOS: QUO VADIS, U.S.; AND WORLD ECONOMY?

We are now in the position to illustrate plausible scenarios. At the heart of our analysis lie our findings about the U.S. economy throughout the previous period. Namely:

- i) The point of departure at present is a unique configuration of aggregate demand by which a near-record relaxation of the fiscal stance is partially taking over from an unprecedented lending-led private sector demand.
- ii) The movement into reverse of the private sector balance is incomplete and will continue since the growth of the stock of debt is unsustainable and has to stop.
- iii) For the U.S. economy to exit the growth-recession, there is still a shortage of aggregate demand in the range of 3 to 6 % of GDP, depending on how far the adjustment of the private sector goes.
- iv) While the current account deficit is a drag on demand for the US, it is also acting as 'importer of last resort' for the world economy.

We will limit ourselves to considering three scenarios²¹. Admittedly, the set of assumptions proposed in our projections are complicated by the fact that the U.S. is now at the onset of a presidential election year. A failure in creating a job-recovery environment may threaten the 'success' of the present administration's electoral campaign. Thus, our scenarios might fail to fully incorporate events and processes which may prevail on political-economy grounds even if unlikely or unsustainable from a macroeconomic perspective.

Scenario 1: Spontaneous recovery turning into a global growth-recession

Our first scenario is constructed in an indirect way. We first take the official story of a spontaneous recovery in the U.S. and show why this is not credible. Then we carry into the future what we take to be a set of plausible configurations of demands, flow-balances and stocks of debt. The result is that the US will not recover properly and will traverse a long period of sub-trend growth. The current 'growth-recession' would be projected into the mid-term future as well as into the global economy.

²¹ As of the time of writing (end August 2003) our precise numerical results are too preliminary to go on record. In this draft we will suggest the directions that the U.S. and world economy may be leading to, and will hint at the magnitudes involved. The model of the US economy will be re-estimated after revisions to the NIPA figures and release of *Flow of Funds* data in September. Likewise, the World Model (©Alphametrics) will be updated when U.N. trade figures for 2002 are published, end September. A forthcoming Godley and Izurieta 'CERF Strategic Analysis', will be available at the site www.cerf.cam.ac.uk.

The relevant parameters of the official recovery in the U.S., according to the most recent CBO document are as follows. Real GDP growth will be 2.2% in 2003, 3.8% in 2004 and 3.3% thereafter. Calendar-year general government deficits are projected at 5.5% of GDP in 2003, 6.5% in 2004, after which will start to decline (4.9%, 3.8%, ...) ²². Unemployment rates will stay at 6.2% until starting to fall to 5.4% in 2005 and thereafter. The average of the 3-month bond and 10-year Treasury bond rates will be 2.5% at the end of 2003, 3.1% in 2004, and 5% thereafter. CPI inflation rates will be 2.3% this year, 1.9% the next and then 2.5%. As to the trade weighted dollar exchange rate (the so-called 'broad', real index), the CBO is not more specific than stating that it "will continue to gradually depreciate during the second half of 2003 and in 2004" (pp. 38). Using their benchmark of July 2003, we will assume a 5% per annum effective depreciation.

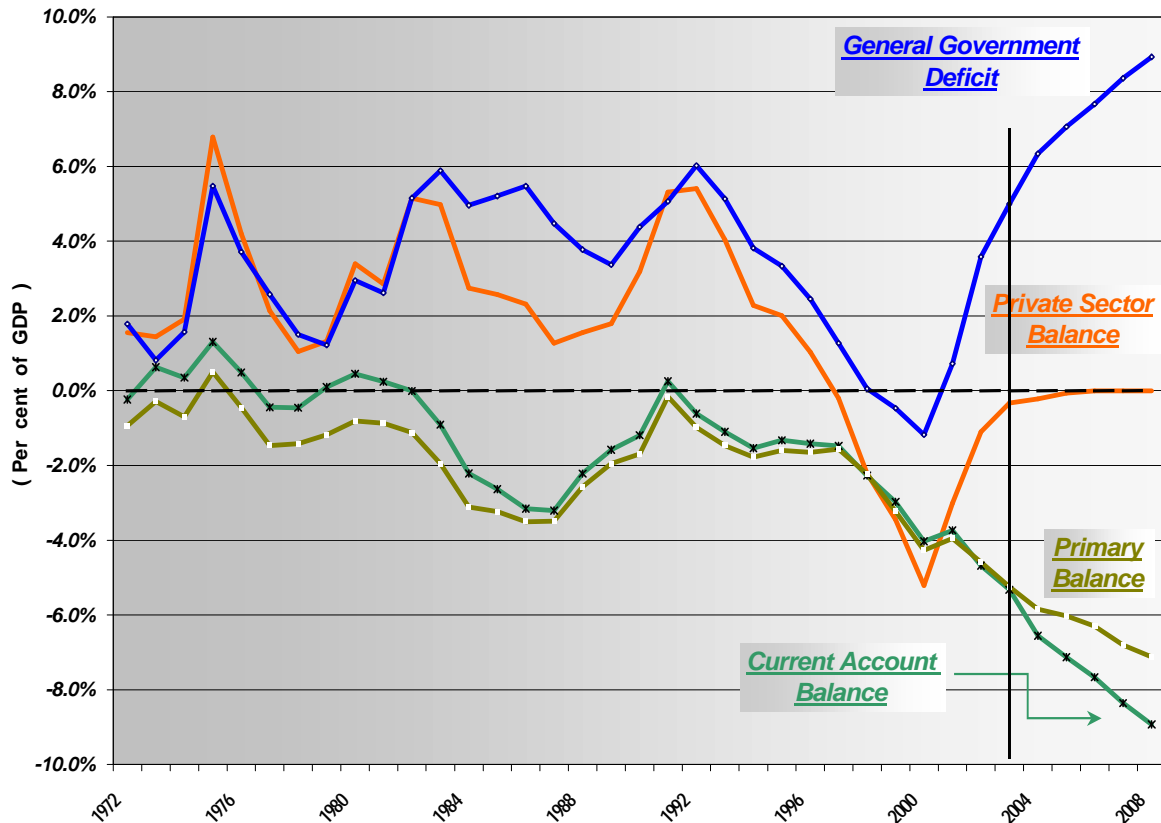
These parameters do not add up, unless something totally unrealistic happens to the private sector or to the world economy. Starting from a 4.8% of GDP general government deficit as of 2003Q2, the addition to aggregate demand granted by a projected fiscal deficit of 5.5% and 6.5% will be a cumulative 1.7% by the end of 2004. By that time the economy is supposed to be growing at 3.8%. Using our simple three-balances framework we have identified that the shortage of aggregate demand is about 6% of GDP, assuming that the private sector balance approaches its historic norm of 2.5% of GDP. But let us take the moderate view that the private sector will stay just around balance. So, the conditional forecast proposed by the CBO leaves an aggregate demand deficiency of 1.8% GDP in the next two years. Where is an injection of demand going to come from in order to compensate such deficiency? The external sector? This seems unlikely, as we shall demonstrate below.

The primary balance (current account balance before factor payments) has deteriorated by 3% of GDP over the last 5 years (from 2.2% of GDP to 5.2%). During this period the average economic growth was 2.8%, while the now projected rate of growth is 3.3% over the mid-term. The world economy is, and will likely remain, in an anaemic state. Taking the low world demand and high US growth into account, and assuming a 5% dollar depreciation per annum, the primary balance would deteriorate by about 2% of GDP, at the very least. This would bring the primary balance above 7% of GDP in five years from now. The inflows to compensate the continuing external deficits would add to the existing 25% of GDP net liability position. By 2008 the net debt position of the US would likely be about 60% of GDP. Using the projected interest rates, the outflow of payments on that debt would

²² Strictly speaking, the CBO proposes 3.7% and 4.3% of GDP in 2003 and 2004 respectively, for the *Federal* budget and *fiscal* years. Our numbers are straightforward re-calculations.

be about 2% of GDP by the end of the forecast period. In sum, the balance of payments deficit would reach 9% of GDP in 2008. This is shown in Chart 11.

Chart 11: The Official US Recovery Seen from the Perspective of Aggregate Demand

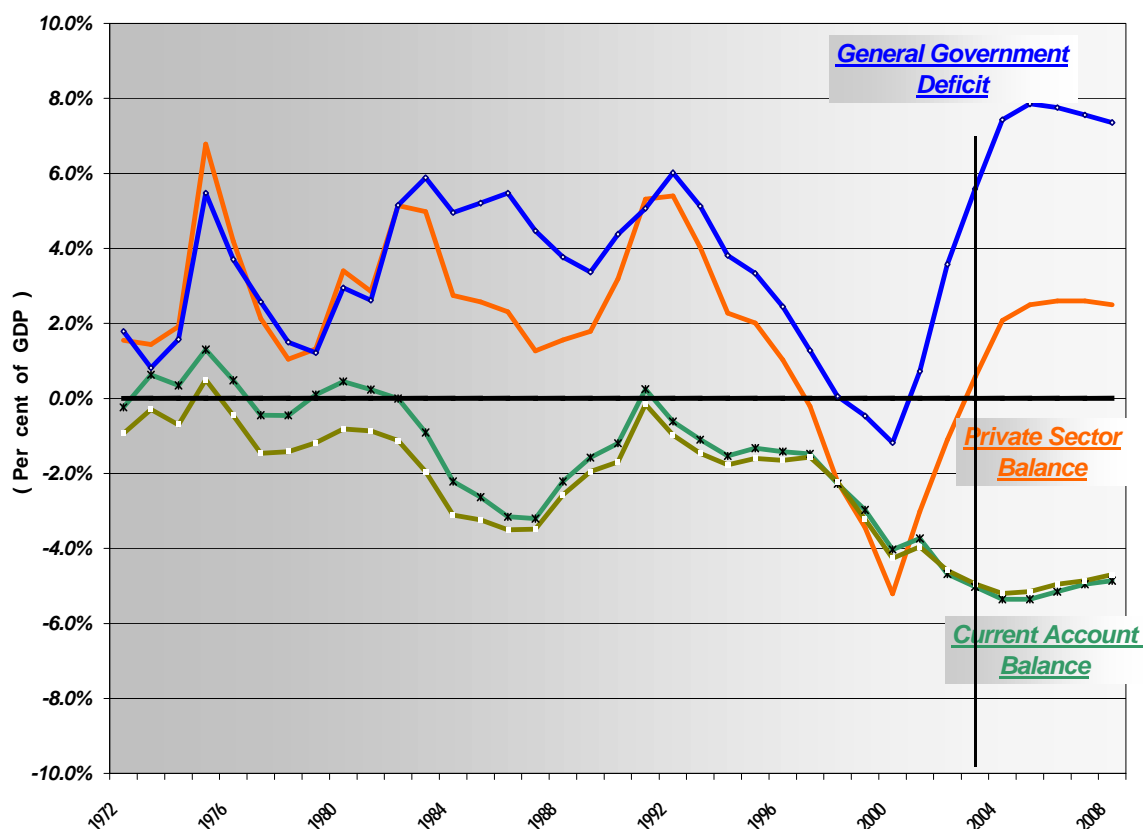


A continuously growing external deficit implies not an addition to aggregate demand, but a further subtraction of 4% of GDP in five years. In the shorter horizon of two years, the drag on demand will be about 1.5% of GDP. This would worsen the aggregate demand deficiency of about 1.8% of GDP noted above, thus leaving a shortage of more than 3% of GDP through the next two years. In conclusion, the official recovery scenario does not hold.

We are now in the position to describe what the 'spontaneous recovery' means, on realistic assumptions. Because of weaker aggregate demand, economy growth will be below trend. Our preliminary estimates are that the two-year average rate of growth at the end of this year will be around 2.5%, and about 2.2% at the end of 2004. The rate of unemployment may reach 6.5 – 6.8% (possibly lower in the event of rising proportions of discouraged workers). Apart from unemployment costs, sub-trend growth will take away part of the tax revenues that are currently projected. Adding this together by the same methodology proposed in previous CBO studies, the general government deficit will be in two years from now at about 7% of GDP. If the private sector balance stays around zero, the current account deficit will be, by accounting logic, about 7 % of GDP.

Another possibility is that the private sector approaches its historic norm, or even overshoots. Taking the middle view that the private sector balance stays at about 2.5% of GDP, the current account balance would be (barely) improving, but only because of a slow-down in the US. Under these circumstances, the world economy, so far reliant on the US as importer and demand driver of last resort, would be affected. This is shown in Chart 12.

Chart 12: Aggregate Demand in the U.S. Causing a Global Growth-Recession



Going by the assumption that the US current account deficit would flatten, or fall slightly, the impact on developing and emerging countries might be greater than what appears at first sight. For one thing, the forecast effective dollar devaluation of 5% per annum would not be uniform across the board. Given the reluctance to adjust exchange rates in Asia (and we do not have any reason to believe that it would change), the bigger chunk of the dollar devaluation will be against the Euro and other minor currencies. As to the latter, a 10% dollar devaluation per annum seems a conservative assumption. For another thing, a flat or slightly recovering current account balance in the U.S. would mean *lower* imports (in tandem with lower exports). Bearing this in mind, we anticipate that peripheral economies will notice the difference both in their export performance and, naturally, in their ability to hold reserves and service external debt.

Scenario 2: A lose-lose recovery

Our second scenario assumes that policy-makers, in the U.S. in particular, would try to avert the previous scenario as soon as its most painful characteristics become apparent²³. By then hardly anybody would be thinking of supply-side policies. Our assessment regarding the shortage of aggregate demand would prevail. Besides, the effectiveness of monetary relaxation in that juncture would be discredited. Furthermore, it would be self-evident that pulling the strings of a lending-led consumer expansion may be irresponsible. Thus, the likely policy reaction would aim at increases in net export demand²⁴.

We suppose that policy-makers and exporters would press for dollar devaluation. It is an open question whether there are effective ways to achieve a substantial depreciation. But let us assume that a devaluation actually takes place, in the range of 10-15% this year and likewise in 2004²⁵. The most recent devaluation of a similar magnitude took place in mid-1980s. In about three years the 'broad' dollar index depreciated by 35%, succeeding in improving the balance of payments by 2% after four years. Not coincidentally, the average, annualized rate of growth of the rest of the world (trade-weighted) was over 3% during that period. But the world we now face is less prone to react in a similar way. As of 2003Q1, our estimate of global growth rate yields about 1.75%. Besides, the balance of payments deficit of the US is at a record low, despite below-trend domestic economic growth. If recovery is to be achieved, the external deficit would rise sharply because of the large propensity to import. Similarly, in a recovery scenario interest rates would rise, and with it the external debt payments on the already large net liability position of the U.S. Putting all this together the proposed dollar devaluation may yield, at best, a slight recovery in the balance of payments of about 0.5% of GDP per annum, which would perhaps start to manifest at end-2004. In sum, the current account balance would continue to be a major drag on aggregate demand. I.e. a quick fix via devaluation alone seems impracticable.

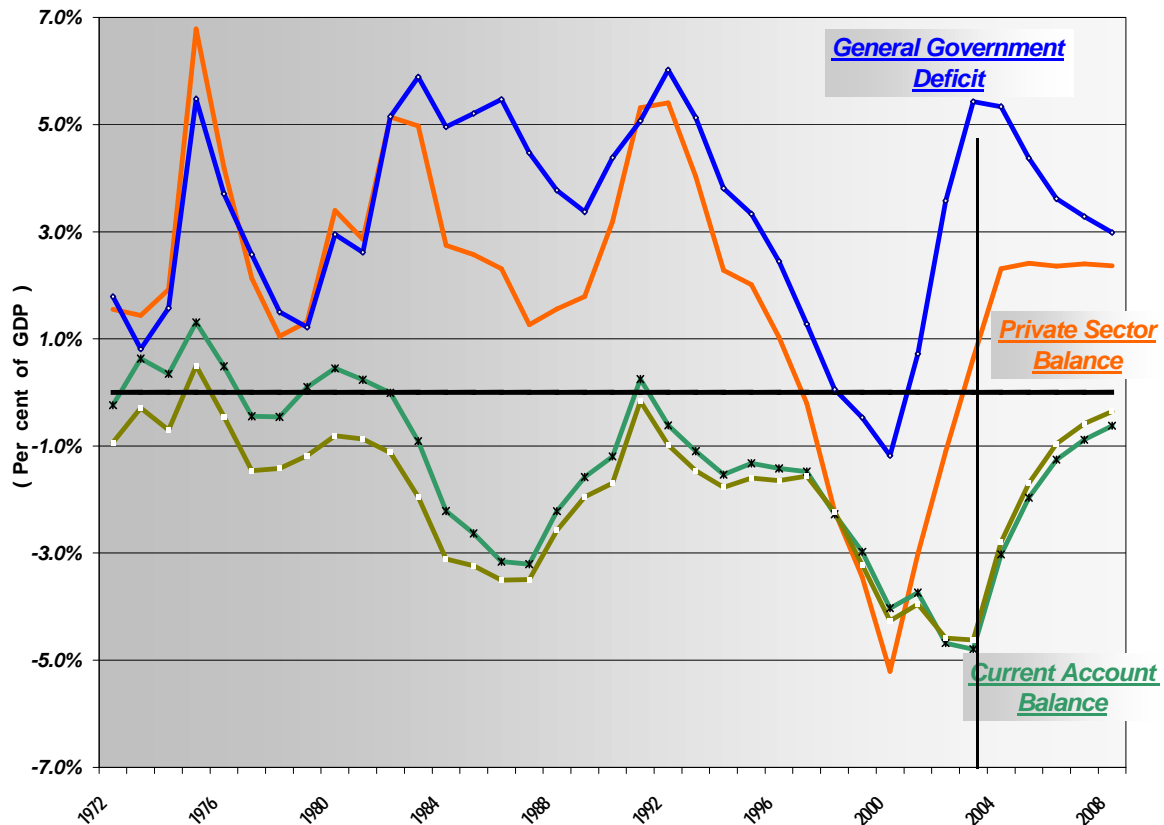
²³ Critical to the time horizon are the following issues. First, income tax-rebates are taking place, and it will be carefully scrutinized whether the extra income was spent. Second, NIPA two-year revisions are postponed from the summer to December. Since these revisions tend to be significant, it is to be seen to what extent worse or better macroeconomic indicators change the sentiment of 'the markets'. It is generally agreed that the stock market and the dollar are both overvalued; thus it will not take a lot for financial investors to react quickly when facing bad news. Finally, any reaction deemed necessary by policy-makers, or by their critics, would likely take place before November 2004.

²⁴ A deepening or advancement of tax-relaxation reforms could be contemplated, but the public sector deficit would be rising fast.

²⁵ These seem to be the figures currently in the public discussion, and we do not have any particular knowledge to question them. In any event, given the preferences expressed by central bankers in Asia, the likely dollar depreciation would be against currencies elsewhere.

Another way to curb the balance of payments deficit could be unilateral, selective import protection²⁶. In taking such path, protection would likely be deepened until securing a turn-around of the current account of the order of 1.5% of GDP this year and the next. This seems consistent with acceptable rates of growth, which in turn would help the fiscal balance to start moving slowly towards its norm. The configuration of aggregate demand, if this scenario persists, is shown in Chart 13.

Chart 13: Configuration of Aggregate Demand if Economic Growth Resumes



The first losers under such a scenario would be peripheral economies, mostly those specialized in exports of manufactures (the likely target for protection from a US perspective). These countries would initially absorb the assumed \$300-350 Bn. adjustment. But then, world income would be reduced. Likely, some countries would try to retaliate. At the end of the day, all would be losers. Such a model would not likely persist; or not without shaking the 'globalization' model, upon which the world economy and its institutions is built.

²⁶ Pursuing such an agenda may require a series of legal and diplomatic actions. Yet, these could be circumvented with relative ease, at least by the largest economy in the world. In particular, we do not have any reason to believe that the current administration will not try hard if a re-election is at stake. Such measures might be accompanied by dollar devaluation.

Scenario 3: A global reflation upswing

In this case we would reach a configuration of aggregate demand *for the US* very much alike that of the second scenario, by which economic growth is achieved by a restoration of external balance and public sector injections around the historic norm. The difference is what are the forces driving the macroeconomic adjustment. What is required is a globally co-ordinated fiscal and trade agenda, with the support of financial investors and international financial institutions. The underlying premises have been clearly advanced in a seminal study by Cripps and Godley (1978). To that effect, we suggest:

- ◆ Since the largest economies in the world are suffering from shortages of aggregate demand (the US, Japan, Euroland, the UK, Australia, Canada, etc.) a strategic solution depends on generating demand on sustainable basis.
- ◆ Peripheral countries suffer from lack of activity and unemployment, in large part because of import constraints. Granted alleviation of such constraints, they would increase their ability to satisfy both domestic and external demands. Their shortages of demand are in direct relation with the shortages of demand elsewhere. It is misleading to say that their structural problem is coming from the supply side.
- ◆ The public sector has a structural role to play in generating demand, worldwide, at the pace of long-term economic growth. Fiscal expansions are more easily tolerated in the largest economy of the world; but we do not see any reason why they should not be allowed elsewhere. Considerations about the sustainability of public sector debt matter²⁷, but at the crucial juncture the world economy is traversing, alternative financial schedules ought to be devised.
- ◆ External balances can be achieved at different levels of production and trade volume; the question is to create the financial and capacity conditions in order to assure that production in each country is consistent with full-employment.

We are aware that implementing such a congenial alternative requires a gigantic will from the part of policy-makers and market participants around the globe. Unfortunately, its relevance and fundamental necessity may not become forcefully apparent before the U.S. and the world economy have gone through the previously depicted scenarios to reach a realization in practice, of what we as macroeconomic forecasters are now anticipating.

²⁷ Martin (2002), Magnum et al (2003), Bibow (2003).

CONCLUSION

This study has undertaken the task of delineating what we take to be plausible scenarios for the world economy, based almost entirely on our strategic analysis of the U.S., given its importance as the largest economy in the world and effectively the 'importer of last resort'. In this context, the critical issue is the appraisal of the US balance of payments and its expected performance.

Many reviews of the US current account concentrate either on trade balances in terms of their impact on specific industries, or international flows in terms of their impact on domestic financial markets. While these are useful contributions, our view is that the behaviour of the US balance of payments cannot be analysed independently from the other two balances that comprise the circular flow of income and together generate the aggregate demand which determines the path of economic growth.

Looking at the US balance of payments from this perspective, we have identified that the strategic problem of the US economy, of which the current account is part, is a growing leak out of the circular flow of income on such a scale that we cannot envisage a simple solution. Such a prognosis is aggravated by the fact that most economies around the globe are underperforming, with their own prospects of recovery hinging on the expectation of a strong upturn in the US.

Failure to fully account for the likelihood that the US may not recover properly in the near future, or that it may be stalled in growth-recession, would likely make matters worse in the rest of the world, with perhaps also negative feedback in the US itself.

We are confident that policy makers and market participants around the globe would come together to an understanding that a co-ordinated solution worldwide must be found. We believe that such a solution requires the rehabilitation of fiscal policy worldwide to sustain the expansion of output, raise the volume of global trade and restore full employment across borders. It is our hope that the world comes to this realization before having traversed a long period of stagnation.

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