

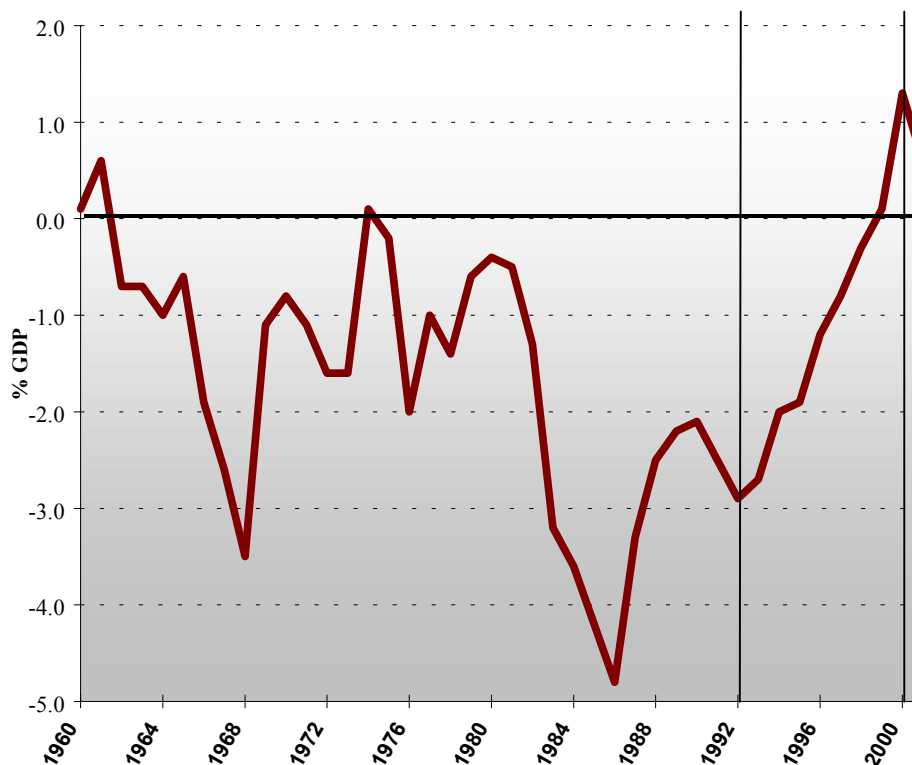
STRATEGIC PROSPECTS AND POLICIES FOR THE U.S. ECONOMY

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INTRODUCTION

During the last three or four years several papers published by the Levy Institute have argued that, notwithstanding the great achievements of the U.S. economy, the growth of aggregate demand was being structured in a way which would eventually prove unsustainable. Chart 1 shows figures describing the ‘structural’ (cyclically adjusted) budget balance, expressed as a percentage of GDP, which have just been published by the Congressional Budget Office (CBO).

Chart 1: Standardized-Budget Surplus as Per Cent of Potential GDP



Source: Congressional Budget Office (CBO), April 2002, pp.11-12

As the chart shows, there was a tightening of the fiscal stance during the main period of economic expansion, between 1992 and 2000, which was much greater than in any previous period during the last forty years. In 2000 there was structural budget surplus equal to 1.3 per cent of (trend) GDP –the most restrictive fiscal stance for at least forty years; the budget had never previously been in structural surplus to any significant extent.

While the fiscal stance was tightening through the period of expansion, there was also a progressive deterioration in net export demand, so that the current balance of payments was a record 4.5 per cent of GDP in deficit in 2000. It followed that the expansion of demand in aggregate had been driven by a similarly unprecedented expansion of private expenditure *relative to income*; and that this had perforce been financed by growing injections of net credit which was causing the indebtedness of the private sector¹ to escalate to unprecedented levels.

Official projections always showed that the fiscal stance was set to go on tightening through each ensuing ten year period; and there was no reason to suppose, if growth were maintained and the dollar remained strong, that the balance of trade would not continue to worsen. Therefore, we argued, sustained growth in the future depended critically on there being a continued expansion of private expenditure relative to income, implying ever greater injections of net lending, and an ever increasing burden of servicing the debts.

The conclusion we drew was that this process must come to an end at some stage, and that when it did the entire stance of fiscal policy would have to be changed –in an expansionary direction. Moreover, if economic growth were to be sustained indefinitely, there would have to be a recovery in net export demand since otherwise the U.S.'s net international investment position would eventually spin out of control.

It is worth recalling the conventional view which was held, almost universally, until about a year ago. The consensus view was that the U.S. had acquired a *New Economy* which was

¹ That is, the non-financial private sector.

immune to the business cycle and which, thanks to investment in new technology and labor market flexibility, had a much faster underlying growth rate than previously. So the good times were here to stay. But apart from faith in the New Economy, there was a widespread belief that the use of fiscal policy as a tool to manage the economy had been for ever discredited. Any attempt by governments to manage demand by fiscal measures would soon fail in its objective and do nothing but increase the rate of inflation. In particular, it would be counterproductive to attempt ‘fine tuning’, that is, to use fiscal policy to manage aggregate demand in the very short term. And underpinning all these views was the conviction that economies are self-righting organisms which governments will only mess up if they interfere.

But there has been a seismic shift during the last year. As to abolition of the business cycle, the latest figures show, in contrast with the consensus forecast at the end of 2000, that the GDP in the fourth quarter of 2001 was just 0.5 per cent higher than a year earlier. And, by the preliminary releases for the first quarter of 2002, GDP was 1.5 per cent higher than a year earlier. These are growth rates probably in the range of 3 to 1.5 percentage points (respectively) below that of productive potential. Unemployment rose 1.6 percentage points over the same period –by no means a record, but among the largest yearly increases during the post-war period.

But, in addition, there has been a large change in the stance of fiscal policy. In January 2001, the CBO was projecting budget surpluses of \$313 billion and \$359 billion for respectively 2002 and 2003. In March 2002, those figures had been revised to *deficits* of \$46 and \$40 billion –changes compared with what had been projected fifteen months previously which (using round numbers) totaled respectively \$360 and \$400 billion². Downward revisions to the CBO’s assumptions about economic growth appear to have reduced the

² And that is before including anything for the President’s Budgetary Proposals beyond what was in the Economic Stimulus Package enacted on March 9th.

surpluses originally forecasted by about \$100 billion in each year³, implying that there was a relaxation in the overall fiscal stance of, say, \$260 and \$300 billion in respectively 2002 and 2003 –that is, 2.5 - 3 per cent of GDP. This is an enormous change. True, the CBO's estimate of changes due to enacted legislation, \$142 billion in 2002 and \$204 billion in 2003, though very large, are rather lower than these figures, leaving around \$100 billion in each year to be explained by what they call 'technical' factors. Yet from the outside analyst's point of view, there is little if any difference between a change to a budget estimate which is the result of enacted legislation and a change which is the result of technical factors; either way the analyst must conclude that the government is now proposing to inject into the economy the sums of money currently estimated by the CBO. Whether the government has reached its fiscal stance on purpose or by default is beside the point.

We are not saying that these relaxations of fiscal policy should not have been made. On the contrary, the administration has swiftly moved in the right direction⁴ and also in accordance with our own recommendations. The substantial relaxation of fiscal policy should now be counted, along with the huge reduction of interest rates, as an important reason why the slowdown has been partially checked. Yet this does not appear to have entered the public discussion very effectively. The brevity and moderate scale of the recent recession has been put down, not to a change in fiscal policy, but to the fall in interest rates combined with the natural resilience of the New Economy. And if policy did have anything to do with the recovery, it was monetary not fiscal policy which did the trick.

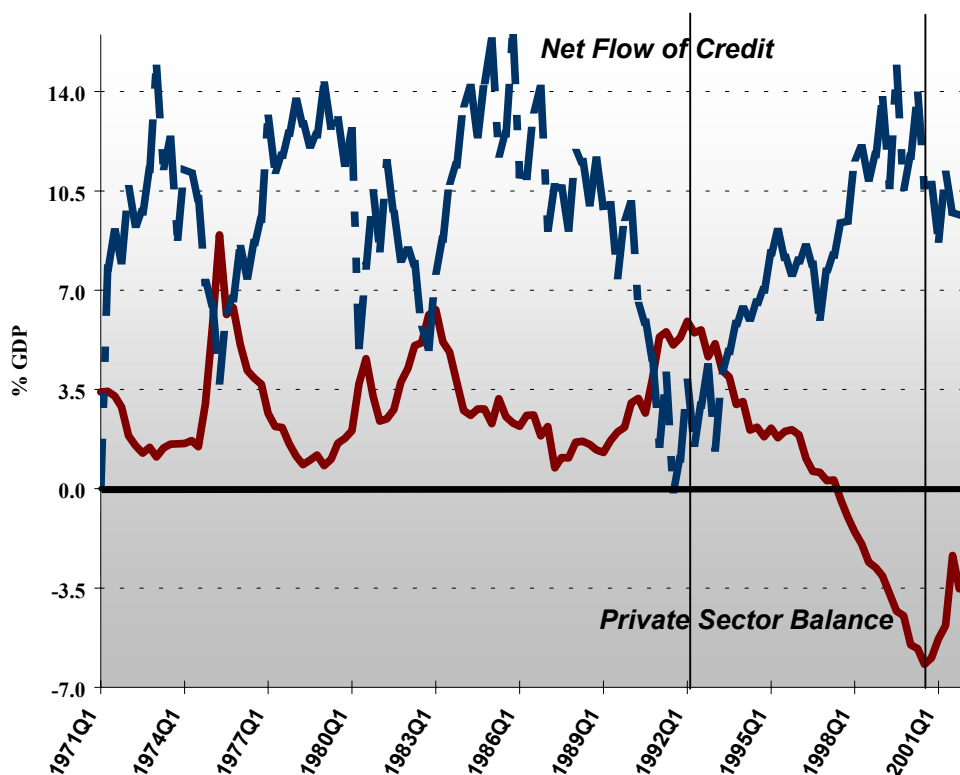
The sensible and pragmatic fiscal policy changes by the U.S. government stand in very sharp contrast to what has been happening in Europe, which was nearly treated to the rich spectacle of the German government receiving an official reprimand from the European Commission for failing to tighten fiscal policy at a time when unemployment was rising.

³ In its January 2002 report the CBO put changes due to economic assumptions at \$148 billion in 2002 and \$131 billion in 2003. But since then the CBO has revised its assumptions about GDP growth, raising the level by 1.2 per cent in 2002 and 0.4 per cent in 2003

A CLOSER LOOK AT RECENT DEVELOPMENTS

It was argued above that the growth of demand in aggregate between 1992 and 2000 could not have occurred unless there had been an unprecedented growth in private expenditure relative to income. The solid line in Chart 2 shows the private sector's financial balance, that is, the difference between total private disposable income and total private expenditure, over the last thirty years. During the main period of the recent expansion, between the second quarter of 1992 and the third quarter of 2000 (marked by vertical lines in the chart) the increase in private expenditure exceeded that of income by an amount equal to 12 per cent of GDP, driving the balance into substantial deficit. Nothing like that had ever happened before, at least during the last fifty years. The fall in this balance had, as its necessary counterpart, a rise in the net flow of credit to the private sector, which is shown by the broken line in Chart 2.

Chart 2: Non-financial Private Sector: Financial Balance and Net Flow of Credit



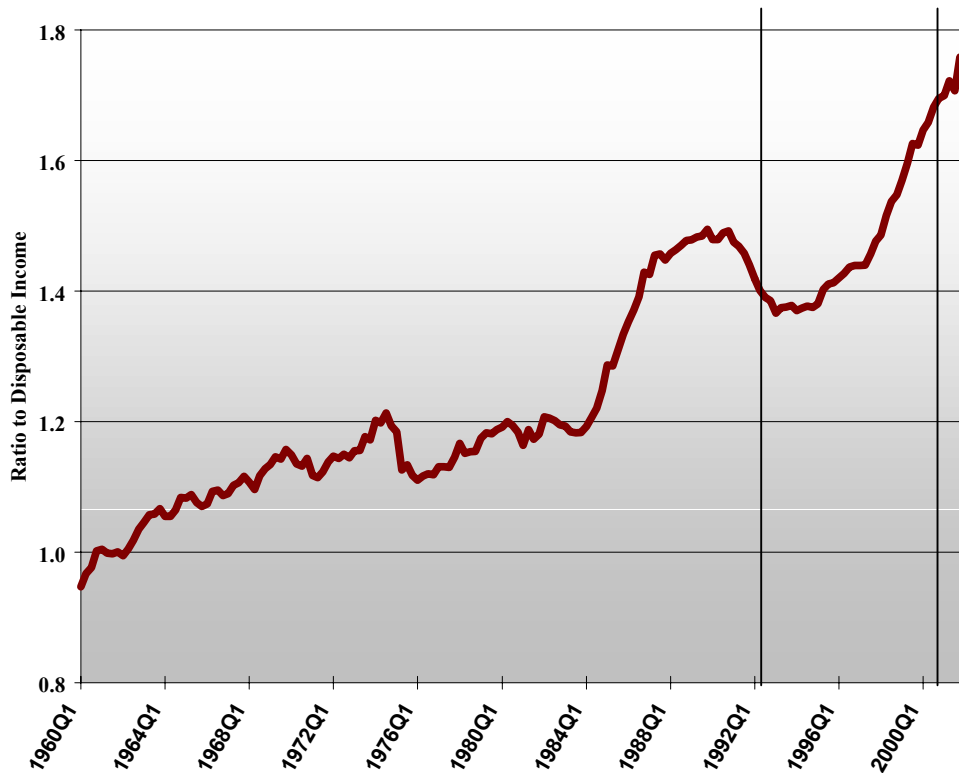
⁴

We only refer here to the scale of the changes, not to their composition.

Source: National Income and Production Accounts (NIPA); authors' calculations

The private deficit started to turn in the fourth quarter of 2000, that is, expenditure started to fall relative to income and it was this which was responsible for the slowdown. The slowdown, which as the chart shows was associated with a fall in expenditure relative to income, is a preliminary and partial vindication of the position we have been advocating for some time.

Chart 3: Private Debt Stock Relative to Disposable Income



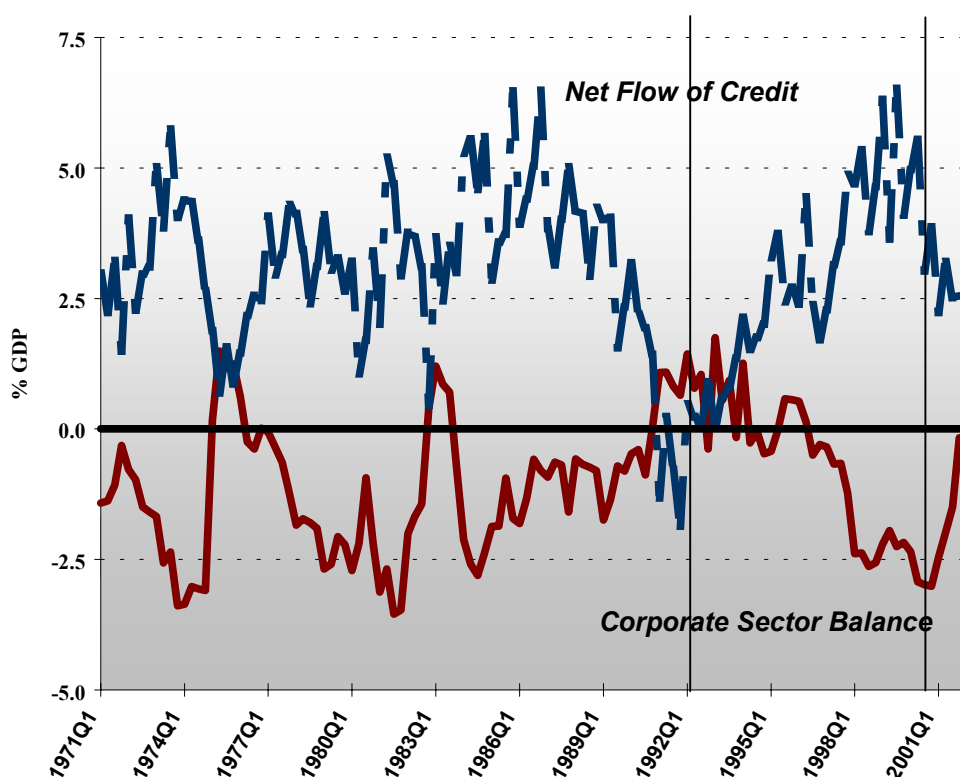
Source: NIPA and Flow-of-Funds; authors' calculations

But although the private balance started to revert, it did remain in deficit through 2001, and the net flow of credit continued at a rate far in excess of the growth of income. So, as Chart 3 shows, there was a continued rapid growth in the level of debt relative to income which continued through the whole of last year⁵.

⁵ There was a growth blip in the third quarter of 2001 because of the one-time tax rebate, which temporarily raised disposable income relative to expenditure.

It is instructive to split the overall private financial balance into its two major components—the corporate and personal sectors. The solid line in Chart 4 shows the financial balance of the corporate sector which, unsurprisingly, is normally in deficit because investment is partly financed by externally generated funds. During most of the expansion, between 1992 and the first half of 2000, there was an increase in this deficit, but no more than during previous periods of expansion. The reversion towards zero in the second half of last year was the counterpart of the sharp fall in fixed investment and inventory accumulation. However, as the broken line in Chart 4 shows, the flow of net lending to the corporate sector continued at a relatively high level in part because corporations were still net purchasers of equity.

Chart 4: Corporate Sector: Financial Balance and Net Flow of Credit



Source: NIPA; authors' calculations

So notwithstanding the sharp fall in investment, the level of corporate debt continued to rise rapidly through the year, reaching new records all the time. Chart 5 shows how corporate debt reached 8.5 times the flow of undistributed profits (gross of capital consumption) at the end of last year. Admittedly this ratio is swollen because profits had fallen a lot—but anyway

of scaling the debt (for instance by expressing it as a share of GDP) would tell the same story.

Chart 5: Corporate Debt Relative to Corporate Cash-flow Income



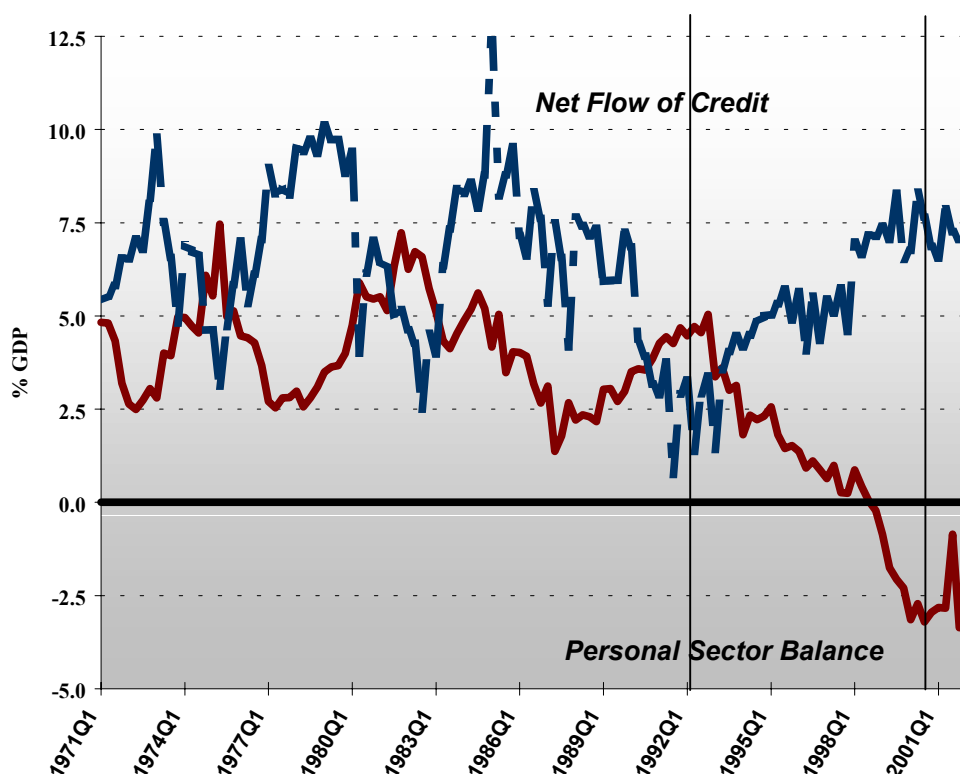
Source: NIPA and Flow-of-Funds; authors' calculations

It is, however, the behavior of personal sector which has been, and which remains, truly exceptional. The solid line in Chart 6 shows how personal expenditure (consumption and investment combined) rose relative to income throughout the main period of expansion. Since the third quarter of 2000, the growth of household expenditure has decelerated considerably, from about 5 per cent per annum to about 3 per cent; yet it continued to grow faster than income (once again, ignoring the third quarter blip). So although the economy slowed down, the personal sector's deficit⁶ went on increasing. The broken line in Chart 6 shows how the

⁶ The concept of 'financial balance' is used in preference to the usual 'personal saving' because it includes capital consumption among receipts and investment among outlays. A financial deficit thus measures the extent to which the sector must be borrowing. The figures illustrated here have been derived, at the suggestion of Bill Martin of Phillips and Drew, as the difference between lines 10 and 12 in Table 100 of the Flow of Funds *plus* half the residual error (a negative number) in the NIPA.

net flow of credit to the personal sector increased steadily until the third quarter of 2000. And since then, although the growth of expenditure slowed down, the fact that it continued to exceed income meant that there was a continued injection of credit on a scale which supplemented income to the tune of about 10 per cent⁷. Doubtless it was the huge reduction in interest rates which caused, or at least facilitated, the credit-financed growth in consumption.

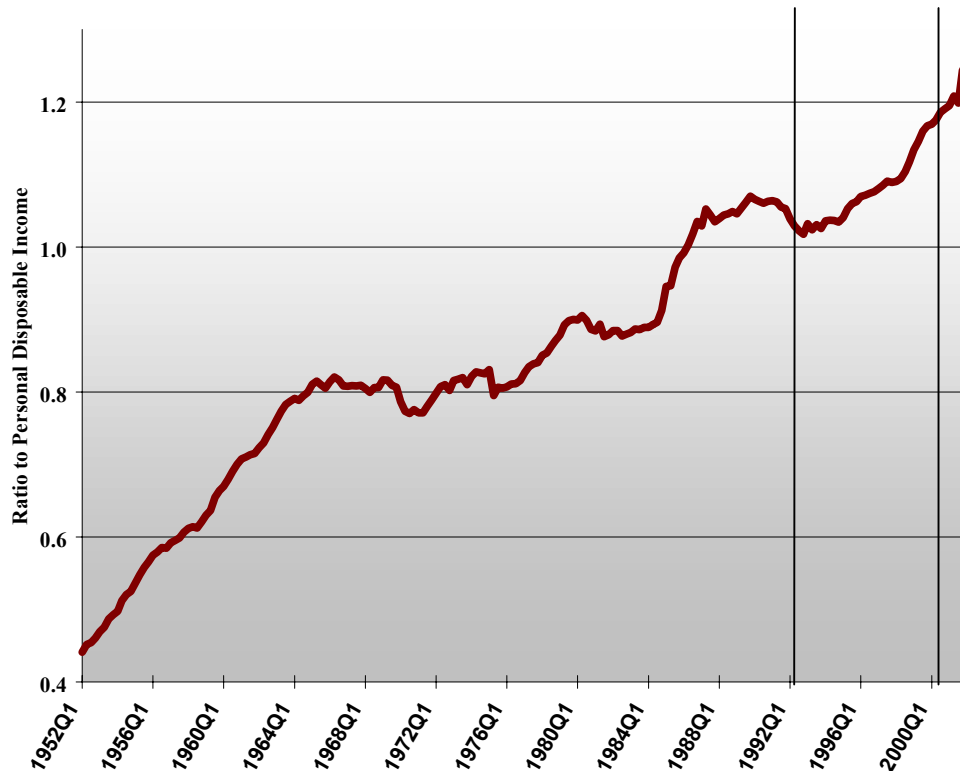
Chart 6: Personal Sector: Financial Balance and Net Flow of Credit



Source: NIPA; authors' calculations

The fact remains that as the flow of net lending was about double the growth of income during 2001, the ratio of personal debt to income, shown in Chart 7, had risen to another record by the end of the year.

⁷ The chart shows flows as a percentage of GDP (rather than personal income) for easy comparison with other charts.

Chart 7: Personal Debt Relative to Personal Disposable Income

Source: NIPA and Flow-of-Funds; authors' calculations

SOME STRATEGIC SCENARIOS

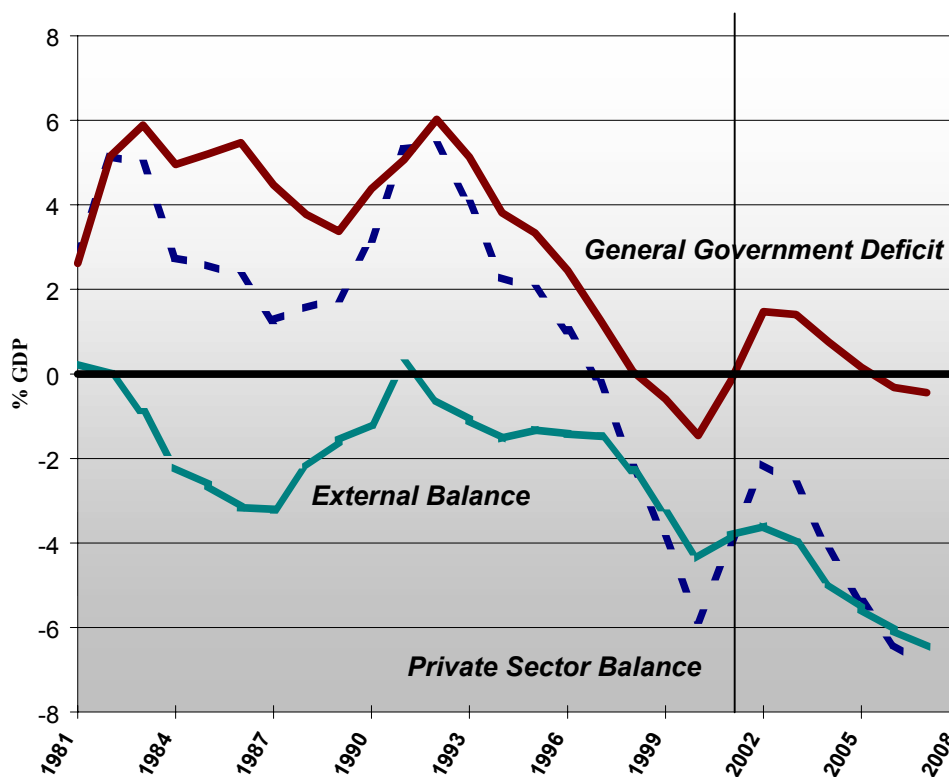
The following sections bring up to date the analysis which we have presented at many previous Minsky conferences. As usual we begin by constructing a 'base run' *Scenario* based on the CBO's projections through the next five years. In order to derive their estimates of the Federal Budget in future years, the CBO made the assumption, which is not a forecast, that GDP will grow from now on a rate fast enough to keep unemployment at its present level; more precisely they projected a growth rate of 1.7 per cent between 2001 and 2002 followed by average growth at 3 per cent per annum during the subsequent five years. The CBO also assumed that inflation, measured by the GDP deflator, stays put at 2 per cent per annum. Our task in this section is to infer what has to be assumed about the rest of the economy if the CBO's economic assumptions are to be validated.

The immediately following section is divided into three parts dealing with, respectively, the budget, the balance of payments and private expenditure relative to income.

The Budget

Chart 8 below illustrates, with the solid line, the future course of the general government’s budget⁸ deficit expressed as a proportion of GDP, as projected by the CBO. As the chart shows, the general government’s budget is now set to move from a small surplus in 2001 back into deficit this year and next. This is the relaxation of fiscal stance currently under way, which has undoubtedly helped to keep the US recession at bay. The *federal* budget is set, under existing policies, to achieve a surplus again in 2004 which rises to \$185 billion in 2007 and grows further in subsequent years. The general government budget, shown in Chart 8, improves from 2002 onwards but only re-attains surplus in 2006.

Chart 8: Balances of Main Sectors: Historic & Simulated According CBO’s Assumptions



Source: NIPA, CBO, authors’ model results

The Balance of Payments

The dashed line in Chart 8 shows our conditional forecast of the current balance of payments, on CBO’s assumptions about growth and inflation, together with the assumption

⁸ The CBO’s projection was adapted, using a scaling factor derived from the past relationship (which has been pretty stable) between the Federal Budget and the surplus or deficit of the general government.

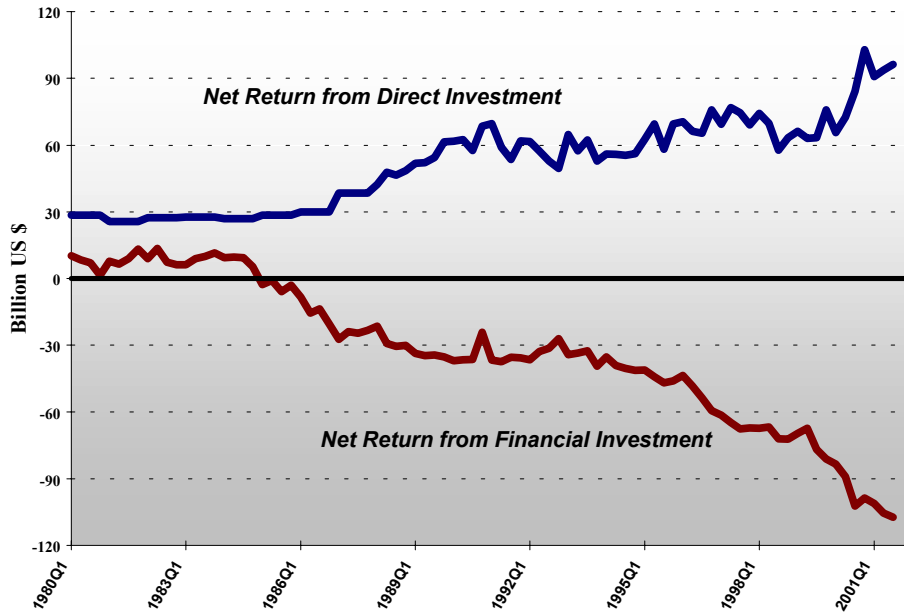
that the dollar rate of exchange remains at its present level. We cannot justify these balance of payments projections at all scientifically, largely because recent figures both for exports and for imports are so far below what past experience would lead us to expect and we do not at present know how to interpret this. Yet it does seem uncontroversial to suppose, should output really grow fully as fast as productive potential from now on, and assuming that the rest of the world continues to be mired in relative stagnation, that the trade deficit will indeed resume its deteriorating path after the brief improvement which the slow-down has generated.

There are two reasons for supposing that, conditional on the assumptions being made, the current balance of payments could turn out to be even worse than our projection shows. The first question mark arises because it seems possible, at least, that the recent fall in imports is partly the consequence of extremely large negative inventory accumulation in the second half of last year; for there is a general presumption that the import content of inventory accumulation is considerably higher than that of final sales. If it turned out that the fall in imports had indeed been caused, to a significant extent, by negative inventory accumulation, we could well see a mighty surge in imports when inventories turn round—as they are bound to do at some stage. The jump in imports in February reported last week, though ‘only one month’s figures’ is consistent with this interpretation.

A second puzzle concerns the future of net investment income, which has remained obstinately positive, though very small, although the net foreign asset position of the U.S. has deteriorated steadily, reaching some \$2.2 trillion (about 22 per cent of GDP) in the middle of last year. This is a phenomenon which raises a fundamentally important question, for the ultimate constraint on the extent to which any country can run a deficit in its external balance resides in the fact that, if the net foreign asset position continues to deteriorate, net interest payments must eventually accelerate out of hand. Yet so far from accelerating, net interest payments by the U.S. have remained obstinately close to zero.

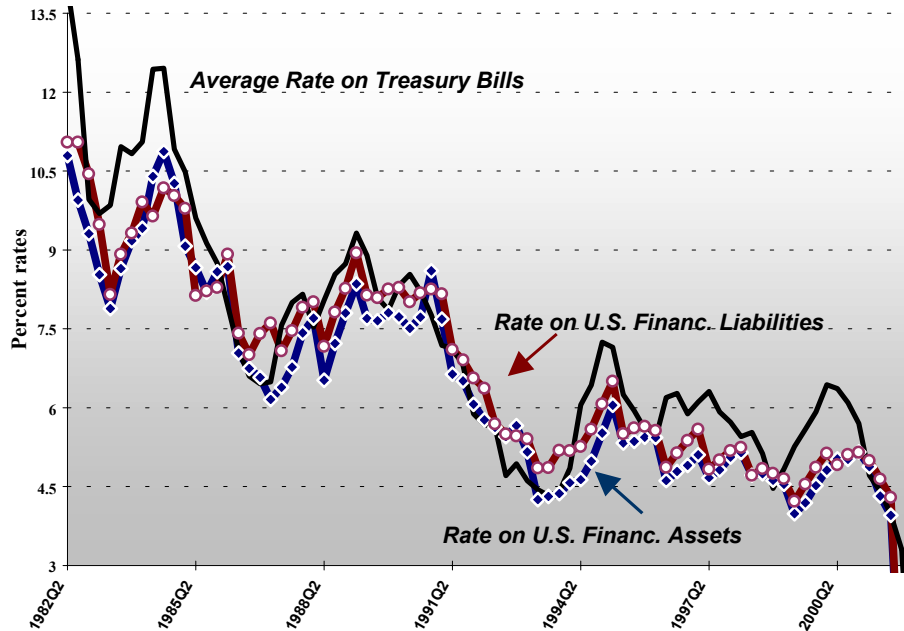
Some light is shed on this phenomenon if the aggregate figures are broken down into net income from net foreign direct investment on the one hand and net income arising from financial assets—mainly equities and paper issued both by governments and by corporations.

Chart 9: Net Return from Direct and Financial Investment of the U.S.



Source: Survey of Current Business (BEA); authors' calculation.

Chart 10: Rates of Return on Financial Investment Compared with Treasury Rates



Source: Federal Reserve, BEA, authors' calculation.

As Chart 9 shows, there has been a growing deficit in net payments across the exchanges on financial assets, but this has been almost exactly offset by an increase in net receipts from direct investment. Net payments on financial assets have behaved in a rather orderly way. If

the net flow is broken down into receipts on assets and payments on liabilities, and if each series is then expressed as a (messy) average rate of ‘interest’ on the relevant asset and liability stocks, it turns out, as Chart 10 shows, that each very roughly tracks the average of long term Treasury bill rates.

But no such coherence attends the figure for income from direct investment. The net stock of direct investment has been falling rather than growing and, measured at market prices, has actually been negative during the last three years. But for reasons which have never been satisfactorily explained, the rate of return to U.S. investors from their foreign direct investments remains obstinately –indeed increasingly– higher than the return to foreigners of making direct investments in the U.S.

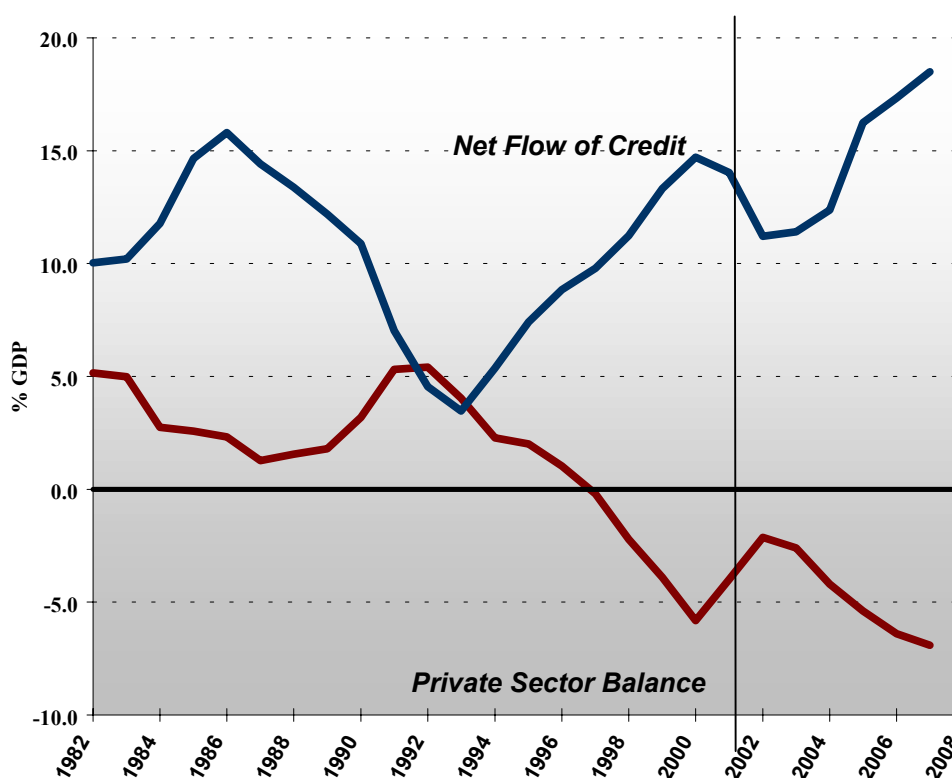
The difficulty of interpreting data relating to all these property income flows is compounded by the fact that the income derived from financial investments, which are straightforward payments across the exchanges, are not *in pari materia* with income from direct investments, which measure the profits earned abroad whether they are distributed or not. Accordingly, income from direct investments do not, for the most part, describe transactions at all and may contribute little to the financing of the current account deficit.

In constructing the medium term simulation illustrated in Chart 8, we have so far assumed that the total net flow of income from all kinds of foreign investment remains close to zero, although the growing deficit in the current balance of payments implies that the negative net asset position doubles, from \$2.2 trillion to about \$4 trillion in 2007. But in reality the net outflow generated by financial assets could easily overtake the ‘inflow’ generated by direct investments. And it is at least arguable that income from direct investments, since it largely consists of undistributed profits, should be altogether ignored when considering whether or not a deficit can be financed. In sum, given our projected trade deficit, it is possible that a net outflow of investment income will add \$100-200 billion per annum to the balance of payments deficit compared with that shown in the ‘base run’ of Chart 8.

Private Income and Expenditure

Given the CBO's assumptions about growth and inflation, together with their projections of the federal budget, and given also our projection of the balance of payments, it follows by accounting logic that the private sector's deficit⁹, having fallen since the end of 2000, would have to start increasing once again, as depicted in Chart 8. Having reverted part of the way back towards its normal state of surplus during 2001, the growth of total private expenditure relative to disposable income would once again have to become the motor for expansion over the next five years. A growing excess of income over expenditure requires a growing flow of net lending relative to income.

Chart 11: Private Balance & Flow of Credit as Implied by CBO's Projections



Source: NIPA, CBO, authors' model results

Chart 11 reproduces, from Chart 8, the necessary course of the private deficit if the CBO's projections are to be validated, alongside our own estimates of the flow of net lending which might then be required. And Chart 12 shows that the level of private indebtedness

⁹ The private financial balance expressed as a *surplus* is, of course, equal by definition to the government *deficit* plus the balance of balance of payments *surplus*.

implied by those net lending figures would be more than twice the level of disposable income in 2007.

Chart 12: Private Debt Relative to Income as Implied by CBO's Projections



Source: NIPA, CBO, authors' model results

The projected flows of net lending and the stocks of debt shown in Charts 11 and 12 have been generated by a careful analysis of the past relationship between expenditure on the one hand and, on the other, disposable income, net lending and asset prices (houses as well as equities)¹⁰. Nobody knows better than ourselves how inaccurate these projections are likely to prove. Yet growth in output fast enough to keep unemployment constant, particularly when combined with a deteriorating balance of payments, could only be achieved if private expenditure were once again to rise continuously faster than income; and this would indeed require a resumption in the growth of net lending and the level of indebtedness. We are bound

¹⁰ For details see 'Seven Unsustainable Processes' by Wynne Godley, published by the Levy Institute in July 1999.

to conclude that our ‘base run’ tells a most implausible tale; existing household and corporate debt levels are already widely cited as a cause for concern. At the very least this base run forms an unwise and unsound basis for strategic thinking and fiscal planning.

CONTROVERSY

So far as we know, the main points which are habitually made by critics of the story we are telling are:

a) The burden on the personal sector of interest payments and repayments of debt, estimated by the Fed at 14.3 per cent of disposable income in the final quarter of 2001, is not particularly high.

b) It is inconsistent to count taxes on capital gains as a deduction from income without treating realizations of capital gains as part of income.

c) The recorded increase in personal indebtedness is of little consequence because it is usually, or often, a simple consequence of the fact that people use credit cards as a means of payment, paying off their liabilities at the end of each month.

d) The balance sheet of the personal sector taken as a whole remains very satisfactory, with assets far in excess of liabilities.

Taking these points in order:

a) At first glance the Fed’s estimate of the burden of personal debt service may not look very high, although it is nearly at a record level –almost back to the previous peak just before the last credit crunch in the late eighties. However, the Fed’s figures may be seriously misleading if judged as levels rather than changes. This is because there is a large discrepancy between the coverage of the numerator and denominator of the relevant fraction. The numerator refers only to servicing obligations generated by *household* mortgages and consumer credit, whereas the denominator, that is, *personal* disposable income, includes non-

profit organizations (churches, educational facilities etc.) and the entire *non-corporate business* sector. It is far from obvious how to correct for this difference of coverage, particularly because no figures seem to exist for *household* as opposed to *personal* income. What can easily be ascertained is that personal sector debt is 36 per cent higher than the household debt which the Fed uses in its calculation. A *pro rata* correction would raise the burden from 14.3 per cent to about 20 per cent –by any standard a ‘large’ figure.

In any case, as will be re-emphasized below, the point is not whether the existing burden is high but rather whether it can go on rising indefinitely. It may further be pointed out that the recorded burden has so far risen relatively slowly because of the fall in interest rates. As rates cannot fall much further, the rise in this ratio from now on is likely to track that of debt, while if interest rates rise the increase in the burden would accelerate.

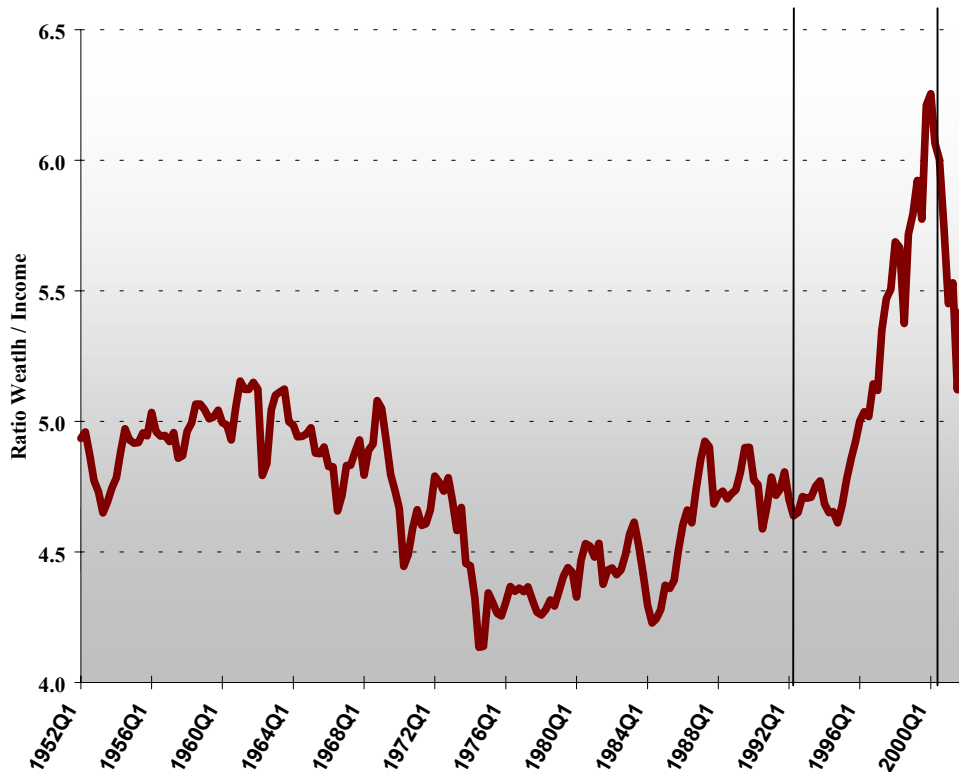
b) The argument that *realized* capital gains should be counted as part of income –if we have stated it correctly– seems to be definitely incorrect. Compare two people who have equivalent conventional income, wealth, accumulated capital gains and spending intentions. One of them realizes capital gains to pay for expenditure in excess of income, the other borrows. At the end of the day on which the funds needed for spending are obtained, there is no difference whatever between the two transactors with respect to their net wealth. True, the realizing agent now has a liability to pay capital gains tax but that is not, on the day in question, different from the contingent liability for capital gains tax of the agent who borrows. The difference between the two agents resides solely in the structure, as opposed to the level, of their net wealth; all that has happened is that they have made different wealth allocation decisions and in no relevant sense is either the income or the net wealth of one higher than that of the other. Of course, if stock prices subsequently go up, the net wealth of the borrowing agent will improve relatively; if they fall, the realizing agent will be relatively wealthier. But that is part of a quite different story.

c) Ignoring the use of credit cards as a means of payment in the calculation of debt would not imply a significant difference to the growth of personal debt in total. Consumer credit accounted, during 2001, for circa 17 per cent of total borrowing by the personal sector.

Besides a high proportion of consumer credit must be accounted for by cars and consumer durables

d) Regarding the last point, i.e. the high level of net wealth relative to income, it should first be noted that although the collective balance sheet of the household sector was still in a healthy state at the end of 2001, it was very much less healthy than two years previously.

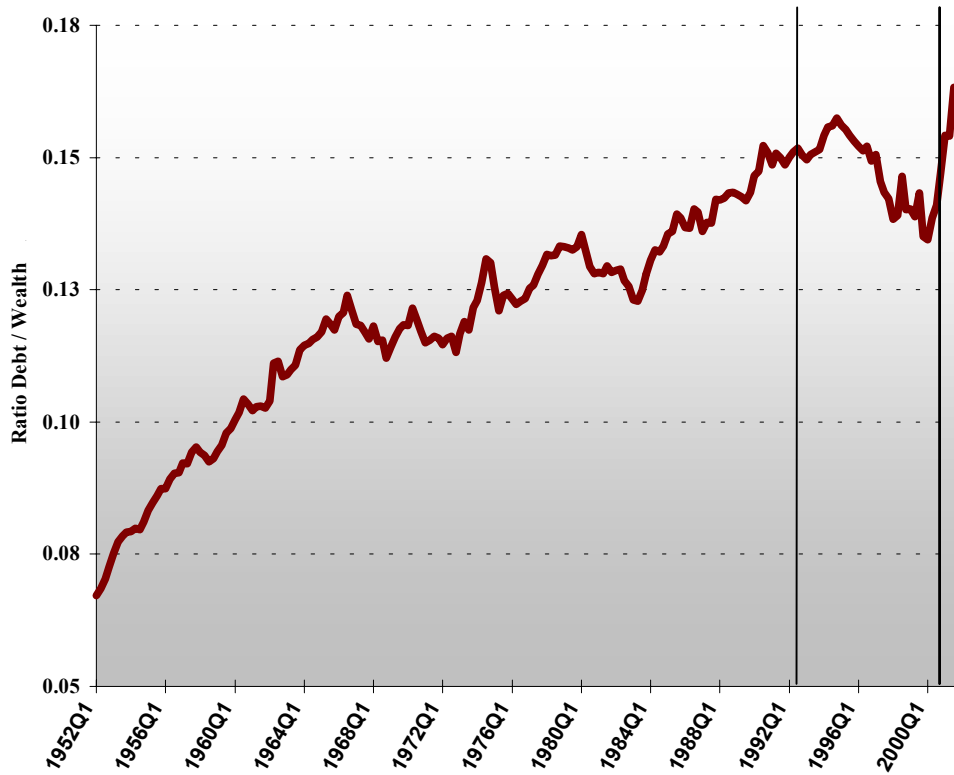
Chart 13: Household Net Worth Relative to Personal Disposable Income



Source: NIPA & Flow-of-Funds, authors' calculation.

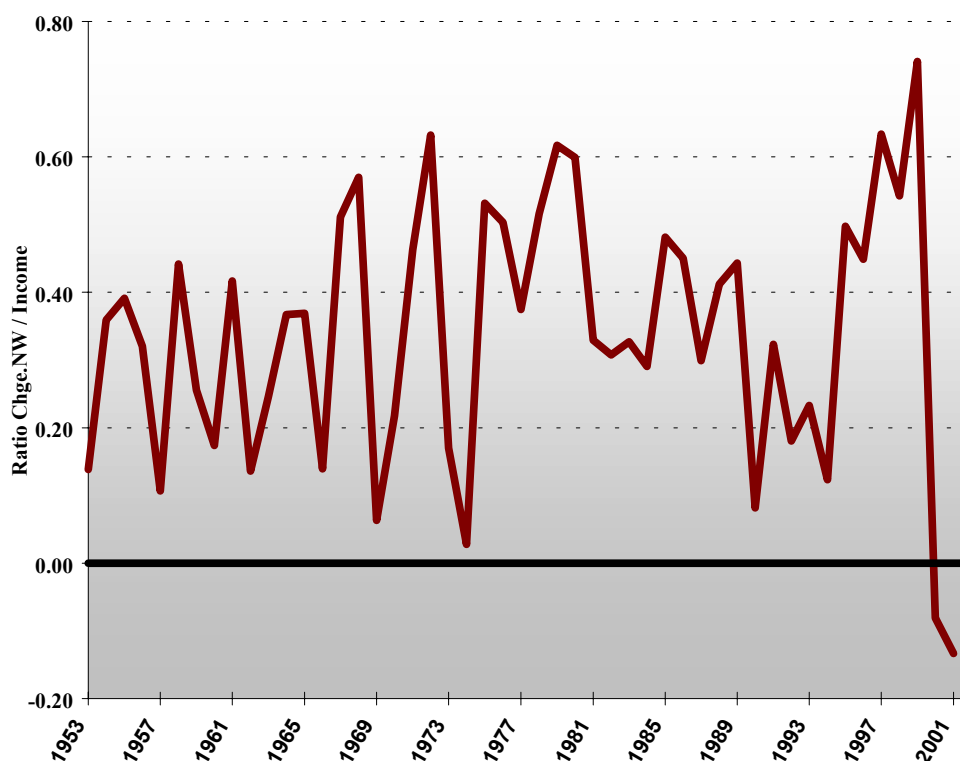
Chart 13 shows the net worth of households divided by personal disposable income. This ratio rose in a spectacular way in the late nineties, but since the end of 1999 wealth has fallen absolutely while incomes have continued to rise rapidly. So the wealth to income ratio has fallen back half of the way to what had previously been normal. A comparable story is told in Chart 14, which shows household debt as a share of household wealth¹¹.

¹¹ That is, net wealth of households as recorded in the Flow of Funds gross of household debt.

Chart 14: Household Debt Relative to Household Wealth

Source: Flow-of-Funds, authors' calculation.

There was a very sharp fall in the nineties as wealth rose much more than debt. But this has gone sharply into reverse during the last two years. Debt continued to rise rapidly while wealth fell –so the ratio rose rapidly, reaching record levels in the second half of 2001. It is worth mentioning finally that, as shown in Chart 15, the change in households' net worth, which some people prefer to the conventional measure of saving, has been negative since the end of 1999.

Chart 15: Change of Household Net Worth Relative to Personal Disposable Income

Source: Flow-of-Funds; authors' calculation.

Yet even if household balance sheets had not worsened dramatically during the last two years and even if the servicing burden were only 14.3 per cent of income, these arguments would not answer the central point which we have been making. We have at no stage argued that the *present* situation is necessarily unsustainable, although a very high level of indebtedness must make both households and businesses vulnerable to a fall in asset prices or incomes or to a rise in interest rates –the assets could lose half their value in an afternoon, yet the debts would remain. Our central contention, however, has always been a different one – that the *growth* of net lending (and of expenditure relative to income) which drove the economy between 1992 and 2000 cannot continue to fuel the *growth* of aggregate demand indefinitely in the future. In other words, while it is not impossible that the present *level* of debt may be OK, the flow of credit cannot be an abiding engine of growth. Eventually the cost of debt service must get to the point where, if there are to be sufficient funds to pay for expenditure in excess of income and also for debt service, recourse must be had to realization

of assets. But while in normal times individuals can realize capital assets on any scale they wish, the same thing is not true for the personal sector taken as a whole. Sales by any whole sector can only take place to the extent that there are purchases by whole other sectors. It is not conceivable that the growth of personal consumption could be long financed by growing net purchases by the corporate sector or by foreigners. The personal sector as a whole cannot realize assets on a large, let alone growing, scale and any attempt to do so would cause a crash, eliminating the gains which people were trying to realize.

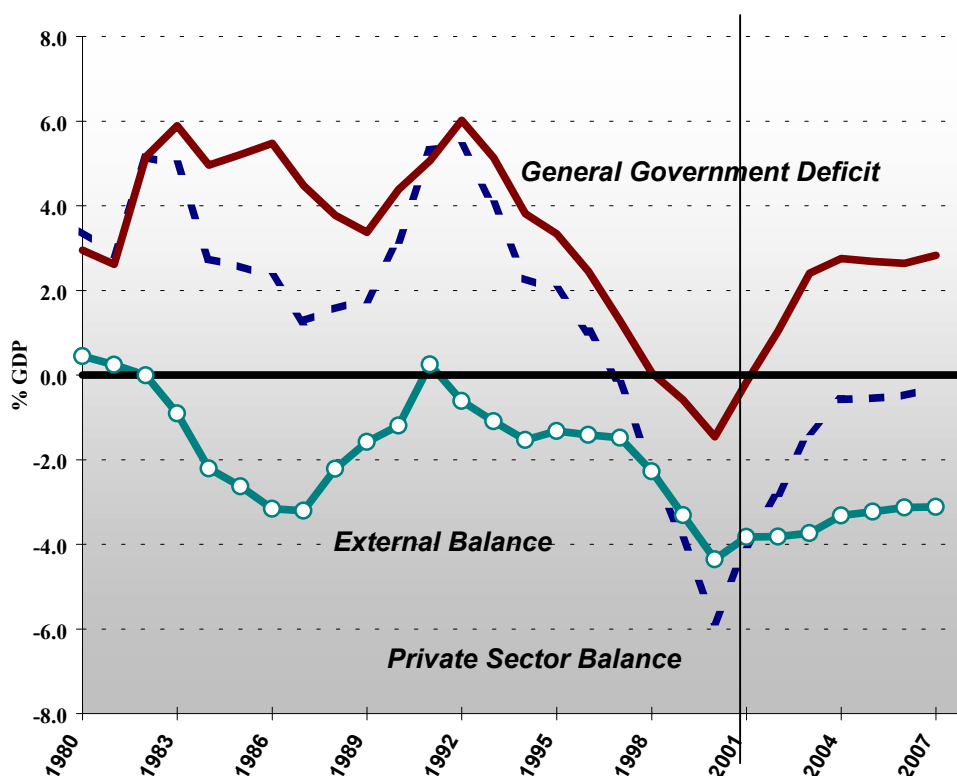
THREE STRATEGIC SCENARIOS

In conclusion we present three projections of the U.S. economy between now and 2007. These projections are not forecasts in the ordinary sense, most particularly they are not short term forecasts, although care has been exercised to ensure that they are consistent with recent developments and with the raft of indicators currently available; nor is there any pretense that our figures characterize future developments on a year by year basis. Our purpose in making these strictly conditional projections is to make a broad characterization of the major strategic problems which are likely to arise over the next five years; and to consider alternative strategies for dealing with them.

SCENARIO 1

We first retain all the assumptions about the fiscal stance made by the CBO. together with the assumptions about net export demand which we used to construct the ‘base run’ illustrated in Chart 8. *Scenario 1* differs from the base run in that it makes what we believe to be more realistic assumptions about the private sector’s indebtedness and the way in which its financial balance—the gap between income and expenditure—develops. Specifically we have assumed that the flow of net lending falls away during the next few years, causing the rise in indebtedness to taper off. The counterpart of such a fall in net lending would probably be a reduction in the private sector’s deficit (that is, a fall in expenditure relative to income), on a scale such as that illustrated in Chart 16 below, which shows a reversion almost to zero.

Chart 16: Balances of Main Sectors: Simulated on Plausible Assumptions



Source: NIPA, authors' model results.

The counterpart of such a fall in private expenditure relative to income would be to greatly reduce the annual average growth rate of GDP between now and 2007. The CBO assumed an average growth of 3 per cent; the simulation illustrated in Chart 16 implies an average growth rate of 1-1.5 per cent. This would at best be a 'growth recession' for at this rate there would, by 2007, be a cumulative shortfall of GDP of more than 7 per cent compared with the base run, with unemployment rising to nearly 8 per cent. So far from moving into surplus, the general government would have a deficit equal to at least 2.5 per cent of GDP at the end of the period. The CBO's projection shows a Federal Budget *surplus* equal to 1.5 per cent of GDP; according to our *Scenario 1* this would become a *deficit* of 1.5 per cent.

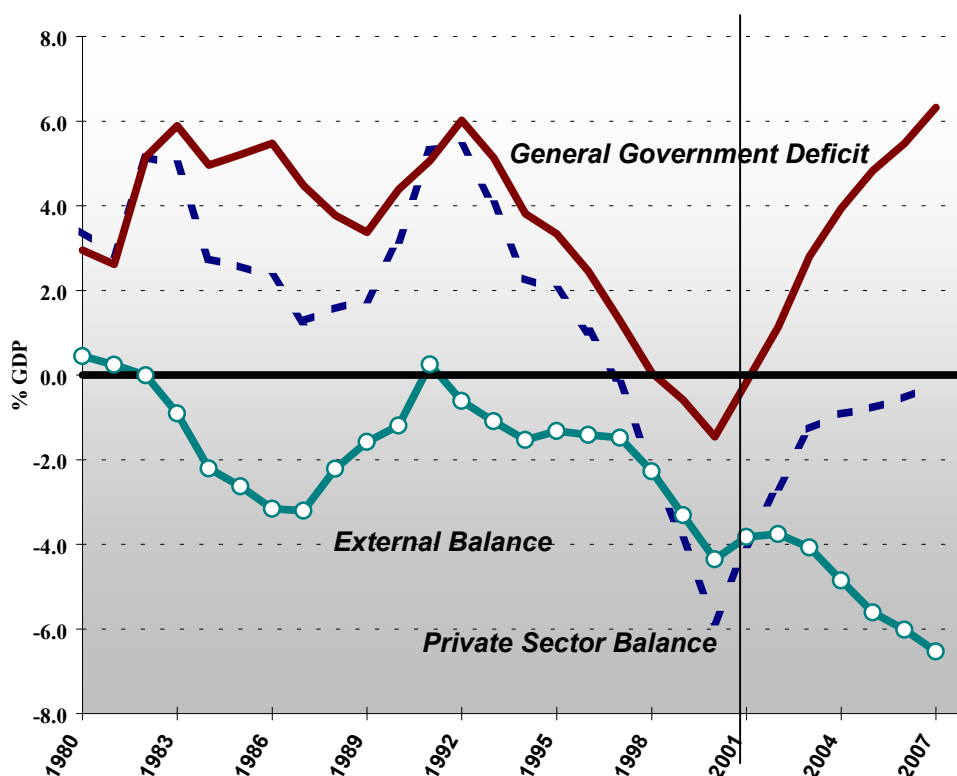
Things could turn out far worse than has been assumed in *Scenario 1*, always given that the fiscal stance does not change again. There has never, at least in the post-war period, been

a period when the private sector was in deficit at all for any length of time, as we have assumed here. And on the few occasions when the private sectors of other countries have fallen into deficit on a scale like that which has occurred recently in the U.S. (e.g. in the UK and Scandinavia just over ten years ago) there was eventually a brisk reversion to surplus, which overshoot what had previously been normal, in each case generating large and intractable recessions. In constructing these projections we assumed that equity and house prices would continue to rise moderately. But it is quite possible, given the other assumptions that we have made, that there will at some stage be another break in the stock market which would probably make matters very much worse, perhaps causing an outright recession at some stage.

SCENARIO 2

Seeing the ease with which the fiscal stance has been transformed since the beginning of last year, it is virtually inconceivable that things could turn out as depicted in *Scenario 1* and Chart 16. If the fiscal stance can change once by \$250 billion per annum with few people even noticing, it can do so again. In *Scenario 2* we superimpose a fiscal relaxation on *Scenario 1* such as to raise the growth of GDP back to that assumed by the CBO, that is, to about 3 per cent per annum, implying no significant change in unemployment. Chart 17 illustrates a possible outcome for the three financial balances under this assumption.

The main points to be made about this *Scenario* are, first, the relaxation in the fiscal stance (compared with what is now projected by the CBO) would have to be extremely large. At a minimum, all of the relaxation which is supposed to occur this next year and next (\$250-300 billion in each year) which is at present due to be recouped in the following years would have to be reinstated. But if the private sector's financial deficit were to go on falling, as we have assumed, a far larger –and growing– relaxation would become necessary. By our reckoning, there would have to be a fiscal stimulus which would rise to about \$600 billion per annum (at 1996 prices) by 2007. The general government deficit might have to rise to six per cent of GDP and the Federal deficit to perhaps five per cent.

Chart 17: Balances of Main Sectors when Growth is Achieved by Fiscal Expansion Alone

Source: NIPA, authors' model results

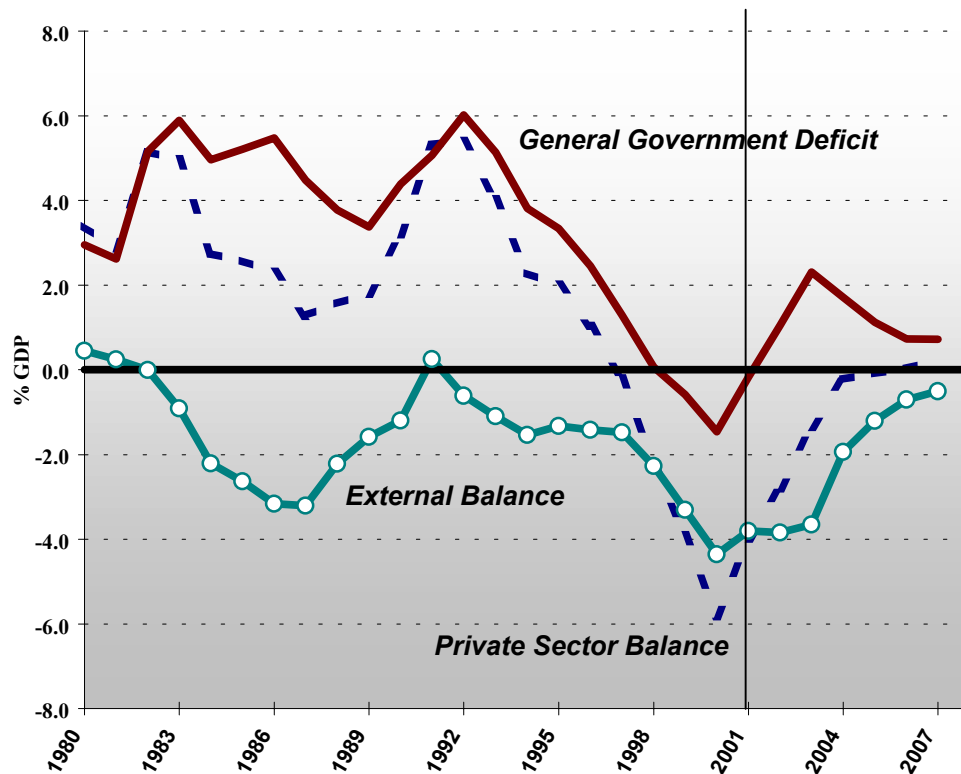
In *Scenario 2* we ignore the difficulty of matching, on a year-by-year basis, the relative decline in private spending with the postulated fiscal expansion. In practice it is most unlikely that the two divergent processes could be so nicely matched throughout the period. In particular, should a break in the stock market cause a sudden collapse in private demand, it might be impossible to intervene effectively by changing fiscal policy. And with interest rates so low, it might also be difficult to check a major downturn with easier monetary policy.

The second important feature of *Scenario 2* is that the balance of payments resumes its deterioration in exactly the same way as it did in the 'base run' illustrated in Chart 8. In the absence of new corrective measures, the external deficit would surely overtake the previous record, reaching perhaps 6 per cent of GDP, with no hint of recovery in sight. And this is a story of 'twin deficits' with a vengeance; for with the private balance close to zero and the external deficit about 6 per cent, the government deficit must (be found to be) about 6 per cent of GDP as well.

SCENARIO 3

Scenario 3, illustrated in Chart 18, is a ‘dream’ Scenario. An improvement in net export demand large enough to close the balance of payments deficit would generate sufficient growth combined with full employment without further fiscal expansion, thereby making all three balances converge towards zero over the next five years.

Chart 18: Balances of Main Sectors when Growth is Achieved by Net Export Demand



Source: NIPA, authors' model results

By our reckoning, this outcome could in principle be achieved if the trade-weighted dollar were to be devalued by 25 per cent¹² at the beginning of next year, if could be assumed that accelerated inflation did not whittle away the gains in competitiveness and also that world

¹² The assumptions underlying this number are that import prices would rise by about 10 per cent and dollar export prices about 6 per cent, implying a fall in the foreign price of U.S exports of nearly 20 percent. The price elasticities of demand for exports and imports are assumed to be, respectively 0.9 and 0.7.

demand and output were not affected by the improvement in the U.S.'s balance of trade.

Scenario 3 possesses a certain beauty because it seems to solve all problems simultaneously. But its apparent simplicity and wholeness must not be allowed to mask the very strong assumptions which have to be made in order to make it come true. In the first place devaluation is no longer an instrument of policy. It is already clear that a large and growing balance of payments deficit cannot be counted on, in any degree whatever, to bring about an automatic and orderly depreciation of the dollar. Nor do changes in interest rates seem to have the slightest effect on exchange rates, whatever the textbooks may say. In short, in a world of free international capital markets it seems empty to recommend devaluation as a simple solution to the strategic problem.

Next, it is unclear how much domestic inflation would be generated by a 25 per cent devaluation. We incline to the view that this would not be a major problem although this is a highly controversial matter. The direct effect on prices would probably not be very large; the 10 per cent increase in import prices (which should probably result from a 25 per cent devaluation) should not, by itself, cause domestic prices to rise by more than 1-2 per cent. Furthermore, we know that there was a devaluation much larger than 25 per cent in the second half of the eighties without there being much acceleration in domestic inflation.

The problem of changed absorption, both in the U.S. and in the rest of the world, must be rated as extremely serious. There is no way of correcting the U.S.'s external deficit which does not imply a substantial (and equivalent) reduction in the country's absorption of goods and services. At present the U.S. is consuming about 4 per cent in excess of what it is producing, an amount which is larger than that by which the economy normally grows in a full year. This excess absorption would have, by the logic of accounting, to come to an end if the deficit were to be eliminated. Part of this, at least, would be brought about by the tightening fiscal stance—in accordance with the projections made by the CBO's assumptions—but however brought about the effect on living standards would be palpable.

But the necessary reduction in the U.S.'s absorption would also create a major problem

for the rest of the world; it would mean a reduction of equivalent size in the net export demand for their goods and services. The U.S. would present the rest of the world with a nasty disinflationary shock since it would abruptly cease to be 'importer of last resort'. As already mentioned, in arriving at our figure of 25 per cent for the needed devaluation, the strong assumption was made that demand and output in the rest of the world does not alter. But this would only happen if the rest of the world were to take expansionary measures on whatever scale is necessary *to make it happen*. In sum, balanced growth and full employment in the U.S. may require a quite radical change in the way Europe, Japan and some other countries run their economies. Market forces are not good at counteracting financial imbalances. There may ultimately have to be active international co-ordination of trade and capital transactions as well as fiscal and monetary policy.

CONCLUSIONS

The main conclusions of this paper are:

- a) Personal and corporate debt are both very high relative to income, and this makes the economy unusually vulnerable to shocks - for instance a fall in asset prices, a rise in oil prices or a rise in interest rates.
- b) It is doubtful whether the government's fiscal stance, as projected by the CBO, is consistent with a growth rate fast enough to stop unemployment from rising after 2003. Such growth could only occur if private indebtedness, already a cause for concern, were to resume a rapid rate of growth relative to income.
- c) A major relaxation of the fiscal stance after 2003 could generate an adequate growth rate, but only at the cost of a large and growing balance of payments deficit and also a large and growing budget deficit.
- d) A rapid expansion of net export demand could, in principle, generate adequate growth

while eliminating the other two imbalances - that is, the deficits both of the government and of the private sector. This could conceivably happen if there were a large (25 per cent?) devaluation of the dollar, so long as the competitive advantage is not offset by higher inflation. Such an outcome would require a substantial reduction (equal to at least 4 per cent of GDP) in U.S. absorption of goods and services; a further condition is that foreign countries offset the disinflationary shock which would be imparted by a large improvement in the U.S. balance of payments with expansionary measures of their own. But neither the institutions nor agreed principles which could carry out co-ordinated expansionary policies around the globe are at present in existence.