## Strategic Analysis

# As The Implosion Begins . . .?

# Prospects and Policies for the U.S. Economy: A Strategic View 1

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#### 1 Introduction

The U.S. economy is probably now in recession, and a prolonged period of subnormal growth and rising unemployment is likely unless there is another round of policy changes. A further relaxation of fiscal policy will probably be needed, but if a satisfactory rate of growth is to be sustained, this will have to be complemented by measures that raise U.S. exports relative to imports.

Over the past few years, a series of reports emanating from the Levy Institute, see Papadimitriou and Wray (2001, 1998a-b, 1994), Godley (2001b, 2000, 1999a-c; 1995a-c), Wray (2000a-b, 1999, 1998), Godley and Wray (1999), Godley and Martin (1999), Godley and McCarthy (1998), Aschauer (1998), Whalen (1995), D. Levy (1995, 1994), Godley and Milberg (1994), SJ. Levy and D. Levy (1992), has argued that, while the U.S. economy has useful supply-side achievements to its credit, the expansion of aggregate demand had been structured in an unusustal and unsustainable way-unsustainable because it relied upon a continuing growth of private spending in excess of disposable income. This, in turn, required a continuing increase in net lending to the private sector, causing a rapid growth in the burden of indebtedness, which could not continue indefinitely. Our conclusion was that at some stage, the growth of net lending to the private sector would go into reverse and that this would drive the economy into recession.

We have generally been careful, hitherto, to emphasize that we were looking to a strategic time horizon and that there was no way of telling when the turning point would come. But it has become pretty clear during the last six to nine months that the process of implosion that so concerned us has now begun. The new administration's tax and expenditure plans will help, but are insufficient to reestablish an adequate growth rate.

There is a second reason why the expansion, as structured, was unsustainable. The large and growing deficit in the U.S. balance of trade made the economy increasingly dependent on capital inflows, which might dry up at some stage. In addition, the deficits generated a growing negative net foreign asset position that could not be allowed to continue without limit

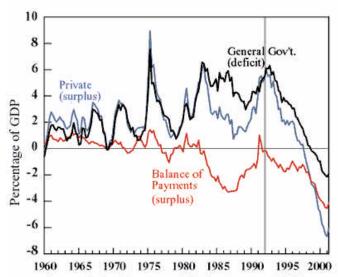
#### 2 Balances and Imbalances

Chart 1 shows the financial balances of the three broad sectors that make up the economy—the overseas, general government, and private sectors. By "financial balance," we mean, for the domestic sectors, their receipts of disposable income (gross of capital consumption) less their total expenditure (consumption and investment combined); the overseas sector's financial balance is simply the current balance of payments (exports less imports plus net property income and transfers). The chart is arranged to show how a general government deficit plus a balance of payments surplus add up exactly to a private surplus of disposable income over expenditure.

As seen here, each of these three balances has moved, since 1992, quite differently from anything that had happened during the previous 30 years. The fiscal and current account balances were both bleeding the circular flow of income on an increasing scale, the budget attaining a record surplus while the current balance of payments reaching a record deficit. The expansion of total demand could thus only take place because private expenditure increased so much relative to income. The private sector's financial balance, which had (almost) always previously been in surplus, became increasingly negative, reaching an astonishing minus 6.7 percent of GDP at the end of 2000; this is the extent to which private expenditure then exceeded disposable income.

# Chart 1

# Financial Balances of Main Sectors

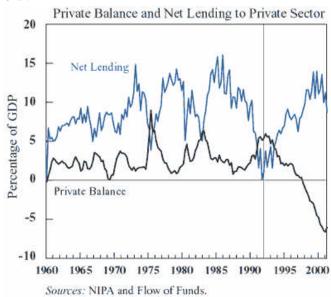


Source: National Income and Product Accounts (NIPA).

In the first quarter of 2001 the private deficit fell back a little and a great deal of evidence suggests that this marks a critical turning point. Yet the deficit, at 6 percent of GDP, was still exceptionally high.

We know from the Flow of Funds accounts that a substantial proportion of the rising private deficit was financed by rising borrowing. Chart 2 shows the flow of net lending to the private sector over the last 40 years alongside the deficit. There is a clear inverse relationship between the two series. It is true that the fall in the private balance since 1992 has not been fully matched by a rise in lending; part of the deficit was probably financed by foreign purchases of equities, which rose \$156 billion, from \$17 billion to \$173 billion between 1995 and 2000.

#### Chart 2



The growth of lending has been so far in excess of the growth of disposable income that there has been a very rapid rise, again to record levels, in the ratio of private debt to disposable income, illustrated in Chart 3. Although the flow of net lending fell back quite sharply in the first quarter of 2001, it was still fast enough to bring about an increase of the debt-to-income ratio to 1.69, as compared to 1.49 at the previous peak in the fourth quarter of 1989.

Chart 3

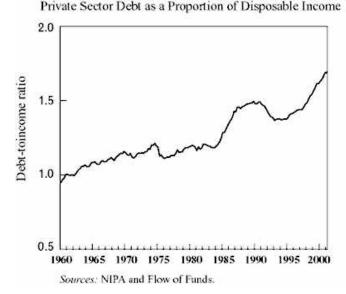


Chart 4 shows the breakdown of the private deficit between the personal sector and corporations. It was the behavior of the personal sector that was truly exceptional. Starting from a surplus slightly above normal, by the end of 2000 the financial balance of the personal sector had fallen to a record minus 4 percent of GDP (minus 5.6 percent of disposable income) and continued to fall in the first quarter of 2001, well after a major slowdown in the economy had become manifest. There has also been a large fall in the financial balance of the corporate sector, but no more than normally occurs during cyclical upswings. It is noteworthy that there was an upturn in the corporate sector's financial balance in the first quarter of 2001--the counterpart of the fall in investment, which (using current prices and an annual rate of change) was down nearly 20 percent from the previous quarter, mainly because of the steep decline in inventory accumulation.

## Chart 4

Financial Balances of the Personal Sector and Corporations

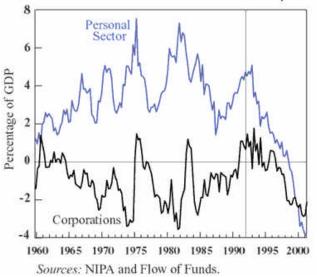


Chart 5 shows the ratio of household indebtedness to household disposable income.  $\frac{4}{3}$  The debt ratio rose rapidly through the 1990s and reached 1.24 in the last quarter of 2000, compared with less than 0.95 at the peak of the last boom.

Chart 5
Household Debt as a Proportion of Household Disposable Income

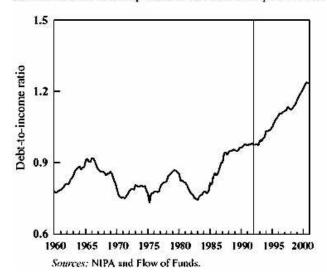


Chart 6 shows the ratio of indebtedness of the nonfinancial corporate sector to undistributed profits, measured gross of capital consumption. Again, there has been a rise through the last decade, although the ratio has not yet matched its previous peak at the end of the 1980s, when the savings-and-loan crisis was raging. The corporate debt ratio continued to rise in the first quarter of 2001, although net lending fell sharply. This was because the drop in profits was even larger than that of lending. Corporate debt in the first quarter was about 6.7 times the flow of undistributed profits, suggesting that the sector may have become vulnerable to any sharp decline in profitability.

Chart 6

# Debt of Nonfinancial Corporations as a Proportion of Undistributed Profits (gross of capital consumption)



## 3 Sustainability and the Public Discussion about Personal Saving

There are important conceptual differences between the financial balance of a sector and its saving. Saving, as defined in the National Income and Product Accounts (NIPA), is the increase in a sector's wealth before holding gains are taken into account. The figure is therefore derived by deducting capital consumption as well as current expenditure from post-tax income; capital expenditure is not deducted because it is matched by an increase in tangible assets, which adds to wealth. Financial balances, unlike saving, include capital consumption because this is an accounting entry that does not describe a money outlay—there is no corresponding transaction. It is also derived by after deducting not only consumption but investment in fixed and working capital. A financial balance, in other words, measures total money receipts of disposable income less money expenditure of all kinds. The concept of a financial balance is crucially important because expenditure can only exceed income to the extent that the excess is borrowed or assets are realized, net, by the sector as a whole, or if cash balances are run down.

A number of papers have recently been published about the low saving rate in the United States. See, for example Lusardi, Skinner, and Venti (2001); Barnes (2001); and Peach and Steindel (2000). They tend to conclude that, properly measured, saving may be much higher than indicated by the NIPA figures and carry the innuendo, at least, that the low conventional level of saving is no cause for worry. The main points these papers make are:

- a) Saving, since in principle it aims to measure the sector's increase in net worth, should include capital gains.
- b) It is illogical to deduct taxes on realized capital gains from the definition of income if capital gains themselves are excluded from it.
- c) Saving, in the NIPA, includes under the heading "Other Labor Income," employers' contributions to certain kinds of pension plans, but ignores pensioners' receipts from those plans. As capital gains have made it possible for firms to fund plans without making cash contributions, a situation has arisen in which pensioners receive more from these plans than businesses pay into them. Hence the official figures understate what pensioners actually save.
- d) There has been a suggestion that saving would be raised, in some significant sense, if automobile purchases by households were reclassified as investment rather than consumption.

None of these arguments, with the partial exception of the first, qualifies the case we are making regarding the unsustainability of the private sector's deficit. Before addressing the points listed above, it should be pointed out that none of these studies explores the problem of corporate indebtedness, which is an important part of the story we are telling. It is not simply that firms, just as much as households, can run into difficulties if they are overindebted, with adverse consequences for employment, investment, stock prices, etc. There is the additional point that households' realization of equities has largely depended on the fact that corporations have been net purchasers of equities. As corporations have been in financial deficit, they could not have purchased equities on the scale they have without having to borrow more, which indirectly sets another limit to households' ability to realize.

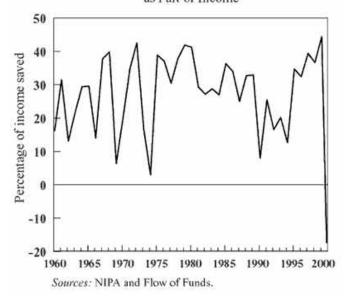
Taking the points in order:

a) It is, of course, true that capital gains add to wealth. But capital gains themselves cannot be spent. To add to spending, there must be either additional net borrowing by households or net realizations of assets by the sector as a whole. There is a limit to the extent to which either of these things can happen. The limit to borrowing is not set by the extent of debt relative to wealth, although this is an important part of the reckoning. A more binding constraint, in the last resort, is set by the ratio of debt to *income* because debts have to be serviced by paying cash; the higher the debt ratio, the more vulnerable the sector to a fall either in asset prices or in income. Moreover, the household sector as a whole cannot realize assets to more than a limited extent without causing the stock market to crash.

Of course, the whole argument that saving should include capital gains goes into reverse when asset prices fall. When this happens, as during 2000, saving defined to include capital gains is *lower* than conventional saving. Lusardi et al. (2001) provided a chart showing saving rate between 1973 and 1999 if capital gains are treated as part of income. It is not clear why the authors stopped at 1999; had they continued into 2000, the result would be entirely different, as shown in Chart 7.

Chart 7

# Personal Saving Rate When Capital Gains are Treated as Part of Income



Saving, inclusive of capital gains, plunged from 44.4 percent of disposable income in 1999 to minus 17.4 percent in 2000 and remained strongly negative in the first quarter of 2001.

b) Given that our focus of interest is the net cash flow of the private sector, there is no justification for ignoring taxes on capital gains. These taxes withdraw cash from the income/expenditure flow just as much as any other tax and give rise to an additional borrowing requirement on an exactly equivalent scale.

c) It is true that pensioners have been getting more out of pension plans than firms are paying in. However, any adjustment to households' balances to allow for this will have a precisely offsetting effect on business balances, so a redefinition of personal saving along these lines would not change the private deficit as a whole at all. In any case, any effect of this kind seems to be extremely small, particularly during the last three years: according to Lusardi et al., in 1999, the latest date covered by their calculations,  $\frac{7}{2}$  it would only have shifted 0.1 percent of households' negative balances into the business sector.

d) So long as we are interested in the financial surplus of the personal sector rather than "saving," it makes no difference whether expenditure on automobiles is classified as consumption or investment.

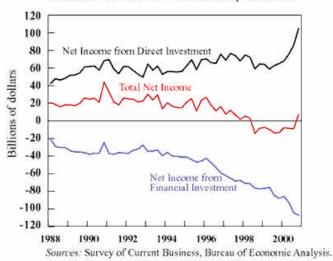
# 4 Sustainability of the Balance of Payments Deficit

A recurrent theme of our earlier reports was that the United States' rising balance of payments deficit was generating an increasingly negative net asset position. This would eventually constrain the United States, as it would any country, when the cost of servicing the debt started to explode. So far, our fears have proven groundless; the projections we made in earlier reports were apparently confuted by figures that were subsequently published. Far from deteriorating, the net flow of foreign income stabilized and even (just) went into the black in the last quarter of 2000. It seems very surprising that, with negative net assets worth at least \$1.5 trillion (16 percent of GDP), the net flow of factor income has remained close to zero. As the future course of the balance of trade--and the income flows that would be generated by a further increase in the foreign debt--plays such an important role in our analysis of strategic prospects, it may be worth studying foreign income flows in some detail. If there really were no need to service the debt, the importance of the deficit would be greatly reduced.

Chart 8 breaks down the total net flow of foreign income into its two major components: net income derived from direct investments and net income from all other sources. The latter consists mainly of income from corporate and government bonds, equities, and foreign exchange reserves, which we shall call "financial investments."

#### Chart 8

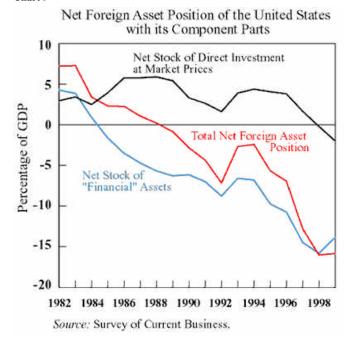
## Net Income from Abroad with its Component Parts



As the chart shows, the two component parts of income have moved in opposite directions, more or less offsetting one another. In the final quarter of 2000 there was a leap in the net flow from direct investment, and it was this that put the overall net flow temporarily into surplus.

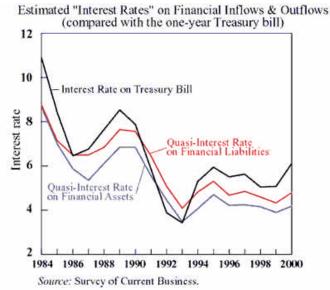
The pattern of flows revealed in Chart 8 is, on the face of it, surprising in view of the pattern of change in the underlying asset and liability stocks illustrated in Chart 9. Almost all the deterioration has been in stocks of financial assets. The net stock of direct investment has been fairly constant, though with a gently deteriorating trend, so that it became negative, for the first time, in 1999.

#### Chart 9



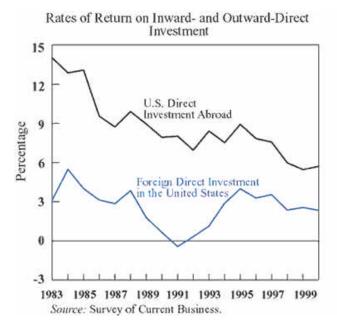
The growing net outflow of income generated by financial liabilities (net of assets) is reasonably coherent with the underlying stock position. Chart 10 shows the inflows and outflows, each expressed as a ratio to the relevant total of financial assets or liabilities that generated them. Although these ratios, quasi-interest rates, are messy averages of rates on very diverse instruments, they do exhibit a remarkable degree of coherence. The rate on U.S. financial liabilities is consistently higher than that on financial assets, but otherwise the two series track one another very closely, and both show some affinity with the rate on one-year Treasury bills.

# Chart 10



The flows associated with direct investment are dreadfully difficult to interpret, partly because they are not, conceptually, equivalent to income derived from financial investment. The latter record the interest and dividends actually paid across the exchanges. The former record the entire profits of the companies in question, regardless of whether they were actually remitted abroad. As we are mainly interested in transactions across the exchanges, the direct investment flows should perhaps always be recorded separately; there is a case for heavily discounting or even ignoring them.

Chart 11 shows recorded flows as a percentage of the relevant stocks of direct investment, valued at market prices. The plot indicates that the rate of return to the United States on direct investment abroad has been chronically far in excess of the rate on foreign direct investment in the United States. A number of studies have examined this phenomenon (e.g., Grubert 1997, Laster and McCauley 1994) but none of them was very conclusive. In 1991, earnings on foreign direct investment in the United States were actually *negative*, denoting that the sector as a whole suffered a loss! In 2000 there was both a fall in the profits of foreign-owned companies in the United States and a rise in those of U.S.-owned companies abroad; the combined effect of these changes was to raise the net flow quite sharply, putting the net flow of all investment income (from financial and direct investment combined) briefly into surplus. This happened despite the fact that, as mentioned above, the stock of foreign investment in the United States exceeds that of the United States abroad.



The difficulty of interpreting the figures relating to direct investment is well illustrated by the transactions surrounding the acquisition of Chrysler by Daimler. The acquisition itself was affected by an exchange of shares, without a cent changing hands, but it nevertheless "scored" fully as a component of inward direct investment. As the Bureau of Economic Analysis naturally uses double entry accounting, the inward "investment" by Daimler had a counterpart (in the statistics) in the form of "purchases" of foreign equities by U.S. residents, although no one actually bought anything; they merely woke up to find that whereas they had previously owned shares in a U.S. company, they now owned shares in a foreign company. Confusion may have been compounded when Chrysler recorded a large loss, since this went straight into the accounts as a negative payment of factor income by the United States to foreigners, significantly improving the overall balance--although once again, no transaction across the exchanges had taken place. This may partly explain the jump in net direct investment income in the last quarter of 2000. If there are a significant number of comparable instances, the total net outflows that actually cross the borders may be considerably larger than those recorded in the published figures.

#### 5 Some Scenarios that Assume No Change in Policy

Our starting point for assessing the strategic problems facing the U.S. economy is the projection of the Federal budget published by the Congressional Budget Office (CBO) in May 2001, modified by the prospective effects of the tax bill that has subsequently been passed. The CBO's economic assumptions remain the same as those used in their previous major review in January: that real GDP will grow 2.4 percent this year, 3.4 percent in 2002, and 3.1 percent during each of the following eight years. Inflation is assumed to stay constant at 2 percent while unemployment drifts up toward 5 percent. These are not forecasts; they are the assumptions that the CBO used to make their tax and revenue projections. According to their May report, modified by the tax bill, the Federal budget surplus would, on these assumptions, fall to \$218 billion in 2001, largely because of the tax rebate—a one-time handout worth about \$70 billion. The surplus then rises slowly to \$340 billion in 2006, the final year of the period we will use in this study.

## Chart 12

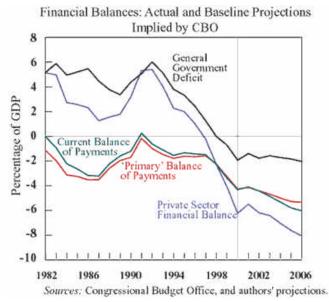


Chart 12 shows, in the uppermost of the four lines, the general government's budget balance, expressed as a percentage of nominal GDP. For the period 2001-2006, we have spliced the modified CBO projections of the federal budget onto earlier figures describing the general government surplus, scaling them to allow for differences in coverage and timing. As the chart shows, the budget, using the CBO's economic assumptions, is likely to remain roughly constant at about 1.8 per cent of nominal GDP through the next five years.

A great deal turns on what would happen to the balance of payments under these circumstances. In what follows, the primary balance of payments will be discussed separately from flows of property income. In the first four months of 2001 there was a large fall in imports -- well in excess of what income elasticities derived from past experience suggest would happen, for total output at that time was still rising, though not very fast. Most of the fall in imports seems to have been caused by the fall in high tech investment and by a sharp fall in inventory investment; certainly imports of computers and capital goods were very weak. If this is correct, we would expect the reduced level of imports to be maintained for a while because investment is likely to fall further. But after two years or so, under the (unrealistically rapid) growth assumptions we are using, there would probably be a resumption of the upward trend.

Exports of goods and services have also been weaker over the past few quarters than might be expected, at least if the IMF's optimistic-seeming assessment of world output growth is anywhere near correct. But the check on exports has been smaller than that on imports, so the primary balance has improved significantly.

It is, however, difficult to believe that if GDP were to grow 3.4 percent in 2002, and at an average rate of 3.1 percent over the following years, the deficit in the primary balance would not resume its deterioration, given the rather bleak outlook for world output and our assumption that the dollar will remain at its present parity. In the projection illustrated in Chart 12, we have assumed that the deficit in the primary balance would increase, under the CBO assumptions about output growth, from minus 4.2 percent of GDP in 2000 to minus 5.2 percent in 2006.

An important consequence of such a deterioration in the primary balance would be that the United State's net stock of overseas assets would decline from about minus 20 percent of GDP at the end of 2000 to minus 40 percent in 2006. To reach a figure for the consequential net outflow of income as a result of such a rise in indebtedness, it has been assumed that the net stock of direct investment and the net flow of income derived from direct investment remain constant as a share of GDP, and therefore that the entire change in the net asset stock takes the form of "financial" assets which should bear rates of "interest" slightly below 2000 levels because rates in general have been falling. In consequence, the net outflow of foreign income as a whole, the gap between the second and third lines in Chart 12, rises from zero to 0.7 percent of GDP, making the overall balance of payments deficit in 2006 significantly worse than the primary balance (say, 6.0 percent instead of 5.2 percent of GDP). 10

The combination of the projected budget surplus and the concomitant balance of payments deficit shown in Chart 12 implies, by the laws of accountancy, that for the CBO's growth assumptions to be validated, the private sector's *deficit* would have to resume its rise, from 6 percent at the beginning of 2001 to about 8 percent in 2006. <sup>13</sup> It must be assumed that, following the reduction in the private deficit in the first quarter, there will suddenly be a sustained renewal of the credit boom, causing expenditure to exceed disposable income by even larger amounts throughout the next five years.

We regard this outcome, or anything like it, as being entirely out of the question. It certainly could not take place without a renewed increase in the flow of credit to the private sector, implying a sustained reacceleration in the growth of private indebtedness. But indications abound that many firms and households are already overindebted. On June 20 Chairman Alan Greenspan warned that the financial health of the nation's banks was deteriorating and that loans made during the economy's boom of the last four years were now under pressure and scrutiny (See Despeignes 2001.) Investment and capacity utilization have both been falling sharply. There have been reports that an increasing number of households are in arrears with their mortgage payments. The burden on households' income of interest payments plus repayments of debt is at, or close to, its all time high. Is usum, all the ingredients are now present, including rising unemployment and reduced or stagnant asset prices, which normally characterize the inception of a self-reinforcing credit implosion. It even seems to us inconceivable that the private sector's deficit could remain as high as 6 percent, its present (first quarter of 2001) level.

#### 6 Some Alternative Scenarios

The following section presents a range of alternative, more plausible, scenarios. We will not shrink from expressing our views about what we think most likely to happen during the next year or two. Yet one of us (at least) is too old a hand not to know that any short-term forecast is likely to be wildly mistaken. Our more serious purpose is to identify the main strategic problems that may arise over the next five years so as to forewarn the authorities and enable them to carry out the necessary contingency thinking and planning. Our short-term forecasts and rather dire medium-term projections may be wrong. But the authorities should be fully prepared to respond quickly and effectively to the worst situation that is seriously in the cards.

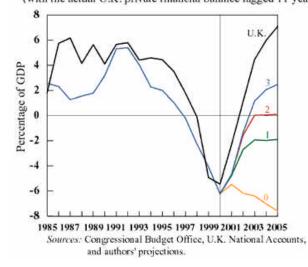
## Collapse of Credit Booms in Other Countries

Although the United States's private sector has never before (at least in modern times) been in deficit on anything like the present scale, similar deficits have occasionally turned up in other countries. For instance, in 1989 the United Kingdom's private deficit rose to minus 5.45 percent of GDP; there were similar deficits in Sweden and Finland at about the same time. The precise causes and manifestations of the U.K. deficit were different from those in the United States: the U.K's deficit was associated, in particular, with a boom in real estate prices and large-scale withdrawal of equity from the housing market, whereas in the United States the boom was fueled mainly by the stock market. The similarities are more important than the differences. In each case, there was a rapid expansion in the real economy generated by an explosion of credit interacting, on the way up, with an explosion in asset prices of one kind or another. In the United Kingdom, there was a lot of triumphalist talk about "miracles" having taken place, which is eerily reminiscent of talk about the "New Economy" over here.

But in verity, the U.K. credit boom in 1988 (like the U.S. boom now) was bound to implode at some stage, and did so when the private sector's deficit was about equal to that of the United States's at present. When it came, the turnaround in the United Kingdom's private balance was spectacular: within three years, it had moved fully 10 percentage points, from 5.45 percent of GDP in deficit to 4.45 percent in surplus. The consequence of this collapse was a recession as severe as any that had occurred in the postwar period. Total output fell for five successive quarters; in the second quarter of 1992, it was 3.5 percent lower than it had been two years previously. Unemployment rose by 4 percentage points. At the same time, there was a very similar debacle in Scandinavia. In Sweden, the absolute fall in output was even faster than in the United Kingdom and continued for a longer time, causing unemployment to rise from 1.5 percent in 1989 to 8.2 percent in 1993. Unemployment in Finland rose from 3.1 percent in 1993 to 16.4 percent in 1993 (See OECD 2000.)

# Chart 13

Private Financial Balance: Actual and Projected on Four Assumptions (with the actual U.K. private financial balance lagged 11 years)



In Chart 13 we show two extremes. The more optimistic is the lower line ("0"), which describes the United States's private financial balance implied by the CBO's projection (reproduced from Chart 12). The most pessimistic is the upper line ("U.K.") which shows what actually happened in the United Kingdom 10 years ago. In between, we show three possible outcomes ("1," "2," "3") for the United States. Each of these intermediate simulations assumes that there will be no change in the dollar rate of exchange and no further change in fiscal policy. The simulations were constructed by making different assumptions about the growth of credit and the movement of asset prices, and allowing for some feedback into the growth of world output. We did not make explicit assumptions about interest rates in the belief that there is no change that can now be made that will significantly alter the outcome, unless via an effect on the exchange rate.

Having lived through the U.K. experience, we tend to prefer simulation 3, that is, we expect the private deficit to revert to something like its normal level within the next three years,

while recognizing that the outcome could be much worse than this should an interactive process between falling credit, asset prices, profits, investment, employment, and consumption really get going. According to our model, the counterpart of Simulation 3 is that, after a blip in the second half of this year as a result of the tax rebate, output falls absolutely in each quarter of 2001. By the third quarter, output would be 2.5 percent lower than two years previously, and the federal budget surplus would have completely disappeared.

As a starting point for strategic policy evaluation, however, we forswear short-term forecasting and consider where the economy would be five years out according to each of the three basic simulations illustrated in Chart 13. The tabular format enables a wide range of indicators to be shown succinctly, while by showing levels only in 2006, or rates of change over the whole five-year period between 2000 and 2006, we emphasize that it is medium-term developments on which we are concentrating.

Table Projections Based on Four Assumptions				
Simulation	Average Growth of GDP (2000-2006)	Unemployment Rate in 2006	General Government Balance in 2006 (% of GDP)	Current Balance of Payments in 2006 (% of GDP)
0	3.04	4.7	2.6	- 6.0
1	1.96	7.4	- 0.7	- 2.5
2	1.63	8.2	- 1.6	- 1.4
3	1.13	9.0	- 2.9	0.0

The table speaks for itself. The most favorable assumption about the private sector deficit that we can regard as plausible is that it reverts only a small distance, to about minus 3 percent of GDP over the next five years (Simulation 1). This implies that GDP would grow at an average rate of only about 2 percent between 2000 and 2006. This would not be enough to prevent unemployment from rising another 3 percentage points, to more than 7 percent. The budget surplus would have evaporated altogether, but the current balance of payments deficit would have improved from over 4 percent to 2.5 percent of GDP.

The other two simulations (2 and 3) describe increasingly dreadful, but also, in our opinion, increasingly plausible outcomes. If the private deficit were to reattain its normal state of surplus as illustrated in Chart 13 (line 3), the average growth rate might barely exceed 1 percent per annum between 2000 and 2006, which would probably cause unemployment to double. Also, the federal budget in 2006 could be as much as \$300 billion in deficit while the balance of payments improves to about zero. The direct and indirect consequences for trade, output, and unemployment in the rest of the world would be very severe.

#### Policy Responses

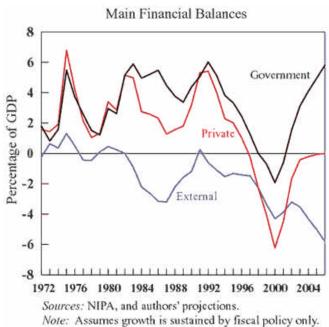
To get some sense of the magnitude of the policy responses that, according to the system of ideas deployed in this study, may be required in order to maintain full employment, no new model solution is needed. There is an easier and more intuitive way to reach an answer.

Let us suppose that between now and 2006 the private deficit reverts, not the full way to its normal state of surplus, but just to zero—the intermediate assumption illustrated in Chart 13. We have already given our reasons for believing that if GDP were to grow fast enough to maintain full employment, and if the dollar remained at its present parity, the deficit in the current balance of payments would probably rise to about 6 percent of GDP in 2006. With a zero private balance and a 6 percent balance of payments deficit, there would, by the rules of accounting logic, have to be a general government deficit equal to 6 percent of GDP. As the CBO is predicting a budget *surplus* of almost 2 percent of GDP based on the same output and inflation assumptions, the startling implication is that to make our story come true, there would have to be a further fiscal relaxation equal to 8 percent of GDP in 2006--roughly \$700 billion at today's values. 13 The famous twin deficits last seen in the 1980s would have returned with a vengeance!

The magnitudes we adumbrate are enormous, but not really surprising. We are postulating a radical rebalancing in the structure of demand, the scale of which is straightforwardly implied by the extent to which the financial balances are out of kilter at the present time. After all, the private balance is at least 8 percentage points (of GDP) below what used to be normal.

But while a fiscal expansion on the scale mentioned in the previous paragraph might indeed secure full employment over the next five years, this by itself would not come close to achieving balanced and therefore sustainable growth. This is because a huge fiscal expansion on its own would have as its counterpart a catastrophic deterioration in the United States's current balance of payments (and net foreign asset position) between now and 2006-- with no presumption that the deterioration would not continue indefinitely into the future. This configuration of outcomes is illustrated in Chart 14.

#### Chart 14



For sustainable growth at an acceptable rate to take place, any further fiscal relaxation will have to be coupled with an expansion of net export demand, so that all three financial balances move toward zero. The more net export demand rises, the less the need for fiscal expansion. If net export demand were to rise so much that the balance of payments *deficit* reached 2 percent of GDP, and the private deficit reverted to zero, the need for further fiscal relaxation would roughly be halved, to \$350 rather than \$700 billion in 2006. It is

difficult, in any case, to see how full employment can be maintained without the budget reverting to deficit-its normal state during the whole postwar period.

A substantial expansion of net export demand is easier spoken of than achieved. The classic remedy would be to bring about a dollar devaluation. However, by our reckoning, the size of the devaluation required -- under the strong assumptions that world demand is unaffected and that the gesture is not neutralized by higher inflation -- is very large, in the region of 20-25 percent. Unfortunately, there is no presumption whatever that market forces will automatically bring about the required adjustment in a timely way. In today's world of free international capital movements, devaluation of the currency has ceased to be a policy instrument in any normal or direct sense.

Another possibility is that other countries, which have so far depended on the United States through her growing external deficit to provide a locomotive force for their own economies, should be encouraged to engage in some form of coordinated reflation. Unfortunately, there exist neither the institutions nor the agreed-upon principles needed to bring such a thing about. In the very last resort, the United States should not forget that nondiscriminatory measures to control imports (not to be confused with "protectionism") are permitted under Article 12 of the successor to the GATT.

#### 7 Conclusion

This paper has argued that growing imbalances in the structure of U.S. demand have led to a situation where a recession is more or less unavoidable in the very short term. Looking to the medium-term future, there will have to be a very large change in the stance and structure of fiscal and trade policy if a sustained expansion is to be reestablished. The management of monetary policy via the manipulation of short-term interest rates, however sensitively and skillfully this may be carried out, is totally inadequate as a means of dealing with the serious structural problems that threaten the future prosperity both of the United States and the rest of the world.

#### Notes

- 1 The authors are grateful to Bill Martin for his very penetrating criticizms and to Boriana Handjiyska for her sustained and skillful statistical assistance.
- 2 A technical recession may just be avoided in 2001 because the tax rebate may cause output to "blip" in the second half of the year.
- 3 The gross national product (Y) is defined as private expenditure (PX) plus government expenditure (G) plus the current balance of payments (BP). Symbolically:

Y = PX + G + BP

To obtain the identity linking the financial balances, deduct government taxes and other transfers (T) from both sides and rearrange:

[Y - T - PX] = [G - T] + BP

The first term in square brackets is the private balance, the second is the budget deficit.

- 4 Note that the ratio is of household indebtedness to household income, obtained by deducting income of unincorporated businesses (Flow of Funds, Table F101, line 1) from personal income as defined in the NIPA. An ill-matched ratio is sometimes shown (e.g. by ourselves in the past) of household debt relative to income of the personal sector, which includes unincorporated businesses.
- 5 For households, this amounted to \$430 billion in 2000.
- 6 The study by Peach and Steindel did look at the private financial balances. Their reassuring conclusion was based on the situation at the time they wrote their article (published in September 2000). Our main point is that the *growth* in the debt burden cannot continue forever.
- 7 A much larger effect was suggested in Barnes (2001). But this estimate was apparently derived by calculating the difference between "Other Labor Income" in the NIPA as it was and as it would have been if it had grown at the same rate as other income from employment. This procedure greatly overestimates any effect of this kind, apparently ignoring the fact that about two-thirds of "Other Labor Income" consists of contributions for medical insurance.
- 8 The estimated effects of the tax bill are to found in CBO documents recently released (CBO, 2001a, b, c), which take into account the recently enacted "Economic Growth and Tax Relief Reconciliation Act."
- 9 The primary balance is defined as balance of trade in goods and services plus net unilateral transfers. It does not include net payments of income to or by foreigners.
- 10 There is no concealing the fact that our conditional forecast of the net outflow is shaky and ambiguous. There may be more inward direct investment than we have assumed and foreigners may continue to earn exceptionally low returns on their investments, in which case we will again have overestimated what will be recorded in the statistics as the net outflow. But it seems essential to have some counterpart to the ballooning foreign debt feeding back into the balance of payments projections. Earlier, we argued that the net outflows that have actually moved across the exchanges were much larger than those recorded because of the conventions governing the measurement of these flows. In view of our earlier discussion about the meaning of direct investment flows, it should be borne in mind that the actual outflows across the exchanges may be much larger than our projections show.
- 11 The temporary upturn in the private balance in the calendar year 2001 is partly a result of the turnaround in the first quarter, which has already happened, and partly of the \$70 billion tax rebate, which for a short period raises disposable income more than expenditure. It is assumed that people will not spend all the money at once.
- 12 Is the Fed underestimating this burden? The figure they publish shows interest and repayments on consumer debt plus mortgages as a share of personal disposable income. But total debt owed by households exceeds the sum of mortgages and consumer credit by nearly 10 percent, and personal income exceeds households' disposable income by about 10 percent because the former includes the income of unincorporated businesses. Prorata corrections for these two items could raise the burden from the 14.3 percent figure published to as much as 17.5 percent.
- 13 By "today's values," we mean that percentage changes have been applied to the value of GDP in 2001. If we did not scale the numbers in this way, an exaggerated impression would be conveyed because nominal GDP is assumed to rise by more

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