The Levy Economics Institute of Bard College

Strategic Analysis

April 2007

THE U.S. ECONOMY: WHAT'S NEXT?

WYNNE GODLEY, DIMITRI B. PAPADIMITRIOU, and GENNARO ZEZZA

The collapse in the subprime mortgage market, along with multiple signals of distress in the broader housing market, has already drawn forth a large body of comment.[1] Some people think the upheaval will turn out to be contagious, causing a major slowdown or even a recession later in 2007. Others believe that the turmoil will be contained, and that the U.S. economy will recover quite rapidly and resume the steady growth it has enjoyed during the last four years or so.

Yet no participants in the public discussion, *so far as we know*, have framed their views in the context of a formal model that enables them to draw well-argued conclusions (however conditional) about the magnitude and timing of the impact of recent events on the overall economy in the medium term—not just the next few months.

The CBO's Report as a Starting Point

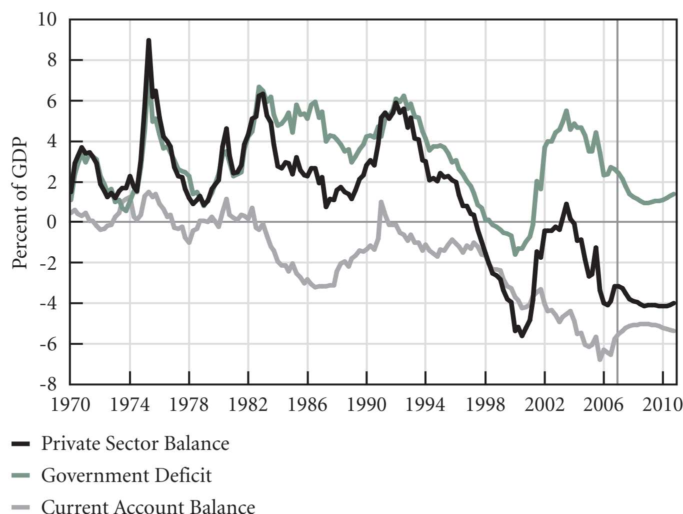
In January, the Congressional Budget Office (CBO) produced its annual report, which, as usual, gave projections of the budget deficit based on the government's tax and expenditure plans, together with assumptions about GDP growth and inflation during the next few years. And, as usual, the figures describing GDP and inflation, both indicating a Goldilocks world in the medium term, were no more than assumptions. The CBO made no attempt to demonstrate that they made sense in terms of the likely evolution of the economy as a whole.

One of our principal points is that the CBO's assumptions, viewed in the context of other likely events, are wildly implausible if viewed as predictions. We build our own argument around likely changes in the financial balances of the three major sectors of the economy—government, foreign, and private—which, as a matter of logic, must always sum to zero.[2]

Figure 1 shows the CBO's projection for the budget deficit between now and 2010, based on the assumption that the economy will grow at an average rate of 2.85 percent between now and then.

The Levy Institute's Macro-Modeling Team consists of Distinguished Scholar WYNNE GODLEY, President DIMITRI B. PAPADIMITRIOU, and Research Scholars GREG HANNSGEN and GENNARO ZEZZA. All questions and correspondence should be directed to Professor Papadimitriou at 845-758-7700 or dbp@levy.org.

Figure 1 **U.S. Main Sector Balances with CBO Assumptions**



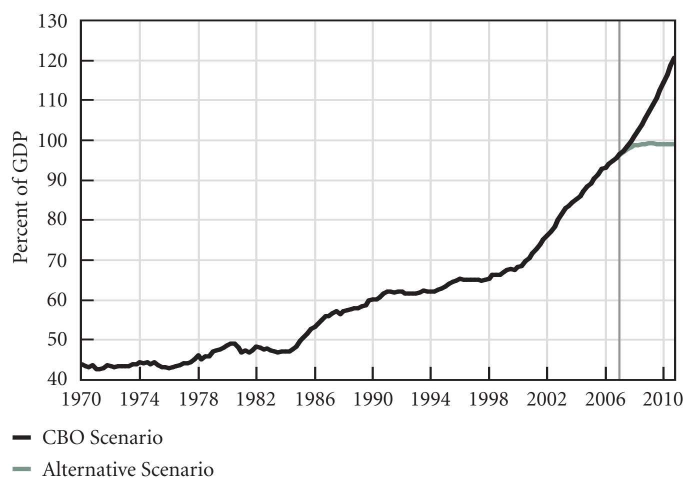
Sources: National Income and Product Accounts (NIPA) and authors' calculations

The figure also shows a projection, derived from our model, of the current account balance over the same period, conditional on the growth rate assumed by the CBO. This conditional forecast shows a significant improvement over projections that we and others have made in the recent past, considering the relatively high growth rate of output that has been assumed. This revision has come about almost entirely because of the recent depreciation of the dollar, which, we have assumed, will continue at about the same rate during the next three to four years. As far as we can ascertain, dollar prices for exports are insensitive to changes in the exchange rate, implying that when the dollar depreciates, the foreign price of U.S. exports falls nearly as much as the exchange rate. Since the price elasticity of demand for U.S. exports[3] is, by our reckoning, around 0.9, we expect quite a large positive response of export volumes to dollar depreciation. There is already plenty of evidence for this. Import volumes have also already responded to the recent depreciation.

Given the projections for the government budget deficit and the current account balance, which is still in heavy deficit, the private sector's deficit—that is, saving less investment, or "net saving"—follows as a matter of identity; in other words, it shows what *has* to happen to private net saving if the other two balances are to turn out as projected.

Another of our contentions is that a continued large private sector deficit (implying total spending far in excess of income), as shown in Figure 1, is wildly implausible, given the multifaceted implosion of the housing market. In Figure 2, we show personal debt relative to GDP since 1970 and the way in which its rise has accelerated during the last few years. The figure illustrates how high (drawing on simulations of our model) we think the level of debt relative to income would have to rise after the fourth quarter of 2006—marked by the vertical line—in order to fund the excess of expenditure over income implied by the negative private sector balance shown in Figure 1. The lower line, for the period following the fourth quarter of 2006, shows the debt-to-GDP ratio leveling off much as it did in 1981–84. This line seems to us to describe a far more plausible path, given all the factors that limit the extent to which lenders can, or will be willing, to lend.

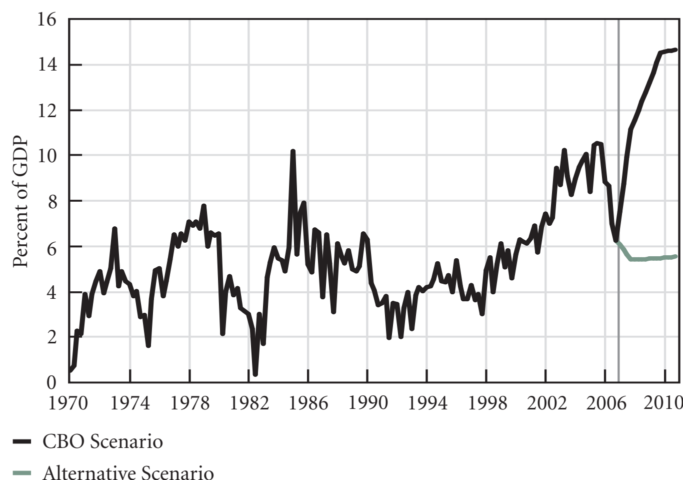
Figure 2 **Household Debt Outstanding**



Sources: Federal Reserve, NIPA, and authors' calculations

In Figure 3, we translate the debt-to-GDP ratios in Figure 2 into flows of lending relative to GDP simply by subtracting from each quarter's debt the previous quarter's debt. One striking feature of Figure 3, not at all obvious from inspection of Figure 2, is that net lending was already falling rapidly from the beginning of 2006. The lower line for the post-2006 period shows what would happen to the net lending flow if the debt-to-income ratio were to level off: net lending would continue to fall rapidly, though not so far or fast as happened in 1980. The projections in the figure also show the enormous gap between the leveling-off scenario, in which we are inclined to believe, and the (implied) CBO scenario, in which we don't believe at all.

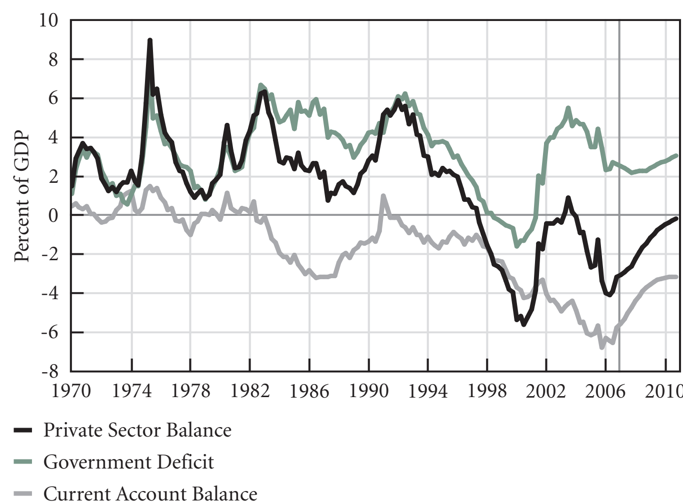
Figure 3 **Household Borrowing**



Sources: Federal Reserve, NIPA, and authors' calculations

In reaching provisional conclusions about the future growth rate of output and the future configuration of the three financial balances, we have used revised assumptions about output in the rest of the world because of lower U.S. growth than in the CBO scenario (based on the solution of a world model) and the performance of the stock market. The major conclusion is that output growth slows down almost to zero sometime between now and 2008 and then recovers toward 3 percent or thereabouts in 2009–10. However, by the end of the period, the *level* of output is still far (about 3 percent) below that in the CBO's projection, which implies that unemployment starts to rise significantly and does not come down again.

Figure 4 **U.S. Main Sector Balances under the Assumption of Stabilizing Household Debt**



Sources: NIPA and authors' calculations

Figure 4 shows counterpart projections for the three balances based on the assumption of stabilizing household debt. The private sector's net saving rises substantially toward (though it does not reach) the levels that obtained in the 1970s and 1980s. The current account balance improves more decisively than in Figure 1. And instead of the fall in the budget deficit foreseen by the CBO, there is a small but significant rise, because the lower level of output reduces tax revenues.

Status of Projections

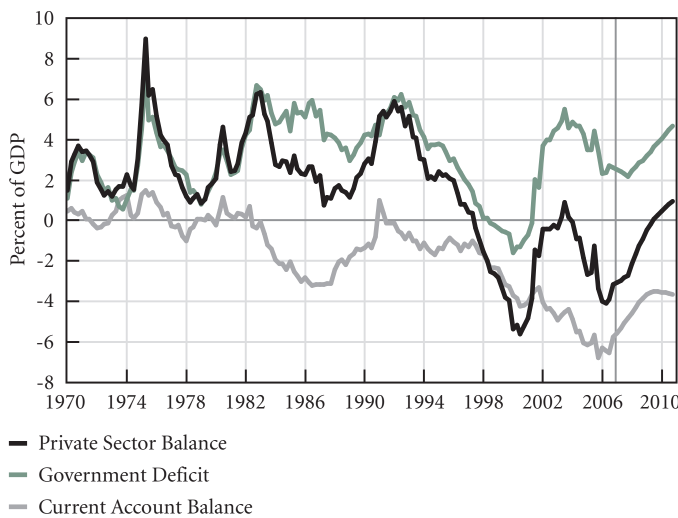
We realize that the outcome illustrated in Figure 4, combined with its *ex ante* implication that there will be a growth recession from which there is no immediate prospect of recovery, will seem arbitrary to many readers. And, even for ourselves, these calculations do not amount to a point *forecast* in which we strongly believe. What we have done is put together, within a logically consistent framework, the implications of a number of individually plausible assumptions, extended over a strategic time period, using a model that takes into account the main functional interrelationships. Even if events turn out to be entirely different from our "central" projections, it is still worth presenting these calculations now, so that policy options can be considered.

Other people may make different assumptions and use different models. In our very strong view, the public discussion would be much strengthened if other participants were to adopt the same procedure, since this would bring precision to different points of view that at present seem to us to be half-articulated, not to say arbitrary and chaotic.

Future Policy

What policy responses might be appropriate if our central projection, viewed *ex ante,* turns out to be anywhere near correct? Two alternative scenarios seem obvious. One would be a further, substantial depreciation of the dollar in excess of what we are assuming. But it would be quite unsafe to rely on this as an adjustment mechanism. First, we would have to be looking at a depreciation in the region of perhaps 30 percent, compared with the dollar's most recent peak in 2002, and it might become

Figure 5 **U.S. Main Sector Balances under the Assumptions of Further Dollar Devaluation and Expansionary Fiscal Policy**



Sources: NIPA and authors' calculations

impossible to ignore the inflationary consequences of such a great fall in value. Second, all of the econometrics indicate that there are long lags between changes in the exchange rate and consequential changes in real exports and imports, which will make it difficult to synchronize the rise in net export demand with the fall in domestic demand. Third, currency depreciation can no longer be regarded as a straightforward policy instrument, particularly if major surplus countries like China and Japan remain determined not to let their currencies appreciate. The other major alternative potentially available to keep the expansion on track is a significant rise in the government deficit, entirely contrary to the present intention of the Bush administration and the Democratic Congress. In order to generate a level of output in 2010 as high as that assumed in the CBO report, the deficit would have to reach 4.6 percent of GDP in 2010, a figure that exceeds that in the dubious CBO baseline shown in Figure 1 by $540 billion, or 3.2 percent of GDP. See Figure 5 for this higher projected path.

Our opinion, if we *are* anywhere near correct in our conditional predictions, is that this is, indeed, what will happen. We learned our lesson in 1999, when we inferred that a fiscal expansion corresponding to several hundred billion dollars would soon be necessary if recession were to be held at bay. But how wrong we were! An increase of $750 billion in the government's deficit did take place between 2000 and 2003, contrary to what had been the government's policy a year or two earlier—a policy that had the full support of the entire body politic, including the financial press.

It remains to point out that, as illustrated in Figure 5, an economic expansion generated by a $540 billion expansion in the budget deficit could cause the current account deficit to re-expand, indefinitely postponing a rebalancing of the world economy.

Notes

1. We note, with some irritation, the surprise expressed by many commentators, including the Fed, at the subprime market's collapse, as we have been drawing attention to it as a looming probability, with increasing emphasis, for at least the last 18 months.
2. Y = PX + G + X – M, where Y is GDP, PX is private expenditure, G is government expenditure, X is exports, and M is imports. Subtracting government taxes and other transfers from both sides and rearranging implies [Y – T – PX] = [G –T] + [X – M], where the terms in square brackets describe, in order, the private financial balance, the government deficit, and the current account balance.
3. That is, the percentage change in exports for a given percentage change in export prices.

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