

Economic Forecast 2009: Recession and Recovery

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By Michael Mussa, Senior Fellow
The Peterson Institute for International Economics

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Overview

Following the collapse of Lehman Brothers and the near failure of AIG in mid September, global credit markets froze and commodity and equity prices collapsed worldwide. Meanwhile, economic data showed a turn toward recession in most other industrial countries beginning in the spring, significant weakening of the U.S. economy after mid year, and slowing growth in many key emerging market economies.

With these developments, the prospect now is for a sharp recession in the United States and a general recession in the world economy that will be more severe than the recessions at the beginning of the decade. Specifically, U.S. real GDP is forecast to fall by 2 percent between mid 2008 and mid 2009—in line with the average of U.S. postwar recessions but much greater than the 0.2 percent decline in real GDP during the mild 2001 recession.

With recovery expected in the second half, year-over-year growth for the U.S. economy in 2009 is forecast at – 0.8 percent, well below the + 0.8 percent year-over-year growth recorded in the recession of 2000-2001. For 2010, recovery is likely to proceed at about a 4 percent annual rate—below the 5 to 8 percent growth rates in the initial stages of recovery from relatively deep recessions earlier in the postwar era.

The unemployment rate will continue rising through the middle of 2009, reaching at least 7 ½ percent and possibly topping 8 percent. The subsequent decline in unemployment will be gradual, leaving significant margins of slack in the U.S. economy through 2010 and into 2011.

With the sharp worldwide decline in commodity prices, especially oil prices, since July, headline inflation rates have already fallen sharply on a

12-month basis, and are likely to moderate further in the months ahead. Core inflation rates have shown much less moderation, but it may be anticipated that the emergence of significant margins of slack will help keep core inflation well contained through 2009 and well into 2010. On a year-over-year basis for 2009, the U.S. CPI is forecast to rise by only 1.5 percent and the core CPI by 2.0 percent.

In these circumstances, macroeconomic policy will remain oriented toward restoring orderly conditions in credit markets and providing sufficient stimulus to assure that the recession is not unduly deep or prolonged and that the recovery is sufficiently robust. Unwinding the massive government interventions undertaken to combat the present crisis and containing the overheating risks and moral hazards likely to be engendered by these actions are challenges that will be put off until at least the middle of 2010 and beyond.

Causes for Optimism and Pessimism

The seizing up of global credit markets from mid September to mid October posed an unprecedented and dire threat to the functioning of the financial system and the whole economy. Businesses of all sizes and descriptions rely on the ready availability and circulation of short-term credit to conduct the myriad of transactions that are essential to their normal functioning. When the “Great Wheel of Circulation”—as Adam Smith described it—grinds to a halt, normal business activity tends to grind to a halt as well.

Policy authorities around the world have reacted to this threat on a scale and speed that far surpasses actions in any earlier financial crisis. Central banks have injected trillions of dollars of liquidity into interbank and short-term credit markets, with the Federal Reserve expanding its net credit to banks and other (non U.S. Treasury) borrowers from virtually zero fifteen months ago to over \$1.5 trillion and counting. Deposit insurance coverage has been massively expanded, and official guarantees have been extended for interbank credits. Governments have injected large amounts of capital to insure the solvency of major financial sector institutions—to the extent that they have now virtually assured that there will be no major failures that involve private losses beyond those sustained by common shareholders.

With all of this massive government intervention, conditions in world credit markets have calmed down considerably, although they have not yet returned to normal. Equity markets, which experienced large sell-offs, have begun to recover, although they generally remain well below their levels of last July before credit markets went nuts.

The key assumption underlying the present economic forecast is that, with the aid of continued policy activism, credit markets will not return to the extreme turbulence of September/October 2008, but rather will continue to work back toward more normal operation over coming months. Under this assumption, it is reasonable to expect that the present U.S. recession will look broadly similar to previous postwar U.S. recession where the average, peak-to-trough decline in real GDP was 2 percent. If extreme credit market turbulence were to return on any sustained basis, economic prospects would be considerably bleaker, potentially involving a decline in real GDP greater than the 3.7 percent fall recorded in the deepest postwar recession.

Baring this risk, insight into the probable scope of the current recession may be gleaned by considering likely similarities and differences with the ten earlier postwar recessions. As reported in Annex I, in the quarterly data of the National Income and Product Accounts (NIPA), recessions are reflected in periods of declining real GDP that average 3 quarters in length, with a minimum of 2 quarters and a maximum of 6 quarters. Correspondingly, the current recession is forecast to see declines of real GDP in the third and fourth quarters of 2008 and the first quarter of 2009, with real GDP being essentially flat in the second quarter of 2009, before turning upward in the second half of the year.

Looking to the four main components of GDP, movements in government purchases of goods and services play an erratic role in postwar recessions, sometimes boosting and sometimes retarding real GDP growth. In the present recession, it is likely that fiscal stimulus adopted by the incoming Obama Administration will boost federal purchases and provide sufficient support to avert a decline and produce a moderate increase in purchases by state and local governments.

Changes in personal consumption spending have also made erratic contributions to previous recessions, sometimes positive and sometimes negative. In the present recession, we have already seen real consumption spending fall at a 3.7 percent annual rate in the third quarter of 2008, and

further significant declines are forecast for the next two quarters. As is typically the case in recessions, purchases of consumer durables (including autos and light trucks) will decline sharply. Consumption of non-durables is also projected to decline, while consumption of services (as in past recessions) will continue to post modest gains.

The total decline in real consumer spending between mid 2008 and mid 2009 is projected to be 2 percent—the largest decline in real consumption spending in any postwar recession. This decline reflects the powerful forces that will retard the normally vigorous advance of consumer spending: falling employment and very sluggish growth of household disposable income, and declining household net worth due to falling home values and equity prices. These negative forces, however, will be partly offset by a gain of 2 to 3 percent in household real incomes due to lower energy prices. These gains will enable households to achieve substantial desired increases in their saving rates without equally large cuts in their real spending. In addition, it noteworthy that in the categories of consumer purchases that will absorb most of the cutbacks, import content is quite large (about 25 percent). Accordingly, foreign suppliers rather than U.S. producers will absorb an important part of the cutback in U.S. consumer spending.

The most important contributor to declining real GDP during U.S. recessions is falling inventory investment, which alone accounts for more than three-quarters of the decline in real GDP—including four postwar recessions where falling inventory investment accounted for more than 100 percent of the decline in real GDP. On this occasion, businesses generally have kept inventories quite lean and inventory investment was running at minus \$50 billion in the second quarter of 2008. It is likely that inventory investment will go further negative during the next couple of quarters. But it is unlikely that the decline of inventory investment during this recession will make anything like the contribution that such declines have made to previous postwar recessions.

Private investment in equipment and software is in a somewhat similar situation. It already started declining in the first half of 2008 (when the overall economy was still expanding) after almost two years of sluggish advance. Further sharp declines in this category of investment are likely as real GDP contracts, but no more so than in the average of past recessions.

Private investment in nonresidential structures is on a quite different course. Such investment has expanded rapidly since early 2006, including another gain during the third quarter of 2008. With disruptions in financing adding to other problems, a substantial downturn of (private) investment in nonresidential structures is now in store. The relatively long lives of investments in this category, however, suggests that this correction, which could plausibly amount to as much as 1 percent of GDP, will be spread out through 2009 and 2010, well beyond the period of declining overall real GDP.

Real residential investment peaked at \$602 billion (in chained 2000 dollars) in the fourth quarter of 2005. It fell by 39 percent as of the second quarter of 2008 and by 42 percent as of the third quarter of 2008. Thus, there is no doubt that the present decline in residential investment will exceed the largest continuous decline of such investment in the postwar era, 39.6 percent between the 1973I and 1975I. With the further declines likely to occur through the middle of 2009, the present depression in residential investment will exceed the record, cumulative 45 percent decline during the four years from 1978III to 1982III (which was briefly interrupted by a 10 percent recovery during two quarters of 1980).

In gauging the likely contribution of residential investment to the decline in real GDP between mid 2008 and mid 2009, however, the key point is that most of the historic downturn of residential investment is already behind us. Indeed, the cyclically sensitive of residential investment—new home building—is already down by two-thirds from its peak level and cannot fall much further.

Turning to net exports, we find the key reason why the present downturn in U.S real GDP will match only about the average of previous postwar recessions and not be significantly larger. The U.S. real trade deficit (as measured in the NIPA) peaked at \$638 billion (in chained 2000 dollars) in the fourth quarter of 2005 and subsequently fluctuated near this level for the next five quarters. It then began a steep decline reaching deficits of \$381 billion and \$352 in the second and third quarters of 2008.

These improvements in the real trade balance more than offset sharp declines in real residential investment that were occurring over the same periods. In addition, through the usual multiplier/accelerator mechanism, it is clear that rapid improvements in real net exports countervailed

developments that would have pushed the U.S. economy into recession by mid 2007—a recession that would now be extending and deepening into its second year.

Looking to the delayed recession that is now getting underway, it is likely that further improvements in real net exports will cushion somewhat the likely decline in real GDP through the middle of 2009. However, with most other industrial countries now in recession and with growth slowing significantly in most emerging market economies, rapidly rising U.S. exports will not be the reason for continued improvements in real net exports. Instead, shrinking U.S. imports will be primarily responsible for further improvements in real net exports.

All told, the next couple of quarters, will see sharp falls in consumer spending, especially on durables, and in business and residential investment. Moderate further declines of inventory investment, will be offset by increases in government purchases and further improvements in net exports. The result will be a recession of about average depth and duration, ending by mid 2009.

Sustaining Moderate Recovery

Subsequently, the U.S. economy will recover with real GDP likely to grow at about a 4 percent annual rate. This forecast is well below the 5 to 8 percent real growth rates that characterized the initial stages of earlier postwar recoveries from moderately deep recessions; but it is somewhat above many other forecasts that envision an exceptionally sluggish recovery from the present recession.

There are good reasons for caution about the likely pace of the present recovery. The rebound in consumer spending is likely to be somewhat constrained by households' desires to rebuild their savings in the face of substantial losses of net worth. The downturn of investment in non-residential structures is likely to continue well into the period of recovery. And, sluggish recovery in much of the rest of the world (especially in other industrial countries) will likely be a drag on U.S. recovery.

Caution about recovery, however, can be over done. When inventory investment shifts from negative to positive, when business investment in equipment and software stops falling and starts rising, when consumer

purchases of durables turn upward, and when residential investment begins the long march back from extraordinarily depressed levels, there will be much to fuel the recovery—especially if expansionary fiscal policies remain in place.

Indeed, looking beyond 2009 and 2010, the main problem may well turn out to be an expansion that is proceeding too rapidly. During the expansion of 2002 through 2007, it is now clear that policy was kept too loose for too long, contributing to bubbles in real estate and credit markets—the unwinding of which is key cause of present difficulties.

In the face of these difficulties, policies have been eased far more dramatically than in the previous episode, including massive direct intervention by governments and central banks into credit markets and financial institutions. Although justified by the need to combat the present crisis, there is no doubt that most of this massive policy easing and intervention will eventually need to be unwound. The unprecedented scope and scale of the policy actions, however, make it extremely difficult to know when and how rapidly they should be unwound. And, this problem has surely been made significantly more difficult by the impact on private sector behavior of the expectations about likely policy actions in potential future crises arising from the actions taken in the present crisis.

Forecast Scorecard

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| Nominal GSP (% change, year-over year, 2009) | + 1.7% |
| Real GDP (% change, year-over-year, 2009) | - 0.8% |
| Real Consumer Spending (% change, year-over-year, 2009) | - 0.5% |
| Real Private Investment (% change, year-over-year, 2009) | - 7.7% |
| Real Government Spending (% change, year-over year, 2009) | + 2.7% |
| Real Trade Balance (billions of real dollars, level, 2009) | - 341 |
| Consumer Prices (% change, year over year, 2009) | + 1.5% |
| Unemployment rate (year average, 2009) | + 7.7% |
| Corporate Profits after Taxes (% change, year-over-year, 2009) | - 12% |
| Federal Surplus (\$ billions, fiscal year 2009) | - \$750 |

Annex I: Contributions to Postwar Recessions

The U.S. economy experienced ten recessions in the 60 years from 1947 through 2006 and the eleventh recession is now underway. As reported in the table, all previous (postwar) recessions involved peak to trough declines in real GDP ranging from 0.2 percent in the very mild recession of 2001 to 3.7 percent in the very sharp recession of 1957-58. The average percentage decline in real GDP for the ten recessions is 2.0 percent. [The appropriate ending quarters for the first and fourth recessions are somewhat ambiguous as real GDP was only 0.1 percent lower in 1949II than in 1949IV and was less than 0.01 percent lower in 1970IV than in 1970I. The choice of ending quarters for these two recessions, however, does not much alter the general pattern movements of components of GDP during postwar recessions.]

The various components of GDP (consumption, investment, government spending, and net exports) and their subcomponents did not contribute in an equi-proportionate manner. Declines in inventory investment were very important in all recessions, in four cases accounting for more than 100 percent of the decline in real GDP. Declines in residential and business fixed investment and in consumption of durables also occurred in all or almost all recessions, while declines in non-durable consumption occurred in only four recessions. Except for a tiny decline in 1990-91, consumption of services expanded during all recessions. (Total consumption modest gains or losses, with an average rise of 0.3 percent across ten recessions.) The final row in the table shows the expected behavior of key components of real GDP for the recession that is forecast to occur between 2008II and 2009II. [The National Bureau of Economic Research has decided to date the start of the present recession in December 2007. However, for the purposes of the comparisons in this table it makes no sense to begin the recession with two quarters of positive real GDP growth.]

| Period | % chg RGDP | % Contrib of Inventory investmt | % Chg Invest Equip Software | % Chg Invest Nonres Struct | % chg RES Invest | % Chg Consm Dur | % Chg Consm NonDur | % Chg Consm services | % Chg Gov spend | % Contrib of Net Exports |
|------------|------------|---------------------------------|-----------------------------|----------------------------|------------------|-----------------|--------------------|----------------------|-----------------|--------------------------|
| 48IV-49II | - 1.8 | - 3.5 | - 10.9 | - 4.2 | - 9.1 | + 6.8 | + 0.7 | + 1.2 | + 7.5 | + 0.5 |
| 53II-54I | - 2.7 | - 1.3 | - 5.3 | + 3.4 | - 3.6 | - 6.7 | Nil | + 1.1 | - 2.7 | + 0.3 |
| 57III-58I | - 3.7 | - 1.1 | - 14.2 | - 2.4 | - 4.1 | - 7.9 | - 1.7 | + 1.4 | + 0.7 | - 0.7 |
| 60I-60IV | - 1.6 | - 2.9 | - 5.8 | + 5.3 | - 11.1 | - 1.2 | + 0.6 | + 2.0 | + 4.0 | + 0.5 |
| 69III-70IV | - 0.6 | - 1.4 | - 5.9 | - 3.6 | + 0.9 | - 2.2 | + 1.6 | + 2.3 | - 2.8 | + 0.3 |
| 73IV-75I | - 3.3 | - 2.4 | - 9.5 | - 11.2 | - 30.2 | - 9.2 | - 2.8 | + 3.7 | + 4.6 | + 1.2 |
| 80I-80III | - 2.2 | - 1.5 | - 5.9 | - 1.7 | - 17.1 | - 6.7 | - 1.5 | + 0.6 | - 1.1 | + 1.0 |
| 81I-82III | - 2.3 | - 1.1 | - 5.0 | + 1.0 | - 27.2 | - 4.1 | + 1.5 | + 2.9 | + 2.1 | + 0.7 |
| 90III-91I | - 1.3 | - 0.6 | - 3.0 | - 6.6 | - 11.2 | - 5.7 | - 1.1 | - 0.1 | + 1.4 | Nil |
| 00IV-01III | - 0.2 | - 0.7 | - 8.0 | - 1.7 | + 2.4 | + 2.3 | + 0.7 | + 0.7 | + 0.4 | - 0.4 |
| 08II-09II | - 2.0 | - 0.3 | - 7.9 | - 5.9 | - 14.9 | - 11.1 | - 3.9 | + 0.9 | + 2.7 | + 0.5 |