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The Great Recession in Perspective

By some measures previous recessions match this one in severity. But the recent downturn stands apart in its length, its impact on jobs and wealth, and in the government response it triggered.

by Polina Vlasenko, Research Fellow and Kerry A. Lynch, Senior Fellow

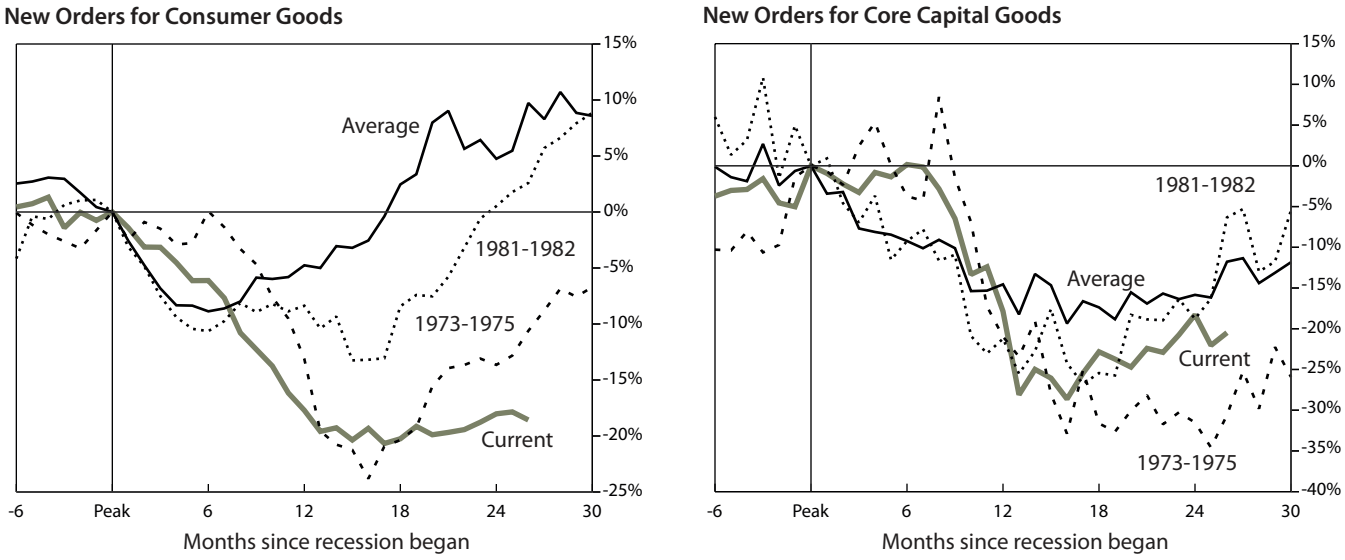
The recession that began in December 2007 appears to be over. The National Bureau of Economic Research (NBER), which officially dates turning points in U.S. business cycles, has yet to say that, but AIER's statistical indicators suggest the recession probably ended in the third quarter of last year. Robert Gordon, a renowned economist who serves on the NBER committee that will eventually make the call, thinks it ended even earlier, in June. It's easier to assert that a recession is over than to identify the exact month it ended, because the relevant economic data are still subject to large revisions that could yet rewrite history. But the general shift from contraction to recovery is clear.

Many people surely don't feel that the downturn is over. Joblessness remains high, and the stock market remains well below its 2007 peak. The housing bust continues to weigh down the balance sheets of households and banks, and foreclosures remain high.

But it's not unusual for conditions to seem bleakest when a recession ends. It's a moment that, by definition, marks the low point of the business cycle.

Even the experts have trouble recognizing cyclical turning points. AIER correctly warned of the recession months before it happened, but many economists missed the call. In December 2007, for example, the month the recession began, the consensus forecast for the *Blue Chip Economic Indicators Survey* predicted

Recession Comparisons for AIER's Primary Leading Indicators of Business-Cycle Conditions



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that the economy would grow in 2008—and that the rate of growth would increase as the year unfolded.

Some economists are now predicting a "double dip"—a brief recovery followed by another downturn. We can only say that if this does happen, we would expect our leading indicators to warn of it, and they have yet to do so.

Assuming the recession really is over, how bad was it? How does it stack up against earlier ones?

This downturn has been widely described as the Great Recession, a term coined by former Federal Reserve Board Chairman Paul Volcker. The implication is that while it was not as severe as the Great Depression, it was worse than all the other recessions in modern history.

In terms of how long it lasted, it was indeed great. Prior to this one, the longest downturn since World War II lasted 16 months. This one lasted at least 18 months (if Robert Gordon is right), maybe longer.

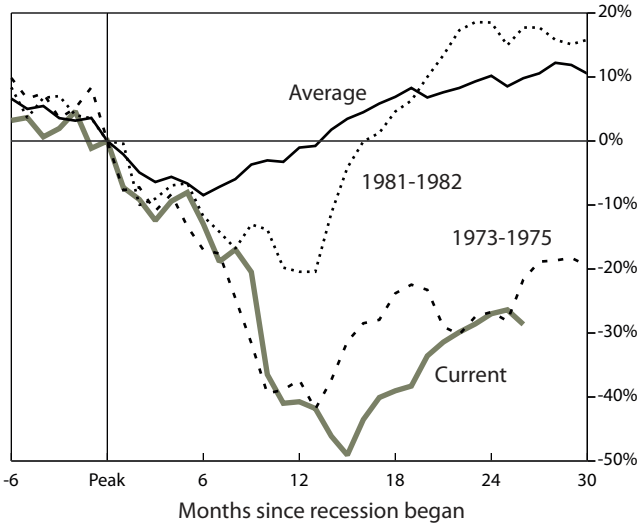
By other measures, however, the picture is more mixed.

This is evident in the charts that accompany this report, which show how AIER's statistical indicators of business conditions behaved during this recession and earlier ones.

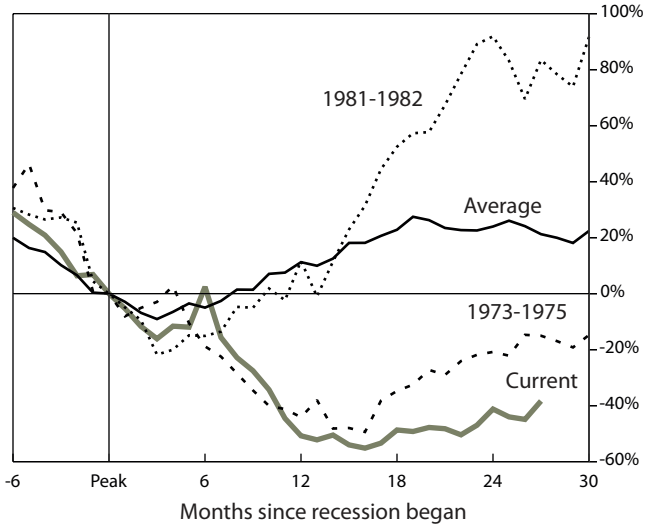
For comparison, we show the "average" experience, which is based on all of the available data for each series, going back as far as 1948 and covering as many as 10 recessions. We also highlight the trends for the recessions of 1973-75 and 1981-82 because, prior to the recent one, they were the longest and most severe of the postwar era.

Recession Comparisons for AIER's Primary Leading Indicators of Business-Cycle Conditions (continued)

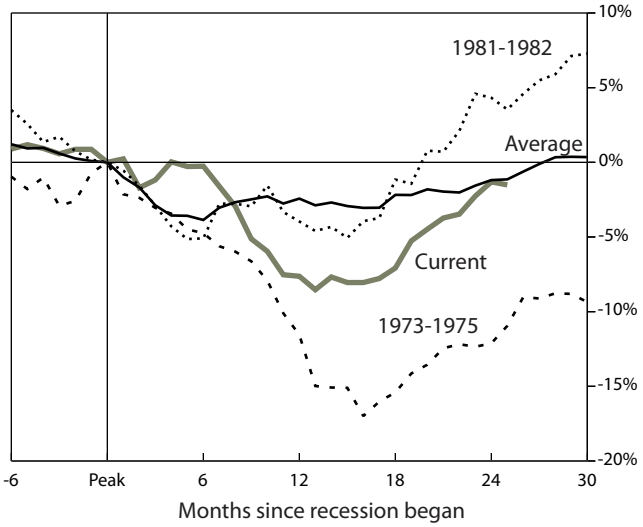
Index of Common Stock Prices



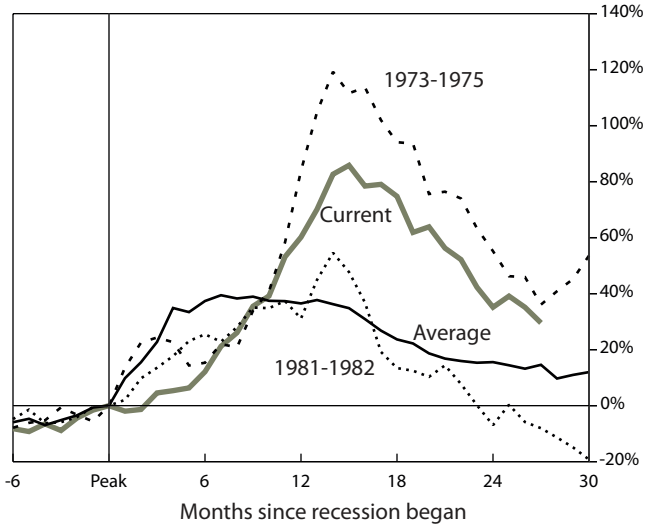
New Housing Permits



Ratio of Manufacturing and Trade Sales to Inventories



Initial Claims for State Unemployment Insurance



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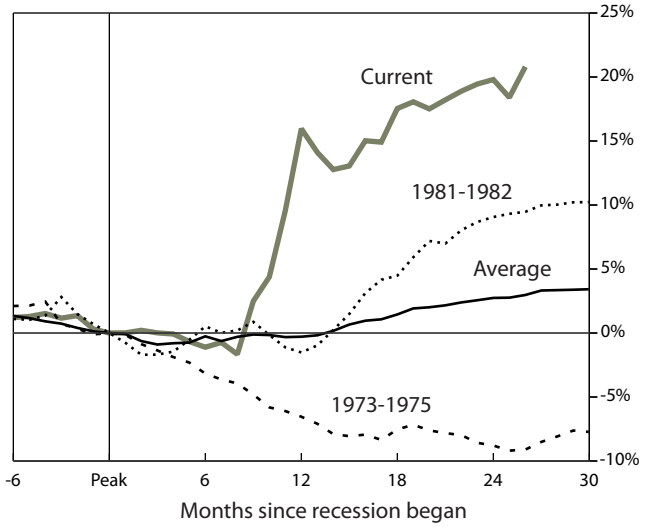
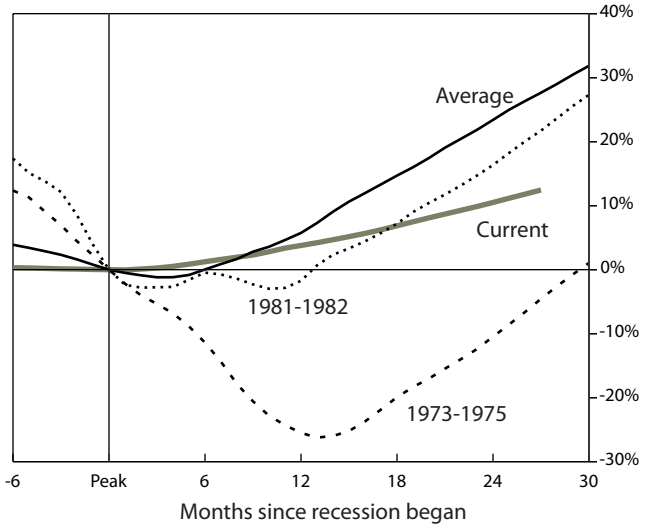
Recession Comparisons for AIER's Primary Leading Indicators of Business-Cycle Conditions (continued)

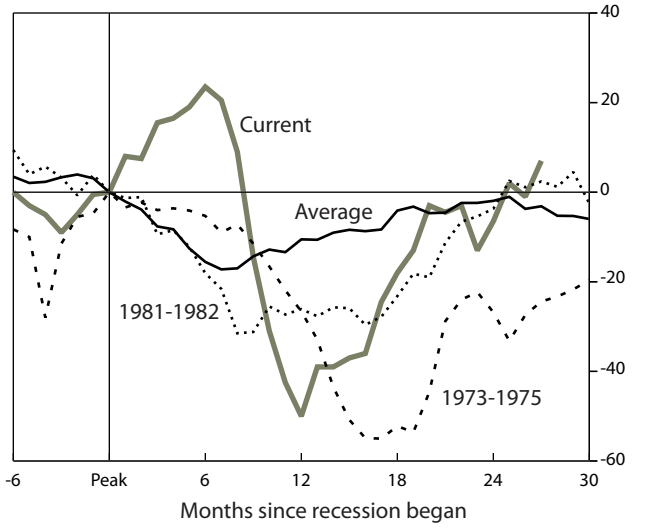
M1 Money Supply



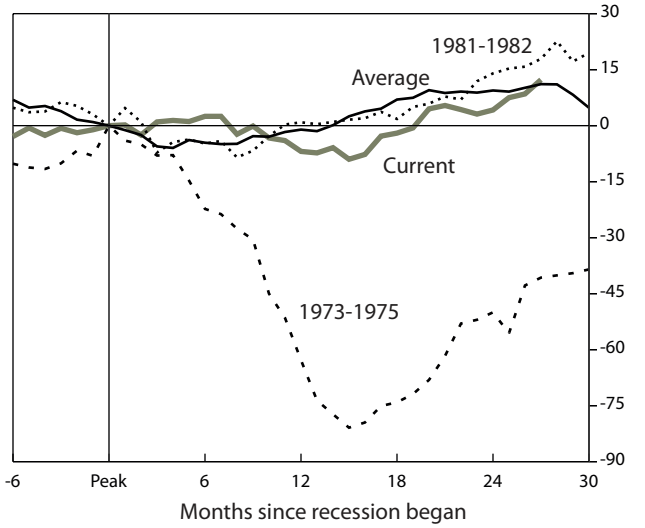
Yield Curve Index



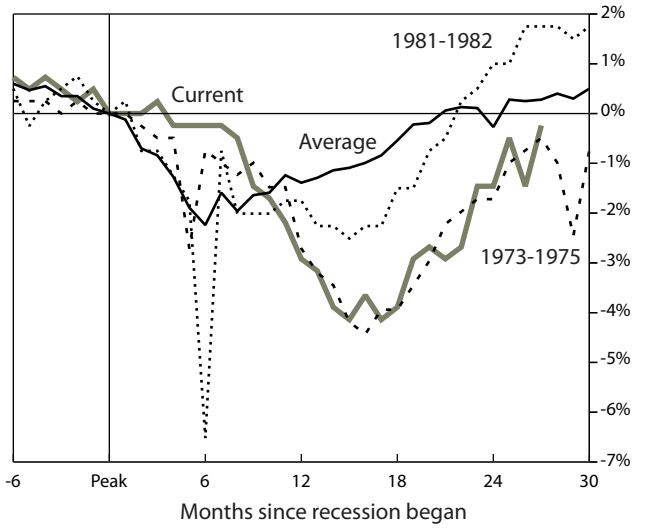
Index of Manufacturers' Prices*



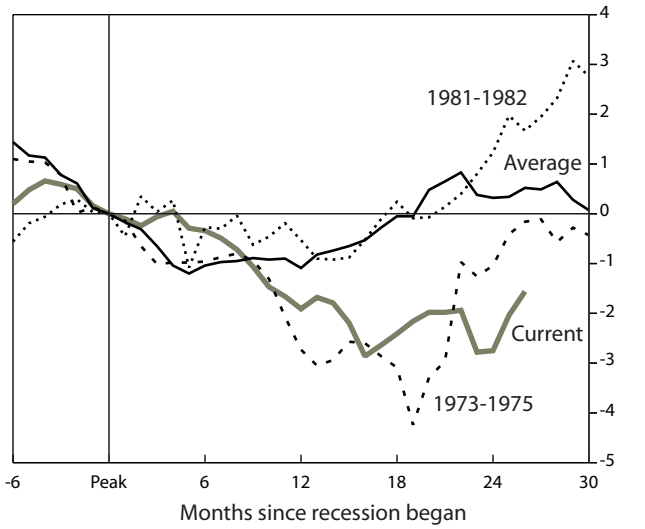
Vendor Performance*



Average Workweek in Manufacturing



3-Month Percent Change in Consumer Debt*



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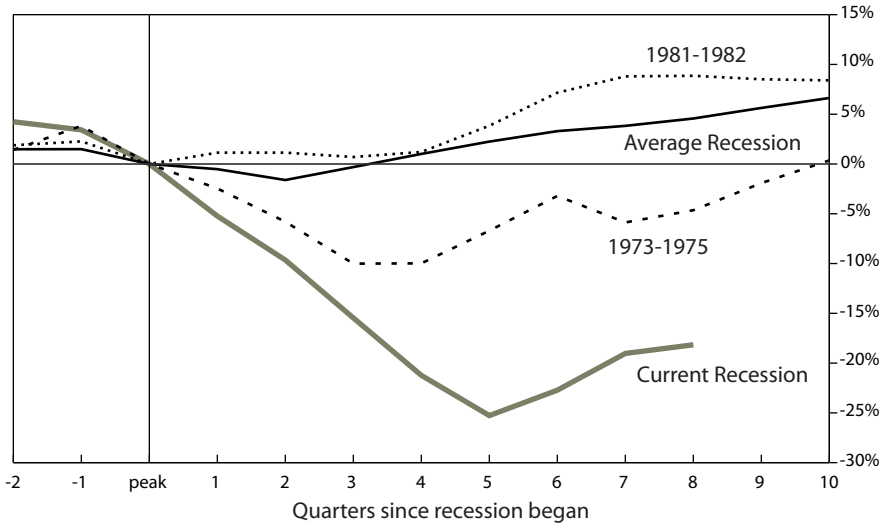
The Great Recession: A Great Drop in Net Worth

During this recession, the net worth of the household sector (adjusted for price inflation) decreased by 25 percent. This was the largest drop in any recession since World War II.

Change in Inflation-Adjusted Net Worth During Recessions
(quarterly)



Several indicators suggest that the fall in output during this recession was similar to the one in 1973-75. *New orders for consumer goods* fell by roughly the same percentage back then, and *new orders for core capital goods* (both adjusted for price inflation) fell even more (see charts on page 1).

The *index of industrial production* (page 5), one of the key indicators used by the NBER to measure the severity of recessions, fell only slightly more this time than it did in the 1970s.

Inflation-adjusted *manufacturing and trade sales* (page 6) followed nearly the same path during both recessions. The *ratio of manufacturing and trade sales to inventories* (page 2) fell less during the recent recession, which suggests that businesses were quicker this time to cut production in response to falling sales, and thereby avoid accumulating unwanted inventory.

Even constant-dollar *gross domestic product* (GDP, opposite page), the most widely cited measure of overall economic activity, decreased only slightly more in this recession than in the 1973-75 downturn. At the lowest point last year, GDP was 3.7 percent below its pre-recession peak, compared to 3.2 percent at the low point in 1975.

One might expect that the 2008-2009 decline in the stock market was by far the worst of any postwar recession. The chart on page 2 shows that at the worst point, March 2009, the *index of 500 stock prices* (the S&P 500, adjusted for price inflation) was almost 50 percent below its level when the recession began. This is, indeed, a devastating drop. But it's not much larger than the drop in the 1973-75 recession, when the index decreased by 42 percent.

Even some developments in the housing sector bear similarities to the 1970s. When home prices plummeted during the recent recession, so did the number of *new housing permits* issued (page 2), a leading indicator of residential construction. From the start of this recession through April 2009, the cyclical low, the number of permits issued decreased by 55 percent. Surprisingly, it turns out that this dramatic decline is very similar to the 50 percent drop that occurred during the 1973-75 recession.

The unemployment situation is bad now, but in some ways it was worse in the 1981-82 recession. The unemployment rate is now 9.9 percent, down from a peak of 10.1 percent last October. However, in 1982 it peaked at 10.8 percent and remained in double-digits for almost a year. *Initial claims for state unemployment insurance* (page 2) increased by 85 percent during this recession—but in 1973-75, they rose by 120 percent.

All of the above suggests that in some respects, the 2007-2009 recession was no "greater" in severity than the worst contractions of earlier decades, especially the 1973-75 recession.

By other important measures, however, the recent recession was indeed in a class by itself. One of the most significant, *nonagricultural employment*, fell by 6 percent (over eight million jobs)—that's twice as much as in the 1981-82 recession. The *ratio of employment to population* also fell by a record amount. *Personal income less transfer payments*, adjusted for inflation, fell more than it did in the 1970s, and has yet to rebound (all charts, page 6).

The increase in the *average duration of unemployment* was similar to that seen in 1973-75 (page 7), but this comparison is a bit misleading. This figure has been trending upward for years and was already high even before the recent recession began. The recessionary increase pushed it even higher—in fact, to a record high. In the depths of the 1970s recession, the average duration of unemployment was 17 weeks. But it was already 16.5 weeks when the recent recession began, and in April of this year, it reached 33 weeks.

The similar-to-the-1970s percentage decline in housing permits is also a misleadingly narrow indicator of what has happened in the housing industry. The financial impact of the current housing bust is unprecedented for both borrowers and lenders. The housing boom that preceded it was the biggest in U.S. history, and the bust has been the worst ever.

Only the Great Depression might be comparable, but it really isn't. A much larger share of American households own homes now than in the 1930s, and their level of mortgage debt relative to their income and net worth is also vastly higher. So the impact of falling home prices and rising mortgage debt is much broader and deeper now.

The mortgage market is also much larger and more complex now. Americans owe much more debt than they did in the Depression, and that debt is woven through the economy, in the form of mortgage-backed securities and other derivatives, in ways that simply didn't exist in the 1930s or even the 1970s.

In 1975, American households collectively owed mortgage and consumer debt equal to 55 cents for every dollar of their income. As recently as 2000, they owed 85 cents. By 2008, they owed $1.23. This was the highest ratio of debt to income on record.

Most of the rapid increase in the debt ratio since 2000 was driven by mortgages, as people borrowed more to buy homes and also used home equity loans to cash in on the rising value of their homes.

The fall in home prices since 2007 has wiped out billions of dollars in home values. This is not the first time that home prices have fallen, but the breadth and depth of this decline was extraordinary.

Add in the legacy of debt, and this means that for many homeowners, the debt on their homes is now more than the homes are worth. Others are still "in the black," but the equity in their homes has shriveled up.

Add to that the 2008 drop in the stock market, and the net result is that households have taken an enormous hit on their net worth. For the household sector as a whole, inflation-adjusted net worth (assets minus liabilities) fell by $7.7 trillion, or 25 percent, during the recession. Net worth has seldom fallen in recessions (see chart on opposite page). When it has, as in the 1973-75 recession, the decrease was much smaller. Over the past year, it has rebounded somewhat because of the stock market recovery. But it is still well below its pre-recession peak.

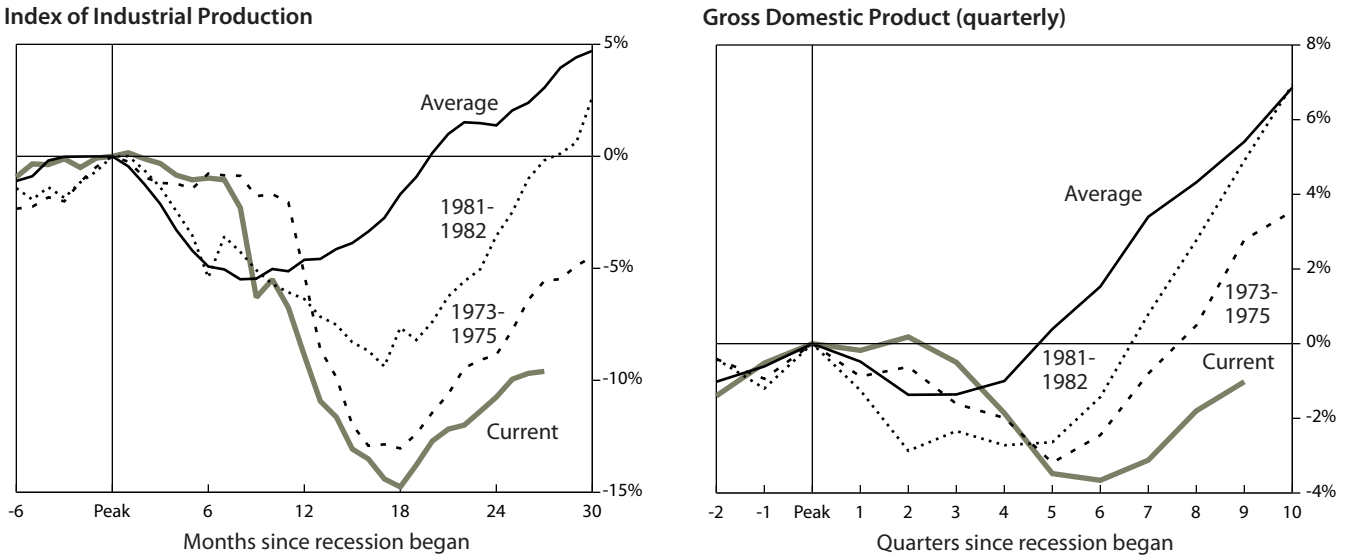
Net worth is not one of the statistical indicators that economists usually use to study trends in the business cycle. But the drop that occurred during the recent recession was extraordinary and is a major reason why the downturn could accurately be described as "great."

Another "great" aspect of this recession was the scale of the policy steps taken to combat it. Beginning in 2007, the Federal Reserve and the Treasury began responding to growing problems in the financial sector by offering emergency loans and lines of credit to banks, insurance companies, mortgage lenders, and other financial institutions. The Fed also bought up hundreds of billions in mortgage-backed securities. (For a blow-by-blow timeline of the financial crisis and policy actions, see http://timeline.stlouisfed.org.)

The Fed also lowered short-term interest rates essentially to zero. In combination with its various emergency liquidity programs for Wall Street, this produced an unprecedented increase in the money supply, one which dwarfs any other increase in postwar history (see the *M1 money supply* chart on page 3).

Simultaneously with the increase in the money supply, the *composite of short-term interest rates* dropped by nearly 100 percent (page 7). This

Recession Comparisons for AIER's Primary Roughly Coincident Indicators of Business-Cycle Conditions



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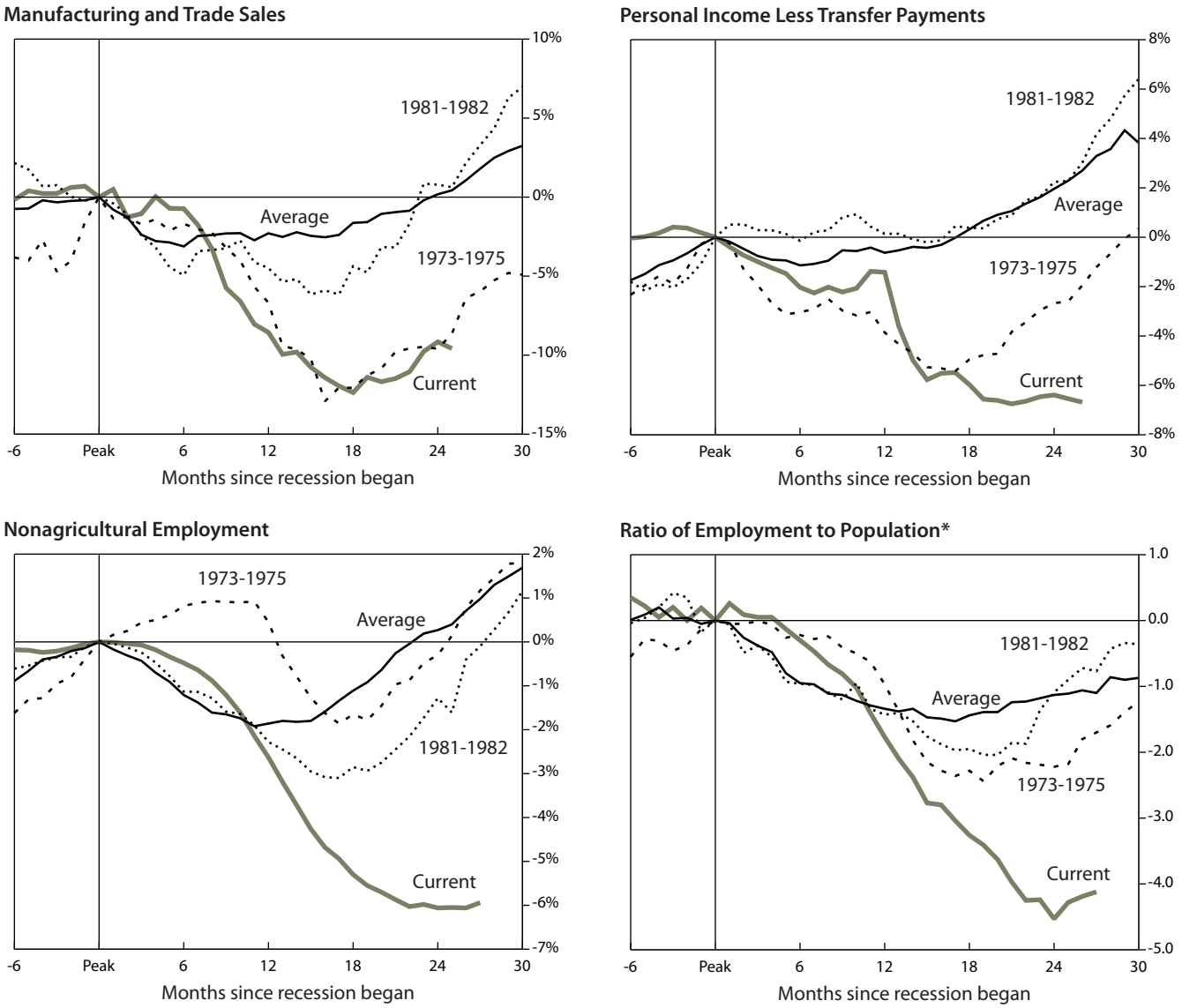
series is the monthly average of the rates on 30-day commercial paper and on 3-month Treasury bills. In past recessions, it usually fell, but never to the near-zero level seen today.

The large increase in the money supply and the expansion of the Fed's lending to various financial institutions has resulted in banks accumulating unprecedentedly large excess reserves (reserves beyond those they are required to hold). Once economic activity picks up and the economic situation becomes more stable, lending will increase both because of higher demand for credit and an increased willingness of banks to lend. There is a concern that once that happens, the Fed may not be able (or willing) to reduce the liquidity in the banking system fast enough, perhaps for fear of stifling the recovery. As a result, inflation could emerge quite rapidly and potentially could accelerate to high levels.

Fiscal policy also has been more aggressive in this recession. Government spending usually increases during recessions, but this time federal outlays rose to the highest level, relative to GDP, since World War II. The Treasury bailouts of Walls Street and of the auto industry were two components. The other was the more conventional stimulus package: the $787 billion American Recovery and Reinvestment Act of 2009, whose goal was to stimulate the economy and, specifically, employment. Federal help to state governments, spending on infrastructure projects, and "green energy" initiatives were all supposed

Recession Comparisons for AIER's Primary Roughly Coincident Indicators of Business-Cycle Conditions (cont.)



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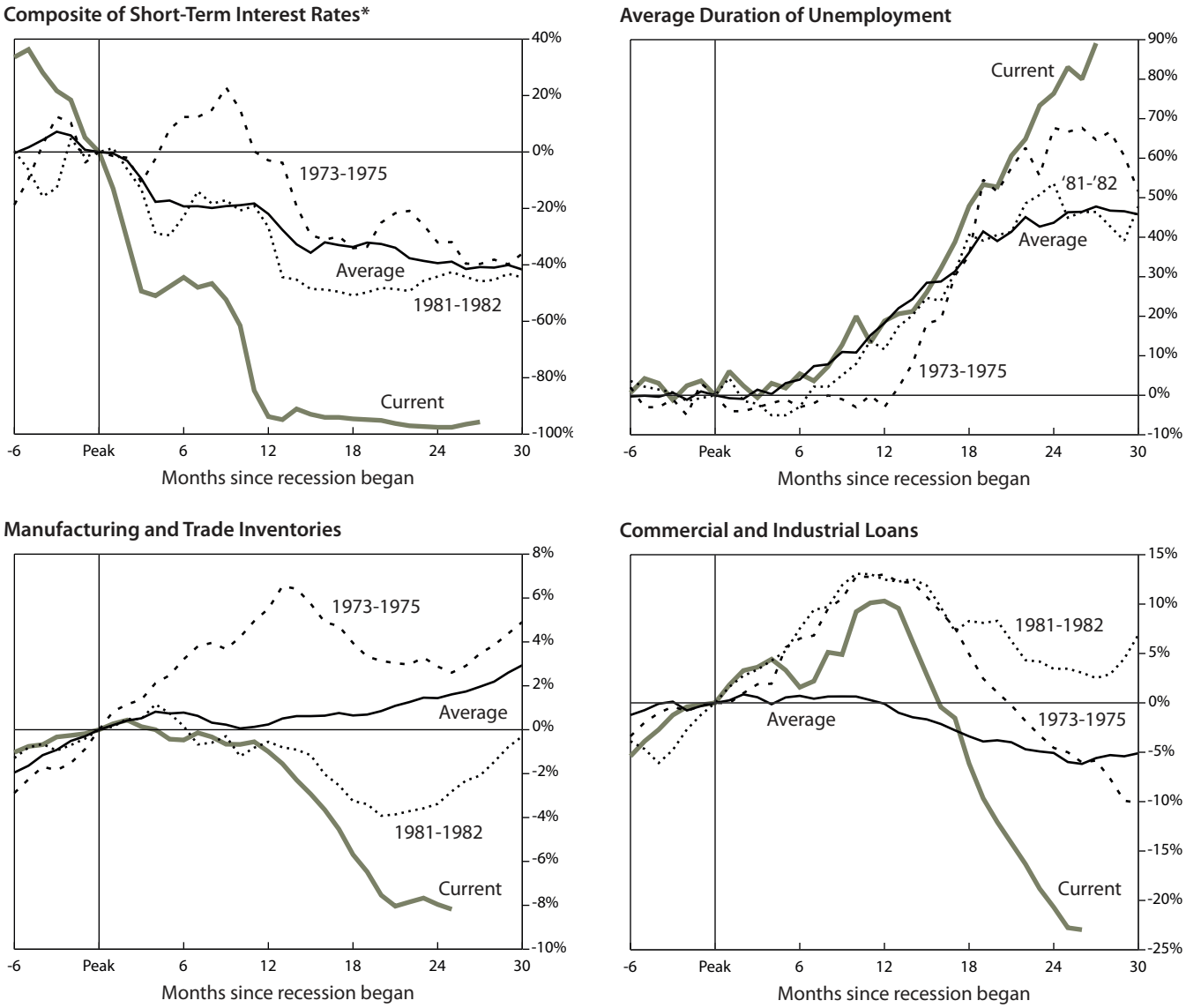
to save or create jobs.

Despite the stimulus, *nonagricultural employment* (opposite page) fared worse in this recession than in any other in postwar history. Proponents of the aggressive monetary and fiscal policy actions argue that things would have been much worse if no policy steps were taken. The problem with such arguments is that they are impossible to verify—we will never know how things would have been had policy makers acted differently.

Moreover, the full consequences of these policies are not yet clear. For example, the interventions in the financial industry appear to have set the stage for future bailouts. They have created an expectation that the next time there's a potential crisis, the government will step in to save financial firms that are "too big" or "too interconnected" to fail. (Is there any doubt that if Goldman Sachs ran into trouble, the government would help it?) The firms know this, so, unless there is effective regulatory reform, they will have less incentive to avoid risky behavior.

The growing reliance of governments on deficit financing is another concern. No one knows the point at which this will become unsustainable. For example, a year ago the financial markets seemed unconcerned about the fiscal situation in Greece, and the euro was hitting new highs against the dollar. Now, Greece is said to be "bankrupt." The euro has fallen sharply, and there are growing concerns about its prospects and even doubts about its survival. (Such concerns are not new. See "Risks to the Long-Term

Recession Comparisons for AIER's Lagging Indicators of Business-Cycle Conditions



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Stability of the Euro," by economist Anna J. Schwartz, in *Research Reports*, September 13, 2004, available on our website or by request.)

There are big differences between Greece and the United States, and between the euro and the dollar. And right now every global crisis seems to work to the advantage of the United States, pushing investors toward the dollar and toward, not away from, U.S. Treasuries. Nonetheless, this latest debt crisis illustrates how quickly events and perceptions can change, and how quickly "acceptable" levels of debt can become "unacceptable" in the eyes of the financial markets. The timing of these tipping points almost always comes as a surprise.

Overall, our review of the data suggests that the 2007-2009 recession was indeed the Great Recession, for at least four reasons. First, it was the longest in postwar history. Second, the impact on employment was much greater than usual. Third, the trifecta of falling home prices, falling stock prices, and high mortgage debt dealt an unprecedented blow to the balance sheets of households.

Fourth, the recession and the financial crisis triggered the most aggressive monetary and fiscal policy responses since the Great Depression. The full consequences of these policies remain to be seen, but they will continue to affect the economy long after the recession ends. (The same may apply to increased regulation and supervision of the financial sector, although Congress has yet to enact reforms.)

What does our comparison of the recession with previous ones tell us about likely developments in coming months?

One general lesson is that recovery will take time. In the severe 1973-75 recession, most of the indicators of business activity did not return to their pre-recession levels during the 30 months depicted in our charts.

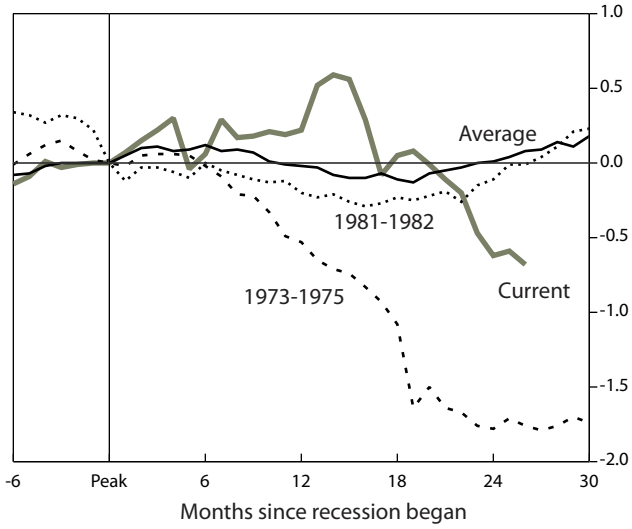
The overhang of mortgage debt was missing in earlier business cycles and it could make for a slow recovery. This debt greased the wheels of the economy for much of the past decade. Now, with home prices down and banks tightening their lending standards, a debt retrenchment is underway. Fundamentally, this is not a bad thing. But it also means that the drivers of the next economic expansion will have to be found elsewhere—not in the housing sector, inflated home prices, or unsustainable debt financing.

Right now the driving factor behind the emerging recovery appears to be government policies—that is, zero interest rates, easy money, and increased government spending financed by government borrowing. In the short term, these boost economic activity. But, just as the housing boom was a short-term blessing that turned into a long-term curse, the artificial stimulus from government policy carries a longer-term risk. In particular, the loose monetary policy and the increase in government borrowing could lead to higher price inflation.

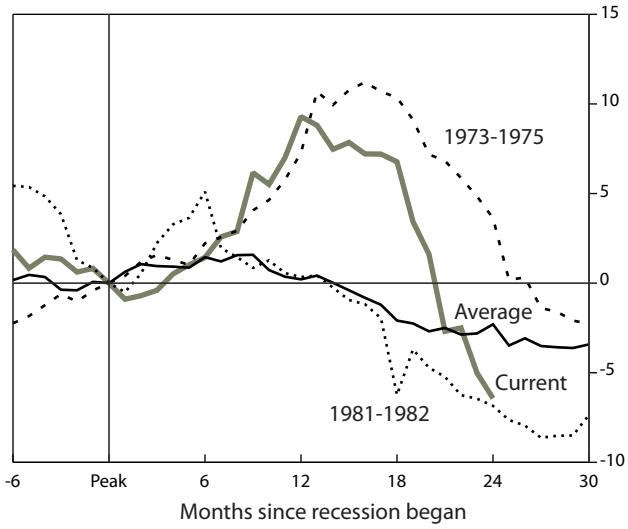
Looking ahead, the financial problems and extraordinary policy responses that helped make this the Great Recession will continue to ripple through the economy for years to come, with uncertain consequences. Partly because of this, it remains an open question whether the recovery will be sustained.

Recession Comparisons for AIER's Lagging Indicators of Business-Cycle Conditions (continued)

Ratio of Consumer Debt to Personal Income*



Change in Labor Cost per Unit of Output, Manufacturing*



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