

Economic Perspective

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The recession is most likely underway and is expected to be about average in length and severity. However, even an average recession will feel worse than anything experienced in over three decades because the two recessions during that period were shorter and less severe than average. Also, if this is an average recession, it will end next summer. I am increasingly confident of a recovery next year because an important feature of the adjustment process necessary for consumer spending to recover is already under way—slowing inflation leading to improved purchasing power.

Lessons from past banking crises—1980 to 2008 11

Although banking crises in the U.S. are rare, they have occurred frequently elsewhere in the world since 1980. Increased global linkages complicate the problem and therefore the solution. Most policy responses involve the transfer of wealth, which tend to inflict considerable costs on the economy.

Deleveraging and the national saving rate 14

Despite the claim that the U.S. economy is reducing its reliance on debt, it simply seems to be shifting leverage from the private to the public sector.

Chart section C-1

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All charts are as of November 25, 2008.

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Overview

	2008				2009F				2007	Forecast	
	Q1	Q2	Q3	Q4F	Q1	Q2	Q3	Q4		2008	2009
REAL ACTIVITY											
Gross Domestic Product	0.9	2.8	-0.5	-3.1	-2.0	-0.4	2.7	3.4	2.3	0.0	0.9
Percent vs. Year Ago(1)	2.5	2.1	0.7	0.0	-0.7	-1.5	-0.7	0.9	2.0	1.3	-0.5
Final Sales	0.9	4.4	-1.4	-2.8	-1.5	-0.2	3.1	3.2	2.5	0.0	1.2
Personal Consumption	0.9	1.2	-3.7	-2.0	-2.7	-0.3	3.4	3.2	2.2	-0.9	0.9
Fixed Investment:											
Nonresidential	2.4	2.5	-1.5	-6.2	-3.4	-3.6	2.6	3.9	6.4	-2.2	-0.1
Residential	-25.1	-13.3	-17.6	-17.5	0.0	3.1	12.5	21.6	-19.0	-18.7	9.5
Government Purchases	1.9	3.9	5.6	2.4	2.4	1.9	1.8	1.7	2.4	3.4	2.0
Exports	5.1	12.3	3.4	-10.0	1.0	-1.0	3.1	4.4	8.9	2.5	1.9
Imports	-0.8	-7.3	-3.2	-5.0	-1.3	-1.0	4.0	6.5	1.1	-4.1	2.1
Industrial Production(2)	-1.0	-4.0	-7.8	-5.6	-5.0	-1.4	2.5	6.1	2.2	-2.0	0.6
Real Disposable Income	-0.7	11.9	-8.7	1.5	-3.0	-1.0	2.1	3.2	2.2	1.2	0.3
Light Vehicle Sales(3)	15.2	14.1	12.9	11.2	11.5	12.3	12.5	14.1	16.1	13.6	12.6
Housing Starts(4)	1.1	1.0	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.0	1.1
Civilian Unemployment Rate	4.9	5.3	6.0	6.5	6.7	6.9	7.4	7.3	4.6	5.6	7.1
PRICES AND COSTS											
Consumer Price Index, All	4.3	5.0	6.7	-3.7	2.7	2.3	1.9	2.0	4.0	3.0	2.2
Consumer Price Index, Core	2.5	1.9	3.2	2.2	2.0	2.1	1.6	2.0	2.3	2.4	1.9
GDP Chain-type Price Index	2.6	1.1	4.2	2.9	2.8	1.5	1.7	2.0	2.6	2.7	2.0
Unit Labor Costs	1.2	-0.1	3.6	3.0	2.5	2.0	1.3	-0.4	1.0	1.9	1.4
Price of Imported Oil/Barrel	89.8	115.6	113.4	52.5	50.0	52.0	65.0	75.0	67.1	92.8	60.5
Trade-Weighted Dollar Index	72.0	70.9	73.5	80.4	80.0	79.2	77.0	75.0	77.9	74.2	77.8
PROFITS											
S&P 500 Operating(5)	16.6	18.8	17.6	18.0	17.5	20.0	21.4	23.0	82.5	71.0	81.9
Percent vs. Year Ago(6)	-25.8	-21.9	-15.7	18.3	5.3	6.4	21.6	27.8	-5.9	-14.0	15.3
Economic Profits**	-1.5	-7.0	-7.1	-2.2	0.5	5.0	10.1	13.5	-1.6	-4.5	7.3
INTEREST RATES											
Federal Funds Rate	3.2	2.1	2.0	0.9	0.5	0.5	1.0	2.0	5.0	2.1	1.0
91-Day Treasury Bill Rate(7)	2.1	1.6	1.5	0.5	0.5	0.5	0.9	1.9	4.3	1.4	1.0
5-Year Treasury Note Yield	2.8	3.2	3.1	2.6	3.0	3.5	4.0	4.3	4.4	2.9	3.7
10-Year Treasury Note Yield	3.7	3.9	3.9	3.4	3.7	4.0	4.3	4.5	4.6	3.7	4.8
AA Utility Bond Yield	6.0	6.1	6.1	6.9	6.7	6.7	6.7	6.7	5.9	6.3	6.7
AAA Municipal Bond 20-Yr	4.4	4.5	4.5	5.2	5.0	4.7	4.7	4.7	4.3	4.6	4.8
Mortgage Rate	5.9	6.1	6.3	6.2	6.5	6.7	6.7	6.7	6.3	6.1	6.7
Bank Prime Rate	6.2	5.1	5.0	3.9	3.5	3.5	4.0	5.0	8.0	5.1	4.0

Sources: U.S. Commerce Department, Bureau of Labor Statistics, Standard and Poor's, Federal Reserve Board, U.S. Department of Energy, Bloomberg, Federal Home Loan Mortgage Corporation (FHLMC), and Ameriprise Financial.

(1) Real gross domestic product quarterly data are percent changes from the same quarter a year ago and the annual data are year-over-year percent changes; (2) Manufacturing sector; (3) Vehicle sales in millions, at seasonally adjusted annual rates (SAAR). (4) Housing starts in millions, SAAR; (5) Standard and Poor's operating earnings per share in dollars; (6) Standard and Poor's operating earnings percent change from a year earlier; (7) The 91-day Treasury bill rate is on a discount basis.

Note: Outlined observations represent substantially different estimates from a month ago. For real gross domestic product and its components, industrial production, disposable income and inflation, the quarter data are percent changes, SAAR, and the annual data are fourth-quarter to fourth-quarter percent changes. For the unemployment rate, price of imported oil, trade-weighted dollar index, and all interest rates, the numbers shown are averages. The municipal bond yield is the Bloomberg Fair Value for a 20-year AAA-rated general obligation bond. The mortgage interest rate is the FHLMC rate for 30-year, fixed-rate, conventional mortgages. The trade-weighted dollar is the Federal Reserve Board's major currency index.

F—forecast. **The quarterly data are percent changes from a year ago, while the annual data are year-over-year percent changes.

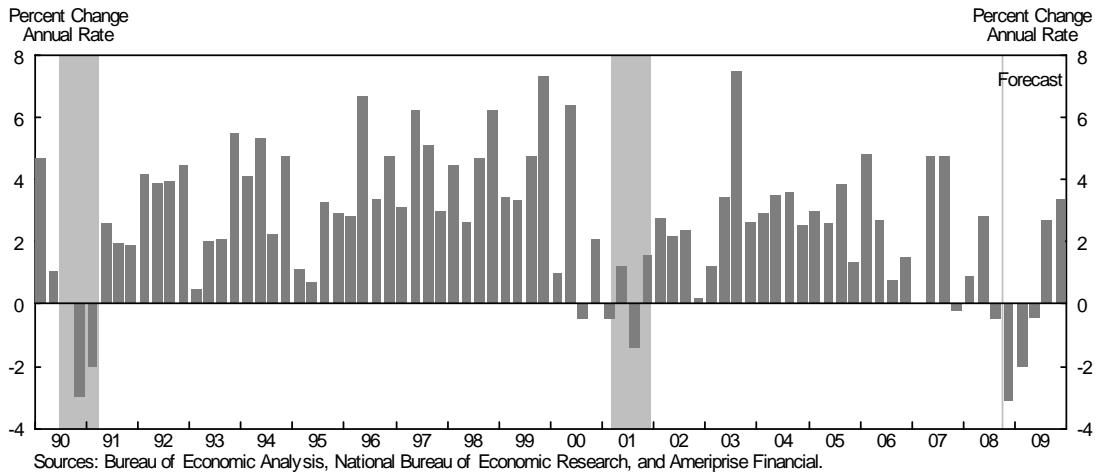
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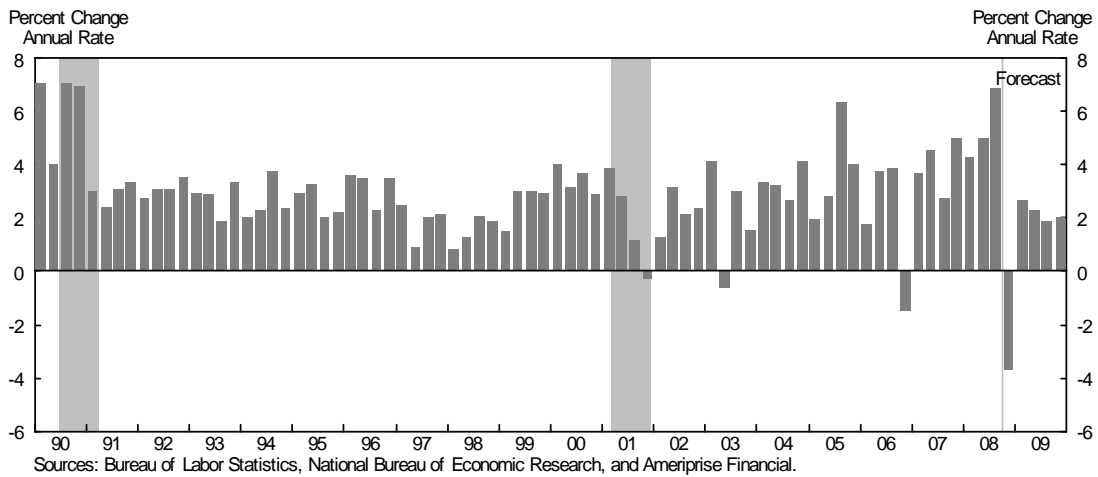
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- According to the preliminary estimate from the Commerce Department, real gross domestic product (GDP) declined 0.5 percent at an annual rate in the third quarter, which was weaker than anticipated in the October forecast. Also, the economic downturn now is expected to be considerably more intense in the fourth quarter (down 3.1 percent) than estimated a month ago (down 1.3 percent). A much weaker consumer sector and less of a contribution from the foreign trade sector are the primary reasons for the lower estimate.
- Despite a weaker fourth quarter, real GDP still is expected to decline less than 2.0 percent at an annual rate over the course of the current recession. The tradeoff for a weaker fourth quarter of 2008 is a milder decline in the second quarter of 2009. The reason for this less pessimistic end to the recession is that the fundamental adjustments necessary for consumer spending to recover already appear to be underway.
- The primary adjustment for consumer spending to recover is for them to regain purchasing power—that is, real income growth. The sharp drop in energy prices over the last three months is a start in that direction. More widespread disinflation likely will follow. The other adjustment needed for a healthier economy is for household wealth to stabilize. This will require that house and equity prices stop falling. I now think that the negative wealth effect, which is likely to be very substantial over the next few quarters, will moderate by the second quarter of 2009.
- The U.S. economy is not experiencing a depression. That being said, it will feel worse than either of the last two recessions because it is expected to be the most severe recession in over 25 years. Many market participants are not old enough to remember the last severe recession.
- The Federal Reserve has cut its federal funds rate target to 1.0 percent, matching the previous low in 2004. Exactly how much more the Fed can or should cut short-term interest rates is unclear. After all, lower short-term interest rates promote economic activity largely if they encourage investors to stretch for return by bidding up the prices (lowering the yields) on riskier debt obligations. Ironically, it was this stretching for return and indifference toward risk that created the current credit mess. At the moment, investors are far from being indifferent toward risk.
- The difficult economic environment facing President-elect Obama most likely will dictate fiscal policy initiatives early in his first term. In particular, the top priority of the new administration will be to get the economy expanding again, and quickly. As such, enacting another stimulus package seems very likely, which in turn could play a role in shaping the pace of economic activity in the second half of 2009. Unfortunately, even with the election behind us, the range of possible measures are wide, including spending on infrastructure, another round of tax rebates, or an acceleration of some proposed tax breaks (while delaying any proposed tax increases).

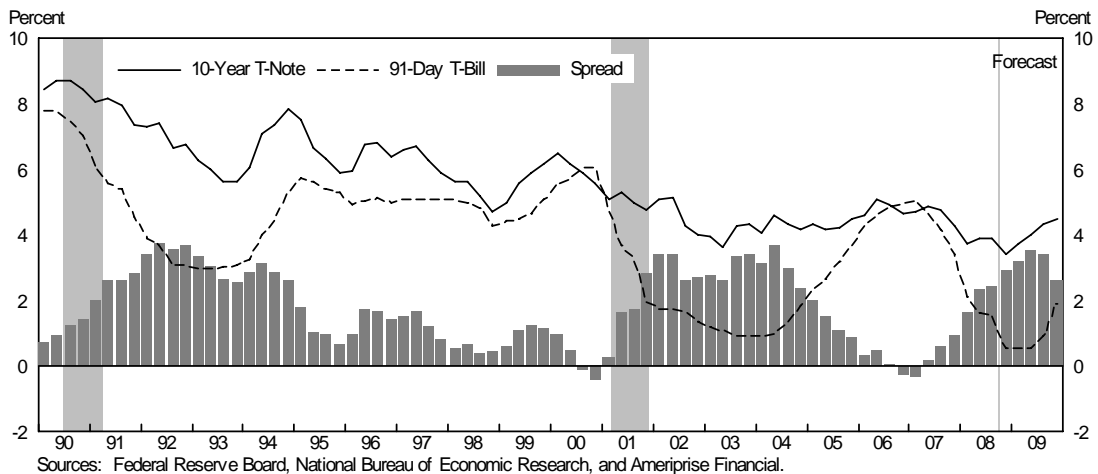
Real Gross Domestic Product



Consumer Price Index



Interest Rates



Forecast update

The Ameriprise Financial forecast was revised last month to show the recession starting in late 2008 rather than early 2009. In fact, I believe that the Business-Cycle Dating Committee of the National Bureau of Economic Research, the group responsible for officially timing recessions, will eventually inform us that the recession started in the third quarter. This conclusion was reinforced by the Commerce Department's preliminary estimate that real gross domestic product (GDP) declined 0.5 percent at an annual rate in the third quarter, which was weaker than shown in the Ameriprise Financial forecast a month ago. In addition, the economy is expected to contract at a much faster pace in the current quarter (down 3.1 percent) than estimated a month ago (down 1.3 percent). A much weaker consumer sector, weaker business spending, and a smaller contribution from the foreign trade sector are the primary reasons for a larger decline in real GDP in the fourth quarter.

Although the housing sector has been in a recession for nearly three years and the financial sector has been in a recession for about a year, the downturns in these two sectors apparently were not enough to pull the overall economy into a recession. Not until the consumer sector fell into a recession did the overall economy follow suit. I believe that happened in the third quarter, as real personal consumption expenditures contracted a whopping 3.7 percent at an annual rate. Of course, a recession in the consumer sector is not totally independent of the recessions in the housing and financial sectors. It was a combination of factors, including the third quarter spike in consumer inflation, the collapse in asset prices more recently, and the pervasive loss of confidence in the government's policy responses to the financial crisis, that caused consumers to retrench. While all the factors were expected, they were more pronounced and peaked sooner than anticipated.

Inflation has long been advertised as the likely catalyst to the next recession. In fact, for nearly two years I have been talking about an inflation-induced, consumer-led recession. Based on the latest data, the consumer sector apparently hit a wall in the third quarter. Why in the third quarter? I contend that it was the spike in inflation that finally killed consumer spending. The overall consumer price index (CPI) increased 4.3 percent at an annual rate in the first quarter, which was high by recent standards but not yet problematic. In the second quarter, the overall CPI rose 5.0 percent at an annual rate, which most likely was starting to exert pressure on consumers. Finally, in the third quarter, the CPI jumped 6.7 percent at an annual rate, a pace that most definitely is too high for consumers to maintain spending. At the same time, compensation per hour rose only 4.7 percent, suggesting that even those who still had jobs saw their purchasing power evaporate. If consumers lose purchasing power, they typically retrench. They did in the third quarter.

Moreover, consumers lost substantial wealth again in the third quarter, adding to an already meaningful negative effect on consumer spending. The loss of

wealth associated with falling house prices had been a drag on consumers for some time, but never enough to derail consumer spending. But it was the protracted and deep decline in the equity market—combined with sharper-than-anticipated losses in debt markets—that really impaired household wealth. Although a change in a dollar of wealth alters consumer spending by only a few cents, a substantial drop in wealth can still have a meaningful adverse effect on consumer spending. More importantly, it will take longer for this negative wealth effect to reverse course. For this reason, it is not unreasonable to expect a meaningful negative wealth effect to remain in place for awhile.

And the level of concern about the safety and soundness of financial institutions has not been as high as it is today in probably three decades. Obviously, the loss of wealth is not totally unrelated to the loss of confidence in financial institutions—or the government policies in response to the problems. Again, I was not surprised by the loss of confidence but I was surprised by how quickly and how dramatically confidence evaporated. This loss of confidence combined with inflation and declining wealth, does not bode well for consumer spending in the near term. And of course, once consumers retrench, business spending will follow.

The one bright spot for the economy is that the U.S. had a huge trade deficit going into the recession. Let me explain how this will work. Most consumer goods sold in the U.S. are imported. As such, when consumers retrench, something they have not done for an extended period since the 1990-91 recession, imports decline as well. In fact, imports are expected to contract much faster than exports, causing the trade deficit to narrow and soften the downturn of the U.S. economy. The reason is that foreign manufacturers, who were able to expand production when U.S. consumers were buying, now must lower production in response to a drop in consumer spending. They shared the gain, now they share the pain.

Cyclical disinflation versus secular inflation

A debate is being waged about the impact of recent developments on the outlook for inflation. Some contend that the U.S. economy will experience an extended period of deflation (falling prices) similar to what happened in Japan during the 1990s. Others contend that the U.S. economy is heading for a period of rising inflation similar to the upward trend experienced in the late 1960s and early 1970s. At the moment, I would assign a much greater chance of the higher inflation scenario than the deflation scenario.

That being said, the upward secular inflation trend can be temporarily derailed by cyclical forces. In other words, the recession, and the decline in aggregate demand for goods and services that it encompasses, will certainly lead to the potential for cyclical deflation. Indeed, it may already be here, given the sharp drop in the price of energy over the last few months. The price of a barrel of West Texas Intermediate crude oil is now about \$50, down an astonishing 64.0 percent from its peak of \$146 in mid-July. Although the energy component represents only 9.7 percent of the CPI, it is expected to detract nearly 4.0 percentage points alone from the annualized rate of overall

CPI inflation in the fourth quarter. This means that ex-energy, the fourth-quarter CPI is expected to be little changed.

Some market participants seem to be extrapolating this decline forward, but it is unlikely to be sustained. Inflation will slow dramatically in 2009 from the torrid pace over the first three quarters of 2008, which is far different than saying that prices will decline for all of 2009. The Ameriprise Financial forecast shows the overall CPI increasing a mere 2.0 percent over the four quarters of next year, following an average annual advance of 5.3 percent so far this year. Energy prices have retreated substantially in response to falling demand, and represent a key factor in both the acceleration of inflation earlier this year as well as the deflation expected in the fourth quarter. However, the plunge in energy prices may have already priced in a much worse economic downturn than is likely. Lower energy prices are possible but unlikely to be enough to cause the overall CPI to decline for an extended period. In addition, weak aggregate demand, a slightly elevated dollar, and lower inflation expectations most likely will lead to disinflation, if not outright deflation, in the core goods component of the CPI (excluding food and energy goods). In contrast, prices of core services (excluding energy services) will slow a bit but not enough to prevent core CPI prices from moving higher.

In the longer run, the tremendous injection of liquidity into the global economy by central banks around the world, as well as the surge in leverage in the public sector in exchange for the deleveraging of the private sector, do not bode well for the outlook for inflation. The old adage is that if you are looking for the next potential trouble spot, simply follow the debt. This was certainly true of the many financial crises that have occurred over the last thirty years.¹ In the 1960s, it was the government who leveraged up its balance sheet to finance the Vietnam War and to fund spending on numerous new domestic programs. It was this leveraging up of the government balance sheet in the 1960s that I contend contributed markedly to inflation in the late 1960s and early 1970s. In many ways, the U.S. economy and the federal government's balance sheet seem to be heading down that path again. I do not expect inflation to accelerate as dramatically as it did in the 1970s, but I still expect inflation to peak at a higher level at the end of the next expansion than it did at the end of the last one.

The Fed's self-inflicted liquidity problem

The liquidity problem that has contributed considerably to the current financial crisis may be a consequence of a change the Federal Reserve made nearly six years ago. I am referring to the decision by the Fed in January 2003 to set the discount rate—the rate banks pay to borrow directly from the Fed—above the federal funds rate rather than below it. It seems that there were some very substantial unforeseen consequences from what at the time was perceived as a minor adjustment to discount window operations.

¹For more details about the major financial crises of the last 30 years, see the essay in this issue, "Lessons from past banking crises—1980 to 2008," pp. 11-13.

The idea was that by making the discount rate a penalty rate, it would discourage banks from using the discount window unnecessarily. What the Fed did not anticipate is that the change also would discourage banks from using the discount window when they desperately should. For example, prior to January 2003, when an investment bank needed short-term credit to finance its inventory of securities in the midst of a liquidity crisis, it could turn to a commercial bank for the money. And in most cases, the bank was more than happy to accommodate. The bank could make the loan to its investment bank customer at a rate slightly above the federal funds rate and then borrow either in the federal funds market or at an even lower rate from the Fed through the discount window without looking desperate. Indeed, in a liquidity crisis, commercial banks served as the conduit to the Fed's discount window for their investment bank clients.

With the discount rate above the federal funds rate, commercial banks are less likely to lend to investment banks during a liquidity crisis because commercial banks apparently are reluctant to borrow from the Fed's discount window at a penalty rate. They fear being perceived in a financial crisis, such as the one we are in, as desperate. This is not a problem for banks under normal credit market conditions because commercial banks are able to get the funds they need from other sources, including the federal funds market, commercial paper market, or the Eurodollar interbank loan market. In addition, investment banks are less likely to rely on commercial banks because they also have access to short-term funds through other markets, such as asset-backed commercial paper.

The problem arrived when credit conditions were no longer normal. The last thing any financial institution can afford is to be perceived by lenders or depositors as desperate. If commercial banks went to the discount window to borrow at a rate that was higher than the federal funds rate, they would be perceived by investors, rating agencies, and depositors as desperate.

At the start of the current credit crisis, the first thing the Federal Reserve did was to remind commercial banks that the discount window was open and prepared to provide the necessary funds to maintain lending among financial institutions. The problem was that even after cutting the penalty in half (from 100 basis points to 50 basis points) as its first step to provide liquidity, it apparently was not enough of an incentive to encourage banks to use the window. I believe the Fed would have been more effective if it had lowered the discount rate to a level at least equal to the federal funds rate, if not below, before it even started to cut the federal funds rate. Then commercial banks could have borrowed from the discount window without appearing desperate because it would have been the cheapest source of credit available.

With the discount rate above the federal funds rate, commercial banks only looked desperate coming to the discount window to borrow. In fact, the Fed's creation of the numerous credit facilities—the Term Auction Facility, Primary Dealer

Credit Facility, Term Securities Lending Facility, the Commercial Paper Funding Facility, and coming soon the Money Market Investor Funding Facility—are nothing more than extensions of the discount window, and provided both financial and nonfinancial firms direct access to the Fed in lieu of them having indirect access to the Fed through their relationships with commercial banks. Historically, the discount window has been the primary channel used by the Fed to provide liquidity during financial crises.² The discount window did not play that role this time—the various credit facilities have successfully replaced the discount window as the primary source of liquidity and many financial institutions have applied for a commercial bank charter to gain direct access to the Fed rather than having to rely on other commercial banks to provide that access in the future.

It is not too late for the Fed to lower the discount rate below the federal funds rate, although it is unclear how beneficial such a move would be at this stage of the current credit cycle. However, the Fed may want to consider this in the future. For example, in the early stages of the next tightening episode, the Fed could raise the discount rate to a level above the federal funds rate, which would discourage banks from using the discount window. On the other hand, in the early stages of the next easing episode, the Fed would be advised to lower the discount rate to a level below the federal funds rate, maybe in conjunction with the first cut in the federal funds rate or possibly even before a cut in the funds rate.

President-elect Obama's proposed tax increases versus another stimulus package

The U.S. economy most likely will be very sluggish when President-elect Obama takes office in January. As such, it is unclear that the tax increases that he proposed during his campaign will be implemented immediately, if at all. His top priority will be to get reelected. To do so, it is imperative that the economy be well into the expansion phase of the business cycle by 2012 so that voters are convinced that the recession is over. I doubt that President-elect Obama will want to jeopardize his chances by pursuing policies that could prolong the current recession or trigger another recession near the end of his first term.

The implication is that another fiscal stimulus package seems more likely than a major overhaul of the tax code. That being said, tax legislation is needed to deal with some of the sunset provisions of the President Bush tax cuts. But it is unclear that the changes will be extensive. For example, the tax changes proposed by President-elect Obama during the campaign actually would maintain some of the Bush tax cuts,

²In June 1970, Penn Central—the largest railroad in the U.S. and the sixth largest business in the country—declared bankruptcy and paralyzed the commercial paper market. Penn Central had about \$200 million in outstanding commercial paper, which at the time was substantial. Corporations that relied heavily on commercial paper had to seek alternative sources of funding. The Federal Reserve responded by encouraging money center banks to lend to customers unable to roll over commercial paper by increased use of the discount window. This prevented the crisis from developing into a full-scale panic.

including the current 10, 15, 25 and 28 percent brackets, as well as capping the estate tax at \$7 million for married couples. Moreover, the bulk of the proposed tax increases would hit families with incomes in excess of \$250,000, but with the economy in a recession, it is difficult to imagine that all of the proposed tax increases would be enacted.

Indeed, the more relevant discussion may be what might be included in another stimulus package. Unfortunately, there is very little known about its structure and details, and probably will not be known until after President-elect Obama is in office. However, there may be some clues as to what might be included in the stimulus package by looking at the stimulus package now being discussed in the Congress. This package includes spending on infrastructure projects, another round of tax rebates, or possibly some revenue sharing with state governments to help minimize the adverse effect of shortfalls in their operating budgets. One thing for sure, the stimulus package is likely to be large.

Nevertheless, even if the structure of the stimulus package was known, there still would be considerable uncertainty about its timing. For this reason, it is difficult to incorporate a fiscal package into the forecast because it could play a role in shaping the pace of economic activity in 2009 but it alone cannot jump start the economy.

Investment implications

I believe the U.S. economy has slipped into a recession and that the recession is likely to last for several more months (my best estimate is that it started in the third quarter of this year and will end in the third quarter of next year). More importantly, it appears to me that financial markets are priced for a much longer and probably more severe recession than shown in the Ameriprise Financial forecast. Is there a chance that markets are price properly? Certainly there is a chance, but I would assign a very low probability to that outcome.

The more likely outcome in my view is that the recession is longer and more severe than anything experienced in nearly three decades, but that it still is not that different from the average of the last nine recessions; that is, about ten months long and a loss of about 1.7 percentage points of real GDP at an annual rate. If the Ameriprise Financial forecast proves to be closer to the actual outcome than the more severe scenario currently priced in the market, then there are a host of opportunities available to investors at the moment. This does not mean that asset prices will not fall further—they may. But what it does mean is that the prices paid by investors for stocks and bonds of companies that are likely to survive, if not flourish, in the future are at bargain levels. The key is that managers and analysts still need to identify the survivors, and that the investment horizon is a few years rather than a few weeks.■

Lessons from past banking crises—1980 to 2008

In this essay, I examine the various major financial crises in the U.S. over the last three decades in an attempt to illustrate that much of what we are experiencing today is not that different from the past. Indeed, in a recent staff study, the International Monetary Fund (IMF) suggests that there have been 281 financial crises in the world since 1980, 120 of them systemic banking crises.¹ Only two of the 120 systemic banking crises occurred in the U.S.—the savings and loan crisis in the late 1980s and the current financial crisis. And while the current banking crisis may seem different, something very similar has happened somewhere before.

What may be unusual for the U.S. is that investors are having an extremely difficult time assessing the risk in financial markets after ignoring it for so long. Included among the many causes of global banking crises are unsustainable macroeconomic policies, excessive credit booms, and balance sheet fragilities, exacerbated by a variety of political and legal constraints. The current crisis suffers from the same causes. Moreover, all the policy responses taken to resolve the current banking crisis, while they look innovative, have been used at various times in the past.

An interesting conclusion of the IMF study of past global financial crises is that the policy responses to deal with them eventually succeeded at resolving the crises but at a cost. In other words, “policy responses that reallocate wealth toward banks and debtors and away from taxpayers...can help to restart productive investment, but they have large costs. These costs include taxpayers’ wealth that is spent on financial assistance and indirect costs from misallocations of capital and distortions to incentives that may result from encouraging banks and firms to abuse government protections.”² The spending of taxpayers’ wealth refers to the large budget deficits that represent claims on future taxpayers, the present value of which is an offset to current wealth. The misallocations of capital and distortions to incentives that a policy response may cause are more of a potential problem for future generations because they too will represent an offset to future wealth accumulation. That is, misallocations and distortions imply inefficiencies, which in turn mean that the economy is not as productive as it could be. Such an outcome typically leads to higher inflation, less output growth, and lower living standards than otherwise would be the case.

Of course, there were more banking crises in the U.S. since 1980 than the two identified in the IMF study, including Drysdale Government Securities’ failure of May 1982, Continental Bank’s failure of May 1984, Ohio’s savings and loan crisis of

¹Currency crises are far more frequent than banking crises. The other type of financial crisis is sovereign debt crisis. See Luc Laeven and Fabian Valencia, “Systemic Banking Crises: A New Database,” Working Paper, International Monetary Fund, November 2008, p. 56.

²Ibid, pp. 3-4.

1985, the stock market crash of October 1987, Drexel Burnham Lambert's demise in 1990, Long-Term Capital Management's debacle in 1998, and Enron's scam in 2001. The difference may be that the others crises were not considered by the IMF staff to be systemic; that is, they were relatively contained within a particular industry, region, or a small number of institutions. That being said, the global linkages in financial markets have long been a topic of discussion. Indeed, in a 1997 study by the Government Accounting Office, the authors highlighted the increasing "financial linkages among domestic and global financial markets...affected the nature of financial crises during the 1980s. These linkages also introduced a new dimension to systemic risk in the financial system."³ The disruptions of the 1980s heightened awareness that shocks could spread across markets, institutions, and borders, thus enlarging the scope of crises when they occur. Over time, the linkages have only increased, owing to further advances in communication and information technology that have allowed more firms the use of derivative financial instruments to provide protection against various risks, including currency exchange rates, interest rates, commodity prices, and bond default. These derivative products generally are not the problem. They become a problem when they are held in highly leveraged accounts for speculative rather than hedging purposes. And the increased linkages across borders complicate the policy responses pursued.

This is best illustrated with an example from history. In fact, following the IMF's lead, the example is the savings and loan associations (S&Ls) debacle of the 1980s. The problem was a long time in the making, owing to the residential real estate boom of the 1970s and 1980s, combined with the removal of Regulation Q limiting the interest rate paid on deposit by depository institutions. But the excesses did not start in a meaningful way until the mid-1980s when S&Ls were allowed by regulators to participate in commercial real estate ventures that exposed many S&Ls to considerable downside risk. In particular, not only were S&Ls allowed to underwrite the mortgage on the venture, they were also allowed to assume the equity position. By doing so, the S&Ls effectively ended up owning a lot of commercial real estate. So long as commercial real estate prices were rising, these investments were profitable; so much so that at one point during this period commercial banks petitioned their regulators for permission to do the same.

However, once real estate prices started to fall, these investments became a considerable problem for S&Ls. Of course, there were other factors that contributed to the crisis, not the least of which was the Tax Reform Act of 1986 that removed many tax shelters that lowered the value of real estate investments. Resolving the S&L crisis ended up costing taxpayers about \$125 billion, mostly through the deposit insurance programs and the Resolution Trust Corporation (RTC) established to dispose of failed S&Ls taken over by regulators after January 1, 1989. By the way, the legislation passed to establish the RTC was the same legislation that gave the Federal Home Loan Mortgage

³See United States General Accounting Office, *Financial Crisis Management, Four Financial Crises in the 1980s*, Staff Study, May 1997, p. 9.

Corporation and the Federal National Mortgage Corporation additional responsibility to support mortgages of low- and moderate-income families. Whoops!

The bottom line is that the systemic nature of today's banking crisis was well-advertised decades ago, had its roots in the policy responses to past financial crises, and probably has been exacerbated by aggressive policy responses to lesser crises in recent years. Most everyone expected sub-prime mortgages to be a problem for financial markets, but it was just a matter of when and to what extent. In addition, more recent financial crises, such as the Asian debt crisis in 1997 and the Russian bond default in 1998, clearly illustrated the increased financial linkages across borders, markets, and institutions. Indeed, it should be no surprise that the current crisis was worldwide.

Finally, the Federal Reserve may have been too quick to cut rates in the past, creating moral hazard among investors. This started with the stock market crash of 1987, when the Fed responded quickly by cutting its federal funds rate target a total of 75 basis points, with the last move coming in February 1988. This set a precedent for the Fed's response following the Long-Term Capital Management debacle, when it cut rates again by a total of 75 basis points before determining whether the crisis was going to have an adverse effect on the real economy. By doing so, the Fed created a moral hazard problem among investors; the perception was that the market could only go up because if it didn't the Fed would come to its rescue. From 1998 to 2000, the NASDAQ stock price index jumped to 5000 from 2000. Irrational exuberance was not only in place, the Fed helped drive it. With the Federal Reserve and the Treasury so actively involved in financial markets, it becomes even more difficult for investors to assess the underlying risk. As such, they tend to price in this uncertainty rather than the fundamentals. I believe that is where investors are today.■

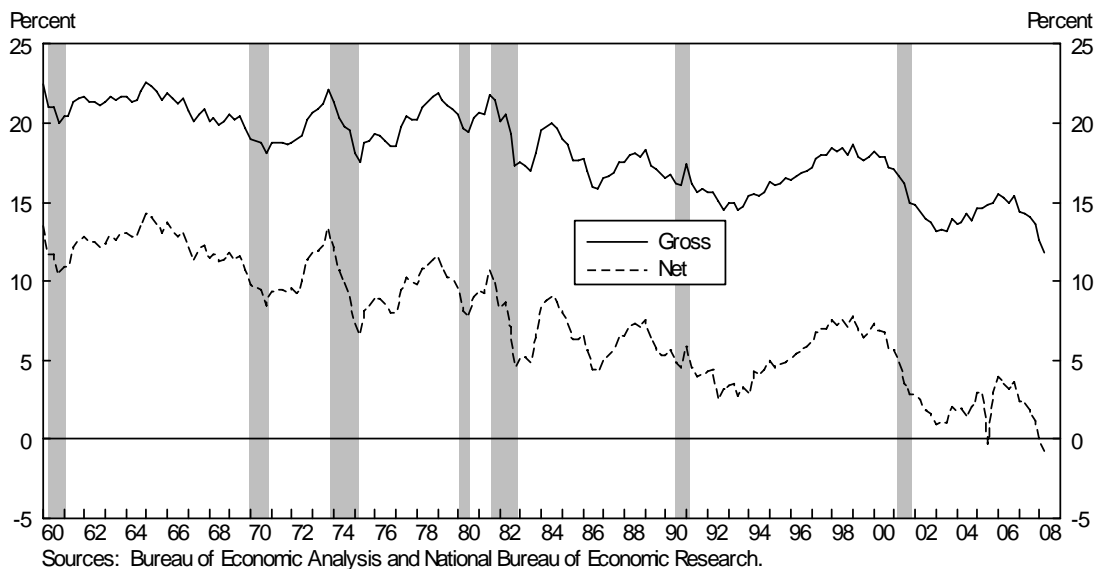
Deleveraging and the national saving rate

There is considerable talk about the deleveraging of the U.S. economy and what it means for future economic growth. If the U.S. economy is deleveraging, then the national saving rate should be rising. In fact, it has declined over the last year. Recall that the national saving rate is the cumulative saving of all sectors of the economy divided by gross national income. This includes personal saving in the household sector, undistributed economic profits in the business sector, and budget surpluses or deficits in the government sector. When the government sector's budget is in surplus, it is saving, but when the sector's budget is in deficit, it is dissaving.

As shown in Chart 1, the national saving rate, regardless of whether it is measured on a gross or net basis, has fallen to its lowest level on record. The difference between gross and net is whether capital consumption (roughly the equivalent of depreciation) is included in the numerator. The gross national saving rate, which includes capital consumption, fell to 11.8 percent in the second quarter, down markedly from its cyclical peak of about 15.5 percent in the first quarter of 2006 and well below its all time peak of 22.5 percent in the first quarter of 1965. The net national saving rate, which excludes capital consumption from the numerator, was negative in the first and the second quarters of this year. Before 2008, the net national saving rate was negative only once and that was in the third quarter of 2005 owing to the massive amount of capital consumed (lost) from the devastating hurricanes that year. Net national savings

Chart 1

National Saving Rate

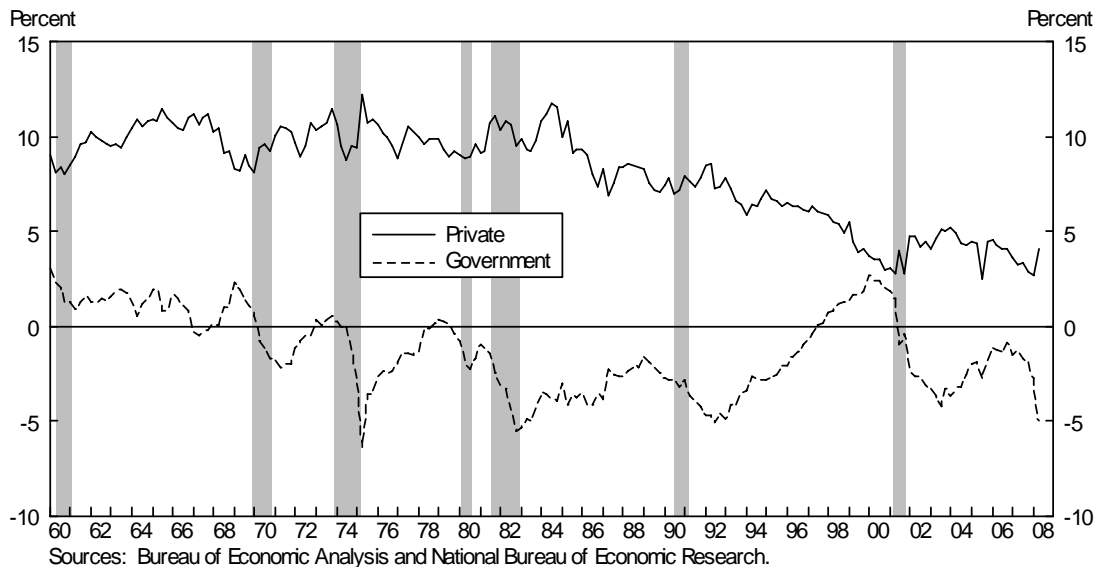


represents the savings available after allowing for the cost of replacing the capital stock used in the production of goods and services.

More importantly, it is expected to continue to decline as any increase in private sector savings should be more than offset by the massive dissaving in the public sector. Also, the ability of the private sector to save will be constrained by sluggish income growth; that is, consumers and businesses may plan to save more but end up saving less as the economy slumps. As shown in Chart 2, the private sector has been able to increase its saving rate very recently, but the government sector has accelerated its dissaving. Saving occurs by spending less, which translates into more assets or less debt. In other words, paying down debt, or deleveraging, is a form of saving. Dissaving by the public sector reflects the growing budget deficits, especially at the federal level. The federal budget deficit for the current fiscal year ending October 1, 2009 now is projected to be 5.5 percent of gross national income, up from 2.9 percent in the previous fiscal year. As such, government dissaving will represent a further drag on the national saving rate next year.

Chart 2

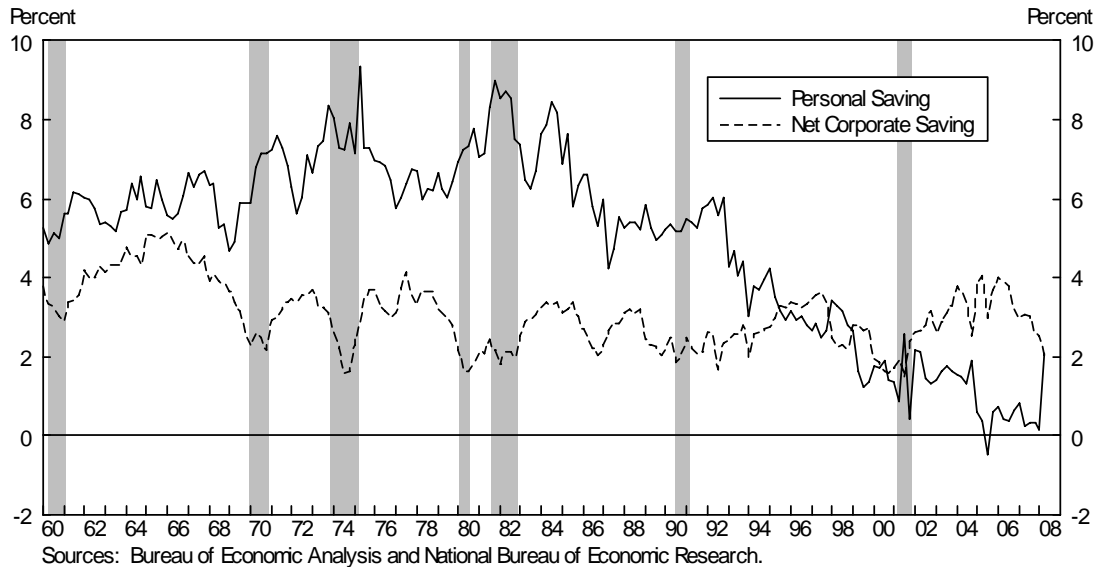
Private and Public Saving As a Percent of Gross Domestic Income



The private sector's saving rate rebounded to 4.1 percent in the second quarter but still was very low by historical standards. More importantly, as shown in Chart 3, the bulk of this improvement was in personal savings, which as a percent of gross domestic income jumped to 2.1 percent in the second quarter from a scant 0.2 percent in the first quarter, as individuals paid down mortgage debt and saved their tax

Chart 3

Corporate and Personal Saving As a Percent of Gross Domestic Income



rebate checks. Corporations are still saving, but the rate of saving has slowed. This suggests that the growth of undistributed economic profits is slowing faster than income.

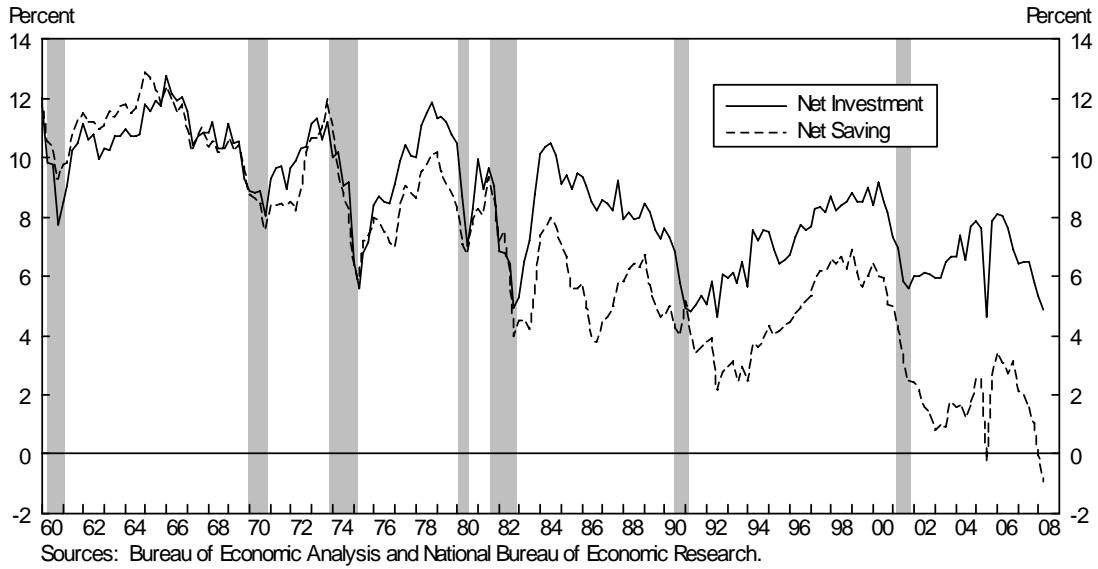
In Chart 4, the net national saving rate is plotted against net domestic investment as a percent of gross domestic income. Clearly, we save less than we invest.

Fortunately for the U.S., the rest of the world is willing to fund the difference. After all, while there may be a shortage of savings in the U.S., there still is no shortage of savings in the world. The concern is that the rest of the world will at some point retreat from owning more dollar-denominated assets. This seems most likely to happen in those countries that have accumulated a substantial number of dollar reserves in recent years, notably the Asian countries. In addition, there is considerable pressure on these countries to accept greater exchange rate flexibility. A weaker dollar is the expected consequence of this flexibility.

But is our dependence on the rest of the world a bad thing? It is if the funds that we are getting from the rest of the world are used to boost consumption rather than investment. In this regard, net domestic investment as a percent of gross domestic income has slowed recently, which is not unusual for this stage of the business cycle. But what is more troubling is that it is a continuation of what appears to be a longer-term downward trend in investment. Such an outcome reduces the likelihood that the U.S. economy is creating the means to honor the future claims that the rest of the world will

Chart 4

Net Domestic Saving and Investment as a Percent of Gross Domestic Income



have against our economy without detracting from the living standards of future generations of Americans. If this trend is not reversed, inflation could become a serious issue very early in the next expansion. Stay tuned.■

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CHART SECTION

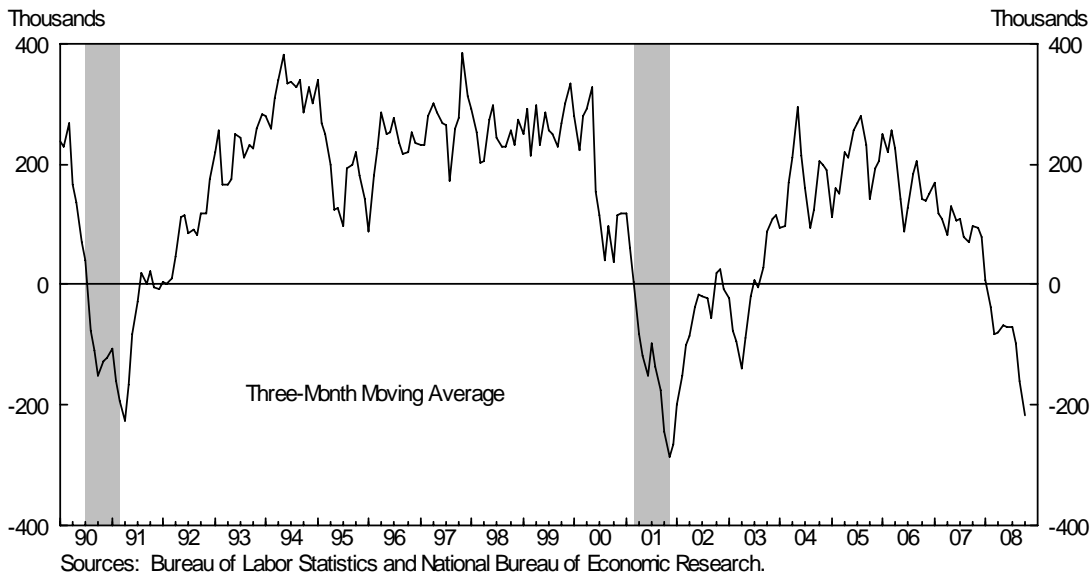
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Civilian Unemployment Rate



The civilian unemployment rate jumped again in October to 6.5 percent, which is higher than its peak following the previous recession. The sharp rise in the unemployment rate so far this year suggests that the recession may have started earlier in the year. However, since the recession is believed to be only a few months old, the implication is that this recession most certainly will be more severe than the last one and maybe the last two.

Change in Nonfarm Payroll Employment



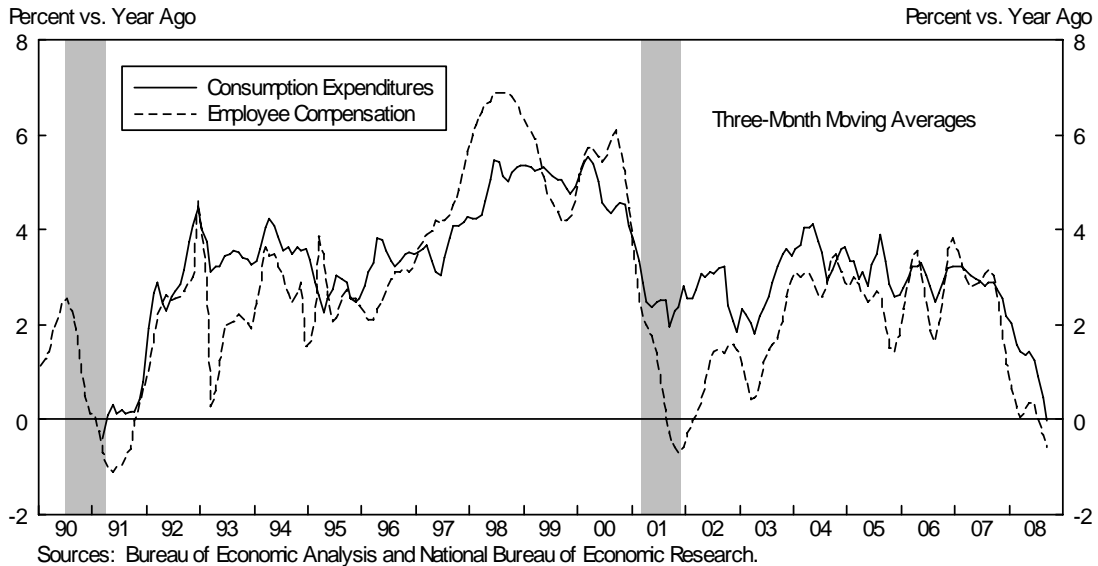
Nonfarm payroll employment plunged 240 thousand in October, following a downward revised decline of 284 thousand in September. This labor statistic also indicates that a recession is definitely underway.

Economic Perspective

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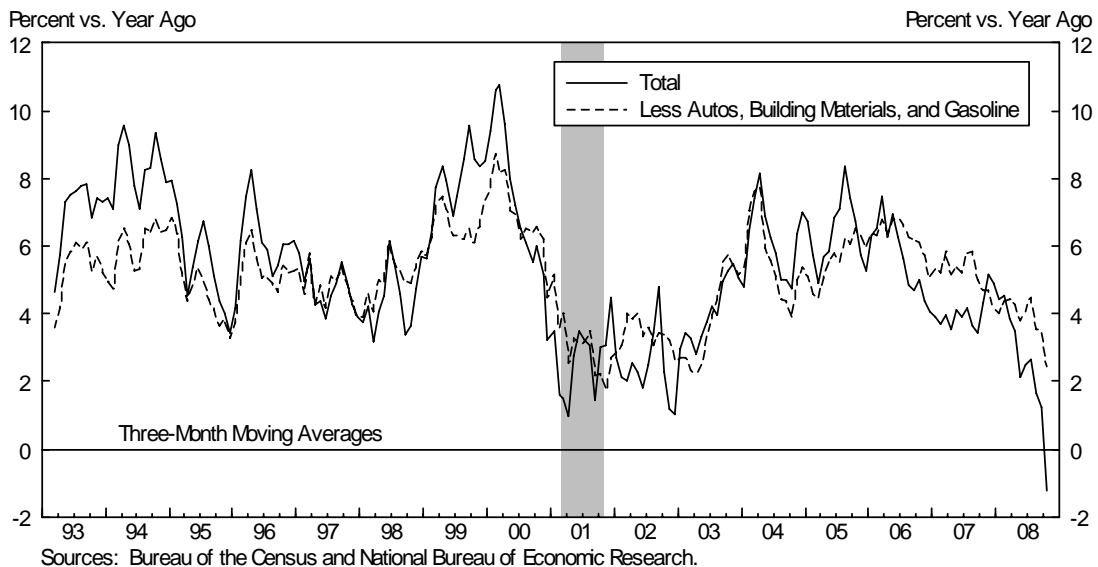
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Real Personal Consumption Expenditures and Employee Compensation



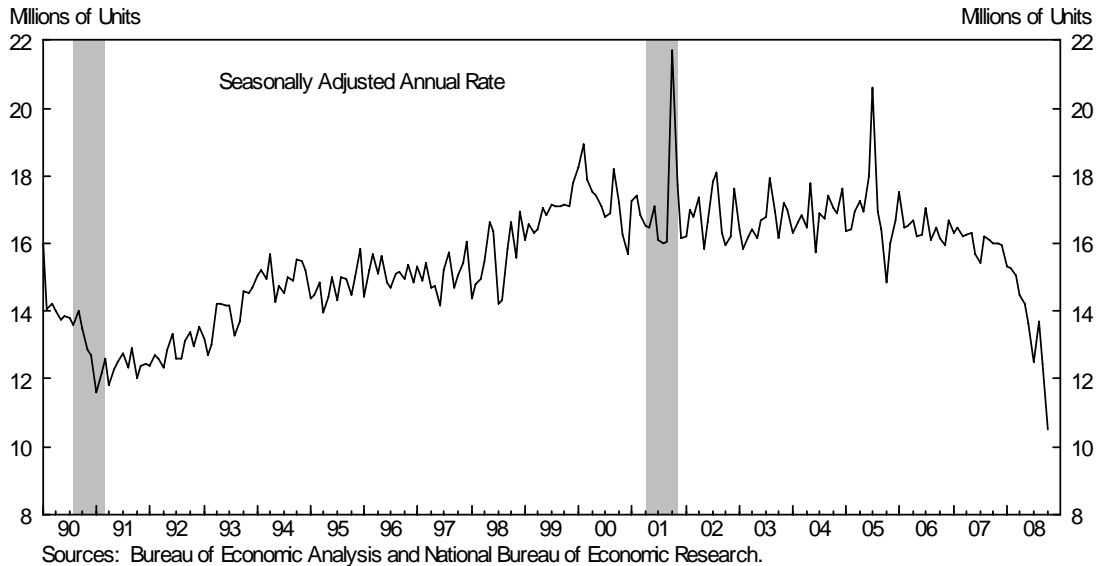
The steady rise in inflation over the first three quarters of 2008 most likely had an adverse effect on consumers, as both real spending and income plunged. In fact, real personal consumption expenditures have not registered a decline from a year earlier since the 1990-91 recession.

Retail Sales



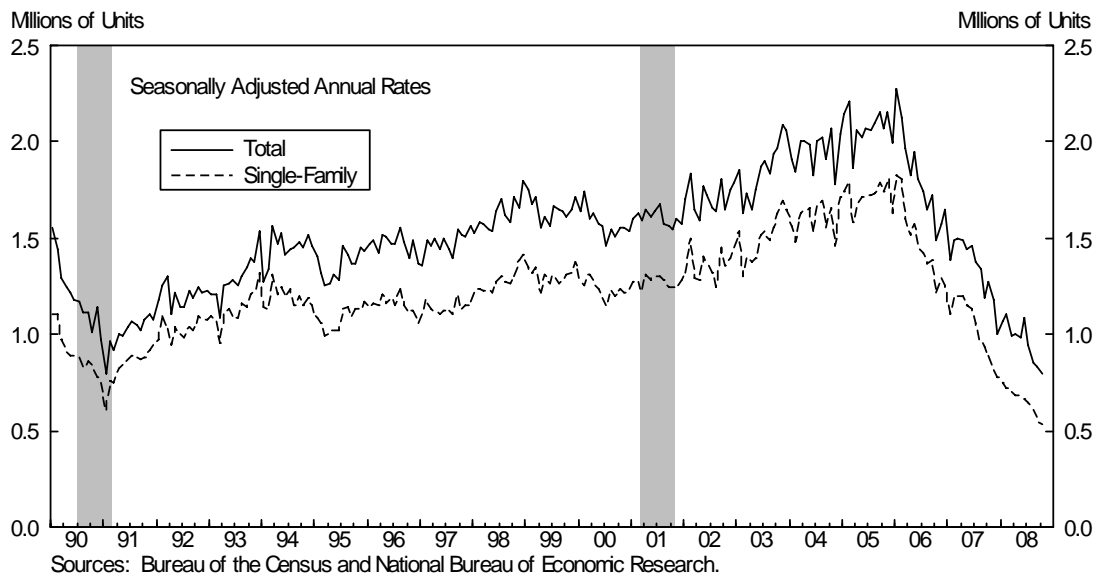
Total retail sales growth from a year earlier turned negative in October, reflecting weak sales at auto dealers, gasoline stations, and building supply stores. Some of this decline was due to price changes but not all. Growth of the so-called core component of sales, which excludes sales at auto dealers, building supply stores, and service stations slowed as well.

Total Light-Vehicle Sales



Light-vehicle sales have tumbled in recent months, falling to a mere 10.6 million units at a seasonally adjusted annual rate in October, down from 12.5 million a month earlier. There is little chance that vehicle sales can avoid being a drag on consumer spending again in the fourth quarter.

Housing Starts



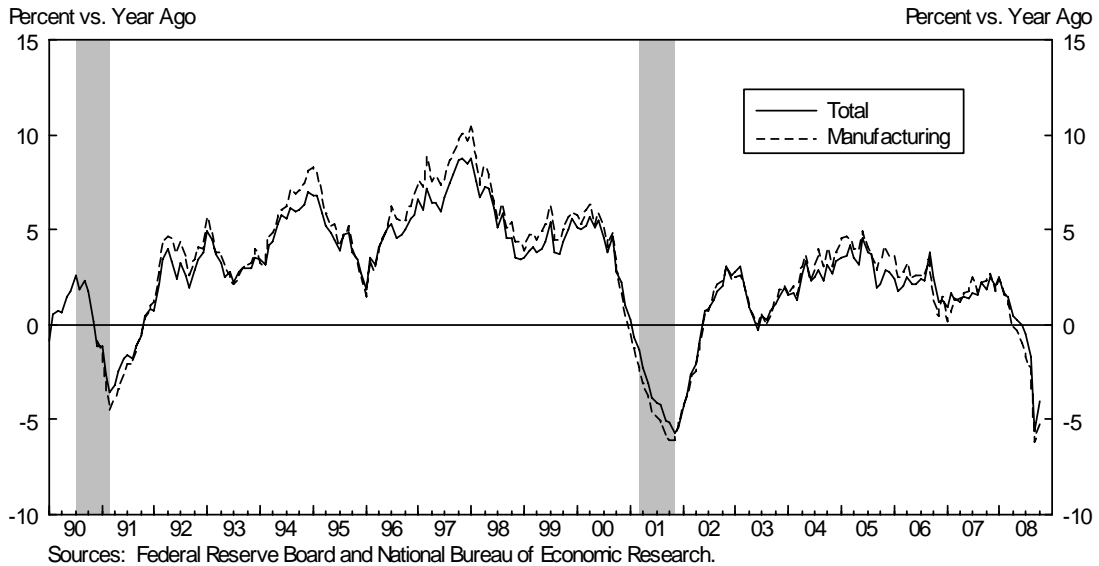
Housing starts, after looking like they may be forming a bottom, took another leg down in October, slipping to a scant 791 thousand units at a seasonally adjusted annual rate. This is very disappointing and it too suggests that residential investment could be a meaningful drag on economic growth again in the fourth quarter.

Economic Perspective

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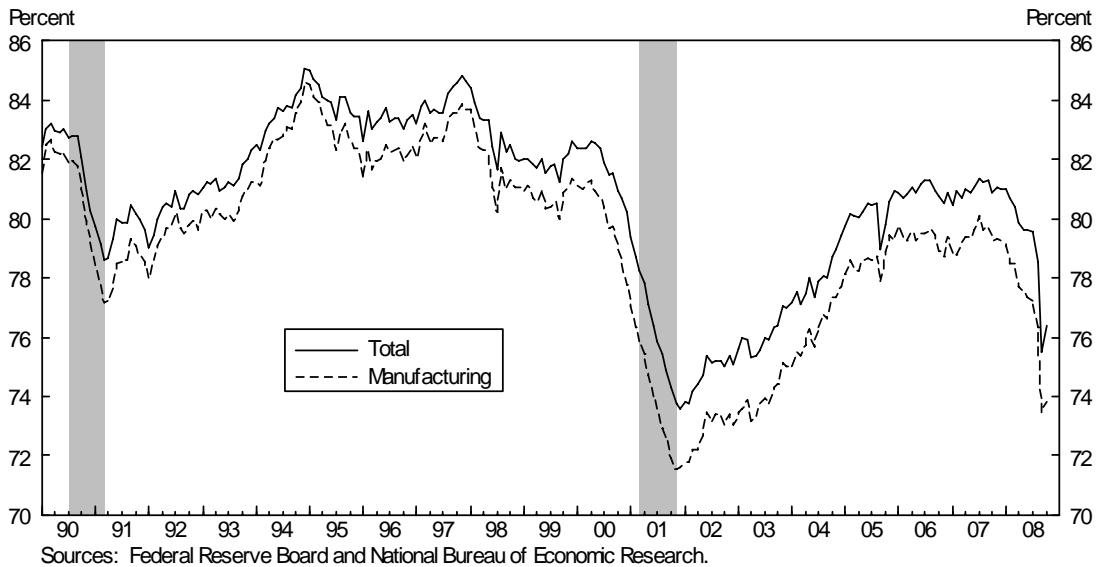
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Industrial Production



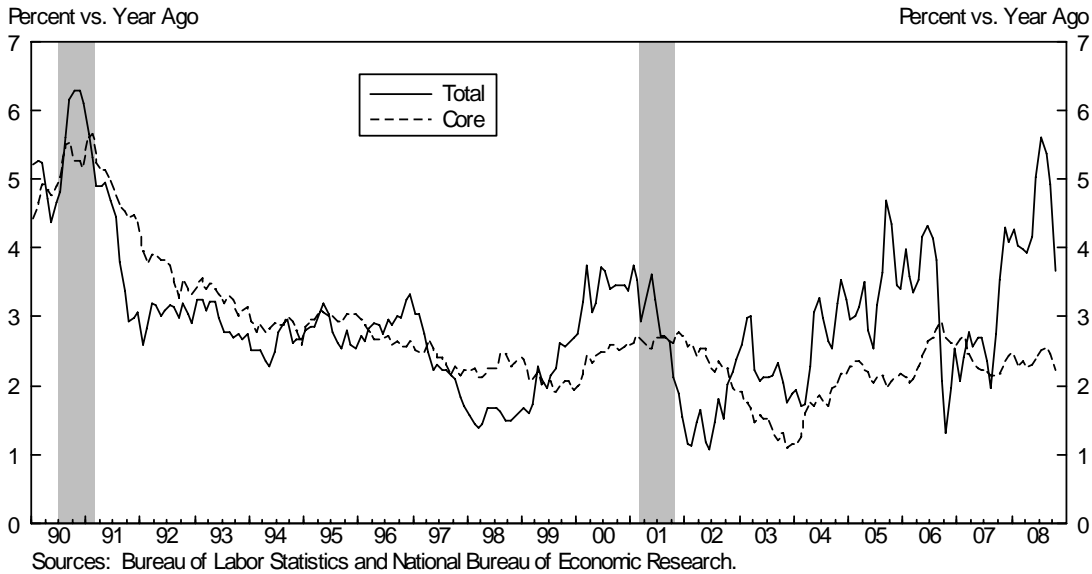
Industrial production, which is consistent with a recession scenario, rebounded a bit in October owing to production brought back on line following their closure by Hurricane Ike. Despite the bounce, it was not enough to change the recession story.

Capacity Utilization



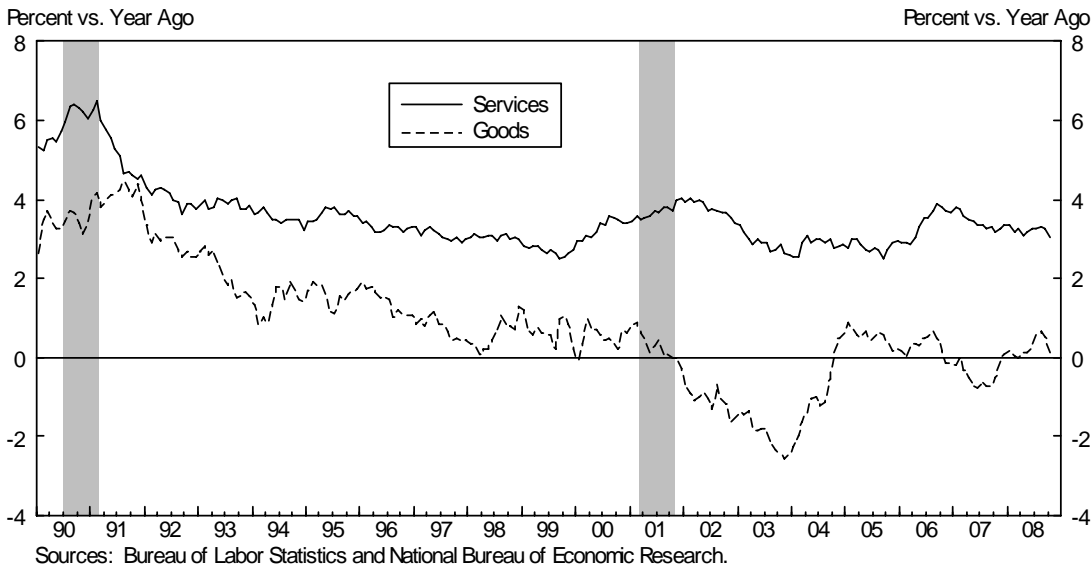
Utilization rates for all industries, as well as for manufacturing, stopped falling in October, as oil, natural gas, and chemical production facilities were brought back on line following their closure by Hurricane Ike.

Consumer Price Indexes



The overall consumer price index (CPI) was up 3.7 percent from a year earlier in October versus being up 4.9 percent in the prior month. Inflation was tamer across the board, but especially in the food and energy components. Excluding food and energy, the CPI was up only 2.2 percent over the year ending in October.

Core Consumer Price Indexes



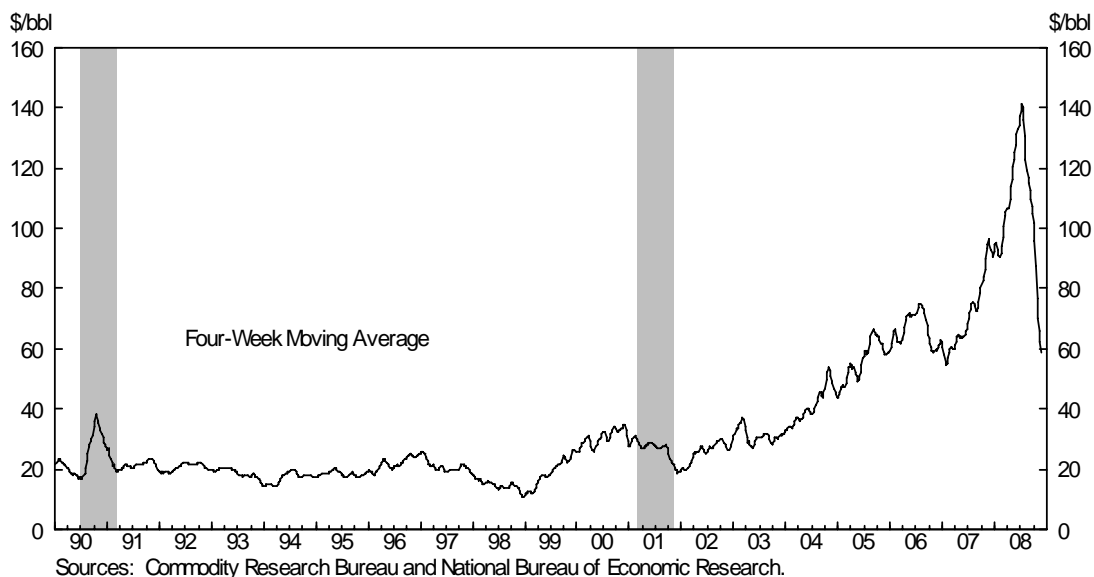
Core service inflation has retreated slightly in recent months, as price increases for both core goods and core services have slowed. Clearly, core inflation remains benign for the moment.

Economic Perspective

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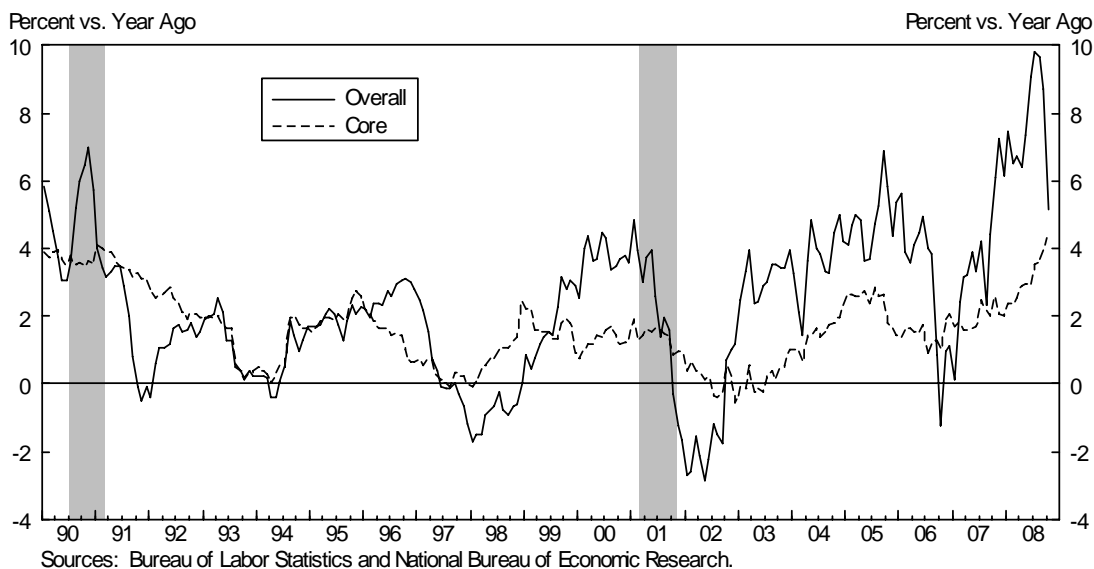
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Crude Oil Price



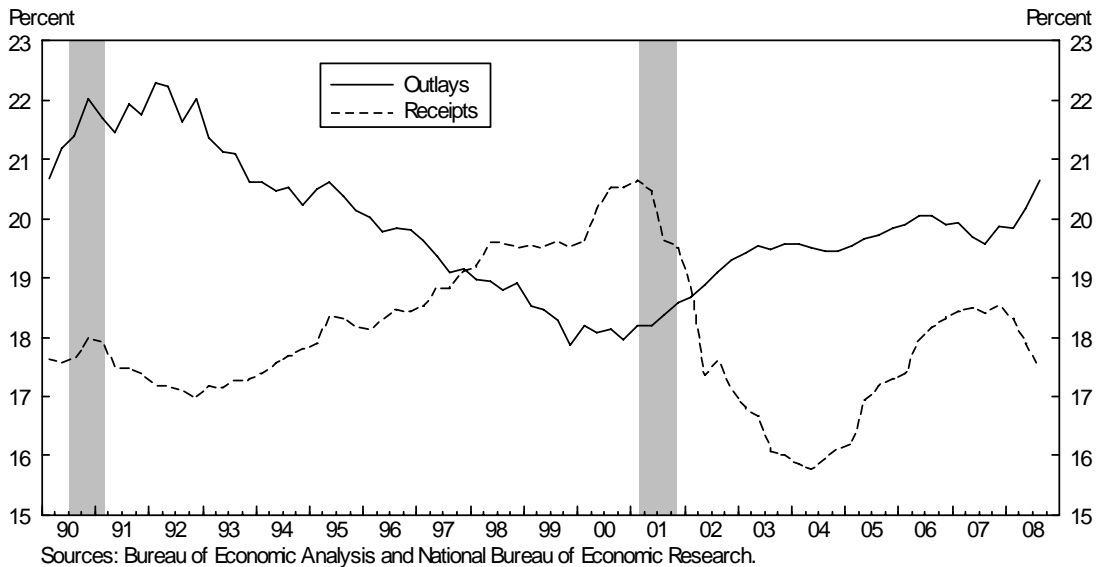
The price of crude oil (West Texas Intermediate) has plunged from its record high earlier in the year but is still high by historical standards.

Producer Price Index for Finished Goods



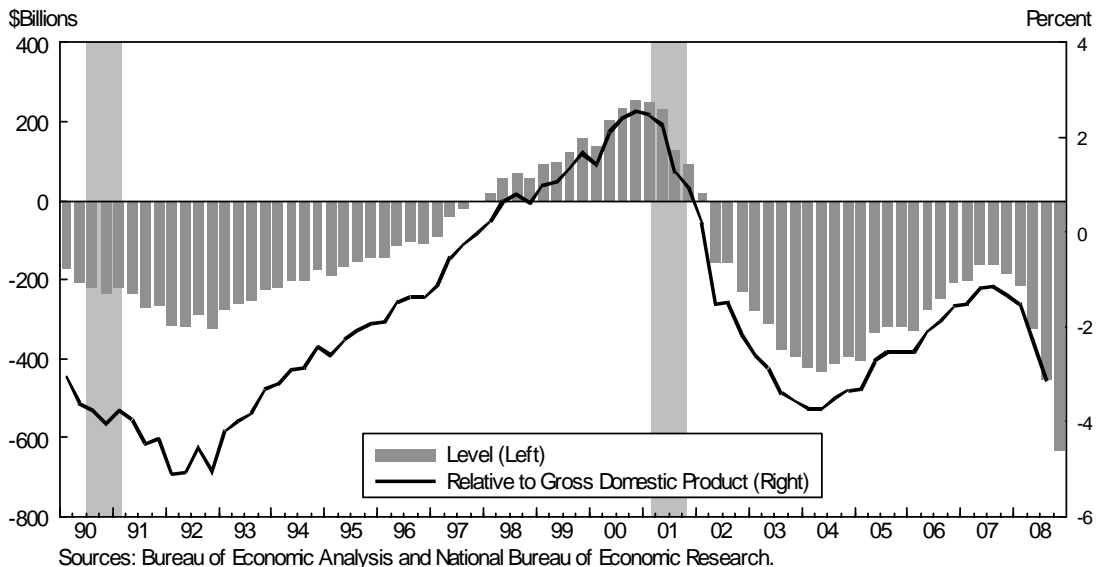
The rate of increase in overall producer prices of finished goods has slowed recently but still remains high by historical standards. More importantly, the rate of increase in core producer prices climbed further to its highest level in two decades.

Federal Government Outlays and Receipts (Percent of Gross Domestic Product)



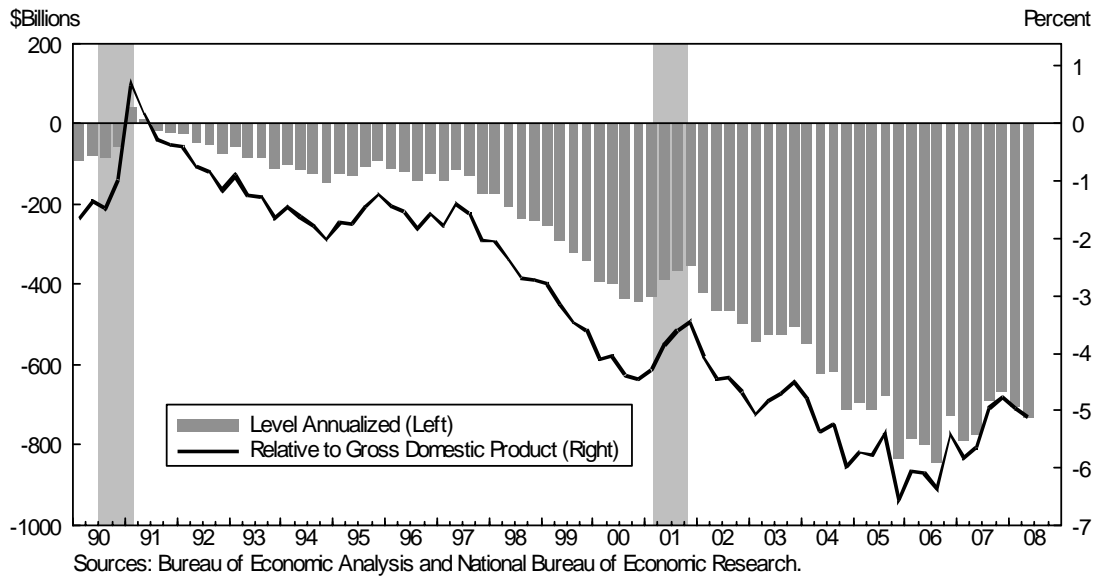
Tax receipts, which were trending upward at a faster pace than gross domestic product (GDP) from mid-2004, have lagged somewhat recently owing in part to the tax rebates as part of the economic stimulus package. In contrast, federal outlays as a percent of GDP have jumped recently in response to slower GDP growth and increased government spending associated with the rescue plan.

Federal Budget Deficit



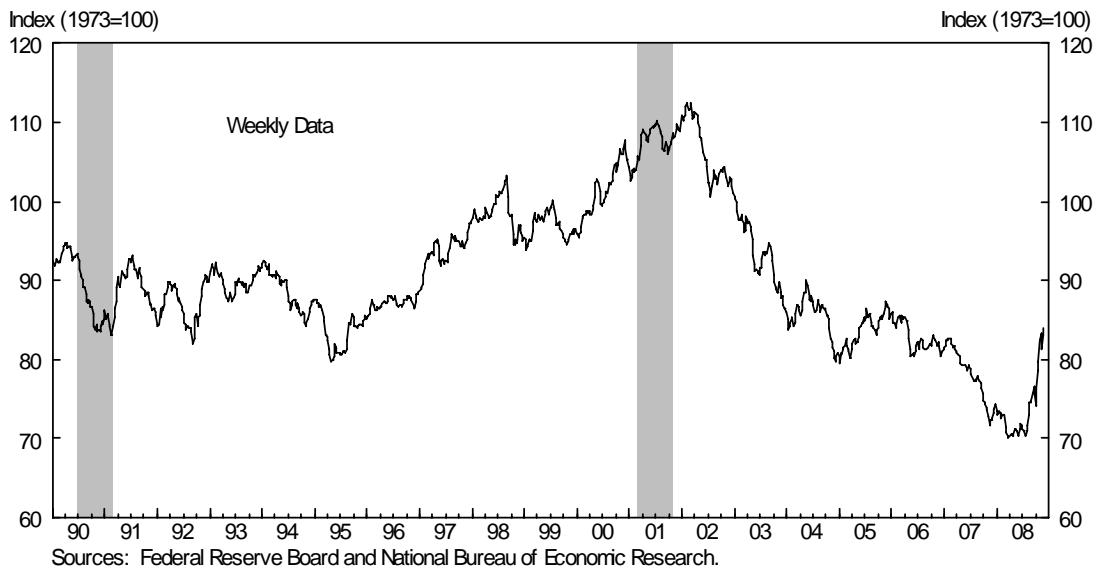
It should be no surprise given the fiscal stimulus package and the extensive government-sponsored rescue of the financial sector that the federal budget deficit, which had narrowed considerably from 2004 to mid-2007, has started to deteriorate again.

Current Account Balance



Sharply higher crude oil prices may have stalled the improvement in the current account deficit over the first half of the year, but further weakness in domestic demand and plunging crude oil prices more recently should relieve the situation.

Trade-Weighted Dollar Index



The recent bounce in the trade-weighted U.S. dollar index is enough to ease some of the inflation pressures coming from imports. However, relative to the sharp downward trend in the dollar index over the last six years or so, the recent improvement still seems rather mild.