November 2008

(Covering October 9, 2008, to November 13, 2008)

#### In This Issue

#### **Inflation and Prices**

September Price Statistics

#### Financial Markets, Money, and Monetary Policy

The Yield Curve, October 2008

More Measures Introduced to Help Financial Markets

#### **International Markets**

Financial Turmoil and Global Growth

#### **Economic Activity and Labor Markets**

What Exactly Is a Recession—and Are We in One?

GDP: Third-Quarter Advance Estimate

Trends in the Components of Real GDP

Comparing Current Payroll Employment Changes with Past Recessions

The Employment Situation, October 2008

#### **Regional Activity**

Fourth District Employment Conditions, September

#### **Banking and Financial Markets**

**Business Loan Markets** 

## **September Price Statistics**

#### **September Price Statistics**

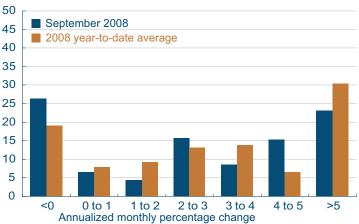
	Percent change, last					
Consumer Price Index	1mo.a	3mo.a	6mo.a	<u>12mo.</u>	5yr.a	2007 avg.
All items	4.8	6.8	4.7	4.3	3.0	4.2
Less food and energy	3.8	3.1	2.7	2.5	2.1	2.4
Median <sup>b</sup>	4.2	3.7	3.4	3.2	2.6	3.1
16% trimmed mean <sup>b</sup>	4.3	3.5	3.1	3.0	2.4	2.8
Producer Price Index						
Finished goods Less food and energy	22.9	19.8	13.3	13.7	5.9	11.3

a. Annualized.

## CPI Component Price Change Distributions



Reserve Bank of Cleveland



Source: Bureau of Labor Statistics.

10.28.08 by Brent Meyer

The Consumer Price Index (CPI) was virtually unchanged in September, falling just 0.4 percent at an annualized rate. Energy prices continued to decrease sharply during the month, slipping 20.7 percent (annualized rate) after a 31.8 percent decrease in August. However, food prices continued to climb, rising 7.0 percent in September. Over the past 12 months, food prices have risen 6.2 percent—their highest growth rate since March 1990. Excluding food and energy, consumer prices rose just 1.7 percent in September, compared to 3.4 percent in the three months prior. The median CPI rose 2.9 percent, while the 16 percent trimmedmean CPI increased just 1.4 percent. Over the past couple of months, the median CPI has remained stubbornly elevated (falling only slightly), while the 16 percent trimmed-mean CPI has fallen dramatically from July's 7.2 percent increase. This disparity between the median CPI and the 16 percent trimmed-mean has a lot to do with the majority of the index's components falling in the tails of the distribution.

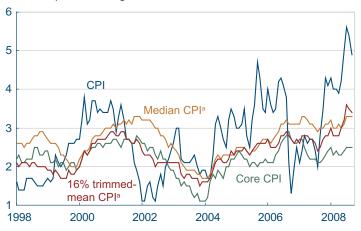
Looking at the distribution of price changes of the individual components of the CPI in September reveals that 29 percent of the components posted price increases between 1 and 4 percent, 26 percent posted decreases, and 23 percent posted increases exceeding 5.0 percent. Because such a large proportion of the overall index exhibited price declines, some were picked up by the 16 percent trimmedmean CPI, pulling its September percent change down. The median CPI, on the other hand, is effectively a 99 percent trimmed-mean measure, and as such it completely disregards the tails of the distribution. This difference in the trims accounts for the disparity between the two measures' estimates of inflation. Nevertheless, by every measure of consumer prices we track, price pressures eased in September when compared to the past 3–, 6–, and 12-month periods.

Over the past 12 months, the CPI has increased

b. Calculated by the Federal Reserve Bank of Cleveland. Sources: U.S. Department of Labor, Bureau of Labor Statistics; and Federal

## CPI, Core CPI, and Trimmed-Mean CPI Measures

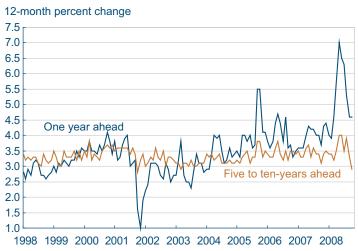
12-month percent change



a. Calculated by the Federal Reserve Bank of Cleveland.

Sources: U.S. Department of Labor, Bureau of Labor Statistics, FRBC.

## **Household Inflation Expectations**



Note: Mean expected change as measured by the University of Michigan's Survey of Consumers.

Source: University of Michigan.

4.9 percent. The longer-term trends in the core and trimmed-mean measures remained somewhaelevated in September, ranging between 2.5 percent and 3.4 percent.

Short-term (one-year ahead) average inflation expectations, measured by the University of Michigan's Survey of Consumers, remained at 4.6 percent in October, as energy and commodity prices continued to fall from recent highs. Long-term (5-10 year) average inflation expectations decreased from 3.3 percent in September to 2.9 percent in October, their lowest value since March 2003.

## Financial Markets, Money, and Monetary Policy

## The Yield Curve, October 2008

10.24.08

by Joseph G. Haubrich and Kent Cherny

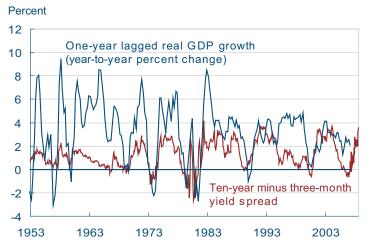
In the midst of the horrendous economic news of the past month, the yield curve might provide a slice of optimism. On the other hand, the historic turmoil in the financial markets also suggests that historical relations may not be holding up in times of stress. Since last month, the yield curve has gotten steeper,

## Yield Spread and Real GDP Growth

#### Percent 12 Real GDPgrowth 10 (year-to-year percent change) 8 6 4 2 0 en-year minus three-month yield spread 2003 1963 1983 1993 1973 1953

Note: Shaded bars represent recessions. Sources: Bureau of Economic Analysis; Federal Reserve Board.

## Yield Spread and One-Year Lagged Real GDP Growth



Sources: Bureau of Economic Analysis; Federal Reserve Board

as short rates fell and long-term rates rose.

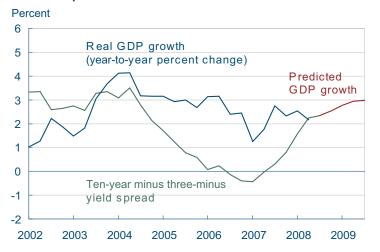
One reason for noting this is that the slope of the yield curve has achieved some notoriety as a simple forecaster of economic growth. The rule of thumb is that an inverted yield curve (short rates above long rates) indicates a recession in about a year, and yield curve inversions have preceded each of the last six recessions (as defined by the NBER). Very flat yield curves preceded the previous two, and there have been two notable false positives: an inversion in late 1966 and a very flat curve in late 1998. More generally, though, a flat curve indicates weak growth, and conversely, a steep curve indicates strong growth. One measure of slope, the spread between 10-year Treasury bonds and 3-month Treasury bills, bears out this relation, particularly when real GDP growth is lagged a year to line up growth with the spread that predicts it.

The financial crisis showed up in the yield curve, with short rates falling since last month, as investors fled to quality. The 3-month rate dropped from 0.62 percent to 0.46 percent (for the week ending October 17).

Meanwhile, the 10-year rate rose from 3.52 percent all the way up to 4.06 percent. Consequently, the slope increased by a full 66 basis points, moving to 356 basis points, up from the 290 basis points for September and the 205 basis points for August. The flight to quality and the turmoil in the financial markets may impact the reliability of the yield curve as an indicator, but projecting forward using past values of the spread and GDP growth suggests that real GDP will grow at about a 3.0 percent rate over the next year. This remains on the high side of other forecasts, many of which are predicting reductions in real GDP.

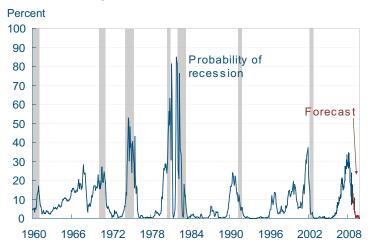
While such an approach predicts when growth is above or below average, it does not do so well in predicting the actual number, especially in the case of recessions. Thus, it is sometimes preferable to focus on using the yield curve to predict a discrete event: whether or not the economy is in recession. Looking at that relationship, the expected chance of the economy being in a recession next October stands a miniscule 0.05 percent, down from September's 0.2 percent and August's 1.3 percent.

#### Yield Spread and Predicted GDP Growth



Sources: Bureau of Economic Analysis; Federal Reserve Board.

## Probability of Recession Based on the Yield Spread



Note: Estimated using probit model; Shaded bars indicate recessions. Sources: Bureau of Economic Analysis, Federal Reserve Board, and author's calculations.

The probability of recession coming out of the yield curve is very low, and may seem strange the in the midst of the recent financial news, but one aspect of those concerns has been a flight to quality, which lowers Treasury yields. Furthermore, both the federal funds target rate and the discount rate have remained low, which tends to result in a steep yield curve. Remember also that the forecast is for where the economy will be next October, not earlier in the year.

On the other hand, in the spring of 2007, the yield curve was predicting a 40 percent chance of a recession in 2008, something that looked out of step with other forecasters at the time.

To compare the 0.05 percent to some other probabilities, and learn more about different techniques of predicting recessions, head on over to the Econbrowser blog.

Of course, it might not be advisable to take this number quite so literally, for two reasons. First, this probability is itself subject to error, as is the case with all statistical estimates. Second, other researchers have postulated that the underlying determinants of the yield spread today are materially different from the determinants that generated yield spreads during prior decades. Differences could arise from changes in international capital flows and inflation expectations, for example. The bottom line is that yield curves contain important information for business cycle analysis, but, like other indicators, should be interpreted with caution.

For more detail on these and other issues related to using the yield curve to predict recessions, see the Commentary "Does the Yield Curve Signal Recession?"

To see other forecasts of GDP growth: http://www.cbo.gov/ftpdocs/89xx/doc8979/02-15-EconForecast\_ ConradLetter.pdf

To see other probabilities of recession: http://www.bloomberg.com/apps/news?pid=20601087&sid=aEX73 qWiBrb4

Econbrowser blog is available at:

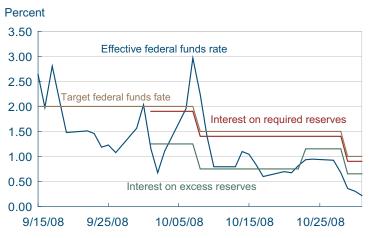
http://www.econbrowser.com/archives/2008/02/predicting\_rece.html

Does the Yield Curve Signal Recession?," by Joseph G. Haubrich. 2006. Federal Reserve Bank of Cleveland, Economic Commentary, is available at:

http://www.clevelandfed.org/Research/Commentary/2006/0415.pdf

## More Measures Introduced to Help Financial Markets

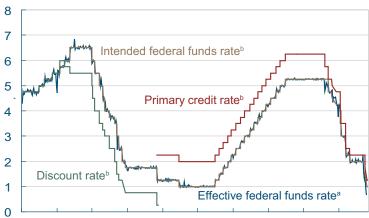
## Federal Funds Rate and Interest on Reserves



Source: Federal Reserve Board.

#### Reserve Market Rates

#### Percent



1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

- a. Weekly average of daily figures.
- b. Daily observations.

Sources: Board of Governors of the Federal Reserve System, "Selected Interest Rates," Federal Reserve Statistical Releases, H.15.

11.06.08

by Charles T. Carlstrom and Sarah Wakefield

On October 8, the Federal Reserve joined with several other central banks to announce reductions in policy interest rates. The Fed's policy-making body, the Federal Open Market Committee (FOMC), voted to reduce the target for the federal funds rate to 1.5 percent. The Bank of Canada, the Bank of England, the European Central Bank, the Sveriges Riksbank, and the Swiss National Bank also reduced interest rates. The FOMC's statement for this intermeeting move noted that "incoming economic data suggest that the pace of economic activity has slowed markedly in recent months. Moreover, the intensification of financial market turmoil is likely to exert additional restraint on spending, partly by further reducing the ability of households and businesses to obtain credit."

At its next meeting on October 28 and 29, the FOMC unanimously decided to again reduce the target for the federal funds rate by 50 basis points, bringing it to 1 percent. In its statement, the FOMC stated that "recent policy actions, including today's rate reduction, coordinated interest rate cuts by central banks, extraordinary liquidity measures, and official steps to strengthen financial systems, should help over time to improve credit conditions and promote a return to moderate economic growth."

On October 6, the Federal Reserve announced that it will pay interest on depository institutions' required and excess reserves. This change had been planned and was scheduled to go into effect in 2011, but the Emergency Economic Stabilization Act of 2008 accelerated the effective date to October 1, 2008. The rate paid on required reserves was set to the federal funds rate target minus 10 basis points. The Federal Reserve statement explains that "paying interest on required reserve balances should essentially eliminate the opportunity cost of holding required reserves, promoting efficiency in the banking sector." The rate on balances in excess of those required was set to the federal funds rate target minus 75 basis points.

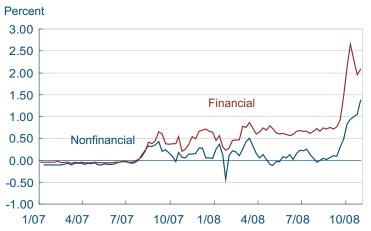
## Libor-OIS Spread

#### Percentage points



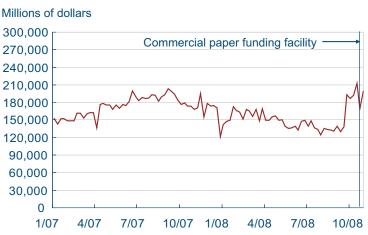
Source: Bloomberg Financial Services, Financial Times.

## Commercial Paper Spread



Note: Spread is the 3-month commercial paper rate minus the 3-month OIS. Source: Federal Reserve Board.

## **Commercial Paper Value**



Source: Federal Reserve Board.

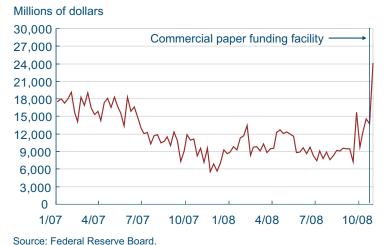
An advantage to paying interest on excess reserves is that it is expected to make it easier for the Federal Reserve to keep the effective federal funds rate close to the target rate. During times of financial stress, the effective funds rate has fallen below the target funds rate. The idea behind the new approach is that if banks can earn interest on excess reserves, the funds rate should always remain above the rate paid on those reserves. Presumably, whenever the effective federal funds rate falls below the interest rate that banks can earn on excess reserves, they would have an incentive to borrow at the funds rate and park the cash in reserves. This "arbitrage" opportunity would put upward pressure on the funds rate until the effective funds rate was at least as great as the interest rate earned on excess reserves.

For reasons not well understood, even after interest began to be paid on reserves, the effective funds rate still traded below the rate on excess reserves. Nevertheless, on October 22, the Federal Reserve announced an alteration to the formula for interest paid on excess reserves. Instead of subtracting 75 basis points from the target of the federal funds rate, the new formula subtracts only 35 basis points. The Board explained this decision, stating that "a narrower spread between the target funds rate and the rate on excess balances at this time would help foster trading in the funds market at rates closer to the target rate."

The Board continued to have trouble meeting its funds rate target and announced on November 5 another change. "Under the new formulas, the rate on required reserve balances will be set equal to the average target federal funds rate over the reserve maintenance period. The rate on excess balances will be set equal to the lowest FOMC target rate in effect during the reserve maintenance period. These changes will become effective for the maintenance periods beginning Thursday, November 6. The Board judged that these changes would help foster trading in the funds market at rates closer to the FOMC's target federal funds rate."

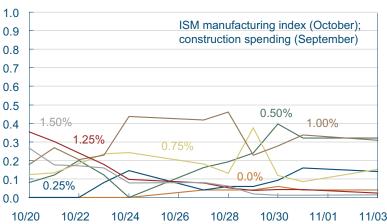
The Federal Reserve has continued to take measures to provide additional liquidity to the credit markets. Following major financial market stress in September, liquidity became extremely strained.

## Financial Commercial Paper Value



## **December Meeting Outcomes**

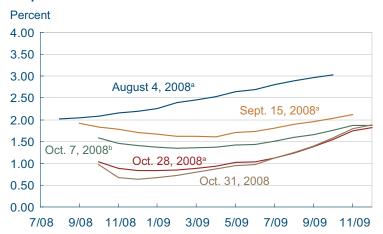
Implied probability



Note: Probabilities are calculated using trading-day closing prices from options on federal funds futures that trade on the Chicago Board of Trade.

Source: Chicago Board of Trade and Bloomberg Financial Services

## Implied Yields on Federal Funds Futures



- a. One day before FOMC meeting.
- b. One day before FOMC Intermeeting.
- Sources: Chicago Board of Trade and Bloomberg Financial Services.

The spread between the one–month Libor and the one–month OIS jumped from around 50 basis points on September 12 to 338 basis points on October 10. (Libor is the London interbank offer rate, the interest rate at which banks lend money to each other in London, and the OIS is the overnight index swap rate.) The three–month Libor–OIS spread showed similar results, reaching its peak of 3.64 percent on October 10. These liquidity spreads have improved somewhat since then, but still remain at near–record levels. Currently, the spread between the one–month Libor and the one–month OIS stands at 174 basis points.

Perhaps more alarming was that, along with these liquidity issues, there were signs of stress in the short-term commercial paper market. Firms borrow in this market to meet current operating expenses; loans are short-term and unsecured. The Federal Reserve addressed the stress in this market by creating the Commercial Paper Funding Facility and the Money Market Investor Funding Facility. The spread in the financial commercial paper market had been on the rise in September.

Under the Commercial Paper Funding Facility, the Federal Reserve Bank of New York finances the purchase of unsecured and asset-backed commercial paper from eligible issuers through its primary dealers. The interest rate charged is the three–month OIS rate plus 100 basis points. Since the normal spread is less than 50 basis points, it is hoped that this new intervention will naturally dissipate as markets improve. This facility appears to have been successful in that after its introduction, the value of commercial paper outstanding jumped. The jump is particularly notable in financial commercial paper, which had been hit especially hard by the credit squeeze.

The next FOMC meeting is scheduled for December 16. The markets are almost even on expectations between no change in the federal funds rate at that meeting and a 50 basis point cut to 0.50 percent. Implied yields on federal funds futures suggest that the fed funds rate will reach its minimum toward the end of this year, and then begin a gradual climb during 2009. Given the zero—bound restriction on interest rates, most analysts do not see the

Fed cutting rates more than another 50–75 basis points. After that point and if it becomes necessary, the Fed must use another instrument to stimulate the economy. The perception is that the Federal Reserve will practice quantitative easing. This is the monetary strategy followed by the Bank of Japan when it cut rates to near-zero and then flooded the market with liquidity to stimulate private lending.

#### International Markets

#### Financial Turmoil and Global Growth

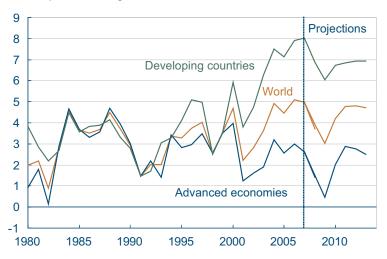
11.07.08 by Owen F. Humpage and Michael Shenk

The turmoil in world financial markets is impeding global economic growth, according to the International Monetary Fund (IMF) (see here and here). The major advanced economies are teetering on the brink of recession, and many developing and emerging—market countries are experiencing a sharp slowdown in their growth rates. The world is likely to experience a fairly prolonged period of subpar growth, since the process of rebuilding bank balance sheets will take a long time. Moreover, risks to the outlook are weighted to the downside, as financial institutions remain vulnerable to the negative feedback effects of slower economic growth.

Financial crises do not always spell disaster for economic growth. The IMF studied 113 episodes of severe financial stress occurring in 17 advanced countries over the past 30 years and found that a significantly slower pace of economic growth or a recession followed in only about one-half of the incidents. These economic slowdowns and recessions, however, were longer and substantially deeper than otherwise tended to be the case. The likelihood of a slowdown in economic activity following severe financial stress increased when the economy had previously experienced a rapid expansion of credit, a run-up in housing prices, and heavy household and corporate borrowing. Financial crises involving the banking system were more likely to produce a slowdown in economic activity or a recession than financial crises largely contained to either the securities market or to the foreign-exchange

#### World GDP Growth

Annual percent change



Note: Dotted lines are November 6, 2008 revisions for 2008 and 2009. Source: International Monetary Fund, World Economic Outlook Database, October 2008.

#### **World GDP Growth**

		2006 2007	Projections	
	2006		2008	2009
World	5.1	5.0	3.7	2.2
Advanced economies	3.0	2.7	1.4	-0.3
United States	2.9	2.2	1.4	-0.7
Euro area	2.8	2.6	1.2	-0.5
Japan	2.4	2.1	0.5	-0.2
United Kingdom	2.9	3.1	8.0	-1.3
Canada	3.1	2.7	0.6	0.3
Emerging and developing economies	7.9	8.0	6.6	5.1
China	11.6	11.9	9.7	8.5
India	9.8	9.3	7.8	6.3
ASEAN-5	5.7	6.3	5.4	4.2
Western Hemisphere	5.5	5.6	4.5	2.5

Duningtions

Note: GDP growth is measured as a year-over-year percent change. Source: International Monetary Fund, World Economic Outlook Update July 2008. market. Financial systems heavily dependent on arms' length financing—securities and investment banks—as opposed to financing through commercial banks, experienced more procyclical leveraging, which amplified financial shocks. Unfortunately, almost all of these conditions currently hold for the United States.

According to the IMF, the ongoing financial turmoil is causing the global economy to undergo a serious reversal of the extraordinary growth rates that it experienced over the past few years. Between 2004 and 2007, overall global economic growth was near 5 percent. Emerging and developing countries—notably China and India—led this growth, but nearly every country on earth shared in the expansion. The IMF, which recently marked down its projections, now expects global growth to moderate from 5 percent in 2007 to 3.7 percent in 2008 and to 2.2 percent in 2009. A gradual recovery will likely begin sometime in late 2009, but output growth will remain relatively weak until well into 2010.

The IMF expects that most advanced economies will bear the brunt of the slowdown. Advanced economies grew in a range of roughly 2.5 percent to 3.0 percent between 2004 and 2006. Growth will likely slow to around 1.4 percent this year and fall by 0.3 percent in 2009. This would be the first out—and—out drop in the overall output of advanced countries in the post—World War II period. The IMF expects all of the key advanced economies, except Canada, to experience a contraction in 2009.

Emerging—market and developing countries will experience a slowing in economic growth during the last half of 2008 and early 2009. While the expected slowdown marks a sharp deviation from the countries' recent growth trend, it will nevertheless leave their economic growth fairly high relative to their history. While these countries have not decoupled from the advanced world, they seem to have acquired a bit of their own momentum. Of course, the prognosis masks sharp disparities among individual emerging-market and developing countries; those that depend heavily on external financing may experience particularly rough going.

Economists, even in large groups, are not very precise forecasters, especially when faced with one-off economic events. Despite the revisions, the IMF acknowledges that the risks to its forecast are weighted somewhat more to the downside than the upside. Credit market conditions are likely to remain weak through 2009, as financial institutions in advanced countries go through a prolonged period of deleveraging, during which lending standards will remain tight and risk spreads will stay high. Emerging and developed countries will face difficulty in finding external financing, and consequently, those with large current-account deficits—or who otherwise seem high risk—will remain under pressure. Many currently believe that deleveraging will proceed only through 2009, but the financial sector could take longer to recover, particularly if the housing contraction in the United States proves deeper or if the global feedbacks from slow economic growth appear stronger than currently expected.

To see IMF data on world financial markets : http://www.imf.org/external/pubs/ft/weo/2008/02/index.htm

http://www.imf.org/external/pubs/ft/weo/2008/update/03/index.htm

To read more on the IMF's financial study on financial stress:  $\label{lem:http://www.imf.org/external/pubs/ft/weo/2008/02/pdf/c4.pdf} http://www.imf.org/external/pubs/ft/weo/2008/02/pdf/c4.pdf$ 

## Economic Activity and Labor Markets

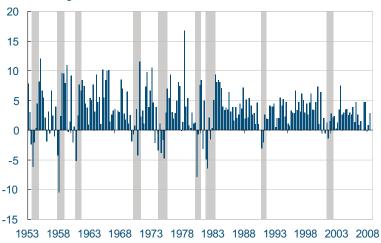
## What Exactly Is a Recession—and Are We in One?

10.10.08 by Michael Shenk

The common definition of a recession, and the one most frequently cited in the media, is a period of two consecutive quarterly declines in real GDP. While historically this definition has held pretty close to true, it is more of shorthand than the precise definition. The actual definition of a recession as given by the NBER, the committee responsible for determining and dating official recessions, is "a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale—retail sales." The definition is fairly vague, which

#### Real GDP

Percent change, annual rate



Note: Shaded bars indicate recessions. Source: Bureau of Economic Analysis.

## Real Personal Income Less Transfer Payments

12-month percent change



Source: Bureau of Economic Analysis.

## Nonfarm Payroll Employment

12-month percent change



Note: Shaded bars indicate recessions. Source: Bureau of Labor Statistics

explains why many prefer the shorthand definition, but the idea is fairly simple. A recession is any period when economic activity experiences a prolonged and widespread decline.

The fact that the definition is vague and open to interpretation is precisely why the NBER committee is in charge of determining the exact dates of such periods. Moreover, our knowledge about the current state of the economy is limited to volatile and frequently revised statistics, so even experts may have a difficult time defining a period of recession.

When determining whether or not a recession has occurred, the NBER places significant weight on the BEA's estimates of GDP, since GDP is considered to be the best measure of aggregate economic activity. Unfortunately, GDP numbers are revised substantially for years after their first release, and their initial values must be considered provisional. Another problem with using only GDP to determine a recession is that it is released quarterly, but the NBER dating committee pinpoints the onset of recessions to a single month. Because of these problems with GDP data, the NBER looks at four main monthly indicators: personal income less transfer payments in real terms, employment, industrial production, and real manufacturing and wholesale—retail sales, with the first two being of particular importance. The dating committee may consider other indicators as well, and it does look at monthly estimates of GDP, taking into consideration their volatility and probable revision.

With the committee's basic dating procedure in mind one can look at the various indicators they use and try to get an idea of where we currently stand.

Looking at the two main indicators considered by the NBER, it appears that the current period is fairly consistent with a recession. Year—over—year growth in personal income excluding transfer payments has fallen into negative territory in each of the last three months. Employment has been falling since January, and its 12—month growth rate recently dipped into negative territory as well. The industrial production picture is also beginning to show signs consistent with past recessions, as are the wholesale—retail sales data, though the duration

#### **Industrial Production**

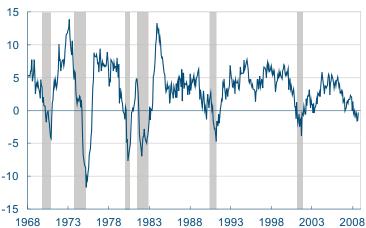
12-month percent change



Note: Shaded bars indicate recessions. Source: The Federal Reserve Board.

## Real Manufacturing and Trade Sales

12-month percent change



Note: Shaded bars indicate recessions. Source: Bureau of Economic Analysis

and depth of all of these declines does leave some room for doubt.

So are we in a recession? The data are certainly indicating a slowdown in economic activity. But we'll leave it up to the experts to make the final determination as to whether or not the scope and depth of this slowdown are large enough to constitute an official recession. Perhaps the most important thing to realize about a recession is that it is merely a technical term. Whether the NBER officially deems this period a recession or not, there is little doubt that the economy is struggling and the challenges ahead are significant.

To see more on the NBER's recession dating procedure: http://www.nber.org/cycles/jan08bcdc\_memo.html

## GDP: Third-Quarter Advance Estimate

## Real GDP and Components, 2008:Q3 Advance Estimate

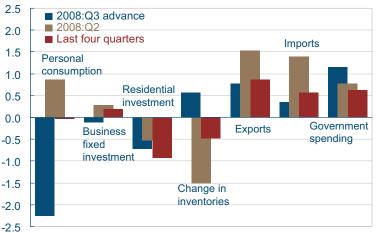
Annualized percent change, last:

	Quarterly change (billions of 2000\$) Quarter		Four quarters	
Real GDP	-7.4	-0.3	0.8	
Personal consumption	-66.1	-3.1	0.0	
Durables	-45.8	-14.1	-5.4	
Nondurables	-40.0	-6.4	-0.7	
Services	7.1	0.6	1.3	
Business fixed investment	-3.5	-1.0	1.8	
Equipment	-15.1	-5.5	-2.6	
Structures	6.5	7.9	10.8	
Residential investment	-19.1	-19.1	-21.3	
Government spending	29.4	5.8	3.1	
National defense	22.5	18.2	7.7	
Net exports	31.3	_	_	
Exports	22.3	5.9	6.9	
Imports	-9.1	-1.9	-3.1	
Private inventories	-38.5	_	_	

Source: Bureau of Labor Statistics.

## Contribution to Percent Change in Real GDP

Percentage points



Source: Bureau of Economic Analysis

11.03.08 by Brent Meyer

Real GDP decreased at an annualized rate of 0.3 percent in the third quarter, slightly above expectations. Much of the decrease was due to a dramatic drop in consumption and a decrease in investments. Personal consumption expenditures decreased 3.1 percent in the third quarter, their largest decrease since the second quarter of 1980. Even worse, spending on nondurable goods fell 6.5 percent during the quarter, its largest decrease since the fourth quarter of 1950.

Nonresidential fixed investment fell 1.0 percent, while residential investment—resuming a more negative path after easing down to only 13.3 percent last quarter—decreased 19.1 percent in the third quarter. Over the past year, residential investment has fallen 21.3 percent. Some components countered the decline in growth: Real exports increased 5.9 percent in the third quarter, and real imports (which are subtracted from GDP) decreased 1.9 percent. Government consumption expenditures and gross investment rose 5.8 percent during the quarter, as national defense spending jumped up 18.2 percent. Also, the sell-off in real private inventories slowed (contributing to real GDP growth), shedding \$38.5 billion in the third quarter, compared to a decrease of \$50.6 billion in the second quarter. That said, counting on government spending, inventories, and net exports to bolster GDP growth is not exactly an encouraging sign.

Real personal consumption subtracted 2.3 percentage points from real GDP growth in the third quarter, the most it has taken away from GDP growth since the 1980 recession. Both residential and business investment subtracted from growth during the quarter, deducting 0.7 percentage point and 0.1 percentage point, respectively. Government consumption expenditures and gross investment added 1.2 percentage points, with the majority of that coming from national defense—which added 0.9 percentage point. Also, net exports added 1.1

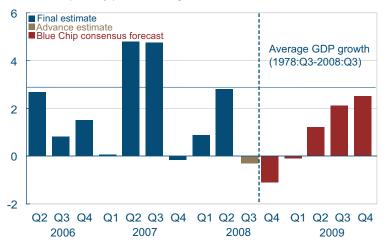
#### Real Gross Domestic Purchases

Four-quarter percent change



#### Real GDP Growth

Annualized quarterly percent change



Source: Blue Chip Economic Indicators, Sept. 2008; Bureau of Economic Analysis.

# percentage points to real GDP growth in the third quarter, while the real change in private inventories added 0.6 percentage point.

An alternative barometer of our national performance—real gross domestic purchases (purchases by U.S. residents wherever produced)—fell 1.3 percent in the third quarter, compared to a decrease of 0.1 percent last quarter, pushing the year—over—year growth rate to -0.6 percent. The growth rate in this series did not turn negative during the 2001 recession, but did fall to -1.8 percent during the 1990–91 recession.

The consensus forecast from the Blue Chip Panel of forecasters is now for three consecutive quarters of negative growth, punctuated by a slow rebound toward trend growth. The consensus estimate for 2009 year—over—year growth fell to 0.5 percent, a full percentage point below the previous forecast, with nearly all forecasters marking down their outlook. Perhaps more indicative of how gloomy the outlook has become is that the Blue Chip optimists (the average of the top to 0.5 percent top—10 forecasts) are now expecting the economy to eke out a growth rate of only 1.3 percent in 2009.

## Economic Activity and Labor Markets

## Trends in the Components of Real GDP

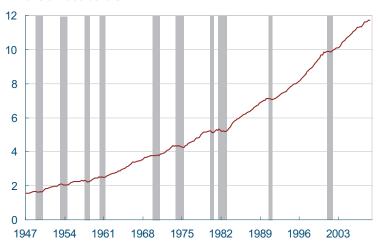
11.04.08

by Paul W. Bauer and Michael Shenk

The third quarter's GDP report did not make for uplifting reading, so now is a good time to take a longer run view to help us reestablish our equilibrium, if not the economy's. We are used to focusing on the growth rate of real GDP, along with the contributions of various components to it, but it is easy to lose sight of the magnitudes involved—of the absolute magnitude of real GDP or the relative magnitudes of the components. As we move through the current financial crisis, taking a longer-

#### Real GDP

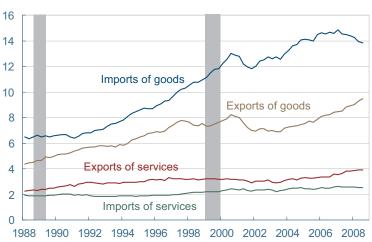
Trillions of 2000 dollars



Source: Bureau of Economic Analysis.

## International: Components

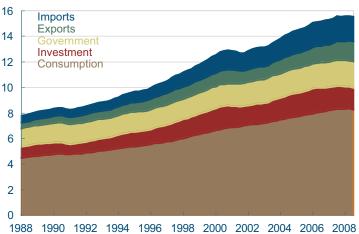
Percent of real GDP



Source: Bureau of Economic Analysis.

#### Real GDP

Trillions of 2000 dollars



Source: Bureau of Economic Analysis.

run perspective and seeing how the economy has evolved, may be, if not comforting, at least informative.

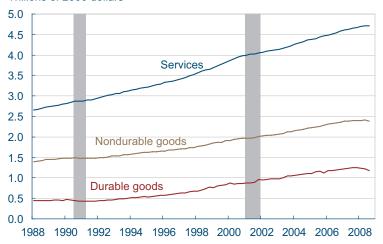
Real GDP has grown from an annual rate of \$1.6 trillion in the first quarter of 1947 to \$11.7 trillion in the third quarter of 2008 (all figures in 2000 dollars), an average of 3.3 percent per year. While all economic downturns are painful for those directly affected—indeed, some people suffer even in boom times—it has been some time since the U.S economy has endured a severe recession. The 2000 recession lasted about four quarters, but GDP fell less than 0.2 percent. The 1990-1991 recession was shorter, lasting only three quarters, while output fell 1.3 percent. Contrast these two most recent recessions with the three before them: The 1974-1975 recession lasted six quarters, and output fell 3.1 percent. Two official recessions fell back to back between 1980 and 1982. During this period, only three quarters out of 36 were not recessionary, and GDP grew only 0.6 percent over the three years from the first quarter of 1980 to the fourth quarter of 1982. No matter how the NBER dating committee ultimately looks at the current period, it is likely that the U.S. economy has survived worse.

To get a clue as to where the economy may be headed, it is instructive to examine how we got where we are today by looking at the components of GDP. As all first-year economics students learn, GDP represents the amount of goods and services produced by the economy in a given year and is calculated as the sum of the final demand for goods and services by households, firms, and government, along with net exports of goods and services from other countries. (The government component includes only the government's final demand for goods and services; thus transfer payments are not included.) As is often mentioned, consumption is the largest component, currently running at an annual rate of \$8.3 trillion, followed by the government component at \$2.1 trillion and investment at \$1.7 trillion. Exported goods and services totaled \$1.6 trillion, with imported goods and services coming to \$1.9 trillion, for a net contribution of \$350 billion.

Looking more closely at the composition of con-

## Consumption: Components

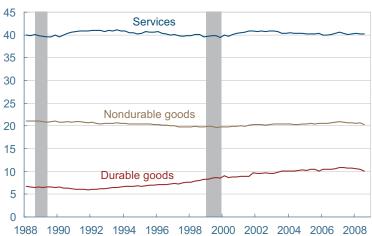
Trillions of 2000 dollars



Source: Bureau of Economic Analysis.

## Consumption: Components

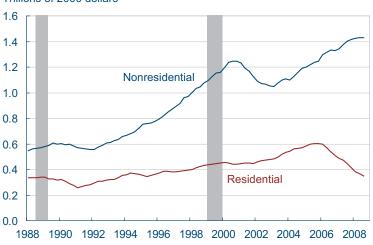
Percent of real GDP



Source: Bureau of Economic Analysis.

## Investment: Components

Trillions of 2000 dollars



Source: Bureau of Economic Analysis.

sumption, we see that consumers spend the most on services (\$4.7 trillion), followed by nondurables (\$2.4 trillion) and then durables (\$1.2 trillion).

Their respective shares of GDP are 40 percent for services, 20 percent for nondurables, and 10 percent for durables. Over the past 20 years, the shares of services and nondurables have been remarkably constant. The share of durables, meanwhile, has risen from 6.5 percent to 10 percent of GDP.

The components of investment have shown much more variation. While the current decline in residential investment is justifiably making headlines now, in 2001 it was nonresidential investment that plunged, as it typically does in a recession.

In the third quarter of 2000, nonresidential investment's share of real GDP peaked at 12.7 percent before falling to 10.2 percent in the first quarter of 2003. For most of this period, residential investment averaged around 4.5 percent of GDP, but during the housing boom it peaked at 5.4 percent in the third quarter of 2005. It now stands at 3 percent and is still trending downward.

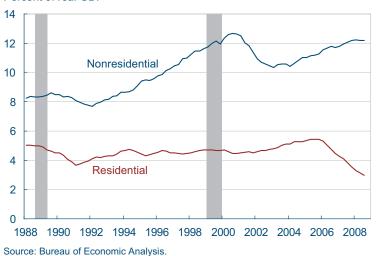
Most of government's purchases of goods and services happens at the state and local level (\$1.3 trillion). While state and local spending grew steadily from 1988 to 2002, its growth rate since has been nearly flat. Federal defense spending accounts for \$551 billion, compared to only \$259 billion on federal nondefense spending.

Defense spending's share of GDP fell from 7.3 percent in 1988 to 3.8 percent in 2001. Over the next seven years it rebounded to 4.7 percent. In contrast, the GDP shares of nondefense and state and local spending have been more stable. Nondefense spending averaged just over 2 percent during this period. State and local government spending averaged about 12 percent prior to 2002 and has fallen to about 11 percent currently.

Although net exports contributed only \$350 billion to an \$11.7 trillion economy, the netting masks a great deal of economic activity. Both imports and exports have grown rapidly. Exports and imports of goods have each grown 6.7 percent since 1988. Exports of services have grown more slowly (5.6)

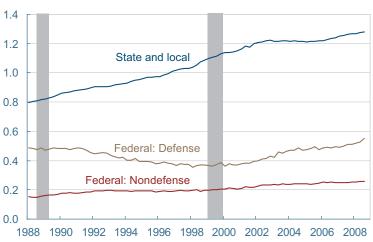
#### **Investment: Components**

Percent of real GDP



## Government: Components

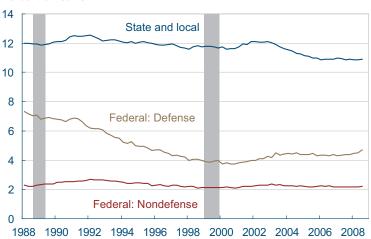
Trillions of 2000 dollars



Source: Bureau of Economic Analysis.

## Government: Components

Percent of real GDP



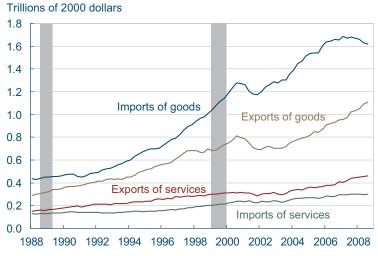
Source: Bureau of Economic Analysis.

percent), but more rapidly than imports of services (4.2 percent).

Since 1988, the GDP shares of goods exported and imported more than doubled. Predictably, the shares of services exported and imported grew less rapidly. The GDP share of exported services rose only 72 percent, but this easily outpaced the 32 percent growth of the GDP share of imported services.

Increased exports and reduced imports were one of the few bright spots in the most recent GDP report. With weaker U.S. aggregate demand, import growth should continue its decline, at least as a share of GDP. Unfortunately, weak foreign aggregate demand may slow U.S. exports. Given the prospect of weak aggregate demand from consumers and firms in the near term, government purchases of final goods and services are likely to rise and stimulate aggregate demand—the result of both intentional actions (for example, through a boost to infrastructure spending) as well as through the "automatic stabilizers" of deficit spending, unemployment insurance, welfare, and other forms of income support.

## International: Components

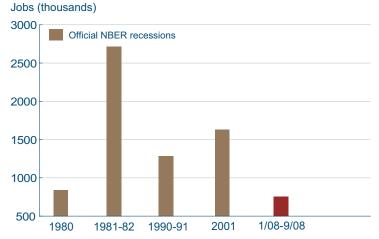


Source: Bureau of Economic Analysis.

#### **Economic Activity and Labor Markets**

## Comparing Current Payroll Employment Changes with Past Recessions

## Net Job Loss During Recessions



Notes: Seasonally-adjusted total nonfarm employment loss within official NBER recessions; Present represents loss from January to September 2008. Source: Bureau of Labor Statistics.

11.06.08 by Yoonsoo Lee and Beth Mowry

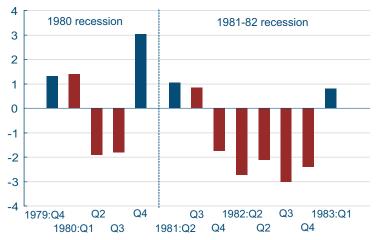
The labor market has now lost jobs for nine straight months, with September's recent loss of 159,000 being the worst yet of the streak. The "R" word has been tossed around plenty this year, although the National Bureau of Economic Research has not declared that a recession has started (which it typically doesn't do until well after a recession has begun). But now seems a good time to ask how employment behavior so far this year sizes up to that of recent recessions.

Since January, the U.S. economy has shed 760,000 jobs. During the four previous official recessions net employment losses were higher: 837,000 in the 1980 recession; 2,172,000 in the 1981–1982 recession; 1,282,000 in 1990–1991; 1,629,000 in 2001. The magnitude of job losses depended on the duration of each recession. For example, the 1980 recession lasted just seven months, while the 1981–1982 recession lasted seventeen and the 1990–1991 and 2001 recessions were each nine months long.

To compare across recessions, we can compensate for differences in recession length by looking at the average monthly payroll loss over these periods. The average monthly job loss in each of the four recessions was 120,000, 160,000, 142,000,

## Percent Change In Employment by Quarter

Percent

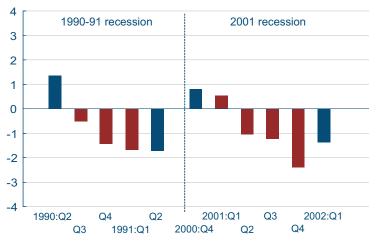


Notes: Seasonally-adjusted annualized rates. Percent change in total nonfarm employment within official NBER recessions; Blue bars represent quarters immediately before and after recession periods.

Source: Bureau of Labor Statistics.

## Percent Change in Employment by Quarter





Notes: Seasonally-adjusted annualized rates. Percent change in total nonfarm employment within official NBER recessions; Blue bars represent quarters immediately before and after recession periods.

Source: Bureau of Labor Statistics

and 181,000. While the average monthly loss of 84,0000 that we have experienced so far in 2008 looks rather moderate by comparison, last quarter's monthly average loss of 100,000 is closer to those recessions' averages.

The behavior of employment around the past four recessions can be seen in the quarter-by-quarter percent employment change in the charts below. Note that neither the onset of job losses in a recession nor their reversal necessarily coincides with the official start and end dates of the recession. For example, job losses did not begin until the fourth month of the 1980 recession, as the 1.4 percent growth in the recession's first quarter shows. Interestingly, employment growth in the recession's first quarter actually exceeds growth in the quarter immediately preceding the recession. Job losses did not start until the second month of the 1981-1982 recession, and this delay again helps the first recessionary quarter to be in positive territory. Quarterly gains resumed immediately after each of the 1980s' recessions.

Employment patterns in the two most recent recessions were quite different from those of the 1980s. In 1990–1991 and 2001, job loss began immediately on or before the first NBER-designated month of the recession. This shows up as much weaker quarterly employment change from the get–go. Employment dropped 0.53 percent in the first quarter of the 1990–1991 recession, and it grew only 0.56 percent in the first quarter of the 2001 recession, a much slower pace than in the 1980s' recessions.

Another difference between the recessions of the 1980s and the two recent ones is that employment loss continued well after the recessions had ended in 1990–91 and 2001. The 2001 recession is the most obvious case, as losses continued for another six consecutive months after the recession's end.

Aside from the timing differences, the charts also show that losses occurred at a greater rate in the 1980s' recessions, reaching 1.91 percent of quarterly employment in 1980 and exceeding 3 percent at one point in the 1981–1982 period. The rate of loss was much slower in the two recent recessions, reaching just 1.69 percent in 1990–1991 and 1.24

percent during the 2001 recession. Losses continued to pick up pace after the end of the 1990–1991 recession, though, totaling 252,000 jobs in the second quarter of 1991. Losses also held strong following the 2001 recession, with 303,000 jobs gone in the first quarter of 2002.

In the third quarter 2008, employment loss sped up to an annualized rate of 0.73 percent. Given that some recent recessions started with job gains, this rate is not necessarily low compared to the beginning quarters of those. In the 1990–1991 recession, which was the only one of the four most recent episodes to see a decline in employment in its first quarter, the U.S. economy lost jobs at an annualized rate of only 0.53 percent. Given that the employment situation has deteriorated further in the midst of most recessions, labor markets may still have further south to go.

#### Economic Activity and Labor Markets

## The Employment Situation, October 2008

## Average Nonfarm Employment Change

Change, thousands of jobs 300 Revised
Previous estimate 200 100 -100 -200 -300 -400 2005 2006 2007 2008 Q2 Ω1 Aug Sep 2007 2008

Source: Bureau of Labor Statistics.

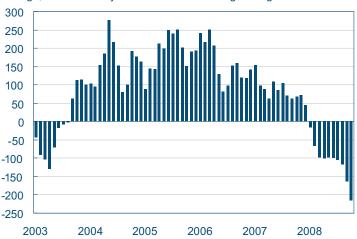
11.07.08 by Yoonsoo Lee and Beth Mowry

October nonfarm payrolls fell by 240,000, for the tenth straight month of decline this year. October's decline in payrolls was slightly worse than consensus expectations, which called for losses in the vicinity of 200,000. August and September figures were revised down by a total of 179,000 jobs, changing losses for those months from 73,000 to 127,000 in August and 159,000 to 284,000 in September. In fact, September now marks the largest monthly loss since November 2001. Average employment losses in the four most recent recessions ranged anywhere from 120,000 to 180,000 per month, although much larger losses occasionally occurred in a single month. Cumulative losses for the U.S. economy have reached 1.2 million jobs since January, when the downward slope began. [For a look at how payroll employment numbers have changed in recent recessions, see this article.]

The unemployment rate also jumped a surprising 40 basis points, to 6.5 percent, a higher level than that reached in the 2001 cyclical downturn.

## Private Sector Employment Growth

Change, thousands of jobs: three-month moving average



Source: Bureau of Labor Statistics.

### **Unemployment Rate**

Percent

12

9

6

3

1980

1985

1990

1995

2000

2005

Note: Seasonally adjusted rate for the civilian population, age 16+. Source: Bureau of Labor Statistics.

The rate is up 170 basis points over the same time last year, leaving it at its highest level since March 1994.

The diffusion index of employment change sank slightly further from 38.1 to 37.6 in October after a steep fall all the way from 46.2 the previous month. An index reading below 50 indicates that more employers are cutting jobs than adding them, and this past month's movement indicates that an even greater share of employers have now begun to cut jobs. The index has not looked this poor since June 2003.

Job losses were widespread, with every major sector observing declines except education and health services (+21,000) and government (+23,000). Payrolls in goods-producing industries were shaved down by 132,000, with 90,000 of those losses attributable to manufacturing and 49,000 to construction. Manufacturing took the worst hit since July 2003, with 75,000 workers losing jobs in durable goods manufacturing and 15,000 losing jobs in the nondurable goods category. Transportation equipment manufacturing is responsible for a large chunk of losses within durable goods (40,100).

Service-providing industries dropped 108,000 jobs in October, on the heels of a loss of 201,000 in September. The trade, transportation, and utilities sector performed similarly to September, losing 67,000 jobs. Within this sector, retail trade lost 38,100 jobs, with auto dealers (-20,300) and department stores (-18,000) faring particularly poorly. Professional and business services shed 45,000 jobs, with employment services (-50,000) being the biggest loser in this category by a long shot. Financial activities (-24,000) posted its worst decline since the series began nearly 70 years ago, and leisure and hospitality shed 16,000 jobs. As stated earlier, the only positive sectors were education and health services and government, although downward revisions to both of these categories turned their September gains into slight one-month losses. Neither of these two sectors had lost jobs for at least a couple of years.

Last month, the three-month moving average of private sector employment growth slipped lower, to -215,000 from -163,000 in September. September's moving average was substantially lowered from 126,000 losses, due to two months of downward employment revisions.

To see how payroll employment numbers have changed in recent recessions:

http://www.clevelandfed.org/research/trends/2008/1108/04ecoact.cfm

#### **Labor Market Conditions**

Average monthly change	e (thousands o	f employees, NAICS)
------------------------	----------------	---------------------

	Average monthly change (mousands of employees, NAICS)				
	2005	2006	2007	2008 YTD	October 2008
Payroll employment	211	175	91	-118	-240
Goods-producing	32	3	-38	-82	-132
Construction	35	13	-19	-40	-49
Heavy and civil engineering	4	3	-1	-5	-4.3
Residential <sup>a</sup>	11	-2	-10	-26	-26.9
Nonresidential <sup>b</sup>	4	7	1	-9	-17.3
Manufacturing	-7	-14	-22	-49	-90
Durable goods	2	-4	-15	-37	-75
Nondurable goods	-8	-10	-7	-12	-15
Service-providing	179	172	132	-36	-108
Retail trade	19	5	7	-30	-1
Financial activities <sup>c</sup>	14	9	-8	-10	-24
PBS <sup>d</sup>	56	46	27	-36	-45
Temporary help svcs.	17	1	-7	-29	-33.6
Education and health svcs.	36	39	45	43	21
Leisure and hospitality	23	32	30	-3	-16
Government	14	16	19	16	23
Local educational svcs.	6	6	5	4	23.2
	Average for period (percent)				
Civilian unemployment rate	5.1	4.6	4.6	5.3	6.1

a. Includes construction of residential buildings and residential specialty trade contractors.

b. Includes construction of nonresidential buildings and nonresidential specialty trade contractors.

c. Includes the finance, insurance, and real estate sector and the rental and leasing sector.

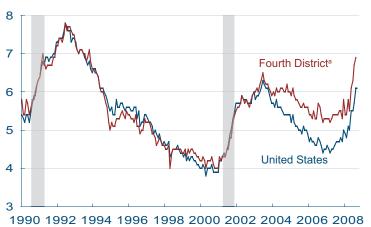
d. PBS is professional business services (professional, scientific, and technical services, management of companies and enterprises, administrative and support, and waste management and remediation services.

Source: Bureau of Labor Statistics.

## Fourth District Employment Conditions

## **Unemployment Rates\***

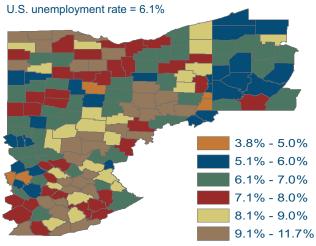
Percent



a. Seasonally adjusted using the Census Bureau's X-11 procedure. Notes: Shaded bars represent recessions. Some data reflect revised inputs, reestimation, and new statewidecontrols. For more information, see http://www.bls.gov/lau/launews1.htm.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

## **County Unemployment Rates**



Note: Data are seasonally adjusted using the Census Bureau's X-11 procedure.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

10.09.08 by Kyle Fee

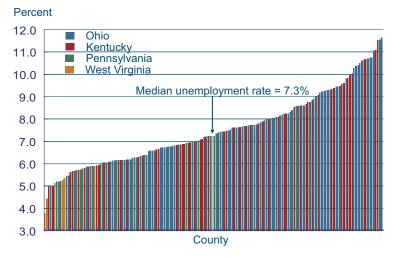
The District's unemployment rate increased 0.2 percent, reaching 6.9 percent for the month of August. July's rate was also revised upward 0.1 percent. August's increase in the unemployment rate is attributed to monthly increases in the number of people unemployed (3.4 percent) outpacing increases in the number of people employed (0.1 percent). The District's rate was again higher than the nation's in August (by 0.8 percentage point), as it has consistently been since early 2004. Since this time last year, the District's rate has increased 1.5 percentage point, and the national rate has increased 1.4 percentage points.

The counties of the Fourth District differ considerably in their unemployment rates. Of the 169 counties that make up the District, 34 had an unemployment rate below the national average in August, and 135 had one higher. Sixteen counties reported double-digit unemployment rates, while 2 counties had an unemployment rate below 5.0 percent. Rural Appalachian counties continue to experience higher levels of unemployment, and counties along the Ohio-Michigan border have begun to see more elevated rates of unemployment as well.

The distribution of unemployment rates among Fourth District counties ranges from 3.8 percent to 11.7 percent, with the median at 7.3 percent. Counties in Fourth District West Virginia and Pennsylvania have generally lower unemployment rates than counties in Fourth District Kentucky and Ohio. These county-level patterns are reflected in statewide unemployment rates: Ohio's is 7.4 percent, Kentucky's is 6.8 percent, Pennsylvania's is 5.8 percent, and West Virginia's is 4.1 percent.

The distribution of changes in unemployment rates from August of 2007 shows that the median county unemployment rate increased 1.4 percentage points. Year over year, the largest increases in county-level unemployment rates are concentrated in Ohio, with 38 percent of the counties in Ohio

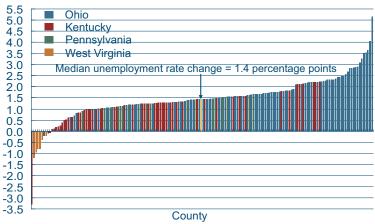
## **County Unemployment Rates**



Note: Data are seasonally adjusted using the Census Bureau's X-11 procedure. Sources: U.S. Department of Labor, Bureau of Labor Statistics.

## Change in County Unemployment Rates, August 2007-August 2008

#### Percentage points



Note: Data are seasonally adjusted using the Census Bureau's X-11 procedure. Source: U.S. Department of Labor, Bureau of Labor Statistics.

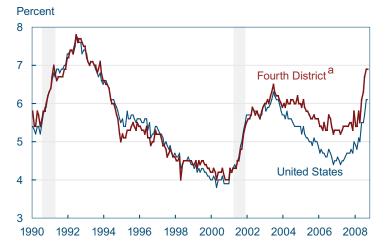
## Regional Activity

## Fourth District Employment Conditions, September

11.07.08 by Kyle D. Fee

The District's unemployment rate remained steady at 6.9 percent for the month of September. The flat unemployment rate is attributed to relatively small changes in both the number of people unemployed (-0.3 percent) and the number of people employed (0.0 percent). The District's rate was again higher than the nation's in September (by 0.8 percentage

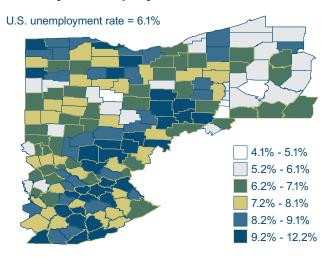
#### **Unemployment Rates**



a. Data are seasonally adjusted using the Census Bureau's X-11 procedure. Notes: Shaded bars represent recessions. Some data reflect revised inputs, reestimation, and new statewide controls. For more information, see http://www.bls.gov/lau/launews1.htm.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

## **County Unemployment Rates**



Note: Data seasonally adjusted using Census Bureau's X-11 procedure. Source: U.S. Department of Labor, Bureau of Labor Statistics.

point), as it has consistently been since early 2004. Since this time last year, both the District's rate and the national rate have increased 1.5 percentage points.

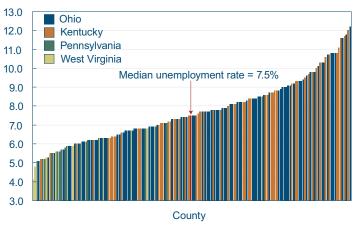
There are considerable differences in unemployment rates across counties in the Fourth District. Of the 169 counties that make up the District, 29 had an unemployment rate below the national average in September, and 140 had one higher. Nineteen counties reported double-digit unemployment rates, while two counties had an unemployment rate below 5.0 percent. Rural Appalachian counties continue to experience higher levels of unemployment, while those counties along the Ohio-Michigan border have begun to see more elevated rates of unemployment.

The distribution of unemployment rates among Fourth District counties ranges from 4.1 percent to 12.2 percent, with the median at 7.5 percent. Counties in Fourth District West Virginia and Pennsylvania have generally lower unemployment rates than counties in Fourth District Kentucky and Ohio. These county-level patterns are reflected in statewide unemployment rates. Ohio's unemployment rate is 7.2, Kentucky's is 7.1 percent, Pennsylvania's is 5.7 percent, and West Virginia's is 4.5 percent.

Similar to the wide differences in unemployment rates observed across Fourth District counties, employment growth has also varied markedly. Year to date, the median county saw the number of people employed decrease by 1.4 percent with about onethird of the District's counties experiencing declines exceeding 2.0 percent. To put this in perspective, the number of people employed fell by only 0.5 percent for the median U.S. county over the same period. Given the unemployment rates reported above, it is not too surprising that Ohio and Kentucky experienced relatively weak employment growth relative to Pennsylvania and West Virginia. What is mildly surprisingly is how well Fourth District Pennsylvania counties have fared given the difficult macroeconomic environment. A full 90 percent of Fourth District Pennsylvania counties experienced positive employment growth, with five counties having growth rates exceeding 3 percent.

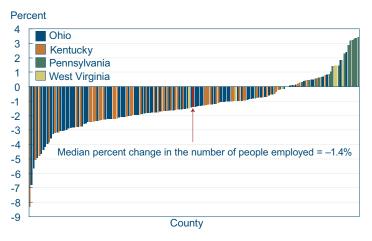
#### County Unemployment Rates

#### Percent



Note: Data seasonally adjusted using Census Bureau's X-11 procedure. Source: U.S. Department of Labor, Bureau of Labor Statistics.

## Change in Number of People Employed, January 2008—September 2008



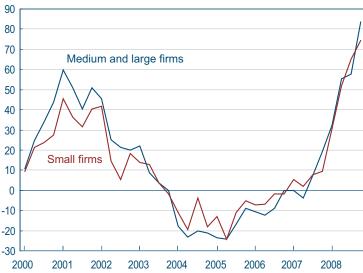
Note: Data seasonally adjusted using Census Bureau's X-11 procedure. Source: U.S. Department of Labor, Bureau of Labor Statistics.

#### Banking and Financial Markets

## **Business Loan Markets**

## Domestic Banks Reporting Tighter Credit Standards

#### Net percent



Source: Senior Loan Officer Opinion Survey on Bank Lending Practices, Board of Governors of the Federal Reserve System, October 2008.

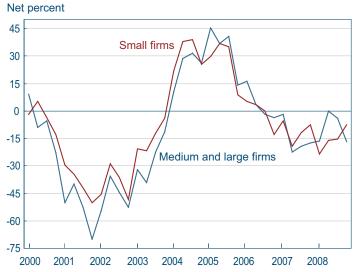
#### 11.13.08

by Joseph G. Haubrich and Saeed Zaman

The Federal Reserve Board's October 2008 survey of senior loan officers (covering the months of August, September, and October of 2008), found significant tightening of standards for commercial and industrial loans since the last survey. The share of the domestic banks reporting tightening of standards for commercial loans rose to its highest level. About 85 percent of domestic banks (up from 60 percent in last survey) and 70 percent of foreign banks surveyed reported having tightened standards for commercial and industrial loans to large and midsized firms over the past three months. The reasons cited for tightening included the more– uncertain economic outlook, reduced tolerance for risk, and worsening of industry-specific problems. A large fraction of domestic and foreign banks increased the cost of credit lines and premiums charged on loans to riskier borrowers. A substantial majority of the domestic and foreign banks surveyed raised lending spreads (loan rates over the cost of funds).

Demand for commercial and industrial loans has

## Domestic Banks Reporting Stronger Demand



Source: Senior Loan Officer Opinion Survey on Bank Lending Practices, Board of Governors of the Federal Reserve System, October 2008.

## Quarterly Change in Commercial and Industrial Loans

Billions of dollars 100 90 80 70 60 50 40 30 20 10 n -10 -20 -30 -40 2003 2004 2005 2007 2001 2002 2006

Source: Federal Deposit Insurance Corporation, Quarterly Banking Profile, Second Quarter 2008.

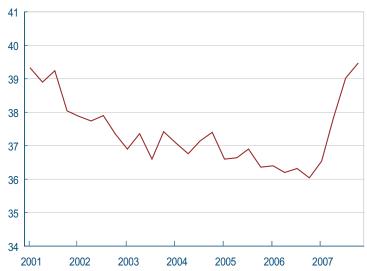
continued to weaken over the period surveyed although by less than over the previous survey period. About 15 percent of domestic banks reported weaker demand from large and midsized firms, and about 5 percent reported reduced demand by small firms. In contrast, 5 percent on net of foreign banks reported an increase in demand. Those who reported weaker demand said that the reasons were decreased investment in inventories, plants, and equipment, and a decrease in customers' need to finance mergers and acquisitions and to finance accounts receivables. Those who reported stronger demand cited a shift of customer borrowing from other bank or nonbank sources as these became less attractive for borrowers. Another reason cited was a decrease in their customers' internally generated funds.

Bank and thrift holdings of business loans went up by only \$10 billion in the second quarter of 2008, their smallest quarterly increase since third quarter of 2005. The increase marks the seventeenth consecutive quarterly increase in the bank and thrift holdings of commercial and industrial loans. This trend of quarterly increases in commercial and industrial loan balances on the books of FDIC–insured institutions has been holding up since second quarter of 2004.

The utilization rate of business loan commitments (draw downs on prearranged credit lines extended by banks to commercial and industrial borrowers) jumped up to 39.47 percent of total commitments, about the same rate as it was in the recession of 2001. This high rate can be attributed to the ongoing financial and credit market crisis.

## Utilization Rate of Commercial and Industrial Loan Commitments

Percent of loan commitments



Source: Federal Deposit Insurance Corporation, Quarterly Banking Profile, Second Quarter 2008

Economic Trends is published by the Research Department of the Federal Reserve Bank of Cleveland.

Views stated in *Economic Trends* are those of individuals in the Research Department and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System. Materials may be reprinted provided that the source is credited.

If you'd like to subscribe to a free e-mail service that tells you when *Trends* is updated, please send an empty email message to **econpubs-on@mail-list.com**. No commands in either the subject header or message body are required.

ISSN 0748-2922

