

# Economic Trends

**February 2010** (January 13, 2010 to February 9, 2010)

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## December Price Statistics

### December Price Statistics

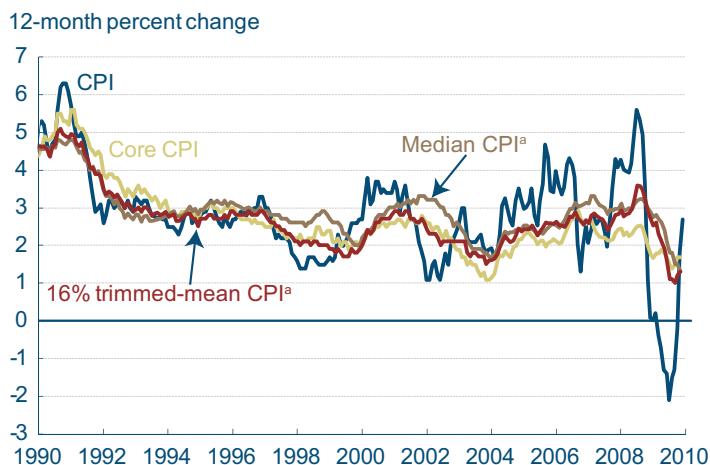
	Percent change, last					
	1mo. <sup>a</sup>	3mo. <sup>a</sup>	6mo. <sup>a</sup>	12mo.	5yr. <sup>a</sup>	2008 average
<b>Consumer Price Index</b>						
All items	1.6	3.3	2.9	2.7	2.6	0.3
Less food and energy	1.4	1.3	1.3	1.8	2.2	1.8
Median <sup>b</sup>	0.6	0.7	0.9	1.2	2.6	2.9
16% trimmed mean <sup>b</sup>	1.1	1.4	1.2	1.3	2.4	2.7
<b>Producer Price Index</b>						
Finished goods	2.0	9.5	5.0	4.4	3.2	0.2
Less food and energy	0.0	-0.5	-0.1	0.9	2.2	4.3

a. Annualized.

b. Calculated by the Federal Reserve Bank of Cleveland.

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

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



a. Calculated by the Federal Reserve Bank of Cleveland.

Sources: U.S. Department of Labor, Bureau of Labor Statistics, Federal Reserve Bank of Cleveland.

01.28.10

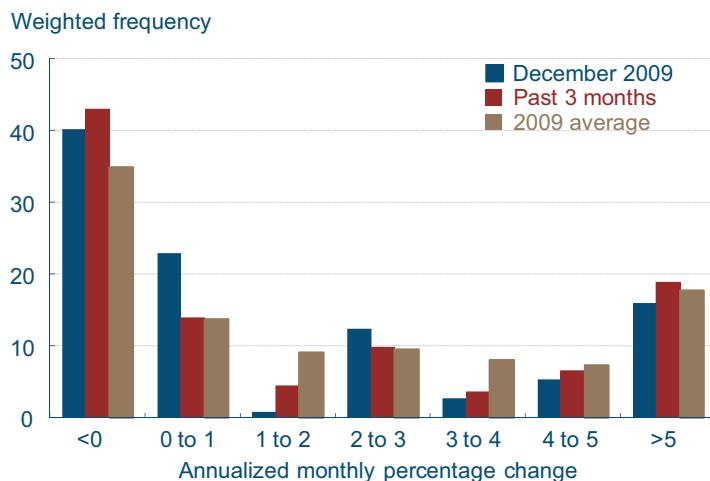
by Brent Meyer

The CPI rose at an annualized rate of 1.6 percent in December, as both food and energy prices posted modest increases. Over the past 12 months, the CPI has risen 2.7 percent. The core CPI rose 1.4 percent in December and is up a mere 1.3 percent over the past three months, somewhat of a downward trend compared to a still-modest 1.8 percent over the past year. Measures of underlying inflation trends produced by the Federal Reserve Bank of Cleveland, the median and the 16 percent trimmed-mean CPI, rose 0.6 percent and 1.1 percent, respectively, in December, consistent with recent softness seen over the past six months or so. Also, there is little evidence of pricing pressure feeding through from producer prices, as the core PPI was flat in December and has been holding to a virtually flat trend over the past six months.

In December, the bulk of the consumer market basket (by expenditure weight) continued to reside on the low end of the distribution, as 40 percent of the overall index posted outright price decreases and 23 percent rose at rates between 0 and 1 percent. Over the past six months, the average share of the market basket exhibiting declines has been 42 percent. Perhaps more remarkable (and illustrative of recent price softness) is that over the past eight months, the majority of items in the consumer market basket have either been rising at rates less than 1.0 percent or decreasing, on average. On the other end of the distribution, just 24 percent of the market basket rose at rates exceeding 3 percent in December, leaving just 13 percent in the broad sweet spot between 1 percent and 3 percent.

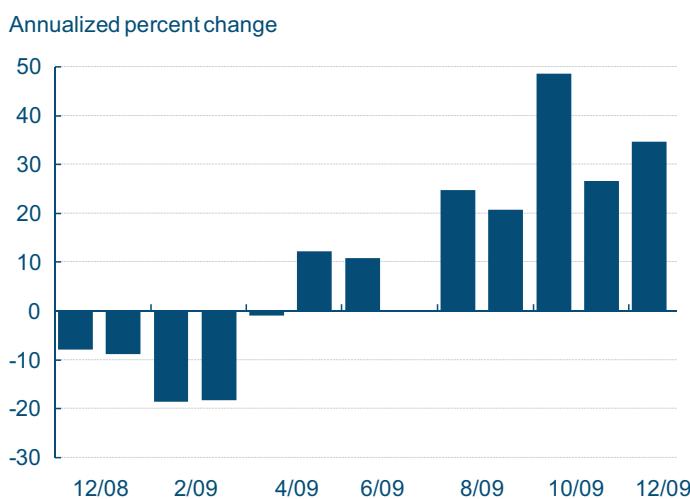
Roughly half of the overall increase in the core CPI in December was due to a 35 percent increase in used car and truck prices. The unusual strength in used car and truck prices over the past five months (up nearly 31 percent) has been somewhat of a mystery. Initially, the story read as if the CARS program negatively impacted used auto supply, driving up auction prices. However, it's hard to

## CPI Component Price Change Distribution



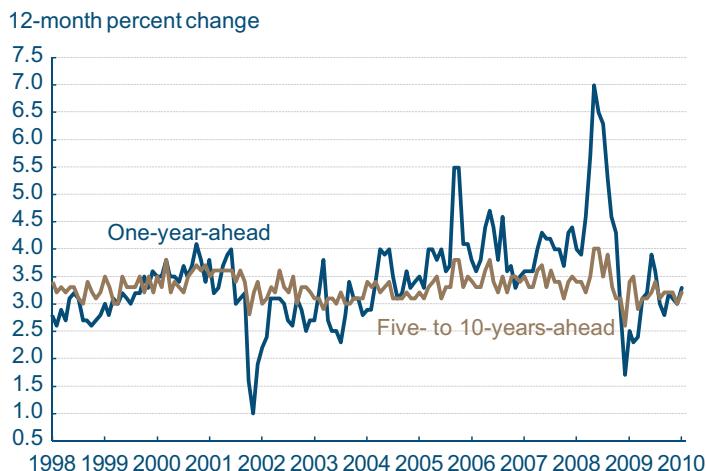
Source: Bureau of Labor Statistics.

## Used Cars and Trucks Prices



Source: Bureau of Labor Statistics.

## Household Inflation Expectations



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

Source: University of Michigan.

imagine that this is still the case. Perhaps the story now is that there has been some substitution away from new vehicles recently, possibly due to credit constraints, as some used car purchases are cash transactions. Either way, new vehicle prices slipped down 3.1 percent in December.

Although there was a slight uptick in both the short-term and longer-run average inflation expectations from the University of Michigan's Survey of Consumer Sentiment, they still appear to be relatively "well-anchored." One-year-ahead average inflation expectations rose from 3.0 percent to 3.3 percent in January, while the longer-run (5- to 10-year-ahead) expectations ticked up 0.2 percentage point to 3.2 percent, still well within historical norms and very close to their average over the past five years of 3.3 percent.

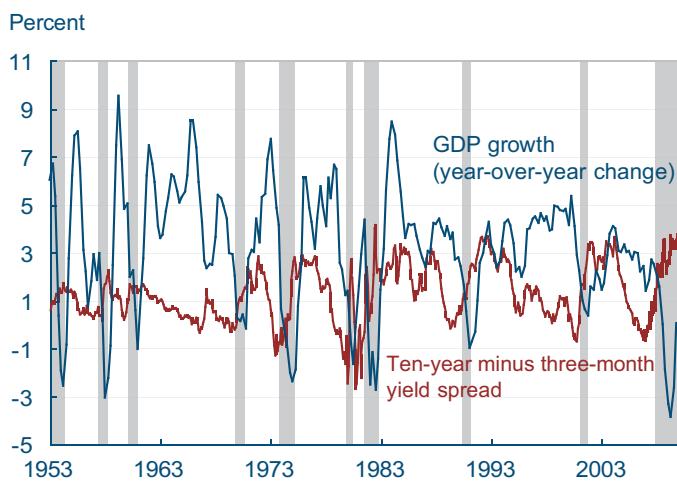
# What Is the Yield Curve Telling Us?...And Should We Have Listened?

02.01.10

by Joseph G. Haubrich and Kent Cherny

A new year has started, and by some reckoning, a new decade, so it may be a natural time to take a look back. This column has been around for three years, giving a full two years of “year-ahead” predictions, and it’s time assess those predictions. First, though, let’s look at the story for this month.

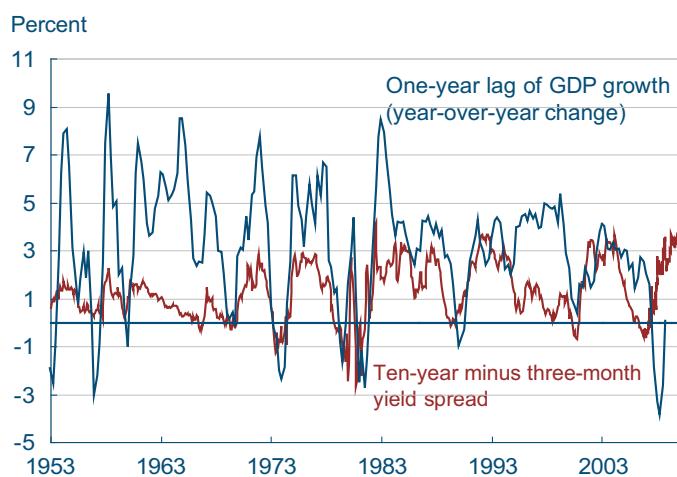
## Yield Curve Spread and Real GDP Growth



Note: Shaded bars indicate recessions.

Sources: Bureau of Economic Analysis, Federal Reserve Board.

## Yield Spread and Lagged Real GDP Growth



Sources: Bureau of Economic Analysis, Federal Reserve Board.

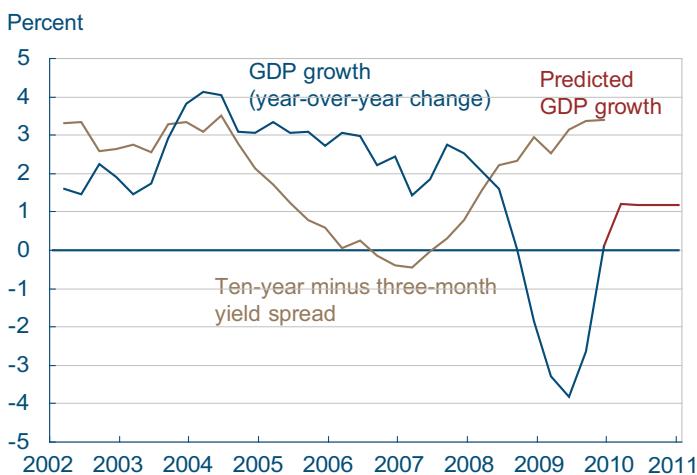
Since last month, the yield curve has moved up and gotten a bit steeper, with long rates rising a bit more than short rates. The difference between these rates, the slope of the yield curve, has achieved some notoriety as a simple forecaster of economic growth. The rule of thumb is that an inverted yield curve (short rates above long rates) indicates a recession in about a year, and yield curve inversions have preceded each of the last seven recessions (as defined by the NBER). In particular, the yield curve inverted in August 2006, a bit more than a year before the current recession started in December 2007. There have been two notable false positives: an inversion in late 1966 and a very flat curve in late 1998.

More generally, 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 three-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.

Since last month, the three-month rate has risen to 0.06 percent (for the week ending January 22), up from December's 0.04 percent, which was unchanged from November.

The 10-year rate increased to 3.66 percent, up from December's 3.56 percent and also from November's 3.35 percent. The slope increased to 360 basis points (bp), up from December's 352 bp and November's 331 bp. Projecting forward using past values of the spread and GDP growth suggests that real GDP will grow at about a 1.17 percent rate over the next year, down a bit from December's pre-

## Yield Curve Predicted GDP Growth



Sources: Bureau of Economic Analysis, Federal Reserve Board, authors' calculations.

## Recession Probability from Yield Curve

Percent probability, as predicted by a probit model

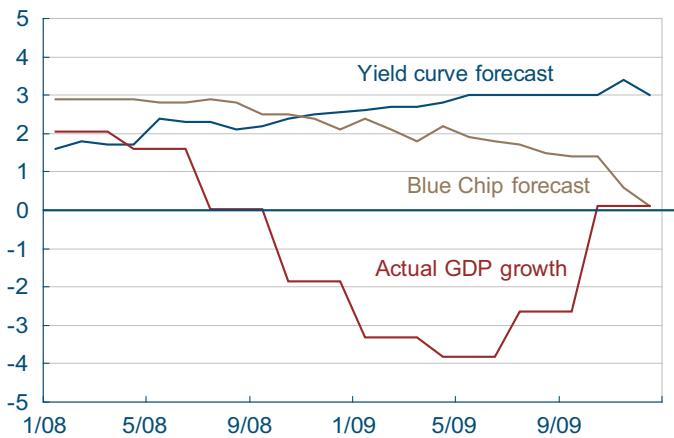


Note: Shaded bars indicate recessions.

Sources: Bureau of Economic Analysis, Federal Reserve Board, authors' calculations.

## Comparison of Real GDP Predictors

Year-over-year growth rate



Sources: Bureau of Economic Analysis, Federal Reserve Board, authors' calculations, Blue Chip Newsletter.

diction of 1.62. Some of the change resulted from recalibrating the model with the latest real GDP numbers for the fourth quarter of 2009.

Although the time horizons do not match exactly, this comes in on the more pessimistic side of other forecasts, although, like them, it does show moderate growth for the year.

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 January is 5.1 percent, just down from December's is 5.5 percent and just up from November's 4.7 percent.

Now let's take a look our track record. We're going to skip the usual disclaimer about using these numbers at your own risk, because looking at past performance should make the point obvious.

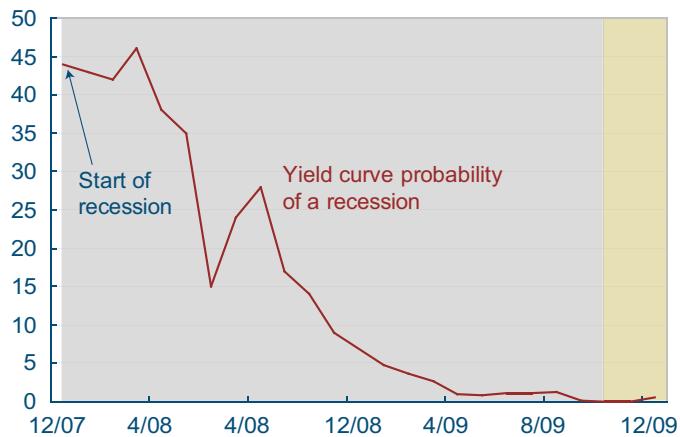
First, let's compare at our year-ahead forecasts of real GDP with the actual figures and the consensus predictions of the Blue Chip panel. We've made our predictions on a monthly basis, but GDP only comes out quarterly, so for the comparison we've taken quarterly averages. At the beginning, our yield curve model was predicting lower growth than Blue Chip, but neither predicted anything like the negative numbers seen in this recession. Blue Chip seemed to catch on to the length of the recession faster than the yield curve model, which seemed to expect a faster upturn.

The other prediction we make every month, on the probability of a recession, fares somewhat better, but shows a similar pattern. In December 2006, our yield curve model was predicting a 44 percent chance of recession in December 2007, which, as it turns out, is when the NBER eventually ended up dating the onset of the current recession. Many people think the recession ended in the third quarter of 2009, and our yield curve model put low odds on the recession continuing that long.

How about our brush with greatness, when No-

## Recession Probability Effectiveness

Recession probability as predicted in prior year



Notes: Gray bar indicates recession. Yellow bar indicates possible recovery phase, based on GDP numbers.

Sources: NBER, Federal Reserve Board, authors' calculations.

bel Prize winner and New York Times columnist Paul Krugman thought we were too optimistic in December 2008? We predicted a year-over-year growth rate of 3 percent for December 2009. The actual number came out to be 0.1 percent—low, but positive. So perhaps we should call it a tie.

As usual, 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 Recessions?”

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To read more on other forecasts:

[http://www.econbrowser.com/archives/2008/11/gdp\\_mean\\_estima.html](http://www.econbrowser.com/archives/2008/11/gdp_mean_estima.html)

For Paul Krugman's column:

<http://krugman.blogs.nytimes.com/2008/12/27/the-yield-curve-wonkish/>

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

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

# A Sign of Normalization

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02.02.10

by John B. Carlson and John Lindner

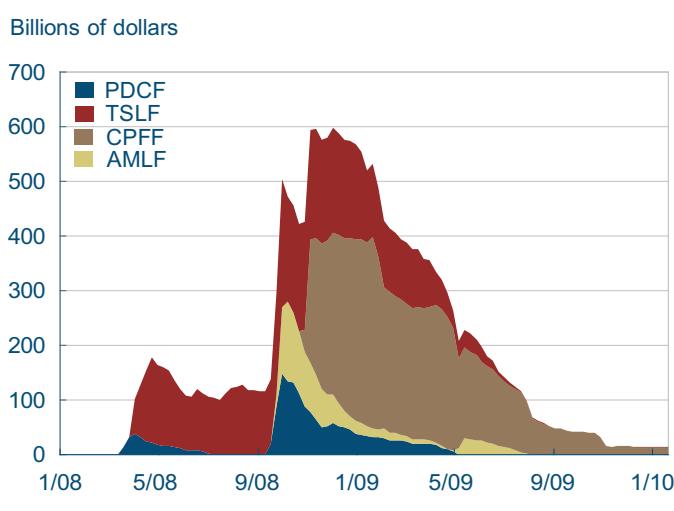
During the recent financial turmoil, the Federal Reserve created several emergency credit facilities to address the extreme demands for liquidity. Several of these facilities involved lending to institutions outside the set of those permitted by the Federal Reserve Act in normal circumstances. To extend credit to them, the Fed needed to invoke its authority under section 13(3) of the Act, which allows it to expand the types of permissible borrowers under exigent and emergency conditions.

Four of the Federal Reserve's new credit facilities were allowed to expire on February 1. These include the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), the Commercial Paper Funding Facility (CPFF), the Primary Dealer Credit Facility (PDCF), and the Term Securities Lending Facility (TSLF). As financial market functioning improved, private sources of liquidity became sufficient and the demand for credit via the special facilities diminished. It is important to note that credit extended through these facilities required good collateral backing. Moreover, to limit the use of the facilities, the terms of lending were set to be less attractive than private sources. In this sense, the facilities mimicked the features of the Fed's Discount Window—a facility available to qualified depositories in normal times.

The Primary Dealer Credit Facility (PDCF) and the Term Securities Lending Facility (TSLF) were created following the collapse of Bear Stearns and its subsequent sale to JP Morgan in March 2008. These two facilities gave primary dealers greater access to credit as credit conditions worsened and their private sources of liquidity dried up. Toward the end of 2009 and into the beginning of this year, spreads on most forms of credit abated, and financial markets are now functioning in an orderly way.

In September 2009, the collapse of Lehman Brothers spurred the formation of the Asset-Backed Commercial Paper Money Market Mutual Fund

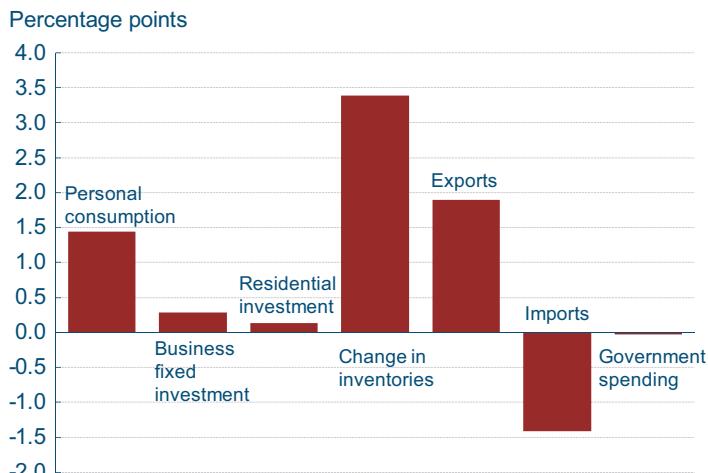
## Epiring Liquidity Programs



Liquidity Facility (AMLF) and the Commercial Paper Funding Facility (CPFF). Both of these programs were designed to help assure the viability of the commercial paper market. As the commercial paper market normalized, private sources became sufficient to sustain liquidity demands.

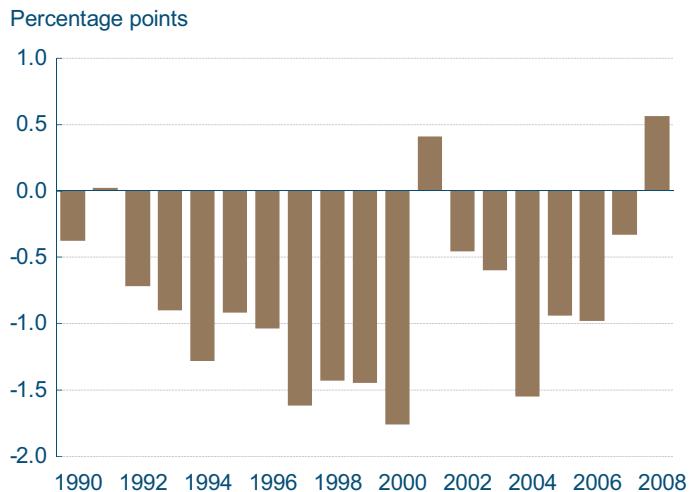
# Imports and Economic Growth

## Contribution to Percent Change in Real GDP, 2009:4Q Advance Estimate



Source: Bureau of Economic Analysis.

## Contribution of Imports to Percent Change in Real GDP



Source: Bureau of Economic Analysis.

02.02.10

by Owen F. Humpage and Caroline Herrell

A quick look at the latest GDP data might suggest that imports are slowing the domestic recovery. A quick look might get it wrong.

Real GDP—the chief barometer of our nation's economic health—increased 5.7 percent in the fourth quarter of 2009, according to advance estimates. In a standard analysis of the data, the Commerce Department calculates the contribution that each spending category in the accounts makes to the overall GDP growth rate. In the fourth quarter of 2009, inventory accumulation alone added a whopping 3.4 percentage points to the overall growth rate. Expanding exports, personal consumption expenditures, and business and residential investment together added another 3.7 percentage points to the quarter's growth. In stark contrast to these growth contributors, expanding imports seem to have pulled overall economic growth down by 1.4 percentage points to the observed 5.7 percent. Expanding imports always appear as a drag on overall economic growth.

This unfortunate false perception results because imports enter the GDP account with a negative sign. Consequently, whenever imports increase, which is typically the case in a growing, open economy, they appear to take bite out of GDP growth. Appearances can indeed be deceiving. In fact, imports promote economic growth.

Interpreting imports in the GDP accounts requires some care. GDP measures the value of all final goods and services produced in the United States over each quarter. Last quarter, for example, the United States produced \$13.2 trillion worth of output, as measured in 2005 dollars. Since imported goods are not produced here, they do not belong in the tally, but taking them out creates a small perceptual problem. The key expenditure categories of the GDP accounts, like personal consumption, business-fixed investment, and government spending, do not distinguish between outlays for goods and services produced in the United States

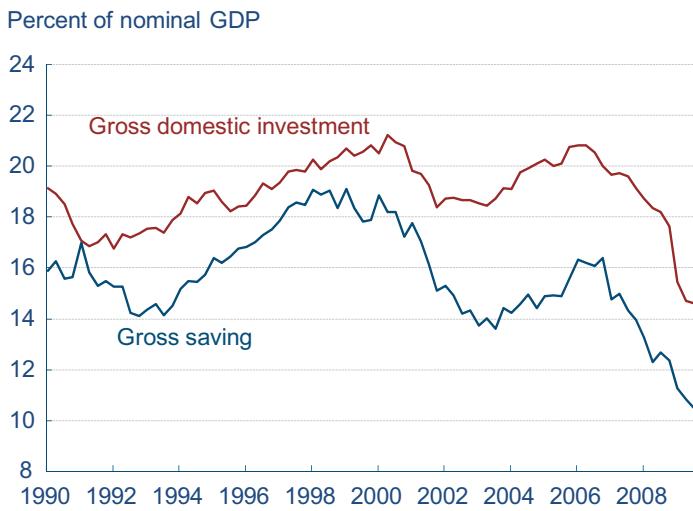
and spending on goods produced abroad. That is, imports are already in these categories. Instead of removing imports from each individual spending category, the Commerce Department lists imports as a separate component in the accounts, which then gets subtracted from the total.

This methodology actually seems a superior way for handling imports, but interpreting the impact of foreign purchases on U.S. economic growth then requires giving some considerable thought to how we pay for these imports. To be sure, if American households buy \$500 million worth of goods and services abroad during a particular quarter, they spend that much less on domestic goods and services. Still, the United States as a nation must pay for these imported products. If we happen to produce and export \$500 million worth of goods and services in exchange, then trade overall—imports plus exports—will have no net impact on GDP. The value of output in this case would be exactly the same as if Americans had spent all of their income on domestic output and no trade had taken place. When balanced trade occurs, we have simply swapped some domestically produced goods and services for some foreign-made goods and services.

The process is somewhat more complicated, but essentially the same, when our imports exceed our exports, which is typically the case. When a country runs a trade deficit, it pays for the surfeit of imports by issuing financial claims—corporate stocks and bonds, Treasury securities, bank accounts, and the like—to the rest of the world. The funds made available when foreigners accept these financial claims on the United States do not sit idle in some U.S. bank account. They will end up financing additional investments or consumption in the United States. In fact, the U.S. current account deficit—essentially a broad measure of our nation's trade shortfall—exactly equals the difference between gross domestic investment and gross domestic savings in the United States, allowing for measurement error. So what imports seem to subtract from the value of domestic output (GDP) always reappears as exports, domestic spending, or domestic investment.

Ben Franklin never looked at a GDP account, but he got it right: “No nation was ever ruined by trade.”

## Investment and Saving



Source: Bureau of Economic Analysis.

# The Employment Situation, January 2010

02.09.10

by Murat Tasci and Beth Mowry

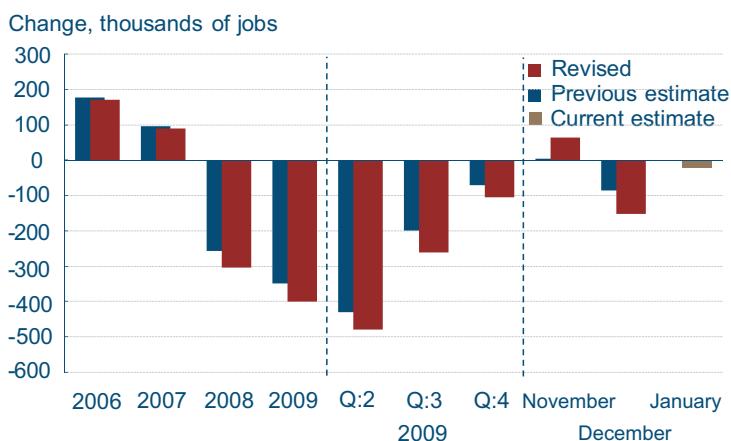
Nonfarm employment was essentially unchanged in January, declining by just 20,000 jobs, following a downwardly revised loss in December (from 85,000 to 150,000) and an upwardly revised gain in November (from 4,000 to 64,000). Monthly revisions result from additional sample reports and the monthly recalculation of seasonal factors. In the case of the current Employment Situation release, the annual benchmark process also contributed to November and December's revisions. Since the start of the recession in December 2007, payroll employment has fallen by 8.4 million. Over the past three months, however, average employment decline has slowed considerably.

In January, the number of unemployed persons dropped a substantial 430,000, while the labor force expanded by 111,000, resulting in a decline in the unemployment rate of 0.3 percentage point, to 9.7 percent.

The improvement in January payrolls from December's much larger loss was due almost entirely to progress in service-providing industries. Job losses in goods-producing industries as a whole remained roughly the same month-to-month, at 60,000. Losses steepened in construction, from 32,000 in December to 75,000 in January, while the manufacturing industry actually added to payrolls for the first time in three years (11,000).

Service industries tacked on 40,000 jobs in January after a 96,000-drop just one month earlier. The improvement was broadly shared, resulting from a turnaround in retail trade (from -18,000 to +42,000 jobs), a larger gain in professional and business services (from 20,000 to 44,000), and from smaller losses in leisure and hospitality (from -41,000 to -14,000) and government (from -27,000 to -8,000). Temporary help services has charted solid gains for four straight months now, adding 52,000 jobs in January.

## Average Nonfarm Employment Change



Source: Bureau of Labor Statistics.

## Labor Market Conditions and Revisions

	Average monthly change (thousands of employees, NAICS)				
	November current	Revision to November	December current	Revision to December	January current
Payroll employment	64	60	-150	-65	-20
Goods-producing	-33	25	-54	27	-60
Construction	-15	12	-32	21	-75
Heavy and civil engineering	4.1	2	-9	9	0
Residential <sup>a</sup>	-2.8	2	-2	16	-15
Nonresidential <sup>b</sup>	-16.5	8	-20	-4	-60
Manufacturing	-25	10	-23	4	11
Durable goods	-23	6	-15	1	13
Nondurable goods	-2	4	-8	3	-2
Service-providing	97	35	-96	-92	40
Retail trade	9	22	-18	-8	42
Financial activities <sup>c</sup>	2	8	-7	-11	-16
PBS <sup>d</sup>	106	17	20	-30	44
Temporary help services	95	40	59	12	52
Education and health services	31	-6	26	-9	16
Leisure and hospitality	-21	-8	-41	-16	-14
Government	-11	-15	-27	-6	-8
Local educational services	13	-2	-13	-11	-11

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.

The Diffusion Index of Employment Change rose 5.5 points to 46.8, a step closer to striking a balance between industries increasing and decreasing employment. The index currently matches its recent high of November 2009 and has climbed all the way from a record low of 19.6 in March of that year.

This month's Employment Situation release coincides with the Bureau of Labor Statistics' annual benchmark revision process. Establishment survey data since April 2008 have been revised to reflect unemployment insurance tax records and updated adjustments to models of net business births and deaths. Also, data from January 2005 forward incorporate updated seasonal adjustment factors. Revision caused average monthly payroll losses for 2008 and 2009 to increase by roughly 50,000. In 2008 an average 302,000 jobs were lost on net each month, and average losses in 2009 were 398,000.

Adjustments for August through October 2008 were particularly substantial, adding a total of 470,000 additional losses to those months' figures.

## Labor Market Conditions

	Average monthly change (thousands of employees, NAICS)				
	2006	2007	2008	2009	January 2010
Payroll employment	172	90	-302	-398	-20
Goods-producing	2	-37	-139	-199	-60
Construction	13	-17	-66	-84	-75
Heavy and civil engineering	3	0	-7	-10	0
Residential <sup>a</sup>	-5	-23	-43	-32	-15.1
Nonresidential <sup>b</sup>	15	6	-16	-42	-60.2
Manufacturing	-16	-23	-75	-108	11
Durable goods	-5	-17	-54	-84	13
Nondurable goods	-11	-6	-21	-24	-2
Service-providing	170	126	-163	-199	40
Retail trade	4	14	-59	-42	42.1
Financial activities <sup>c</sup>	9	-10	-19	-28	-16
PBS <sup>d</sup>	43	23	-69	-61	44
Temporary help services	1	-8	-42	-11	52.0
Education and health services	39	43	40	26	16
Leisure and hospitality	32	20	-24	-22	-14
Government	17	24	15	-7	-8
Local educational services	6	8	3	-4	-10.4
Average for period					
Civilian unemployment rate	4.6	4.6	5.8	9.2	9.7

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.

# Real GDP: Fourth-Quarter 2009 Advance Estimate

02.08.10

by John Lindner

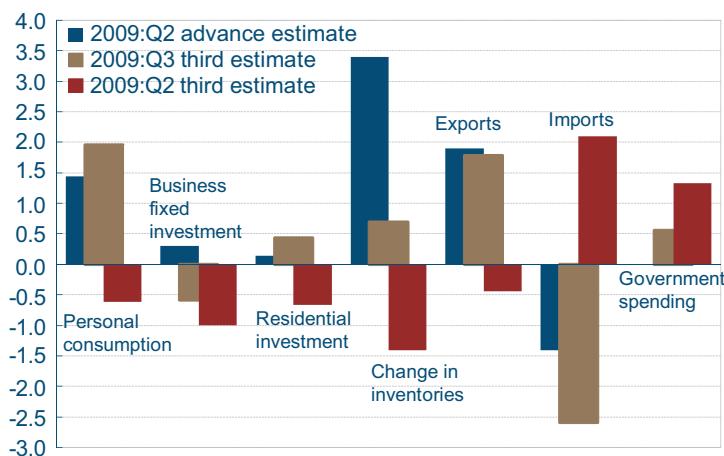
## Real GDP and Components, 2009:Q4 Advance Estimate

	Quarterly change (billions of 2000\$)	Annualized percent change, last:	
		Quarter	Four quarters
Real GDP	182.0	5.7	0.1
Personal consumption	45.9	2.0	1.1
Durables	-2.4	-0.9	4.0
Nondurables	21.3	4.3	1.4
Services	25.8	1.7	0.6
Business fixed investment	9.1	2.9	-14.6
Equipment	27.9	13.3	-8.7
Structures	-15.6	-15.4	-24.7
Residential investment	5.0	5.7	-12.1
Government spending	-1.1	-0.2	1.6
National defense	-6.2	-3.5	3.1
Net exports	16.3	—	—
Exports	62.8	18.1	-1.7
Imports	46.5	10.5	-7.7
Change in private inventories	-33.5	—	—

Source: Bureau of Economic Analysis.

## Contribution to Percent Change in Real GDP

Percentage points



Source: Bureau of Economic Analysis.

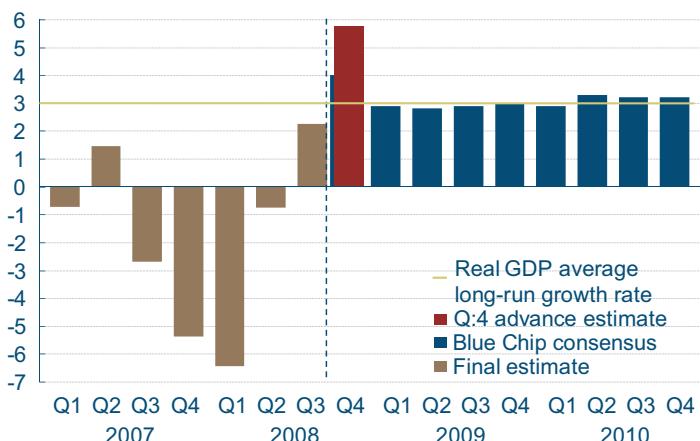
GDP had its strongest quarter in more than six years, coming in above the majority of analysts' estimates at an annualized rate of 5.7 percent for the fourth quarter of 2009. The four-quarter growth rate returned to positive levels for the first time since the third quarter of 2008. The big jump was largely driven by a 3.4 percentage point (pp) increase in private inventories, which happened to be that component's largest contribution to GDP growth since the first quarter of 1984. Smaller positive contributions also came in from all components except for government spending, and even that negative contribution (-0.02 pp) was minimal. Personal consumption rose another 2.0 percent in the fourth quarter, adding 1.4 pp to real growth. Residential investment grew 5.7 percent this quarter, much less than its third-quarter growth of 18.9 percent, but still contributing 0.1 pp to GDP growth.

Two interesting developments in the latest release were net exports and business fixed investment (BFI). Exports grew 18.1 percent in the fourth quarter, adding 1.9 pp to real GDP growth and matching their third-quarter performance. This was partially offset by growth in imports of 10.5 percent, but net exports still added 0.5 pp to real growth. BFI also made a positive contribution to GDP despite opposing components. Equipment and software grew at a steady clip of 13.3 percent after having reversed their negative trend last quarter, while structures dropped for the sixth straight quarter, this time by 15.4 percent. On net, BFI added a total of 0.3 pp to GDP.

The final reading for 2009 real GDP growth was -2.4 percent, slightly ahead of December's Blue Chip consensus forecast. The consensus estimate for 2010 growth ticked up 0.1 pp in January to 2.8 percent, while no quarter in 2010 is currently forecasted to top 3.0 percent. According to forward-looking forecasts, real GDP growth is first expected to reach its long-run trend again in the

## Real GDP Growth

Annualized quarterly percent change



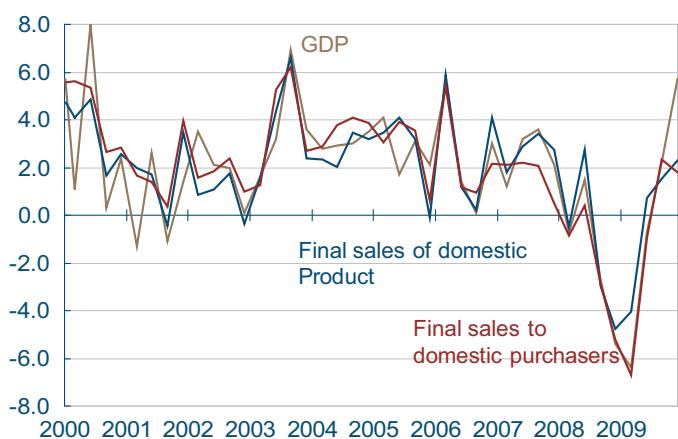
Sources: Blue Chip Economic Indicators, December 2009; Bureau of Economic Analysis.

fourth quarter of 2010. January's survey also started a forecast for 2011 growth and that value came in at 3.1 percent. Overall, these forecasts match the overwhelming concern that a recovery from the current recession will be a slow one.

A deeper look into the larger-than-expected growth for the fourth quarter of 2009 shows what some economists have been calling an "inventory blip." When looking at the final sales of domestic products—which is just GDP less the change in inventories—it shows that demand for domestic goods grew only 2.3 percent. Comparing this to the third quarter numbers, what appears to be a 3.5 pp quarter-to-quarter increase in GDP translates into only a 0.8 pp increase in final sales. The picture turns even bleaker in looking at a measure of domestic demand for domestic goods, or final sales to domestic purchasers, which nets out exports and imports. In this case, there is a 0.5 pp drop from third-quarter to fourth-quarter sales, and final domestic sales grew only 1.8 percent. Effectively, this means that there is a more muted return to demand. Growth through 2010 should reflect such a soft return, as forecasters are predicting growth rates closer to the long-run average in all four quarters of the year.

## Final Sales

Percent



Source: January 2010 Blue Chip survey.

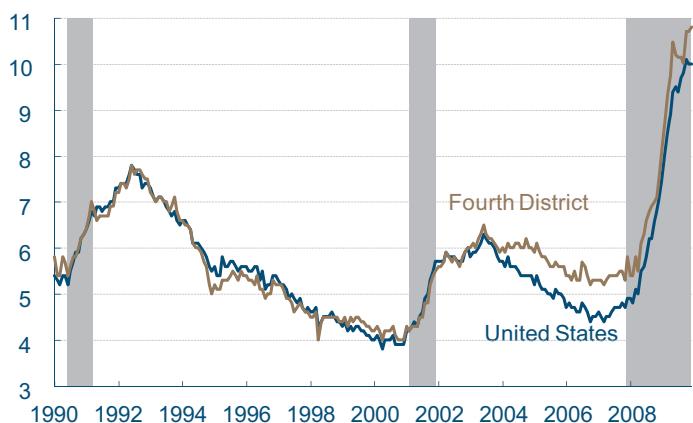
## Fourth District Employment Conditions

02.08.10

by Kyle Fee

### Unemployment Rate

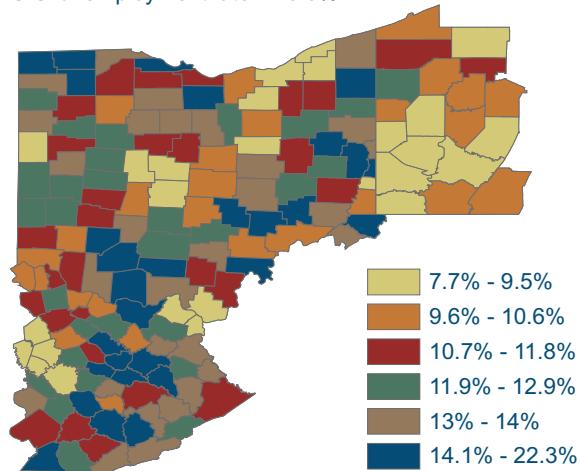
Percent



Notes: Shaded bars indicate recessions. Seasonally adjusted using the Census Bureau's X-11 procedure. Some data reflect revised inputs, reestimation, and new statewide controls. For more information, see <http://www.bls.gov/lau/launews1.htm>.  
Sources: U.S. Department of Labor, Bureau of Labor Statistics.

### County Unemployment Rates

U.S. unemployment rate = 10.0%



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

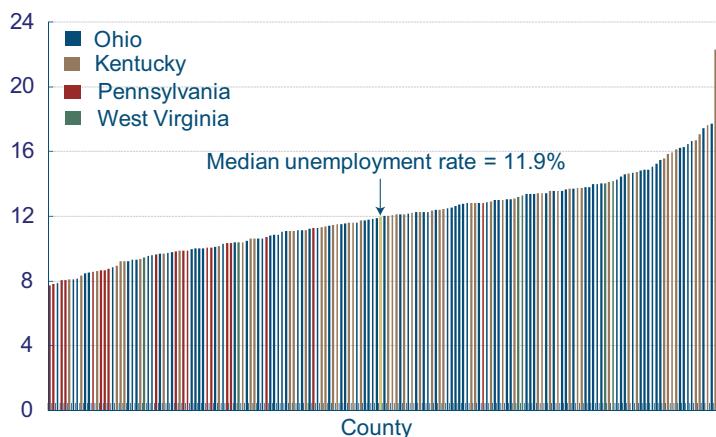
The District's unemployment rose 0.1 percent to 10.8 percent for the month of December. Compared to the national rate, the District's unemployment rate was 0.8 percentage point higher. The District's unemployment rate has been consistently higher since early 2004. Since the start of the recession, the nation's monthly unemployment rate has averaged 0.6 percentage point lower than the Fourth District unemployment rate. Since this same time last year, the Fourth District unemployment rate has increased by 3.1 percentage points and the national unemployment rate has increased by 2.8 percentage points.

There are significant differences in unemployment rates across counties in the Fourth District. Of the 169 counties that make up the District, 40 had an unemployment rate below the national rate in December and 129 counties had a rate higher than the national rate. There were 134 District counties reporting double-digit unemployment rates in December, indicating large portions of the Fourth District have high levels of unemployment. Geographically isolated counties in Kentucky and southern Ohio have seen rates increase as economic activity is limited in these remote areas. Distress from the auto industry restructuring can be seen along the Ohio-Michigan border. Outside of Pennsylvania, lower levels of unemployment are limited to the interior of Ohio or the Cleveland-Columbus-Cincinnati corridor.

The distribution of unemployment rates among Fourth District counties ranges from 7.7 percent (Allegheny County, Pennsylvania) to 22.3 percent (Magoffin County, Kentucky), with the median county unemployment rate at 11.9 percent. Counties in Fourth District Pennsylvania generally populate the lower half of the distribution, while the few Fourth District counties in West Virginia are scattered across the distribution. Fourth District Kentucky continues to dominate the upper half of the distribution with Ohio counties becoming

## County Unemployment Rates

Percent



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

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

more dispersed throughout the distribution. These county-level patterns are reflected in state-wide unemployment rates as Kentucky and Ohio have unemployment rates of 10.7 percent and 10.9 percent, respectively, compared to Pennsylvania's 8.9 percent and West Virginia's 9.1 percent.

## Seriously Delinquent Mortgages in the Fourth District

02.09.10

by Kyle Fee

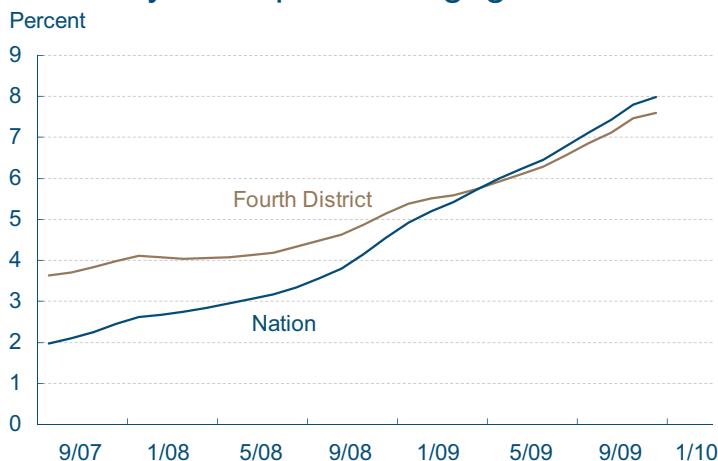
Much of the recent commentary on the economy has been focused on the recovery, while seriously delinquent mortgages have quietly crept upwards. (McDash/LPS defines seriously delinquent mortgages as those that are 90 or more days delinquent plus those that are in foreclosure.) As of December 2009, 7.9 percent of mortgages in the nation and 7.6 percent of mortgages in the Fourth District were considered seriously delinquent. Since December 2008, seriously delinquent mortgages have increased 75 percent (3.42 percentage points) nationally, whereas in the Fourth District they have increased 48 percent (2.45 percentage points).

While it might be natural to suspect that subprime mortgages are responsible for the increase in seriously delinquent loans, this would be misleading. Currently, prime loans account for 83 percent of seriously delinquent mortgages in the Fourth District and 84 percent of mortgages in the nation.

Delinquencies in prime loans are rising mainly for two reasons: “underwater” mortgages and unemployment. Declines in home prices have left many homeowners with underwater mortgages. A homeowner with an underwater mortgage may choose to stop making mortgage payments because the value of the mortgage is worth more than the actual house. Eventually, the decision to walk away from an underwater mortgage leads to delinquencies and then on to foreclosure. The decision to walk away from an underwater mortgage is a personal decision involving many different variables (mortgage terms, the amount of the drop in home price, credit history, and so on), which makes estimating the potential number of underwater mortgages challenging. The usefulness of such estimates are thus limited.

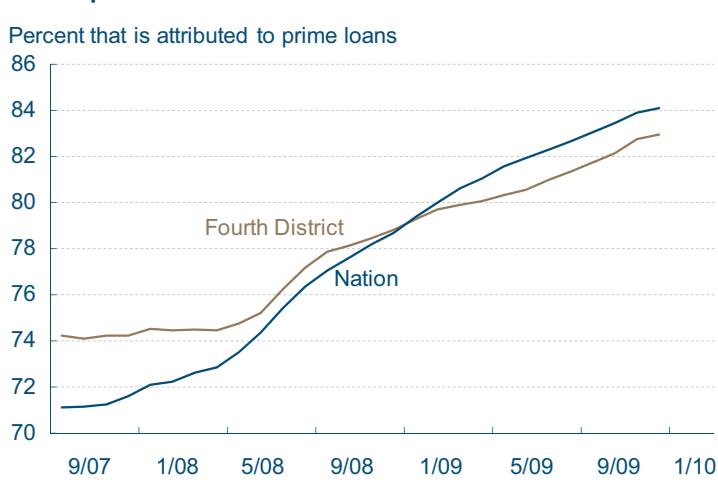
A more informative indicator of seriously delinquent mortgages would be local unemployment rates. Conceptually this relationship is straightforward. If unemployment increases in an area, wages

### Seriously Delinquent Mortgage Rates



Source: McDash/LPS.

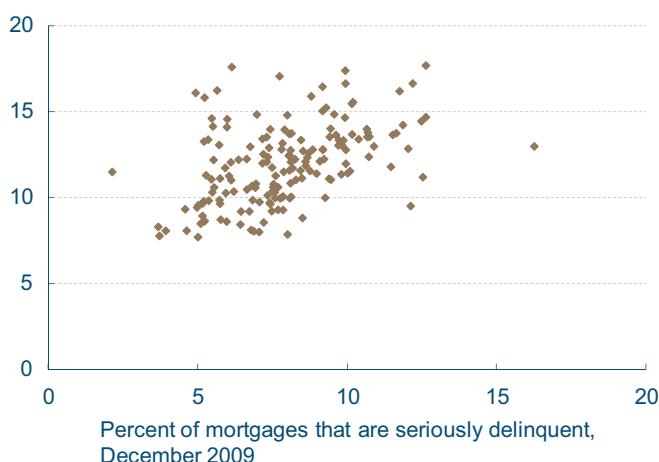
### Seriously Delinquent Mortgage Rate Composition



Source: McDash/LPS.

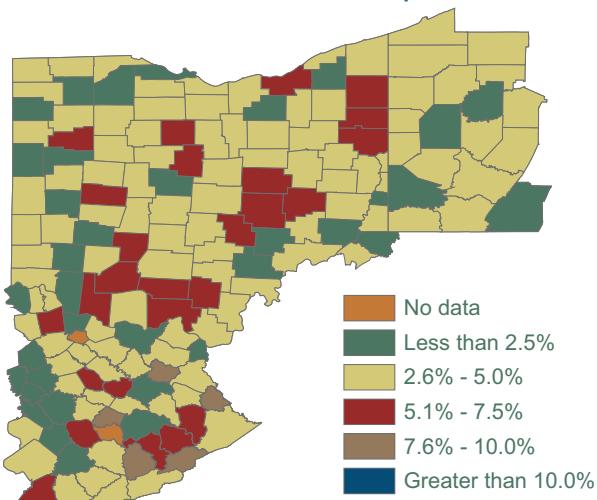
## Seriously Delinquent Mortgage Rate and Unemployment Rates

Country unemployment rate, December 2009 (percent)

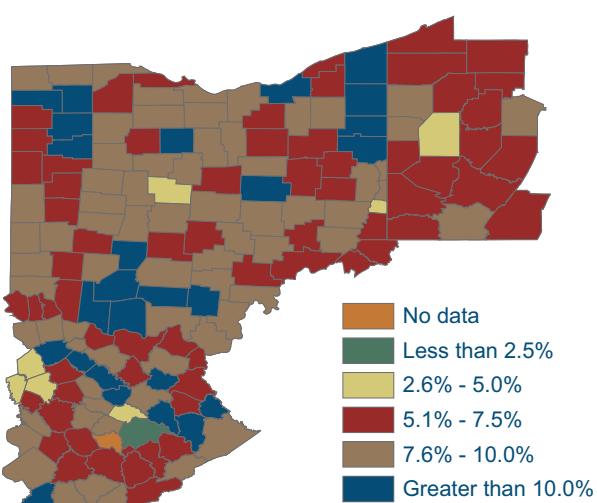


Sources: McDash/LPS, Bureau of Labor Statistics.

## Seriously Delinquent Mortgage Rates in the Fourth District, September 2007



## Seriously Delinquent Mortgage Rates in the Fourth District, December 2009



decrease. Falling wages inhibit homeowners' ability to pay their mortgages and delinquencies increase. In the Fourth District, county unemployment rates have a strong correlation (0.47) with seriously delinquent mortgages.

Like the nation, many counties in the Fourth District began to see their rates of seriously delinquent mortgages increase at the end of 2008 and accelerate throughout 2009. Many of the same geographic patterns that characterize unemployment rates across the Fourth District also characterize seriously delinquent mortgage rates. In recent reports on Fourth District employment conditions [link on "employment conditions" to /research/trends/2010/0210/01regact.cfm], for example, we have noted a pattern that applies equally well to unemployment rates as to seriously delinquent mortgage rates: "Distress from the auto industry restructuring can be seen along the Ohio-Michigan border. Outside of Pennsylvania, lower levels of unemployment are limited to the interior of Ohio or the Cleveland-Columbus-Cincinnati corridor." Surprisingly, there are pockets of lower rates of serious delinquency in Fourth District Kentucky despite the state's high unemployment rate (10.7 percent). Overall, a majority (56 percent) of Fourth District counties reported 7.5 percent of all mortgages as seriously delinquent.

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