Economic Trends

December 2009 (November 13, 2009 to December 8, 2009)

In This Issue:

FEDERAL RESERVE BANK
of CLEVELAND

October Price Statistics

11.24.09
by Brent Meyer

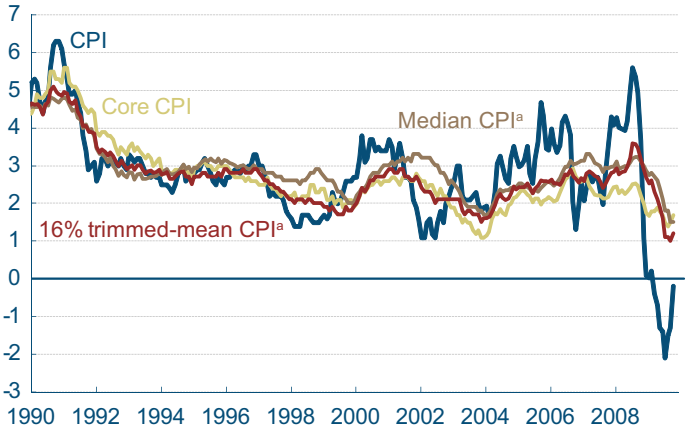
October Price Statistics

	Percent change, last					
	1mo.[a]	3mo.[a]	6mo.[a]	12mo.	5yr.[a]	2008 average
Consumer Price Index						
All items	3.4	3.6	3.5	−0.2	2.5	0.3
Less food and energy	2.2	1.7	1.7	1.7	2.2	1.8
Median[b]	1.2	1.2	0.8	1.5	2.6	2.9
16% trimmed mean[b]	1.9	1.5	1.3	1.2	2.5	2.7
Producer Price Index						
Finished goods	3.5	6.0	4.8	−1.9	2.8	0.2
Less food and energy	−6.8	−1.9	−0.3	0.7	2.1	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

12-month percent change



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

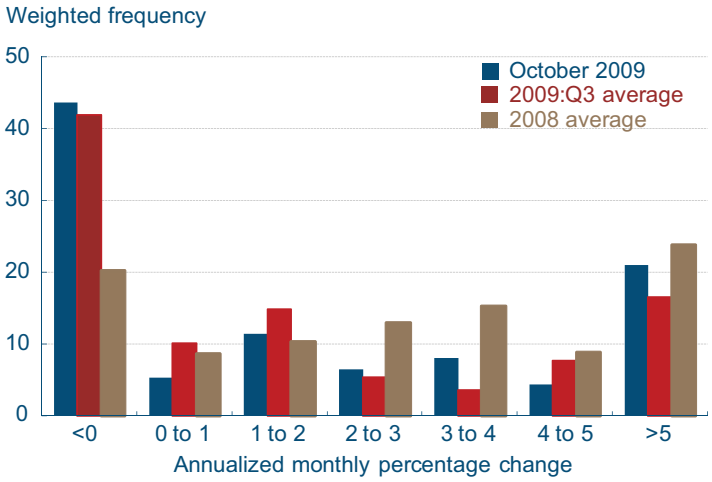
The CPI rose at an annualized rate of 3.4 percent in October, as energy prices jumped up 19 percent. On a year-over-year basis, the CPI is down 0.2 percent, up from a 12-month growth rate of –1.3 percent in September. Excluding food and energy prices, the "core" CPI rose 2.2 percent during the month, largely on sharp increases in used cars and trucks (up 48.6 percent) and new vehicles prices (up 21.3 percent). The measures of underlying inflation produced by the Federal Reserve Bank of Cleveland continued to run a little softer than those of the BLS, as the 16 percent trimmed-mean CPI rose 1.9 percent and the median CPI increased 1.2 percent. Over the past 12 months, the median is up 1.5 percent, and the growth rate in the trimmed mean is up 1.2 percent.

The underlying price-change distribution continued to show a lot of mass in the tails (65 percent), with 44 percent of the consumer market basket (by expenditure weight) exhibiting outright price decreases. The softness in the market basket is clearly evident when compared to the 2008 average. In October, only 18 percent of the overall index was in the broad "sweet-spot" between 1 percent and 3 percent, compared to roughly 23 percent in 2008.

The sharp rise in used car and truck prices is being attributed by some to after-effects of the CARS program ("cash for clunkers"). Back on October 6, 2009, the Wall Street Journal (subscription required) reported that used-car-dealers' inventories were low because of the limited supply available at auction—the clunkers program had sent many used cars to the junkyard instead. Prices in used car and truck markets appear to reflect that phenomenon, as evidenced by a whopping 30.8 percent jump in used car prices over the past three months (its highest rate since January 1981).

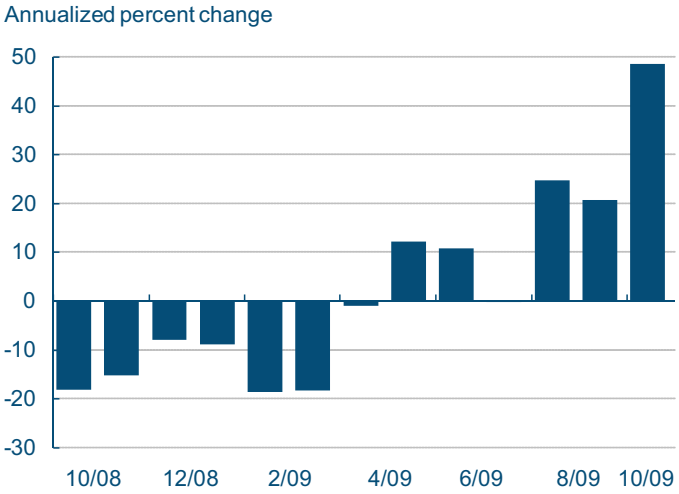
Rents continued to exhibit softness in October, as OER (owners' equivalent rent) was virtually unchanged, and rent of primary residence slipped

CPI Component Price Change Distribution



Source: Bureau of Labor Statistics.

Used Cars and Trucks Prices

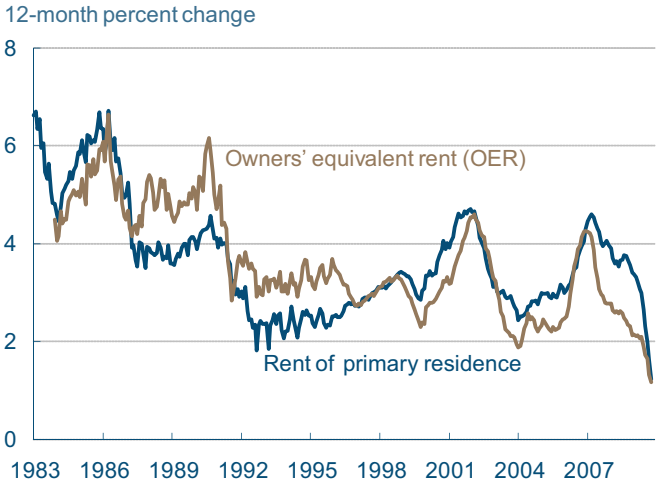


Source: Bureau of Labor Statistics.

down 1.3 percent. Both series are up just 1.2 percent over the past year, an all-time low for OER and the lowest growth rate for rent of primary residence since the mid-1960s. Because the two series account for roughly 30 percent of the overall index (by expenditure weight), continued low readings should apply some downward pressure on the overall market basket.

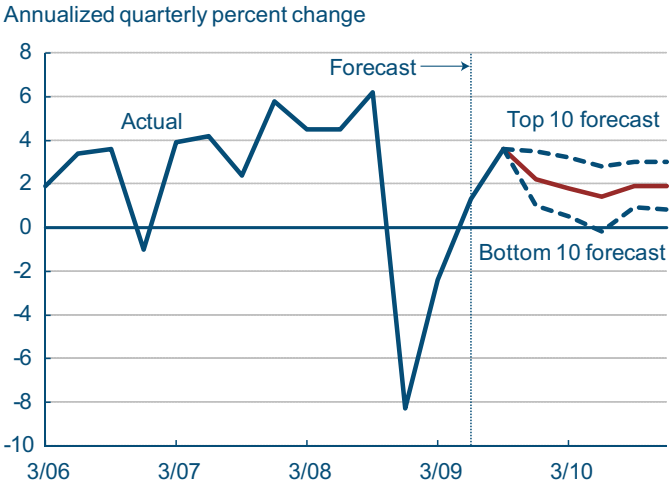
The consensus CPI inflation forecast from the most recent Blue Chip survey continues to moderate over the next few quarters, coming in at just under 2.0 percent at the end of 2010. Interestingly, the average of the bottom 10 forecasts shows headline inflation slipping into negative territory in the second quarter of 2010, while the top-ten average puts inflation at around 3.0 percent throughout the forecast period.

Rents



Source: Bureau of Labor Statistics.

CPI and Forecasts

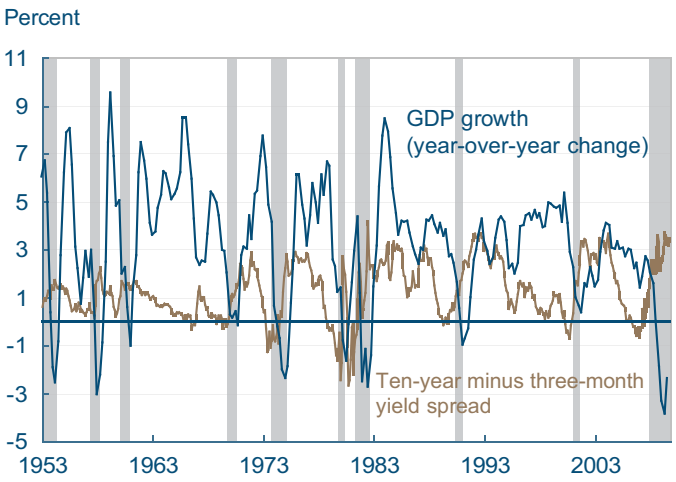


Sources: Blue Chip *Economic Indicators*, November 2009; Bureau of Labor Statistics.

The Yield Curve, November 2009

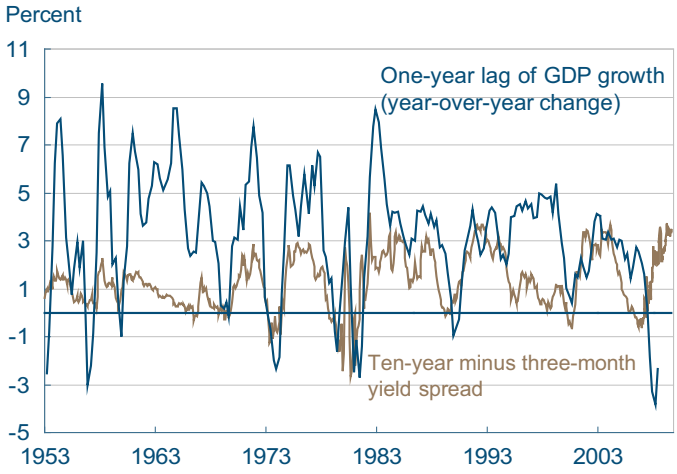
11.25.09
by Joseph G. Haubrich and Kent Cherny

Yield Curve Spread and Real GDP Growth



Note: Shaded bars indicate recessions.
Source: Bureau of Economic Analysis, Federal Reserve Board.

Yield Spread and Lagged Real GDP Growth



Source: Bureau of Economic Analysis, Federal Reserve Board.

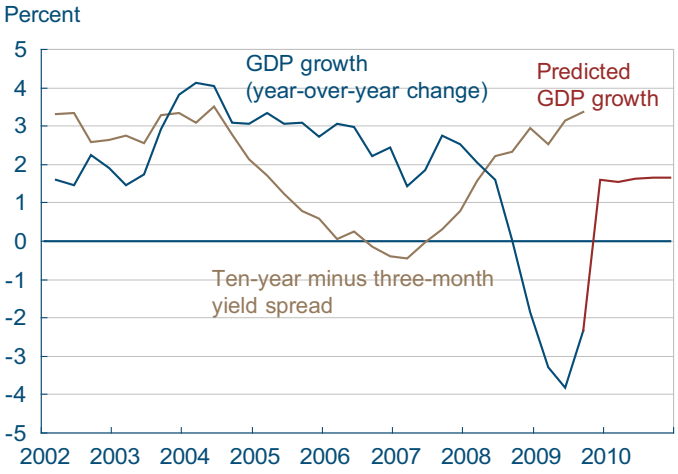
Since last month, the yield curve has shifted a bit downward and flattened slightly, with long rates dropping a bit faster than short rates. The difference between these two rates, the slope of the yield curve, has achieved some notoriety as a simple forecaster of economic growth. The rule of thumb is that an inverted yield curve (short rates above long rates) indicates a recession in about a year. 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 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.

Since last month, the three-month rate has fallen to 0.04 percent (for the week ending November 20). At that rate, $100 invested for a year would earn 4 cents. This is down from October's already very low 0.07 percent and September's 0.11 percent. The 10-year rate dropped to 3.35 percent, down a bit from October's 3.43 percent and September's 3.46 percent. The slope decreased to 331 basis points, down from October's 336 basis points and September's 335 basis points.

Projecting forward using past values of the spread and GDP growth suggests that real GDP will grow at about a 1.6 percent rate over the next year. This is down from last month's prediction of 2.3 percent, and it is a rather large change, particularly since rates hardly moved. The difference resulted from re-estimating the model using more recent real GDP numbers. Although the time horizons do

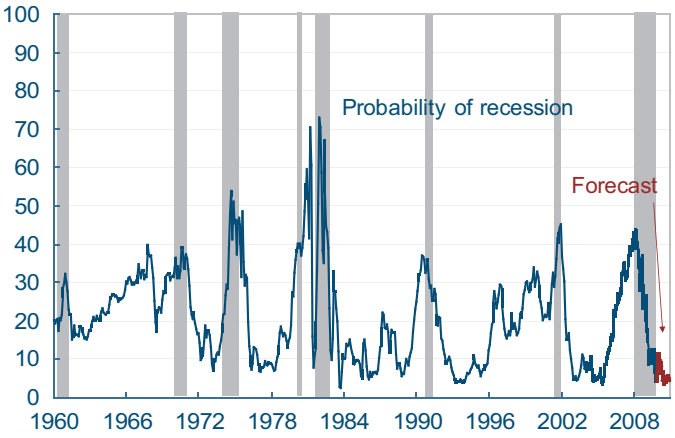
Yield Curve Predicted GDP Growth



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.

not match exactly, our estimate comes in somewhat below other forecasts.

While this 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 November stands at 4.7 percent, up a bit from October's 3.9 percent and September's 3.0 percent, but it is still, of course, very low. The low probability accords with many forecasts that suggest we have already come out of recession. Remember, too, that the forecast is for where the economy will be in a year.

Of course, it might not be advisable to take these number quite so literally, for two reasons. (Not even counting Paul Krugman's concerns.) 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 those that generated yield spreads in 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, they 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 read more on other forecasts:
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 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

Economic Projections from the November FOMC Meeting

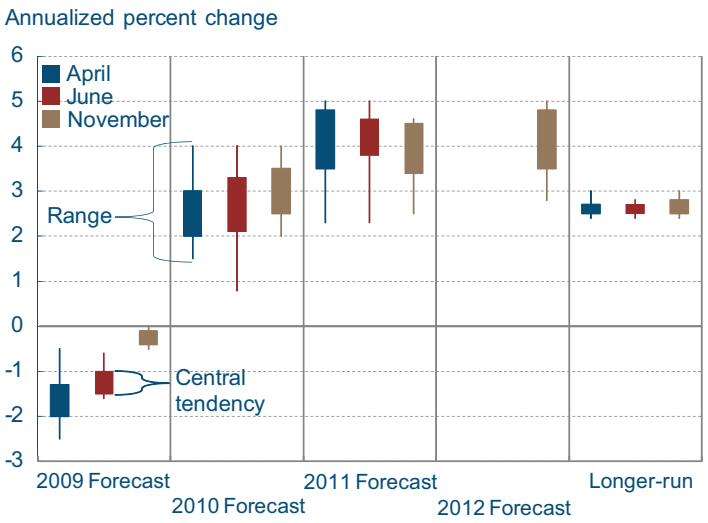
11.25.09
by Brent Meyer

The economic projections of the Federal Open Market Committee (FOMC) are released in conjunction with the minutes of the meetings four times a year (January, April, June, and November). The projections are based on the information available at the time, as well as participants' assumptions about the economic factors affecting the outlook and their view of appropriate monetary policy. Appropriate monetary policy is defined as "the future policy that, based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability."

Data available to FOMC participants on November 3-4 were indicative of a nascent recovery and, quite possibly, the end of one of the most severe postwar recessions on record. Notably, industrial production posted its third consecutive gain in September, which pushed its three-month annualized growth rate up to a strong 12.2 percent. Various housing-market indicators showed signs of a rebound (albeit from relatively low levels). Also, while overall consumer spending reflected the effects of the government's auto rebates in late July and August, "core" retail sales (excluding autos, building materials, and gasoline sales) showed somewhat surprising strength, rising at annualized rates of 6.7 percent in August and 4.8 percent in September. Indicators of employment conditions continued to point to a soft (but improving) labor market. Nonfarm payroll losses averaged roughly 225, 000 in the third quarter, compared to an average monthly loss of 428,000 in the second quarter. That said, the unemployment rate continued to climb and had reached 9.8 percent at the time of the meeting.

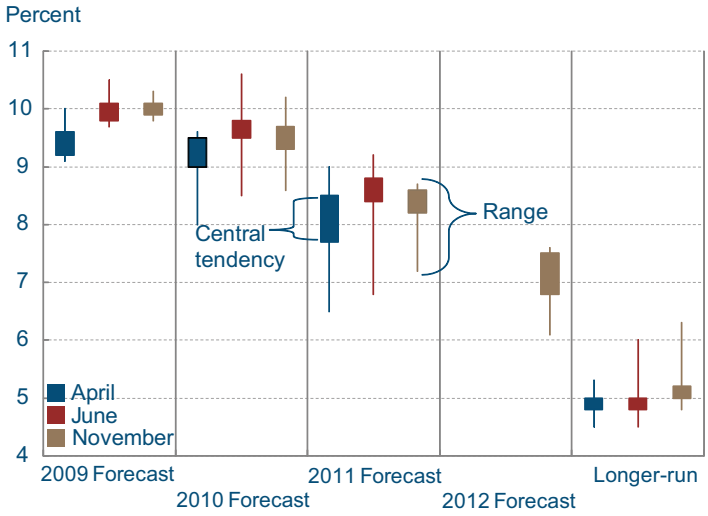
The Committee's central tendency for economic growth is now for the economy to contract on a year-over-year basis in 2009 between –0.4 percent and –0.1 percent, a dramatic improvement when

FOMC Projections: Real GDP



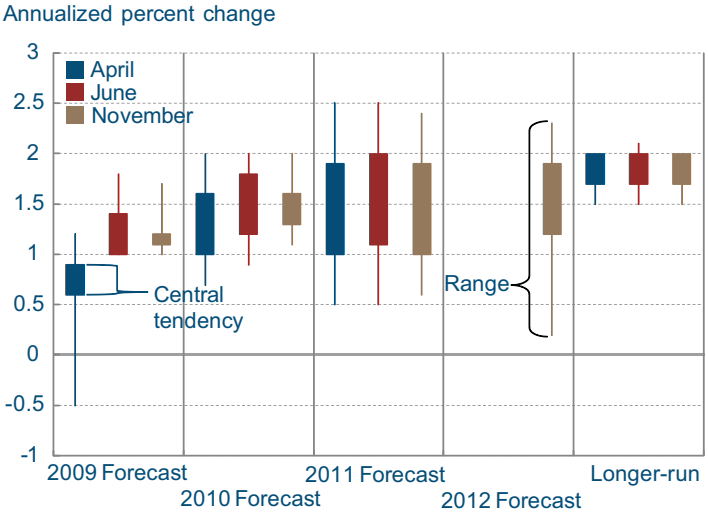
Source: Federal Reserve Board.

FOMC Projections: Unemployment Rate



Source: Federal Reserve Board.

FOMC Projections: PCE Inflation



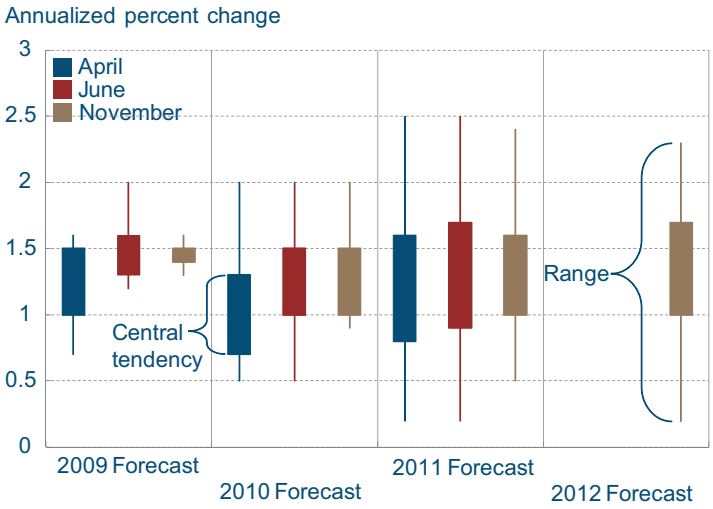
Source: Federal Reserve Board.

compared to June's central tendency of –1.5 percent to –1.0 percent. The growth outlook for 2010 and 2011 remained roughly consistent with projections from the June meeting, as the release noted that the recovery is expected to be "restrained" by a weak labor market, heightened uncertainty among businesses and households, and a "slow waning" of tight credit conditions. Growth in 2010 is expected to be between 2.5 percent and 3.5 percent, which is somewhat less robust than historical patterns would suggest, given the depths of the contraction. In 2011 and 2012 the central tendency is for output to grow above its longer-run trend, thus closing some of the gap between potential and actual GDP. Committee members noted that "over time" the economy would converge to a "sustainable path with real GDP growing at a rate of 2.5 percent to 2.8 percent."

Given the data available at the time of the meeting, FOMC participants expected the unemployment rate to average between 9.8 percent and 10.3 percent in the fourth quarter of this year, as they noted that recovery in the unemployment rate tends to lag turnarounds in output growth. Unemployment rate projections for 2010 and 2011 were revised down slightly, and the Committee's central tendency for the unemployment rate in 2012 is 6.8 percent to 7.5 percent. Perhaps the most interesting revision in the November projections from those in June is to the longer-run unemployment rate projections, which were revised up from a range of 4.5 percent—6.0 percent to 4.8 percent—6.3 percent. The release stated, "A number of participants made modest upward revisions to their estimates of the longer-run sustainable rate of unemployment in light of their assessments of the extent to which ongoing structural adjustments would be associated with somewhat higher labor market frictions."

The Committee's estimates for PCE inflation for 2009 were broadly similar to its estimates in June. Inflation data for the first half of 2009 was"somewhat lower' than expected, roughly offset by rising energy prices in the second half of 2009. With just three remaining months of data unknown at the time, most FOMC participants expect core PCE inflation in 2009 to be between 1.4 percent and 1.5 percent. Over the next few

FOMC Projections: Core PCE Inflation



Source: Federal Reserve Board.

years, the Committee expects inflation to "remain subdued," reflecting a response to "sizeable resource slack." Importantly, "Many participants stated that well-anchored inflation expectations would play an important role in avoiding further declines in inflation over the next few years." That said, it is clear that uncertainty surrounding the inflation projections remains. The November projections of headline and core PCE inflation for 2012 range between 0.2 percent and 2.3 percent, a spread of 2.1 percentage points.

In the minutes of November's FOMC meeting, many participants noted that uncertainty was higher than historical norms for all forecasted variables. The majority of respondents continued to view the risks around their projections of real GDP, inflation, and the unemployment rate as "roughly balanced." In stating the risks to the inflation outlook, Committee members noted that longer-term inflation expectations may either head lower in response to "persistent economic slack and low inflation outcomes" or "shift upwards in response to a sharper recovery, especially if extraordinary monetary policy stimulus were not unwound in a timely fashion."

Real GDP: Third-Quarter 2009 Second Estimate

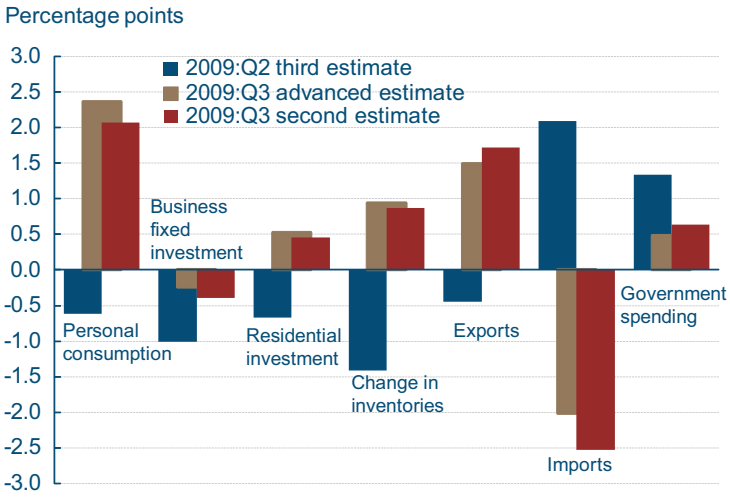
11.25.09
by John Lindner

Real GDP and Components, 2009:Q3 Second Estimate

	Quarterly change (billions of 2000$)	Annualized percent change, last: Quarter	Four quarters
Real GDP	88.8	2.5	−2.5
Personal consumption	67.0	2.9	−0.1
Durables	50.3	20.1	−1.5
Nondurables	8.4	1.7	−0.8
Services	14.9	1.0	0.4
Business fixed investment	−13.5	−4.1	−19.3
Equipment	5.0	2.3	−17.7
Structures	−16.1	−15.2	−22.1
Residential investment	15.7	19.5	−18.8
Government spending	19.6	3.1	2.0
National defense	15.0	8.9	5.2
Net exports	−27.6	—	—
Exports	56.9	17.0	−10.8
Imports	84.6	20.8	−14.1
Private inventories	−133.4	—	—

Source: Bureau of Economic Analysis.

Contribution to Percent Change in Real GDP



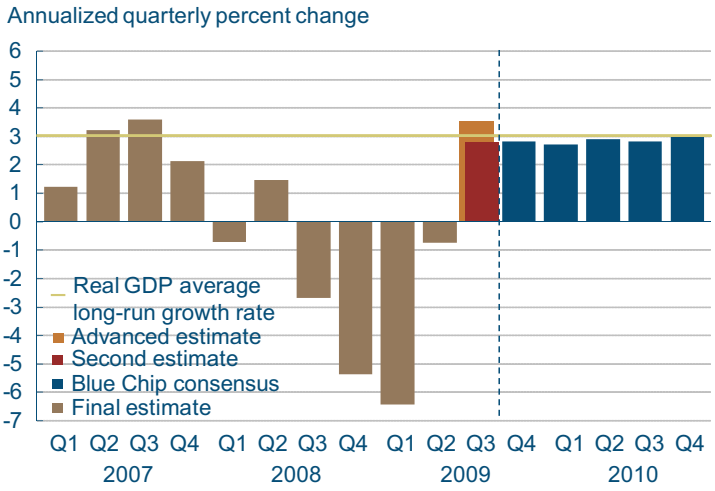
Source: Bureau of Economic Analysis.

Third-quarter GDP was revised down in the second estimate, as the annualized growth rate dropped from 3.5 to 2.7 percent, which was close to consensus expectations. The four-quarter growth rate fell 0.2 percentage point (pp), back to -2.5 percent. The downward revision was largely driven by a 4.5 pp increase in imports and by decreases in personal consumption and fixed investment. These losses were somewhat offset by a positive revision to exports, which added 2.3 pp to annualized growth. Another improvement could be seen in government spending, which went from 2.3 percent in the advance estimate to 3.1 percent in this revision. On the negative side, the second- to third-quarter movement of business fixed investment, from –9.6 percent to –2.5 percent lost some of its luster when it was revised to –4.1 percent. Personal consumption followed a similar pattern, as its apparent gains from the second to the third quarter were lowered by 0.5 pp.

Personal consumption remained the largest contributor to the growth in real GDP, adding 2.1 pp, though this was revised down slightly from the advance estimate of 2.4 pp. Other large revisions were in exports and imports. Net exports (which subtract from real growth) went from 0.5 pp to 0.8 pp. The change to the imports estimate (an extra 0.5 pp subtraction in GDP accounting) outweighed the increase in the exports estimate (a 0.2 pp addition). Residential investment, business fixed investment and changes in inventories all took an extra 0.1 pp from real growth after revisions, while government spending added an extra 0.1 pp.

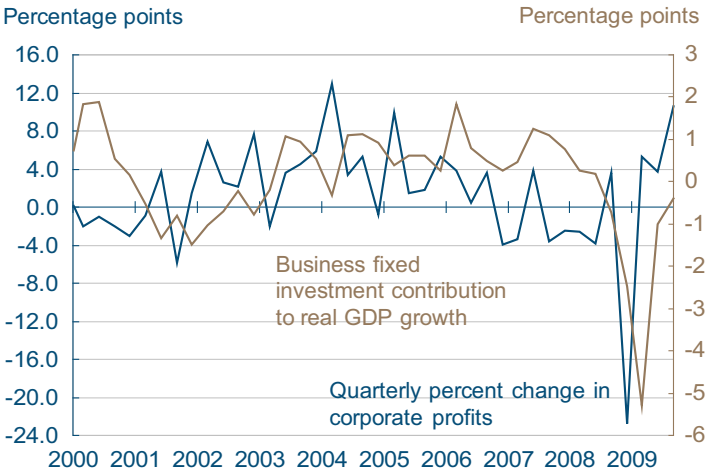
The Blue Chip consensus forecast for 2009 real GDP growth improved again, from –2.5 to –2.4 percent in the November survey, despite the expected downward revisions to the third-quarter estimate. This change can be traced to the improved consensus forecast for the fourth quarter, which jumped from 2.4 to 2.8 percent. The consensus estimate for 2010 growth ticked up again as well, this

Real GDP Growth



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

Corporate Profits and Business Fixed Investment



Source: Bureau of Economic Analysis.

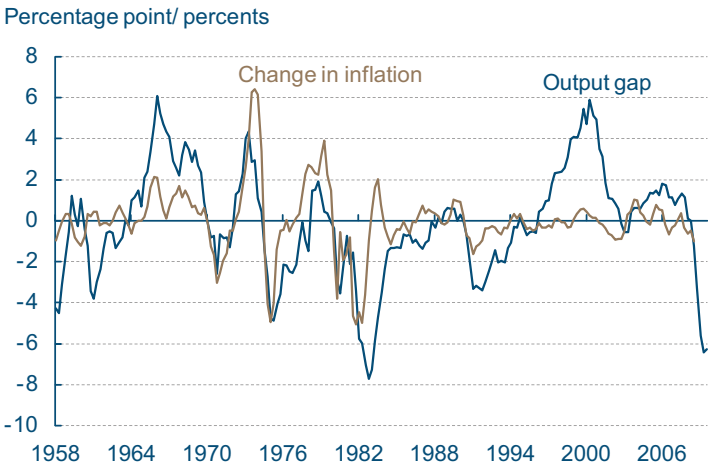
month by 0.2 pp, to 2.7 percent, its sixth upward revision in seven months, though that estimate still remains below real GDP's long-run trend. Looking ahead, even pessimists are predicting GDP growth of over 1.5 percent for the rest of this year and into 2010.

Released alongside the GDP revision was the preliminary estimate of third-quarter profits. In total, profits rose for the third straight quarter, gaining 10.6 percent in the third quarter. Over 90 percent of the increase has been attributed to profits from financial corporations. There were also gains in nonfinancial firms for a second straight quarter, but they were small. Nonetheless, such an increase in profits is typically accompanied by a lagged increase in investment. Fiscal and monetary stimulus has boosted demand, while the weakening dollar has made exports more appealing. Expectations for the future are likely to include a return to positive growth of fixed investment, which will add to real GDP growth, though such an outcome could be hampered by the uncertainty of the current recovery. Profits may be conserved until investments appear less risky and the economy returns closer to full employment.

Measures of Economic Slack, Cost Pressure, and Inflation

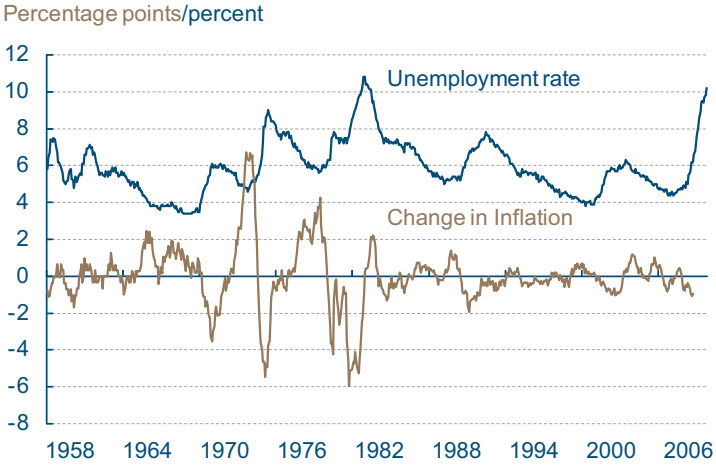
12.01.09
by Filippo Occhino and Kyle Fee

Output Gap and the Change in Inflation



Notes: The output gap is computed as the percentage difference between GDP and the estimate of potential GDP that is calculated by the Congressional Budget Office. The change in inflation is the change in the core CPI inflation over the following year.
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics and Congressional Budget Office.

Unemployment Rate and the Change in Inflation



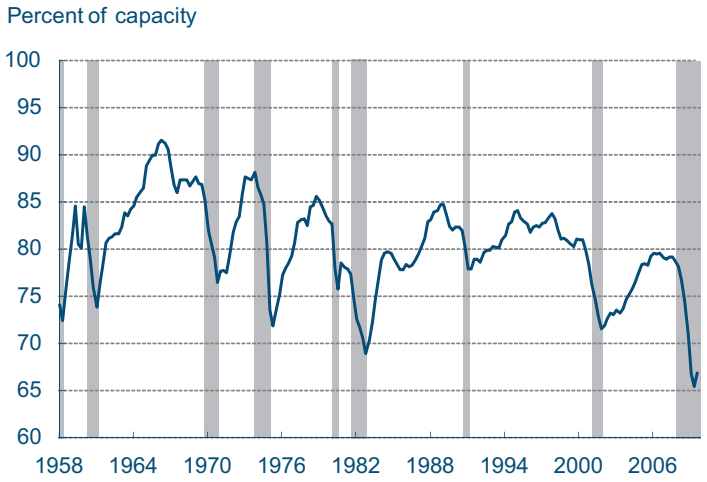
Sources: Bureau of Labor Statistics, Congressional Budget Office.

In its November 2009 statement, the Federal Open Market Committee appears to consider the level of resource utilization in the economy an important determinant of future inflation: "With substantial resource slack likely to continue to dampen cost pressures and with longer-term inflation expectations stable, the Committee expects that inflation will remain subdued for some time." A look at the historical relationship between inflation and two commonly used indicators of economic slack, the output gap and the unemployment rate, makes a good case for the view that slack and inflation are related. Current levels of those and other indicators of resource utilization all suggest a good degree of slack in the economy and contained cost pressures.

The hypothesis that the output gap (the percentage difference between GDP and its potential) is positively related to the change in the core CPI inflation rate over the following year is one of the many versions of the Phillips curve. The idea behind it is that whenever output is above its potential, the rate at which the factors of production, namely capital and labor, is utilized is higher than normal. This puts upward pressure on the cost of capital and labor, and ultimately leads to an increase in the prices of final products and in inflation. Conversely, whenever output is below potential, the low rate of capital and labor utilization puts downward pressure on wages, costs, and prices.

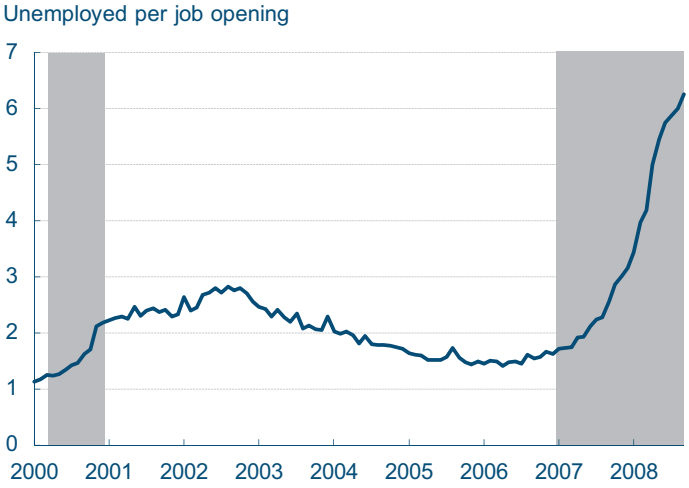
A clear positive relationship between the output gap and the change in inflation can be found in the data. The correlation between the two series is 0.47. The current very low level of the output gap, then, seems to point to an eventual decrease in the inflation rate. However, there are several periods in which the two series appear little correlated, so the relationship may not be that reliable. Other factors, including long-term inflation expectations, monetary and fiscal policy, and the price of imported goods, play important roles in determining inflation. Also, the correlation between the two series

Capacity Utilization: Manufacturing



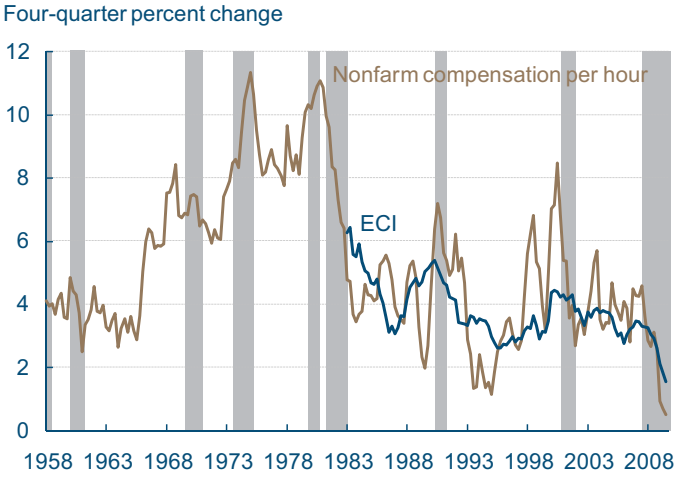
Note: Shaded bars indicate recessions.
Source: Federal Reserve Board.

Slack in the Labor Market



Note: Shaded bars indicate recessions.
Sources: Bureau of Labor Statistics and JOLTS.

ECI and Compensation Per Hour



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

is smaller after 1982, so the relationship may have weakened in recent decades. Finally, one should take into account that a very large degree of uncertainty surrounds the current estimates of potential GDP and the output gap.

Another simple and standard version of the Phillips curve states that the unemployment rate is negatively related to the change in core CPI inflation over the following year. The argument behind this hypothesis is similar to the previous one, except that it focuses on the rate of labor utilization, rather than the rate of utilization of all factors of production. An unemployment rate above its natural rate, which we here take as constant over time, puts downward pressure on wages, and leads in turn to lower final product prices.

The data also confirm a negative relationship between the unemployment rate and the change in inflation. The correlation between the two series is –0.37. The currently very high level of unemployment, above 10 percent, may then lead us to anticipate a subdued inflation rate, at least over the short run. As with the output gap and inflation, however, the relationship does not hold during several periods and has somehow weakened during the last decades.

This evidence seems consistent then with the view that the level of resource utilization in the economy contains information about the future short-run dynamics of inflation. Other indicators of resource utilization and cost pressures are likewise correlated to subsequent changes in inflation. Their recent trends also point to low inflation pressures in the near term.

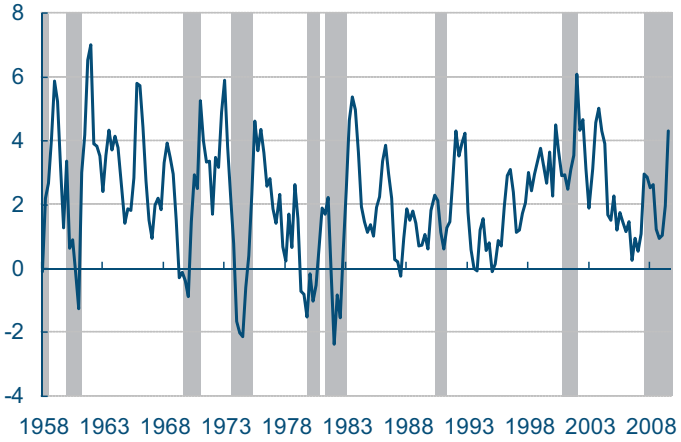
Manufacturing capacity utilization is at a historically low level, 67 percent, indicating a very large level of spare capacity in the economy.

The ratio of unemployed workers to job openings points to the presence of substantial slack in the labor market. The very large current ratio indicates weak labor demand and abundant labor supply, with consequent downward pressure on wages.

The absence of upward pressure on wages is confirmed by the historically low growth rates of the

Productivity

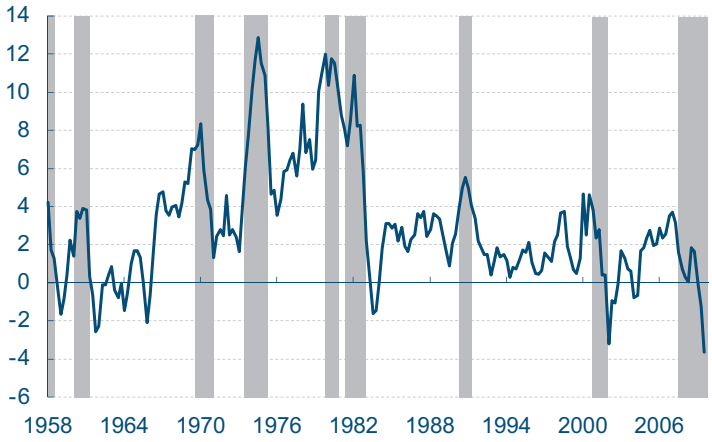
Four-quarter percent change



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

Unit Labor Costs

Four-quarter percent change



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

employment cost index (ECI) and compensation per hour.

The prices of final products are affected not only by wages but also by labor productivity. (Higher productivity implies lower production costs for final goods and lower prices.) Productivity growth has remained high during the past recession.

The combination of contained labor compensation and strong productivity explains the current negative growth rate of unit labor costs (the labor cost of producing one unit of output), which is exerting a strong downward pressure on prices.

Several measures consistently show that the current level of economic slack is elevated. Given the historical relationship between measures of resource utilization and the subsequent change in inflation, this slack suggests that inflation will remain subdued in the near term.

The Employment Situation, October 2009

12.08.09
by Beth Mowry

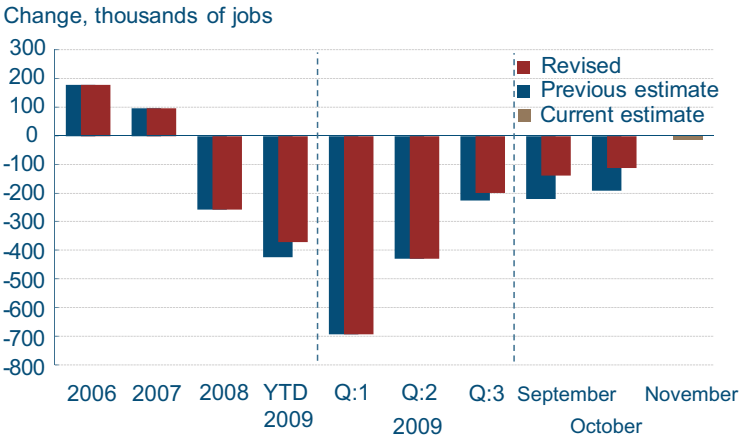
Nonfarm payrolls beat expectations in November, falling just 11,000, the smallest loss in nearly two years. Strong upward revisions trimmed September and October's losses by a total of 159,000 jobs, leaving their respective declines at 139,000 and 111,000. November's improvement was shared by most major sectors, in the form of fewer losses or larger gains over the month. For the most part, net job losses have slowed since January, with declines averaging 691,000 in the first quarter and 428,000 in the second quarter, compared to just 87,000 in the past three months.

The unemployment rate unexpectedly ticked down 0.2 percentage point to 10.0 percent, the largest of four lone rate declines this recession. However, the rate remains elevated beyond levels observed in all but one other post-World War II recession. The number of unemployed persons fell by 325,000, while the number employed rose by 227,000, resulting in a contraction to the labor force of 98,000. The employment-to-population ratio was unchanged at 58.5 percent, matching its lowest point since 1983.

Improvement in payrolls spanned goods-producing and service-providing industries alike, with goods industries shedding 69,000 jobs in November compared to 113,000 in October, and service industries stepping more firmly into the black, adding 58,000 jobs compared to just 2,000 in October. Within goods, 41,000 jobs were shed in manufacturing, and construction employment fell by only 27,000, its smallest monthly decline since August 2008.

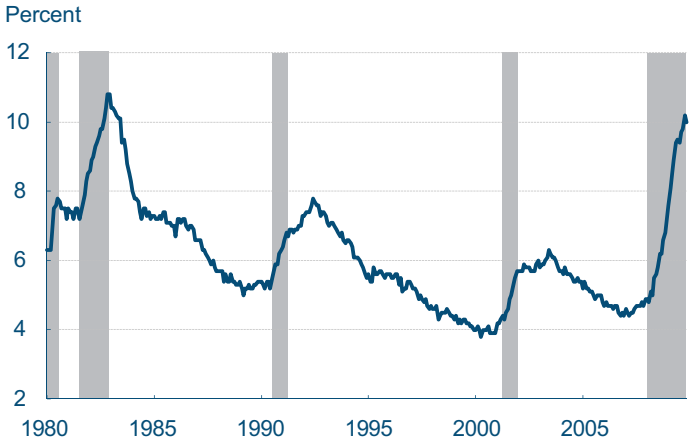
Within services, the largest improvements last month came from professional and business services, which added 86,000 jobs versus 38,000 in October, and from trade, transportation, and utilities, where losses were halved to 34,000. Retail trade, specifically, accounted for progress in the latter industry, as its losses diminished from 44,000 to 14,500 in November. Temporary help services

Average Nonfarm Employment Change



Source: Bureau of Labor Statistics.

Unemployment Rate



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

added 52,400 jobs in the largest of four successive gains. Employment decline in information picked up to 17,000, while leisure and hospitality showed smaller declines of 11,000. Losses in financial activities have been solid since July 2007, but November marks the industry's smallest drop (10,000) in over a year. Education and health services, meanwhile, have added jobs every month in the current recession, tacking on another 40,000 in the past month. The government added a meager 7,000 to its payrolls after a 46,000 gain in October.

Labor Market Conditions and Revisions

	Average monthly change (thousands of employees, NAICS)				
	September current	Revision to September	October current	Revision to October	November current
Payroll employment	−139	80	−111	79	−11
Goods-producing	−95	19	−113	16	−69
Construction	−53	15	−56	6	−27
Heavy and civil engineering	−8.0	4	−13	1	5
Residential[a]	−6.1	7	−9	6	−3
Nonresidential[b]	−38.3	4	−34	−1	−29
Manufacturing	−41	4	−51	10	−41
Durable goods	−35	4	−37	7	−33
Nondurable goods	−6	0	−14	3	−8
Service-providing	−44	61	2	63	58
Retail trade	−40	5	−44	−4	−15
Financial activities[c]	−11	−2	−10	−2	−10
PBS[d]	24	21	38	20	86
Temporary help services	17	10	44	10	52
Education and health services	36	19	40	−5	40
Leisure and hospitality	13	15	−36	1	−11
Government	−39	1	46	46	7
Local educational services	−19	−5	33	28	12

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 8.1 points, from 32.5 to 40.6, a sizeable step toward balance between industries increasing and decreasing employment. The index has climbed far from its record low of 19.6 in March but remains far below the expansionary threshold of 50.

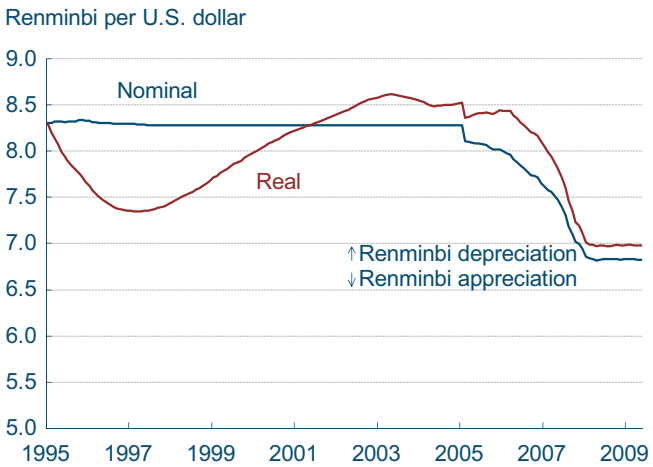
Renminbi-Dollar Peg Once Again

11.25.09
by Owen F. Humpage and Caroline Herrell

China gains a competitive advantage not from its peg with the dollar, but from its ability to offset the impact of foreign financial inflows on its price level. Appreciating this distinction is crucial for understanding Chinese exchange-rate policies.

China is once again tightly managing the renminbi-dollar exchange rate. Between mid-1995 and July 2005, the People's Bank of China pegged the renminbi at approximately 8.3 per U.S. dollar. In July 2005, following years of complaints about China's exchange-rate policy, the People's Bank loosened its grip and allowed the renminbi to appreciate 18 percent against the dollar over the next three years. With the emergence of the global economic crisis, however, China has once again tightened up on its renminbi reins. Since July 2008, the People's Bank has effectively pegged the renminbi to the dollar, constricting movements even more since the beginning of this year.

Renminbi-Dollar Exchange Rate

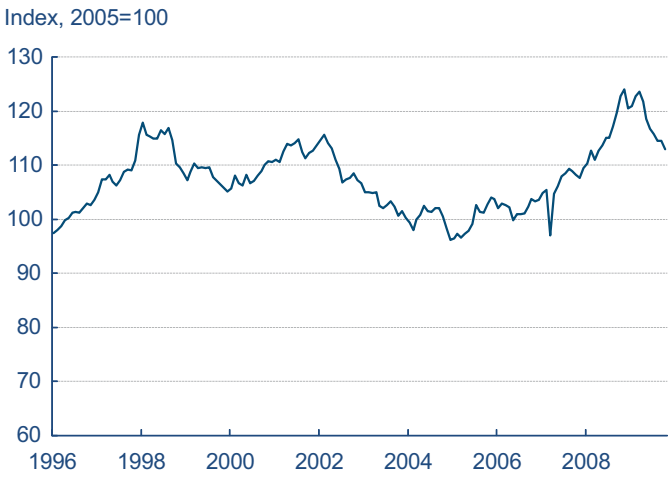


Source: International Monetary Fund, *International Financial Statistics*.

Pegs with the dollar, in and of themselves, do not confer trade advantages on China. China's trade competitiveness also depends on price trends in China as compared with the rest of the world. Real exchange rates, which incorporate Chinese and foreign inflation patterns along with conventional exchange rates, offer clearer pictures of China's competitive position. During much of the 1990s, for example, the renminbi appreciated against the dollar in real terms, clipping China's competitive position relative to the United States even though the country maintained a peg.

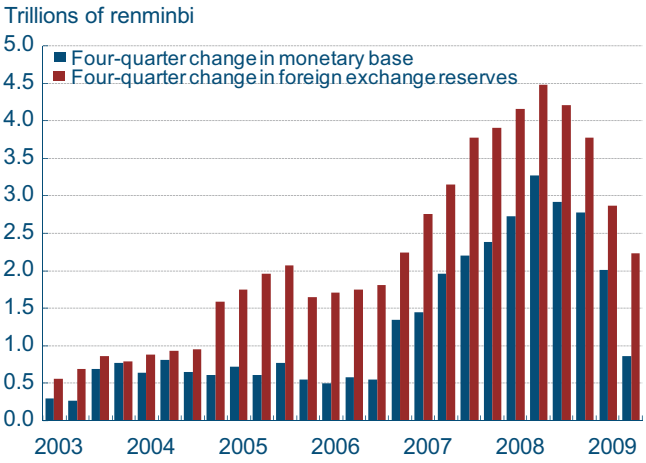
Recently, however, with inflation in China closely paralleling inflation in the United States, China's real renminbi-dollar rate has not changed much. So China is not gaining a competitive advantage relative to the United States. The dollar, however, is depreciating on a broad basis, and the renminbi is going along for the ride. On a real trade-weighted basis, China's renminbi depreciated 9 percent be-

Real Effective Exchange Rate of the Renminbi



Source: International Monetary Fund, *International Financial Statistics*.

Sterilization of Reserve Flows



Source: International Monetary Fund, *International Financial Statistics*.

tween March and October, implying a competitive gain against other countries, notably China's Asian competitors.

The real trick to China's competitive gains is its ability to offset inflows of foreign exchange. China maintains a substantial current-account surplus, the counterpart of which is a large financial inflow and an official accumulation of foreign-exchange reserves. All else constant, this reserve accumulation should expand the monetary base in China, raise the inflation rate, cause the renminbi to appreciate on a real basis, and negate any trade advantage China acquires from its peg. Yet this has not happened.

Since 2003, the People's Bank of China has offset—sterilized, in econspeak—the expansionary effects of its official reserve accumulation on its monetary base by selling renminbi bonds to the banking system. The bond sales drain away part of the renminbi created when foreign exchange flows into the official coffers. Over the past seven years, the People's Bank has offset nearly one-half of the effect of these flows on the Chinese monetary base. Over the four quarters ending in the second quarter of this year, the People's Bank offset roughly 60 percent of the foreign-exchange inflow. This offset limits the inflation in China that otherwise would result, and it is tantamount to limiting the renminbi's real appreciation.

Ohio's Economic Momentum

12.04.09
by Kyle Fee

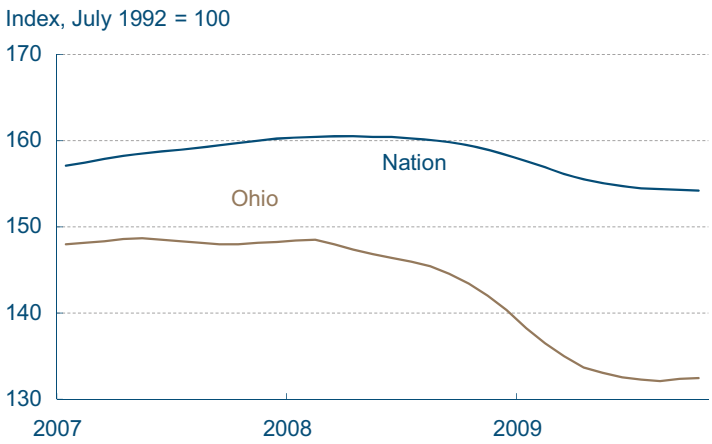
In recent remarks, Federal Reserve Bank Chairman Ben Bernanke has stated that "from a technical perspective, the recession is very likely over at this point." The data that lead him to that conclusion are unfortunately not produced at the state level, so it's not possible to tell what they would show about the degree of recovery in individual states. But another source can give us an idea, the Federal Reserve Bank of Philadelphia's state coincident indexes, which measure real-time changes in state economic activity.

While the NBER has yet to officially pinpoint the trough, a growing consensus among economists puts the "technical" end of the recession at some time during the summer of 2009. As we pointed out in an earlier article on Ohio's Business Cycle, Ohio typically enters recessions earlier than the nation and stays in them longer. In particular, data from 1979 to the present show that "On average, Ohio's economic activity slowed 5.5 months prior to the typical national recession and recovered 1.3 months later." Even though this has not been your "average" recession, Ohio may already be recovering.

The Philadelphia Fed's state indexes show that economic activity in Ohio was stagnant though much of 2007 and into the early part of 2008. It began to fall off sharply in late 2008, decreasing 10.9 percent from its peak in May 2007. But in recent months, declines have been gradually slowing, and in September and October, economic activity began to post small increases.

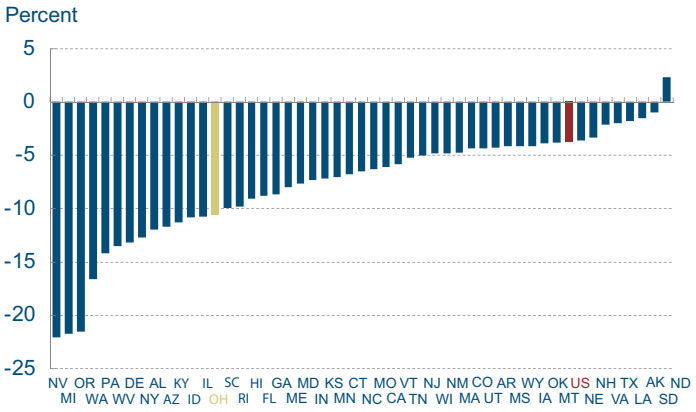
Across the 50 states, economic activity has varied markedly over this recession, ranging from –22.1 percent (Nevada) to +2.3 percent (North Dakota). The Fourth District states of Pennsylvania, West Virginia, Kentucky, and Ohio all have fared worse than the nation. Each saw larger declines than the nation's –3.7 percent: Pennsylvania, –14.2 percent, West Virginia, –13.5 percent, Kentucky,

Economic Activity Index: January 2007–October 2009



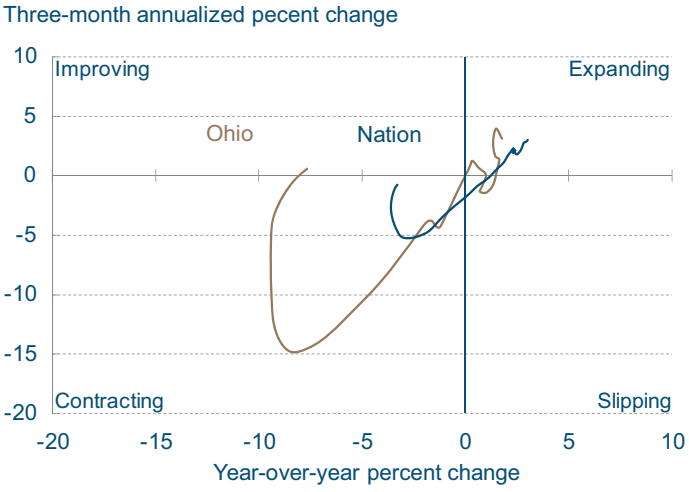
Source: Philadelphia Federal Reserve Bank.

Economic Activity Growth Since December 2007



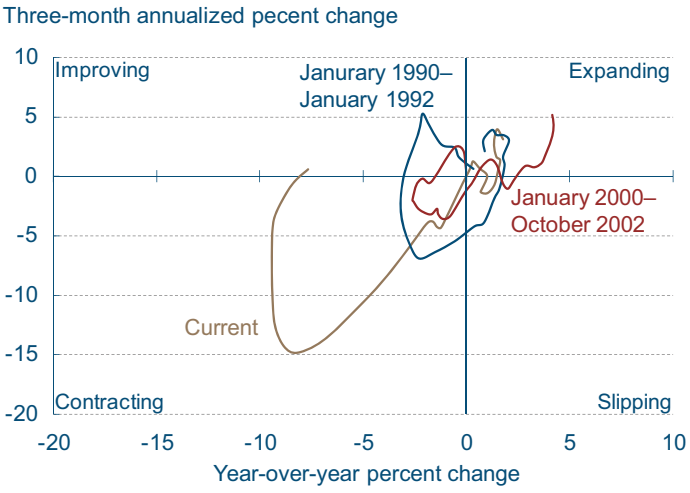
Source: Philadelphia Federal Reserve Bank.

Economic Activity Index Momentum: January 2007–October 2009



Source: Philadelphia Federal Reserve Bank.

Ohio's Economic Activity Index Momentum Cycles



Source: Philadelphia Federal Reserve Bank

–11.3 percent. Surprisingly, Nevada and Arizona are the only "housing bust" states to see declines in economic activity in excess of 10 percent, while declines in the manufacturing-intensive states of Michigan, Oregon, and Washington have exceeded –15 percent.

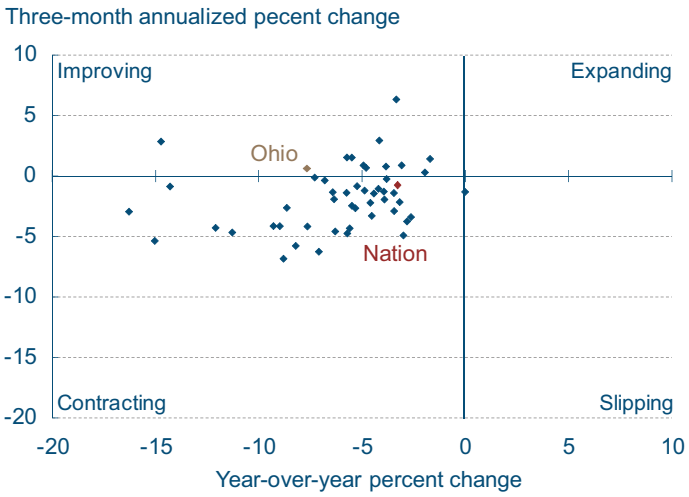
For a simple visual interpretation of the data, coincident indexes can be translated into "momentum tracks." A momentum-tracks chart is a scatter plot of the year-over-year percent change in the index (X axis) and the three-month annualized percent change (Y axis), with sequential data points connected by a line. The chart is divided into four quadrants, each representing a stage of the business cycle: The upper right quadrant, where both measures are positive, represents "expanding" activity. The lower right represents "slipping" activity, as the year-over-year percent change is positive, but the three-month change is negative. The lower left shows "contracting" activity since both measures are negative, and the upper left shows "improving" activity since the year-over-year percent change is negative, but the three-month measure is positive.

After having spent the past 19 months in the "contracting" quadrant, Ohio's economic-activity momentum changed to "improving" in October. Ohio's momentum looked dire for a brief period, but that started to change in March 2009. At that point, it made a distinct turn toward "improving," signaling that the worst of this recession had passed and that better times lay ahead.

Momentum tracks from previous business cycles show a similar yet less pronounced pattern. Economic activity takes a sharp fall into the lower two quadrants and is then followed by a distinct turn toward "improving." Once in the "improving" quadrant, it takes an average of six months for economic activity to move into "expanding" territory again. However, given the severity of this downturn, it is unlikely that economic activity will return to "expanding" within six months.

Research conducted by the Philadelphia Federal Reserve Bank finds that states experience downturns at different times and to varying degrees. Comparing the October 2009 momentum data points across states also confirms this observation. Ohio is

Economic Activity Index Momentum: October 2009



Source: Philadelphia Federal Reserve Bank.

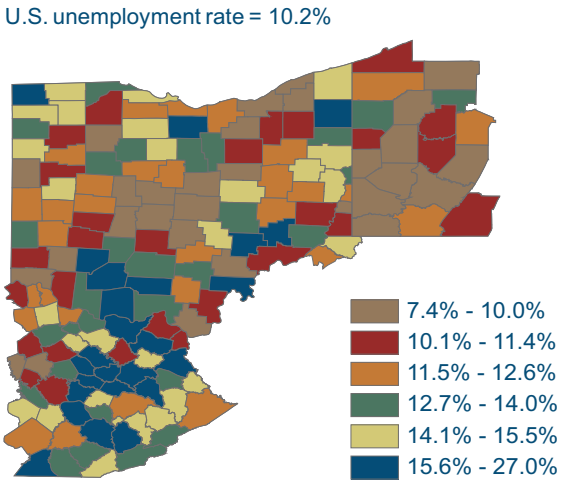
one of 12 states in the "improving" quadrant. The rest of the states and the nation are still "contracting," although most have made the noticeable turn toward "improving."

After having experienced what was arguably its worst downturn in the postwar period, Ohio appears to be on the road to recovery—and it appears to be ahead of many other states. Given the economic troubles (population loss, low educational attainment, dwindling manufacturing employment, and so on) that have plagued the state over the past decade, this is perhaps unexpected good news.

Fourth District Employment Conditions

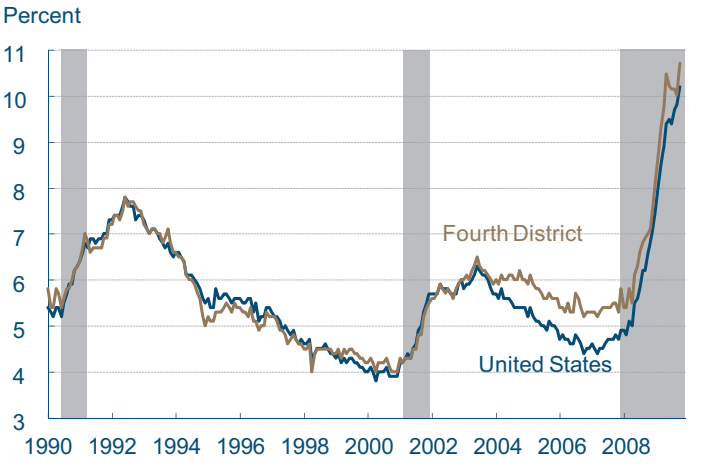
12.07.09
by Kyle Fee

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.

Unemployment Rate



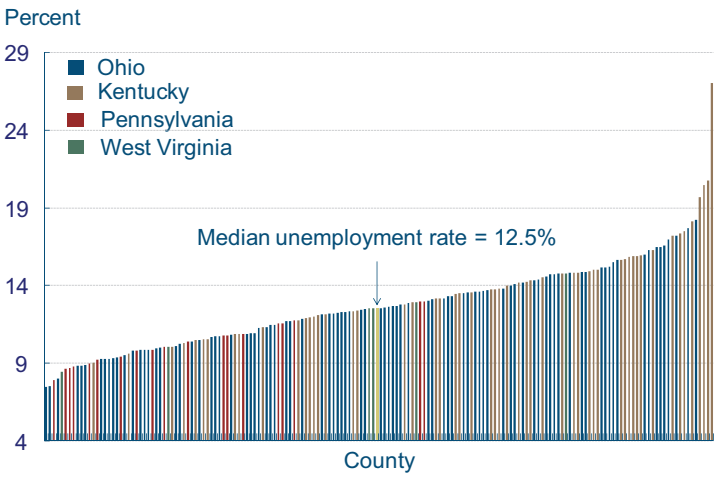
Notes: Shaded bars indicate recessions. Seasonally adjusted using the Census Bureau's X-11 procedure. Some data reflect revised inputs, reestimation, and new statewide controls. For more information, see http://www.bls.gov/lau/launews1.htm.
Sources: U.S. Department of Labor, Bureau of Labor Statistics.

The District's unemployment rate jumped 0.7 percentage point to 10.7 percent for the month of October. The decrease in the unemployment rate is attributed to monthly increases in the number of people unemployed (6.6 percent) and the labor force (0.1 percent), while the number of people employed decreased 0.4 percent for the month. Compared to the nation's unemployment rate in October, the District's was higher (0.5 percentage point), as it has been consistently 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. From this time last year, the Fourth District and the national unemployment rates have increased 3.7 percentage points and 3.6 percentage points, respectively.

There are significant differences in unemployment rates across counties in the Fourth District. Of the 169 counties that make up the District, 34 had an unemployment rate below the national rate in September, and 135 counties had a rate higher than the national rate. There were 139 District counties reporting double-digit unemployment rates in October, indicating that 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 and the Cleveland-Columbus-Cincinnati corridor.

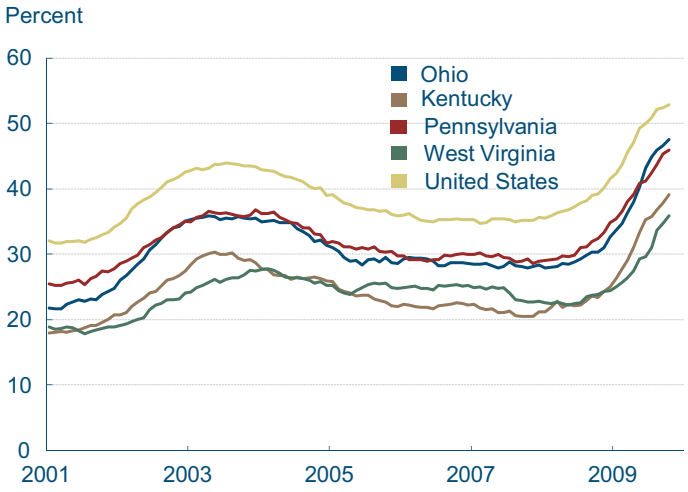
The distribution of unemployment rates among Fourth District counties ranges from 7.5 percent (Delaware County, Ohio) to 27.0 percent (Magoffin County, Kentucky), with the median county unemployment rate at 12.5 percent. Counties in Fourth District Pennsylvania generally populate the lower half of the distribution, while the few

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.

Unemployment Insurance Exhaustion Rate



Source:U.S. Department of Labor, Haver Analytics.

Fourth District counties in West Virginia, which continue to experience increases in unemployment rates, fall mostly into the lower half. Fourth District Kentucky continues to dominate the upper half of the distribution, with Ohio counties becoming more dispersed throughout the distribution. These county-level patterns are reflected in statewide unemployment rates, as Kentucky and Ohio have unemployment rates of 10.9 percent and 10.1 percent, respectively, compared to Pennsylvania's 8.8 percent and West Virginia's 8.9 percent.

Supply and Demand Shocks in Residential Mortgages

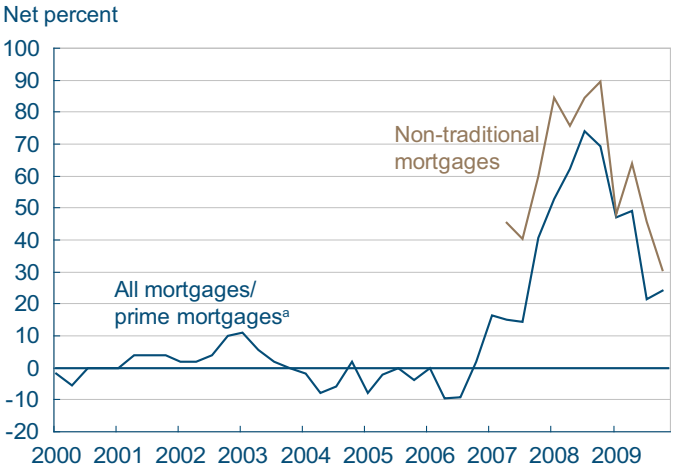
12.08.09
by Jian Cai and Kent Cherny

The current financial crisis was triggered by severe deteriorations in the U.S. real estate market and sharp increases in mortgage delinquencies and foreclosures, especially among adjustable-rate mortgages issued to subprime borrowers. Having witnessed the unprecedentedly adverse consequences of the crisis, lenders reversed the practice of making highly risky mortgage loans and now require that credit standards be followed more strictly. This shift has led to a contraction in supply of residential mortgages. In the meantime, the decline in housing prices also discouraged quality buyers from entering the market, causing a shrinkage of demand. Now that the economy may be stepping out of the recession, the residential mortgage market may also begin to recover.

The net percentage of banks reporting tightened credit standards on prime and nontraditional residential mortgages decreased by half during the past six months, according to the Senior Loan Officer Opinion Survey on Bank Lending Practices that is conducted by the Board of Governors of the Federal Reserve System on a quarterly basis. In fact, this net percentage reached its peak of 74 percent on prime mortgages in July 2008 and dropped to 24 percent in October 2009. The net percentage of banks reporting tighter credit standards on nontraditional mortgages stayed above 75 percent throughout 2008 and is now down to 30 percent.

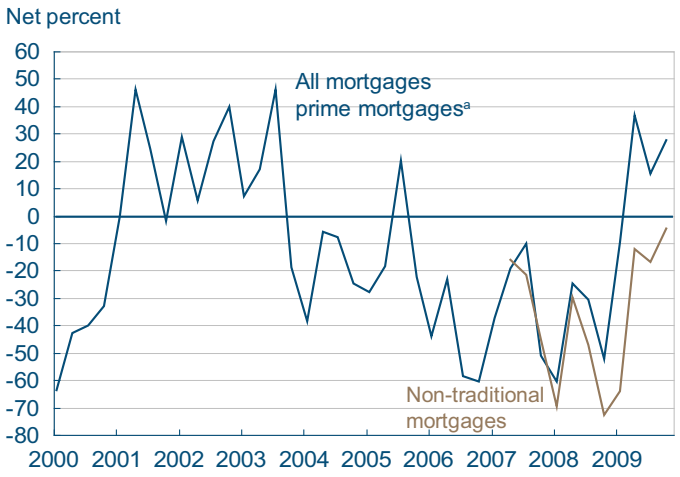
Note that the "tightening" reported in recent quarters was based on previously elevated levels of credit standards. Thus, a smaller yet positive net percentage of banks reporting tightened credit standards means that on a net basis, incremental tightening is still occurring, but the pervasiveness of this incremental tightening has generally shown a decreasing-to-flattening trend. That is, fewer banks continue to tighten. Interestingly but not surprisingly, no more than three banks responding to the survey reported that they had originated any subprime residential mortgages in the two most recent quarters. The

Banks Reporting Tighter Credit Standards



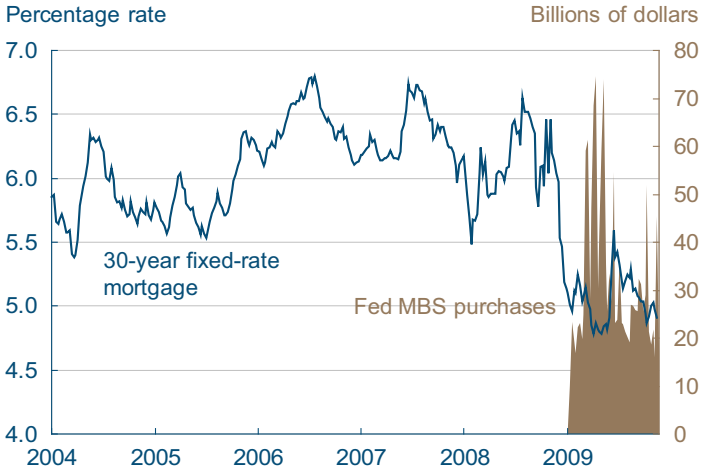
a. Data are for prime loans beginning 2007:Q2.
Source: Federal Reserve Board.

Banks Reporting Stronger Demand



Note: Data are for prime loans beginning 2007:Q2.
Source: Federal Reserve Board.

Mortgage Interest Rates



Source: Federal Reserve Board.

implications of these results are twofold. On one hand, fewer banks are reducing the availability of mortgages. But on the other hand, banks are offering financing cautiously and selectively–mortgages are likely to be going to borrowers with solid credit history and strong repayment capabilities.

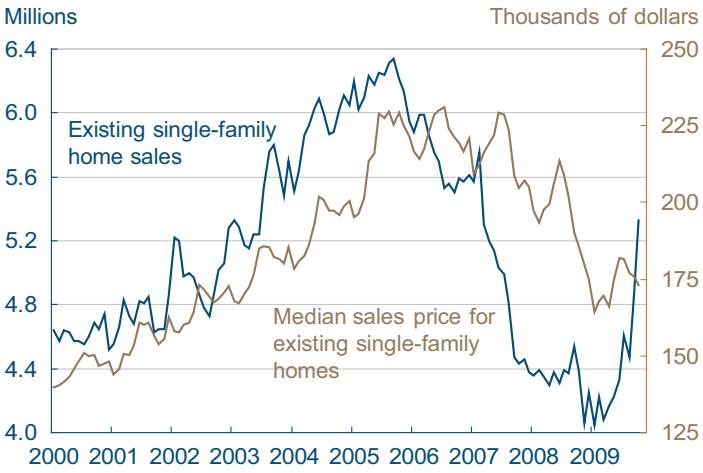
Demand for residential mortgages has also gotten stronger, according to the survey. At the beginning of 2009, the net percentage of banks seeing stronger demand for prime mortgages was –10 percent, that is, there were 10 percent more banks seeing weaker demand than banks seeing stronger demand. This percentage reached 37 percent in April and stayed positive at 16 percent in July and 28 percent in October. For nontraditional mortgages, the net percentage of banks reporting stronger demand was negative throughout 2009, but it increased dramatically from –64 percent in January to –12 percent in April and further increased to –4 percent in October.

An interesting thing to note here is that when the housing market was at its peak from the middle of 2003 to 2006, commercial banks reported sharply declining demand for residential mortgages. A probable cause for that could be that more mortgages were obtained from nonbank lenders at the time, and thus, demand for borrowing from banks decreased even while the market was booming.

Three developments are stimulating the housing market's recovery. First, the federal funds rate has been reduced to a historical low (from 5.25 percent in September 2007, to 2 percent in April 2008, then to a 0–0.25 percent range in December 2008). Second, the Fed created a program to purchase agency mortgage-backed securities and started making purchases at the beginning of 2009. It has now purchased nearly all of the $1.25 trillion limit. These two developments have helped reduce and stabilize mortgage interest rates. For the greater part of 2009, the interest rate on a 30-year fixed rate mortgage stayed between 4.75 percent and 5.25 percent.

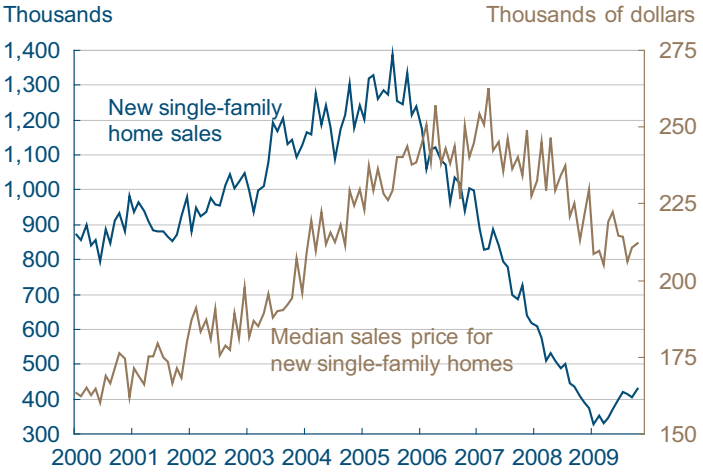
The third development stimulating recovery is the home buyer tax credit created by the Worker, Homeownership, and Business Assistance Act of 2009. Qualified first-time home buyers are eligible for

Existing Home Sales and Prices



Sources: Federal Reserve Board, National Association of Realtors.

New Home Sales and Prices



Sources: Federal Reserve Board, National Association of Realtors.

a tax credit of up to $8,000, and qualified repeat home buyers are eligible for up to $6,500. Applying to sales made between January 2009 and April 2010, the tax credit is in fact an effective reduction in house sales prices and motivates potential home buyers to enter the market.

After persistent decreases since 2006, existing single-family home sales jumped significantly in 2009–from 4 million units in January to 5.3 million units in October. There were two small dips in March and August, but sales picked up again in the next month. This steady growth is more proof of stronger demand for residential mortgage loans.

Existing home sales prices, however, tell quite the opposite story. The highest median sales price for existing single-family homes was around $230,000 during the summers of 2005, 2006, and 2007. Apart from seasonal variations in home sales prices, the median has been declining since 2007 and was $173,100 in October 2009.

New home sales show a trend similar to existing home sales (yet with a slower pace to pick up sales volume). The question is then: If the sales growth is an outcome of the economic stimulus program, does the downward trend observed in home sales prices indicate a price correction in the once overheated housing market or still insufficient demand due to a period of oversupply? If the latter, when will the housing market eventually reach its long-run equilibrium, which associates housing supply with fundamental demand? The answer awaits further evidence.

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