Economic Trends

December 2011 (November 11, 2011-December 6, 2011)

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FEDERAL RESERVE BANK
of CLEVELAND

Mortgage Market Struggles to Gain Footing

11.29.11
by Yuliya Demyanyk and Matthew Koepke

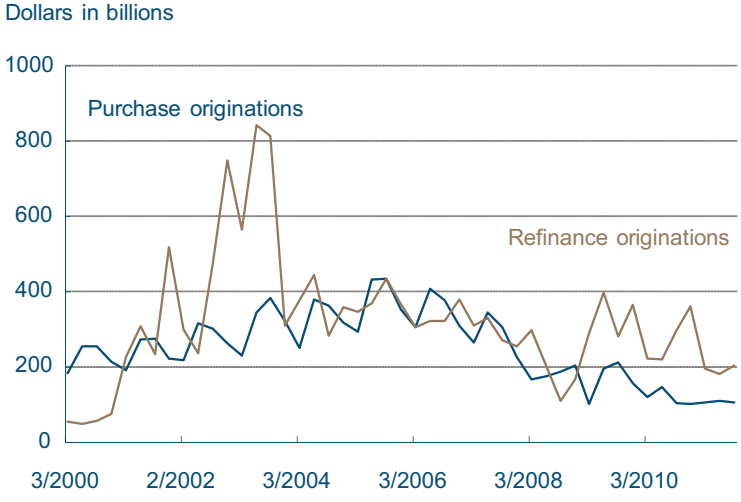
After a difficult first and second quarter, the U.S. mortgage market is projected to improve in the third quarter of 2011. According to the Mortgage Bankers Association's October forecast, home mortgage production is projected to improve 6.6 percent in the third quarter. According to the forecast, refinance originations are expected to increase 13.3 percent to $204 billion, while purchase originations are projected to fall 4.5 percent to $105 billion. The two-to-one ratio of refinance originations to new purchase originations suggests that mortgage demand continues to be driven by the favorable interest rate environment and not consumers seeking to purchase a new home.

While the improvement in the third quarter's projected performance is welcomed, it suggests that there is considerable weakness in the U.S. mortgage market. According to the Mortgage Bankers Association, the quarterly average for total mortgage production in 2011 is $300 billion per quarter, well below the quarterly averages of 2009 and 2010, where total mortgage production stood at $499 billion and $393 billion, respectively.

The dramatic reduction in total mortgage originations suggests that low interest rates are having a diminished impact on driving refinance originations and increased demand for mortgages will have to come from increased demand for housing. However, significant headwinds exist that may prevent the demand for housing to improve in the immediate future.

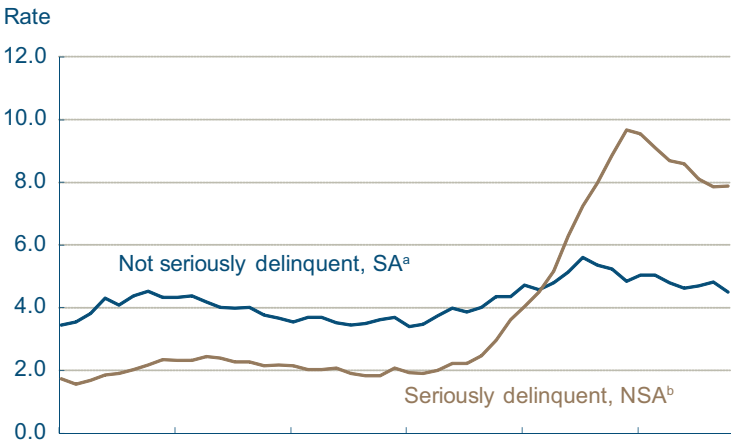
One significant headwind facing the housing market recovery is the persistently high levels of seriously delinquent mortgages. While nonseriously delinquent mortgages (30-89 days) have shown signs of improvement recently, falling 34 basis points over the last quarter to 4.49 percent of all mortgages, seriously delinquent mortgages remain stubbornly high. Even though seriously delinquent mortgages—defined as mortgages that are 90 days

1-4 Unit Residential Mortgage Originations



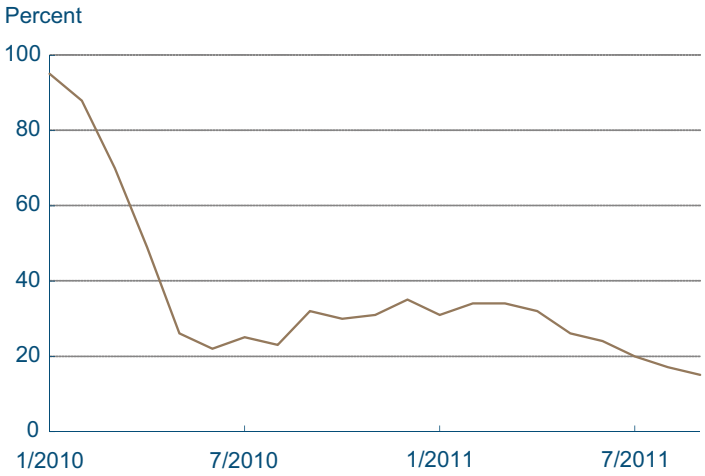
Source: Mortgage Bankers Association.

1-4 Unit Residential Mortgage Delinquency Rates



a. Includes mortgage 30–89 days delinquent.
b. Includes mortgage 90 or more days delinquent or in foreclosure.
Sources: Mortgage Bankers Association, Haver Analytics.

Number of HAMP Trial Modifications Started per Month



Source: Department of Treasury.

or more past due plus mortgages in foreclosure—have come down from their 2009 peak, recent data suggest that the decline has halted. In fact, in the third quarter of 2011, seriously delinquent mortgages rose 4 basis points to 7.89 percent of all mortgages. The level of seriously delinquent mortgages is primarily driven by the inventory foreclosures; consequently, the level of seriously delinquent loans will remain high until foreclosures begin to fall.

Due to the number of risky mortgages made from 2004 to 2008 and the reduced support for at-risk consumers, it may not be realistic to expect the level of foreclosures to decline in the immediate future. A recent study from the Center for Responsible Lending suggests that we may be only halfway through the foreclosure crisis. According to the study, 8.3 percent mortgages (3.6 million loans) made between 2004 and 2008 are at an immediate risk of foreclosure. Consequently, the number of seriously delinquent mortgages may actually increase in the near future.

Additionally, the potential increase in foreclosures comes at a time when some supports put in place during the financial crisis may be phasing out. According to data released by the Department of Treasury, the number of trial modifications started under the government's HAMP program fell to 15,000. Moreover, on a quarterly basis, the number of trial modifications started in the third quarter of 2011 was significantly lower than in the second quarter of 2011. According to the Department of Treasury, the number of new trial modifications under the HAMP program in the third quarter stood at 52,000—the lowest level since the start of the program. The persistent decline in the number of new trial modifications suggests that there is a larger effort to sustain current permanent modifications instead of starting new ones.

Why Some European Countries and Not the U.S.?

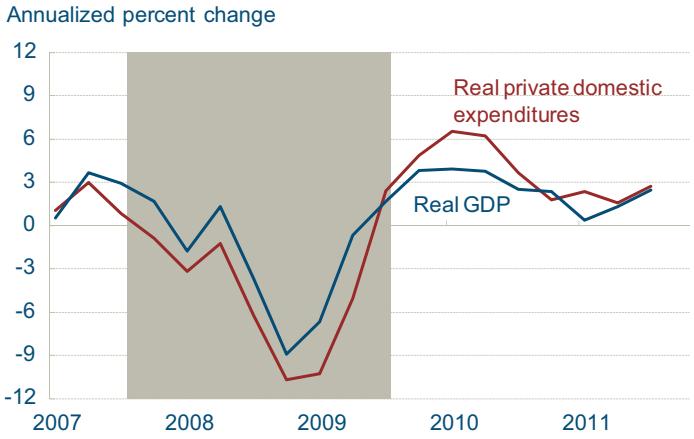
12.02.2011
by Pedro Amaral and Margaret Jacobson

These days it seems it is just a matter of time until we hear about the next euro zone country whose interest rates on sovereign debt will start soaring. What started with Greece, Portugal, and Ireland has since spread to countries of greater economic importance such as Spain and Italy. The United States is dealing with serious debt issues, too, but while Spain and Italy face increased borrowing costs, interest rates on U.S. government debt are at all-time lows.

Why are interest rates on U.S. sovereign debt so much lower than those of Greece, Italy, Portugal, Ireland, and Spain? (For simplicity we will call these countries the euro zone periphery or EZP.) The two most frequently cited possibilities are substantial differences across countries in either the ratio of sovereign debt to GDP or in the countries' growth prospects. Neither possibility seems to explain the sovereign debt spreads between the EZP and the U.S.

The sovereign-debt-to-GDP ratio could cause the interest rate spread if it were much smaller in the U.S. than in the EZP countries. While that is true for most of the EZP countries, Spain has a smaller debt-to-GDP ratio than the U.S. and Ireland has one similar to the U.S. The amount of debt outstanding, however, may not tell the whole story behind the interest rates. In particular, two countries may have the same debt-to-GDP ratio and have very different immediate financing needs. When we look at financial obligations over the next few years, or at the average debt maturities, we see very little difference between the U.S. and the group of EZP economies experiencing large increases in interest rates.

Real GDP and Private Domestic Expenditures



Notes: Private domestic expenditures is the sum of private consumption and private investment. Shaded bar indicates recession.
Source: Bureau of Economic Analysis.

Gross Financing Needs (Percent of GDP)

	2011			2012				
	Maturing Debt	Budget Deficit	Total financing need	Maturing Debt	Budget Deficit	Total financing need	Average years to maturity (as of September 2011)	Debt to GDP ration (2010)
U.S.	17.6	9.6	27.3	22.4	7.9	30.4	5.1	72.6
Greece	15.7[1]	8.0	23.7	9.6	6.9	16.5	6.9	144.7[2]
Italy	18.5	4.0	22.6	21.1	2.4	23.5	7.2	117.2
Portugal	16.1	5.9	22.0	17.9	4.5	22.3	6.0	88.7
Spain	13.4	6.1	19.6	15.4	5.2	20.6	6.2	48.7
Ireland	8.7	10.3	19.0	5.3	8.6	13.9	6.2	78.0

1. Greece's maturing debt assumes 90 percent participation in the debt exchange.
2. Eurostat calculation.
Source: International Monetary Fund, Fiscal Monitor, September 2011.

The spread might also arise if the growth outlook is better for the U.S. That is true, for the most part, but in order for future growth to help the fiscal situation, it needs to lift future revenues and reduce future deficits. Looking at deficit projections, anticipated U.S. growth does not seem sufficient to bring down the U.S. deficit in comparison to the deficits of the EZP.

Gross Financing Needs (Percent of GDP)

	2011	2012	2013	2014	2015	2016
United States	–9.6	–7.9	–6.2	–5.5	–5.6	–6.0
Greece	–8.0	–6.9	–5.2	–2.8	–2.8	–2.8
Italy	–4.0	–2.4	–1.1	–1.1	–1.1	–1.0
Portugal	–5.9	–4.5	–3.0	–2.3	–1.9	–1.7
Spain	–6.1	–5.2	–4.4	–4.1	–4.1	–4.1
Ireland	–10.3	–8.6	–6.8	–4.4	–4.1	–3.7

Source: International Monetary Fund, Fiscal Monitor, September 2011.

The size of the 10-year government bond spread between the U.S. and the EZP is pretty significant. There are several other reasons that might explain why rates are still so low in the U.S.

First, as the Irish know all too well, banking balance sheet problems can quickly turn into sovereign problems. In the fall of 2010, the Irish government had to intervene to recapitalize the banks, which increased the country's sovereign debt. In the United States, links between the banking sector and government debt seem to be weaker than in Europe. For example, the claims of domestic banks on their respective governments exceed 20 percent of GDP for all the countries in the EZP, while such claims amount to only 8 percent in the United States. The

same pattern is true if one looks at overall sovereign debt exposure; less foreign debt is held by U.S. banks compared to their European counterparts. Should the government need to step in and recapitalize banks, as in the case of Ireland, less exposure to banks means that the government's liabilities are likely to be smaller in the U.S. than in the EZP.

A second factor explaining the difference in interest rates has to do with the demographics of sovereign debt holders. Compared to the EZP, the U.S. has a larger share of domestic holders and foreign official holders such as other central banks. This gives the U.S. the advantage of a very stable investment base. Private domestic holders tend to exhibit some home bias. If they want to hold an asset with the risk-return characteristics of a government bond, they are, everything else being the same, much more likely to hold a government bond of their home country. In turn, these investors are also less likely to shift away from these bonds as prices fluctuate. Furthermore, given the importance of the U.S. economy, foreign central banks may want to hold U.S. treasuries for strategic reasons that do not necessarily reflect market concerns.

Another reason for the interest rate spread is the safe haven factor. Money managers need to park their funds somewhere, and with a large fraction of European sovereign bonds in trouble, U.S. debt has benefited from an increase in demand. This mechanism has been exacerbated by the recent increase in volatility in capital markets.

Finally, we will finish with a word on credibility. A security does not bear the "safe haven" moniker by chance. The reason U.S. Treasury securities command lower interest rates than say Zimbabwean government securities is partly because both the U.S. government and the Federal Reserve have each made credible commitments; the government pledges to keep the debt at a sustainable level and the Federal Reserve assures that it will not monetize away the debt. These commitments are more credible in the eyes of the public than those made by the Zimbabwean government and central bank.

In the euro zone it seems the commitment devices set forth by the Maastricht Treaty limiting the national governments' debts and deficits lacked

bite and ultimately failed, shattering the credibility of some of the member countries' governments. In contrast, the market seems to think the U.S. government can solve its debt problems, which are mostly tied to entitlements (see this Commentary). This vote of confidence should not be squandered.

Recent Trends in Neighborhood Poverty

11.29.11
by Dionissi Aliprantis and Nelson Oliver

Recent data releases have focused attention on the increase in the share of individuals living in poverty since 2006. Since this increase in poverty has not only changed individuals' economic circumstances, but also those of entire communities, researchers have been interested in understanding how those circumstances have varied across communities. One way to summarize the impact of the recent recession on communities is to examine neighborhood poverty rates.

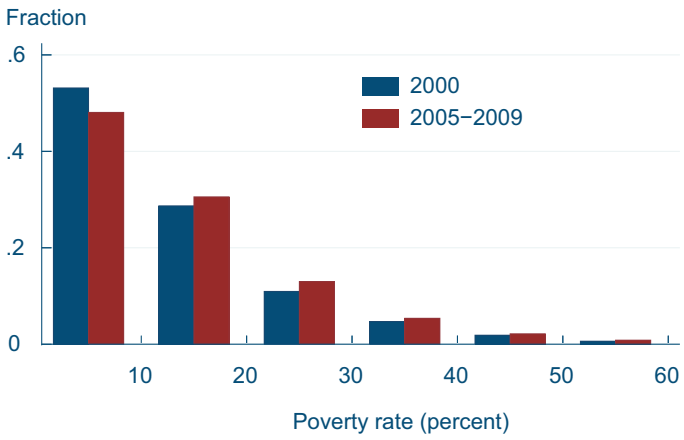
We use data from the 2000 Census and from the 2005-2009 American Community Surveys (ACS) to examine recent trends in neighborhood poverty rates. The fraction of Americans living in more affluent neighborhoods (poverty rates of 10 percent or less) declined between 2000 and 2005-2009. Meanwhile, the share of Americans in neighborhoods with higher poverty rates (greater than 10 percent) grew during these years.

In terms of the magnitude of the changes during this period, the share of Americans living in the most well-to-do neighborhoods (less than 2.5 percent poverty rates) fell from 8.3 percent to 7.5 percent during this period. The share of Americans living in neighborhoods with poverty rates of 10 percent or higher grew by over 5 percent, and the share in high poverty neighborhoods (greater than 20 percent or greater than 40 percent) increased as well.

During this period, poverty patterns also shifted across the Fourth District of the Federal Reserve System, which includes Ohio, western Pennsylvania, eastern Kentucky, and the northern panhandle of West Virginia. The overall poverty rate in the Fourth District in 2000, 11.6 percent, was lower than the nation as a whole. But by 2005-2009, the Fourth District's rate had surpassed the national rate, growing to 14.1 percent.

Comparing neighborhood poverty rates over this period, we see that the share of people living in

The U.S. Population in 2000 and 2005-2009



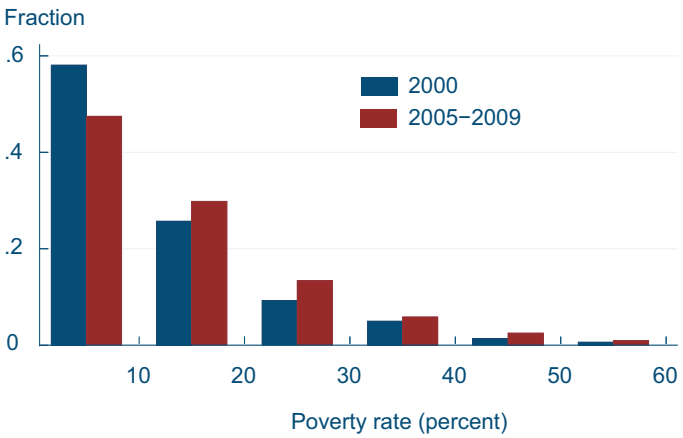
Sources: U.S. Census Bureau; NHGIS; ACS.

U.S. Population by Neighborhood Poverty Rate

Neighborhood poverty rate (percent)	Share of population (percent)	
	2000	2005-2009
2.5 or less	8.3	7.5
10 or greater	47.0	52.2
20 or greater	18.4	21.8
40 or greater	2.8	3.5

Sources: U.S. Census Bureau; NHGIS; ACS.

The Fourth District Population in 2000 and 2005-2009



Sources: U.S. Census Bureau; NHGIS; ACS.

Fourth District Population by Neighborhood Poverty Rate

Neighborhood poverty rate (percent)	Share of population (percent)	
	2000	2005-2009
2.5 or less	8.7	6.5
10 or greater	42.2	53.0
20 or greater	16.6	23.5
40 or greater	2.4	4.5

Sources: U.S. Census Bureau; NHGIS; ACS.

neighborhoods with poverty rates of 10 percent or more increased 5.2 percentage points in the nation as a whole, and 10.8 percentage points in the Fourth District. This trend was also true for extreme-poverty neighborhoods; for example, the share of residents in neighborhoods with poverty rates of 40 percent or higher grew by 2.1 percentage points in the Fourth District, almost doubling.

One possible explanation for the increase in the population in high-poverty neighborhoods would be a uniform increase in the poverty rate across all neighborhoods. In this case, geographic considerations would play little role in any policies aimed at decreasing the poverty rate.

However, the data show that the increase in overall poverty was not felt equally in all neighborhoods. We do not present details here, but the data indicate that the change in the poverty rates of the poorest neighborhoods was larger than the change for more affluent neighborhoods, both nationally and in the Fourth District. This pattern indicates that the process leading to individual-level poverty is connected to the process leading to neighborhood-level poverty. One implication is that an improved understanding of neighborhood poverty can help to improve poverty-related policies. Such a motivation will keep researchers and policymakers focused on neighborhood poverty as they seek to understand and respond to the recent recession.

Inflation Takes a Breather…

11.22.11
by Brent Meyer

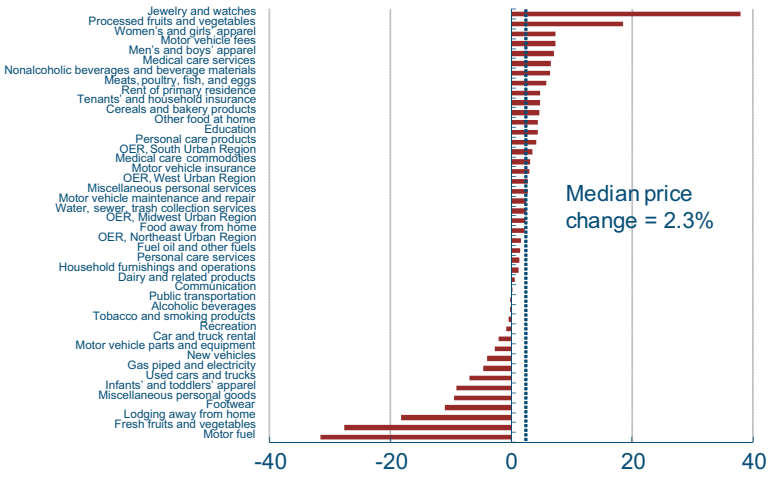
October Price Statistics

	Percent change, last					
	1mo.[a]	3mo.[a]	6mo.[a]	12mo.	5yr.[a]	2010 average
Consumer Price Index						
All items	–1.0	2.4	2.1	3.5	2.3	1.4
Excluding food and energy (core CPI)	1.6	1.8	2.4	2.1	1.8	0.6
Median[b]	2.3	2.8	2.5	2.2	2.0	0.7
16% trimmed mean[b]	1.4	2.6	2.5	2.5	2.1	0.8
Sticky price[c]	2.5	2.5	2.0	1.9	2.0	0.9
Flexible price[c]	–8.8	2.4	2.1	7.8	3.3	3.5

a. Annualized.
b. Calculated by the Federal Reserve Bank of Cleveland.
c. Author's calculations.
Source: Bureau of Labor Statistics.

Component Price-Change Distribution

Annualized percentage change, October 2011



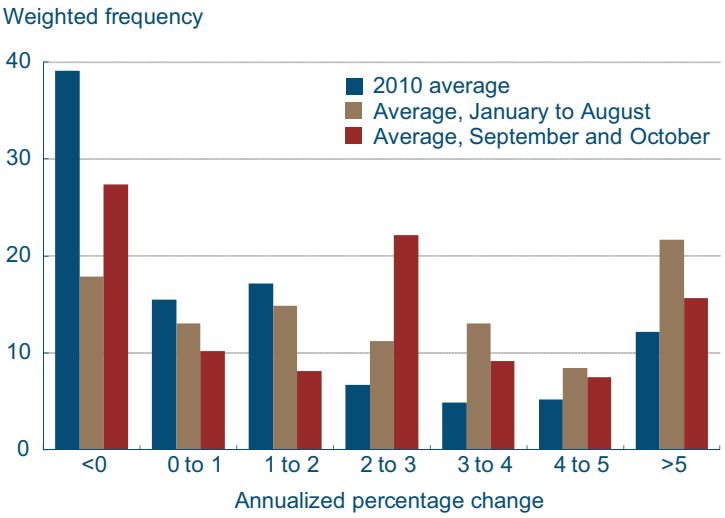
Sources: Bureau of Labor Statistics; author's calculations.

Upward pressure on the Consumer Price Index (CPI) from a few component prices reversed in October, and the 12-month growth rate in the index slowed from 3.9 percent to 3.5 percent, edging down for the first time since last November. This reversal came as a dip in energy prices (led by a 31.6 percent decrease in motor fuel) more than offset a modest 1.4 percent increase in food prices. However, October's increase in food prices—which was the smallest of the year—was due in large part to a fairly sizeable 28 percent decrease in fresh fruit and vegetable prices. Most of the other food categories were in the upper tail of the price-change distribution (posting increases above 5 percent).

Measures of underlying inflation, on the other hand, rose slightly. One popular measure of underlying inflation, the "core" CPI (which is the CPI excluding food and energy prices) rose 1.6 percent in October. The core CPI is up 1.8 percent over the past three months, slightly below its 6-month growth rate of 2.4 percent and its 12-month growth rate of 2.1 percent. Measures of underlying inflation produced by the Federal Reserve Bank of Cleveland—the median CPI and the 16 percent trimmed-mean CPI—rose 2.3 percent and 1.4 percent, respectively, in October. As was the case last month, both measures slowed relative to their respective 3- and 6-month growth rates.

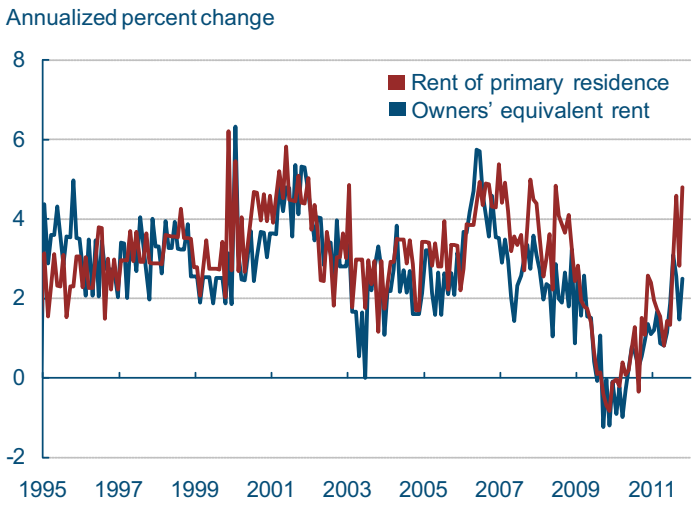
A large contingent of automobile-related prices (used cars and trucks, new vehicles, car and truck rentals, and parts and equipment) decreased in October, which put some downward pressure on the core CPI. Notably, new car prices, which are still up 3.4 percent over the past year, followed up a 2.4 percent decrease in September by falling 5.1 percent in October. On the other hand, prices for medical care services jumped up 6.6 percent in October, their largest monthly increase in 13 months. Still, the 12-month percent change in the price index for medical care services stands at 3.1 percent and has yet to climb back to its longer-run

CPI Component Price-Change Distribution



Sources: Bureau of Labor Statistics; author's calculations.

Rents



Source: Federal Reserve Board.

(10-year) growth rate of 4.25 percent.

An alternative way to view the price-change distribution takes the focus off of the price changes for the individual components and draws it to where the mass of the distribution was centered during the month. Shifting the focus this way allows us to see that there was a leftward (downward) shift in the mass over the past few months. Notably, just one-third of the prices in the consumer market basket (by expenditure weight) rose at rates in excess of 3 percent in September and October, compared to an average of 43 percent over the first eight months of 2011. We can also see that, while it appears that some of the underlying mass has shifted from the upper end, the price-change distribution doesn't look nearly as disinflationary as it did during 2010 (when the average increase in the median CPI was a mere 0.7 percent).

While we've seen a slowing in underlying inflation over the past few months, continued increases in OER and rent (perhaps as homeownership rates and rental vacancy rates continue to decline) are likely to put upward pressure on measured inflation. The indexes for owners' equivalent rent of residences (OER) and rent of primary residence—which account for roughly 30 percent of the overall index—accelerated in October. Rent of primary residence jumped up 4.8 percent during the month, pulling its near-term (3-month) growth rate up to 4.1 percent, well above its longer-term (10-year) growth rate of 2.8 percent. Following suit, OER rose 2.5 percent in October and has posted increases of at least 2.5 percent in three of the last four months. For comparison, prior to July 2011, the last time OER had a monthly increase of 2.5 percent or higher was March 2009. On a year-over-year basis, OER is now up 1.6 percent. Last October, the 12-month growth rate in OER was flat.

Policy Innovations at the Zero Lower Bound

12.01.11
by Todd Clark and John Lindner

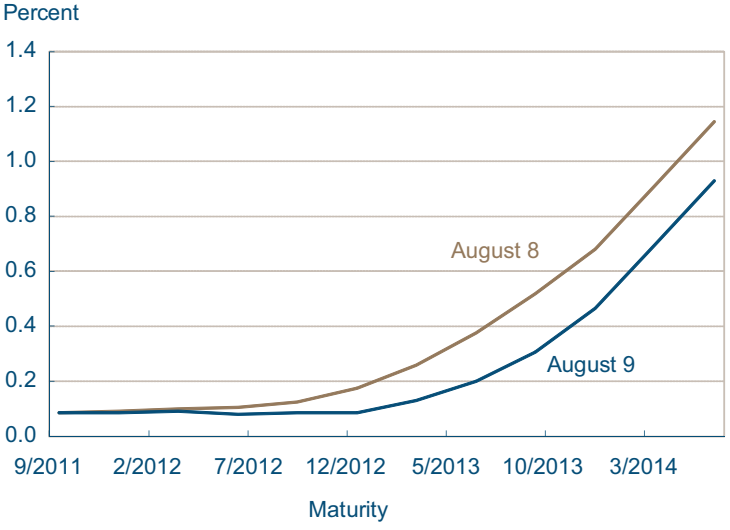
The late summer and early fall bore witness to two new innovations in monetary policy.

The first was at the August Federal Open Market Committee (FOMC) meeting, when the Committee introduced a change to the statement released after meetings, which altered the projected path of the federal funds rate target. The Committee announced that it "currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013."

The second came in September, when the Committee opted to begin selling shorter-term Treasuries from the Fed's portfolio and use the proceeds from those sales to purchase longer-term Treasury securities. According to the statement, "this should put downward pressure on longer-term interest rates and help make broader financial conditions more accommodative."

Both of these innovative moves were intended to adjust interest rates, one through communications and one through balance sheet manipulations. Here's a quick look at how they did and at what some of the consequences could be.

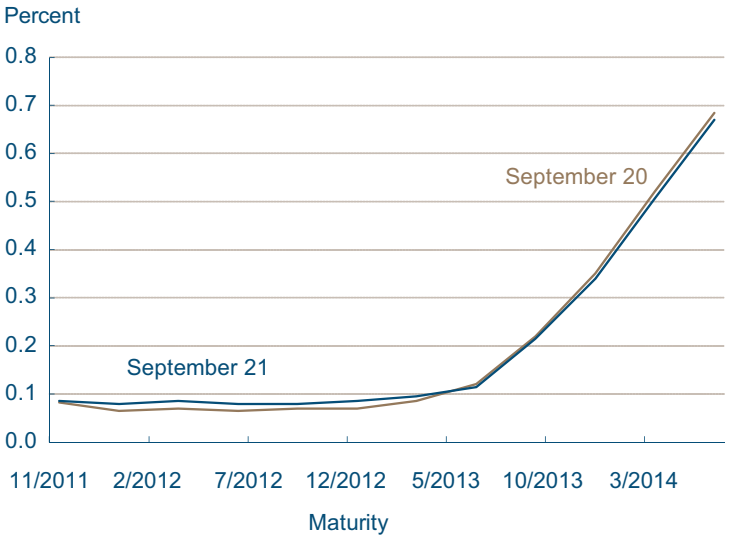
Federal Funds Futures Implied Interest Rates



Source: Bloomberg.

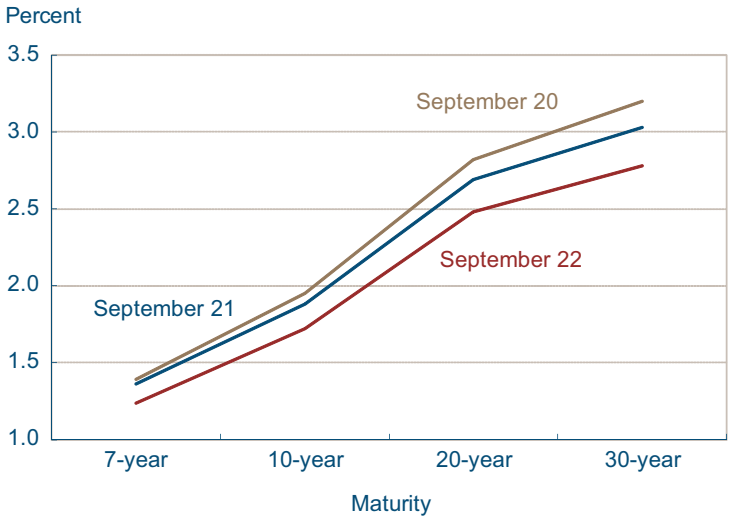
The new language introduced in August is clearly a conditional statement. Whether the federal funds rate stays "exceptionally low" until mid-2013 depends on the economy progressing as the FOMC thinks it will. The August communication strategy, as we've highlighted before, was extremely effective at lowering expected future interest rates. One way of seeing how markets interpreted this statement is by looking at a type of derivative called a federal funds rate future contract. The contract allows banks to borrow interbank (federal) funds at a specified rate at some date in the future. Implied interest rates from these contracts declined dramatically after the August statement, incorporating

Federal Funds Futures Implied Interest Rates



Source: Bloomberg.

Long-Term Treasury Interest Rates



Source: Federal Reserve Board.

the expectation that the federal funds rate would remain low until the middle of 2013.

The announcement of September's new policy, dubbed Operation Twist, was also successful at lowering long-term interest rates. A simple chart of some longer-maturity Treasury yields shows that there were significant declines following the release of the Committee's statement. Yields on 30-year Treasury securities fell 17 basis points to 3.03 percent, and 10-year Treasury yields dropped 23 basis points in the two days following the meeting.

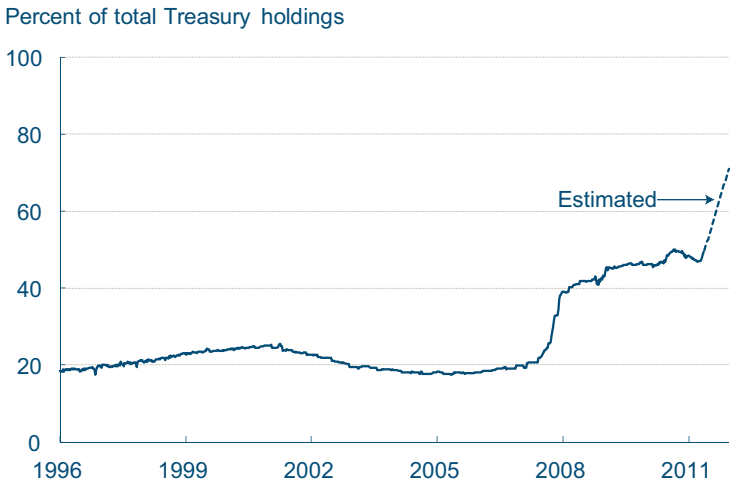
One issue that some economists are concerned about is Operation Twist's effect on the Fed's balance sheet. The policy will likely push the balance of Treasury holdings to long-term security holdings. Ultimately, $400 billion will be shifted from short-term Treasury securities to long-term Treasury securities.

A rough look at the history of the maturity distribution for the Fed's Treasury holdings shows that long-term securities have traditionally comprised just about 20 percent of the Fed's Treasury holdings. During and after the financial crisis in 2008, that percentage grew closer to 50 percent. The proportion, according to back of the envelope calculations, is expected to balloon. (This is an imperfect measurement, as the availability of detailed data is limited. We have broadly defined short-term securities as those that mature in less than five years, and long-term securities as those that mature in more than five years.)

Another view of this situation looks at the combined holdings of Treasury securities and the agency securities that were purchased as part of previous large-scale accommodative programs. Since the Fed's portfolio mostly includes agency securities with long-term maturities, adding in those types of securities would show that the asset holdings on the Fed's balance sheet will be even more heavily weighted in long-term securities (roughly 78 percent by mid-2012).

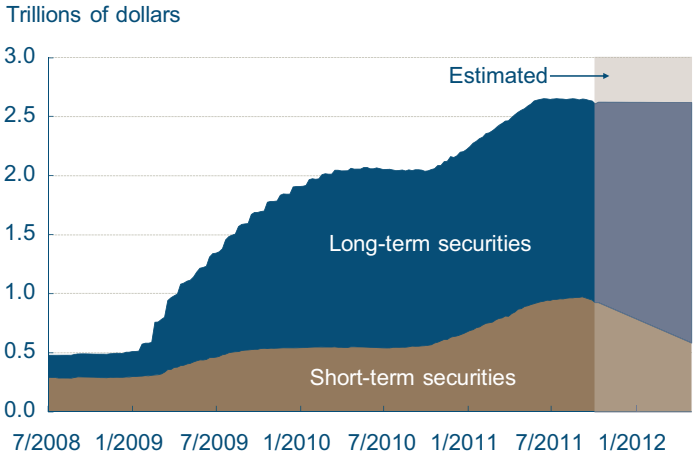
What are some of the implications of these changes in the Federal Reserve's balance sheet? Most immediately, the Fed's income from interest payments on purchased securities has risen, from $40.3 billion

Federal Reserve Long-Term Treasury Holdings



Note: Long-term is defined as a security of maturity more than 5 years.
Source: Federal Reserve Board's H.4.1 Statistical Release.

Federal Reserve Security Holdings



Note: Security holdings composed of all Treasury, agency debt, and agency mortgage-backed securities on the Fed's balance sheet.Short-term is defined as a security of maturity less than 5 years. Long-term is defined as a security of maturity more than 5 years.
Source: Federal Reserve Board's H.4.1 Statistical Release.

in 2007 to about $76.2 billion in 2010. Interest income has risen with the share of the balance sheet devoted to long-term bonds because long-term bonds pay more interest than short-term bills. The increase in the Fed's interest income has allowed the Fed to turn more money over to the Treasury each year.

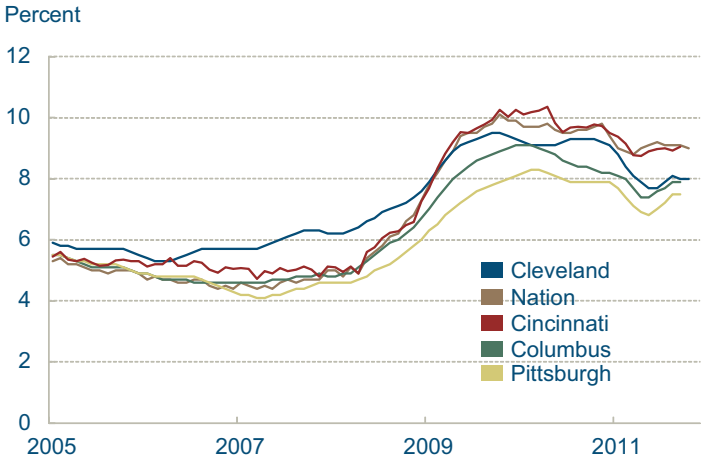
However, in future years, as interest rates rise, the Federal Reserve's income could fall sharply. Specifically, such losses could arise when the Federal Reserve eventually follows through on the FOMC's stated intention to sell some of the long-term assets, to gradually shrink its balance sheet to a more normal size. The reason is that the value of long-term securities falls when interest rates increase, potentially causing the Fed to realize capital losses with the eventual sales of bonds.

Pittsburgh's Labor Market in the Recession and Recovery

12.02.11
by Tim Dunne and Kyle Fee

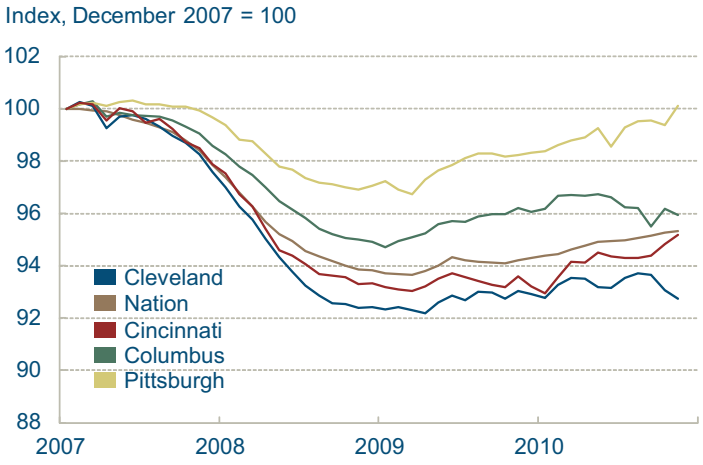
Over the course of the recent business cycle, labor markets within the Fourth District have experienced distinctly different patterns of contraction and expansion. In particular, Pittsburgh experienced a milder recession, measured in terms of job loss or unemployment rates, than the nation and the three other major metropolitan areas in the Fourth District—Cincinnati, Cleveland, and Columbus. Pittsburgh's recovery has also been more robust.

Unemployment Rate



Source: Bureau of Labor Statistics.

Payroll Employment



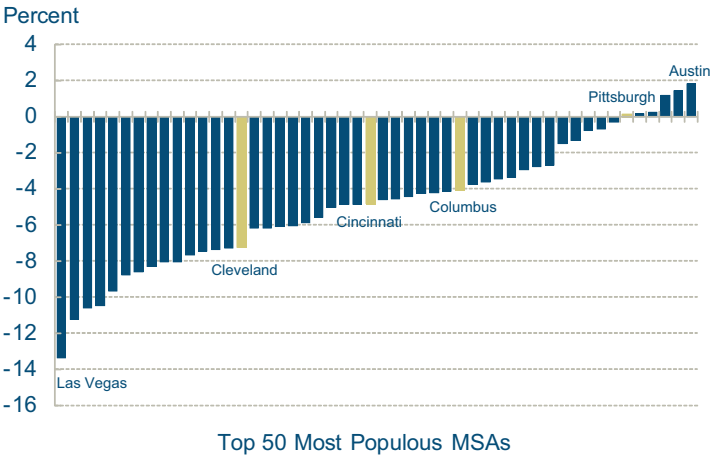
Source: Bureau of Labor Statistics.

Pittsburgh's unemployment rate is currently considerably lower than the nation's unemployment rate, (7.5 percent versus 9.0 percent), and it has been lower throughout the recession and recovery. More striking, however, is the fact that Pittsburgh has recovered (on net) the employment it lost since the start of the last recession. This stands in stark contrast to the nation as a whole, where employment is almost 5 percent below pre-recession levels, and to Cleveland, where employment remains 7 percent below pre-recession levels.

This employment recovery reflects, in part, the muted recession that Pittsburgh experienced. At the depth of the recession, Pittsburgh lost only 3 percent of its payroll employment, roughly half of the nation's loss and well below the employment losses seen in Cincinnati and Cleveland. Still, Pittsburgh has also seen a more rapid recovery than the nation or the other major metropolitan areas in the Fourth District.

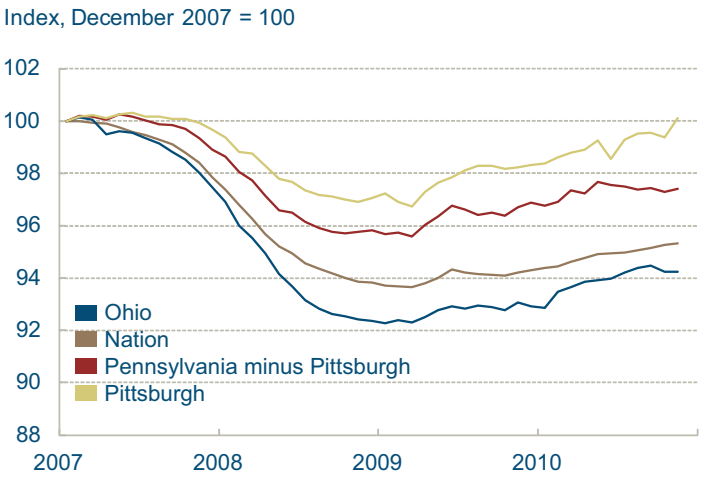
Looking across the 50 largest metropolitan areas in the country, Pittsburgh is one of a handful of metro areas that have shown a net expansion in employment since the start of the last recession, albeit a very slight one. The other metropolitan areas where employment rose are all located in the south central part of the United States. Included are Austin, Houston, New Orleans, Oklahoma City, and San Antonio.

Payroll Employment Growth, December 2007–October 2011



Source: Bureau of Labor Statistics.

Payroll Employment



Source: Bureau of Labor Statistics.

Payroll Decomposition, December 2007–October 2011

	Pittsburgh
City–U.S. Difference (percentage points)	+4.7
Percent to growth differences	81.5
Percent to share differences	18.5

Source: Bureau of Labor Statistics.

Pittsburgh's relatively strong labor market performance may also reflect the strength of the state's overall labor market performance, which was better than the nation's. Looking at Pennsylvania's employment with Pittsburgh's employment subtracted out, we see that Pennsylvania outside of Pittsburgh experienced less employment loss than the nation in the recent business cycle but still performed somewhat worse than Pittsburgh during the recession. Moreover, Pittsburgh's recovery has clearly been more robust than the rest of Pennsylvania. So, Pittsburgh's relative performance does not simply reflect a "state effect."

A natural question is whether the difference in Pittsburgh's labor market performance was driven by its industrial structure. That is, did Pittsburgh perform better than other parts of the country because the city specialized in industries that overperformed during the business cycle? To examine this issue, we decompose the differences in employment growth between Pittsburgh and the nation into the fraction due to differences in industry specialization and the fraction due to differences in industry growth rates. The latter term accounts for differences in employment growth which are due to differences in industry-specific growth between the metro area and the nation.

The difference in employment growth rates between Pittsburgh and the nation was 4.7 percentage points from December 2007 to October 2011. About one-fifth of the difference in growth is accounted for by industry specialization, as Pittsburgh had a higher share of employment in industries that grew faster or shrank less during the recession and recovery. However, industry specialization plays a secondary role compared to differences in industry growth, as four-fifths of the growth difference is accounted for by industry-growth differentials. Pittsburgh performed better largely because specific industries in Pittsburgh grew faster (or declined less) than those industries in the nation as a whole.

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