Economic Trends

December 2008
(Covering November 14, 2008 to December 11, 2008)

In This Issue

October Price Statistics

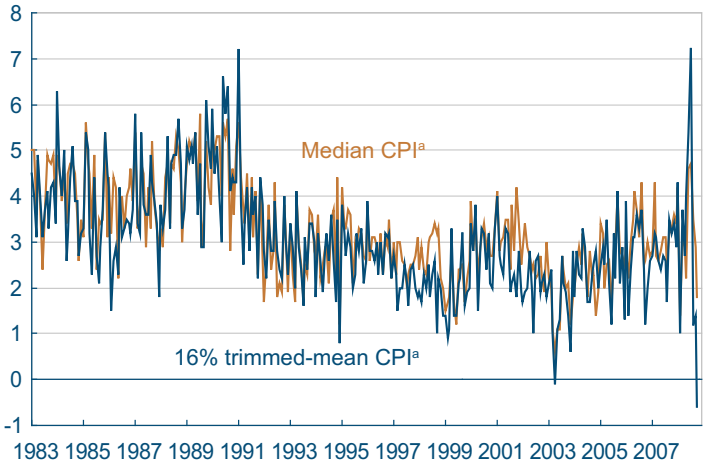
October Price Statistics

	Percent change, last					
	1mo.[a]	3mo.[a]	6mo.[a]	12mo.	5yr.[a]	2007 avg.
Consumer Price Index						
All items	−10.9	−4.4	2.8	3.7	3.2	4.2
Less food and energy	−0.9	1.1	2.3	2.2	2.2	2.4
Median[b]	1.8	2.7	3.3	3.2	2.8	3.1
16% trimmed mean[b]	−0.6	0.7	3.1	3.0	2.6	2.8
Producer Price Index						
Finished goods	−28.5	−15.2	0.5	5.1	4.0	7.1
Less food and energy	5.1	4.4	4.6	4.4	2.3	2.1

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.

Trimmed-Mean CPI Measures

Annualized monthly percent change



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

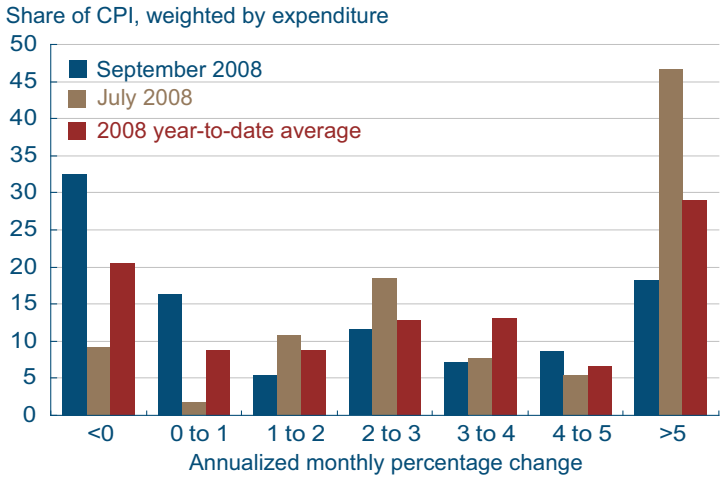
11.25.08
by Brent Meyer

The Consumer Price Index (CPI) decreased at an annualized rate of 10.9 percent in October. It was the largest monthly decrease on record in the series (which goes back to 1947), conjuring the specter of deflation just four short months after inflation looked to be a major concern. Moreover, the core CPI fell 0.9 percent in October, its first price dip since December 1982. Energy prices decreased dramatically during the month (65.9 percent at an annualized rate) and were responsible for much of the headline price decrease. However, falling gas prices are not the whole story, as evidenced by the declining core CPI.4.9 percent. The longer-term trends in the core and trimmed-mean measures remained somewhaelevated in September, ranging between 2.5 percent and 3.4 percent.

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

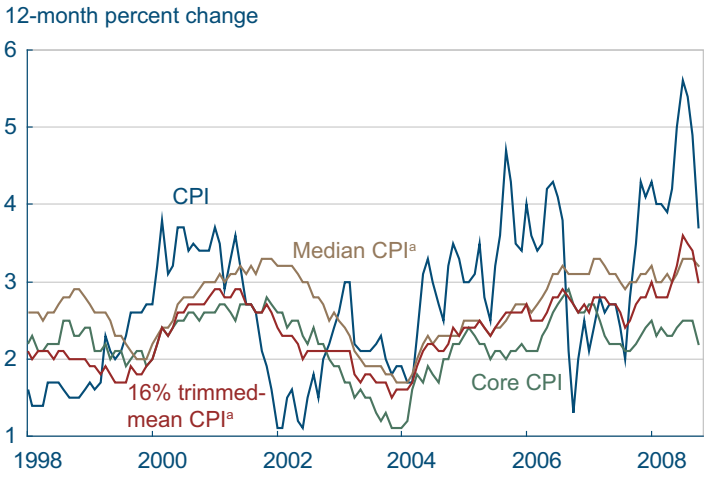
Turning to the measures of underlying inflation calculated by the Federal Reserve Bank of Cleveland, the median CPI rose 1.8 percent, while the 16 percent trimmed–mean CPI fell 0.6 percent (its second price decrease since the series began in 1982). The CPI trimmed–mean estimators exclude the components in the CPI that show the most extreme monthly price changes and are much less volatile than either the CPI or the more traditional core CPI, making them more useful guides in evaluating inflation trends. Lately, the 16–percent trimmed-mean CPI and median CPI have been diverging somewhat. For example, over the past three months, the median CPI is up 2.7 percent, while the 16–percent trimmed-mean has increased only 0.7 percent. Over the past four months, the 16 percent trimmed-mean measure has been pick-

CPI Component Price Change Distributions



Source: Bureau of Labor Statistics.

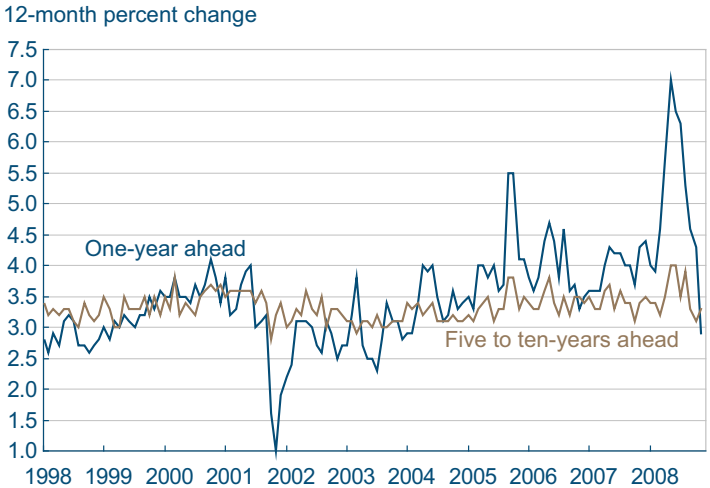
CPI, Core CPI, and Trimmed-Mean CPI Measures



a. Calculated by the Federal Reserve Bank of Cleveland.

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

Household Inflation Expectations



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

Source: University of Michigan.

ing up on some of the extreme prices swings that are excluded from the median. At least 50 percent of the CPI's components (by expenditure weight) exhibited price decreases or increases at rates exceeding 5 percent.

An investigation into the price-change distribution of CPI components may reveal why the overall index exhibited such a large decline. In October, 33 percent of the CPI's components (by expenditure weight) decreased, while only 9 percent fell in July. Also, only 34 percent rose at rates exceeding 3.0 percent in October, compared to 60 percent in July and a year-to-date average of roughly 50 percent. Deflation requires sustained, broad–based price declines. We can see that the rate of price increases slowed in October, and the prices of some components did actually decline during the month. However, based on this report alone, it would be more than a stretch to declare that deflation has set in.

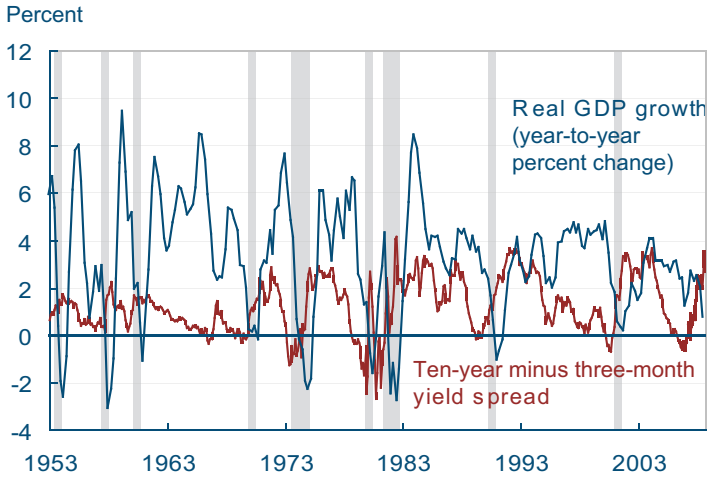
Over the past 12 months, the CPI is up 3.7 percent, down considerably from July's recent year–over–year high of 5.6 percent. The 12–month trends in the underlying inflation measures (core, trim, and median) have fallen as well, and are ranging between 2.2 percent and 3.2 percent.

According to the November preliminary release of the University of Michigan's Survey of Consumers, 21 percent of respondents expect zero inflation in the year ahead, while 16 percent actually expect deflation. Consequently, short–term (one–year ahead) average inflation expectations fell to 2.9 percent in early November. Long–term (5–10 year) average inflation expectations have remained more stable over the past few months, and actually increased from 3.1 percent in October to 3.3 percent in November.

The Yield Curve, November 2008

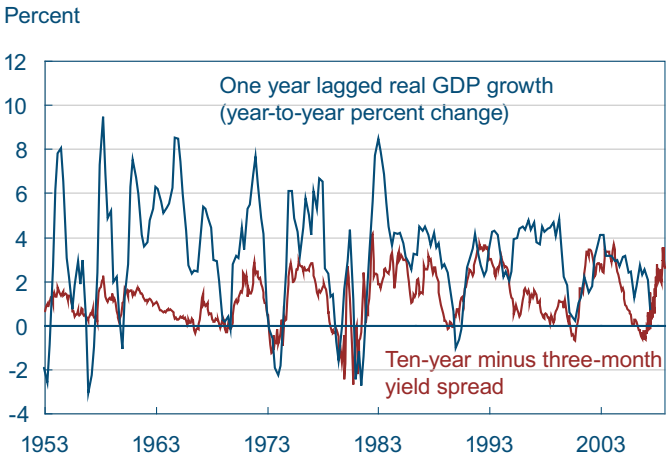
11.26.08
by Joseph G. Haubrich and Kent Cherny

Yield Spread and Real GDP Growth



Note: Shaded bars represent recessions
Sources: Bureau of Labor Statistics and the Federal Reserve Board.

Yield Spread and One-Year Lagged Real GDP Growth



Sources: Bureau of Economic Analysis and the Federal Reserve Board.

In the midst of the horrendous economic news of the last month, the yield curve might provide a slice of optimism. Since last month, it has flattened, as short rates fell more than long rates. On the other hand, the historic turmoil in the financial markets also suggests that the historical relationships on which our interpretation of the yield curve depends may not be holding up in times of stress.

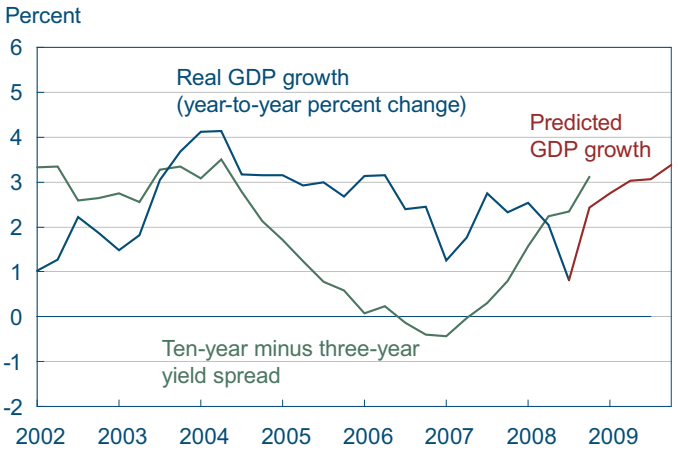
Those relationships underlie the use of the slope of the yield curve as a simple forecaster of economic growth. The rule of thumb is that an inverted yield curve (short rates above long rates) indicates a recession in about a year, and yield curve inversions have preceded each of the last six recessions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

The financial crisis showed up in the yield curve, with short rates falling since last month, as investors fled to quality. The 3–month rate dropped from an already low 0.46 percent down to a miniscule 0.07 percent (for the week ending November 21), the lowest level it has been since the Treasury constant maturity series started in 1982.

The 10-year rate fell from 4.06 percent to 3.38 percent. Consequently, the slope decreased by 29 basis points to 331, down from 360 in October, but still above the 290 basis points for September and the 205 for August.

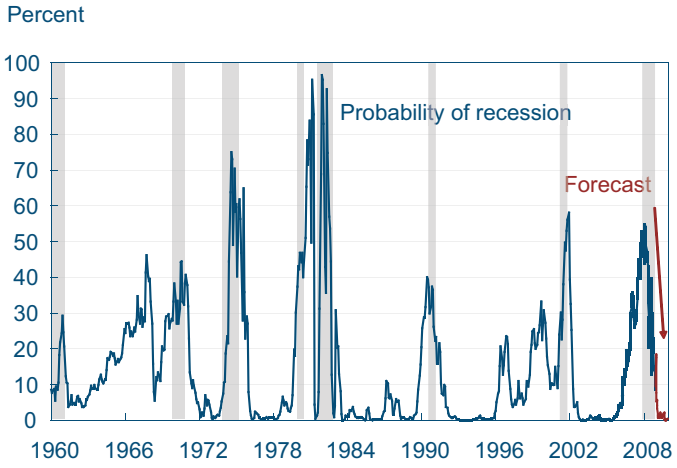
The flight to quality and the turmoil in the financial markets may affect the reliability of the yield curve as an indicator, but projecting forward using past values of the spread and GDP growth suggests

Yield Spread and Predicted GDP Growth



Sources: Bureau of Economic Analysis and the Federal Reserve Board.

Probability of Recession Based on the Yield Spread



Note: Estimated using probit model.
Sources: Bureau of Economic Analysis, the Federal Reserve Board, and authors' calculations.

that real GDP will grow at about a 3.4 percent rate over the next year. This remains on the high side of other forecasts, many of which are predicting reductions in real GDP.

While such an approach can predict 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 a miniscule 0.05 percent, equal to October and down from September's already low 0.2 percent.

The probability of recession predicted by the yield curve is very low, and may seem strange the in the midst of the recent financial news, but one aspect of those concerns has been a flight to quality, which lowers Treasury yields. Furthermore, both the federal funds target rate and the discount rate have remained low, which tends to result in a steep yield curve. Remember also that the forecast is for where the economy will be next November, not earlier in the year. On the other hand, in the spring of 2007, the yield curve was predicting a 40 percent chance of a recession in 2008, something that looked out of step with other forecasters at the time.

To compare the 0.05 percent to some other probabilities and learn more about different techniques of predicting recessions, head on over to the Econbrowser blog. It might not be advisable to take this number quite so literally, for two reasons. First, this probability is itself subject to error, as is the case with all statistical estimates. Second, other researchers have postulated that the underlying determinants of the yield spread today are materially different from the determinants that generated yield spreads during prior decades. Differences could arise from changes in international capital flows and inflation expectations, for example. The bottom line is that yield curves contain important information for business cycle analysis, but, like other indicators, should be interpreted with caution.

For more detail on these and other issues related to

using the yield curve to predict recessions, see the Commentary "Does the Yield Curve Signal Recession?"

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

To see other probabilities of recession: http://www.bloomberg.com/apps/news?pid=20601087&sid=aEX73qWiBrb4

Econbrowser blog is available at: http://www.econbrowser.com/archives/2008/02/predicting_rece.html

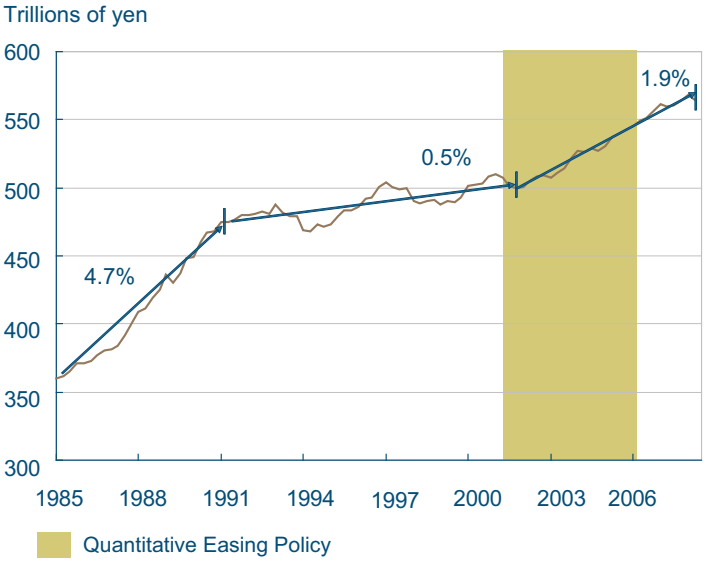
Does the Yield Curve Signal Recession?," by Joseph G. Haubrich. 2006. Federal Reserve Bank of Cleveland, Economic Commentary, is available at: http://www.clevelandfed.org/Research/Commentary/2006/0415.pdf

International Markets

Japan's Quantitative Easing Policy

12.10.08
by Owen F. Humpage and Michael Shenk

Japanese Real GDP



Source: International Monetary Fund, *International Finance Statistics Database*, October 2008.

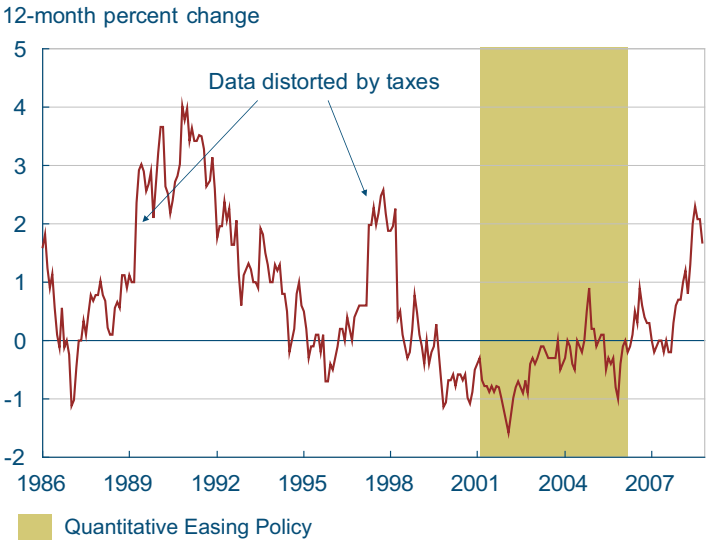
The Federal Open Market Committee has lowered its federal funds rate target 4.5 percentage points since August 2007. It is now at 1 percent, and financial markets expect a further substantial cut. The United States has entered a recession, and the outlook for next year seems so somber that some economists are asking if deflation—a drop in overall prices—is not a distinct possibility.

Very low interest rates and deflation are a precarious combination. At zero interest rates, open market operations are less effective than under normal circumstances because reserves and short–term Treasury bills are near perfect substitutes on banks' balance sheets. As a result, open market operations, which substitute reserves for Treasury bills, may not spur bank lending. In addition, declining prices discourage consumption and investment spending, especially when interest rates approach zero.

Japan underwent a decade–long odyssey with deflation and the zero–bound problem. The Bank of Japan's experience during this period offers a guide for getting back to more familiar economic turf.

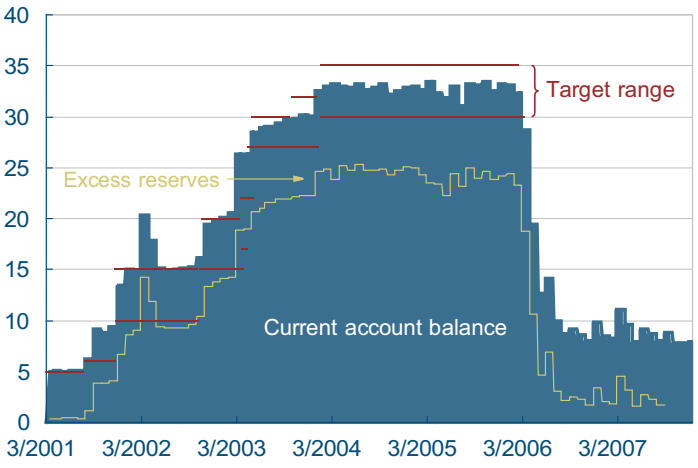
Economic activity in Japan slowed precipitously following the collapse of the so–called bubble economy in December 1989, and Japan began to expe-

Japanese Inflation



Source: International Monetary Fund, *International Finance Statistics Database*, October 2008.

Quantitative Easing



Source: Bank of Japan.

rience deflation by early 1995. During this initial period, while the economy was slowing, forecasters and policymakers consistently underestimated the extent of Japan's economic malaise. Consequently, while monetary policy seemed appropriate in terms of the prevailing outlook, the loosening proved woefully inadequate in hindsight.

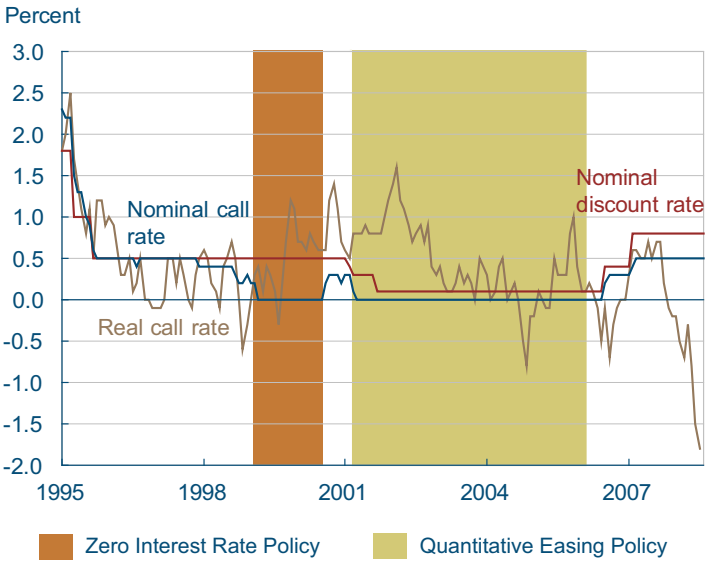
After a series of fairly ineffectual policy actions, the Bank of Japan undertook its famous quantitative easing policy from March 19, 2001, to March 9, 2006. Under this policy, the Bank shifted its day–to–day operating target from the overnight, call–money rate to the level of current–account balances (reserves) at banks. Over the five years that the program was in place, the Bank of Japan raised its current–account target nine times. In implementing the quantitative easing policy, the Bank of Japan also increased its outright purchases of longer-dated Japanese government securities. The objective was to flood banks with excess reserves, which, of course, would keep the call-money rate at zero.

The Bank's previous policy, maintained between February 1999 and August 2000, had been a zero interest rate policy, but the Bank had supplied only enough reserves to keep the call–money rate at zero. Hence, the quantitative easing was a more profound and visible policy shift.

When it introduced the quantitative easing policy, the Bank of Japan also promised to maintain the policy until the core CPI either reached zero or rose on a year–over–year basis for several months. This inflation target was stronger than the Bank's zero interest rate policy, which only promised to maintain zero interest rates until the economy showed signs of recovery. Since inflation lagged economic activity and since the Bank had a history of being hawkish on inflation, the zero interest rate policy was not a strong commitment to a positive inflation rate. In contrast, the new commitment required clear evidence that deflation had ended.

Analytically, the quantitative easing policy consisted of three distinct parts: a commitment to maintain zero interest rates until deflation clearly ended; a significant increase in the Bank of Japan's balance sheet; and a change in the composition of the Bank's balance sheet. Generally, empirical analysis

Japanese Policy Rates



Source: International Monetary Fund, *International Finance Statistics Database*, October 2008.

seems to suggest that the quantitative easing policy lowered the term structure of government securities by increasing expectations that future short–term interest rates would remain near zero, but not by affecting term premia on government securities or risk premia on other assets. In addition, the quantitative easing policy eventually helped banks—and firms that depended on them for financing—by indicating that the Bank of Japan would continue to provide liquidity. This reduced uncertainty about future funding.

The connection between the quantitative easing policy and the macroeconomic recovery remains somewhat more flimsy. Most observers believe that because the quantitative easing policy aided the banking sector, economic activity at least did not deteriorate further. The pace of economic activity did pick up, with contributions from consumer spending and investment, but exports, which benefited from growth among Japan's trading partners, spurred much of the improvement. Although deflation ended in 2006, along with the quantitative easing policy, it returned after a very short hiatus in 2007, and continued until the recent commodity price boom.

The Japanese experience suggests that when inflation and short–term interest rates approach zero, central banks should act aggressively, giving greater than normal weight to downside risks. Moreover, they should commit to an inflation target and clearly explain their actions in terms of that target.

To read more on the empirical analyses of Japan's quantitative easing policy:

http://www.boj.or.jp/en/type/ronbun/ron/wps/data/wp06e10.pdf

Economic Activity

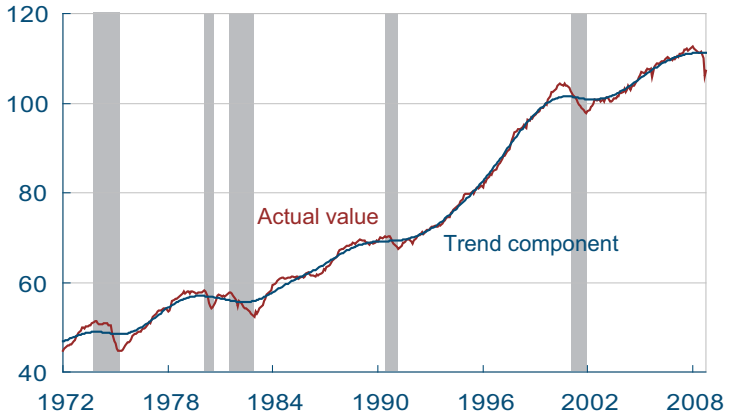
Industrial Production, Commodity Prices, and the Baltic Dry Index

11.28.08
by Beth Mowry and Andrea Pescatori

Industrial production rebounded in October, rising 1.26 percent after declining a downwardly revised 3.7 percent in September. The revision to September output was caused, in part, by a larger–than–anticipated estimate of the impact of hurricanes

Industrial Production and Its Trend Component

Index, 2002=100

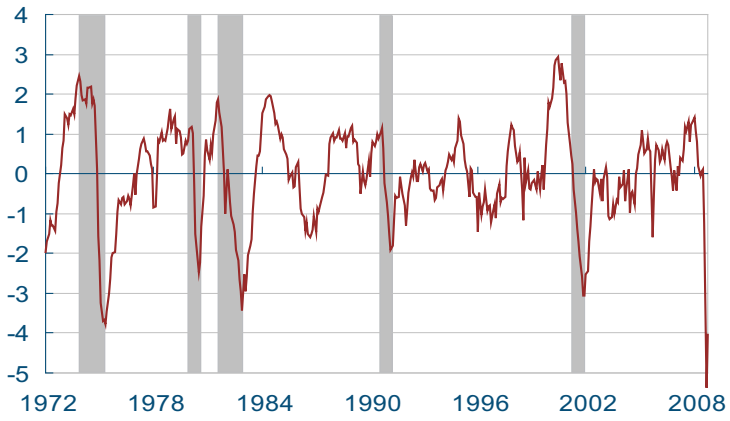


Notes: Data are seasonally adjusted. The trend component was constructed with the Hodrick-Prescott filter.

Source: Federal Reserve Board/Haver Analytics.

Industrial Production, Cyclical Component

Percent change

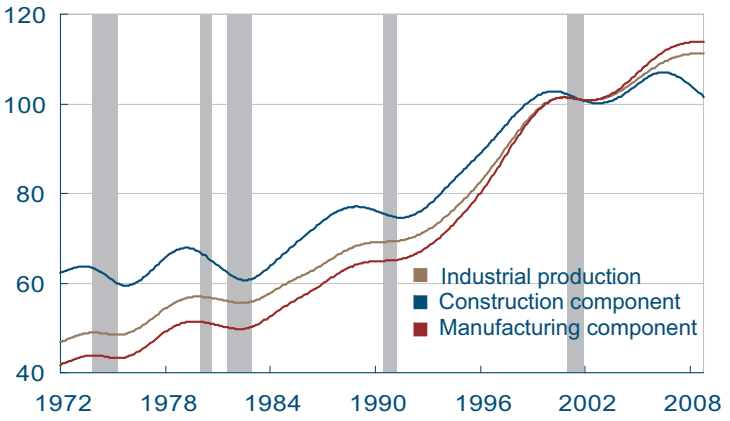


Note: Data are seasonally adjusted.

Source: Federal Reserve Board/ Haver Analytics.

Industrial Production Trends

Index, 2002=100



Notes: Data are seasonally adjusted. The trend components were constructed with the Hodrick-Prescott filter.

Source: Federal Reserve Board/Haver Analytics.

Gustav and Ike on the chemical industry. The September drop resulted in the largest month–over–month percent decline in the series since February 1946.

Splitting the series into its cyclical and trend components, we notice two things about the behavior of industrial production (IP). First, the trough currently observed in the cyclical component is of a similar magnitude to that of the 1973–74 recession. Second, since the 1970s, the trend in IP has been lagging the dates of recessions: The trough in the trend is reached at the very end of recessions. (A caveat: The filter used to construct the trend might have introduced an artificial phase shift on the order of 2–4 months for the most recent data.)

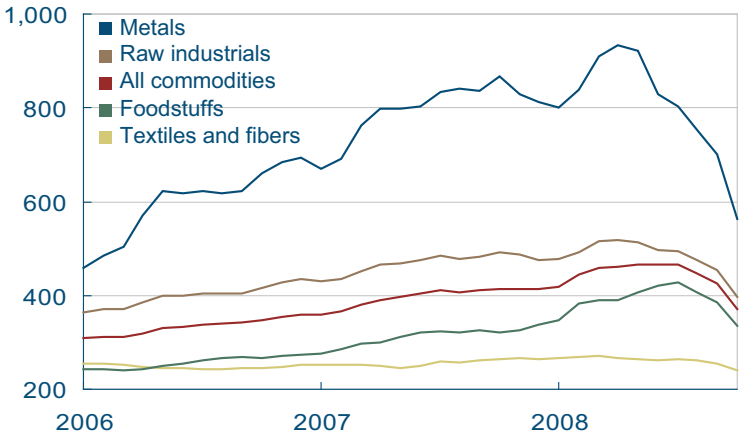
Industrial production reached its peak in January 2008, with an index reading of 112.6. It has since fallen about 4.7 percent to 107.3. It is worth noting that the 1974 and 2001 recessions were each preceded by an exceptional increase in IP and then followed by a trough. The current situation seems more similar to the 1980-81 scenario, when IP did not surge before turning downward.

Industrial production can also be divided by major market and industry groups. Market groups include, for example, final products, nonindustrial supplies, and materials. Construction lies within the nonindustrial supplies group. It is interesting to note that, while more volatile, the IP–construction series was well-synchronized with the total IP series up until recently. This seems to have changed now, as the trend in construction production is leading the decline in total IP, confirming the fact that the current decline in economic conditions started in the housing sector.

The manufacturing sector is the most important component of industrial production in most countries, emerging countries included. Its definition excludes construction and comprises "establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products." The inputs used and transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments.

Spot Commodity Price Indexes

1967=100

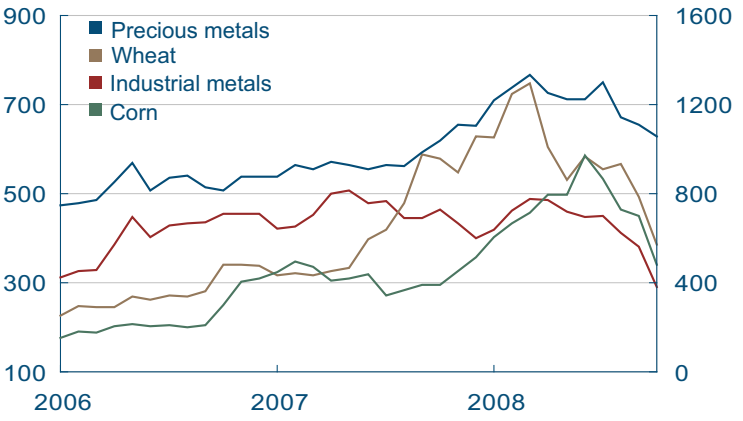


Notes: The Commodity Research Bureau's spot index is an unweighted geometric mean of the individual commodity price relatives, i.e., of the ratios of the current prices to the base period prices. The advantage of using the geometric mean is that the index is not dominated by extreme price movements of individual commodities.

Source: Commodity Research Bureau/Haver Analytics.

Spot Commodity Price Indexes

Reference year=100[a]

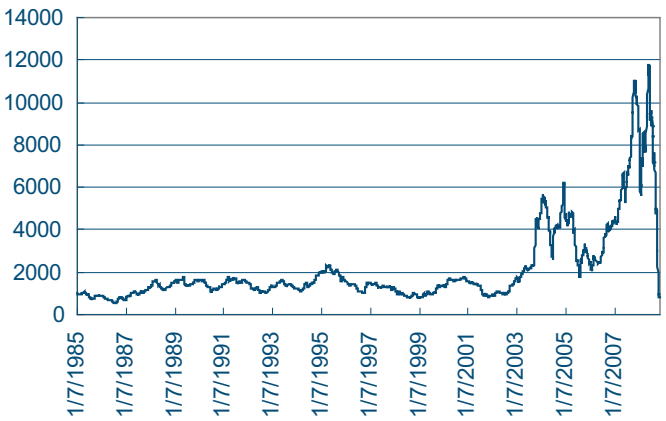


a. The reference years for each commodity are different. For industrial metals, 1970=100; for precious metals, January 2, 1973=100; for wheat and corn, Decemeber 31, 1969=100. Indexes represent monthly average prices.

Source: Standard & Poor's.

Baltic Dry Index

January 1985=1000



Those materials are usually purchased directly from producers or obtained through customary trade channels. Consequently, most of the commodities traded throughout the world are (directly or indirectly) the main input materials of the manufacturing sector.

The fact that those commodities have a worldwide market means that their prices are a good barometer for economic activity around the world, and, when those prices are available at a high frequency, they can be used as an indicator of future economic conditions. Recent data on commodity prices confirm that the slowdown in industrial production is a worldwide phenomenon.

The overall spot commodity price index (published by the Commodity Research Bureau) peaked between May and July 2008 and has greatly retreated since then. That index is clearly strongly affected by oil prices, which peaked in the first half of July. West Texas Intermediate (WTI) oil sold for more than $145 per barrel until July 14. However, other commodities peaked earlier than that. For example, metals peaked around April and May 2008, textiles and fibers peaked in March (although the steep decline in this index did not begin until after July), raw industrials peaked between March and May, and foodstuffs peaked in July. The industrial and precious metals spot indexes (published by Standard and Poor's) peaked in March, while wheat and corn peaked in March and June, respectively.

Another indicator that is supposed to be a relatively accurate barometer of global trade volume and, in turn, global production, is the Baltic dry index. It is issued daily by the London–based Baltic exchange and is considered useful in part because it contains no speculative content. World economic activity is the most important determinant of the demand for transport service, and the Baltic dry index, loosely speaking, provides an assessment of the price of moving major raw materials by sea.

This "price" reflects the demand for shipping capacity with respect to the supply of dry bulk carriers, which is inelastic in the short run. Hence, the index indirectly measures global demand for the commodities shipped aboard dry bulk carriers, such as building materials, coal, crude oil, metallic ores,

and grains. These materials function as raw material inputs to the production of intermediate or finished goods, such as concrete, electricity, steel, and food, which makes the index an economic indicator of future manufacturing activity and, more generally, worldwide industrial output.

The Baltic index, after skyrocketing to almost 12,000 in mid–November 2008, now sits around 840 (about a 93 percent drop!). Part of the run-up reflected oil–price patterns, given that bunker fuel is a significant part of shipping costs. However, bunker fuel prices can explain only a small fraction of the Baltic index's volatility. Moreover, WTI oil prices were still above $146 on July 14, while the index was already receding from its peak. In fact, it peaked back in May (on a daily basis it peaked June 5 at 11,689) and by the beginning of July was already below 9000 (a 25 percent decline).

All in all, data on commodity prices and freight rates suggest that world industrial production (or economic activity) was still exceptionally buoyant during the winter of 2007. Furthermore, world production was not perfectly synchronized with U.S. industrial production, which saw its turning point in January 2008. This created a situation resembling the 1970s, where producer prices were skyrocketing due to increasing commodity prices, while industrial production was stagnating. However, unlike the 1970s, the initial shock behind the current slowdown (stemming from the financial industry and the housing market) has restrained the ability to lend, an effect more similar to the one caused by the disinflation shock engineered by Fed Chairman Volcker in the early 1980s. This effect, coupled with a better management of inflation expectations by central banks, has avoided a persistent world rise in inflation together with the downturn.

Hence, the lack of perfect business cycle synchronization, especially between developed and emerging economies (which, like China, now represent a large share of the world manufacturing sector), contributed to the spectacular rise in commodity prices up until the summer of 2008. However, this clearly could not last for long. The spillover from credit markets and the drop in U.S. imports had already hit world industrial production by the spring

of 2008 (as reflected in some commodity prices and especially in freight rates). This also suggests that the high oil prices were not the outcome of pure speculation but were reflecting demand pressure originating in the manufacturing sector; at most, we can say that it took it a little bit too long before oil prices started to decrease.

Economic Activity

GDP: Third–Quarter Preliminary Estimate

12.02.08
by Brent Meyer

Real GDP and Components, 2008:Q3 Preliminary Estimate

	Quarterly change (billions of 2000$)	Annualized percent change, last: Quarter	Four quarters
Real GDP	−15.1	−0.5	0.7
Personal consumption	−79.2	−3.7	0.2
Durables	−49.5	−15.2	−5.7
Nondurables	−42.9	−6.9	−0.9
Services	0.1	0.0	1.1
Business fixed investment	−5.3	−1.5	1.7
Equipment	−15.5	−5.6	−2.6
Structures	5.5	6.6	10.5
Residential investment	−17.5	−17.6	−20.9
Government spending	27.0	5.3	3.0
National defense	22.4	18.1	7.7
Net exports	29.0	—	—
Exports	13.1	3.4	6.2
Imports	−15.8	−3.2	-3.4
Private inventories	−29.1	—	—

Source: Bureau of Labor Statistics.

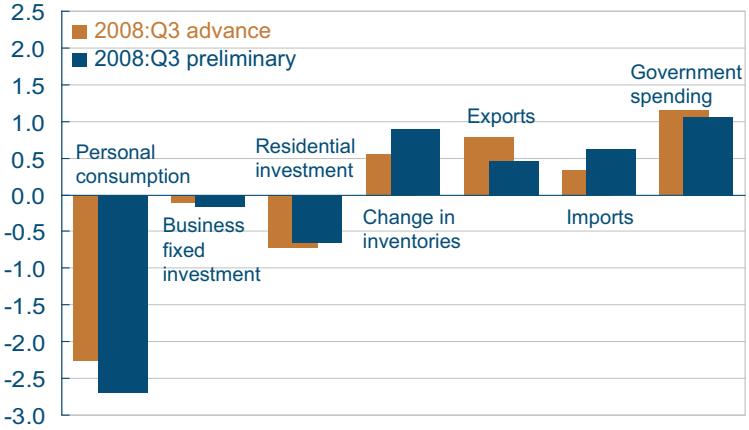
Third–quarter real GDP was revised down 0.2 percentage point, to –0.5 percent, according to the preliminary estimate released by the Bureau of Economic Analysis. The downward revision, which was largely anticipated, reflected downward adjustments to personal consumption and exports, which were somewhat offset by an upward adjustment to inventories, and a downward revision to imports (which subtracts from real GDP). Personal consumption was revised down from –3.1 percent (annualized rate) to –3.7 percent—its largest decrease since the second quarter of 1980. Real export growth was adjusted down to 3.4 percent from the 5.9 percent of the advance release. Also, imports are now reported as decreasing at an annualized rate of 3.2 percent, as opposed to –1.9 percent before. Residential investment in the third quarter was revised up from –19.1 percent to –17.6 percent, a slight improvement over its four–quarter growth rate and a somewhat welcome development given the current status of the housing sector.

According to the preliminary estimate for the third quarter, personal consumption expenditures subtracted 2.7 percentage points from real GDP growth, whereas in the four quarters prior, they had added an average 0.9 percentage point. The real change in private inventories added 0.9 percentage point to growth, up 0.2 percentage point from the advance release. Also, the contribution to growth from exports decreased, but was offset by a gain from imports.

The most recent economic indicators indicate

Contribution to Percent Change in Real GDP

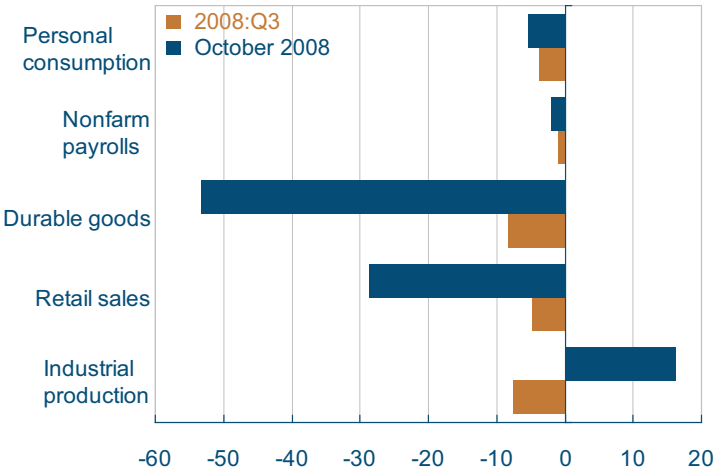
Percentage points



Source: Bureau of Economic Analysis

Recent Economic Indicators

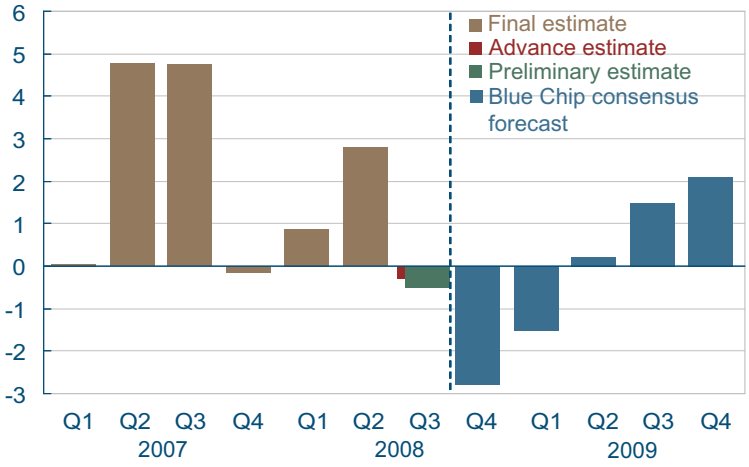
Annualized percent change



Source: Bureau of Economic Analysis

Real GDP Growth

Annualized quarterly percent change



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

further weakness moving forward. Most notably, durable goods decreased at an annualized rate of 53.3 percent in October, compared to an 8.3 percent decline in the third quarter. Also, retail sales fell 28.6 percent (annualized rate) in October, much further than the 4.8 percent decrease seen in the third quarter. Industrial production increased 16.3 percent (annualized rate) in October, following a 36.8 percent decrease in September. However, much of the headline volatility in this series during September and October was due to "hurricane–related disruptions, which are now estimated to have been larger than previously reported," according to the Federal Reserve. In fact, "excluding [the effects from the hurricanes], total industrial production is estimated to have fallen around 0.7 percent (nonannualized) in both September and October."

The forecast from the Blue Chip panel continues to deteriorate. The consensus estimate is now for year–over–year growth of –0.4 percent in 2009, compared to 0.5 percent in the October forecast. Perhaps more indicative of how gloomy the outlook has become is that the Blue Chip optimists (the average of the top–ten forecasts) are now expecting the economy to eke out a growth rate of only 0.3 percent in 2009.

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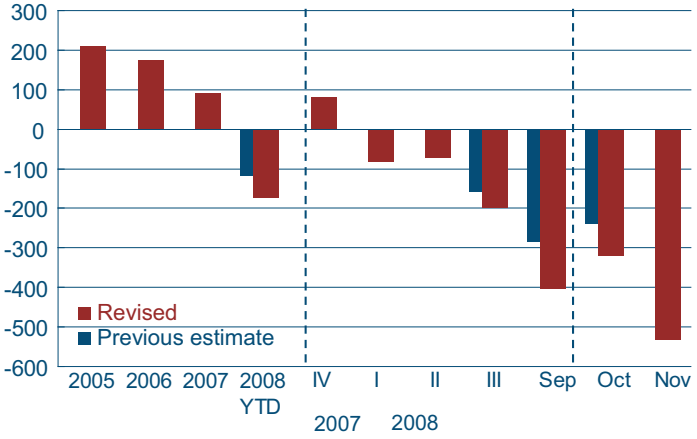
The Employment Situation, November 2008

Average Nonfarm Employment Change

Change, thousands of jobs



Source: Bureau of Labor Statistics.

12.05.08
by Murat Tasci and Beth Mowry

November employment fell by 533,000 in the largest one-month drop since December 1974, coming in far worse than expectations. Additionally, payrolls in September and October were revised down to losses of 403,000 and 320,000, respectively. Since the start of the recession in December 2007, job losses in the United States have totaled about 1.9 million, roughly 1.3 million of which have come in just the past three months. The unemployment rate also continued its upward path, increasing 20 basis points to 6.7 percent, the highest rate seen since September 1993.

The diffusion index of employment change also sank from 37.8 to an unprecedented low of 27.6, meaning that only 27.6 percent of employers are hiring, while the remaining 72.4 percent are cutting jobs.

Job losses were across the board, with the only major areas posting any sort of gain being education and health services (+52,000) and government (+7,000). Goods-producing industries lost a total of 163,000 jobs, and this was spread evenly between construction (–82,000) and manufacturing (–85,000). Within manufacturing, the durable goods category shed almost triple the number of jobs that nondurables shed.

Service-providing industries dropped a massive 370,000 jobs in November, after experiencing downwardly revised losses of 286,000 and 183,000 in September and October. The only other time since the series began in 1939 that service industries lost more jobs was in August 1983. The retail trade sector lost 91,300 jobs, a large part stemming from auto dealers (–24,000). Declines in leisure and hospitality totaled 76,000, and information services lost 19,000. Professional and business services and financial activities each saw record losses (–136,000 and –32,000, respectively). Within professional and business services, the employment services sector

Labor Market Conditions

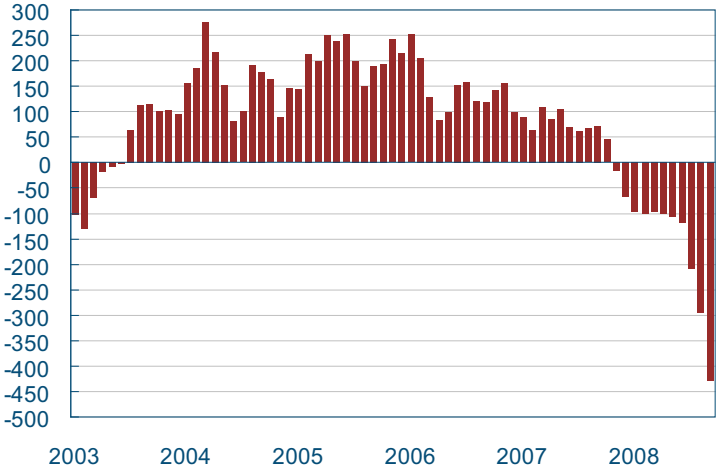
alone lost 100,000 jobs.

	Average monthly change (thousands of employees, NAICS)				
	2005	2006	2007	2008 YTD	November 2008
Payroll employment	211	175	91	−174	−533
Goods-producing	32	3	−38	−96	−163
Construction	35	13	−19	−47	−82
Heavy and civil engineering	4	3	−1	−7	−12
Residential[a]	11	−2	−20	−27	−35.7
Nonresidential[b]	4	7	1	−13	−33.8
Manufacturing	−7	−14	−22	−55	−85
Durable goods	2	−4	−16	−41	−62
Nondurable goods	−8	−10	−6	−14	−23
Service-providing	179	172	130	−78	−370
Retail trade	19	5	6	−40	−91.3
Financial activities[c]	14	9	−9	−13	−32
PBS[d]	56	46	26	−49	−136
Temporary help svcs.	17	1	−7	−36	−78.2
Education and health svcs.	36	39	44	46	52
Leisure and hospitality	23	32	29	−14	−76
Government	14	16	21	19	7
Local educational svcs.	6	6	5	4	−4.2
	Average for period (percent)				
Civilian unemployment rate	5.1	4.6	4.6	5.6	6.7

a. Includes construction of residential buildings and residential specialty trade contractors.
b. Includes construction of nonresidential buildings and nonresidential specialty trade contractors.
c. Includes the finance, insurance, and real estate sector and the rental and leasing sector.
d. PBS is professional business services (professional, scientific, and technical services, management of companies and enterprises, administrative and support, and waste management and remediation services.
Source: Bureau of Labor Statistics.

Private Sector Employment Growth

Change, thousands of jobs: three-month moving average



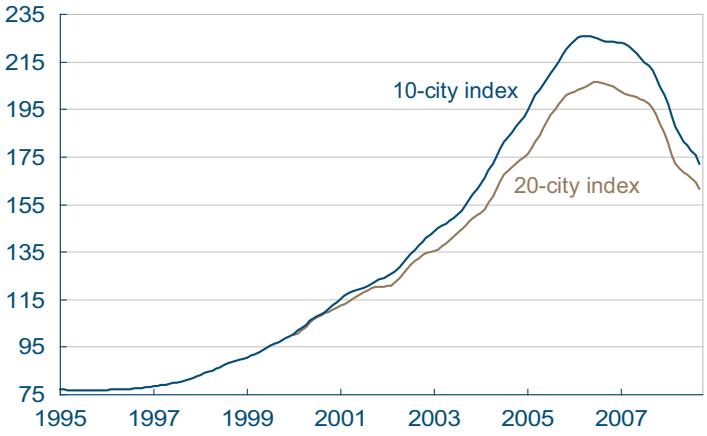
Source: Bureau of Labor Statistics.

The three-month moving average of private sector employment growth dropped all the way from −295,000 to −429,000 last month. Private payrolls have seen losses in every month since December 2007, while government payrolls have declined in only one month during that same period.

Metro-Area Differences in House Price Indexes

Case-Shiller Composite Home Price Indexes

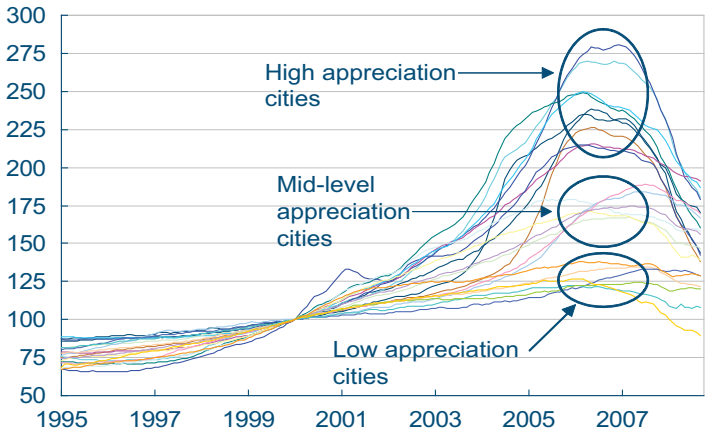
Index, January 2000 = 100



Source: S&P, Fiserv, and MacroMarkets LLC.

Case-Shiller Individual City Home Price Indexes

Index, January 2000 = 100



Source: S&P, Fiserv, and MacroMarkets LLC.

12.11.08
Michael Shenk

Home price indexes have been providing homeowners with nothing but bad news for the better part of two years now. On the last Tuesday of every month, when the monthly S&P/Case-Shiller housing price indexes are released, newspapers fill up with dour headlines about another new record drop in home prices. While these headlines may be factually correct, it's important to realize that the numbers being quoted are almost always the composite figures. Since real estate markets are local, national or composite figures should have only limited meaning to homeowners concerned about their home's value.

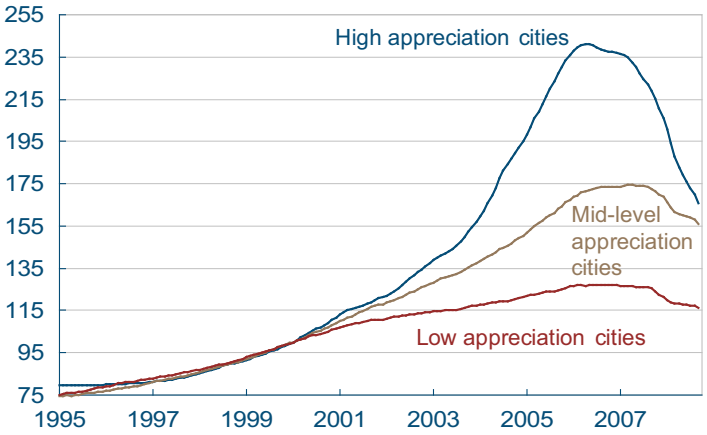
As the picture below shows, home price appreciation patterns vary tremendously by metro area. Cities like Miami, Los Angeles, San Diego, and Washington, D.C. all saw tremendous growth in home prices during the boom and have all subsequently seen massive declines in values. On the other hand, cities like Denver and Charlotte saw little to no unusual home price appreciation during the boom and have seen home prices decline only modestly during the bust. For simplicity's sake, the 20 metro areas that the S&P/Case–Shiller indexes measure can be arranged into three groups of similar appreciation rates: high–appreciation cities, mid–appreciation cities and low–appreciation cities.

These aggregates are not weighted in any way, so what they are actually showing is the average index value in the cities included. This information, while still an aggregate measure, is potentially more useful to homeowners living in a city that is not directly measured by the indexes. These measures show pretty clearly that the size of the decline in home prices in a given metro area is directly related to the size of the run up in prices during the boom.

Another factor that the aggregate home price indexes tend to hide is that not all homes in a metro area experience the same price patterns. Homes in

Case-Shiller Home Price Indexes Grouped by Appreciation Level

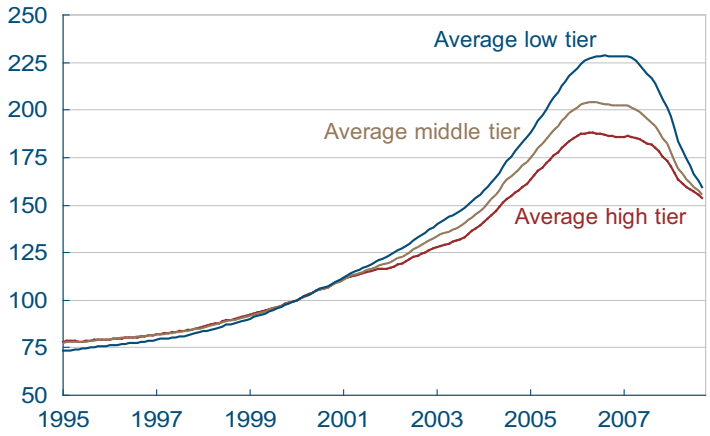
Index, January 2000 = 100



Source: S&P, Fiserv, and MacroMarkets LLC.

Case-Shiller Tiered Home Price Indexes

Index, January 2000 = 100



Source: S&P, Fiserv, and MacroMarkets LLC.

Change in Home Prices

12-month percent change as of September 2008

City	Low Tier	Middle Tier	High Tier	Aggregate
Atlanta	-13.78	-10.12	-8.62	-9.47
Boston	-12.10	-8.36	-3.22	-5.71
Chicago	-13.80	-10.73	-8.82	-10.08
Cleveland	-13.63	-7.73	-5.29	-6.37
Denver	-6.80	-4.79	-5.41	-5.40
Las Vegas	-37.42	-30.10	-29.81	-31.33
Los Angeles	-39.07	-29.45	-19.99	-27.57
Miami	-39.73	-30.57	-25.44	-28.40
Minneapolis	-19.15	-14.33	-13.13	-14.43
New York	-10.36	-8.11	-5.73	-7.29
Phoenix	-38.97	-30.99	-29.91	-31.90
Portland	-6.27	-8.29	-9.59	-8.62
San Diego	-33.35	-25.43	-17.98	-26.34
San Francisco	-43.16	-27.26	-14.39	-29.51
Seattle	-10.52	-10.22	-9.20	-9.82
Tampa	-25.85	-20.04	-16.66	-18.51
Washington DC	-29.35	-21.22	-11.69	-17.16
Largest Decline		Middle Decline		Smallest Decline

Source: S&P, Fiserv, and MacroMarkets LLC.

different price ranges have different demand and supply curves and, as a result, appreciate and depreciate in different ways. A significant portion of the housing boom was driven by a loosening in lending standards, which one might expect to disproportionately affect lower–priced homes. When credit standards loosen, a whole new group of people who previously were unable to afford homes are suddenly capable of buying a home. The majority of the people in this group are naturally going to demand lower-priced homes. All else equal, the increase in demand is going to push prices for these types of homes upward. Mid– and high–priced homes are affected by these developments, too. More readily available credit may mean that a person previously able to afford only a low-priced home can now afford a mid–priced home. In addition, the increase in home prices creates positive feedback such that people who already owned homes are now able to sell their homes at higher prices and buy a more expensive home.

Again creating some unweighted aggregates gives a better view of how homes in specific price tiers have changed in value. S&P breaks the Case–Shiller metro area indexes down into price tiers. Each price tier is unique to a specific area, meaning that the maximum value of low-tier homes in Cleveland is different than that of low–tier homes in Miami. Each tier in each metro area represents one–third of the sales in a given period that are used to formulate an area's overall index. The averages shown below ignore the differences in price level between metro areas and instead show the average index value of the respective price tiers across metros. The least expensive third of homes clearly has the largest appreciation and subsequent depreciation in value, while the most expensive third of homes has seen the smallest run up and decline in home prices. This pattern holds true in all but two of the 17 metro areas that the index breaks down into tiers.

What does all this mean to homeowners wondering what their home is worth? Not as much they might like. Ultimately, the value of a home is what a buyer is willing to pay for it, and that is determined by the individual characteristics of a home as well as many economic factors. But in the absence of a pending offer, these different breakdowns of the

data provide some insight into how home prices in different areas and different price tiers have behaved on average. Given the data, it seems safe to assume that those homes that experienced the largest price increases during the boom have likely given a great deal, if not all of that gain back. Homes whose prices held pretty steady during the good times likely have experienced only modest declines to date.

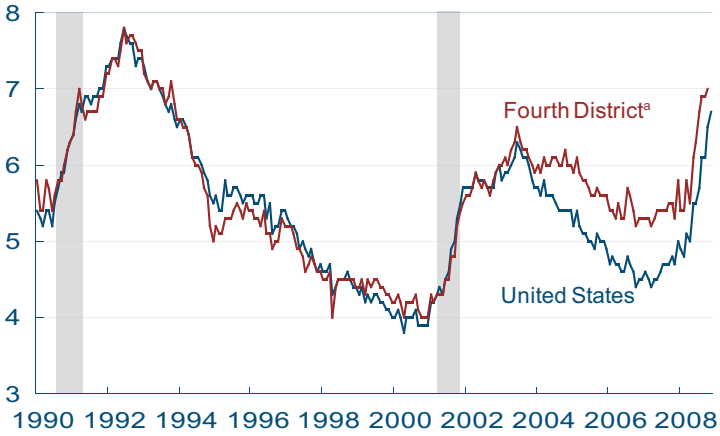
Regional Activity

Fourth District Employment Conditions, October 2008

12.11.08
Kyle Fee

Unemployment Rates

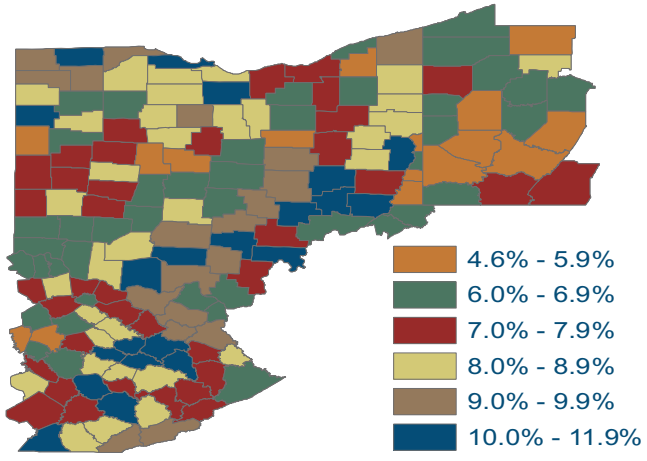
Percent



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

County Unemployment Rates

U.S. unemployment rate = 6.5%



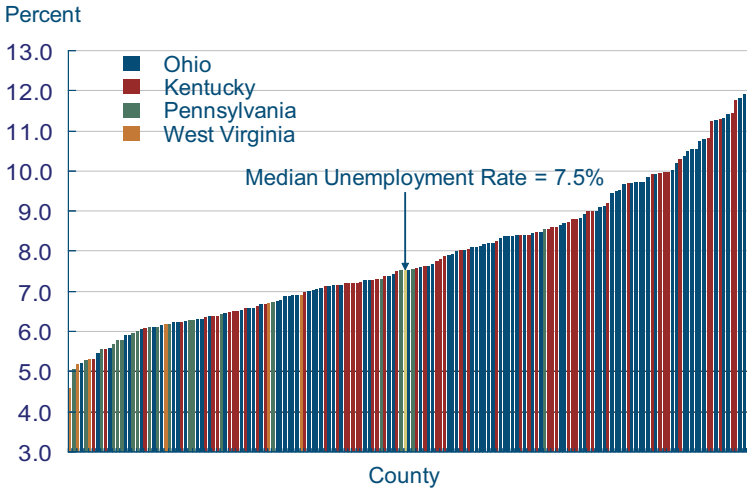
Note: Data are seasonally adjusted using the Census Bureau's X-11 procedure.
Sources: U.S. Department of Labor, Bureau of Labor Statistics.

The District's unemployment rate rose 0.1 percent, reaching 7.0 percent in October. The increase in the unemployment rate is attributed to increases in the number of people unemployed (2.2 percent) and a decrease in the number of people employed (–0.2 percent). The District's rate was again higher than the nation's (by 0.5 percentage point), as it has been since early 2004. Since this time last year, the District's unemployment rate has increased 1.5 percentage points, and the nation's has increased 1.7 percentage points.

There are considerable differences in unemployment rates across counties in the Fourth District. Of the 169 counties that make up the District, 42 had an unemployment rate below the national average in October, and 127 had a higher one. District counties reporting double–digit unemployment rates numbered 19, while only 1 county had an unemployment rate below 5.0 percent. Rural Appalachian counties continue to experience higher levels of unemployment, and those counties along the Ohio–Michigan border have begun to see more elevated rates of unemployment.

The distribution of unemployment rates across Fourth District counties ranges from 4.6 percent to 11.9 percent, with a median county unemployment rate of 7.5 percent. Counties in Fourth District West Virginia and Pennsylvania populate the lower half of the distribution, while 55 percent of Fourth District Kentucky counties and 60 percent of Ohio's counties are in the upper half of the distri-

County Unemployment Rates



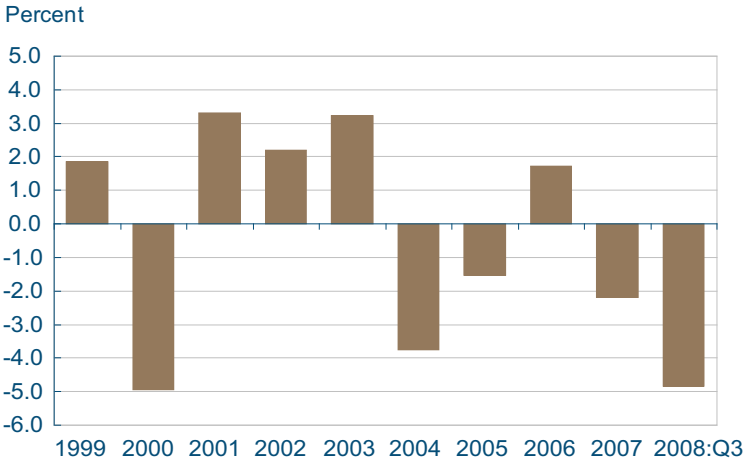
Note: Data are seasonally adjusted using the Census Bureau's X-11 procedure.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

bution. These county–level patterns are reflected in statewide unemployment rates. The states of Ohio and Kentucky have unemployment rates of 7.3 and 6.8 percent, respectively, compared to Pennsylvania's 5.8 percent and West Virginia's 4.7 percent.

Banking and Financial Institutions

Fourth District Community Banks

Annual Asset Growth



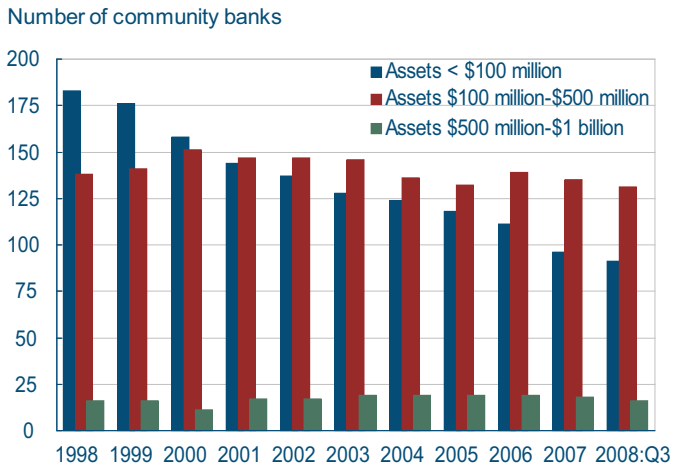
Note: 2008:Q1, 2008:Q2 and 2008:Q3 growth rates are annualized year-to-date asset growth. For other years, Q4/Q4 growth rates are used.
Source: Author's calculation from Federal Financial Institutions Examination Council, Quarterly Banking Reports of Condition and Income.

12.11.08
by Joseph G. Haubrich, Kent Cherny, and Saeed Zaman

Most of the 262 banks headquartered in the Fourth Federal Reserve District as of September 30, 2008, are community banks—commercial banks with less than $1 billion in total assets. There are 238 such banks headquartered in the District, a number that, as a result of bank mergers, has declined since 1998, when there were 337.

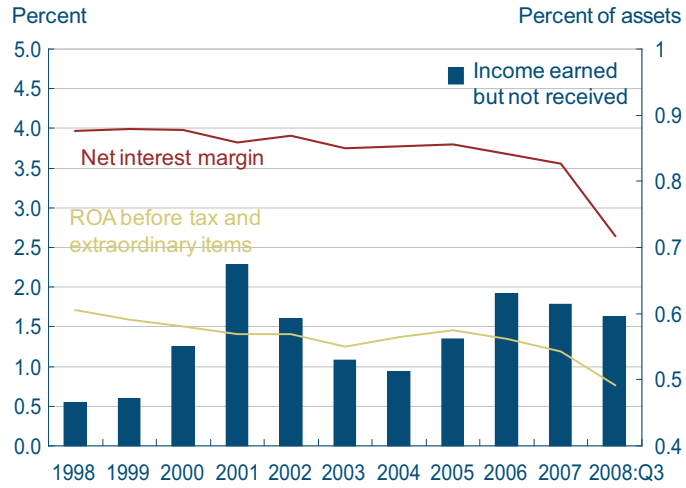
Total asset growth for Fourth District community banks decreased 4.84 percent (annualized rate) in the third quarter, but this rate has fluctuated quite a bit in the last few years. These fluctuations do not necessarily reflect falling asset values, though this may partially be the case given the recessionary environment of the last four quarters. Another possibility for the decrease in asset growth is that some banks are merging with other Fourth District banks in a way that pushes their assets above $1 billion, and therefore out of our "community bank" sample. A bank's assets may also be bought and transferred to a bank holding company in another state, which would again remove them from our sample.

Fourth District Community Banks by Asset Size



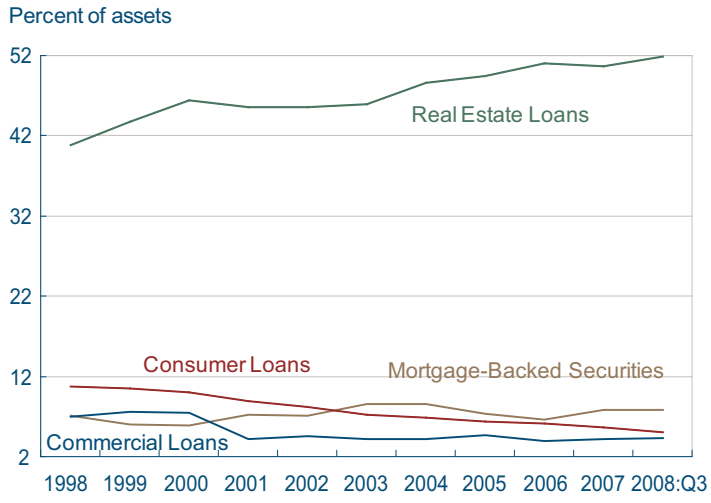
Source: Author's calculation from Federal Financial Institutions Examination Council, Quarterly Banking Reports of Condition and Income.

Income Stream



Source: Author's calculation from Federal Financial Institutions Examination Council, Quarterly Banking Reports of Condition and Income.

Balance Sheet Composition



Source: Author's calculation from Federal Financial Institutions Examination Council, Quarterly Banking Reports of Condition and Income.

The structure of the market with respect to bank size has changed since 2000. Back then the majority of the community banks in the district had less than $100 million in total assets. Since then, banks in the mid–size category ($100 million to $500 million) have constituted the majority.

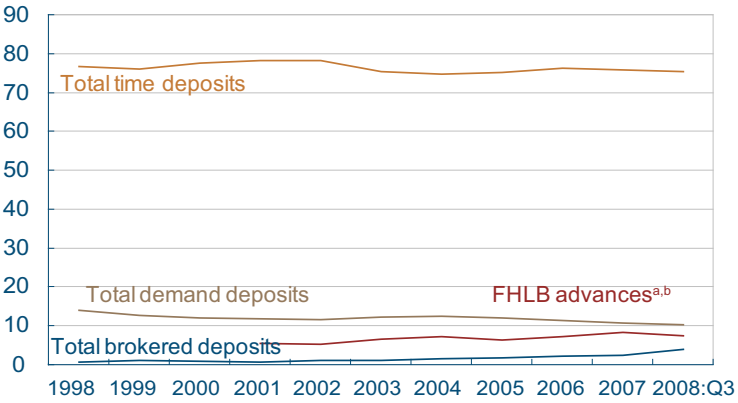
The income stream of Fourth District community banks has deteriorated slightly in recent years. The return on assets (ROA) fell from 1.7 percent in 1998 to 0.76 percent in the third quarter of this year. (ROA is measured by income before tax and extraordinary items, because one bank's extraordinary items can distort the averages in some years.) The decline is due in part to weakening net interest margins (interest income minus interest expense divided by earning assets). Currently at 2.65 percent, the net interest margin for Fourth District community banks is at its lowest level in over a decade, as the deposit interest rate market remains competitive and the prime rate stays low.

One possible cause of concern for Fourth District community banks is their level of income earned but not received, which currently stands at 0.59 percent of assets. If a loan agreement allows a borrower to pay an amount that does not cover the interest accrued on the loan, the uncollected interest is booked as income even though there is no cash inflow. The assumption is that the unpaid interest will eventually be paid before the loan matures. However, if an economic slowdown or other some other factor forces an unusually large number of borrowers to default on their loans, the bank's capital may be impaired. Income earned but not received has been elevated since 2006, but it has not reached the level seen following the 2001 recession, though it could again approach that level depending on the severity of the current economic downturn.

Real estate lending continues to be the primary focus of community banks in the Fourth District. When mortgage-backed securities are included, 59.7 percent of bank assets are tied to real estate. Consumer and commercial loans (as a percentage of assets) have been declining and flat, respectively, over the last few years and account for 9.3 percent of assets. Our last report on Fourth District bank

Liabilities

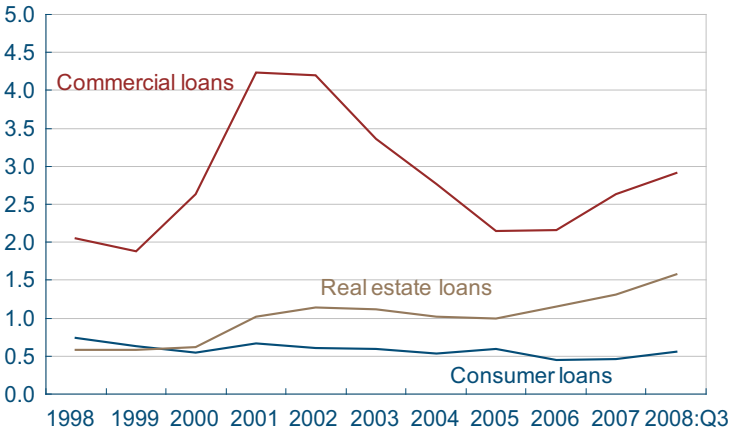
Percent of liabilities



a. Federal Home Loan Bank Advances.
b. Data starts in 2001
Source: Author's calculation from Federal Financial Institutions Examination Council, Quarterly Banking Reports of Condition and Income.

Problem Loans

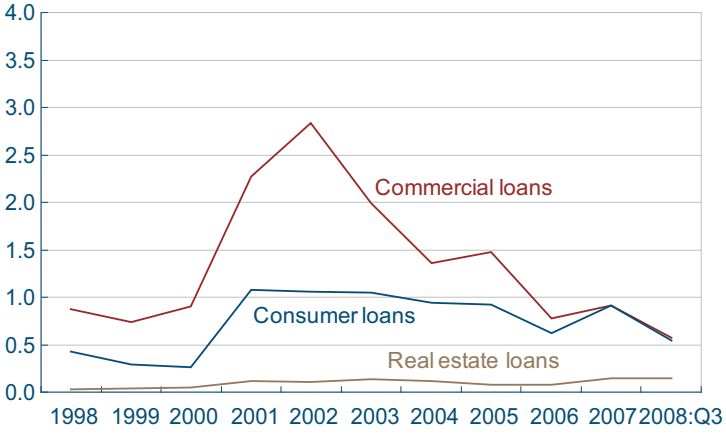
Percent of loans



Source: Author's calculation from Federal Financial Institutions Examination Council, Quarterly Banking Reports of Condition and Income.

Net Charge-Offs

Percent of loans



Source: Author's calculation from Federal Financial Institutions Examination Council, Quarterly Banking Reports of Condition and Income.

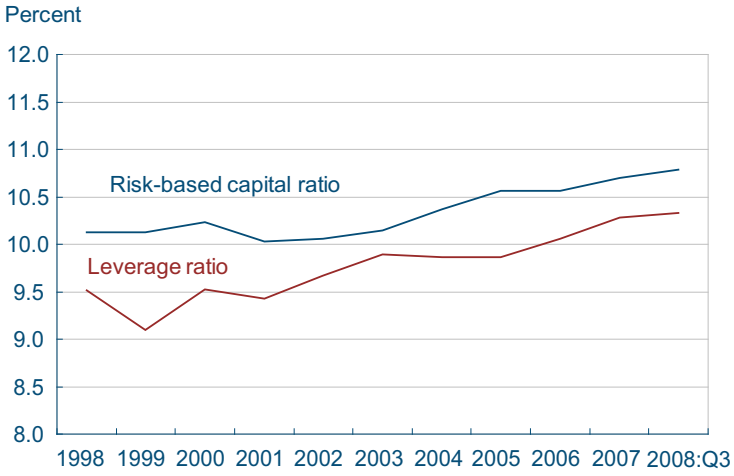
holding companies showed that BHC asset portfolios contain slightly different allocations. Although both types of bank predominantly hold real estate loans, community banks focus more heavily on them, while consumer and commercial loans account for a large share—25 to 30 percent—of regional bank holding companies' balance sheets.

Fourth District community banks consistently finance their assets primarily through time deposits (about 75 percent of total liabilities). Brokered deposits, which are a riskier type of deposit for banks because they chase higher yields and are not a dependable source of funding, are used less frequently. Federal Home Loan Bank (FHLB) advances are loans from the FHLBs that are collateralized by the bank's small business loans and home mortgages. Although they have gained some popularity in recent years, FHLB advances are still a small fraction of community banksâ€™ liabilities (7.5 percent of total liabilities) and remain an important source of backup liquidity for most Fourth District community financial institutions.

Problem loans are those that are more than 90 days past due, as well as those no longer accruing interest. Problem commercial loans rose sharply in 2001, returned to their 1998–2000 levels in 2005–2006, and have again begun increasing in the last two years. Currently, 2.91 percent of all commercial loans are problem loans. About 1.58 percent of all outstanding real estate-related loans are 90 days or more past due, which is the highest level in more than a decade. The trend in problem real estate loans lately has mirrored that of housing prices nationwide. Problem consumer loans (credit cards, installment loans, etc.) have increased 0.10 percent from 2007 levels, and currently account for 0.56 percent of consumer loans.

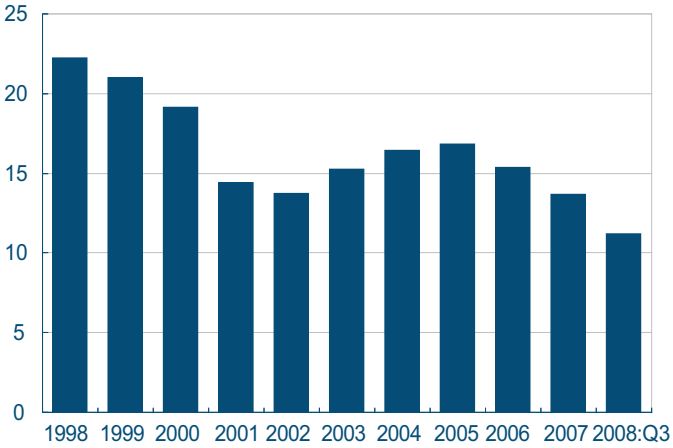
Net charge–offs are loans that are removed from the balance sheet because they are deemed unrecoverable, less any loans that were deemed unrecoverable in the past but are recovered in the current year. As with problem loans, there was a sharp increase in the net charge-offs of commercial loans during and following the 2001 recession. Consumer loans saw a similar increase during that recession, and their charge–off rate has remained near those levels since

Capitalization



Source: Author's calculation from Federal Financial Institutions Examination Council, Quarterly Banking Reports of Condition and Income.

Coverage Ratio



Note: Ratio of capital and loan loss reserves to problem assets.

Source: Author's calculation from Federal Financial Institutions Examination Council, Quarterly Banking Reports of Condition and Income.

then. Net charge–offs in the third quarter of 2008 reached 0.57 percent of outstanding commercial loans, 0.55 percent of outstanding consumer loans, and 0.15 percent of outstanding real estate loans. These numbers could rise going forward if the increasing number of problem loans these banks are documenting ultimately translates into more "unrecoverable" loans.

Capital is a bank's cushion against unexpected losses. The recent trend in the capital ratio indicates that Fourth District community banks are protected by a large cushion. While the leverage ratio (capital over total assets) remained above 10 percent, the risk-based capital ratio (a ratio determined by assigning a larger capital charge on riskier assets) was about 11 percent in the third quarter of 2008. The growing capital ratio is a sign of strength for community banks.

An alternative measure of balance sheet strength is the coverage ratio. The coverage ratio measures the size of the bank's capital and loan loss reserves relative to its problem assets. As of the third quarter, Fourth District community banks had about $11 in capital and reserves for each $1 of problem assets. The coverage ratio has declined over the last few years, as problem loans have increased, but balance sheets remain strong.

To read our last report on Fourth District bank holding companies:

http://www.clevelandfed.org/research/trends/2008/0808/01banfin.cfm

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