

Housing Markets, Financial Markets, and Recession: What About the Fifth District?

BY SONYA RAVINDRANATH WADDELL AND BETTY JOYCE NASH

The Fifth District's recession likely began in the spring of 2008, later than the national recession, which the National Bureau of Economic Research (NBER) dates from December 2007.

Like the national recession, the District downturn was ignited by a collapse in residential real estate markets. New construction, home prices, and consumer spending have been falling, while unemployment and mortgage delinquencies are rising. In addition, increased delinquencies of subprime mortgages and the subsequent decline in value of mortgage-backed assets have hurt financial institutions, further weakening the economy.

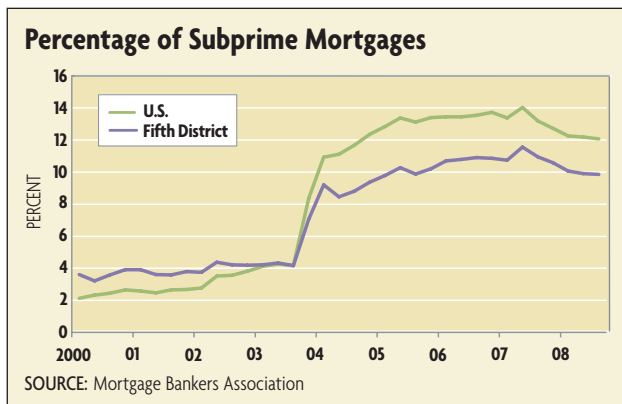
But through third quarter 2008, the District economy performed better than the U.S. economy, even when residential real estate is included in the mix.

District Prices

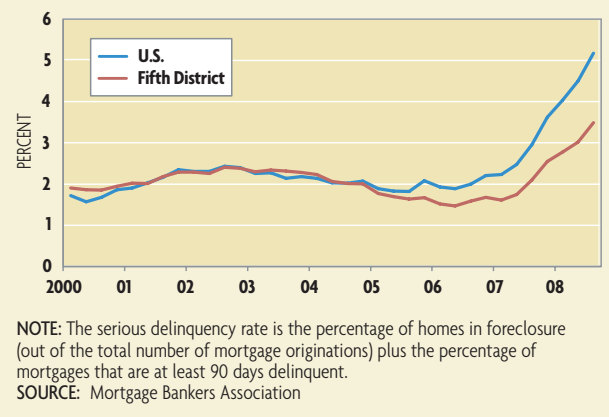
Housing markets in the District outperformed the nation in the first part of the decade, as did house price growth. From 2000 to second quarter 2007, house prices in the Fifth District grew 86.1 percent, an average annual rate of 9.1 percent, according to the Federal Housing Finance Agency House Price Index (HPI). Nationally, house prices grew 69 percent, an average annual rate of 7.5 percent, over the same period.

House prices rose dramatically in the Washington, D.C., metropolitan statistical area (MSA), which includes the District of Columbia and parts of Maryland, Virginia, and West Virginia. House prices in the MSA grew at an average annual rate of 12.9 percent from 2000 to 2007. Meanwhile, prices grew at an average annual rate of 12.3 percent in Maryland, 10.7 percent in Virginia, and 14.6 percent in D.C.

Although the D.C. metro area influenced total apprecia-



Serious Delinquency Rate (All Mortgages)



tion in Maryland and Virginia, prices in those states also increased considerably outside the D.C. region. The Lynchburg, Va., metro area saw the *slowest* annual average growth of all metro areas in Virginia and it grew at nearly 6 percent from 2000 to 2007. Meanwhile, in five of seven metro areas in North Carolina and three of four metro areas in South Carolina, house prices appreciated at an average annual rate of less than 5 percent between 2000 and 2007. In fact, price growth was less steep in North Carolina and South Carolina in general, where prices grew at an average annual rate of 5.2 percent and 5.6 percent, respectively.

West Virginia University economist George Hammond says most of West Virginia missed the housing boom except the areas that lie in or near the D.C. metro area. Prices grew sharply in the Winchester, Va.-W.Va., MSA early in the decade, and then declined by 17 percent from fourth quarter 2007 through fourth quarter 2008.

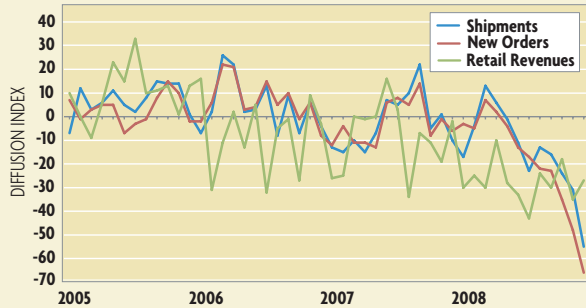
But statewide, prices in West Virginia grew by an average annual of 5.5 percent between 2000 and 2007. "West Virginia missed the worst excesses of the boom, so it's better positioned to miss the worst of the bust," he says. House prices declined by 0.5 percent over 2008.

Subprime Lending

The share of subprime lending in the Fifth District never reached that of the nation. But it accounted for nearly 11.6 percent of the District mortgage market in second quarter 2007 compared to almost 4 percent at the beginning of 2000.

The expansion of subprime lending was much stronger in

Fifth District Retail and Manufacturing Data



NOTE: The diffusion index equals the percentage of responding firms reporting increase minus the percentage reporting decrease.
SOURCE: Federal Reserve Bank of Richmond

D.C., Maryland, and Virginia than in the Carolinas. In Maryland and Virginia, for example, the number of subprime mortgages expanded more than fivefold from 2003 through second quarter 2007. Over the same time frame, the number of subprime loans in the Carolinas more than doubled. Even though house price growth, financial market innovations, and policy decisions enabled more lending in the District, the share of subprime lending did not grow as sharply as it did nationally.

As the overall U.S. housing market began to show signs of stress toward the end of 2006 and into 2007, reports indicated stronger conditions in the Fifth District than the nation. Nationally, subprime “serious” delinquency rates had begun to climb toward the end of 2006. Serious

QUICK FACT

Subprime loans are those extended to borrowers whose credit is impaired or who have limited or no documentation on income or assets, high loan-to-value ratios, or high payment-to-income ratios.

delinquency rates represent the percentage of homes in foreclosure plus the percentage of mortgages at least 90 days delinquent. In fourth quarter 2006, the subprime serious delinquency rate was nearly 8 percent, but by third quarter 2008, the rate had jumped to 19.6 percent.

In the Fifth District, it was mid-2007 before serious delinquency rates started rising. The subprime delinquency rate jumped 8 percent from second quarter 2007 to 15 percent by third quarter 2008.

As subprime delinquencies rose, the value of investment assets backed by mortgage loans fell, setting off a string of problems in the financial sector. With rising delinquencies and a stalled housing market, house prices peaked in the second quarter of 2007 and began the first national decline in history, falling 4.5 percent by third quarter 2008. In the Fifth District, prices over the same period fell almost 3 percent.

As prices fell and homeowners continued to lose equity, prime delinquencies also started to rise. Although delinquency and foreclosure rates have remained below national levels, the measures have risen notably in every jurisdiction of the Fifth District.

The Economic Consequences

As the boom in housing ended, residential construction activity declined. Permit levels and housing starts have fallen, workers in construction and manufacturing have been laid off, and consumer spending has fallen. As house prices have fallen, even those households not in danger of losing their homes have felt less wealthy and have reduced consumption.

Failed banks and mortgage companies also have left employees without work, and economic uncertainty has contributed to significant fluctuation in the stock market, which has eroded consumer confidence and further reduced spending. Furthermore, the deleveraging of financial firms and heightened concern over the quality of borrowers has reduced lending, making it difficult for businesses and individuals to secure loans. Manufacturers, retailers, and financial firms are all suffering, payrolls have fallen, and unemployment has risen.

The NBER estimates that the United States went into recession in December 2007. Using state data along with monthly manufacturing and service sector data from Richmond Fed surveys, we can estimate the timing and depth of the recession in the Fifth District.

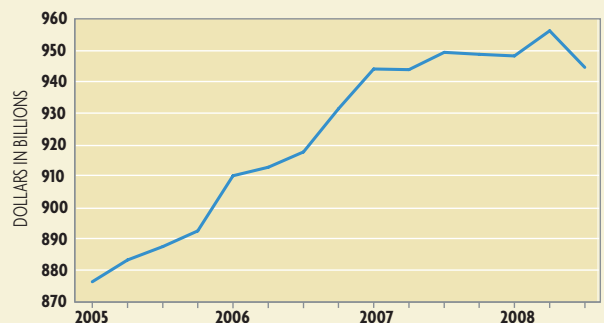
Employment in the Fifth District peaked in the spring of 2008. Payroll employment estimates indicate a peak in February 2008, with the household survey indicating an employment peak around the same time. It was also in the spring of 2008 when the number of unemployed in the District began to grow beyond fluctuations of recent years.

Personal income may have peaked in the second quarter of 2008, although this conclusion could change as more data become available. Peaks in the indexes for Fifth District manufacturing and retail sales measured by the Richmond Fed survey are also difficult to judge. Nonetheless, in March

QUICK FACT

Alternative-A (Alt-A) mortgage loans are those extended to borrowers with strong credit histories, but nontraditional characteristics, such as reduced documentation, a low downpayment, or a house that is not owner-occupied.

Fifth District Real Personal Income



SOURCE: Bureau of Labor Statistics, Seasonally Adjusted

2008 the indexes for both shipments and new orders in manufacturing began to fall to levels far below what the measures have seen even in the difficult environment of the past few years. In the retail sector, the index for revenues peaked in June 2007, but the index started dipping to extremely low levels in April 2008.

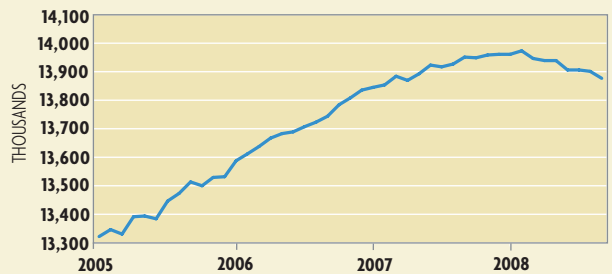
From these data, therefore, it appears that the Fifth District is in a recession that began in the spring of 2008 — a few months after the national recession began.

Looking Forward

Although in the early part of this episode, housing markets in the Fifth District fared better than the aggregate national market, they have slowed enough to create problems elsewhere in the economy. In addition, the depth of the regional recession is likely to be affected by the stress on the banking sector caused by the mortgage crisis.

A primary reason for the relatively more stable housing conditions in the Fifth District was the strength of the Carolinas. But house prices in North Carolina and South Carolina posted their first declines in the third quarter of

Fifth District Payroll Employment



SOURCE: Bureau of Labor Statistics, Seasonally Adjusted

2008. While reports on existing home sales and new residential construction indicate some potential firming in the northern part of the District and other parts of the country, conditions in the Carolinas have deteriorated further. The

sluggishness in residential real estate may persist in the Carolinas after conditions start to turn around in the nation and the D.C. area. This could impede the quick recovery of the Fifth District economy. **RF**

QUICK FACT

In securitization, the cut-offs between tranches for structured products are usually chosen to ensure a specific rating. The safest offer investors a relatively low interest rate, but are the first to be paid out of the cash flows from the assets. Those tranches are usually rated AAA. Tranches that will be paid only after other tranches are paid out typically have much lower ratings.

Subprime Primer

An expansion in lending to people who previously would not have had the opportunity to buy homes — so-called Alt-A and subprime mortgage lending — fueled the housing boom. According to Mortgage Bankers Association data, the number of prime mortgages serviced in the United States almost doubled from 2000 to 2007, while the number of subprime mortgages grew almost tenfold.

Fifth District mortgage growth was less skewed toward subprime. Over the seven-year period, prime mortgage lending more than doubled in the District while there were about five times as many subprime loans made.

Although future research will shed more light on this recent episode, there is some consensus that policy decisions, house price appreciation, and innovations in the financial system all contributed to the escalation of subprime lending.

First, accommodative monetary policy and government programs targeted at homeownership encouraged institutions to lend and people to buy homes. Second, steep house price appreciation allowed borrowers to take on more house than they ultimately could afford. Borrowers used escalating home values to refinance and extract equity. Finally, the traditional banking model of originating and maintaining a mortgage or loan was

replaced in recent years by an “originate and distribute” model.

Here is how that works: After making a loan, banks typically form portfolios of mortgages, loans, corporate bonds, or other assets (called “structured products”) and slice them into tranches, or groups, before selling them in the market. The tranches are then sold separately to, for example,

pension funds, hedge funds, or structured investment vehicles. This “securitization” was the main financing method of the major subprime mortgage originators. It spread risk, enabling lower interest rates.

Securitization also increased the available pool of money for loan originators because it allowed investors to indirectly hold assets that they were previously prevented from holding for regulatory reasons. For example, certain pension funds that could invest only in AAA-rated fixed-income securities could invest in a AAA-rated senior tranche of A-rated securities.

Toward the end of 2006, national subprime serious delinquency rates began to climb. Those are the percentage of homes in foreclosure plus the percentage of mortgages at least 90 days delinquent. In the last quarter of 2006, the subprime serious delinquency rate was 7.8 percent, but by third quarter 2008, the rate was 19.6 percent.

—SONYA RAVINDRANATH WADDELL

Outside the Urban Range: House Prices in the Rural Fifth District

House price appreciation has stalled in nonmetro areas of the District. Prices for land, with its variety of uses, are more difficult to gauge and appear to vary from state to state.

About 17 percent of people in the United States live in places outside the commuting range of urban or metro areas of more than 50,000 people. The classification is used to define "rural" for research and policymaking.

Rural areas didn't grow as much as metro areas over 2000 to 2005, according to the Economic Research Service of the United States Department of Agriculture. Nonmetro area populations increased only slightly, about 2.2 percent, compared to a 5.3 percent increase in urban areas over the first half of this decade.

In 2008, the Federal Housing Finance Agency released indexes for nonmetro house prices. Those measure the rates at which prices changed from quarter to quarter, year to year. The indexes show that in all Fifth District states, prices reflected metro prices: They began to rise in the early part of the decade.

Year-over-year house price appreciation in nonmetro areas started to slip by fourth quarter 2005. Growth peaked at 9.2 percent in North Carolina at the end of 2005, but slowed to 4.6 percent by fourth quarter 2007, and further to 1.7 percent by the end of 2008.

In South Carolina, the year-over-year change slipped to -0.8 percent by the end of 2008, after having reached a growth rate of 10 percent as late as mid-2006. In Virginia, house price growth peaked in 2005 at 17.7 percent over the previous year but by 2008 had fallen to -1.4 percent.

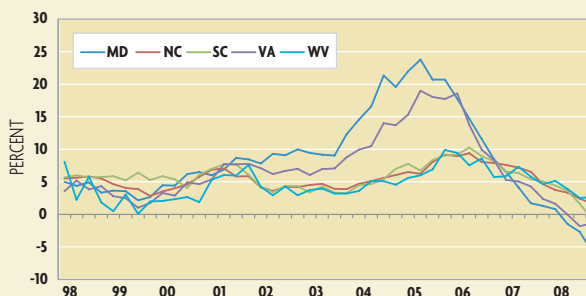
While those price indexes apply to home prices in nonmetro areas, land prices are trickier to evaluate because of the wide variety of ways land is used: agriculture, pasture, and residential development.

Land prices don't appear to be on the decline in North Carolina, according to Mike Huskey. He heads the farm loan programs for the United States Department of Agriculture in Raleigh, N.C. "Traditionally up until this year, land prices were on the increase, 10 percent to 12 percent, but even that would vary," he says. "I think people are still investing in land — they see it as a better investment than the stock market. There are probably fewer transactions now with the economy being the way it is, but people are still investing in land."

His agency lends to farms, and loans have increased. "I don't know what to attribute it to," he says. "But credit is

Regional Nonmetro House Prices

(Year-over-Year Percent Change)



SOURCE: Federal Housing Finance Agency

tighter in the private sector. That's part of it."

Lori Lynch, an agricultural economist at the University of Maryland, has studied land prices for her research into the viability of Maryland's land preservation program. "We're half agriculture, half forest. The study we did looked at whether or not we could save a million acres."

Rural land prices are influenced by the potential for residential housing development. In Maryland, she says, land prices throughout the state, even in the most remote corners, seemed to have appreciated because of that possibility. "Garrett and Allegany [counties] would be least urban influenced, but they also were getting second home purchases," she says.

"Between 2002 and 2005, agricultural land prices went up more than 100 percent, while the agricultural value of the land went up 12 percent to 14 percent," she says. That's what the land would be worth for agricultural uses, not development.

"They seem to think that any time they want, they could just find a developer and sell their land, move to Florida, and live happily ever after. Whether that's factual is really, really hard. There's a lot of land in Maryland," she says.

But now the market has dried up. "The bottom line — the market has just stopped. It started slowing down in 2005. There's not a lot of action because we don't have that many transactions."

As for foreclosures, she hasn't heard of even one in Maryland. "That doesn't seem to have hit the farm community the same way," she says. "I haven't even heard people talking that much about credit problems." Farmers seem more concerned about input prices.

—BETTY JOYCE NASH

QUICK FACT

Nonmetro House Price Appreciation

	2007	2008
MD	1.3	-5.8
NC	4.6	1.7
SC	5.0	-0.8
VA	2.4	-1.4
WV	4.6	2.7

SOURCE: Federal Housing Finance Agency

State Data, Q3:08

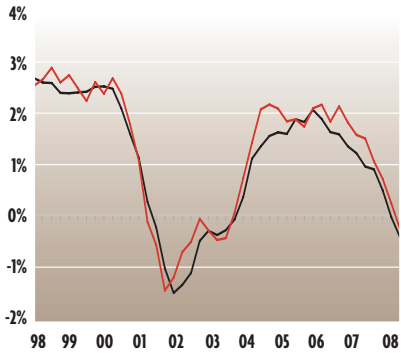
	DC	MD	NC	SC	VA	WV
Nonfarm Employment (000's)	709.7	2,597.9	4,132.0	1,924.6	3,767.3	763.2
Q/Q Percent Change	0.8	-0.4	-0.3	-0.9	0.0	0.4
Y/Y Percent Change	2.4	-0.5	-0.6	-1.2	0.1	0.6
Manufacturing Employment (000's)	1.6	128.0	512.3	241.9	264.2	56.1
Q/Q Percent Change	-4.0	-0.9	-1.6	-1.4	-1.1	-1.3
Y/Y Percent Change	-4.0	-2.9	-4.6	-3.0	-4.5	-4.8
Professional/Business Services Employment (000's)	153.2	399.0	504.2	219.3	659.1	60.6
Q/Q Percent Change	0.0	0.6	-0.6	-2.6	0.3	-0.5
Y/Y Percent Change	0.7	0.3	0.3	-3.5	1.7	-0.5
Government Employment (000's)	236.5	488.9	708.7	343.2	697.3	147.2
Q/Q Percent Change	1.0	0.5	0.7	-1.2	0.9	0.7
Y/Y Percent Change	2.3	2.0	2.7	2.2	1.9	1.4
Civilian Labor Force (000's)	333.9	2,999.2	4,552.2	2,160.3	4,129.4	804.6
Q/Q Percent Change	0.5	0.1	0.6	0.9	0.4	-0.3
Y/Y Percent Change	2.4	0.3	1.0	1.7	1.3	-1.2
Unemployment Rate (%)	7.2	4.5	6.6	7.2	4.1	4.2
Q2:08	6.6	4.1	5.9	6.3	3.8	4.3
Q3:07	5.5	3.5	4.8	5.6	3.0	4.5
Real Personal Income (\$Mil)	31,431.8	221,375.0	259,648.4	116,637.5	272,180.8	45,845.7
Q/Q Percent Change	-0.6	-0.8	-1.3	-1.6	-0.9	-0.6
Y/Y Percent Change	-0.1	-0.4	0.0	-0.2	-0.8	1.2
Building Permits	152	3,819	14,572	6,706	6,308	873
Q/Q Percent Change	-19.6	-2.3	-6.3	-16.9	-14.1	4.1
Y/Y Percent Change	-71.2	-18.4	-26.7	-20.5	-24.5	-10.8
House Price Index (1980=100)	622.2	500.7	345.8	325.6	452.8	229.5
Q/Q Percent Change	-1.5	-2.9	-0.5	-0.6	-1.7	-2.1
Y/Y Percent Change	-5.7	-6.3	2.2	2.3	-3.8	0.2
Sales of Existing Housing Units (000's)	7.2	65.6	153.6	80.4	126.4	25.2
Q/Q Percent Change	0.0	1.9	-9.0	-6.9	11.7	-3.1
Y/Y Percent Change	-21.7	-18.0	-24.3	-22.4	12.9	-7.4

NOTES:

Nonfarm Payroll Employment, thousands of jobs, seasonally adjusted (SA) except in MSAs; Bureau of Labor Statistics (BLS)/Haver Analytics, Manufacturing Employment, thousands of jobs, SA in all but DC and SC; BLS/Haver Analytics, Professional/Business Services Employment, thousands of jobs, SA in all but SC; BLS/Haver Analytics, Government Employment, thousands of jobs, SA; BLS/Haver Analytics, Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics, Unemployment Rate, percent, SA except in MSAs; BLS/Haver Analytics, Building Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics, Sales of Existing Housing Units, thousands of units, SA; National Association of Realtors®

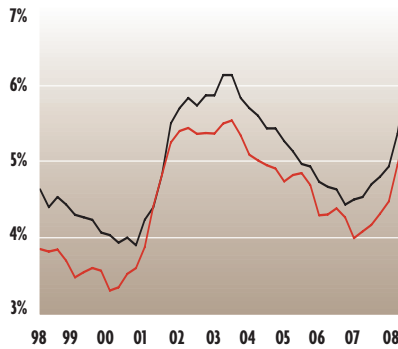
Nonfarm Employment

Change From Prior Year
First Quarter 1998 - Third Quarter 2008



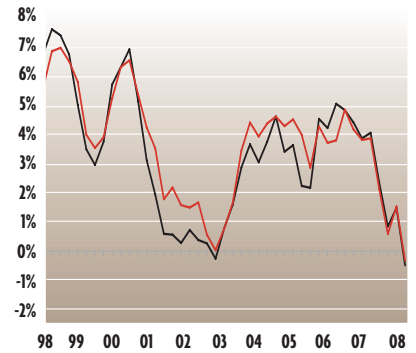
Unemployment Rate

First Quarter 1998 - Third Quarter 2008



Real Personal Income

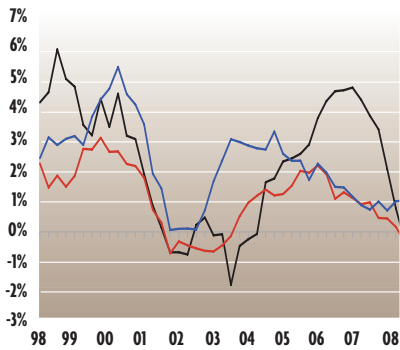
Change From Prior Year
First Quarter 1998 - Third Quarter 2008



— Fifth District — United States

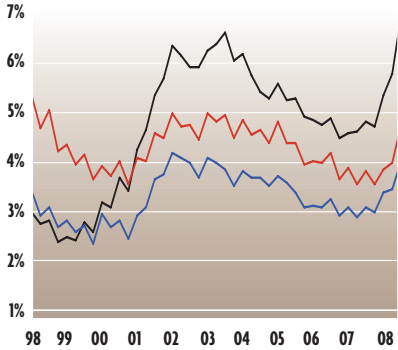
Nonfarm Employment Metropolitan Areas

Change From Prior Year
First Quarter 1998 - Third Quarter 2008



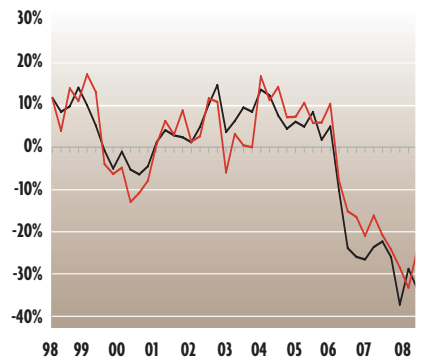
Unemployment Rate Metropolitan Areas

Change From Prior Year
First Quarter 1998 - Third Quarter 2008



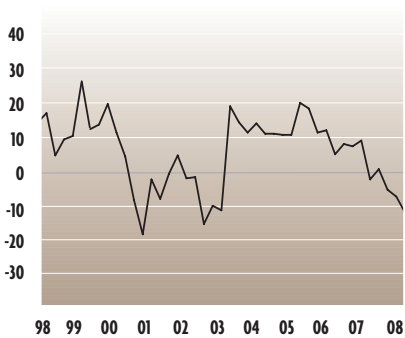
Building Permits

Change From Prior Year
First Quarter 1998 - Third Quarter 2008



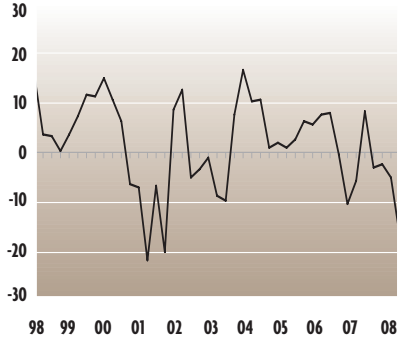
FRB—Richmond Services Revenues Index

First Quarter 1998 - Third Quarter 2008



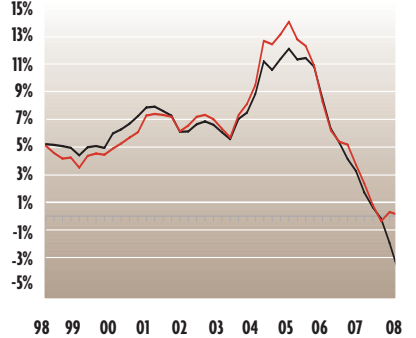
FRB—Richmond Manufacturing Composite Index

First Quarter 1998 - Third Quarter 2008



House Prices

Change From Prior Year
First Quarter 1998 - Third Quarter 2008



— Fifth District — United States

NOTES:
1) FRB—Richmond survey indexes are diffusion indexes representing the percentage of responding firms reporting increase minus the percentage reporting decrease. The manufacturing composite index is a weighted average of the shipments, new orders, and employment indexes.
2) Metropolitan area data, building permits, and house prices are not seasonally adjusted (nsa); all other series are seasonally adjusted.

SOURCES:
Real Personal Income: Bureau of Economic Analysis/Haver Analytics.
Unemployment rate: LAUS Program, Bureau of Labor Statistics, U.S. Department of Labor, <http://stats.bls.gov>.
Employment: CES Survey, Bureau of Labor Statistics, U.S. Department of Labor, <http://stats.bls.gov>.
Building permits: U.S. Census Bureau, <http://www.census.gov>.
House prices: Federal Housing Finance Agency, <http://www.ofheo.gov>.

Metropolitan Area Data, Q3:08

	Washington, DC	Baltimore, MD	Hagerstown-Martinsburg, MD-WV
Nonfarm Employment (000's)	2,440.7	1,316.7	101.1
Q/Q Percent Change	-0.1	-0.7	-0.9
Y/Y Percent Change	1.1	-0.3	-1.6
Unemployment Rate (%)	4.0	4.8	5.1
Q2:08	3.5	4.0	5.3
Q3:07	3.1	3.8	4.3
Building Permits	3,458	1,621	281
Q/Q Percent Change	-6.7	29.5	-11.9
Y/Y Percent Change	-23.7	-6.9	-40.8
	Asheville, NC	Charleston, SC	Durham, NC
Nonfarm Employment (000's)	175.4	854.6	292.2
Q/Q Percent Change	-1.3	-1.4	-0.1
Y/Y Percent Change	-1.1	-0.3	1.5
Unemployment Rate (%)	5.4	7.0	5.4
Q1:08	4.6	5.8	4.7
Q2:07	3.5	4.8	3.9
Building Permits	483	2,642	542
Q/Q Percent Change	-11.2	-32.2	-15.4
Y/Y Percent Change	-39.9	-45.3	-27.2
	Greensboro-High Point, NC	Raleigh, NC	Wilmington, NC
Nonfarm Employment (000)	365.0	520.7	146.7
Q/Q Percent Change	-1.2	-0.3	-1.5
Y/Y Percent Change	-1.4	0.6	-1.3
Unemployment Rate (%)	7.1	5.4	6.1
Q2:08	5.9	4.5	5.1
Q3:07	4.9	3.6	3.9
Building Permits	679	4,007	967
Q/Q Percent Change	-26.4	26.4	-12.8
Y/Y Percent Change	-40.1	-11.8	-24.9

For more information, contact Sonya Ravindranath Waddell at (804) 697-2694 or e-mail sonya.waddell@rich.frb.org

Metropolitan Area Data, Q3:08

	Winston-Salem, NC	Charleston, SC	Columbia, SC
Nonfarm Employment (000's)	216.2	301.5	365.2
Q/Q Percent Change	-1.5	-1.2	-1.0
Y/Y Percent Change	-0.3	0.6	-0.3
Unemployment Rate (%)	6.5	6.1	6.5
Q2:08	5.4	4.8	5.3
Q3:07	4.5	4.8	5.4
Building Permits	353	1,090	1,375
Q/Q Percent Change	-16.0	-16.7	9.8
Y/Y Percent Change	-50.9	-31.9	0.2
	Greenville, SC	Richmond, VA	Roanoke, VA
Nonfarm Employment (000's)	318.6	628.5	161.8
Q/Q Percent Change	-1.4	-1.0	-0.9
Y/Y Percent Change	0.9	-0.8	-0.8
Unemployment Rate (%)	6.3	4.7	4.3
Q1:08	5.1	4.0	3.7
Q2:07	5.4	3.2	3.1
Building Permits	596	1,129	141
Q/Q Percent Change	-46.3	-4.7	-25.4
Y/Y Percent Change	-42.7	-27.6	-36.2
	Virginia Beach-Norfolk, VA	Charleston, WV	Huntington, WV
Nonfarm Employment (000)	775.6	153.1	118.8
Q/Q Percent Change	0.2	0.7	-0.4
Y/Y Percent Change	-1.1	1.1	-0.8
Unemployment Rate (%)	4.6	3.3	5.1
Q2:08	3.9	4.5	5.3
Q3:07	3.3	4.0	4.8
Building Permits	1,301	4,007	8
Q/Q Percent Change	-24.9	169.6	-33.3
Y/Y Percent Change	-4.1	101.3	-75.8

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