

The Roles of New and Existing Establishments in Employment in the Fifth District

BY R. ANDREW BAUER

The most recent recession has had a dramatic impact on employment, with payroll employment falling 8.4 million, or 6 percent, from December 2007 through December 2009, according to the Bureau of Labor Statistics. Job losses from contracting establishments and business closings rose dramatically, while the number of new jobs created fell sharply. Although the labor market has stabilized in 2010, there is some concern that the severity of the recession with its impact on the financial system will slow business expansion and new firm growth as the economy recovers and, as a result, will slow the recovery in the labor market. This article looks at historical trends within the Fifth District in job creation and job destruction as well as trends during the most recent recession.

Historical Job Flow Trends: Changes Over the Business Cycle

There is always a churning within the economy as businesses expand and new businesses are formed to seek new opportunities, while other firms are contracting or closing. This dynamic is amplified by the business cycle. During a downturn, businesses contract and close at a more rapid rate and job losses therefore increase. At the same time, the rate of business expansion and business starts are slowed as managers and entrepreneurs are more reluctant to begin new endeavors during times of economic uncertainty. As a consequence, the pace of job hiring falls. The cycle reverses during economic expansions as existing firms expand their work force and new firms are created, increasing job gains and moderating job losses.

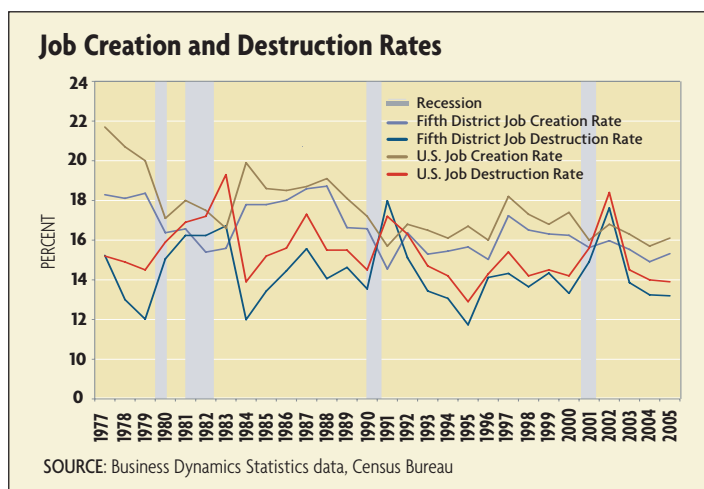
Information on U.S. business and employment dynamics

has improved considerably in recent years. One source is the Business Dynamics Statistics (BDS) data from the Census Bureau, which details employment at the establishment level. This data allow for an examination of the source of changes in employment resulting from existing establishments or from new or closing establishments. In addition, the BDS data provide information on the size and age of establishments, which permits a more detailed accounting of employment growth. The BDS data are annual and cover the years from 1977 to 2005 — allowing for an examination of business dynamics and job flows over various business cycles.

One way of summarizing the churning of jobs within the economy is to look at the total number of jobs created and the total number of jobs destroyed and compare them to the total level of employment. These two metrics are called the job creation rate and the job destruction rate. These two figures indicate the percentage of jobs being created and destroyed just as the unemployment rate indicates the number of unemployed persons in the economy. For instance, a job creation rate of 10 percent indicates that 10 percent of the jobs in the economy were newly created from the previous year, while a job destruction rate of 10 percent implies that 10 percent of the previous year's jobs no longer exist. During periods of economic growth, the job creation rate will be higher than the job destruction rate as businesses are hiring at a faster rate than they are dismissing workers. Of course, even during times of very strong economic growth, there is always some job destruction, just as when the economy is exceptionally weak, jobs are still being created.

The annual job creation and job destruction rates for the United States and for the Fifth District from 1977 through 2005, the latest year for which data are available, vary considerably over the business cycle (see chart). The average job creation rate over the period is roughly 18 percent for the United States and about 17 percent for the Fifth District. The average job destruction rate is slightly lower, roughly 15 percent for the United States and about 14 percent for the Fifth District. These figures suggest that the economy is indeed very dynamic as each year almost one in five jobs in the United States is a newly created one and that there is sizeable turnover as a large number of jobs are lost each year — even during periods of economic growth. The difference between the United States and the Fifth District, albeit modest, suggests that the Fifth District economy is perhaps slightly less dynamic and slightly more stable than the overall economy.

Job creation can result from expansion of existing estab-



lishments or from new establishments. According to the BDS, roughly one-third of newly created jobs in the United States result from new establishments while the remainder is from expansion of existing establishments. The same is true for the Fifth District. As for job destruction, again roughly one-third of job losses are due to establishment closings. It should be noted that in the BDS data, an establishment is not necessarily the same as an individual firm. An establishment is one physical location and may be an individual firm, such as a local restaurant, retail store, or business — but it could also be one location of a nationwide or regional chain, like a big-box retailer or bank.

Examining job creation and job destruction over time, job creation is procyclical while job destruction is countercyclical, as one would expect. During recessions, destruction rates rise sharply and then return to their pre-recession levels relatively quickly. Interestingly, the job destruction rate rose in the Fifth District by similar amounts during the recessions of the early 1980s (by 4.7 percentage points); the 1990-91 recession (by 4.4 percentage points); and the 2001 recession (by 4.3 percentage points), despite the fact that the 1981-82 recession was more severe than the later recessions.

The job creation rate declined during each of the recessions, although the severity of the decline was less uniform. The decrease during the recessions of the early 1980s was more significant than during the later, more moderate recessions, with the job creation rate dropping 3 percentage points from 1979 to 1982. Interestingly, the smaller decline in job creation during the 1990-91 and 2001 recessions resulted from job creation from new businesses. During the 1981-82 recession, job creation from new businesses fell sharply, but increased during the 1990-91 recession and edged only lower slightly during the 2001 recession. In those later recessions, the dynamics of new business growth helped offset larger declines in employment at existing establishments.

One final observation is that both the rate of job creation and the rate of job destruction within the United States and the Fifth District decreased from the 1980s expansion to the 1990s expansion. This is perhaps somewhat counterintuitive, especially when one considers the strong growth during the second half of the 1990s expansion. Those years were marked by a sharp increase in business startups and investment related to the dot.com boom and high rates of economic growth. Yet even in those boom years of the 1990s, the job creation rate, on average, was lower than in the 1980s. This is also true for the rate of jobs being created by new businesses. Those trends appear to have continued during the most recent expansion period.

Differences within the Fifth District

Just as we see some modest differences between the United States and the Fifth District, there are differences among the jurisdictions that comprise the Fifth District (see table). Within the Fifth District, Maryland and Virginia have job creation rates comparable to the U.S. average, while the

Average Job Creation and Job Destruction Rates by State (1977-2005)

	Fifth District	U.S.	DC	MD	NC	SC	VA	WV
Establishment Entry Rate	12.5	13.0	11.2	12.6	12.8	13.1	12.9	11.2
Establishment Exit Rate	10.4	11.1	10.3	10.5	10.4	10.7	10.4	10.4
Job Creation Rate	16.5	17.6	16.4	17.7	16.3	16.6	17.6	15.8
Job Creation Rate by Entry	6.2	6.6	5.5	6.6	6.1	6.4	6.6	5.8
Job Destruction Rate	14.3	15.4	15.1	15.3	13.9	14.1	14.7	15.0
Job Destruction Rate by Exit	5.0	5.5	4.9	5.3	4.8	4.9	5.1	5.0
Net Job Creation Rate	2.2	2.2	1.3	2.3	2.4	2.4	2.9	0.8
Reallocation Rate	28.7	30.3	28.4	30.2	27.1	27.7	28.9	28.1

SOURCE: Business Dynamics Statistics data, Census Bureau

other jurisdictions are below the U.S. average with West Virginia, at 15.8 percent, having the lowest overall job creation rate. The District of Columbia has the lowest job creation by entry rate, which is the percentage of newly created jobs that are created by new businesses. Job destruction rates vary considerably within the Fifth District, as well, with Maryland having the highest rates and North Carolina the lowest. Recall that having a high job destruction rate is not necessarily problematic. In combination with a high job creation rate (as in Maryland), a high destruction rate suggests a more dynamic economy.

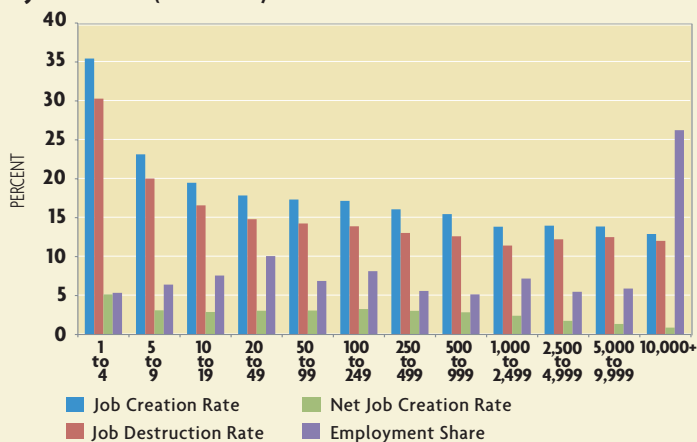
Also included in the table are the establishment entry and exit rates, which measure the frequency with which businesses are started and closed, another indicator of the business dynamics of a region. Within the Fifth District, South Carolina has the highest establishment entry and exit rate which indicates that, relative to the other jurisdictions of the Fifth District, there is more business turnover.

Business and employment dynamics vary across regions of the Fifth District based on differences in underlying economic conditions and industry composition. Ultimately, differences in human capital (skilled and educated work force), physical capital (plant and equipment), technology, infrastructure, and regulation will drive the expansion of businesses, the formation of new businesses, and economic growth.

The Importance of Size and Age

The BDS data also allow for examination of employment dynamics by the size and age of businesses. It is well known that small businesses are a significant source of job creation in the economy. Small businesses have very high rates of job creation as well as job destruction. Very small firms, those firms with one to four employees, create and destroy jobs at a very rapid rate. Each year within the Fifth District, more than one-third, 35 percent, of all jobs at establishments with one to four employees are newly created from the previous year. At the same time, however, 30 percent of jobs at establishments of this size are destroyed. Clearly, there is a tremendous amount of turnover for these very small establishments. This dynamic affects a very large segment of

Fifth District Average Job Creation and Destruction by Firm Size (1977-2005)



SOURCE: Business Employment Dynamics data, Bureau of Labor Statistics

the economy, as roughly 40 percent of all establishments in the Fifth District have one to four employees. The most important factor driving this turnover is the opening and closing of establishments — which accounts for roughly two-thirds of all created and destroyed jobs for establishments of this size.

The net job creation rate, the percentage of jobs that are created each year less the percentage of jobs destroyed, is 5 percent for these establishments — a strong rate of growth compared to firms of other sizes. As a result, despite the fact that these establishments have a relatively small share of total employment (5 percent), on average they account for roughly 12 percent of all newly created jobs each year.

Even with a much broader definition of small business, the numbers still tell the same story. Establishments with fewer than 500 employees, the metric used by the Small Business Administration to categorize a small business, account for a very large share of all establishments within the United States and in the Fifth District. According to the BDS, 83 percent of all establishments in the Fifth District employed fewer than 500 in 2005. Defined this way, net employment in small businesses increased by 178,000 in 2004 and 104,000 in 2005; this accounted for 68 percent and 47 percent, respectively, of the net number of jobs created in those years. Clearly, small businesses are an important driver of employment.

As one would expect, job creation and destruction rates decrease as establishments increase in size and as they become more mature. Establishments with 10,000 employees or more have the lowest job creation and destruction rates as a category, at 13 percent and 12 percent, respectively, and a net job creation rate of just 1 percent as a consequence. But since these large establishments account for more than 25 percent of all employment, they still account for a significant share of the new jobs created each month. In 2005, these large establishments accounted for 16 percent of new jobs created that year.

Recall that a new establishment may be a new location of an existing business or may be a new business. Because the BDS dataset also includes information on firm age, however,

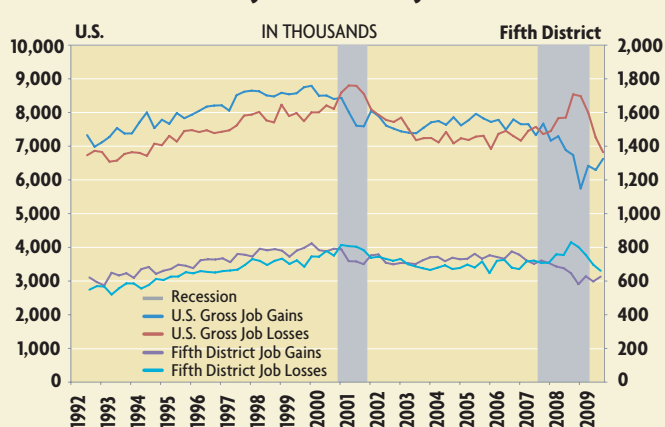
we can go one step further and isolate the effect of new firms, or business startups, on employment dynamics. According to the BDS, new firms (establishments with age equaling zero) contribute considerably to employment creation each year. In the Fifth District, new firms account for 17 percent, on average, of all newly created jobs. That percentage varies with the business cycle. For example, following the severe 1981-82 recession, new firm job creation fell to just 13 percent in 1983 and 10 percent in 1984. There is reason for concern that employment growth will be slower in this recovery in part because of weaker growth of new businesses, as was the case in the early 1980s, due to the severity of the most recent recession, lingering problems in the financial system, and the limited availability of credit.

Recent Job Flow Trends

For the latest information regarding job gains and losses at establishments, we turn to the Business Employment Dynamics (BED) data from the Bureau of Labor Statistics. It also details employment gains and losses at the establishment level and distinguishes changes in employment from existing and new establishments. The BED data are quarterly and cover the years from 1992 through the end of 2009, allowing for a more current examination of job flows.

The latest BED indicates the labor market has stabilized and made some improvement but remains considerably below where it was prior to the recession. Gross job gains are defined in the BED data as the sum of all net gains in expanding and opening establishments, whereas gross job losses are defined as the sum of all net losses in contracting and closing establishments. The difference between the two represents the net job gains in the economy. In the chart, we see that the 2001 and 2007-2009 recessions are both characterized by a sharp rise in gross job losses and a sharp decline in job gains with those movements most pronounced in the most recent recession. Note, however, that even during expansions, there is considerable turnover in the labor market, with gross job losses averaging just over 7 million during the last expansion period. Overall employment increases

Private Sector Gross Job Gains and Job Losses



SOURCE: Business Employment Dynamics data, Bureau of Labor Statistics

during such periods because gross job gains outweigh job losses.

Looking at the most recent recession, U.S. gross job losses rose from 7.4 million in the fourth quarter of 2007 to 8.5 million in the fourth quarter of 2008 — an increase of 16 percent. After peaking in that quarter, gross job losses declined to 6.8 million in the fourth quarter of 2009 — the lowest rate since 1994. Gross job losses declined 25 percent from the fourth quarter of 2007 through the first quarter of 2009, although they have since edged higher.

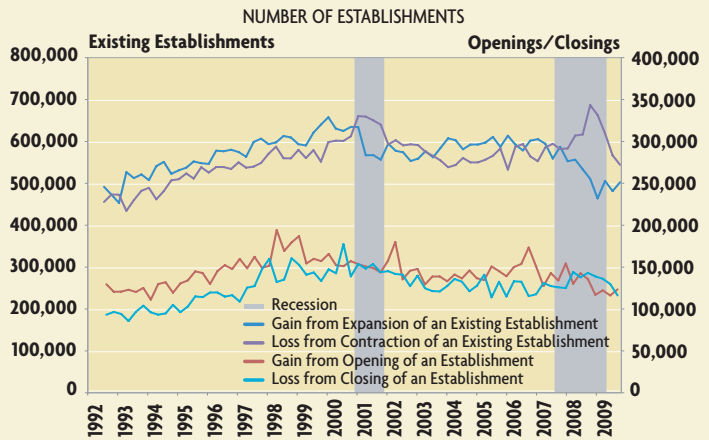
In contrast to job losses, gross job gains remain well below their prerecession levels. In the Fifth District, we see very similar changes in job flows during the latest recession (see chart). Gross job losses rose by 121,000, or 17 percent, from the end of 2008 to 2009 while gross job gains fell by 19 percent from the end of 2008 through the first quarter of 2010. And as we see with the overall U.S. data, the rate of job loss has returned to below its prerecession level, whereas job gains have not, and remain near a historic low.

There can be a number of reasons why gross job gains have yet to return to their prerecession levels. Productivity gains realized by many firms during the recession may have lessened the need to add workers despite the stabilization and upturn in the economy. Smaller firms that would like to expand and hire new workers may face credit constraints that prevent them from doing so. Changes in regulation, new legislative initiatives, and concerns about changes in tax policy could also be causing businesses to be more hesitant and reluctant to expand and hire. It could also be the case that the duration and severity of the recession, the dramatic events that played out in the financial system during the recession, and the ongoing transition in some sectors of the economy, such as the real estate market, may have created a “wait and see” attitude that is causing businesses to postpone hiring until there is greater certainty about their business prospects and the economy more broadly. Very likely, each of the mentioned factors is hurting job growth.

When we look at the BED job flows in the Fifth District in greater detail, we see that the decline in gross job gains can be attributed to a decline in gains at existing establishments and a decline in openings at new establishments. Notably, through the end of 2009, net employment at existing establishments continued to decline. According to the BED data, within the Fifth District, roughly 80 percent of all job gains are due to expansion of existing establishments while 82 percent of all job losses are the result of contractions at existing establishments.

Note that these figures are higher than the BDS data, which indicated that about two-thirds of changes in employment resulted from changes at existing establishments. The difference between the two is a result of the difference in how the data is collected. The BDS data are an annual snapshot describing employment conditions as they exist in March of each year and will miss some of the intra-annual job flow among existing establishments that the quarterly BED survey is able to capture.

Fifth District Job Gains and Losses by Type of Establishment Change



SOURCE: Business Employment Dynamics data, Bureau of Labor Statistics

The implication of the BED data is that the net impact on employment from existing establishments is considerably larger than at new or closing establishments. Job gains from expanding establishments fell by 21 percent from the fourth quarter of 2007 through the first quarter of 2009 while job gains from opening establishments fell by 13 percent. Both remain near their low during the recession and at their lowest level since the early 1990s. Clearly, given continued economic growth we would not expect these depressed levels to persist indefinitely. It remains unclear, however, when the factors that are holding businesses back — whether uncertainty, credit access issues, or otherwise — will fully dissipate.

Conclusion

When considering both the Business Dynamics Statistics and the Business Employment Dynamics data, we get a richer picture of changes in employment and the sources of those changes that underscore the churning in the economy. At any point in time, businesses are expanding and contracting or are being created or going out of business, resulting in a constant turnover in the labor market. This constant turnover and its impact on the labor market is a sign of a dynamic economy as resources are being moved from older industries and businesses to newer ones with greater growth potential. The business cycle amplifies these dynamics.

Despite some improvement in the labor market, the most recent data on job flows through the end of 2009 indicate a weak labor market characterized by a lack of job growth from new and expanding businesses. Job losses, however, have returned to their prerecession levels in the United States and in the Fifth District. So far in 2010, employment has improved considerably relative to 2009 with private payroll employment increasing 763,000 through August, a little less than 100,000 per month. It remains to be seen whether this improvement resulted from expansion by existing businesses or the creation of new businesses. Clearly, the economy will need to generate both for healthy labor market recovery.

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State Data, Q1:10

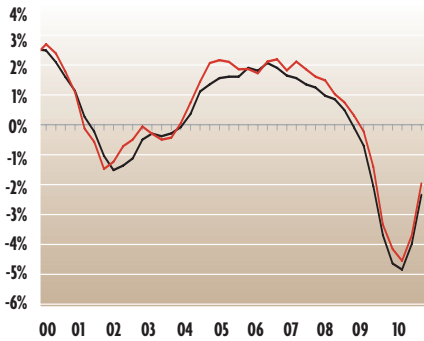
	DC	MD	NC	SC	VA	WV
Nonfarm Employment (000s)	708.1	2,491.9	3,891.8	1,816.8	3,600.7	733.6
Q/Q Percent Change	0.9	-0.3	0.0	0.4	-0.1	-0.6
Y/Y Percent Change	0.6	-2.1	-2.3	-1.5	-2.2	-2.6
Manufacturing Employment (000s)	1.3	115.5	430.0	207.4	229.0	49.3
Q/Q Percent Change	-4.8	-1.7	-0.9	0.0	-1.6	-0.3
Y/Y Percent Change	-9.1	-5.0	-8.6	-7.5	-7.8	-6.6
Professional/Business Services Employment (000s)	150.7	389.1	466.3	206.4	635.5	58.4
Q/Q Percent Change	1.1	1.5	0.4	-1.0	-0.2	-1.0
Y/Y Percent Change	0.5	0.4	-1.9	3.5	-1.7	-3.4
Government Employment (000s)	246.4	487.0	728.0	352.1	692.5	149.8
Q/Q Percent Change	0.6	-0.9	0.1	0.1	0.0	0.8
Y/Y Percent Change	3.7	-0.8	2.4	1.6	-0.8	1.0
Civilian Labor Force (000s)	336.3	2,958.6	4,550.7	2,174.0	4,164.7	787.3
Q/Q Percent Change	1.1	-0.1	0.6	0.1	0.4	-0.2
Y/Y Percent Change	1.3	-1.8	-0.6	-0.3	-0.5	-2.0
Unemployment Rate (%)	11.8	7.6	11.1	12.4	7.1	9.4
Q4:09	11.6	7.3	10.9	12.3	6.8	8.9
Q1:09	8.8	6.4	9.8	10.6	6.1	6.4
Real Personal Income (\$Mil)	37,520.0	251,873.3	301,040.6	135,292.7	318,273.1	53,454.9
Q/Q Percent Change	0.7	0.4	1.3	0.4	0.4	0.6
Y/Y Percent Change	0.9	0.1	1.3	0.1	-0.1	0.0
Building Permits	299	2,985	9,136	4,414	5,193	420
Q/Q Percent Change	-29.0	0.4	21.5	16.0	10.0	14.4
Y/Y Percent Change	15.4	42.5	25.5	23.2	11.3	13.8
House Price Index (2080=100)	562.2	437.0	321.8	327.8	413.1	225.8
Q/Q Percent Change	-1.3	-1.0	-1.7	-1.7	-1.7	0.2
Y/Y Percent Change	-3.3	-8.4	-5.9	-5.7	-6.4	-2.3
Sales of Existing Housing Units (000s)	8.4	73.6	136.8	68.8	108.8	26.4
Q/Q Percent Change	-19.2	-16.0	-16.0	-15.7	-9.6	-19.5
Y/Y Percent Change	23.5	26.0	15.9	8.2	-1.8	15.8

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®

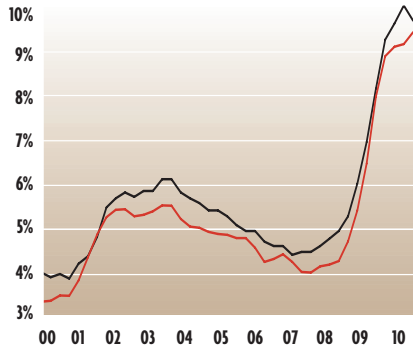
Nonfarm Employment

Change From Prior Year
First Quarter 2000 - First Quarter 2010



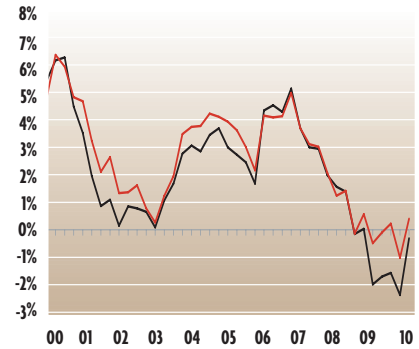
Unemployment Rate

First Quarter 2000 - First Quarter 2010



Real Personal Income

Change From Prior Year
First Quarter 2000 - First Quarter 2010

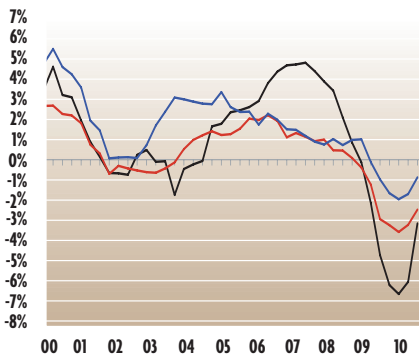


— Fifth District

— United States

Nonfarm Employment Metropolitan Areas

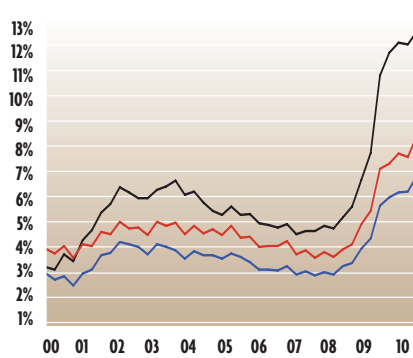
Change From Prior Year
First Quarter 2000 - First Quarter 2010



— Charlotte — Baltimore — Washington

Unemployment Rate Metropolitan Areas

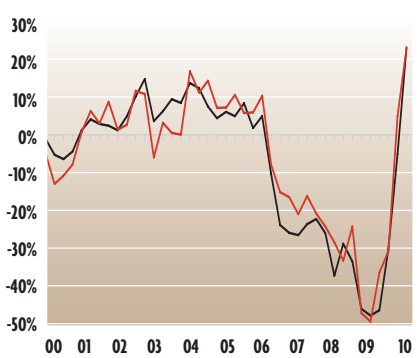
Change From Prior Year
First Quarter 2000 - First Quarter 2010



— Charlotte — Baltimore — Washington

Building Permits

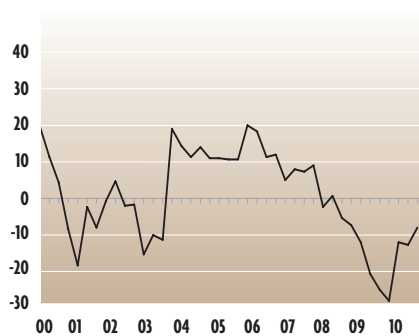
Change From Prior Year
First Quarter 2000 - First Quarter 2010



— Fifth District — United States

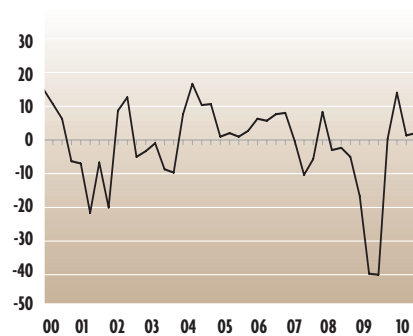
FRB—Richmond Services Revenues Index

First Quarter 2000 - First Quarter 2010



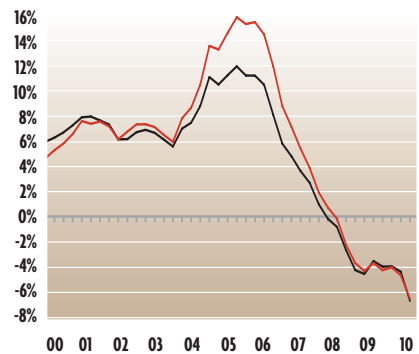
FRB—Richmond Manufacturing Composite Index

First Quarter 2000 - First Quarter 2010



House Prices

Change From Prior Year
First Quarter 2000 - First Quarter 2010



— Fifth District — United States

NOTES:

- 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.
- Building permits and house prices are not seasonally adjusted; 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.fhfa.gov>.

Metropolitan Area Data, Q1:10

	Washington, DC	Baltimore, MD	Hagerstown-Martinsburg, MD-WV
Nonfarm Employment (000s)	2,357.5	1,234.4	94.5
Q/Q Percent Change	-1.5	-2.9	-2.4
Y/Y Percent Change	-0.9	-2.5	-2.7
Unemployment Rate (%)	6.8	8.4	11.2
Q4:09	6.2	7.6	9.4
Q1:09	5.6	7.1	9.3
Building Permits	3,400	1,473	170
Q/Q Percent Change	18.3	11.2	17.2
Y/Y Percent Change	13.0	143.5	4.9
	Asheville, NC	Charlotte, NC	Durham, NC
Nonfarm Employment (000s)	162.0	796.3	281.9
Q/Q Percent Change	-2.3	-1.3	-0.9
Y/Y Percent Change	-3.3	-3.2	-1.3
Unemployment Rate (%)	9.9	12.6	8.2
Q4:09	8.8	12.0	7.8
Q1:09	8.9	10.8	7.5
Building Permits	311	1,747	446
Q/Q Percent Change	22.0	21.7	-12.2
Y/Y Percent Change	-10.9	12.5	-29.8
	Greensboro-High Point, NC	Raleigh, NC	Wilmington, NC
Nonfarm Employment (000s)	336.5	491.5	134.8
Q/Q Percent Change	-1.9	-1.7	-2.2
Y/Y Percent Change	-3.4	-1.9	-2.4
Unemployment Rate (%)	12.1	9.3	11.3
Q4:09	11.4	8.9	10.4
Q1:09	10.7	8.2	10.0
Building Permits	537	1,496	620
Q/Q Percent Change	25.5	21.8	54.2
Y/Y Percent Change	11.2	82.9	36.3

	Winston-Salem, NC	Charleston, SC	Columbia, SC
Nonfarm Employment (000s)	205.8	281.6	344.9
Q/Q Percent Change	-1.4	-0.7	-0.8
Y/Y Percent Change	-3.0	-0.9	-1.3
Unemployment Rate (%)	10.8	10.2	10.0
Q4:09	10.0	10.3	10.0
Q1:09	9.6	8.9	8.7
Building Permits	256	1,003	927
Q/Q Percent Change	80.3	44.5	-3.3
Y/Y Percent Change	80.3	82.0	0.4
	Greenville, SC	Richmond, VA	Roanoke, VA
Nonfarm Employment (000s)	291.7	590.4	152.3
Q/Q Percent Change	-0.7	-1.3	-1.7
Y/Y Percent Change	-2.6	-3.2	-2.5
Unemployment Rate (%)	11.0	8.5	8.3
Q4:09	11.1	7.6	7.2
Q1:09	9.6	7.0	6.8
Building Permits	535	883	107
Q/Q Percent Change	52.0	8.2	3.9
Y/Y Percent Change	32.4	64.4	33.8
	Virginia Beach-Norfolk, VA	Charleston, WV	Huntington, WV
Nonfarm Employment (000s)	724.3	144.2	113.9
Q/Q Percent Change	-1.3	-2.1	-2.1
Y/Y Percent Change	-1.6	-3.2	-1.6
Unemployment Rate (%)	7.9	9.1	9.3
Q4:09	6.9	7.3	7.8
Q1:09	6.6	5.9	7.6
Building Permits	1,125	47	12
Q/Q Percent Change	-10.4	0.0	50.0
Y/Y Percent Change	-3.8	67.9	100.0

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