MEI
MIDSTATE ECONOMIC INDICATORS

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# HOUSING SLOWDOWN

## SINKING IN

*by David A. Penn*

Nashville economic activity slowed to a crawl during the third quarter, with several important indicators turning negative for the first time in several years. Nonfarm employment, a broad measure of payroll growth, failed for the first time since 2003 to post a quarterly gain (Table 1). Manufacturing employment is down from the second quarter, retail and wholesale trade are virtually unchanged, and stalwart educational and health services experienced a modest job loss (Table 3). Taxable sales are down slightly from the previous quarter, and total employment is unchanged. The number of permits issued for single-family home construction continues to drop, but due to a large increase in multi-family permits, total housing construction is down just 2.6 percent from the second quarter (Figure 1).

Nonfarm employment growth for the Nashville metro area fell behind other major metropolitan areas that are viewed as Nashville's competitors. Employment also fell in Louisville in the third quarter, but competitor metro areas experienced net job gains (Table 2).

Both the Chattanooga and Clarksville metro areas are experiencing large declines in housing construction, although nonfarm employment growth remains respectable (Table 5). Taxable sales are flat to down, but the unemployment rate is steady.

The economic landscape this quarter has been filled by news of the subprime mortgage crisis. The research firm Global Insight recently estimated the impact of the mortgage crisis on U.S. metropolitan areas. According to the report, the effect of the mortgage credit curtailment is manifested primarily in two ways: sharply curtailed new residential investment (housing construction) and reduced household wealth due to decreased home equity. Either effect has a depressing impact on local jobs, income, and tax revenue. Fewer houses under construction mean fewer construction jobs plus indirect effects on retail, wholesale, and manufacturing suppliers for the construction industry. One less new home generates a ripple effect in the local

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**Table 1. Economic Indicators for Middle Tennessee**

| Series (seasonally adjusted) | Geographical Area | 2006Q3 | 2006Q4 | 2007Q1 | 2007Q2 | 2007Q3 | % Change 07Q2-07Q3 | % Change 06Q3-07Q3 |
|---|---|---|---|---|---|---|---|---|
| **LABOR FORCE AND EMPLOYMENT** | | | | | | | | |
| Midstate Total Employment | Midstate** | 1,117,841 | 1,126,067 | 1,135,313 | 1,140,902 | 1,141,422 | 0.0% | 2.1% |
| Midstate Labor Force | Midstate | 1,176,018 | 1,180,186 | 1,189,124 | 1,191,301 | 1,191,284 | 0.0% | 1.3% |
| Midstate Unemployed | Midstate | 58,177 | 54,119 | 53,811 | 50,399 | 49,862 | -1.1% | -14.3% |
| Midstate Unemployment Rate | Midstate | 4.9% | 4.6% | 4.5% | 4.2% | 4.2% | | |
| Nashville MSA Nonfarm Employment | Nashville MSA* | 753,084 | 755,451 | 759,344 | 761,445 | 760,534 | -0.1% | 1.0% |
| Average Hours Worked per Week in Manufacturing | Nashville MSA | 40.0 | 40.2 | 40.1 | 40.1 | 40.0 | -0.1% | 0.0% |
| Initial Claims for Unemployment Compensation | Midstate | 42,775 | 41,006 | 42,233 | 38,085 | 37,416 | -1.8% | -12.5% |
| **HOUSING CONSTRUCTION** | | | | | | | | |
| New Residential Permits | Nashville MSA | | | | | | | |
| Single-Family | | 3,194 | 3,272 | 3,131 | 3,036 | 2,650 | -12.7% | -17.0% |
| Multi-Family | | 644 | 335 | 413 | 284 | 584 | 105.6% | -9.3% |
| Total | | 3,838 | 3,607 | 3,543 | 3,320 | 3,234 | -2.6% | -15.7% |
| Value of New Residential Units (million $) | Nashville MSA | | | | | | | |
| Single-Family | | 523 | 537 | 537 | 540 | 491 | -9.0% | -6.0% |
| Multi-Family | | 56 | 26 | 32 | 23 | 55 | 138.8% | -3.0% |
| Total | | 579 | 562 | 570 | 563 | 546 | -3.0% | -5.7% |
| **TOURISM** | | | | | | | | |
| Total Air Passengers, Nashville International Airport | Davidson Co. | 2,444,600 | 2,576,247 | 2,430,861 | 2,439,985 | 2,496,395 | 2.3% | 2.1% |
| **TAXABLE SALES (estimates, million $)** | | | | | | | | |
| Nashville MSA | Nashville MSA | 7,199 | 7,310 | 7,509 | 7,468 | 7,461 | -0.1% | 3.6% |
| In-State Sales Only | | 6,096 | 6,236 | 6,398 | 6,324 | 6,308 | -0.2% | 3.5% |
| Midstate | Midstate | 9,758 | 9,907 | 10,170 | 10,146 | 10,099 | -0.5% | 3.5% |
| In-State Sales Only | | 8,264 | 8,456 | 8,657 | 8,591 | 8,540 | -0.6% | 3.3% |

*Notes:* Seasonal adjustment with X11. *Nashville MSA includes 13 counties. **Midstate is a 41-county area. *Sources:* U.S. Department of Labor, Bureau of Labor Statistics; U.S. Bureau of the Census; Davidson County Clerk's office; Metropolitan Nashville Airport Authority; U.S. Bankruptcy Court, Middle Tennessee District.

# HOUSING SLOWDOWN

*continued from front*

economy beyond the cost of building the home, affecting building supply retailers and wholesalers, developers, building material manufacturers, and furniture, appliance, and home furnishings retailers.

Between 2001 and 2005, home values rose rapidly in the U.S., creating new wealth for homeowners. Taking out home equity loans or establishing equity lines of credit, U.S. householders tapped upward of $1 trillion of increased value in their homes during this period, with much of the proceeds used for spending on goods and services. How important was the wealth effect on household spending during the housing boom? We can approximate the effect by comparing income growth (minus the wealth effect) with the growth of consumer spending during this period.

Declining housing construction and house price deflation will, all else being equal, cause total spending to fall in the Nashville area—but how much? The Global Insight study measures the effect on metropolitan areas across the country in terms of lost Gross Metropolitan Product (GMP). GMP is the metropolitan area measure of net output, much as GDP measures the value of final goods and services produced during a given period for the U.S. economy.

Global Insight estimates a loss of 0.6 percent of GMP growth for the Nashville metropolitan area, amounting to $901.6 billion in output reduction from 3.2 percent growth that would otherwise have occurred. This estimate is doubtful for two reasons. First, the Atlanta MSA also shows a -0.6 percent decline in GMP, producing a reduction of $954.0 billion in output. But isn't the Atlanta economy considerably larger than the Nashville economy? According to the U.S. Bureau of Economic Analysis (BEA, www.bea.gov), Atlanta's GDP is 3.5 times that of Nashville, and Atlanta's total personal income is 3.3 times larger. So one would reasonably conclude that a 0.6 percent loss of GMP for both metro areas should be at least three times larger for Atlanta than for Nashville.

Second, the extent of the wealth effect depends on two factors: (1) the sensitivity of household spending to a change in household wealth and (2) how much household wealth is likely to change due to falling property values during the coming year. According to the Global Insight

**Table 2. Quarterly Growth of Nonfarm Employment for Selected Metropolitan Areas (seasonally adjusted)**

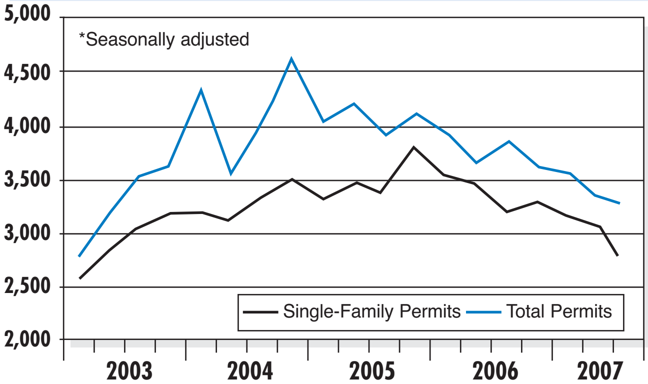
| Metropolitan Area | 06Q3–06Q4 | 06Q4–07Q1 | 07Q1–07Q2 | 07Q2–07Q3 |
|---|---|---|---|---|
| Atlanta–Sandy Springs–Marietta, GA | 0.5% | 0.5% | 0.4% | 0.8% |
| Birmingham–Hoover, AL | 0.2% | 0.3% | 0.3% | 0.2% |
| Charlotte–Gastonia–Concord, NC–SC | 0.7% | 1.1% | 0.3% | 0.5% |
| Indianapolis, IN | 0.4% | 0.3% | 0.4% | 0.4% |
| Louisville, KY–IN | 0.2% | 0.9% | 0.1% | -0.1% |
| Memphis, TN–MS–AR | 0.5% | 0.5% | 0.0% | 0.3% |
| Nashville–Davidson–Murfreesboro, TN | 0.3% | 0.5% | 0.3% | -0.1% |

*Source:* Bureau of Labor Statistics, CES series

**Table 3. Nashville-Davidson-Murfreesboro MSA Nonfarm Employment (seasonally adjusted in thousands)**

| Sector | 2006Q2 | 2006Q3 | 2006Q4 | 2007Q1 | 2007Q2 | 2007Q3 | % Change 07Q2-07Q3 | % Change 06Q3-07Q3 |
|---|---|---|---|---|---|---|---|---|
| Total Nonfarm | 750.5 | 753.1 | 755.5 | 759.3 | 761.3 | 760.5 | -0.1% | 1.0% |
| Total Private | 652.6 | 654.9 | 657.1 | 660.3 | 661.8 | 661.4 | 0.0% | 1.0% |
| Natural Resources, Mining, and Construction | 38.9 | 39.2 | 40.0 | 41.8 | 41.6 | 41.8 | 0.3% | 6.5% |
| Manufacturing | 84.1 | 84.6 | 84.2 | 83.8 | 82.8 | 82.3 | -0.6% | -2.7% |
| Durable Goods | 57.7 | 58.1 | 57.9 | 57.5 | 56.9 | 56.8 | -0.1% | -2.3% |
| Computer and Electronic Products | 4.3 | 4.2 | 4.1 | 4.3 | 4.2 | 4.2 | -0.9% | 0.9% |
| Electrical Equipment, Appliances, and Components | 7.4 | 7.6 | 7.7 | 7.5 | 7.7 | 8.0 | 3.6% | 4.6% |
| Transportation Equipment | 19.9 | 20.2 | 20.1 | 19.6 | 19.4 | 19.0 | -1.8% | -5.6% |
| Nondurable Goods | 26.4 | 26.5 | 26.3 | 26.2 | 25.9 | 25.5 | -1.5% | -3.7% |
| Wholesale Trade | 36.7 | 37.0 | 37.0 | 37.3 | 37.3 | 37.3 | 0.0% | 1.0% |
| Retail Trade | 86.6 | 86.4 | 86.1 | 86.7 | 87.1 | 87.2 | 0.1% | 1.0% |
| Transportation and Utilities | 31.4 | 31.2 | 31.4 | 31.9 | 31.9 | 31.6 | -1.0% | 1.4% |
| Information | 19.7 | 19.7 | 19.8 | 19.8 | 19.8 | 19.6 | -1.0% | -0.5% |
| Financial Activities | 46.0 | 46.1 | 46.1 | 46.1 | 46.2 | 46.5 | 0.7% | 0.8% |
| Finance and Insurance | 35.1 | 35.2 | 35.2 | 35.2 | 35.2 | 35.3 | 0.3% | 0.4% |
| Real Estate and Rental and Leasing | 10.9 | 10.9 | 10.9 | 10.9 | 10.9 | 11.2 | 2.0% | 2.1% |
| Professional and Business Services | 98.0 | 99.1 | 99.9 | 99.4 | 99.5 | 99.7 | 0.1% | 0.5% |
| Professional, Scientific, and Technical Services | 36.2 | 36.5 | 37.0 | 37.5 | 37.7 | 38.2 | 1.4% | 4.7% |
| Management of Companies and Enterprises | 7.6 | 7.6 | 7.7 | 7.6 | 7.8 | 7.5 | -3.1% | -1.3% |
| Admin., Support, Waste Management, Remediation Services | 54.2 | 55.2 | 55.0 | 54.2 | 54.0 | 54.2 | 0.4% | -1.9% |
| Educational and Health Services | 103.8 | 104.3 | 104.9 | 105.4 | 105.5 | 105.0 | -0.4% | 0.7% |
| Educational Services | 22.8 | 22.8 | 23.1 | 23.2 | 23.3 | 23.1 | -0.7% | 1.3% |
| Health Care and Social Assistance | 81.0 | 81.4 | 81.7 | 82.2 | 82.2 | 81.9 | -0.4% | 0.6% |
| Hospitals | 27.8 | 27.7 | 27.8 | 27.8 | 28.0 | 27.8 | -0.9% | 0.3% |
| Leisure and Hospitality | 76.8 | 76.5 | 76.8 | 77.6 | 78.1 | 78.6 | 0.6% | 2.8% |
| Arts, Entertainment, and Recreation | 9.9 | 10.0 | 9.9 | 10.1 | 10.1 | 10.0 | -0.6% | -0.2% |
| Accommodation and Food Services | 66.9 | 66.5 | 67.0 | 67.5 | 68.1 | 68.6 | 0.7% | 3.2% |
| Accommodation | 12.2 | 12.1 | 12.0 | 12.3 | 12.6 | 12.4 | -1.3% | 2.5% |
| Food Services and Drinking Places | 54.6 | 54.4 | 55.0 | 55.1 | 55.5 | 56.3 | 1.5% | 3.4% |
| Other Services | 30.4 | 30.7 | 30.9 | 31.1 | 31.5 | 31.6 | 0.1% | 2.7% |
| Government | 97.7 | 98.4 | 98.2 | 99.2 | 99.4 | 99.2 | -0.1% | 0.9% |

Figure 1. Building Permits Issued for Housing, Nashville MSA*




study, property values for homeowners are expected to fall a total of $1.2 trillion during 2008 for the U.S. Indeed, property values are beginning to fall, as measured by the Office of Federal Housing Enterprise Oversight's index of same-home sales prices: average property values for the U.S. market dropped 1.5 percent in the third quarter from the second quarter, the first quarterly decline since 1994. However, the fall in home values is concentrated in just a few states including Arizona, California, Florida, Nevada, Michigan, Ohio, Massachusetts, Rhode Island, and Minnesota. All other states continue to experience rising home values due to varying reasons such as population growth

**Table 4. Residential Real Estate in the Nashville MSA, 3rd Quarter**

| | 2006 | 2007 | Percent Change 2006-2007 |
|---|---|---|---|
| Inventory | 11,676 | 15,181 | 30.0% |
| Median Price | $181,067 | $187,303 | 3.4% |
| Closings | 3,017 | 2,463 | -18.4% |
| Days on Market | 57 | 65 | 14.6% |

*Source:* Greater Nashville Association of Realtors

(Utah), the rising price of oil and minerals (Texas, Oklahoma, Montana, Wyoming), or long-term population shifts to the South. Declining housing wealth will be focused in those states already experiencing falling housing prices. Tennessee is not one of these states.

One would expect household spending to rise more quickly than disposable personal income when the wealth effect is strong. Unfortunately, the ratio of spending to income could rise for other reasons, such as rising consumer confidence. But as a first approximation, the ratio of spending to income is at least consistent with the wealth effect.

The measure of income we use, estimated by the BEA, does not count income from capital gains or income generated by accessing home equity. So spending from home equity will show up in the spending but not the income figures. Thus, the ratio of spending to income gives us a rough approximation of the wealth effect.

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Figure 2. Trend Sales and Actual Sales for Tennessee (Adjusted)

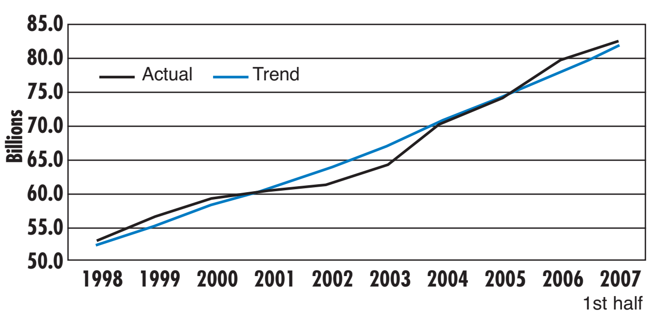


Figure 3. Residential Inventory and Closings, Nashville Area

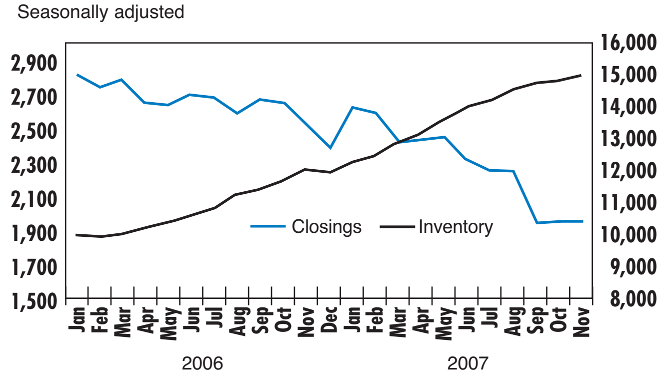


**Table 5. Economic Indicators for Chattanooga MSA and Clarksville MSA**

| Series (seasonally adjusted) | 2006Q1 | 2006Q2 | 2006Q3 | 2006Q4 | 2006Q1 | 2007Q2 | 2007Q3 | % Change 07Q2-07Q3 | % Change 06Q3-07Q3 |
|---|---|---|---|---|---|---|---|---|---|
| **CHATTANOOGA MSA** | | | | | | | | | |
| Nonfarm Employment (thousand) | 242.4 | 245.3 | 247.0 | 246.8 | 248.8 | 247.7 | 248.3 | 0.3% | 0.5% |
| Unemployment Rate | 4.5 | 4.6 | 4.3 | 4.1 | 4.1 | 3.8 | 3.8 | 0.0% | -13.4% |
| Taxable Sales (million $) | 1,608.7 | 1,621.6 | 1,649.7 | 1,637.1 | 1,669.5 | 1,683.3 | 1,687.8 | 0.3% | 2.3% |
| Permit-Authorized Housing Construction | | | | | | | | | |
| Total | 769 | 687 | 736 | 635 | 560 | 576 | 480 | -16.6% | -34.7% |
| Single-Family | 716 | 643 | 578 | 621 | 516 | 513 | 418 | -18.5% | -27.6% |
| **CLARKSVILLE MSA** | | | | | | | | | |
| Nonfarm Employment (thousand) | 81.9 | 83.0 | 83.0 | 83.0 | 83.2 | 83.8 | 84.6 | 1.0% | 1.9% |
| Unemployment Rate | 5.6 | 5.9 | 5.4 | 5.0 | 5.4 | 4.9 | 5.0 | 2.2% | -6.5% |
| Taxable Sales (million $) | 513.7 | 543.2 | 570.1 | 589.6 | 600.1 | 597.1 | 593.7 | -0.6% | 4.1% |
| Permit-Authorized Housing Construction | | | | | | | | | |
| Total | 490 | 620 | 1,123 | 783 | 732 | 533 | 347 | -35.0% | -69.1% |
| Single-Family | 401 | 474 | 536 | 573 | 438 | 408 | 279 | -31.6% | -47.9% |

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# HOUSING SLOWDOWN

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Figure 2 shows adjusted retail sales for Tennessee along with the 10-year trend.[1] We assume the 10-year trend is indicative of the relationship between disposable income and retail sales in the long-run: retail sales can deviate from the long-term trend, but only for one or two years at a time. A movement of actual sales above the trend will have to be "paid back" sometime in the future. Adjusted taxable sales were roughly 2.2 percent above trend for 2006, suggesting a combination of the wealth effect and increased consumer confidence. Data for the first half of 2007 show sales slowing considerably relative to personal income, with sales just 3.3 percent higher from the first half of 2006 compared with personal income growth of 5 percent. Thus, household spending is moving back toward the long-term trend.

The question now is what happens in the second half of 2007. Most likely, actual sales will dip below trend in the second half. Just how much at this point is unclear, but third-quarter sales from retail establishments currently are just 2.2 percent higher for Tennessee over the year, compared with 3.9 percent growth for the second quarter.

In the Nashville area for the third quarter, residential home sales are down 18 percent and inventories are 30 percent higher than one year ago (Table 4). Rapidly rising inventories are a strong sign that supply exceeds demand in this market. Accordingly, home prices are beginning to moderate with the median price up just 3.4 percent over the year. Some price moderation in this situation is helpful, in that lower prices encourage buyers and discourage sellers, bringing supply and demand closer to a balance.

More recent evidence for October and November suggests that price moderation may be working: after adjusting for typical seasonal fluctuations, the growth of inventories has slowed considerably and sales have stopped falling. Inventory for November is just 218 homes higher than September, and sales have stabilized, at least temporarily (Figure 3). It is too early to tell whether inventories have peaked, although the data are encouraging. ■

1. Taxable sales are adjusted by subtracting sales tax collections for building materials to measure consumer, not construction, spending.

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