



Burgundy Book

A report on economic conditions in the Memphis zone

Third Quarter 2016

The Memphis zone of the Federal Reserve comprises northern Mississippi, eastern Arkansas, and western Tennessee and a total population of approximately 3.1 million people, including the 1.3 million who live in the Memphis MSA.

The Memphis Zone's Unemployment Rate Falls to Its Lowest Level Since 2001

By Kevin L. Kliesen, *Business Economist and Research Officer*

Relative to three months earlier, an August survey of Memphis zone business contacts indicated slightly less optimism about the outlook for local economic conditions in 2016.

The zone's unemployment rate fell to 5.4 percent in the second quarter of 2016, down 1.3 percentage points from its average in the first quarter and its lowest rate since 2001. The Memphis MSA unemployment rate fell below 5 percent for the first time in eight years, while the Jonesboro MSA rate fell to a record-low 3.3 percent.

Nonfarm payroll employment growth was mixed across the zone's MSAs in the second quarter. Employment growth was strongest in the Jonesboro MSA, but more moderate in the Jackson and Memphis MSAs. Several contacts reported difficulty finding and retaining employees, but also reported little upward pressure on nominal wages.

Residential real estate activity continued to strengthen in the zone in the second quarter. Single-family permits rose strongly across the zone, while year-to-date home sales in the Memphis MSA were up 9 percent from 2015. In the Memphis MSA, apartment vacancy rates fell sharply in the second quarter, while industrial vacancy rates fell for the eighth consecutive quarter.

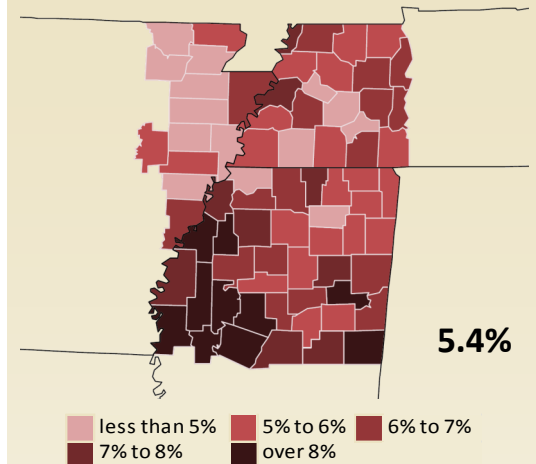
Although reports from auto dealers were mixed, growth of per capita auto debt was up 8.5 percent from a year earlier in the zone, outpacing the nation's growth (7.7 percent).

Bankers reported that loan demand in the third quarter was little changed from a year earlier, but about half of the surveyed bankers expect slightly stronger demand in the fourth quarter.

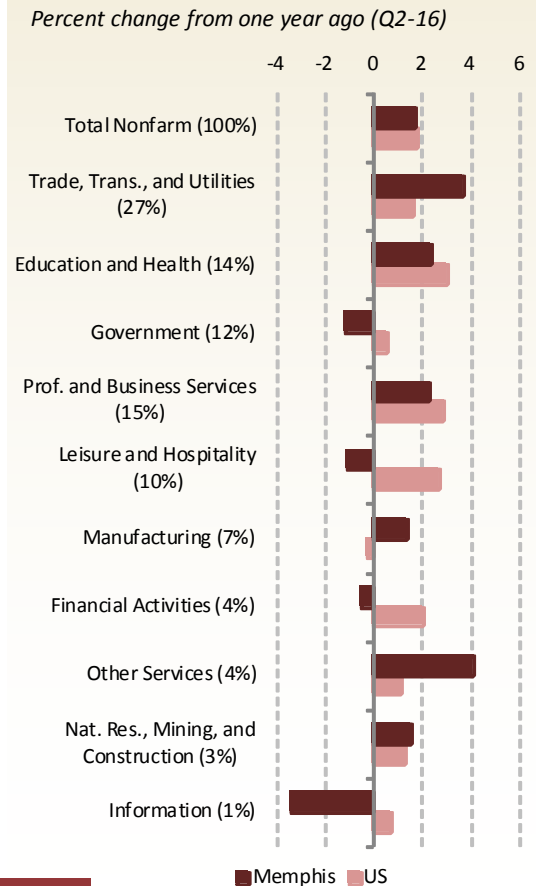
Weather conditions have generally been favorable throughout the growing season, burnishing expectations for increased production for most crops this year.

Data Snapshot

County unemployment rates (SA, Q2-16)



Nonfarm payroll employment by industry



How to read this report

Unless otherwise noted, **city names** refer to the metropolitan statistical areas (MSAs), which are geographic areas that include cities and their surrounding suburbs, as defined by the Census Bureau.

Statistics for the Memphis zone are based on data availability and are calculated as weighted averages of either the 73 counties in the zone or the three MSAs. As of 2012, approximately 53 percent of the zone’s labor force was located in an MSA. Specifically: 44 percent in Memphis, 4 percent in Jackson, and 4 percent in Jonesboro; 47 percent of the zone’s labor force was located in non-metropolitan areas.

Arrows in the tables are used to identify significant trends in the data. The direction of the arrow indicates the sign (up/down) and the color indicates the economic significance (green = good, red = poor). Arrows appear only when the change from the previous quarter is greater than 1 standard deviation. For example, the standard deviation of the change in the U.S. unemployment rate is 0.4 percent. If the U.S. unemployment rate declined from 8.4 percent to 8.2 percent, no arrow would appear; but if it declined from 8.4 percent to 7.9 percent, a green down arrow would appear in the table.

Selected **variable definitions** are located in the appendix.

Selected quotes from business contacts are generally verbatim, but some are lightly edited to improve readability.

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Join Our Panel of Business Contacts

The anecdotal information in this report was provided by our panel of business contacts, who were surveyed between August 9 and August 23.

If you’re interested in becoming a member of our panel, follow this link to complete a trial survey:

<http://research.stlouisfed.org/beigebooksurvey/>

or email us at beigebook@stls.frb.org.

Views expressed do not necessarily reflect official positions of the Federal Reserve System.

Service-Providing Sector Driving Employment Growth Across the Memphis Zone

By Paul Morris, Research Associate

“Representatives from the automotive and furniture industry, as well as other large employers, continue to report challenges in recruiting and retaining qualified workers.”

—Memphis area staffing contact

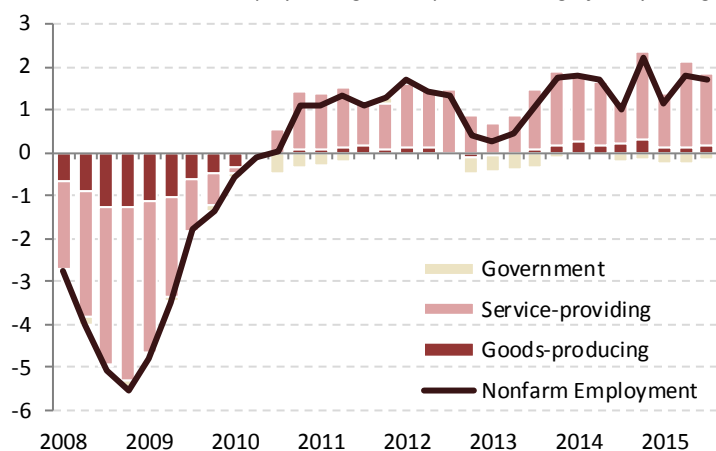
“The manufacturing and service sectors continue to state that one of their major concerns is finding qualified employees as they try to maintain or grow their businesses.”

—Jonesboro area banking contact

- Labor market conditions throughout the Memphis zone were generally positive during the second quarter. The unemployment rate in each of the three MSAs was at or below the national rate. Jonesboro's unemployment rate of 3.3 percent was the lowest in the zone.
- Employment growth in Memphis and Jackson was slower than growth nationally but generally moderate. Jonesboro continued to experience strong growth with payrolls up 3.3 percent from one year ago.
- Employment growth in Memphis was driven by growth in the service-providing sector (see figure). The fastest-growing subsector in Memphis was trade, transportation, and utilities, which has contributed two-thirds of all jobs since the second quarter of 2015.
- Consistent with improving employment data, anecdotal evidence suggests that the labor market is tightening: Manufacturing and services contacts across the zone reported difficulties in finding and retaining qualified employees.
- Despite a tightening labor market, contacts reported little upward pressure on wages. Less than half of contacts reported wages as higher in the third quarter than they were a year ago, and only one-third expect wages to be higher in the fourth quarter.

Service-providing growth continues in Memphis

Sector contributions to employment growth, percent change from year ago



Source: BLS.

	Memphis	Jackson	Jonesboro, AR	US
Unemployment rate (Q2-16) (%)	4.9	4.6	3.3	4.9
Nonfarm employment (Q2-16)	1.6	1.3	3.3	1.8
Goods-producing sector	1.4	0.5 ▼	2.3	0.3
Private service-providing sector	2.2	1.5	4.0	2.3
Government sector	-1.2	1.2	1.1	0.6

Note: Unless otherwise noted, values are percent change from one year ago. Arrows indicate a significant (± 1 standard deviation) change from the previous quarter. See appendix for notes and sources.

Manufacturing Employment Increases in Tennessee Despite U.S. Slowdown

By Daniel Eubanks, Senior Research Associate

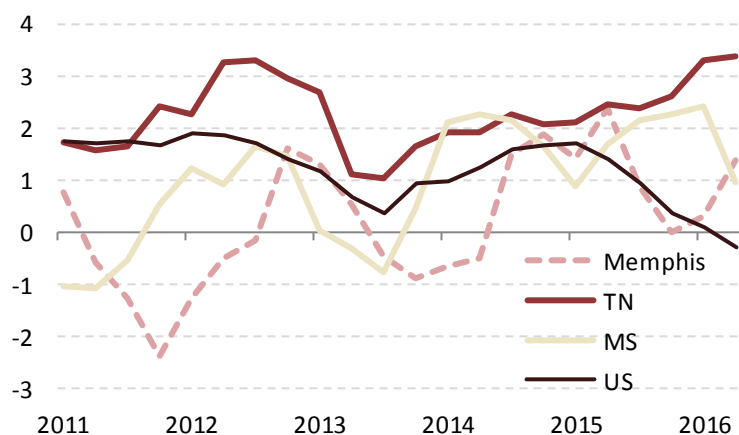
“The global economy is still running very slow.”
 – Memphis area manufacturer

“We are having difficulties hiring high-skill personnel.”
 – Northeastern Arkansas manufacturer

- Manufacturing employment growth was mixed across the Memphis zone. In the Memphis MSA, growth accelerated from 0.3 percent to 1.4 percent. In Tennessee overall, the manufacturing employment growth rate increased to 3.4 percent, the fastest rate in over a decade. In contrast, growth slowed sharply in Mississippi. The slowdown was especially pronounced in the nondurable goods sector.
- Manufacturing contacts reported that slow global growth hurt sales and that finding high-skill labor remains a challenge (see quotes).
- Manufacturing exports from Tennessee decreased significantly. The decline was driven by decreases in exports of chemical products, computer and electronic products, and transportation equipment. Manufacturing exports from Mississippi also decreased as a result of reduced exports of nondurable goods, including petroleum and coal products, chemical products, and paper products.
- Employment growth in the transportation sector slowed across the Memphis zone. In the Memphis MSA, growth slowed 2.6 percentage points from 5.8 percent to 3.2 percent. In Tennessee and Mississippi, employment growth in the sector slowed by 1.5 and 1.1 percentage points, respectively.

Manufacturing conditions are mixed in the Memphis zone

Percent change from one year ago



Source: BLS

	Memphis	Tennessee	Mississippi	US
Transportation employment (Q2-16)	3.2 ▼	2.4	3.5	1.2
Manufacturing employment (Q2-16)	1.4	3.4	0.9 ▼	-0.3
Durable goods	1.8	3.5	0.7	-1.0
Nondurable goods	1.0 ▲	3.2	1.3 ▼	0.9
Manufacturing exports (Q2-16)	--	-7.4 ▼	-8.1	-6.0

Note: Values are percent change from one year ago. Arrows indicate a significant (± 1 standard deviation) change from the previous quarter; see appendix for notes and sources.

Home Sales Remain Strong; Industrial Market Continues To Improve

By Joseph McGillicuddy, Senior Research Associate

“There has been an increase in subdivision development.”

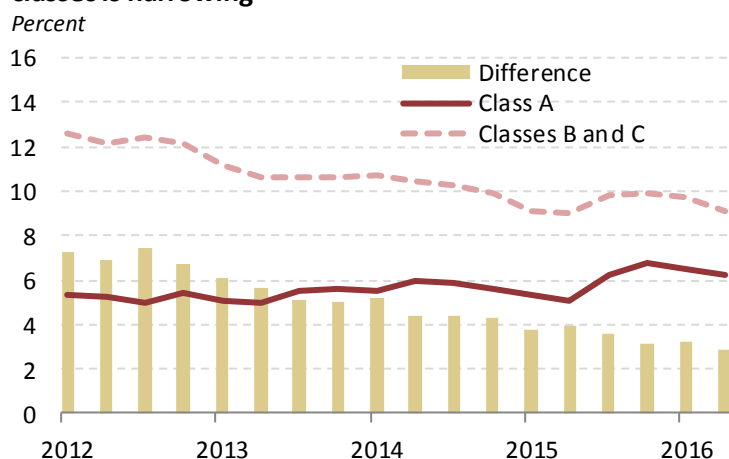
—Memphis real estate contact

“Class A warehouse space remains non-existent in the Memphis MSA market.”

—Memphis real estate contact

- The residential real estate market in Memphis continued to strengthen in the second quarter of 2016. Year-to-date home sales further increased at a relatively high rate, well exceeding that of the nation for a second consecutive quarter. House prices also continued to increase across the zone’s major MSAs but at a fairly modest rate compared with the national average.
- Single-family building permits grew at a moderate rate across the zone, with Memphis, Jackson, and Jonesboro posting growth rates similar to the national average.
- The Memphis industrial market continued to improve. The vacancy rate declined for an eighth consecutive quarter and is more than 2 percentage points below where it was a year ago. There is more than twice the amount of industrial space under construction than at the same time last year.
- The Memphis apartment market tightened slightly in the second quarter as rent growth remained steady and the vacancy rate dropped by half a percentage point. Over the past several years the gap in vacancy rates among the different apartment property classes in Memphis has shrunk substantially. This decrease has been due to a steady decline in the vacancy rates of class B and class C properties (see figure).

Gap between vacancy rates of different apartment classes is narrowing



Source: Reis.com.

Non-residential market (Memphis, Q2-16)	Apartment	Office	Retail	Industrial
Vacancy rate (%)	7.9 ▼	23.2	11.3	8.5
Asking rent	1.9	1.3	0.7	2.5
Percent change from one year ago				

Note: Apartment, office, and retail values are from Reis.com. Industrial values are estimates from Cushman & Wakefield.

Residential market (Q2-16)	Memphis	Jackson	Jonesboro	US
CoreLogic Home Price Index	3.2	0.7 ▼	1.4	5.4
Single-family building permits	16.4	15.4 ▼	7.5	10.1
New and existing home sales	9.0	--	--	5.3

Note: Sales and permits data are year-to-date percent change. Prices are percent change from one year ago. Arrows indicate a significant (±1 standard deviation) change from the previous quarter. See appendix for notes and sources.

Zone Delinquency Rates Surpass the Nation's

By Rodrigo Guerrero, *Research Associate*

"Retailers in general state that sales have continued to be soft over the last couple of months...Retailers are now hoping that sales figures for 2016 meet those of 2015."

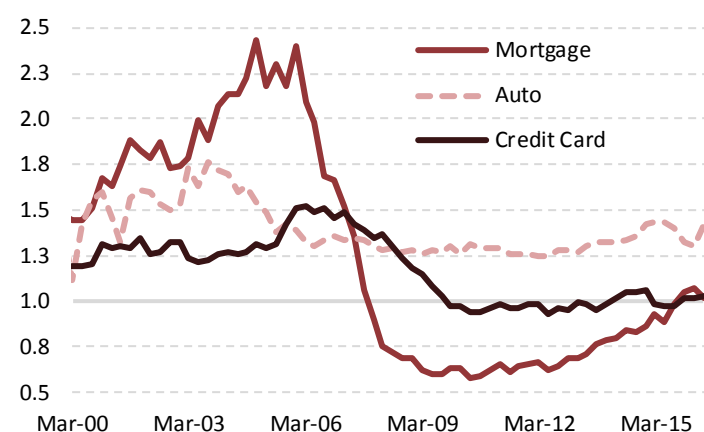
—East Arkansas business contact

"Auto sales are significantly better this year vs last year and the sale of trucks/SUVs has surpassed the sale of cars."

—Memphis business contact

Zone delinquency rates surpass the nation's

Ratio, zone delinquency to nation delinquency



Source: FRBNY Consumer Credit Panel and Equifax.

- The zone's mortgage delinquency rate continued to drop in the second quarter; however, the rate has remained above the nation's for the past three quarters (see figure). Still, mortgage debt balances continue to decline.
- Reports from retailers and auto dealers regarding sales were mixed. Retailers reported soft sales over the summer. Some auto dealers indicated that sales halfway through the third quarter fell short of expectations, while others reported strong sales (see quotes). Auto debt growth remained high in the zone with real auto loan balances increasing at a faster rate than the U.S. average. Meanwhile, the zone's auto delinquency rate continued to increase in the second quarter.
- Households within the zone increased their credit card balances at a faster pace than the U.S. average. The zone's credit card delinquency rate decreased relative to last quarter and is slightly higher than the nation's.
- Real income per capita accelerated across Arkansas and Mississippi, while it decelerated slightly in Tennessee and the U.S. as a whole in the first quarter. The growth rate in each of these three states exceeded the nation's.

	Memphis Zone	Arkansas	Mississippi	Tennessee	US
Per capita personal income (Q1-16)	--	3.2	2.7	3.8	2.6
Per capita debt balances (Q2-16)					
Mortgage	-1.9	0.1	-0.4	-0.1	0.7
Credit card	2.1	4.2	4.0	1.1	1.6
Auto loan	8.5	9.2	8.4	8.9	7.7
90+ day delinquency rates (Q2-16) (%)					
Mortgage	1.5 ▼	1.2	1.8 ▼	1.1 ▼	1.5
Credit card	7.3	7.3	6.4	6.6	7.1
Auto loan	4.6 ▲	3.3	5.0	3.4	3.2

Note: Unless otherwise noted, values are percent change from one year ago. Arrows indicate a significant (± 1 standard deviation) change from the previous quarter. See appendix for notes and sources.

Business Loan Demand Improves in the Memphis Zone

By Michelle Neely, *Economist*, and Hannah Shell, *Senior Research Associate*

“We are seeing more long-term fixed-rate loans. This is more than likely a result of lower investment portfolio yield opportunities.”

— Memphis banker

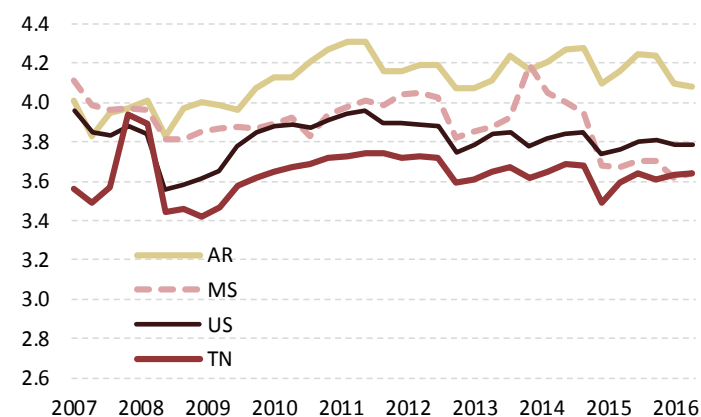
“Low commodity prices continue to present concerns for borrowers’ prospects of being able to service all debts for the 2016 crop year. We could see a cumulative effect after many were forced to restructure debt that could not be paid from the 2015 crop year.”

— Northeast Arkansas banker

- Surveyed bankers reported overall loan demand was unchanged in the third quarter compared with the same time last year. Half of respondents expect loan demand will be slightly higher in the fourth quarter compared with year-ago levels; the rest expect it will be unchanged.
- Two-thirds of respondents reported demand for business loans was slightly higher in the third quarter than it was at the same time last year; one-third reported it was slightly lower. Most respondents predict business loan demand will be unchanged to slightly higher in the fourth quarter than it was one year ago.
- Profitability remained strong at commercial banks in Tennessee and Arkansas. Return on average assets (ROA) was 34 basis points higher than year-ago levels at Tennessee banks. This increase in ROA was partially driven by a 5-basis-point increase in average net interest margin (NIM) at Tennessee banks since 2015:Q2. ROA was 8 basis points above year-ago levels for Arkansas banks despite an 8-basis-point drop in NIM.
- Surveyed bankers reported delinquencies were mostly unchanged across loan categories; the exception was consumer loans, where bankers reported delinquencies were slightly higher in the third quarter compared with the same time last year. Respondents expect delinquencies to be unchanged to slightly higher in the fourth quarter compared with year-ago levels.

Memphis zone margins hold steady

Net interest margin at commercial banks, percent



Source: FRED.

Banking performance (Q2-16)	Tennessee	Mississippi	Arkansas	8th District	US Peer Banks
Return on average assets	1.11	0.80	1.28	1.10	1.07
Net interest margin	3.64	3.64	4.08	3.69	3.79
Nonperforming loans / total loans	0.96	1.21	1.06	0.97	1.05
Loan loss reserve coverage ratio	118.75	97.52	113.21	121.65	121.90

Note: Values are percentage points. Arrows indicate a significant (± 1 standard deviation) change from the previous quarter. See appendix for notes and sources.

Return to Cotton Likely To Reverse Production Trend; Seems Sustainable

By Jonas C. Crews, *Research Associate*

“Crops in the northwestern portion of Mississippi look promising.”

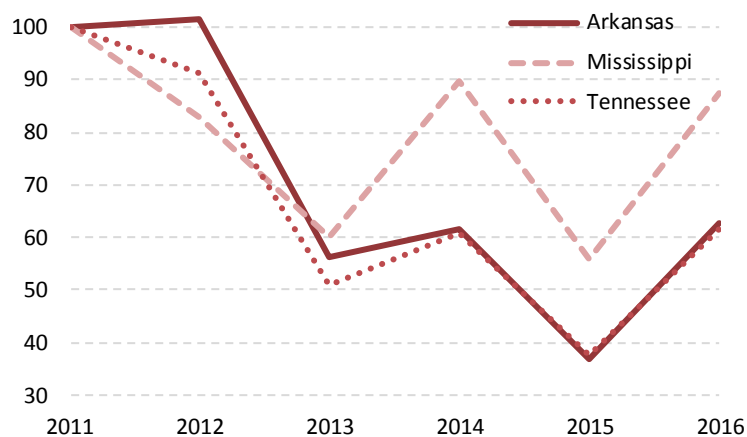
—Northern Mississippi contact

“Unseasonal rains will boost yields both here and in the Midwest.”

—Western Tennessee contact

Cotton Production Trend Expected To Dramatically Reverse

Index of Bushels, 2011=100



Source: USDA-NASS.

- Increased acreage and yield-conducive weather have resulted in the expectation of higher production for corn, cotton, and rice throughout the zone. In particular, cotton and rice are set to experience significant increases (see both quotes). Meanwhile, decreased acreage has resulted in soybean and sorghum expectations that are lower than last year’s levels (see table). The large sorghum declines are the result of both price declines and pest issues in 2015.
- After a multi-year decline in cotton production due to low prices and concerns over related regulation changes, improved prices and plant quality have resulted in the expectation of a major trend reversal (see figure). There was a similar uptick in 2014; but the increase in plant quality, which is a permanent improvement, reinforces the belief that 2017 production will not revert to the same downward trend that occurred in 2015.
- The zone plays a relatively small role in District and national natural resource extraction, but it is also experiencing strong declines. Each state in the zone has experienced a coal production decline that is at least 8 percentage points greater than its decline in the previous quarter (see table).

	Arkansas	Mississippi	Tennessee	US
Natural resources (Q2-16)				
Mining and logging employment	-18.9	-11.0	--	-16.0
Coal production	-35.4	-28.2 ▼	-28.2 ▼	-27.2
Estimated production (2016)				
Corn	72.5	38.4	6.2	11.4
Cotton	69.9 ▲	56.3 ▲	63.9 ▲	23.2 ▲
Rice	25.2 ▲	37.1 ▲	--	27.0 ▲
Sorghum	-92.4 ▼	-82.2	--	-20.5
Soybean	-5.6	-8.6	0.0	3.3

Note: Values are percent change from one year ago. Arrows indicate a significant (± 1 standard deviation) change from the previous quarter or year. See appendix for notes and sources.

Cover Page

Sources

Bureau of Labor Statistics

Unemployment rate, nonfarm payroll employment.

Labor Markets

Table Sources

Bureau of Labor Statistics

Unemployment rate. Nonfarm employment and contributions by sector.

Notes

Goods-producing sector comprises the manufacturing and natural resources, mining, and construction sectors.

Private service-providing sector includes the following sectors: trade, transportation, and utilities; information; financial activities; professional and business services; education and health services; leisure and hospitality; and other services.

Unemployment rate data are seasonally adjusted.

Average hourly earnings are in current dollars.

Manufacturing and Transportation

Table Sources

Bureau of Labor Statistics

Transportation employment: includes transportation and warehousing industries.

Manufacturing employment: total, durable, and nondurable goods.

World Institute for Strategic Economic Research

Manufacturing exports: dollar value.

Notes

Transportation employment in Memphis covers transportation, warehousing, and utility industries. About 90 percent of the reported jobs are contributed by transportation and warehousing industries.

Manufacturing exports are defined as total dollar amount of exports by the manufacturing industries.

Durable goods manufacturing sector is defined by the Bureau of Labor Statistics as industries with a NAICS classification code of 321 (Wood Product Manufacturing); 327 (Nonmetallic Mineral Product Manufacturing); 331 (Primary Metal Manufacturing); 332 (Fabricated Metal Product Manufacturing); 333 (Machinery Manufacturing); 334 (Computer and Electronic Product Manufacturing); 335 (Electrical Equipment, Appliance, and Component Manufacturing); 336 (Transportation Equipment Manufacturing); 337 (Furniture and Related Product Manufacturing); and 339 (Misc. Manufacturing).

Nondurable goods manufacturing sector is defined by the Bureau of Labor Statistics as industries with a NAICS classification code of 311

(Food Manufacturing); 312 (Beverage and Tobacco Product Manufacturing); 313 (Textile Mills); 314 (Textile Product Mills); 315 (Apparel Manufacturing); 316 (Leather and Allied Product Manufacturing); 322 (Paper Manufacturing); 323 (Printing and Related Support Activities); 324 (Petroleum and Coal Products Manufacturing); 325 (Chemical Manufacturing); and 326 (Plastics and Rubber Products Manufacturing).

Real Estate and Construction

Table Sources

CoreLogic

Home price index, including distressed sales.

Census Bureau

Year-to-date single-family building permits.

Memphis Area Association of Realtors

Year-to-date new and existing home sales.

Notes

Asking rent is the publicized asking rent price. Data are in current dollars.

Vacancy rate is the percentage of total inventory physically vacant as of the survey date, including direct vacant and sublease space.

New and existing home sales consist of single-family home sales.

Household Sector

Table Sources

Equifax based on authors' calculations

All figures are based on a 5 percent sample of individual credit reports. Balances are geographical averages of various debt categories. The mortgage category includes first mortgages and home equity installment loans, but home equity lines of credit are omitted. Auto loans include those financed by finance company or bank loans. Credit cards are revolving accounts at banks, bankcard companies, national credit card companies, credit unions, and savings and loan associations.

Haver Analytics

Per capita income.

Notes

Delinquency rates are calculated as the percentage of payments past due by more than 90 days, weighted by the dollar value of the loan.

Banking and Finance

Table Sources

Federal Financial Institutions Examination Council

Return on average assets: USL15ROA. Net interest margin: USL15NIM. Nonperforming loans: USL15NPTL. Loan loss reserve/Total loans: USL15LLRTL. Net loan losses/Average total loans: USL15LSTL.

Note: The data available in the table can be found in FRED.

Notes

Loan loss provisions are expenses banks set aside as an allowance for bad loans.

Nonperforming loans are those loans managers classify as 90 days or more past due or nonaccrual, which means they are more likely to default.

Loan loss coverage ratio is loan loss reserves divided by nonperforming loans.

US peer banks are those commercial banks with assets of less than \$15 billion.

Due to the seasonal nature of bank return on average assets and net interest margin, the **arrows** in the table denote significant changes from one year ago.

Agriculture and Natural Resources

Sources

Energy Information Administration (EIA)

Coal production. Note: Production trends identified in report may be inconsistent with previous reports due to data revisions.

Bureau of Labor Statistics (BLS)

Mining and logging employment.

United States Department of Agriculture (USDA)

Production estimates.