



Burgundy Book

A report on economic conditions in the Memphis zone

Fourth 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.

Business Contacts More Optimistic about Regional Growth for 2017

By Charles S. Gascon, *Regional Economist*

The outlook of business contacts in the zone has improved relative to one year ago. Fifty-four percent of contacts expect local economic conditions to be better or somewhat better in 2017 relative to 2016, no contacts expect conditions to deteriorate. This is a remarkable turnaround in sentiment from one year ago, when 35 percent of contacts expected conditions in 2016 to be worse or somewhat worse than 2015 and only 31 percent expected conditions to improve.

Labor market conditions were generally mixed. The zone's unemployment rate rose slightly from its record lows to 5.6 percent in the third quarter. Nonfarm payroll employment growth was similarly mixed. Contacts, however, remain upbeat and nearly half employment to be higher or slightly higher in the fourth quarter.

Residential real estate activity improved slightly. Growth of both home sales and building permits in Memphis outpaced the national rates. Commercial real estate conditions were a bit weaker. However, the industrial market has seen a pickup in construction activity.

Households' financial positions continue to improve. Per capita income growth in all three states outpaced the national rate. The credit card delinquency rate hit a 16-year low; at the same time, households continue to shed mortgage debt and take on auto loans.

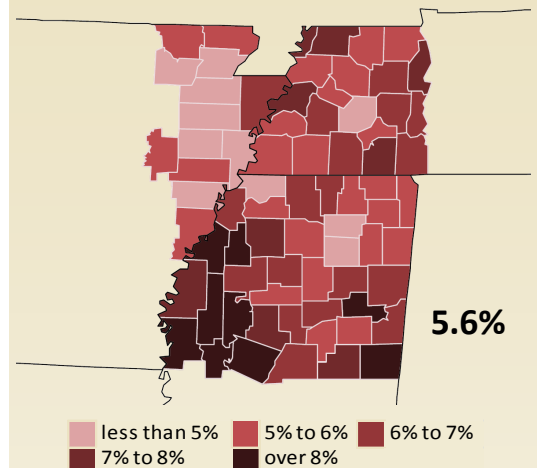
Banking contacts reported that overall banking conditions were generally unchanged during the fourth quarter; however, there was a slight uptick in the number of bankers reporting declines in the demand for auto and commercial and industrial loans.

Estimated growth in corn and rice production was lower than the strong growth previously forecasted. Meanwhile, cotton production growth estimates continue to be marked up to near-record levels.

Note to readers: This will be the final Burgundy Book. Starting in 2017, zone-specific anecdotal information will be included in a supplement to the redesigned Beige Book. The Beige Book is released eight times per year, and the next release will be January 18. The regional economic data contained in the report is available in the St. Louis Fed's FRED database and may be accessed through the Eighth District Economy webpage: research.stlouisfed.org/regecon.

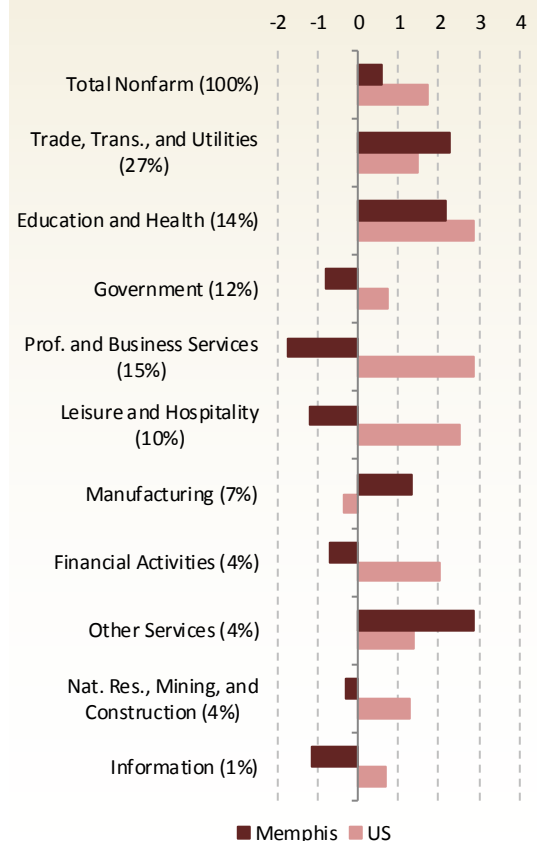
Data Snapshot

County unemployment rates (SA, Q3-16)



Nonfarm payroll employment by industry

Percent change from one year ago (Q3-16)



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 November 8 and November 16.

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.

Unemployed per Advertised Vacancy Rising in Memphis

By Paul Morris, Research Associate

“The manufacturing and service sectors in the smaller communities continue to state that one of their major concerns is finding qualified employees.”

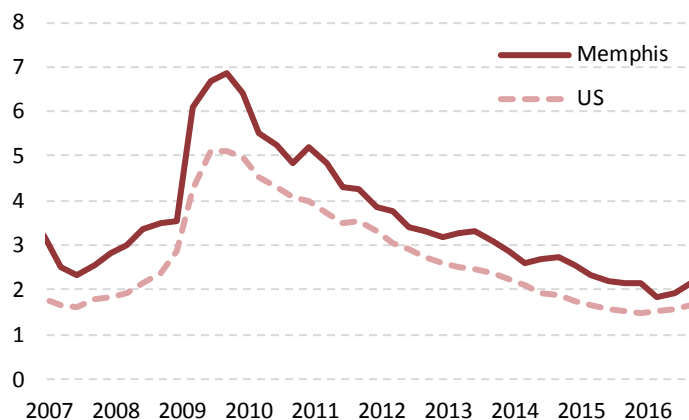
—Northeast Arkansas area business contact

“Employment opportunities exist in abundance. Unfortunately, more than half of those positions go unfilled due to lack of outreach and an underprepared workforce.”

—Memphis area business contact

More unemployed per advertised vacancy in Memphis

Number of unemployed per advertised vacancy



Source: Conference Board.

- Labor market conditions throughout the Memphis zone were generally mixed during the third quarter. While the unemployment rate was at or below the national rate in Jackson and Jonesboro, employment growth was below the national average and lower than a year ago in both Jackson and Memphis. However, nearly half of contacts surveyed expect employment to be higher or slightly higher in the fourth quarter than the same period last year.
- The private service-providing sector continued to drive employment growth throughout the zone, as the majority of job gains came from that sector in Memphis, Jackson, and Jonesboro; in contrast, Memphis registered a significant slowdown in growth.
- Contacts across the zone continue to report difficulty in finding qualified candidates to fill job vacancies in sectors such as manufacturing and services. Anecdotal evidence suggests the lack of skilled labor has put upward pressure on wages, as half of contacts surveyed reported that wages were higher or slightly higher in the fourth quarter than a year ago.
- Despite anecdotal evidence of a tight labor market, the number of unemployed per advertised vacancy in Memphis has increased in each of the past two quarters (see figure). This occurred concurrently with increases in the Memphis labor force.

	Memphis	Jackson	Jonesboro, AR	US
Unemployment rate (Q3-16) (%)	5.2	4.9	3.4	4.9
Nonfarm employment (Q3-16)	0.4 ▼	1.1	3.4	1.7
Goods-producing sector	0.8	-2.1 ▼	3.0	0.2
Private service-providing sector	0.8 ▼	2.2	4.1	2.2
Government sector	-0.8	0.7	1.2	0.7

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.

Transportation Sector Slows; Manufacturing Contacts Report Lack of Orders

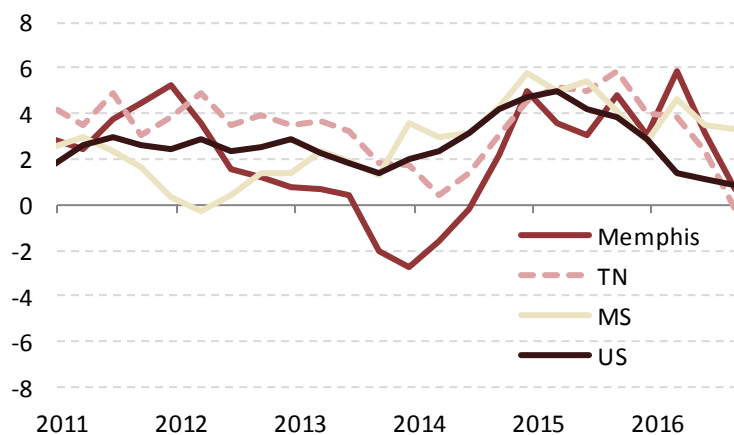
By Daniel Eubanks, Senior Research Associate

"Demand is not there."

– Memphis area manufacturer

Transportation employment growth slows in Memphis

Percent change from one year ago



Source: BLS

- Employment growth in the transportation sector slowed throughout the Memphis zone (see figure). The slowdowns in the Memphis MSA and in Tennessee were especially sharp. In Memphis, transportation employment growth slowed from 3.2 percent last quarter to 0.7 percent this quarter. In Tennessee, transportation employment decreased by 0.2 percent after growing by 2.4 percent last quarter.
- Manufacturing employment growth also slowed slightly across the Memphis zone in the third quarter. Despite the slowdown, manufacturing employment continued to grow. In contrast, total manufacturing employment in the U.S. declined by 0.4 percent. Manufacturing contacts in the zone report a lack of demand.
- Both the durable and nondurable goods sectors contributed to manufacturing employment growth in the zone, although both sectors grew more slowly than in the previous quarter.
- Manufacturing exports from the Memphis zone decreased in the third quarter, mirroring the nationwide decrease in manufacturing exports. In Tennessee, the export decline was driven by reduced exports of transportation equipment and chemicals. Similarly, in Mississippi, the export decline was driven by reduced exports of transportation equipment and petroleum and coal products.

	Memphis	Tennessee	Mississippi	US
Transportation employment (Q3-16)	0.7 ▼	-0.2 ▼	3.3	0.9
Manufacturing employment (Q3-16)	1.3	2.5	0.7	-0.4
Durable goods	1.4	2.5	0.5	-1.1
Nondurable goods	1.3	2.6	1.1	0.8
Manufacturing exports (Q3-16)	--	-4.6	-6.8	-3.7

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 Real Estate Activity Strengthens

By Joseph McGillicuddy, Senior Research Associate

"A large number of industrial buildings are under construction in Mississippi."

—Memphis real estate contact

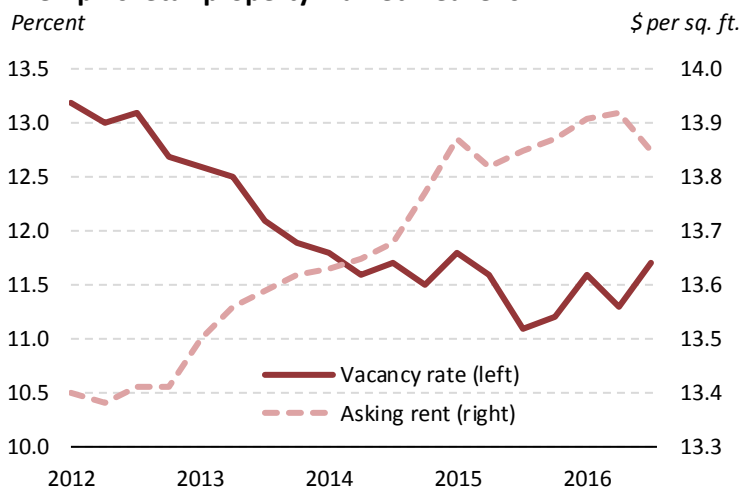
"For the first time in a while, industrial buildings will be built speculatively in Memphis during 2017."

—Memphis real estate contact

"This is as good as the residential market has been over the past few years."

—Jonesboro real estate contact

Memphis retail property market weakens



Source: Reis.com.

- Residential real estate activity improved slightly from the previous quarter. Memphis home sales growth slowed slightly but continued to outpace the national average. On the other hand, house price growth ticked up slightly in all three major MSAs within the zone but remained below that of the nation.
- Single-family building permits in Memphis and Jonesboro grew at a relatively fast rate during the third quarter while Jackson saw a more moderate increase at a rate close to the U.S. average.
- The Memphis retail property market weakened in the third quarter, as the vacancy rate increased sharply while growth in asking rents dropped significantly to no change year-over-year. While the vacancy rate has been relatively flat over the past few years, asking rents have increased at a fairly consistent rate since 2013 up until the third quarter (see figure).
- The Memphis industrial market strengthened in the third quarter. While asking rents remained relatively unchanged, the vacancy rate dropped further. There was more than three times the amount of industrial space under construction than the third quarter of last year.
- The multifamily market and office market continued to strengthen with increasing rents and declining vacancy rates.

Non-residential market (Memphis, Q3-16)	Apartment	Office	Retail	Industrial
Vacancy rate (%)	7.2	22.8	11.7 ▲	8.1
Asking rent	1.6	1.2	0.0 ▼	-0.4
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 (Q3-16)	Memphis	Jackson	Jonesboro	US
CoreLogic Home Price Index	4.3	1.8	2.3	5.8
Single-family building permits	17.1	7.2	31.3	8.3
New and existing home sales	7.4	--	--	4.1

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's Credit Card Delinquency Rate Hits 16-Year Low

By Rodrigo Guerrero, *Research Associate*

"The Jonesboro market continues to see a strong overall economy as consumer spending is strong with retail and restaurant businesses being pleased with current sales."

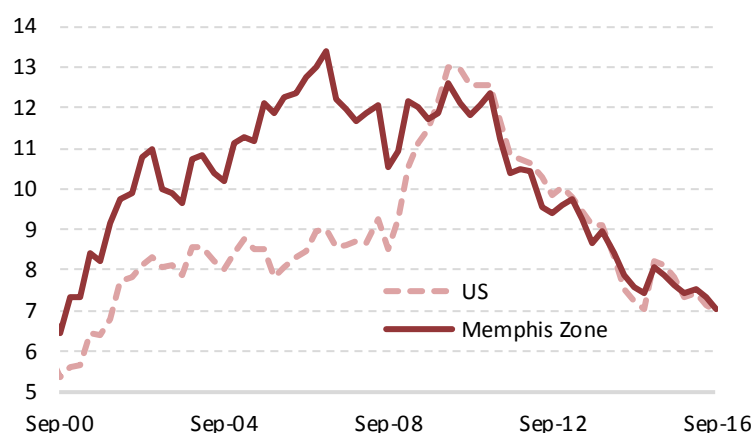
—East Arkansas business contact

"Not sure exactly why but new car sales are down and used car sales are flat."

—Memphis auto dealer

Zone's credit card delinquency rate hits 16-year low

Percent



Source: FRBNY Consumer Credit Panel and Equifax.

- Households continued to increase their credit card balances, and at a faster pace than the national rate. At 7.1 percent, the zone's credit card delinquency rate reached its lowest value since the third quarter of 2000, yet it continued to be slightly above the national rate (see figure).
- Zone households continued to unwind their mortgage debt in the third quarter. Meanwhile, mortgage delinquency rates kept falling and are now just slightly below the national rate.
- Reports from retailers and auto dealers regarding sales halfway through the fourth quarter were mixed. Though still elevated and above the national rate, the zone's auto debt growth rate declined by over 1 percentage point relative to the second quarter. Auto delinquency rates continued to increase and remained above the national rate.
- Real per capita income growth decelerated across Arkansas, Mississippi, Tennessee, and the U.S. as a whole in the second quarter. The growth rates in each of these three states continued to exceed the national rate.

	Memphis Zone	Arkansas	Mississippi	Tennessee	US
Per capita personal income (Q2-16)	--	1.8	2.3	2.1	1.4
Per capita debt balances (Q3-16)					
Mortgage	-1.2	-1.0	-1.3	-0.8	-1.5 ▼
Credit card	3.8	4.6	4.2	1.9	1.7
Auto loan	7.2	7.9	6.5	7.6	6.2
90+ day delinquency rates (Q3-16) (%)					
Mortgage	1.4	1.2	1.7	1.0	1.4
Credit card	7.1	7.2	6.4	6.4	7.0
Auto loan	4.7	3.5	5.2	3.4	3.4

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.

Future releases of these data are available in *The Quarterly Debt Monitor*. See appendix for a link to the report.

Banking Conditions Mixed in the Memphis Zone

By Michelle Neely, *Economist*, and Evan Karson, *Research Associate*

"The yield curve remains flat, which is causing all banks to experience net interest margin compression."

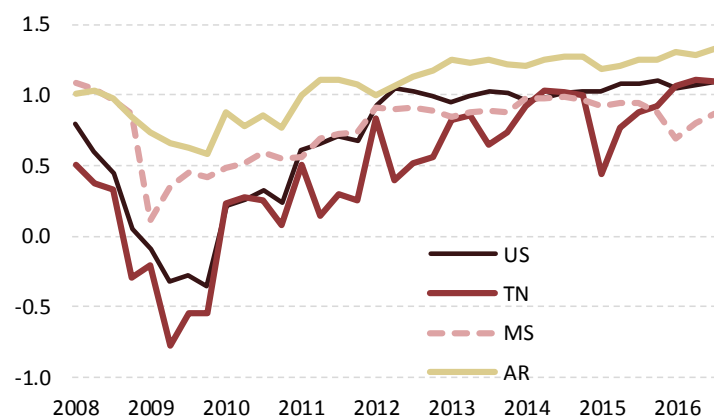
--Northeast Mississippi banker

"Loan pricing remains very competitive for quality credits."

--Memphis area banker

Profit ratios show solid growth for Tennessee banks

Return on average assets at commercial banks, percent



Source: FRED.

- Banking contacts reported that overall banking conditions in the Memphis zone were unchanged during the fourth quarter relative to last year. Loan demand remained steady with some signs of slight weakening in specific loan categories. Credit standards were unchanged to slightly tighter across all loan types, according to contacts.
- There was a slight uptick in the number of survey respondents reporting declines in demand for auto loans and commercial and industrial (C&I) loans. Contacts expect, by a slim majority, that C&I loan demand will continue to taper off into next quarter.
- Trends in bank profitability were mixed within the zone during the third quarter. Compared with the third quarter of 2015, return on average assets (ROA) rose 22 basis points at Tennessee banks (see figure), while the average net interest margin (NIM) remained unchanged over the same period. Meanwhile, ROA declined 7 basis points at banks in Mississippi, a decrease that was partially driven by a 6-basis-point drop in the average NIM from its year-ago level.
- Ratios of nonperforming loans to total loans (NPTL) were unchanged to slightly lower across the zone during the third quarter, which is consistent with national trends. Since the third quarter of 2015, the average NPTL ratio at Tennessee banks has declined 28 basis points, reaching 1.04 percent, its lowest level since 2007.

Banking performance (Q3-16)	Tennessee	Mississippi	Arkansas	8th District	US Peer Banks
Return on average assets	1.10	0.87	1.33	1.12	1.09
Net interest margin	3.64	3.64	4.14	3.70	3.80
Nonperforming loans / total loans	0.93	1.21	1.04	0.94	1.01
Loan loss reserve coverage ratio	116.13	98.35	106.73	121.28	123.76

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

Cotton Yields Above Key Benchmark in All Three Zone States

By Jonas C. Crews, Research Associate

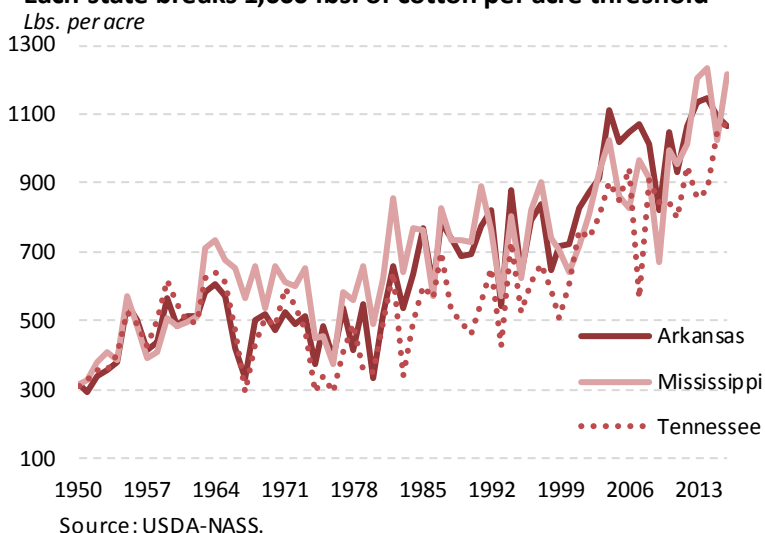
"It's been as good harvest weather as I can remember. Land was rowed and ready for spring planting much sooner than usual."

—Mississippi crop farmer

"I'm hearing fear from the elevators regarding too little storage space."

—Tennessee agricultural technology contact

Each state breaks 1,000 lbs. of cotton per acre threshold



- Estimated corn and rice production growth are lower than the forecasted growth reported in our previous report. Meanwhile, cotton production growth estimates are even larger than the already sizable forecasts. Soybean production is down from 2015 for each state, although yields were still at high levels (see table).
- Strong cotton production growth comes as a result of both planting increases and strong yields. For only the second time in history (last year was the first), each state in the Memphis zone reported cotton yields above 1000 lbs. per acre (see figure).
- Strong yields and overall row crop production have been attributed, in part, to dry conditions during harvest. This additional year of strong production, coupled with persistently low grain prices, is putting pressure on crop storage facilities, as farmers continue to want to store grain in hopes of higher prices in the future.
- While the national declines in coal production and related employment are reflected in declines in Arkansas and Mississippi, Tennessee coal production moved in opposition during the third quarter (see table).

	Arkansas	Mississippi	Tennessee	US
Natural resources (Q3-16)				
Mining and logging employment	-17.1	-7.3	--	-14.9
Coal production	-25.0	-15.7	14.0 ▲	-13.8 ▲
Estimated production (2016)				
Corn	64.6	36.9	1.4	11.9
Cotton	76.2 ▲	63.7 ▲	83.6 ▲	25.4 ▲
Rice	15.3 ▲	30.0 ▲	--	22.1 ▲
Sorghum	-92.9 ▼	-88.5	--	-22.6
Soybean	-3.6	-2.8	-8.8	11.0

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.

See *The Quarterly Debt Monitor* for future releases

<https://www.stlouisfed.org/publications/quarterly-debt-monitor>

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: USL15NPPL. 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 and yield estimates.