



Burgundy Book

A report on economic conditions in the St. Louis zone

Third Quarter 2016

The St. Louis zone of the Federal Reserve comprises central and eastern Missouri and southern Illinois and a total population of approximately 5.6 million people, including the almost 3 million who live in the St. Louis MSA.

Rising Optimism and Healthy Labor Markets in the St. Louis Zone

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

Optimism about the economic outlook for 2016 improved modestly compared with three months earlier according to an August survey of St. Louis zone business contacts. In general, contacts noted improving labor market conditions and increased demand for labor.

The St. Louis zone's unemployment rate measured 4.9 percent in the second quarter, down 0.1 percentage points from the previous quarter. The zone's MSA unemployment rates ranged from a low of 3 percent in Columbia, Missouri, to a high of 4.7 percent in St. Louis.

Nonfarm payroll employment growth varied across the zone MSAs in the second quarter. Growth was strongest in Columbia and Springfield, Missouri, but was appreciably weaker in Jefferson City and Cape Girardeau. The latter two MSAs experienced rapid employment growth in the goods-producing sector.

Housing and commercial real estate activity continued to strengthen in most areas of the zone in the second quarter. New and existing home sales rose rapidly in the St. Louis MSA, while single-family building permits posted double-digit increases in Springfield and Columbia. Office vacancy rates in the St. Louis MSA fell to their lowest levels since the second quarter of 2009.

Household financial conditions remained stable, as mortgage, credit card, and automotive loan delinquency rates remained lower in the zone than in the nation in the second quarter.

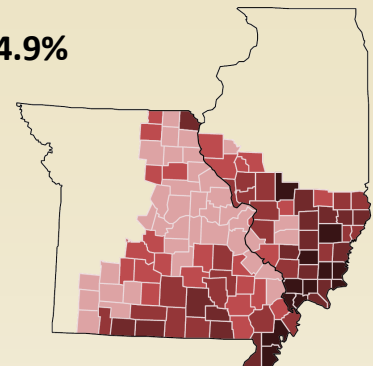
Commercial bank profitability improved slightly at Missouri and southern Illinois banks in the second quarter. Consumer and mortgage loan growth was brisk compared with a year earlier.

Reports from farmers and government projections point to record corn and soybean crops this year.

Data Snapshot

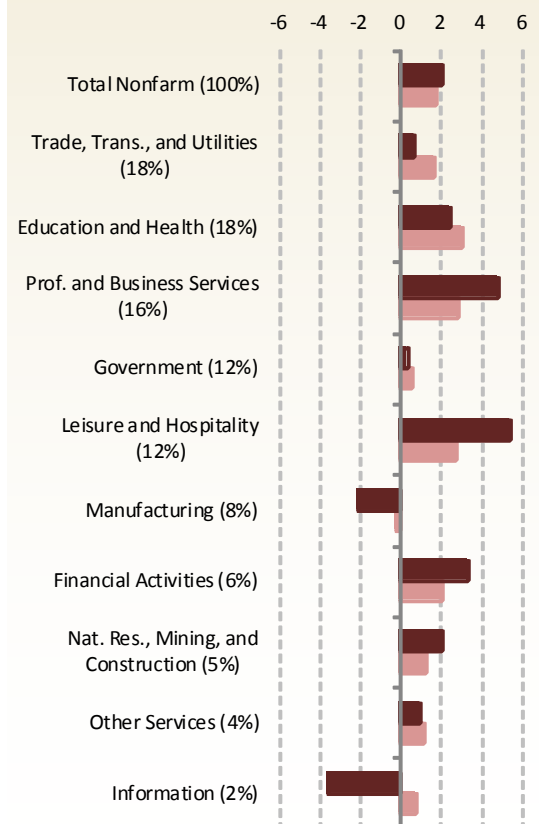
County unemployment rates (SA, Q2-16)

4.9%



Nonfarm payroll employment by industry

Percent change from one year ago (Q2-16)



■ St. Louis ■ US

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 St. Louis zone are based on data availability and are calculated as weighted averages of either the 116 counties in the zone or the five MSAs. As of 2012, approximately two-thirds of the zone’s labor force was located in an MSA. Specifically: 52 percent in St. Louis, 8 percent in Springfield, 3 percent in Jefferson City, 3 percent in Columbia, and 2 percent in Cape Girardeau; one-third 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 US unemployment rate is 0.4 percent. If the US 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 to 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/outlooksurvey/>

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

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

St. Louis Employment Growth Surpasses the Nation's

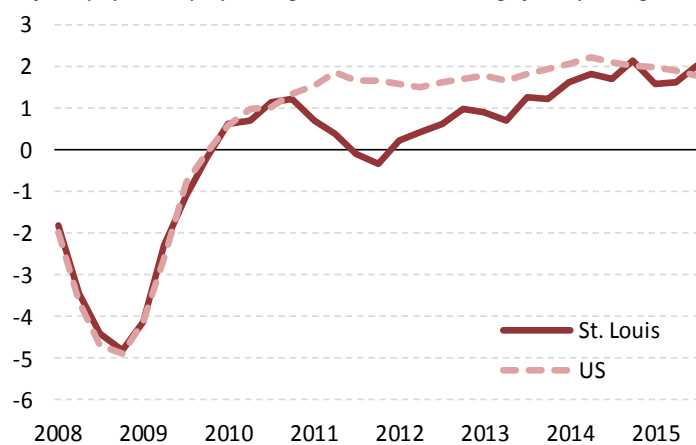
By Paul Morris, Research Associate

“Many good jobs are available in various industries, especially construction and the trades, but there are few qualified job seekers to fill those jobs.”

—St. Louis area workforce development contact

Employment growth accelerates in St. Louis

Nonfarm payroll employment growth, Percent change from year ago



Source: BLS.

- Labor market conditions throughout the zone have remained positive since the previous quarter. Unemployment rates in each of the MSAs in the second quarter stayed below that of the U.S.
- Employment growth throughout the zone remained moderate. Growth exceeded the national average in St. Louis and has been trending upward (see figure). Growth also exceeded the national rate in Springfield and Columbia, while growth fell short of the nation in Jefferson City and Cape Girardeau.
- Job growth in the private service-providing sector was strong in the second quarter. Growth in three of the five MSAs exceeded the nation's, and St. Louis saw a significant increase relative to the previous quarter.
- Anecdotal evidence suggests that the labor market has been tightening. St. Louis-area employers mostly reported that the largest barrier to increasing employment has been a shortage of workers with the required knowledge or skills.
- Consistent with a tightening labor market, about three-quarters of contacts surveyed reported that wages have been higher or slightly higher in the third quarter than the same period a year ago; and two-thirds of contacts expect this trend to continue in the fourth quarter.

	St. Louis	Springfield	Jefferson City	Columbia	Cape Girardeau	US
Unemployment rate (Q2-16) (%)	4.7	3.9	3.7	3.0	4.5	4.9
Nonfarm employment (Q2-16)	2.0	2.6	0.9	2.7	0.3	1.8
Goods-producing sector	-0.6	-1.1	2.5	7.8	6.0	0.3
Private service-providing sector	2.8 ▲	3.4	1.6	4.5	1.5	2.3
Government sector	0.4	1.3	-0.8	-2.0 ▼	-10.8 ▼	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.

Data, Anecdotes Paint a Mixed Picture of Manufacturing Conditions

By Daniel Eubanks, Senior Research Associate

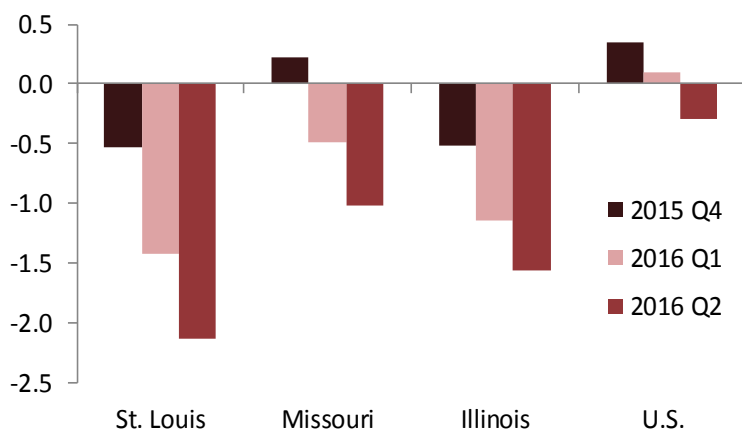
“We are having a very difficult time finding people who will do manual labor. There are help wanted signs all over town, so other businesses are having the same problem.”

– Central Missouri manufacturer

- Manufacturing employment declined across the St. Louis zone in the second quarter at its fastest rate in over five years. Manufacturing employment also declined nationwide, for the first time since the third quarter of 2010. In the St. Louis MSA, manufacturing employment decreased by 2.1 percent, 0.7 percentage points faster than in the previous quarter. In Missouri, job losses accelerated from 0.5 percent to 1.0 percent. In Illinois, job losses accelerated from 1.1 percent to 1.6 percent.
- The decline in manufacturing employment was concentrated in the durable goods sector. In the St. Louis MSA and Illinois, employment in the nondurable goods sector increased slightly, although growth was markedly lower in Illinois than in the previous quarter.
- Additional source data from the Labor Department indicates manufacturing payroll employment in the first quarter may be stronger than currently reported when it is revised next March.
- Also, contrary to weak initial employment data, manufacturing exports from Missouri increased. The increase was driven almost entirely by exports of transportation equipment. Exports from Illinois decreased, with the largest declines coming from exports of chemical products and machinery. Moreover, contacts in the manufacturing sector report continued difficulties in hiring, including finding qualified labor (see quote).

Manufacturing job losses accelerate in St. Louis zone

Percent change from one year ago



Source: BLS

	St. Louis	Missouri	Illinois	US
Transportation employment (Q2-16)	-0.1	0.4	-0.3	1.2
Manufacturing employment (Q2-16)	-2.1	-1.0	-1.6	-0.3
Durable goods	-3.7	-1.5	-2.7	-1.0
Nondurable goods	0.5	-0.3	0.2 ▼	0.9
Manufacturing exports (Q2-16)	--	20.8 ▲	-8.2	-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.

St. Louis Home Sales Remain Strong; Industrial Construction Increases

By Joseph McGillicuddy, Senior Research Associate

“Commercial real estate development is focused on industrial properties.”

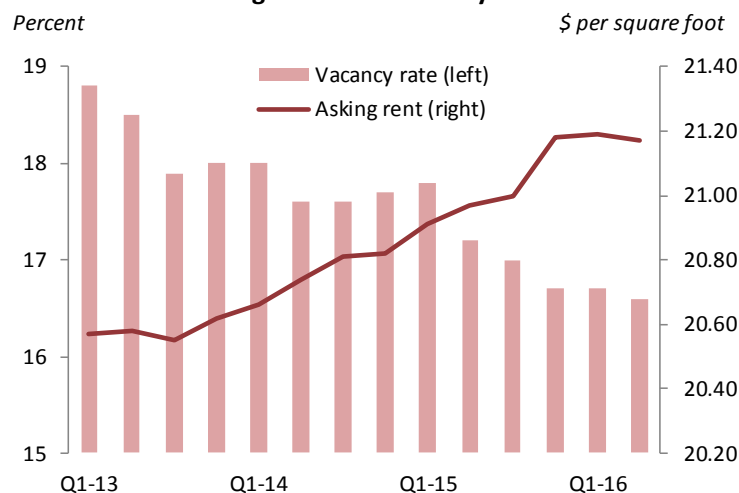
—St. Louis real estate contact

“We continue to see increases in industrial build-to-suit and spec projects.”

—St. Louis real estate contact

- Home sales in St. Louis remained strong during the second quarter, continuing to grow faster than the national average. House prices continued to increase moderately across all of the zone’s major MSAs except for Columbia, where growth was more modest.
- Growth in year-to-date building permits continued to be strong in Springfield and Columbia but was relatively weak in St. Louis. However, a majority of St. Louis real estate contacts indicated that residential construction by the mid-point of the third quarter was higher than a year ago.
- The St. Louis industrial vacancy rate ticked up for the third consecutive quarter, while vacancy rates for all other properties remained essentially flat from the previous period. The office vacancy rate has been fairly constant over the past three quarters, coinciding with a similar leveling off of office asking rents (see figure).
- Almost twice as much industrial space is currently under construction in St. Louis compared with a year ago. Multiple St. Louis real estate contacts reported an increase in both speculative and build-to-suit industrial projects.

St. Louis office asking rents and vacancy rates level off



Source: Reis.com.

Non-residential market (St. Louis, Q2-16)	Apartment	Office	Retail	Industrial
Vacancy rate (%)	4.1	16.6	11.9	7.3
Asking rent	2.5	1.0	0.1	-1.4
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 (Q2-16)	St. Louis	Springfield	Jefferson City	Columbia	US
CoreLogic Home Price Index	3.4	4.6	3.9	1.8	5.4
Single-family building permits	3.6	19.2	--	24.0	10.1
New and existing home sales	7.4	--	--	--	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 Remain Below the Nation's, but the Gap Keeps Shrinking

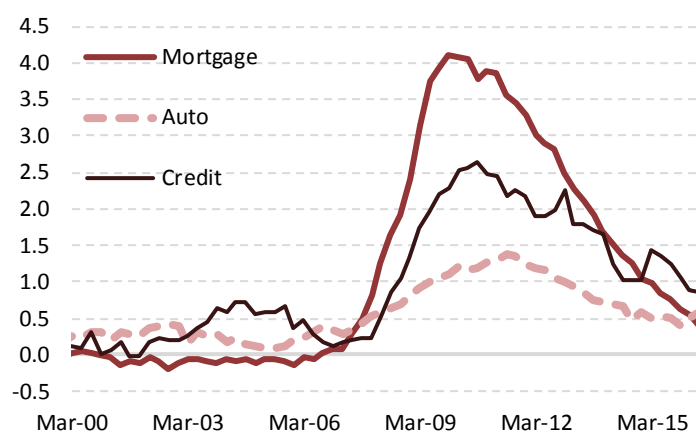
By Rodrigo Guerrero, *Research Associate*

“Sales exceeded expectations due to better offers on vehicles by manufacturers and availability of auto credit for mid-tier lending.”

—Fenton, Missouri, auto dealer

Zone delinquency rates below the national rate

Percentage points, US rate minus St. Louis zone rate



Source: FRBNY Consumer Credit Panel and Equifax.

- The zone's mortgage delinquency rate continued to decrease for the sixth consecutive quarter, though at a slower pace than the national rate. The gap between the nation's and the zone's rates peaked during the recession, when households in the region fared better than average; but this gap has steadily narrowed to long-run averages (see figure).
- Reports from auto dealers indicated that sales halfway through the third quarter exceeded expectations (see quote). Auto debt growth remained high in the zone, with real auto loan balances increasing at a faster rate than the U.S. average. Multiple dealers reported a shift in demand toward high-end vehicles.
- 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 declined relative to last quarter and is about 1 percentage point lower than the national rate.
- Year-over-year growth in real income per capita in Missouri accelerated to 3.0 percent in the first quarter of 2016. Income growth in Illinois slowed to 3.3 percent. Both rates surpassed the 2.6 percent growth of U.S. income.

	St. Louis Zone	Missouri	Illinois	US
Per capita personal income (Q1-16)	--	3.0	3.3	2.6
Per capita debt balances (Q2-16)				
Mortgage	0.5	0.0	-0.4	0.7
Credit card	2.1	2.0	1.7	1.6
Auto loan	8.2	8.6	6.9	7.7
90+ day delinquency rates (Q2-16) (%)				
Mortgage	1.1	1.0	1.8 ▼	1.5
Credit card	6.3	6.8	5.9	7.1
Auto loan	2.7	3.0	2.8	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.

Strong Mortgage Lending Fortifies Banking Markets in St. Louis Zone

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

“Contractors have increased demands for funds; working capital lines for manufacturers are also up.”

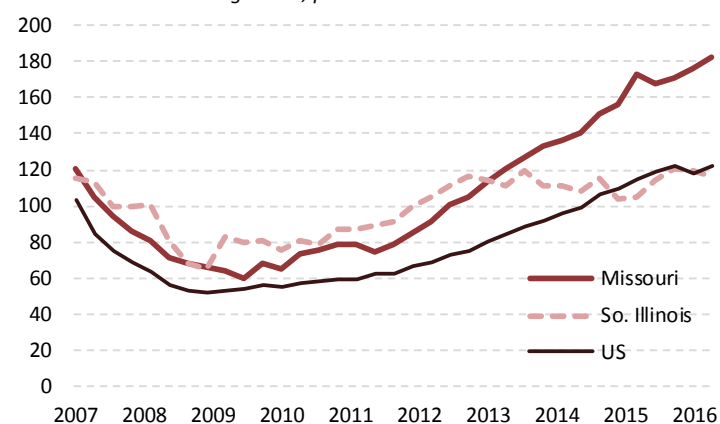
— St. Louis banker

“Borrowing is increasing or decreasing by sector. In general, the Jefferson City economy is stagnant and businesses are not expanding. A fair amount of demand is from the health care sector, while local government borrowing is very slow.”

— Central Missouri banker

Gap between Missouri, national coverage ratios continues to grow

Loan loss reserve coverage ratio, percent



Source: FRED.

- Survey respondents reported that overall loan demand in the St. Louis zone was unchanged to slightly stronger in the third quarter relative to the same period last year. Most respondents indicated that they anticipate slightly stronger loan demand in the fourth quarter compared with 2015:Q4.
- Growth in consumer and mortgage lending was robust in the third quarter relative to 2015:Q3. More than half of bankers indicated that mortgage and credit card demand were stronger in the third quarter relative to year-ago levels.
- The profitability of banks in Missouri and southern Illinois was unchanged during the second quarter. The return on average assets (ROA) and average net interest margin (NIM) were unchanged at both sets of banks compared with the previous quarter, which is consistent with national trends.
- The ratio of nonperforming loans to total loans (NPTL) declined by 5 basis points at banks in Missouri, but rose by 1 basis point at banks in southern Illinois. The average coverage ratio increased 7 percentage points at Missouri banks and declined 3 percentage points at southern Illinois banks (see chart).
- Credit standards across all loan categories were unchanged relative to 2015:Q3 according to banking contacts in the St. Louis zone. Delinquencies were unchanged in the third quarter relative to the same time last year.

Banking performance (Q2-16)	Missouri	Illinois	So. Illinois	8th District	US Peer Banks
Return on average assets	1.03	0.87	1.02	1.10	1.07
Net interest margin	3.35	2.65	3.53	3.69	3.79
Nonperforming loans / total loans	0.70	1.02	1.04	0.97	1.05
Loan loss reserve coverage ratio	182.86	104.90	116.35	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.

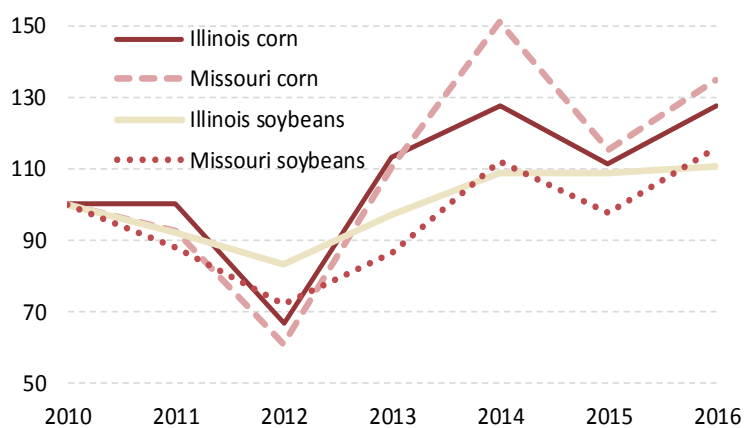
Consistent Rain Pushing Up Yield Expectations for Most Crops

By Jonas C. Crews, *Research Associate*

“Because of consistent rain during growing season, we could be seeing record corn and soybean yields.”

—Illinois farmer

Corn and soybean expected yields near historic 2014 levels
Index of bushels/acre, 2010=100



Source: USDA-NASS.

- With more consistent rain than last year, improved crop yields are expected to drive up production. Illinois, which produces very large portions of District corn and soybeans, is projected to have production increases in both crops. Meanwhile, Missouri is expected to have significantly increased cotton and soybean production, while corn and rice production are also predicted to rise. The rise in cotton production will be the result of improved plant quality that incentivized a move back to the crop and seems to be providing the projected yield improvements (see table).
- Not only are yields for corn and soybeans expected to increase in both states, but they are also expected to reach historic levels. If realized, soybean yields in both states and the Illinois corn yield each will pass their records set in 2014, while the Missouri corn yield will be second only to its 2014 yield (see figure). These lofty expectations are reflected in the views of zone contacts (see quote). Such expectations bode very well for farmers who chose to lock-in futures prices when they jumped earlier in the year.
- Meanwhile, declines continue in the zone’s natural resources industry as coal demand remains weak. Coal production in both states declined faster than the national average in the second quarter (see table).

	Illinois	Missouri	US
Natural resources (Q2-16)			
Mining and logging employment	-4.5	-0.8 ▲	-16.0
Coal production	-27.3	-43.6	-27.2
Estimated production (2016)			
Corn	14.3	34.7	11.4
Cotton	--	67.5 ▲	23.2 ▲
Rice	--	17.4	27.0 ▲
Sorghum	--	-48.3	-20.5
Soybean	3.0	45.5 ▲	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

Sources

Bureau of Labor Statistics

Unemployment rate, nonfarm employment, employment contributions by sector, average hourly earnings of private sector employees.

Notes

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

Private service-providing sector includes the following: Trade, Transportation, and Utilities industry, 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 St. Louis covers transportation, warehousing, and utility industries. About 90 percent of the reported jobs are contributed by transportation and warehousing industries.

Manufacturing exports is 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.

Bureau of Economic Analysis

Year-to-date new and existing home sales, US.

St. Louis Association of Realtors

Year-to-date new and existing home sales, St. Louis.

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 companies 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 the Federal Reserve Bank of St. Louis Economic Database 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.

So. Illinois refers to the portion of Illinois within the Eighth District.

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.