



Burgundy Book

A report on economic conditions in the Louisville zone

Fourth Quarter 2015

The Louisville zone of the Federal Reserve comprises southern Indiana and western Kentucky and a total population of approximately 3.4 million people, including the almost 1.3 million who live in the Louisville MSA.

Most Areas Continued to See Solid Job Growth in the Third Quarter

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

A November survey indicated that nearly half of business contacts expect local economic conditions in 2016 to be better than they were in 2015. Only about one in five expect economic conditions to worsen next year.

Paced by healthy employment gains in the goods-producing sector, most areas of the Louisville zone continued to see strong growth of nonfarm payroll employment in the third quarter of 2015. In Kentucky, the automotive sector accounted for half of new manufacturing jobs in the third quarter.

The Louisville zone's unemployment rate fell to 4.7 percent in the third quarter, its lowest rate since the second quarter of 2001. In the zone's MSAs, the unemployment rates ranged from a low of 3.9 percent in Evansville to 5.0 percent in Elizabethtown.

Residential housing activity continued to advance in the third quarter in most areas of the Louisville zone. In particular, year-to-date gains in single-family building permits were especially strong and more than the national rate in the Elizabethtown and Evansville MSAs. In the Louisville MSA, the industrial vacancy rate is back down to its levels seen earlier this year.

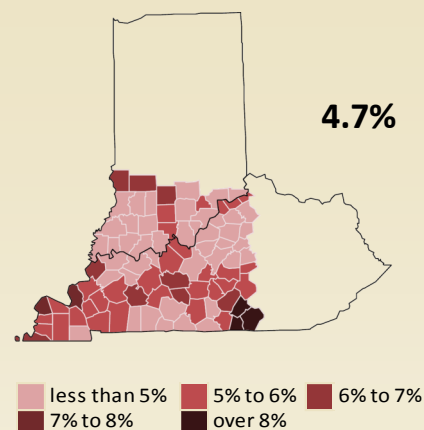
On net, total per capita debt balances in the Louisville zone rose modestly in the third quarter, while delinquency rates were largely unchanged.

Loan performance continued to improve at Indiana and Kentucky banks in the third quarter. In particular, the ratio of nonperforming loans to total loans fell to an eight-year low at Indiana banks.

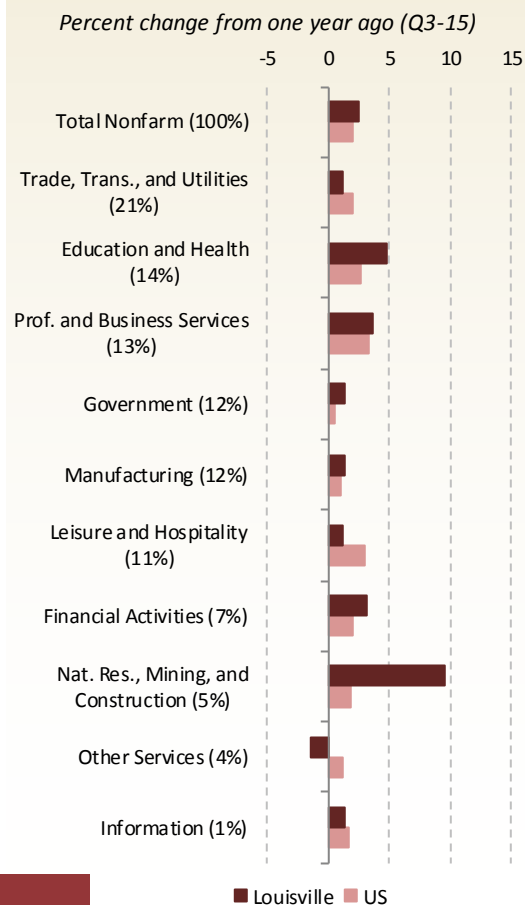
According to preliminary estimates, corn and soybean production fell this year in Indiana, while production of both increased in Kentucky.

Data Snapshot

County unemployment rates (SA, Q3-15)



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 Louisville zone are based on data availability and are calculated as weighted averages of either the 88 counties in the zone or the five MSAs. As of 2012, approximately 60 percent of the zone's labor force was located in an MSA. Specifically: 39 percent in Louisville, 11 percent in Evansville, 4 percent in Bowling Green, 4 percent in Owensboro, and 3 percent in Elizabethtown; 40 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 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 6 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/outlooksurvey>

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

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

Positive Outlook on Labor Market Conditions Across Zone

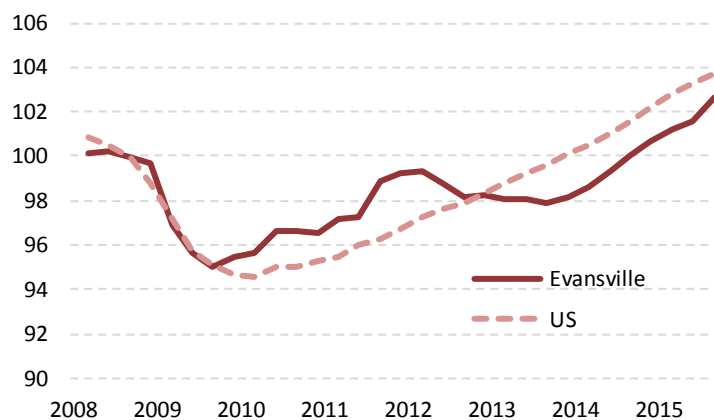
By Maria A. Arias, Senior Research Associate

"We still see strong demand for engineers throughout the industry and higher starting salaries relative to last year."

— Louisville area business contact

Employment growth in Evansville is speeding up

Nonfarm payroll employment, SA (Index 2008=100)



Source: BLS.

- Labor market conditions throughout the zone remain strong, with employment growth in most MSAs growing faster than the national average and the unemployment rates steadily declining. Strong growth in the goods-producing sector continued to drive employment growth across all MSAs (see table).
- In Evansville, growth was driven by the professional and business services sector, which added about as many jobs as the goods-producing sector in the past year.
- About two-thirds of the 56 businesses surveyed in the zone noted that both labor costs and wages were higher than they were a year ago, and just as many contacts expect these measures to continue to increase in the first quarter. The remaining 40 percent of contacts expect these measures to stay about the same compared with the first quarter of 2015.
- Two-thirds of hiring managers reported actively seeking employees because sales are higher or current staff are overworked, half of which reported they cannot find qualified workers. In response, they are increasing starting salaries and wages for select positions.
- Despite anecdotes of wage pressures, hourly earnings in the zone are up only 0.2 percent year-to-date, well below the national average of 1.8 percent. Hourly earnings growth was strongest in Elizabethtown (2.4 percent) and weakest in Evansville and Owensboro at -2.5 percent and -1.8 percent, respectively.

	Louisville	Evansville	Bowling Green	Elizabethtown	Owensboro	US
Unemployment rate (Q3-15) (%)	4.5	3.9 ▼	4.5	5.0	4.4	5.1
Nonfarm employment (Q3-15)	2.5	2.6	1.6	2.6	1.6 ▲	2.1
Goods-producing sector	3.6	3.8	3.1	4.8	2.7	1.4
Private service-providing sector	2.4	2.5	1.6	2.1	2.2 ▲	2.5
Government sector	1.4	1.2	0.0	2.2 ▲	-2.9	0.5

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.

Automotive Sector Drives Manufacturing Growth in Kentucky

By Daniel Eubanks, Senior Research Associate

“We’ve seen fewer exports and more imports as a result of the strong dollar.”

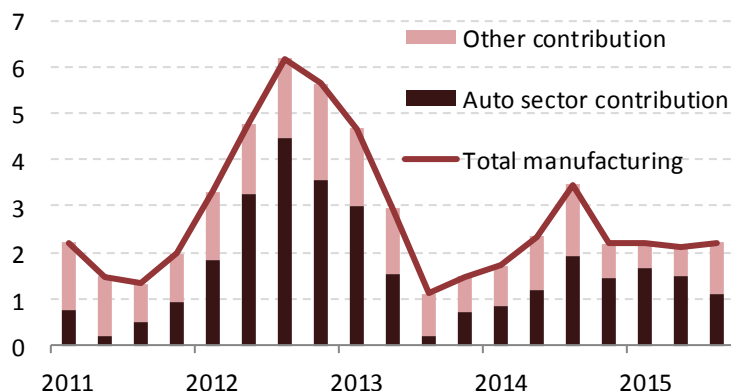
—Evansville manufacturer

“Employment is a challenge. Although we have not had much turnover, we just can’t find the workers to support new growth. We will soon begin construction on a 50,000 square foot addition and hope to find workers to fill it.”

—Louisville area manufacturer

Automotive sector generated half of new manufacturing jobs in Kentucky

Percent change from one year ago



Source: BLS

- Manufacturing employment growth remained relatively healthy across the zone in the third quarter. Although growth from the previous quarter slowed in the Louisville area, it accelerated slightly in Kentucky and Indiana overall. Manufacturing employment in all three areas grew faster than the national average, driven by strength in the durable goods sector.
- The automotive sector alone was responsible for half the manufacturing employment growth in Kentucky in the third quarter (see figure). Exports of transportation equipment grew, despite a significant overall decline in Kentucky’s manufacturing exports. Contacts report that manufacturers supplying the automobile industry in Indiana and Kentucky are working overtime to fill orders.
- Manufacturing exports overall fell in the third quarter. The drop was especially sharp in Kentucky, which slowed from nearly 8 percent growth in the second quarter to a contraction of almost 3 percent in the third quarter. Some contacts attribute the slowdown to the strong dollar (see quote).
- Transportation sector employment growth picked up across the zone. Transportation employment in Louisville grew at a slightly slower pace than the and U.S. average in Kentucky overall, but grew at a somewhat faster pace. Transportation employment growth in Indiana far exceeded the U.S. rate, but much of this growth occurred outside of the zone. Industry contacts continue to note difficulties filling both seasonal and full-time positions.

	Louisville	Kentucky	Indiana	US
Transportation employment (Q3-15)	2.7	3.5	7.5	2.9
Manufacturing employment (Q3-15)	1.3	2.2	2.5	1.0
Durable goods	1.8	4.3	2.9	1.1
Nondurable goods	0.5	-1.4	1.6	0.8
Manufacturing exports (Q3-15)	--	-2.7 ▼	-9.2	-7.1

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.

Louisville's Residential Construction Activity Shows Growth

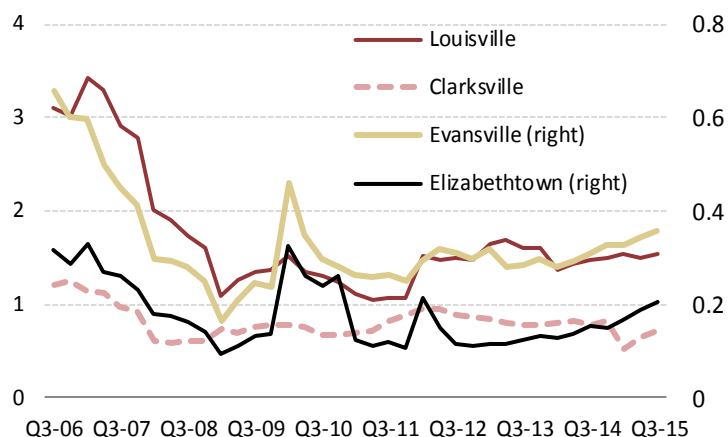
By Usa Kerdnunvong, *Research Associate*

"As a [real estate construction] industry, we realize we are lagging behind...more housing construction will take place."

— Louisville area construction contact

Building permits trend up across all major MSAs

Single-family building permits, SA thous



Source: Census Bureau.

- Residential real estate activity grew at a modest pace in the third quarter. In Louisville, home sales have been stronger than the national average, and prices have appreciated at a steady pace (see table).
- Over two-thirds of real estate contacts surveyed reported slightly higher to higher demand and slightly lower inventories in the fourth quarter. Contacts expect these two trends to continue into the first quarter of 2016.
- Louisville residential construction activity showed signs of growth in the third quarter. Compared with the past quarter, permits increased across all major MSAs and are trending upward (see figure). Contacts reported that multiple housing developments were announced across the zone.
- Commercial real estate activity remains stable. Contacts reported about the same demand for all sectors except the industrial sector, where contacts report the market continues to tighten. Contacts expect the same trends going into the first quarter of 2016.
- Commercial construction activity remained strong in this quarter, with ongoing activity for multi-family buildings and healthcare facilities.

Non-residential market (Louisville, Q3-15)

	Apartment	Office	Retail	Industrial
Vacancy rate (%)	5.4 ▲	14.6	10.1	5.6
Asking rent	3.0 ▲	0.4	1.2	0.6

Percent change from one year ago

Note: Apartment, office, and retail values are from Reis.com. Industrial values are estimates from DTZ.

Residential market (Q3-15)

	Louisville	Clarksville	Elizabethtown	Evansville	US
CoreLogic Home Price Index	3.7	-1.4 ▼	6.8	4.3	5.8
Single-family building permits	3.6	-7.2	32.1	14.6	9.2
New and existing home sales	13.2	--	--	--	9.1

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 Auto Debt Continues To Rise; Mortgage Debt Increases

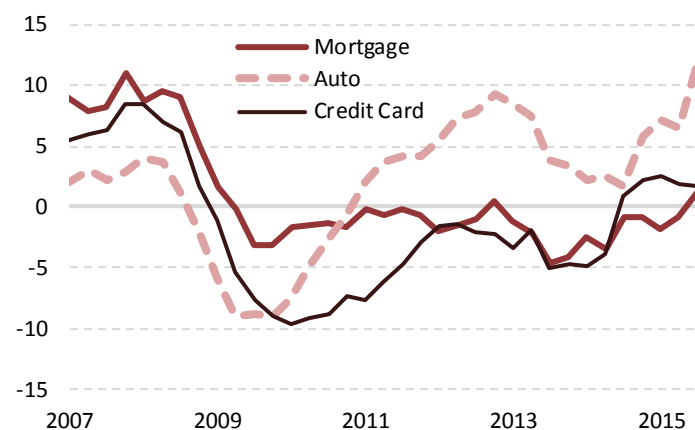
By Joseph McGillicuddy, *Research Associate*

“Hospitality in the fourth quarter shows strong occupancy in the state [of Kentucky] with 4 percent growth. This should help most hoteliers finish with a good year.”

— Louisville area hospitality contact

Auto and mortgage debt growth rates increase

Percent change in debt balances from one year ago



Source: FRBNY Consumer Credit Panel and Equifax.

- Second-quarter personal income growth slowed in both Indiana and Kentucky. Indiana’s growth rate fell below that of the nation, while Kentucky’s rate remained above the U.S. average.
- Zone auto debt growth accelerated to 11.8 percent year-over-year in the third quarter of 2015, more than 2 percentage points above the national rate and the fastest rate since the 2007-09 recession. Households also increased their mortgage debt year-over-year by more than 1 percent for the first time since the recession (see figure). Credit card debt growth remained relatively constant.
- Delinquency rates within the zone for credit cards and auto loans remained largely unchanged, while mortgage delinquency rates continued to decline. All three rates were below those of the nation.
- Reports from auto dealers were mixed, with one expecting record sales for the fourth quarter and another reporting sales have fallen below expectations. A hospitality contact noted that occupancy has been strong so far this quarter (see quote). Plans were announced to renovate a Bowling Green convention center to accommodate increased demand.

	Louisville Zone	Indiana	Kentucky	US
Per capita personal income (Q2-15)	--	3.1	3.7	3.3
Per capita debt balances (Q3-15)				
Mortgage	1.3	1.3	-0.2	0.0
Credit card	1.7	2.0	1.5	3.0
Auto loan	11.8 ▲	9.7	8.6	9.7
90+ day delinquency rates (Q3-15) (%)				
Mortgage	1.4	1.6	1.5	2.0
Credit card	6.2	6.1	6.6	7.8
Auto loan	2.8	3.6	3.1	3.1

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.

Asset Quality Strong, Loan Demand Stable in Louisville Zone

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

“Overall net worth is influencing consumers’ borrowing decisions.”

—Louisville banker

“Real estate loan demand has increased, especially in the commercial area.”

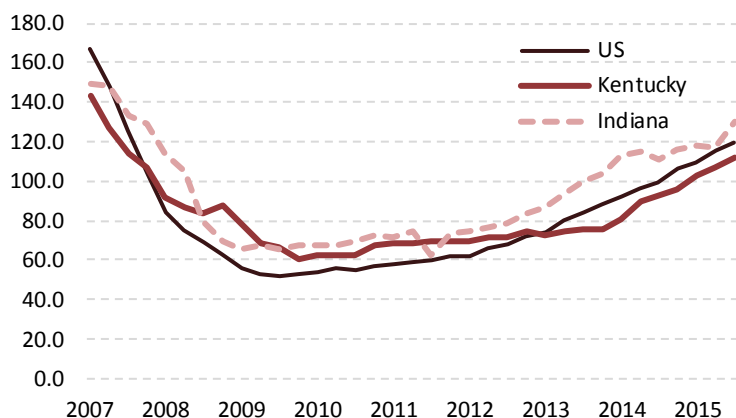
—Western Kentucky banker

“Capital expenditures for equipment and loans for expansion are driving business borrowing.”

—Louisville banker

Coverage ratios approach ten-year high

Loan loss reserve coverage ratio, percent



Source: FRED.

- Most bankers surveyed reported loan demand is unchanged in the fourth quarter relative to the same time last year, while a few said demand has increased. Bankers predict demand will be unchanged to slightly higher in the first quarter of 2016 compared with the first quarter of 2015.
- Demand for residential mortgage loans has picked up in the fourth quarter. Half of survey respondents reported that demand is somewhat higher than during the same period last year. One respondent said it is lower and the rest reported it is about the same. Responses are mixed for the first quarter of 2016, but most bankers predict demand will be unchanged.
- Profitability was steady at Kentucky and Indiana banks in the third quarter. Return on average assets (ROA) increased 3 basis points at Indiana banks and decreased 1 basis point at Kentucky banks. Stable ROA is partially explained by slight increases in net interest margins.
- The ratio of nonperforming loans to total loans fell 9 basis points at Kentucky banks and 13 basis points at Indiana banks, where it is now at an eight-year low.
- Two-thirds of survey respondents reported delinquencies are unchanged in the fourth quarter compared with the same time last year. The remaining said delinquencies are lower. Almost all respondents expect delinquencies to be about the same in the first quarter of 2016 as in the first quarter of 2015.

Banking performance (Q3-15)	Kentucky	Indiana	8th District	US Peer Banks
Return on average assets	1.02	1.07	1.05	1.08
Net interest margin	3.80	3.68	3.79	3.80
Nonperforming loans / total loans	1.19	0.97	1.10	1.13
Loan loss reserve coverage ratio	111.76	129.90	118.18	119.47

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

Indiana and Kentucky Crops Affected Differently by Spring Rain

By Jonas C. Crews, *Research Analyst*

“Some row crop farmers are seeing a 30 percent drop in yields relative to the five-year average.”

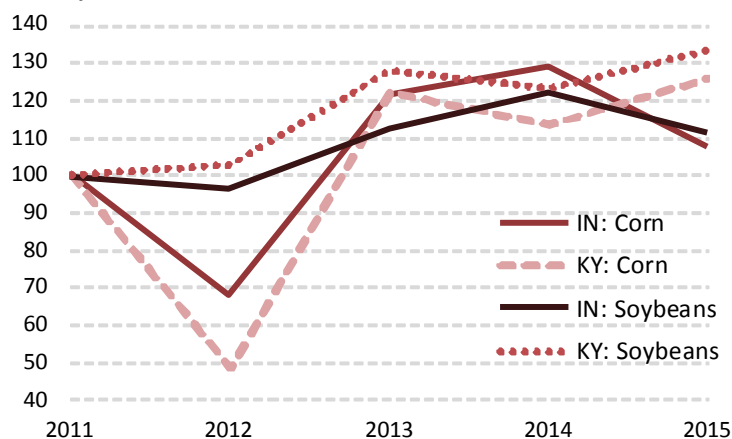
—Southern Indiana farmer

“Due to the long period of consistent rain, it was not possible to replant when doing so was deemed necessary. Thus, acreage is down. However, yields will be good.”

—Kentucky agricultural goods producer

A tale of two states for corn and soybean yields

Index of BU/Acre, 2011=100



Source: USDA-NASS.

- This year’s estimated crop production numbers vary significantly between Indiana and Kentucky. Excessive rain pushed Indiana’s production levels down relative to last year: The current estimate of corn production is around 22 percent below last year’s level (see table). In contrast, the USDA estimates that Kentucky’s production levels for its two major crops, even with the rain-related planting issues noted by contacts, are higher than 2014 levels.
- As explained by farmers in each state, the production divergence can largely be attributed to yield differences (see figure). The spring rain damaged the Indiana fields that were able to be planted and drove down yields relative to 2014. Meanwhile, the rain was not as damaging to Kentucky crops and allowed yields to reach levels high enough to overcome lower-than-planned planted acreage.
- Indiana’s and Kentucky’s coal industries continue to see declines in both employment and production as low alternative fuel prices and energy regulations still hinder demand. Relative to the same quarter in the previous year, Kentucky coal production has declined each quarter over the past four years, while Kentucky mining and logging employment has declined each quarter of the past three and a half years.

	Indiana	Kentucky	US
Natural resources (Q3-15)			
Mining and logging employment	-6.9	-10.5	-9.4 ▼
Coal production	-10.2	-14.6 ▲	-9.0 ▲
Estimated production (2015)			
Corn	-21.8	0.7	-4.0
Cotton	--	--	-18.6 ▼
Rice	--	--	-13.7 ▼
Sorghum	--	--	37.3
Soybean	-7.4	12.7	0.3

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 Louisville 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 the 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 Manufac-

turing); 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.

Greater Louisville 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 consists 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 geographic 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 and yield estimates as of November 2015.