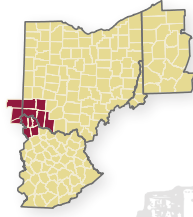


FOURTH DISTRICT METRO MIX

YOUR DISTRICT, YOUR DATA



Rick Kaglic and Tristan Young

CINCINNATI, OHIO MSA | MARCH 2019

FEDERAL RESERVE BANK of CLEVELAND

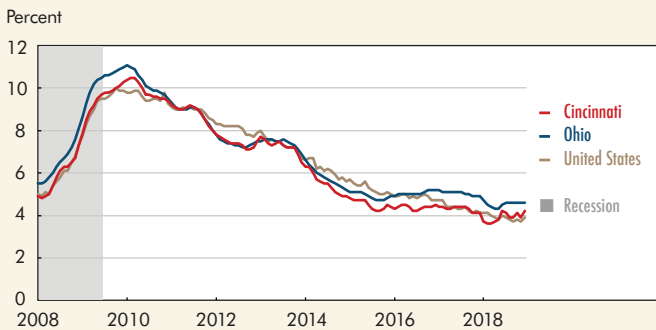
Cincinnati—Solid Growth Continues

At 4.2 percent in December of 2018, the unemployment rate in the Cincinnati metro area was 0.1 percent higher than it was in December of 2017; still, the unemployment rate remains very low by historical standards. The leisure and hospitality sector led the region in employment growth for the 12 months that ended in June 2018. Per capita GDP rose 1.3 percent in the first half of 2017 for the Cincinnati region, on par with growth seen in Ohio and the United States as a whole. Both per capita debt levels and credit card delinquencies ticked up in the first three quarters of 2018 for the Cincinnati metro area.

METRO AREA SNAPSHOT

	Unemployment Rate		Median Home Value		Payroll Employment		Credit Card Delinquency Rate	
	December 2018 (percent)	One-year change (percentage points)	December 2018	One-year change (percent)	June 2018 (thousands)	One-year change (percent)	2018:Q3 (percent)	One-year change (percentage points)
Cincinnati	4.2	0.1	\$167,700	8.1	1,053	1.6	6.6	0.3
Ohio	4.6	-0.3	\$138,500	7.4	5,403	0.7	7.1	0.3
United States	3.9	-0.2	\$223,900	7.6	146,079	1.5	7.4	0.3

Though the Cincinnati metro area's unemployment rate edged up as 2018 drew to a close, it remained in a low range that hasn't been seen in more than 15 years.

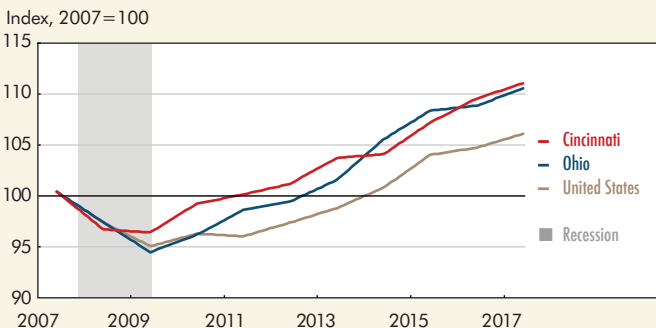


Source: Bureau of Labor Statistics/Haver Analytics.

◀ UNEMPLOYMENT RATE

The Cincinnati metro area's unemployment rate ticked up in the second half of 2018, but it still remained very low by historical standards. The metro area's seasonally adjusted unemployment rate moved up to 4.2 percent in December from 3.9 percent the prior month. In December 2017, the metro area's unemployment rate stood at 4.1 percent. In spite of the month-to-month volatility in the second half of 2018, indications are that labor markets remained very tight in the region. The unemployment rate remained in a low range not seen in more than 15 years, and anecdotal reports suggest that hiring firms continued to struggle to find suitably skilled workers to fill open positions.

GDP per capita continues to steadily climb in the Cincinnati metro area.



Source: Bureau of Economic Analysis/Haver Analytics.

◀ GROSS DOMESTIC PRODUCT

Inflation-adjusted GDP per capita for the Cincinnati metro area grew at an approximately 1.3 percent annualized rate in the first half of 2017. This rate is on par with the 2016 growth rate for the area, which was approximately 1.7 percent. The metro area slightly underperformed the state, which saw GDP per capita grow at a 1.5 percent annualized rate in the first half of 2017. However, the metro area's GDP outgrew the nation as a whole, which saw a 1.2 percent annualized growth rate in the first half of 2017. All three areas continue to exhibit a postrecession longer-run trend of moderate growth.

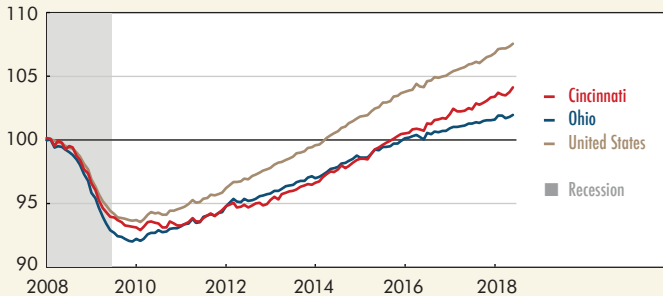
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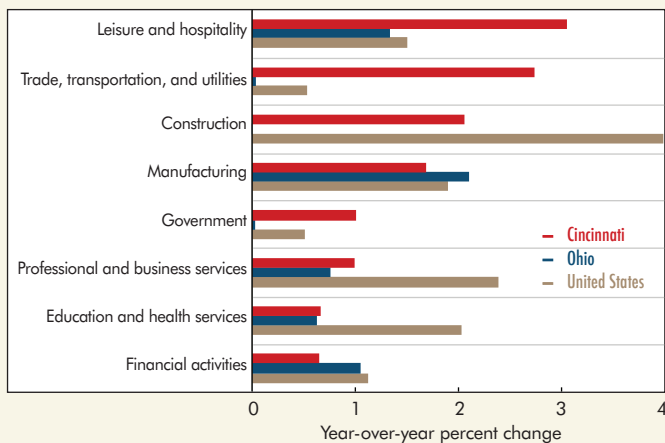
During the first half of 2018, employment growth in the Cincinnati metro area outpaced Ohio's rate.

Index, 2007:M12=100



Source: Bureau of Labor Statistics' Quarterly Census of Employment and Wages.

Led by growth in leisure and hospitality, the Cincinnati metro area's job gains were relatively broad-based in the 12 months that ended in June 2018.



Source: Bureau of Labor Statistics' Quarterly Census of Employment and Wages.

The following were imputed because of missing data: construction, financial activities, and professional and business services.

The bulk of the Cincinnati metro area's job growth during the 12 months that ended with June 2018 occurred in three sectors.

Sector	Employment	12-month change	Share of employment
Trade, transportation, and utilities	210,392	5,626	20.0
Education and health services	162,491	1,074	15.5
Professional and business services	160,771	1,583	15.3
Leisure and hospitality	133,959	3,977	12.7
Manufacturing	118,709	1,972	11.3
Government	117,637	1,176	11.0
Financial activities	68,417	441	6.5
Construction	46,086	932	4.4

Source: Bureau of Labor Statistics' Quarterly Census of Employment and Wages.

The following were imputed because of missing data: construction, financial activities, and professional and business services.

EMPLOYMENT AND INDUSTRIAL SECTORS

◀ EMPLOYMENT

In June 2018, employment in the Cincinnati metro area increased by more than 16,400 jobs compared to a year earlier. Employment growth in the metro area generally accelerated through the first half of 2018, with the year-over-year growth rate reaching 1.6 percent in June. The metro area's growth rate exceeded both the state's and the nation's; employment growth in the state was 0.7 percent, and in the nation it was 1.5 percent. Job growth in the nation held relatively steady during the first six months of 2018, while it generally decelerated in the state. As of June 2018, payroll employment in the metro area was about 3.8 percent higher than it was in December 2007 at the start of the Great Recession; comparable growth rates for Ohio and the United States are 2.0 percent and 7.6 percent, respectively.

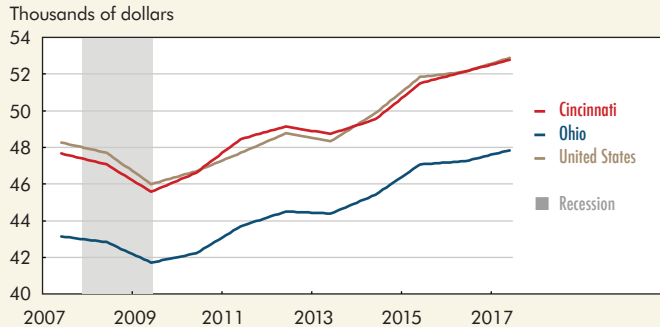
◀ EMPLOYMENT GROWTH BY SECTOR

Employment growth in the Cincinnati metro area exceeded both the statewide and nationwide averages as of June 2018, and the gains were relatively broad-based across industries. The leisure and hospitality sector led the job growth, as it increased more than 3 percent in June 2018 compared to a year earlier. This growth rate far exceeded the comparable rates for the state and the nation. Job growth in the metro area's trade, transportation, and utilities sector was robust as well, rising by approximately 2.7 percent in the 12 months since June 2017. Growth in this sector outpaced the statewide and nationwide averages. An increase in manufacturing jobs in the region kept pace with that of total employment, although factory employment growth in the metro area was a little slower than in Ohio and the United States. The government and education and health services sectors continued to expand but at a slower pace than total employment in the Cincinnati metro area.

◀ SECTOR EMPLOYMENT

The Cincinnati area added more than 16,400 net new jobs between June 2017 and June 2018, and its year-over-year job growth rate of 1.6 percent outpaced that of Ohio and the United States. Leisure and hospitality led the metro area in terms of job growth, but the absolute job gain (roughly 4,000) in the metro area was surpassed by that in trade, transportation, and utilities (approximately 5,600). Importantly, the trade, transportation, and utilities sector is far larger than leisure and hospitality, accounting for nearly 20 percent of total employment compared to 13 percent for leisure and hospitality. Manufacturing firms added nearly 2,000 net new jobs in the 12 months ending in June 2018, and the sector accounted for approximately 11 percent of all jobs in the area. Together, the trade, transportation, and utilities; leisure and hospitality; and manufacturing sectors accounted for a little more than 70 percent of all net new jobs in the Cincinnati metro area between June 2017 and June 2018. The government sector added about 2,000 jobs during the 12-month period, but total employment in this sector has yet to recover all of the jobs that were lost during the Great Recession.

After sharply decelerating in 2015, real per capita income in the Cincinnati metro area continues to grow at a steady pace.



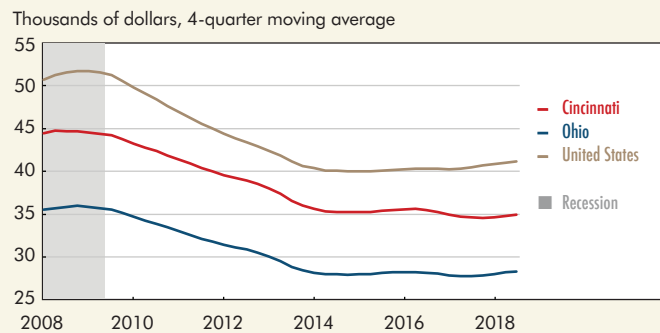
Source: Bureau of Economic Analysis/Haver Analytics.

INCOME

◀ INCOME PER CAPITA

Since decelerating sharply in the second half of 2015, real income per capita in the Cincinnati metro area grew steadily at an average annualized rate of 1.2 percent through June 2017. In other words, per capita income growth outpaced inflation by 1.2 percent through the same period. The Cincinnati metro area outperformed both the state (0.8 percent) and the nation (1 percent) in average income per capita growth during the same period. These growth rates reflect a significant slowdown from the first half of 2015, when per capita income growth rates were 3.9 percent for the metro area, 3.6 percent for the state, and 3.8 percent for the nation. This slowdown is likely the result of overall employment growing faster than income, pushing per capita income down.

Per capita consumer debt ticked up in the first three quarters of 2018 for the Cincinnati metro area.



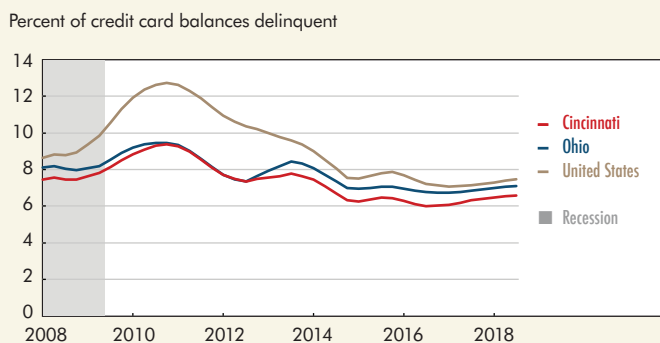
Source: Authors' calculations from the Federal Reserve Bank of New York's Consumer Credit Panel/Equifax.

CONSUMER FINANCES

◀ CONSUMER DEBT

After decreasing through some of 2016 and all of 2017, per capita consumer debt increased approximately 3.8 percent in the first three quarters of 2018 for the Cincinnati metro area. In contrast, Ohio and the United States saw a 7.5 percent and 4.1 percent increase, respectively, during the same time. Debt levels have remained relatively flat across the metro area, state, and nation since the beginning 2014, with a 0.4 annualized percent decline in the metro area, a 0.1 annualized percent increase in the state, and a 0.4 annualized percent increase in the nation through the third quarter of 2018. Relative to the end of the recession (June 2009), per capita consumer debt levels are about 22 percent lower in the Cincinnati metro area and 21 percent lower in both Ohio and the United States.

During the first three quarters of 2018, credit card delinquencies drifted up in the Cincinnati metro area.

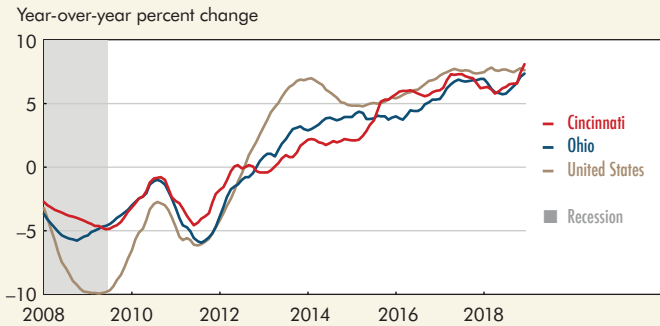


Source: Authors' calculations from the Federal Reserve Bank of New York's Consumer Credit Panel/Equifax.

◀ CREDIT CARD DELINQUENCY RATE

The credit card delinquency rate has been modestly rising in the Cincinnati metro area, increasing at a 0.3 percent annualized rate in the first three quarters of 2018. As of September 2018, 6.6 percent of credit card balances in the Cincinnati metro area were delinquent. This appears to be part of a broader trend, as delinquency rates in Ohio and the United States also rose during that time (0.3 percent and 0.3 percent, respectively). However, delinquency rates remain lower than their recession peaks across the three areas: the metro area (by 2.9 percent), the state (by 2.4 percent), and the nation (by 5.2 percent).

Home price growth in the Cincinnati metro area accelerated in 2018.

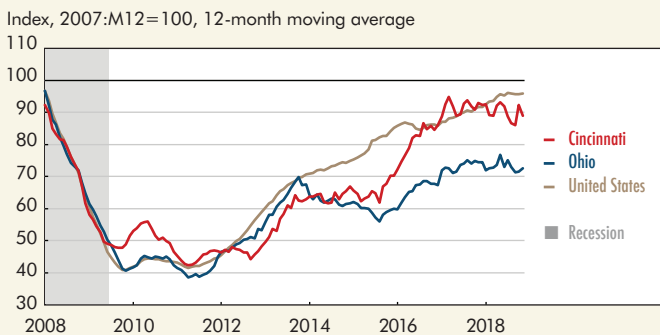


HOUSING MARKET

HOUSING PRICES

Median home values in the Cincinnati metro area rose at an accelerated rate, increasing 8.1 percent in the year ending in December 2018. The dollar value of the median value index for Cincinnati was \$167,700 in the same month. Interestingly, while the index has been rising, home values in the Over-the-Rhine neighborhood, one of Cincinnati's hottest real estate markets, have fallen in recent months, according to Zillow. The metro area's home price growth is outpacing both the state's and the nation's, which saw a 7.4 percent and 7.6 percent increase over the year, respectively, in December of 2018. Since the end of the recession, home values in the Cincinnati metro area have risen at a 2.7 percent annualized rate, slightly higher than in Ohio (2.6 percent) and lower than in the United States as a whole (3.6 percent).

Since peaking in 2017, the average monthly issuance of residential building permits has been trending down in the Cincinnati metro area.



HOUSING PERMITS

Since peaking in 2017, the average monthly issuance of residential building permits in the Cincinnati metro area has declined 6.3 percent through November of 2018. The metro area underperformed both the state and the nation, which saw a 0.2 percent decline and 9.0 percent increase, respectively, during the same period. As the indices for the metro area and the nation approach 100, it indicates that levels of building permit issuance are returning to prerecession levels. However, the index for Ohio is considerably lower than the indices for the metro area and the nation, indicating less recovery there.

DEMOGRAPHICS AND EDUCATION

CINCINNATI, OHIO

In the 10-year period from 2007 to 2017, population in the Cincinnati metro area grew 4.6 percent. The average education level of adults in the metro area rose significantly during the same period, as the number of adults with less than a high school diploma decreased 4.3 percentage points, and the number of adults with an undergraduate degree or higher increased 5 percentage points. The median annual household income for the metro area is \$1,350 higher than the nation's median, but it grew at a slower rate from 2007 to 2017.

	Cincinnati Metro Area		United States	
	2017	Change from 2007	2017	Change from 2007
Population	2,179,082	+4.6%	325,719,000	+8.1%
Adults with less than a high school diploma	9.1%	-4.3 pp	12.0%	-3.5 pp
Adults with an undergraduate degree or higher	33.2%	+5.0 pp	32.0%	+4.5 pp
Median age (years)	37.7	+1.0	38.1	+1.4
Median household income	\$63,191	+0.2%	\$61,841	+0.6%

Note: Percentage points is abbreviated as pp.
Source: US Census Bureau population estimates, American Community Survey.

Rick Kaglic is vice president and senior regional officer of the Cincinnati Branch of the Federal Reserve Bank of Cleveland. Tristan Young is a research analyst at the Bank's Cincinnati Branch. The authors thank economic analyst Christopher Vecchio for preparing the charts.

All monthly and quarterly figures are seasonally adjusted, and all dollar figures are in constant dollars, for which the base period is provided by the latest available data. Home prices are an exception, and they are not adjusted for inflation. Where applicable, these adjustments are made prior to calculating percent changes or indexes. Several charts use indexed measures to facilitate comparisons across regions and have a reference line at 100. These numbers can be thought of as the percentages of prerecession levels. If levels were growing before the recession, prerecession indexes will be below 100; if levels were falling before the recession, prerecession indexes will be above 100.

The Federal Reserve Bank of Cleveland, including its branch offices in Cincinnati and Pittsburgh, serves the Fourth Federal Reserve District (Ohio, western Pennsylvania, the northern panhandle of West Virginia, and eastern Kentucky).