

FOURTH DISTRICT METRO MIX

YOUR DISTRICT, YOUR DATA



CLEVELAND, OHIO MSA | MARCH 2017

FEDERAL RESERVE BANK of CLEVELAND

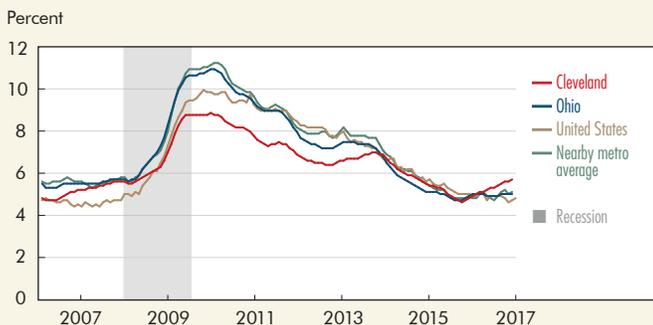
Cleveland—Housing Market Up, Labor Market Mixed

The economy of the Cleveland metro area continues to grow, albeit at a slower pace than nearby metro areas, Ohio, and the nation. Income per capita and output per capita are up, 7,500 jobs were gained, three large sectors grew at about the same rate as in the nation, and home prices grew at their fastest rate in more than a decade. However, this good news is tempered by two important indicators that worsened or failed to improve: the credit card delinquency rate remained stable while falling elsewhere, and the unemployment rate rose almost a full percentage point.

METRO AREA SNAPSHOT

| | Unemployment Rate | | Median Home Values | | Payroll Employment | | Credit Card Delinquency Rates | |
|----------------------|-------------------------|---------------------------|--------------------|---------------------------|----------------------------|---------------------------|-------------------------------|---------------------------|
| | December 2016 (percent) | One-year change (percent) | January 2017 | One-year change (percent) | September 2016 (thousands) | One-year change (percent) | 2016:Q4 (percent) | One-year change (percent) |
| Cleveland | 5.7 | 0.9 | \$131,700 | 4.9 | 1,007 | 0.8 | 7.5 | -0.1 |
| Ohio | 5.0 | 0.1 | \$125,300 | 4.9 | 5,330 | 1.1 | 6.7 | -0.3 |
| United States | 4.7 | -0.3 | \$195,300 | 7.2 | 142,452 | 1.8 | 7.1 | -0.7 |
| Nearby metro average | 5.0 | 0.2 | \$135,850 | 6.5 | 1,089 | 1.5 | 6.4 | -0.4 |

The unemployment rate in the Cleveland metro area has risen since the end of October 2015.

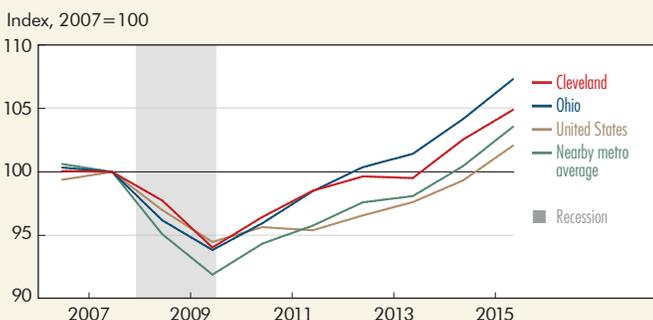


Source: Bureau of Labor Statistics/Haver Analytics.

◀ UNEMPLOYMENT RATE

In the Cleveland metro area, the unemployment rate has been on the rise since October 2015 and was 5.7 percent in December 2016—a percentage point above the nation's unemployment rate that month and 0.9 percentage points above where it was in December 2015. This increase is most likely due to the labor force's growing faster than the number of jobs. Cleveland's labor force rose by about 10,000 people between October 2015 and March 2016—a sharp break from a downward trend that started in March 2007. The upward trend in the unemployment rate may also be a result of measurement error—there was a sharp decline in Cleveland's labor force in the middle of 2015 that was roughly equal to the sharp increase that started in late 2015.

The Cleveland metro area's per capita real gross domestic product rose 2.3 percent in 2015.



Source: Bureau of Economic Analysis/Haver Analytics.

◀ GROSS DOMESTIC PRODUCT

The Cleveland metro area's per capita real gross domestic product rose 2.3 percent in 2015, a rate which is slower than its growth in nearby metro areas, Ohio, and the nation over that time (3.1 percent, 3.0 percent, and 2.8 percent, respectively). However, output per capita is 4.9 percent higher than it was before the recession. This is about halfway between the growth during this time in Ohio (7.4 percent) and the nation (2.1 percent). This suggests that the Cleveland area has experienced robust productivity growth during the recovery.

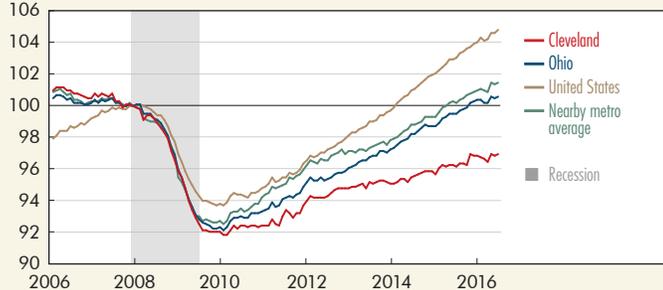
FOURTH DISTRICT METRO MIX

MARCH 2017

YOUR DISTRICT, YOUR DATA

Job growth in the Cleveland metro area was 0.8 percent between September 2015 and September 2016, a gain of 7,500 jobs.

Index, 2007:M12=100



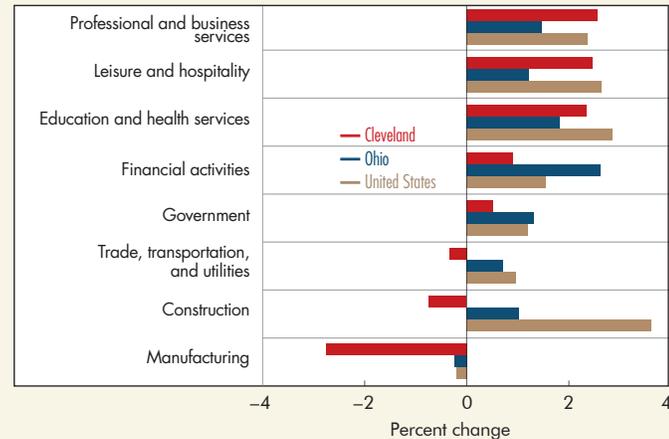
Source: Bureau of Labor Statistics' Quarterly Census of Employment and Wages.

EMPLOYMENT AND INDUSTRIAL SECTORS

EMPLOYMENT

With gains in the third quarter of 2016 offsetting losses in the first half of the year, the Cleveland metro area had job growth of 0.8 percent between September 2015 and September 2016. That translates to a gain of 7,500 jobs. Cleveland's job growth rate was roughly half that of the nation (1.8 percent) and a bit below that of nearby metro areas (1.5 percent) and Ohio (1.1 percent). These differences across these regions' trends have been occurring since the middle of 2013. Cleveland has 3.1 percent less employment than it did before the recession, while nearby metro areas, Ohio, and the nation have more employment than they did when the recession started.

Professional and business services was the fastest-growing sector in the Cleveland area.



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

EMPLOYMENT GROWTH BY SECTOR

The sectors that had the highest employment growth rates in the Cleveland metro area between September 2015 and September 2016 were professional and business services, leisure and hospitality, and education and health services, at 2.6 percent, 2.5 percent, and 2.4 percent, respectively. These sectors grew at a faster rate in Cleveland than in Ohio, and professional business services grew a bit faster in Cleveland than in the nation. The sectors that had the largest percentage decline in jobs during these 12 months were manufacturing (down 2.8 percent) and construction (down 0.8 percent). Manufacturing had a dramatically larger decline in the Cleveland area than in Ohio or the nation, down 0.3 percent and 0.2 percent, respectively.

Three sectors each gained more than 2,500 jobs in the Cleveland metro area from September 2015 to September 2016.

| Sector | Employment | 12-month change | Share of employment |
|--------------------------------------|------------|-----------------|---------------------|
| Education and health services | 194,287 | 4,473 | 19.3 |
| Trade, transportation, and utilities | 174,508 | -601 | 17.3 |
| Professional and business services | 143,700 | 3,606 | 14.3 |
| Government | 128,776 | 659 | 12.8 |
| Manufacturing | 119,821 | -3,395 | 11.9 |
| Leisure and hospitality | 103,764 | 2,504 | 10.3 |
| Financial activities | 59,791 | 540 | 5.9 |
| Construction | 35,660 | -267 | 3.5 |

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

SECTOR EMPLOYMENT

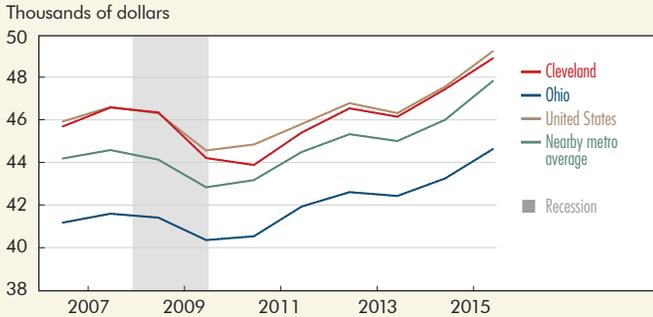
In the Cleveland metro area, three sectors gained more than 2,500 jobs from September 2015 to September 2016: education and health services (4,473), professional and business services (3,606), and leisure and hospitality (2,504). Two of these sectors are among the three largest sectors in the area. Manufacturing lost 3,395 jobs during this time, with most of the decline occurring in the first quarter of 2016.

FOURTH DISTRICT METRO MIX

YOUR DISTRICT, YOUR DATA

MARCH 2017

In 2015, real income per capita rose \$1,469 in the Cleveland metro area.



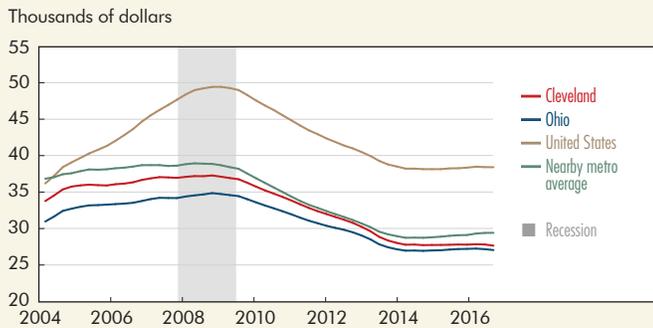
Source: Bureau of Economic Analysis/Haver Analytics.

INCOME

◀ INCOME PER CAPITA

In 2015, real income per capita rose \$1,469 in the Cleveland metro area. This represents a 3.1 percent increase, which is slower than the increase in nearby metro areas, Ohio, or the nation (4.0 percent, 3.2 percent, and 3.5 percent, respectively). At \$48,957, Cleveland's income per capita continues to be close to that of the nation.

Average debt fell 0.6 percent (\$154) in the Cleveland metro area.



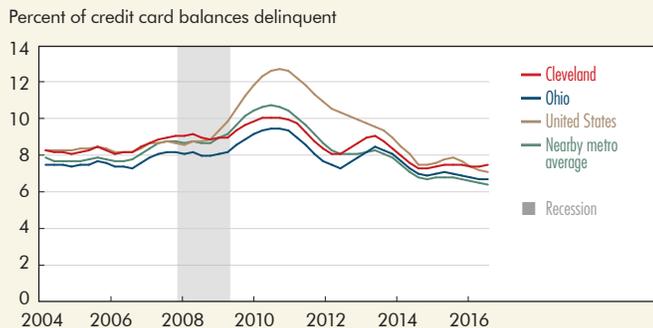
Source: Authors' calculations from the Federal Reserve Bank of New York's Consumer Credit Panel/Equifax.

CONSUMER FINANCES

◀ CONSUMER DEBT

Focusing on the sum of auto, credit card, and mortgage debt, there was little change in average consumer debt levels in 2016 in the Cleveland metro area. Average debt fell 0.6 percent (\$154) in the Cleveland area. This is comparable to the change in Ohio (down 0.5 percent) and well below the gains in nearby metro areas (1.1 percent) and the nation (0.4 percent). This is most likely because in 2016, the Cleveland metro area had less growth in home prices than nearby metro areas or the nation, a situation which impacts mortgage balances.

At 7.5 percent, Cleveland's delinquency rate is lower than it has been in 47 of the past 52 quarters.



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

◀ CREDIT CARD DELINQUENCY RATES

In 2016, the credit card delinquency rate declined less in the Cleveland metro area than in the metro areas near Cleveland and in Ohio and the nation. This suggests that household finances improved in other areas while remaining stable in the Cleveland area. In all four areas, delinquency rates remain low. At 7.5 percent, Cleveland's delinquency rate is lower than it was in all but 5 quarters since 2004. In the other areas, delinquency rates are at their lowest point since 2004.

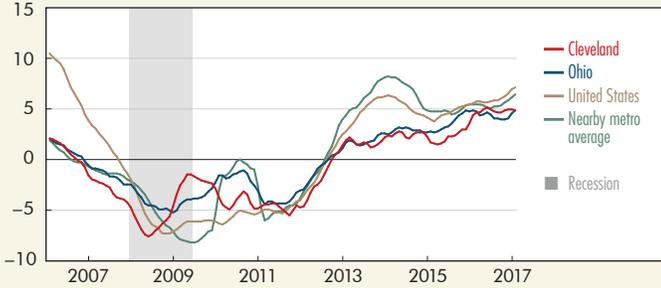
FOURTH DISTRICT METRO MIX

MARCH 2017

YOUR DISTRICT, YOUR DATA

Housing prices were 5.0 percent higher year-over-year at the end of 2016 in the Cleveland area.

Year-over-year percent change



Source: Zillow.com/Haver Analytics.

HOUSING MARKET

HOUSING PRICES

Of the past 10 years, 2016 was the best for home price growth in the Cleveland metro area. The area saw steady, strong home price growth throughout 2016, and prices ended the year 5.0 percent higher. This is comparable to the price growth in Ohio (4.6 percent), but slower than in nearby metros (6.2 percent) or the nation (7.0 percent).

The Cleveland metro area saw a jump in building permits in January 2017.

Index, 2007:M12=100, six-month moving average



Source: US Census Bureau/Haver Analytics.

HOUSING PERMITS

After a weak second half of 2016, the Cleveland metro area saw a jump in building permits in January 2017. Ohio saw a similarly sharp increase—in fact, more permits were issued in Ohio in January than in any other month since the recovery began in June 2009. This suggests rising construction activity in Cleveland and Ohio. These building permits data are seasonally adjusted, so it is likely that the unseasonably warm weather in January is a substantial part of the reason for the sharp increases in both the metro area and Ohio.

DEMOGRAPHICS AND EDUCATION

CLEVELAND, OHIO

According to the 2015 US Census Bureau population estimate, Cleveland remained the 31st largest of the nation's 382 metropolitan statistical areas.

| | Cleveland Metro Area | | United States | |
|---|----------------------|------------------|---------------|------------------|
| | 2015 | Change from 2009 | 2015 | Change from 2009 |
| Population | 2,060,810 | -1.0% | 321,419,000 | +4.8% |
| Adults with less than a high school diploma (percent) | 10.3 | -2.0 | 12.9 | -1.9 |
| Adults with an undergraduate degree or higher (percent) | 29.4 | +2.5 | 30.6 | +2.7 |
| Median age (years) | 41.2 | +1.0 | 37.8 | +1.0 |
| Median household income | \$52,303 | +1.8% | \$57,145 | +0.5% |

Source: US Census Bureau population estimates, American Community Survey.

All monthly and quarterly figures are seasonally adjusted and all dollar figures are in current dollars, except home prices (which are left nominal). 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 pre-recession levels. If levels were growing before the recession, pre-recession indexes will be below 100; if levels were falling before the recession, pre-recession 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).