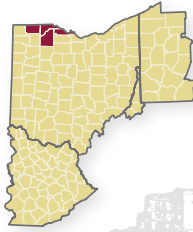


FOURTH DISTRICT METRO MIX

YOUR DISTRICT, YOUR DATA



TOLEDO, OHIO MSA | NOVEMBER 2016

FEDERAL RESERVE BANK of CLEVELAND

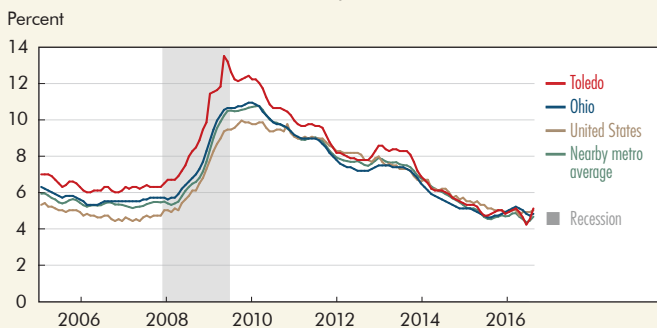
Toledo—Continued Strength in Economic Growth

The economy of the Toledo metropolitan area has continued to improve in 2016 as demand for automobiles—particularly SUVs and crossovers—remains high. From March 2015 to March 2016, employment grew at a faster rate in the Toledo area than in the nation as a whole. In the latest data, Toledo's unemployment rate and rate of home price growth were nearly the same as those of the nation, and output per capita continued to grow. However, it is likely that Toledo's growth will slow down in 2017 because the demand for automobiles is no longer rising, and the region is not seeing growth in financial activities and professional and business services.

METRO AREA SNAPSHOT

	Unemployment Rate		Median Home Values		Employment		Credit Card Delinquency Rates	
	September 2016	One-year change	September 2016	One-year change	March 2016 (thousands)	One-year change	2016:Q2	One-year change
Toledo	5.1	0.3	\$103,000	5.3%	294	2.4%	6.8	-0.6
Ohio	4.8	0.2	\$122,900	3.8%	5,326	1.8%	6.8	-0.2
Nearby metro area average	4.6	0.1	\$139,340	3.8%	1,174	2.1%	6.6	-0.2
United States	5.0	-0.1	\$189,400	5.5%	141,231	1.9%	7.4	-0.2

After falling sharply for the past three months, the area's unemployment rate is now back to where it was in April.

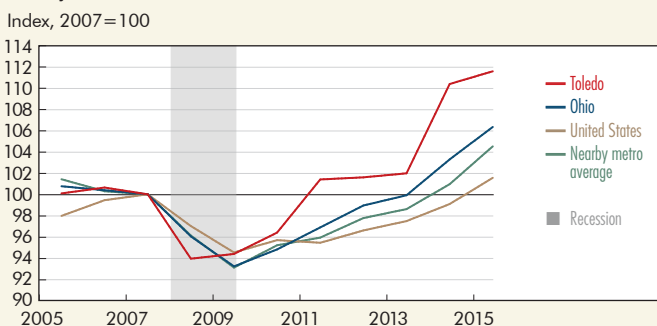


Source: Bureau of Labor Statistics/Haver Analytics.

◀ UNEMPLOYMENT RATE

Metro-level unemployment rates can move up and down sharply due to sample and modeling error. That appears to be what has happened with the Toledo metro area's unemployment rate in recent months. After falling sharply in May, June, and July, it rose sharply in August and September. The area's unemployment rate is now back to 5.1 percent, the same as it was in April and 0.3 percentage points higher than it was a year ago. Given that the metro area's employment is growing, it is likely that this small increase in the unemployment rate is due to people entering the labor force and looking for work. Toledo's unemployment rate is comparable to that of Ohio (4.8 percent) and the nation (5.0 percent) and a half of a percentage point above the average of large metro areas within 200 miles of the city.

Relative to 2007, GDP per capita growth in Toledo has been stronger than in nearby metro areas, Ohio, or the nation.



Source: Bureau of Economic Analysis/Haver Analytics.

◀ GROSS DOMESTIC PRODUCT

Motor vehicle production has been one of the brightest spots in manufacturing since mid-2014. This sector is extremely important to Toledo's economy, and its strong growth nationally has translated into more output and jobs for Toledo. In 2014, the metro area's real GDP per capita rose 7.7 percent over the previous year, more than five times as much growth as was seen in the nation. In 2015, GDP per capita grew more slowly in Toledo than in nearby metro areas, Ohio, or the nation. However, relative to 2007, Toledo's GDP per capita growth outpaced Ohio's and the nation's. As a result of strong output growth in 2012 and an even larger increase in 2014, the metro area's output rose 12 percent over the period, while Ohio's rose 6 percent and the nation's rose 2 percent.

FOURTH DISTRICT METRO MIX

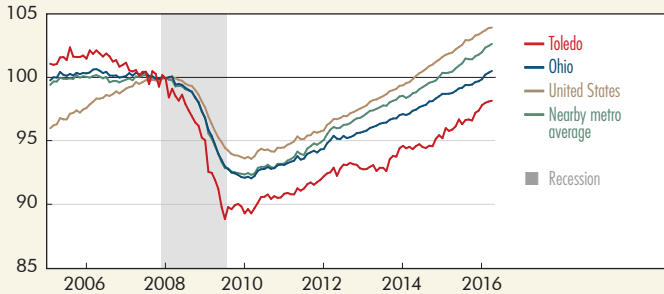
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EMPLOYMENT AND INDUSTRIAL SECTORS

Between March 2015 and March 2016 employment in the metro area grew 2.4 percent, but it remains 1.8 percent below pre-recession levels.

Index, 2007: M12=100

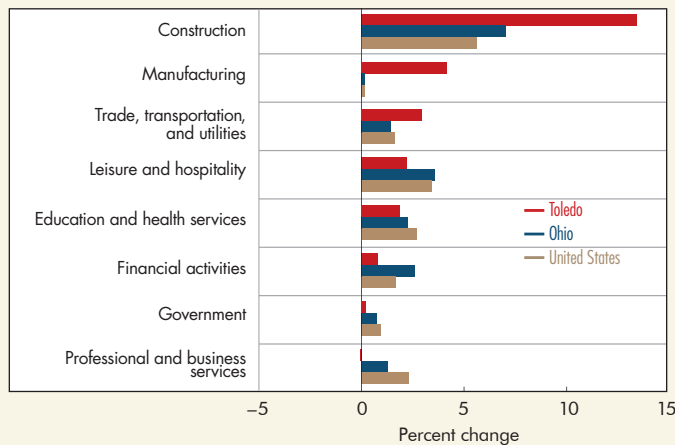


Source: Bureau of Labor Statistics' Quarterly Census of Employment and Wages.

EMPLOYMENT

Between March 2015 and March 2016 the metro area gained 6,889 jobs, a 2.4 percent increase. Employment grew faster in Toledo over those 12 months than in the nation, Ohio, or the average nearby metro areas (1.9, 1.8, and 2.1 percent, respectively). To some extent, Toledo is catching up to the recovery seen in those other places. While the other areas had more employment in March 2016 than when the recession began, employment remains 1.8 percent below pre-recession levels in the Toledo metro area.

Job growth in the Toledo area relative to Ohio and the nation was higher in construction and manufacturing but lagged in financial activities and professional and business services.



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

EMPLOYMENT GROWTH BY SECTOR

In percentage terms, the sectors that had the greatest job growth between March 2015 and March 2016 in Toledo are construction and manufacturing, which grew 13.5 and 4.2 percent. The metro area's construction employment grew almost twice as much as Ohio's and more than twice the nation's. The gap in manufacturing was even more dramatic—Toledo's employment grew 4 percentage points more than either that of Ohio or the nation. While that is good news, Toledo's growth lags the state and the nation notably in financial activities and professional and business services. Professional and business services employment declined 0.1 percent in Toledo while growing 1.3 percent in Ohio and 2.3 percent in the nation. Financial activities employment grew only 0.8 percent in the metro area, versus 2.6 percent in Ohio and 1.7 percent in the nation.

Over the past 12 months, manufacturing has added more jobs in the Toledo area than any other sector.

Sector	Employment	12-month change	Share of employment
Trade, transportation, and utilities	55,163	1,577	19.0
Education and health services	49,296	901	17.0
Manufacturing	44,372	1,773	15.3
Government	39,588	75	13.6
Professional and business services	35,097	-31	12.1
Leisure and hospitality	31,733	693	10.9
Construction	12,289	1,462	4.2
Financial activities	9,425	74	3.2
Information	2,802	-23	1.0

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

SECTOR EMPLOYMENT

In Toledo, the manufacturing sector added 1,773 jobs in the 12 months leading up to March 2016. This is more than any other sector in the region. The next-largest gains were in trade, transportation, and utilities (1,577 jobs) and construction (1,462 jobs). Only information and professional and business services lost jobs—combined, these two sectors lost 54 jobs.

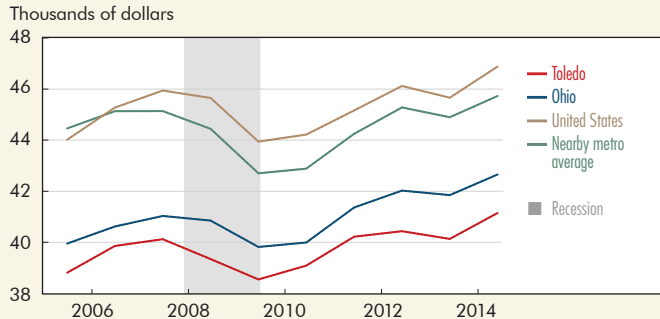
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INCOME

Toledo's real per capita income rose 2.6 percent in 2014 but remains well below that of Ohio and the nation.



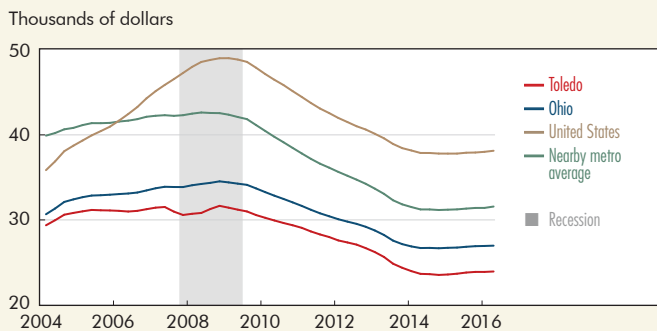
Source: Bureau of Economic Analysis/Haver Analytics.

◀ INCOME PER CAPITA

Toledo's real per capita income rose \$1,037 to \$41,111 in 2014, an increase of 2.6 percent. This is comparable to the national increase (2.7 percent) and larger than the increases in nearby metro areas and Ohio, which both rose about 2 percent. However, the Toledo area's per capita income remains well below that of Ohio and the nation.

CONSUMER FINANCES

The Toledo area's average consumer debt balance has fallen 24 percent since the recovery began.

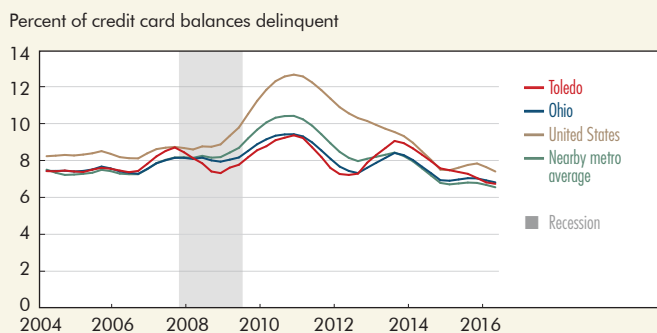


Source: Authors' calculations from the Federal Reserve Bank of New York's Consumer Credit Panel/Equifax.

◀ CONSUMER DEBT

At \$23,833 per adult with a credit report in June of 2016, the Toledo metro area's average balance of mortgage, auto, and credit card debt continues to sit below that of Ohio, nearby metro areas, and especially the United States. This is largely due to the metro area having relatively low home prices, which keeps mortgage balances low. All four of these regions saw per capita debt rise 1 percent between June 2015 and June 2016. The Toledo area's decline in the average debt balance since the recovery began (24 percent) is a little larger than that of the nation and Ohio (both 22 percent).

The credit card delinquency rate continued to decline in the Toledo area through the middle of 2016.



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

◀ CREDIT CARD DELINQUENCY RATES

While credit card delinquency rates have been fairly stable since 2014 in nearby metro areas, Ohio, and the nation, they continued to decline in the Toledo area through the middle of 2016. In December 2014, Toledo's delinquency rate was 7.6 percent, which was in line with the delinquency rate in the nation. In June of 2016, Toledo's rate had fallen to 6.8 percent, which is in line with nearby metro areas and Ohio. All of these areas are seeing delinquency rates below the rates in 2005, suggesting that household finances are stronger than they were during the prior economic expansion.

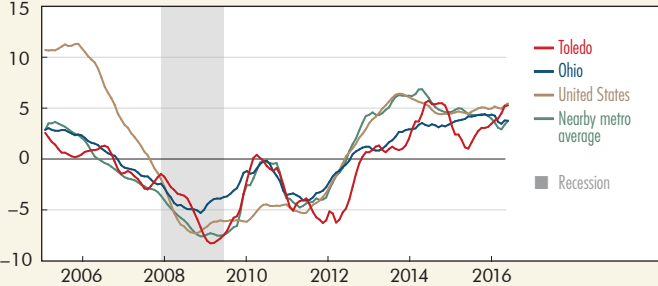
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Home price growth in the Toledo area was on par with the nation and much higher than in Ohio.

Year-over-year percent change



Source: Zillow.com/Haver Analytics.

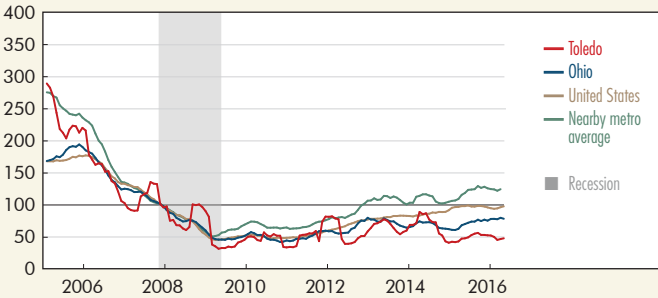
HOUSING MARKET

HOUSING PRICES

Home prices continue to rise in the Toledo metro area. Between August 2015 and August 2016, the median home price rose \$5,200 to \$103,000. This 5.3 percent increase is comparable to the 5.5 percent increase in the nation and notably higher than the 3.8 percent increase in Ohio. This solid price growth may be due to the metro area's improving employment and income levels. It could also be a sign that the stock of distressed properties is falling, which removes a drag on the growth of home prices.

Building permits have been hovering at about 50 percent of their pre-recession level since the beginning of 2015.

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



Source: Census Bureau/Haver Analytics.

HOUSING PERMITS

As noted previously (under Employment Growth by Sector), Toledo had rapid growth in construction employment through June 2016. That must be coming from commercial building, because there has been no similar uptick in residential building permits. In Toledo, building permits have been hovering at about 50 percent of their pre-recession level since the beginning of 2015. This low level of home building is not surprising given the metro area's lack of population growth.

DEMOGRAPHICS AND EDUCATION

TOLEDO, OHIO

According to 2015 US Census Bureau estimates, Toledo remained the 91st largest of the 381 statistical areas in the United States. The share of adults over 25 with an undergraduate degree is higher in the nation than in the metro area, but from 2009 to 2014 it increased more in the metro area.

	Toledo Metro Area		United States	
	2014	Change from 2009	2014	Change from 2009
Population	606,781	-0.6%	318,907,000	+4.0%
Adults with less than a high school diploma	9.8%	-2.7%	13.1%	-1.7%
Adults with an undergraduate degree or higher	27.4%	+5.3%	30.1%	+2.2%
Median age (years)	37.5	+0.1 years	37.7	+0.9 years
Median household income	\$46,507	-4.6%	\$54,720	-3.2%

Sources: 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).