

ON THE MONEY

A Hannah News Service Publication

Vol. 132, No. 27

By Bill LaFayette, PhD, owner, Regionomics® LLC

February 9, 2018

Retail Employment and Activity in Ohio

Retail trade employed more than 575,000 in Ohio in 2016, 10.8 percent of the state's total employment. This sector deserves attention not only because it is a fairly large share of employment but also because it consumes hundreds of millions of square feet of space and millions of acres of land in Ohio communities. If these spaces become vacant, they create eyesores that must either be reused or demolished. Note that the retail sector does not include restaurants and food service; these are a part of the leisure and hospitality sector – the subject of a future article.

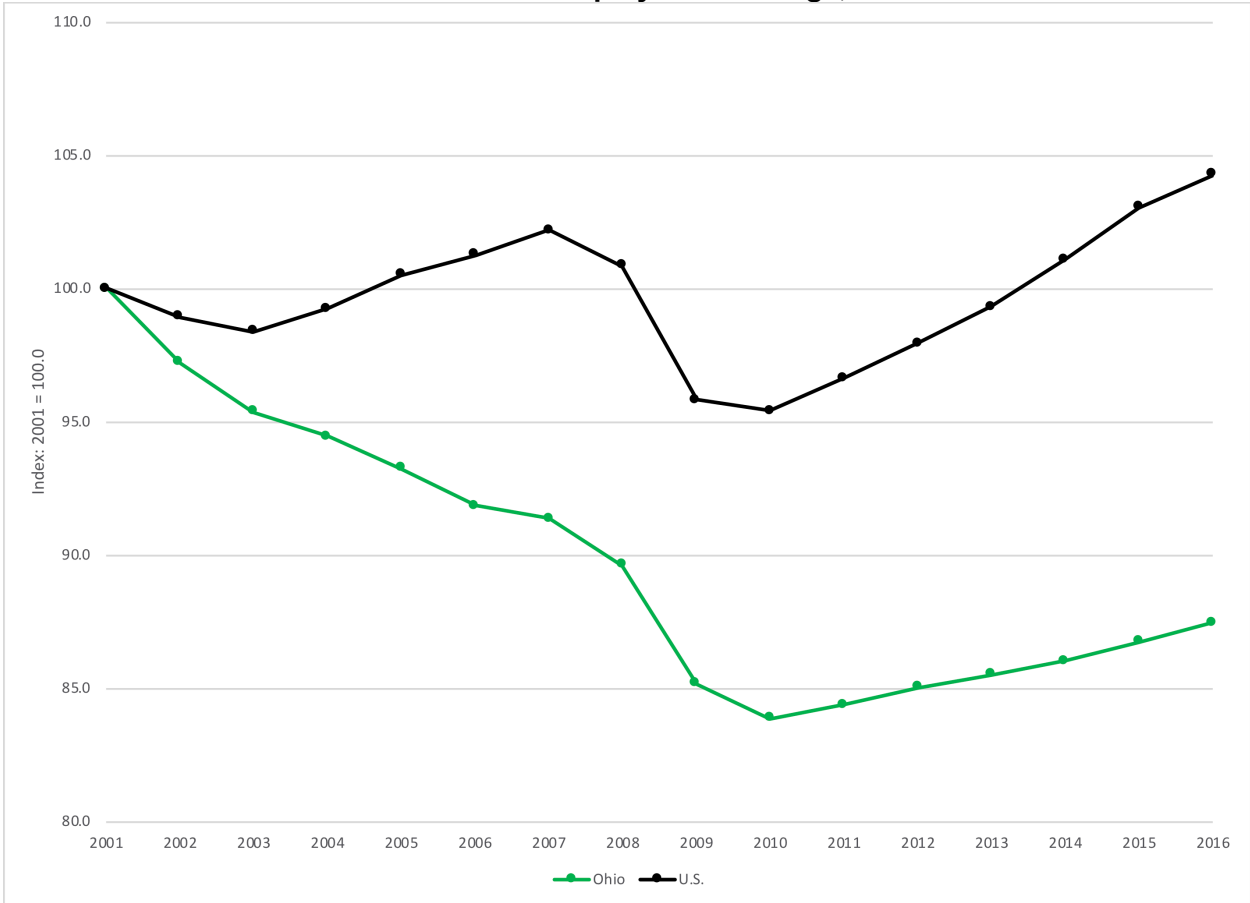
Key conclusions include:

- Ohio's retail employment growth has been significantly less than the national average. Following declines throughout the 2000s, retail employment staged a limited recovery following the recession. Nevertheless, retailers employed 106,000 fewer workers in 2016 than they did in 2001, a net loss of 12.6 percent. U.S. retail employment in 2016 was 4.2 percent higher than its 2001 level.
- Retail employment is organized into 12 major subsectors. The overall retail employment change obscures a wide range of changes among the subsectors. Most of these changes were worse in Ohio than nationally, but used merchandise stores and electronic shopping and mail order houses enjoyed large gains.
- Although retail gross domestic product fell significantly between 2004 and 2009, its recovery since then has been nearly as strong as the national average. Ohio's weak employment growth in the recovery is an attempt to restore worker productivity.
- Ohio workers have been consistently paid 6 to 10 percent less than their counterparts elsewhere. Wages fell between 2004 and 2008 as productivity fell, and stagnated through 2014 due to the slack in the labor market. Wages have risen in 2015 and 2016 as the labor market tightens.
- There are considerable differences among Ohio's regions in retail employment growth. The East North Central region (including Amish Country) is the one region that has exceeded U.S. growth since 2001.
- Online shopping has upended traditional retail. E-commerce grew from 0.2 percent of total retail sales in 1998 to 8 percent in 2016. But the online shopping impact on retail trade has been uneven as e-commerce has penetrated some retail segments to a greater degree than others. Ohio is benefiting from the development of e-commerce fulfillment and data centers, and the growth of transportation and distribution activity.

Retail Employment

Figure 1 shows the trend of U.S. and Ohio retail employment from 2001 through 2016. The chart is constructed on an index basis, showing cumulative percentage changes over the period. Ohio retail employment declined 8.7 percent during the expansion of 2002-2007. Total Ohio employment stagnated during this period, largely due to a sharp decline in manufacturing employment as producers increased their use of machinery and robotics. The recession led to sharper declines. By 2010, retail employment had fallen 16.2 percent, more than 106,000 jobs, from its 2001 level. The expansion has led to some recovery of retail employment, which increased 23,500 (4.3%) between 2010 and 2016. This gain, however, was less than half of the 9.3 percent national average. Over the entire 2001-2016 period, Ohio retail employment declined 82,800, or 12.6 percent. U.S. employment showed a net gain of 4.2 percent.

Figure 1
Ohio and U.S. Retail Employment Change, 2001-2016



Source: Calculated from Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

The employment stagnation of the 2000s definitely played a role in the loss of retail jobs in those years. Likewise, Ohio’s employment growth during the current expansion has led to the limited recovery in employment since 2010. As will be shown later, the weak growth of Ohio retail employment during the recovery was a move to restore worker productivity.

The government’s North American Industry Classification System (NAICS) categorizes retail employment in 12 major subsectors. These are shown in Table 1, together with Ohio and U.S.

net changes from 2001 and 2010 through 2016. Component industry groups are shown for the miscellaneous store retailers and nonstore retailers subsectors. As is evident from the table, the overall retail changes obscure a wide range of changes among the subsectors. Most of the subsectors' changes were worse in Ohio than nationally. However, employment in used merchandise stores (including antique stores) more than doubled over the 16-year period and increased by more than a third between 2010 and 2016. Employment in electronic shopping and mail order houses (including e-commerce fulfillment) increased 84 percent from its 2001 level, all of that gain since 2009.

Table 1
Ohio Retail Employment, and Ohio and U.S. Net Changes

Subsector	Employment.	Change, 2001-2016		Change, 2010-2016	
	2016	Ohio	U.S.	Ohio	U.S.
Retail trade	575,571	-12.6%	4.2%	4.3%	9.3%
Motor vehicle and parts dealers	78,358	0.0%	6.5%	18.0%	21.2%
Furniture and home furnishings stores	13,289	-33.4%	-12.9%	-1.8%	7.4%
Electronics and appliance stores	16,779	-32.0%	-6.9%	-0.3%	3.2%
Building material and garden supply stores	50,079	4.4%	11.5%	10.9%	11.3%
Food and beverage stores	105,031	-0.7%	4.8%	0.9%	9.5%
Health and personal care stores	36,950	-28.5%	11.9%	-0.7%	7.1%
Gasoline stations	37,003	0.5%	0.1%	11.7%	12.6%
Clothing and clothing accessories stores	39,614	-18.6%	1.4%	-7.9%	-2.7%
Sports, hobby, music instrument, book stores	21,366	-23.4%	-9.5%	-2.5%	2.1%
General merchandise stores	118,368	-19.1%	13.9%	-0.3%	7.5%
Miscellaneous store retailers	29,974	-32.5%	-16.5%	2.0%	7.1%
Florists	2,885	-51.3%	-51.1%	-6.5%	-9.6%
Office supplies, stationery & gift stores	8,546	-60.8%	-40.8%	-18.2%	-13.0%
Used merchandise stores	7,692	116.4%	63.3%	36.3%	37.9%
Other miscellaneous store retailers	10,851	-17.3%	6.3%	6.4%	20.2%
Nonstore retailers	28,761	11.8%	13.4%	27.0%	30.1%
Electronic shopping & mail-order houses	18,938	83.8%	53.1%	44.8%	51.2%
Vending machine operators	5,460	-26.8%	-40.9%	-2.1%	0.9%
Direct selling establishments	4,363	-45.3%	-21.9%	9.5%	-0.2%

Indented industry groups are components of the subsector above.

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

Retail Output and Worker Productivity

The Gross Domestic Product (GDP) of Ohio retailers in 2016 was \$38.4 million out of the \$626.6 million total. This total does not represent retail sales, which are available regularly only at the national level. Retail sale prices include the costs of production and transportation, which are classified in the manufacturing and transportation sectors and may occur outside of Ohio or the U.S. The \$38.4 million represents only the economic activity of Ohio retailers. The 16-year trend of Ohio and U.S. retail GDP is shown in Figure 2. The dollar amounts underlying the index values are adjusted for inflation. The decay in Ohio GDP started in 2004, nearly four years before the onset of the recession. However, Figure 3 resets the index to 2009 and shows that Ohio retail GDP growth has only slightly slower than the national average during the expansion.

Figure 2
Ohio and U.S. Retail GDP Growth, 2001-2016

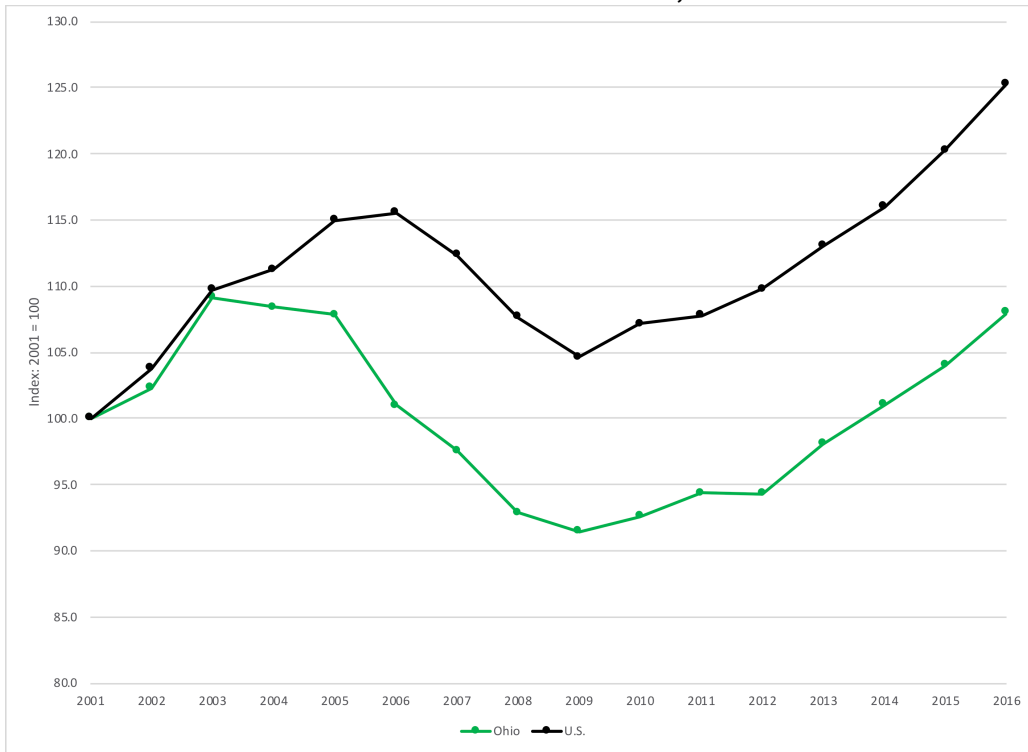
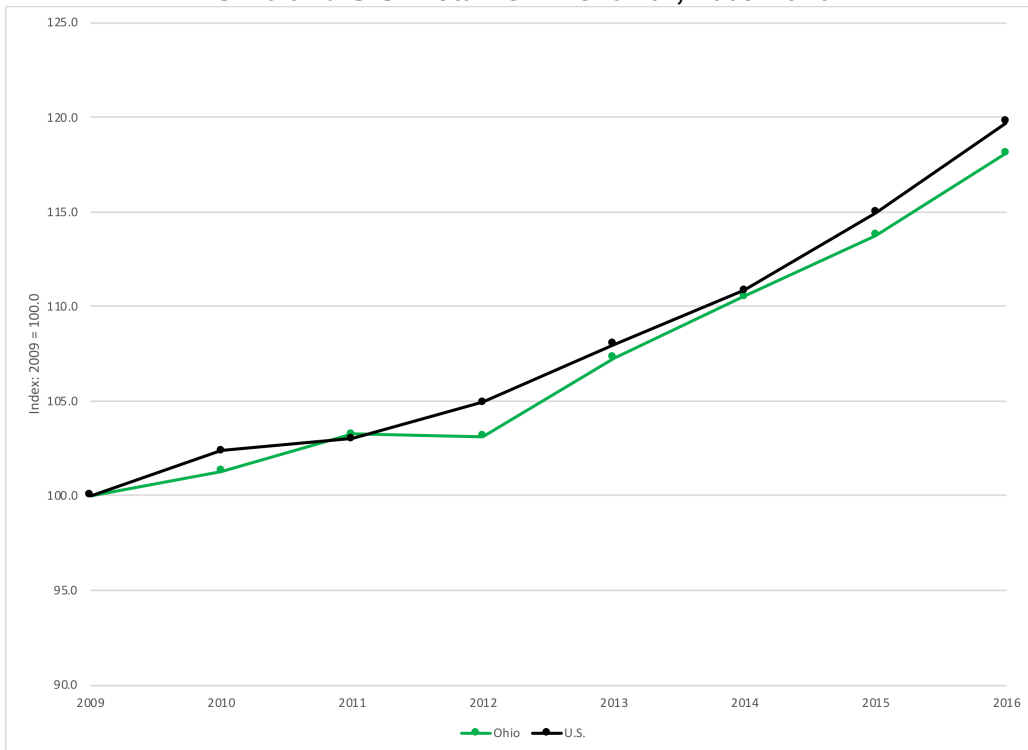


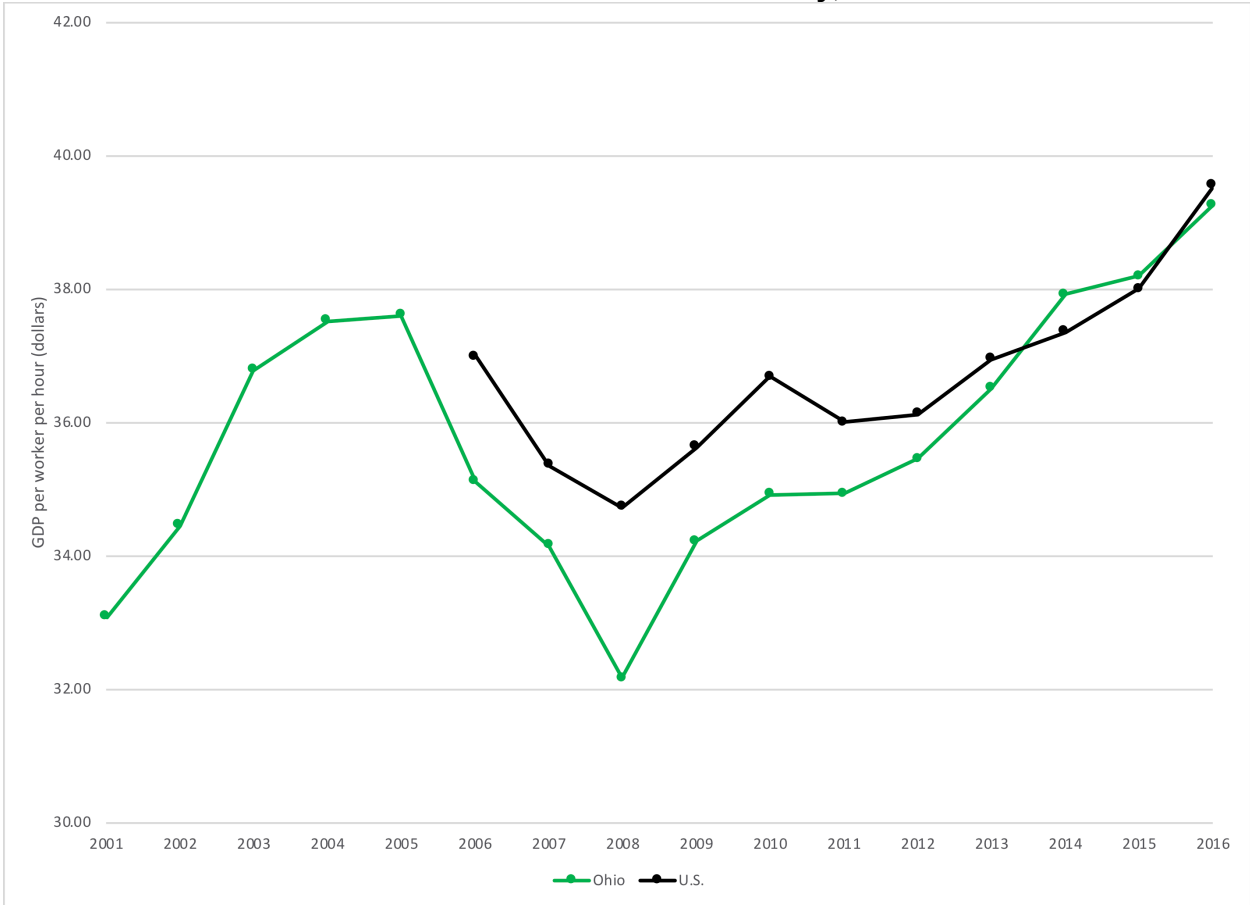
Figure 3
Ohio and U.S. Retail GDP Growth, 2009-2016



Source for both figures: U.S. Bureau of Economic Analysis.

If the output growth of Ohio’s retail sector has been as favorable as that shown in Figure 3, why has employment growth been so weak? An explanation is in Figure 4. This figure charts retail worker productivity – the inflation-adjusted GDP per worker per hour – beginning in 2001. This is derived as the annual GDP total underlying the trends in Figures 2 and 3 divided by aggregate hours worked by retail employees during that year. (The necessary statistics to calculate aggregate hours for the U.S. begin only in 2006.) Even the loss of Ohio retail workers in those years was not enough to prevent productivity from declining 14 percent – from \$37.59 to \$32.16 per hour – between 2005 and 2008. Since then, productivity has increased 22 percent, versus a national gain of less than 14 percent. So the weak growth of Ohio retail employment has been an attempt to align staffing with output. If the economic expansion and the growth of retail GDP continues, Ohio retail employment growth should strengthen.

Figure 4
Ohio and U.S. Retail Worker Productivity, 2001-2016



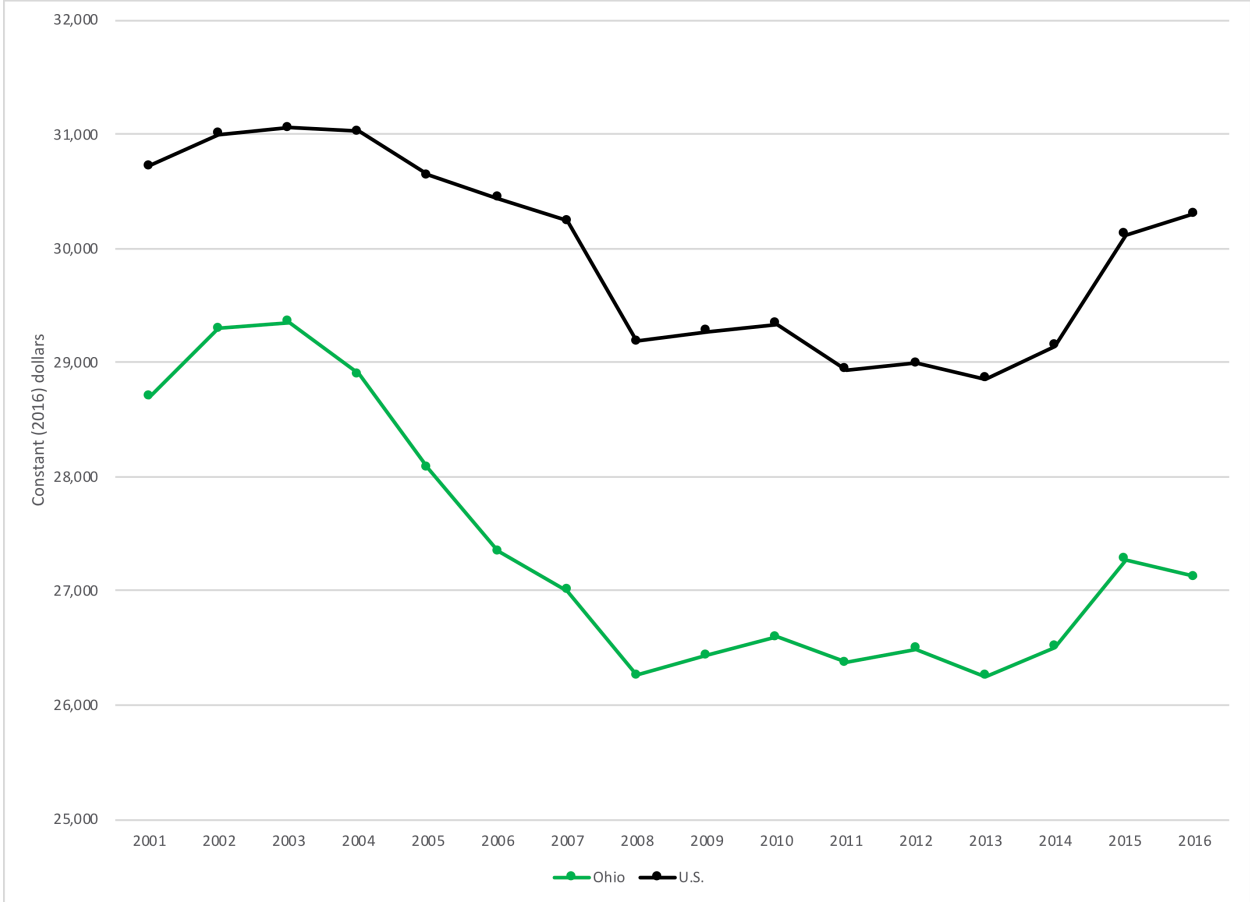
Source: Calculated from U.S. Bureau of Economic Analysis data and Current Employment Statistics, U.S. Bureau of Labor Statistics.

Retail Wages

Figure 5 charts the trend of inflation-adjusted retail wages since 2001. Ohio workers have been consistently paid 6 to 10 percent less than their counterparts elsewhere. Ohio and U.S. wages peaked in 2003. Although we have no productivity data for the U.S. for that year, that was around the time that Ohio worker productivity was peaking. The lack of wage growth through

2014 despite the growth of productivity is due to the excess supply of workers bidding wages down. We are now seeing increases in wages as labor markets tighten.

Figure 5
Average Annual Pay of Ohio and U.S. Retail Workers, 2001-2016



Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

Regional Trends

As with other economic and demographic factors, retail growth is very different among different regions of the state, so these trends must be examined at a regional level. Figure 6 displays the 13 regions that will be familiar to readers of these articles. These regions include the state’s six largest Metropolitan Statistical Areas (MSAs) and seven other regions encompassing smaller MSAs and rural areas. Counties in these areas were grouped together based primarily upon commonality in manufacturing and agriculture.

Figure 6
Ohio Regions



Northwest Toledo MSA West North Central Cleveland MSA Akron MSA
 Northeast West Columbus MSA East North Central Dayton MSA
 Cincinnati MSA South Southeast

Table 2 presents total retail employment in these 13 regions, with the U.S. and Ohio totals shown for comparison. The percentage of total employment in retail is shown in the third column. The fourth column provides each area's Location Quotient (LQ). This is the percentage of total employment in retail in the area divided by the 11.2 percent national share. The LQ here has a somewhat different interpretation from that in most industries. Typically, a high LQ indicates that the industry is highly concentrated and a cornerstone of the economy. But because retail serves a local market, it cannot become an overly large component of the economy. Consequently, a high LQ in retail is a danger sign suggesting that retail is overdeveloped and likely to weaken as more and more retailers compete for a limited supply of spending power. LQs can be higher in less urbanized areas than they should be in major MSAs. The LQs approaching 1.3 in the less-developed Southeast and South are somewhat high and imply limited retail growth potential. This same LQ in one of the six major MSAs would be a cause for serious concern; a healthy urban LQ is slightly below 1.0. The final two columns replicate the 2001-2016 and 2010-2016 percentage change columns in Table 1.

Table 2
Retail Employment, Concentration, and Growth in Ohio Regions

Region	Employment 2016	Percent of total empl.	Location quotient	Change	
				2001-2016	2010-2016
U.S.	15,824,285	11.2%	1.000	4.2%	9.3%
Ohio*	575,498	10.8%	0.970	-12.6%	4.3%
Northeast	58,305	12.9%	1.157	-15.9%	0.8%
Southeast	18,196	14.4%	1.293	-11.6%	5.6%
South	20,829	14.3%	1.282	-5.8%	5.4%
West	28,615	10.2%	0.917	-18.9%	-3.1%
Northwest	8,167	11.4%	1.024	-3.8%	3.6%
West North Central	25,053	11.7%	1.047	-11.2%	4.1%
East North Central	12,987	11.2%	1.005	4.5%	12.0%
Akron	37,397	11.7%	1.045	-4.8%	7.8%
Cincinnati**	83,885	10.3%	0.921	-7.5%	3.8%
Cleveland	101,333	10.1%	0.903	-14.7%	1.9%
Columbus	103,819	10.4%	0.930	-13.9%	6.5%
Dayton	39,407	10.8%	0.968	-15.8%	4.6%
Toledo	32,539	11.1%	0.991	-16.0%	2.6%
Total non-MSA	172,152	12.3%	1.098	-12.4%	2.5%
Total MSA	398,380	10.5%	0.939	-12.4%	4.5%

*Includes 4,966 jobs not assigned to any county.

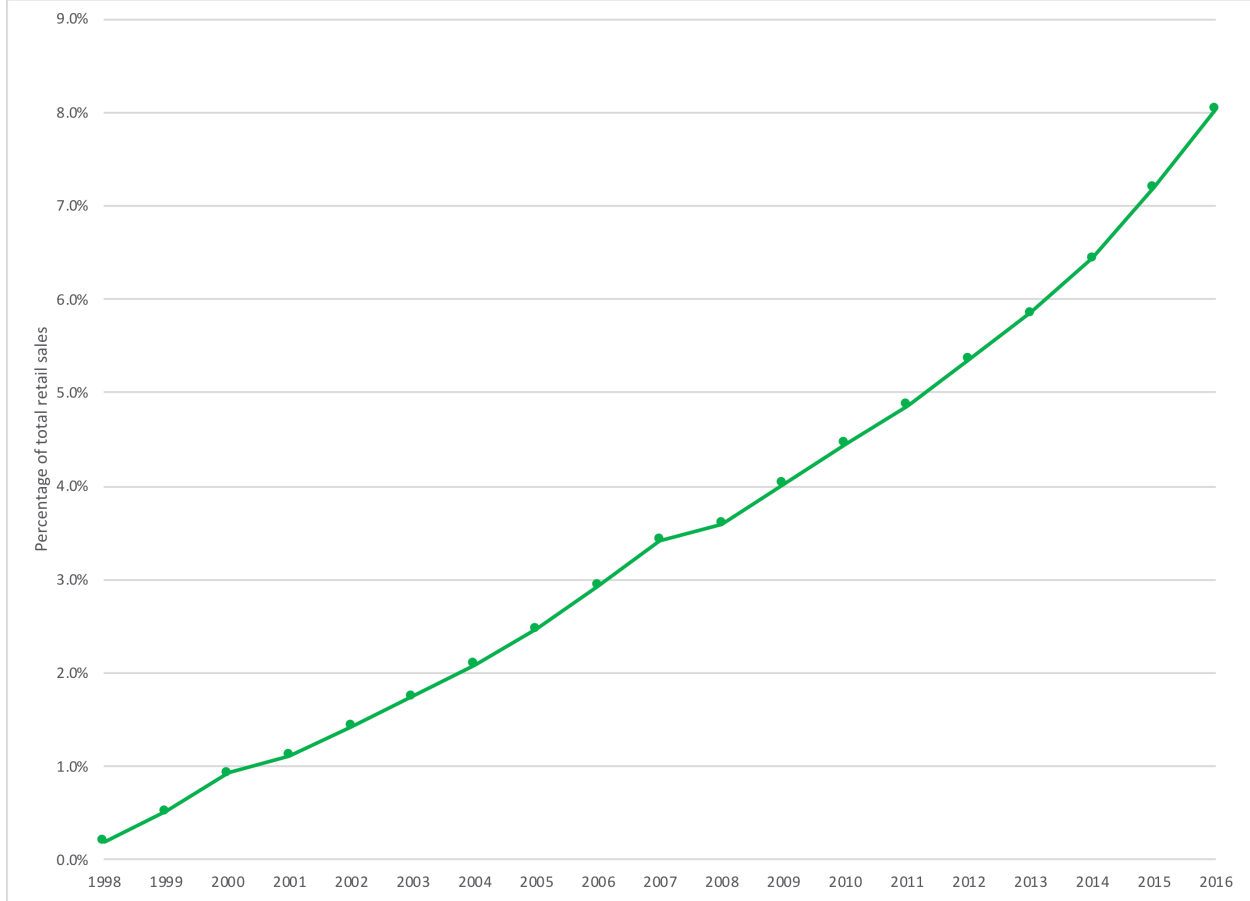
Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

The only region that has consistently outperformed the national average is the East North Central region, which includes Amish Country. Its LQ of 1.005 has risen fairly steadily since 2001, but is still quite low for a rural region and suggests additional growth potential. Among rural/small-MSA regions, the Southeast and South outperformed the state average, but as suggested above, may not continue to do so. The best-performing large MSA has been Akron. Columbus usually takes this spot, but not in retail: growth during 2001 through 2016 was worse than a number of regions. Recent growth, while better than the state average, still ranks only third-best among the 13 regions. Columbus fell victim to at least 20 years of retail overdevelopment during the 1980s and 1990s. LQ peaked at 1.20 in 1997, and employment peaked at 125,000 (seasonally adjusted) in December 1999. Losses through the following decade totaled 30,000, or nearly one-quarter of the December 1999 level.

The Impact of Electronic Commerce

The spread of online shopping has upended traditional retail. The U.S. Census Bureau began tracking e-commerce in 1998, when online sales accounted for only 0.2 percent of total retail. By 2016, U.S. e-commerce sales had reached 8 percent of total retail sales. As Figure 7 makes clear, the trend has been continuously upward, and has slightly accelerated in recent years.

Figure 7
Electronic Commerce as a Percentage of Total U.S. Retail Sales



Source: Retail Trade Report, U.S. Census Bureau

The increasing embrace by the public of online shopping has caused the bankruptcy and in some cases partial or total closure of a number of major retail chains, with Toys R Us as the latest example. Store closures by chains including Sears, JC Penney, and Macy's have robbed malls across the country of some or all of their anchor stores, contributing to the decline and in some cases failure of some of these shopping centers and the smaller stores that rely on the foot traffic generated by the anchors. Some of these closed malls, such as City Center Mall in downtown Columbus, Beechmont Mall near Cincinnati, and Randall Park Mall near Cleveland have been demolished and successfully redeveloped. The City Center site has been redeveloped with apartments, small-scale retail, offices, and a park and pavilion, and the Beechmont Mall site is now Anderson Town Center, an open-air center. The Randall Park Mall site, in a sign of the triumph of e-commerce, will soon be home to an Amazon fulfillment center employing 2,000. Other closed malls, such as Westland Mall in Columbus, continue to decay.

The online shopping impact on retail trade has been uneven as e-commerce has penetrated some retail segments to a greater degree than others. Table 3 shows this by computing the share of total sales accounted for by e-commerce in each segment in 2015. This makes use of a supplemental table in the Retail Sales Report that classifies sales in the electronic shopping and mail order industry (e.g., Amazon). These sales are added to the total and e-commerce portions of the sales of each segment, and the corresponding amount is deducted from nonstore retailers.

E-commerce was still a minor factor in several segments, including motor vehicle dealers, building material stores, health and personal care stores, gas stations, and food and beverage stores. But these statistics are for 2015; innovations since then such as online shopping for cars and Amazon’s two-hour delivery of grocery items in major cities is doubtless increasing the online share in these industries. Also, it may be that electronic shopping for personal care items is classified by the Census Bureau in general merchandise stores rather than health and personal care stores.

**Table 3
E-Commerce as a Share of Total Retail Sales by Segment, 2015**

Subsector	Retail sales (millions)*		Percentage
	Total sales	E-commerce	
Retail trade	4,727,427	340,415	7.2%
Motor vehicle and parts dealers	1,095,946	30,244	2.8%
Furniture and home furnishings stores	113,995	7,403	6.5%
Electronics and appliance stores	122,612	21,775	17.8%
Building material and garden supply stores	338,297	8,299	2.5%
Food and beverage stores	686,710	2,184	0.3%
Health and personal care stores	363,135	**	0.0%
Gasoline stations	443,817	**	0.0%
Clothing and clothing accessories stores	281,669	28,341	10.1%
Sports, hobby, music instrument, book stores	93,220	7,652	8.2%
General merchandise stores	698,012	22,633	3.2%
Miscellaneous store retailers	131,135	13,598	10.4%
Nonstore retailers	358,879	198,286	55.3%

*Includes a reallocation of electronic shopping and mail-order house sales. **Less than \$500,000.

Source: Retail Trade Report, U.S. Census Bureau

An important point is that the growth of e-commerce may negatively impact traditional retail, but it also conveys positive impacts on the Ohio economy. Amazon has built fulfillment and data centers around the state, and the shipment of goods has contributed to significant growth in Ohio’s key transportation and distribution sector.

"On The Money" (c) 1995-2018 Hannah News Service Inc., 21 West Broad Street, Suite 1000,
Columbus, Ohio 43215.

All Rights Reserved. Phone Number (614) 227-5820