



Growth and Change: Tracking Ohio's Recovery from the Great Recession

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Swank Program Website: <http://aede.osu.edu/programs/swank/>



Source: <http://smallbiztrends.com/2013/09/on-the-long-road-to-recovery.html>

Swank Program in Rural-Urban Policy
Summary and Report November 2014

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Executive Summary

The Great Recession that began in December 2007 and ended in June 2009 was the most severe since the Great Depression. In addition to having one of the steepest declines in employment, the recovery has been among the slowest. Yet, we are in our sixth year of economic expansion, which is already the 5th longest since WWII. Although the lengthy expansion has been remarkable given the weak recovery, especially in terms of net job growth, we are getting to the point where another downturn would not be surprising.

To put the severity of the latest recession in perspective, this policy brief contains a comparison of the employment fluctuations to those from previous recessions, beginning with the rather severe one in 1973-1975. Employment in the U.S. and Ohio indicate the following:


- The latest recession was the most severe for the U.S. since 1973: nonfarm employment declined the most and the recovery has been the slowest. As a result, U.S. nonfarm employment did not return to its initial level at the onset of the recession until May 2014.
- National manufacturing employment had the steepest decline of any recent recession, but the recovery fared better than some. It has been recovering steadily since September 2010, albeit very slowly. After falling by nearly 17%, manufacturing employment in June 2014 is still 12% below where it was at the onset of the recession in December 2007, and 30% below employment in June 2000, indicating that despite talk of a manufacturing renaissance, it seems unrelated to job growth.
- The decline in Ohio's employment is comparable to previous recessions, largely because it is one of the states that suffers the most during economic downturns due to its heavier reliance on manufacturing. However, Ohio's nonfarm employment has not fully recovered: by August 2014, employment remained 2% below pre-recession levels. Despite Ohio's initial outperformance of the U.S. during the economic expansion beginning in June 2009, sluggish growth allowed the U.S. to surpass Ohio's rate of job growth by 2011.
- Manufacturing employment in Ohio had a substantial decline at the onset of the recession: employment plummeted by 20%, or declined by about 150,000 employees, and remained 11% below pre-recession levels by August 2014. Yet, the above average performance for Ohio during the 2010-2011 period was in part due to the initial rapid recovery in manufacturing for the U.S. and Ohio. Nevertheless, Ohio's manufacturing employment remained 34% below its levels of June 2000 and 51% below the levels of 1979.

Comparing national employment fluctuations alongside Ohio's can misconstrue its economic performance. As a state with a relatively large manufacturing sector, which has more volatile employment fluctuations, Ohio is one of the hardest hit states during recessions, but bounces back a little faster as well. Thus, Ohio is more comparable to other Great Lakes states, which also have a large manufacturing sector, similar settlement histories, and natural amenities. The Great Lakes states' employment fluctuations suggest the following:

- Employment growth in Ohio, Michigan, and Illinois has lagged, particularly compared to the U.S. and Wisconsin. From 1969 to 2013, total employment in the three states grew by around 30%; it grew by about 50% in Indiana and over 80% in Wisconsin and the U.S.
- Michigan had a much steeper decline in employment during the latest recession, but recovered more quickly than Ohio and Illinois. As a result, by August 2014, all three laggards remain 2% below employment at the onset of the recession, lower than Indiana, Wisconsin, and the U.S.

Finally, a more detailed examination of Ohio is conducted. Employment changes in the three most populous metropolitan cities, Columbus, Cleveland, and Cincinnati, greatly impact the state. Analyzing these three metropolitan areas indicate the following:

- Although the recent recession was challenging for all three metropolitan areas, Columbus clearly performed the best: it fully recovered by February 2012, whereas neither Cincinnati nor Cleveland has



fully recovered as of August 2014.

- Even compared to their peer U.S. metropolitan areas, Columbus performed the best, with the lowest decline in employment and the fastest recovery. Conversely, employment in Cincinnati had one of the steepest declines and the slowest recovery after Cleveland.

The economic performance of cities and states is often attributed to the state government's policies. However, it remains unclear how these policies truly affect a state's economy, something that voters must be conscious of before commending or reprimanding these public officials. In conjunction with government policies, numerous factors lead to economic fluctuations, particularly over the last few decades as we've become more globalized. Since the middle part of the past decade, Ohio state policymakers have relied on tax policy to attract new economic activity. Although Ohio continues to slowly recover from the latest recession, employment has become relatively stagnant over these last few months while national employment has continued its rapid recovery. This slow recovery may be partially due to other states adopting similar tax cutting policies, meaning Ohio and other states are treading water. Instead, alternative strategies should be considered to differentiate Ohio from other states.



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Introduction

The most recent recession, dubbed the Great Recession, was the worst economic downturn since the Great Depression; it began in December 2007 and lasted until June 2009. Historically, recessions were severe, but the economy recovered quickly. The economic downturn for the 1990-91 and 2001 recessions was not very deep but followed by anemic economic growth, similar to the recovery from the Great Recession. Oftentimes, jobs are permanently destroyed and employment does not fully recover, becoming known as “jobless” recoveries (e.g. Avent 2012; Tankersley 2013). As the economy struggled to recover from the latest recession, the media lamented over the plight of the long-term unemployed (e.g. Perkins 2014). Additionally, a number of studies analyzed the slow recovery and made predictions about how the economy may look in the future (e.g. Schierholz and Bivens 2010), including a report released by the C. William Swank program.

In November 2009, the Swank program released a report forecasting how the economic recovery might take shape (Partridge, Huang, and Uprety 2009). Using a similar methodology, this study compares the recent economic recovery to those following previous recessions.

Methodology

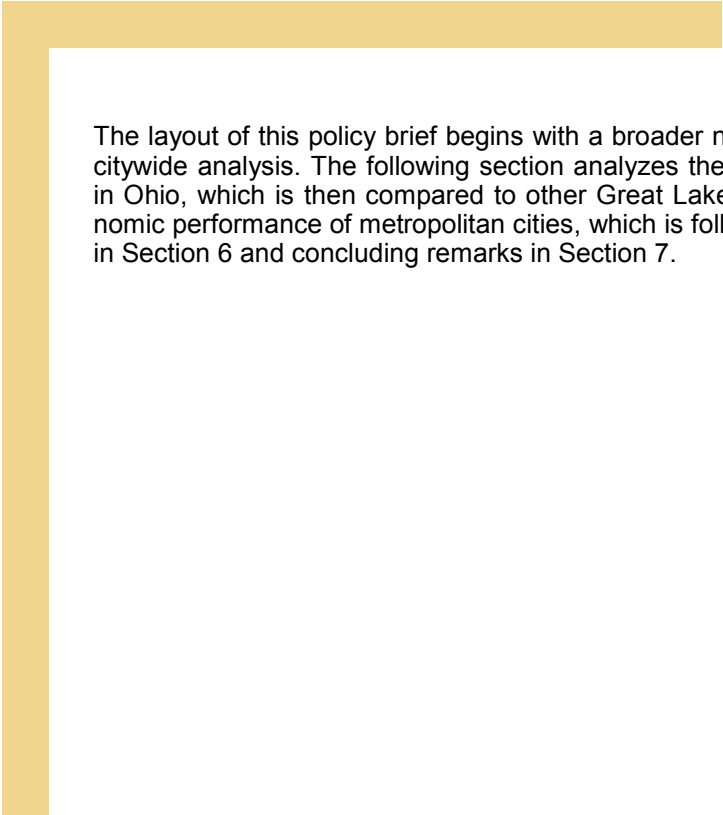
Beginning with the 1973 recession, changes in employment are examined for every recession, as classified by the National Bureau of Economic Research (NBER), the official arbiter of these dates: 1973-1975, 1980, 1981-1982, 1990-1991, 2001, and the latest from 2007-2009¹. The relative performance of the economy is measured using employment from the Bureau of Labor Statistics and the Bureau of Economic Analysis, beginning with the first month the economy officially went into recession, as declared by NBER. The figures report relative employment for the next 84 months, benchmarked to employment at the onset of the recession, or the peak employment of the economic expansion. Thus, the trend lines in the figures begin at 100. When it is at 90, employment is 10% below employment at the peak, and if the trend line is at 115, employment is 15% above the peak.

Employment is a better measure of economic performance than unemployment or income for several reasons. The unemployment rate is calculated using individuals “actively” seeking employment, ignoring discouraged workers and those whose efforts are viewed as “inactive.” It also misses the fluid nature of people jumping in and out of the labor market. Furthermore, at the state and local level, unemployment rates do not reflect people who move away for better economic opportunities. The nonfarm employment estimate comes from a larger, much more representative survey of employers; it is eventually benchmarked to tax return records that make it extremely accurate after a few years. It has none of the disadvantages of unemployment rate, and ultimately job growth is generally considered a good thing while changes in the unemployment rate are associated with “good” or “bad” reasons (Partridge and Rickman, 2003a).

Measures of income are problematic as well. Although average income may grow in a jobless recovery, it may be a skewed representation if the income growth is generated by the very top of the distribution while those below are not participating in the recovery.² Furthermore, data on income tends to be released later, sometimes up to 18 months for local areas. Finally, the public is focused on job creation, further making the case that jobs should be the metric we use. Thus, following our policy briefs for the last eight years, the analyses conducted in this study use employment growth to compare the economic recovery from the most recent recession to previous ones.

¹Throughout this paper, employment refers to nonfarm employment, unless specified otherwise.

²The growth in median household income may capture what is happening at the middle of the distribution, but this number is not as widely available as the other alternatives. Likewise, the employment/population ratio is a preferred measure of employment conditions than the unemployment rate because it is not affected by definitions of who is in the active labor force, but it is not well understood by the public. Unemployment rate estimates are also greatly influenced by measurement error at the state and local level.



The layout of this policy brief begins with a broader national outlook of the recovery and tapers down to a citywide analysis. The following section analyzes the national recovery. Section 3 examines employment in Ohio, which is then compared to other Great Lakes States in Section 4. Section 5 compares the economic performance of metropolitan cities, which is followed by a discussion of the role of state government in Section 6 and concluding remarks in Section 7.



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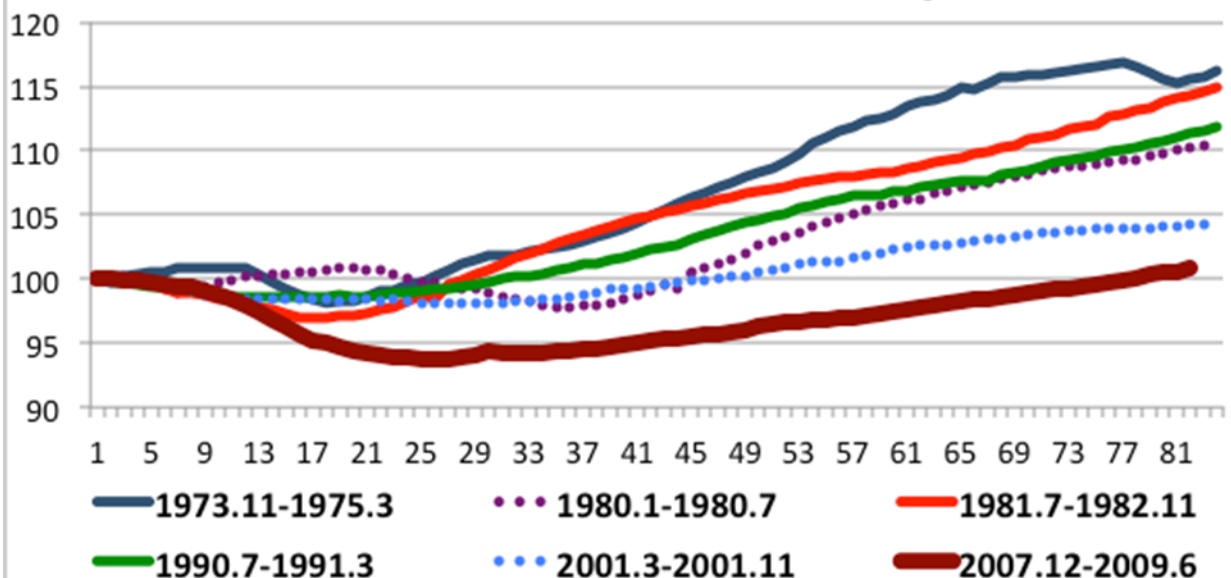
National Recovery

The Great Recession is considered to be one of the worst economic downturns since the Great Depression. Previously, the 1981-82 recession had been the most severe, largely because there was insufficient time to recover from the one in 1980; it became known as a "double dip" recession. Nonetheless, it had a smaller decline in employment and a faster recovery than the latest recession. After the early 1980s, employment changes caused by fluctuations in the business cycle have been less volatile, which has been partially attributed to the declining share of manufacturing in total employment (e.g. Warnock and Warnock 2000), which was labeled by economists as the Great Moderation.

Figure 1 illustrates that the latest recession had the largest decline in national employment. Prior to the 2007-09 recession, the 3% decline in employment during the 1981-82 recession had been the deepest since 1973. The Great Recession had a decline that was twice as deep: by the 27th month, employment had fallen by about 6%, or over 8 million employees. In addition to having the most severe decline in employment, the latest recession had one of the slowest recoveries.

The sluggish recovery beginning in June 2009 delayed the full restoration of U.S. employment for 78 months after the onset of the recession, or until May 2014. It was the longest recovery compared to recent recessions. While it took almost five years for employment to fully recover from this last recession, it took 25, 28, 31, and 46 months, respectively, for total employment to fully recover from the 1973-75, 1981-82, 1990-91, and 2001 recessions. Recovery from the 2001 recession is deceptively slow near the end of the trend line because the Great Recession began at the 81st month. Furthermore, recoveries from the relatively severe 1973-75 and 1981-82 recessions had already experienced about 15% job growth from their pre-recession peaks when they reached the stage we are currently in with the Great Recession. Nevertheless, national employment has been steadily increasing since September 2010, albeit very slowly.

**Figure 1: National Nonfarm Employment
(84 months after the onset of the recession)
Benchmarked to month recession began**

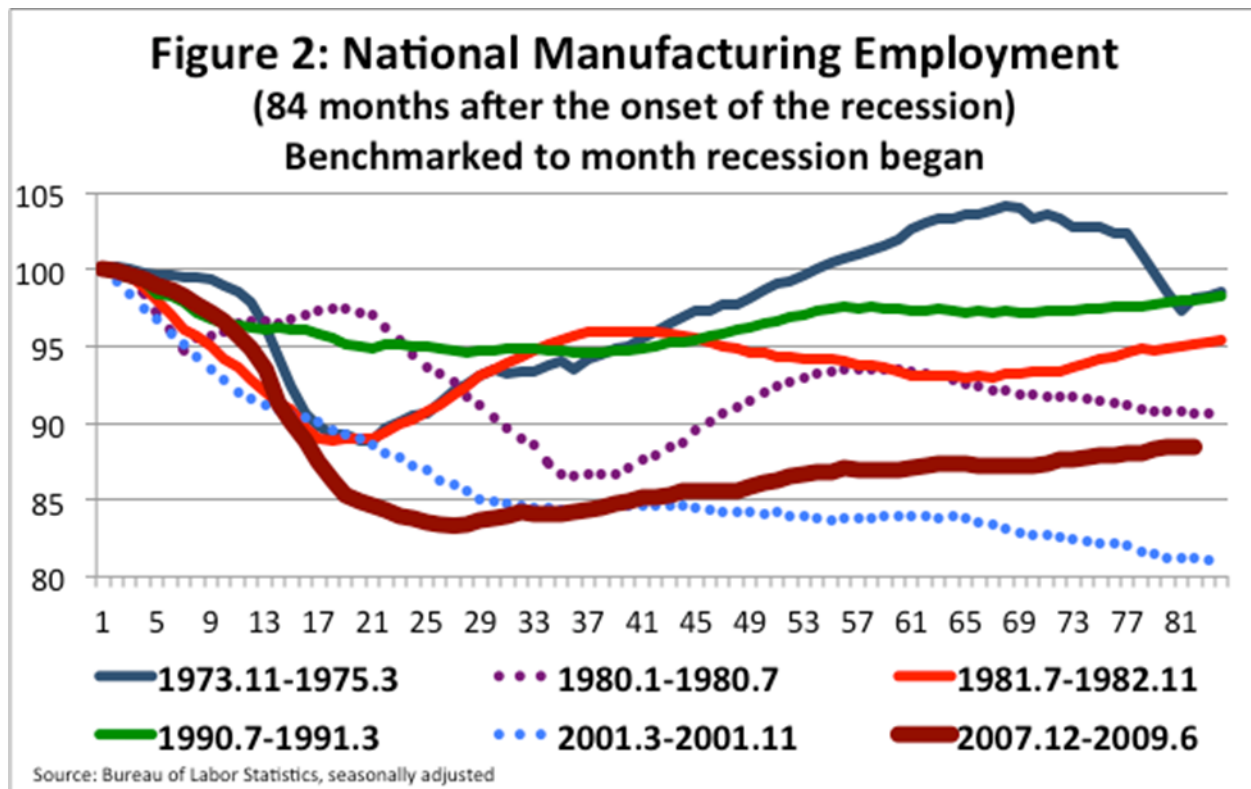


Source: Bureau of Labor Statistics, seasonally adjusted

Economists often refer to the 1982-2007 period as the “Great Moderation”, during which the business cycle was much more muted and employment fluctuations were much less volatile. As previously mentioned, this was partially attributed to the declining share of manufacturing in total employment. Figure 2 shows that national manufacturing employment never fully recovered from the recent recessions. The burst of the dot com bubble in 2001 had the worst recovery, even after considering that the end of this trend line includes the beginning of the Great Recession. Manufacturing employment plummeted in the latest recession, falling by nearly 17%. Although the recovery has been better than the one following the 2001 recession, it remains nearly 12% below employment at the onset of the recession in December 2007, and 30% below employment in June 2000, nine years before the Great Recession ended.

Recovery for the manufacturing sector has been much slower than it has been for the broader economy. While there have been optimistic predictions of a manufacturing rebirth, it is hard to see if employment will be a major component (Schwartz, 2014). U.S. manufacturing has experienced rather large productivity increases since World War II. As a result, while the manufacturing share of GDP has not declined significantly, employment has fallen at about the rate of productivity growth (Marquis and Trehan, 2010). Figure 3 illustrates this phenomena from 1979 to 2013 using annual data, and for 2014, using the average growth through September 2014. Like the previous graphs, 1979 has been benchmarked to 100. Industrial production for manufacturing from the Federal Reserve Board represents output. As the figure shows, while manufacturing production has grown throughout most of the period, employment has fallen. Since the beginning of the Great Recession, production has barely recovered its pre-recession peak, making it difficult to see a rebirth of the manufacturing sector in the data.

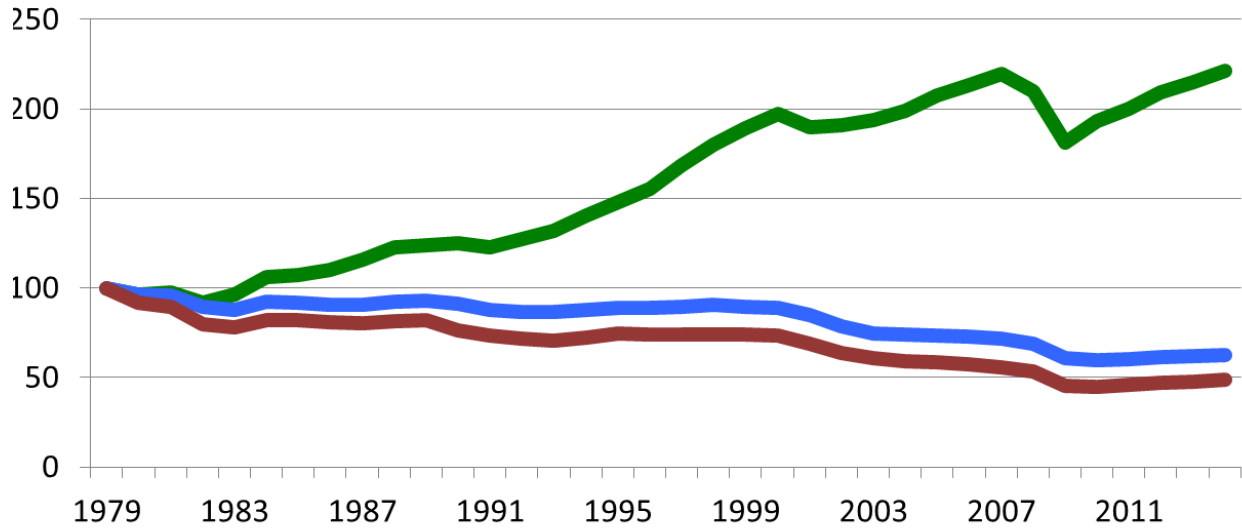
This decline in manufacturing as a share of employment partially explains why the recovery process has been steadily slowing – manufacturing typically rebounds fairly quickly.³ However, because of the deep decline in employment during the Great Recession, the slow recovery has been painful. It also raises the question of how the recession affected states where manufacturing historically played a large role, such as Ohio.



³The recovery from the 1980 recession is deceptively lower because of the double dip recession in 1981-82, and thus ignored for the purpose of this comparison.

Figure 3: Manufacturing Production and Employment (1979-2014)

Benchmarked to 1979 = 100



— Production — US Mfg Employment — OH Mfg Employment

Source: Federal Reserve Board for Manufacturing Industrial Production; Bureau of Labor Statistics for US Employment and OH Employment from 1990-2014; Bureau of Economic Analysis for OH Employment from 1979-1989

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Ohio's Recovery

Although national employment has fully recovered, Ohio's employment has not: it remains about 2% below employment at the onset of the recession. By February 2010, 26 months after the recession began, employment reached its lowest point at about 419,000 fewer employees. However, because Ohio is one of the states that suffers the most during recessions due to its manufacturing intensity, Figure 4 shows that the decline in employment in this last recession is comparable to previous ones, particularly the "double-dip" recession in the early 1980s.

The recovery has been significantly worse in the last two economic downturns. The 2001 recession had a stagnant recovery, where employment remained about 2% to 3% below employment in March 2001 until the onset of the Great Recession, when it declined further. Ohio's employment improved at a faster rate than it did after the 2001 recession, especially in the 2010-2011 period. Nevertheless, it was slower than any other recession depicted in Figure 4. Furthermore, because of the steep decline, employment remains about 2% below its initial level in December 2007. At this stage of the recovery from the severe 1981-82 recession and the relatively mild 1990-91 recession, employment had already increased by about 10%. Furthermore, employment has recovered much more slowly for Ohio than it did for the nation.

A. Comparing Ohio's Nonfarm Employment to the U.S.

Although national employment had fully recovered by June 2014, Ohio's remains about 2% below employment in December 2007. Both the U.S. and Ohio reached its lowest employment in February 2010, or 27 months after the onset of the recession. Ohio had a slightly steeper decline at almost 8%, whereas the U.S. declined by a little over 6%. However, the U.S. had a faster recovery, despite Ohio's initial outperformance in 2010.

**Figure 4: Ohio Nonfarm Employment
(84 months after the onset of the recession)
Benchmarked to month recession began**

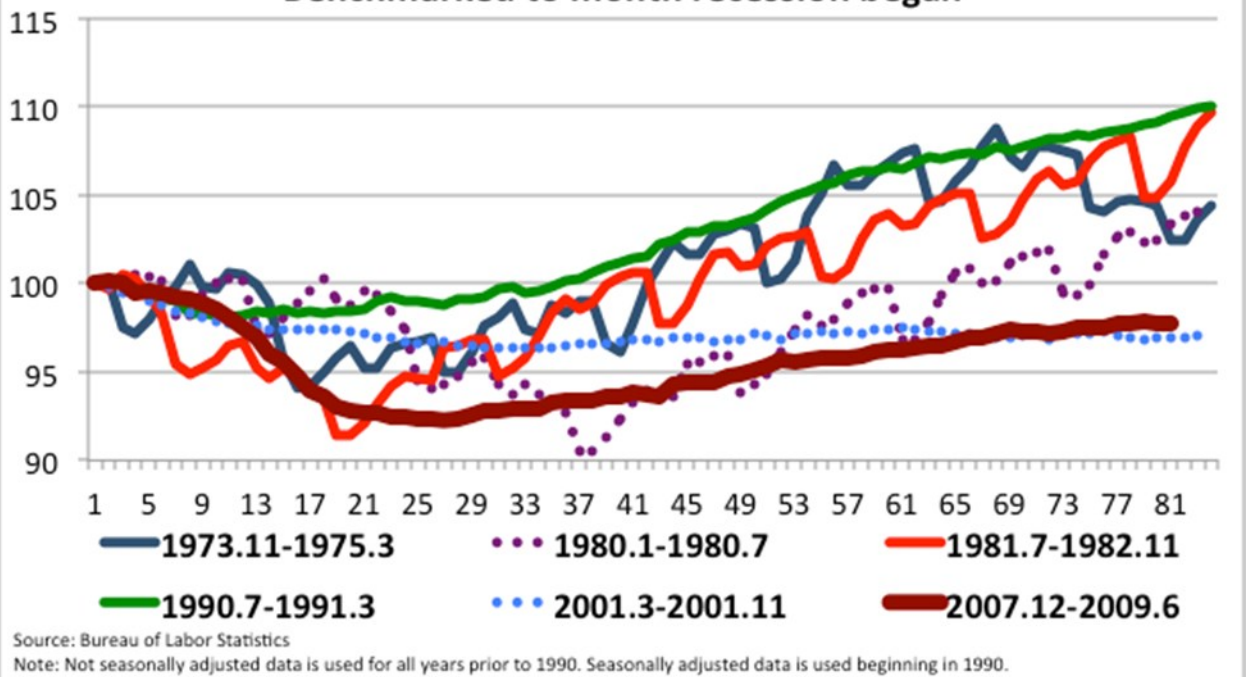


Figure 5 compares Ohio's job growth to the nation's during the current economic expansion, which began in 2009. Initially, Ohio outperformed the U.S. in the recovery process; its employment increased more quickly in 2010. The following year, employment for both increased by 1.6%. Subsequently, national employment continued to increase at a slightly quickening rate while Ohio's employment growth slowed, leading to a greater disparity in the percentage change in employment. Ohio's employment increased by only 1% and 0.3%, respectively, in 2013 and 2014. Meanwhile, national employment increased at a rate of 1.9% thus far in 2014. This shows that after the initial bounce back, Ohio has settled into its historic position dating back to the late 1960s of lagging behind U.S. employment growth by about one-half to one percentage point each year.

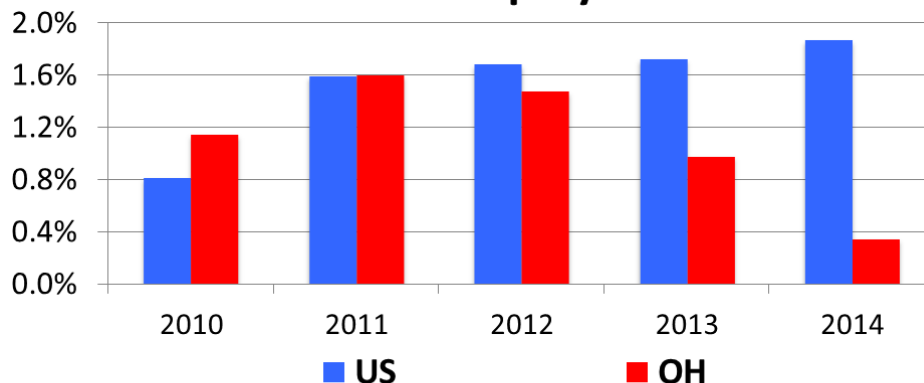
B. Ohio's Manufacturing Sector

Historically, Ohio has been one of the states that suffers the most during economic downturns, largely because of its prominent manufacturing sector. Due to volatile demand, manufacturing employees are generally the hardest hit when the economy is struggling. Figure 6a shows that Ohio experienced a precipitous decline in manufacturing employment, which plummeted at the onset of the recession.⁴ It declined by nearly 150,000 employees (20%) by June 2009, or 19 months after the recession began; by June 2014, it recovered by almost 10%.

Despite Ohio's seemingly faster recovery compared to previous recessions, the trend is slightly skewed because Ohio had a worse recovery after the 2001 recession. Manufacturing employment never recovered in Ohio; when the Great Recession began, it was about 23% below its initial level in March 2001. The volatility of manufacturing employment has a greater impact on Ohio's economy than the nation's because it makes up a greater portion of total employment. Yet, it is remarkable that, aside from the one in 1990-91, every recession dating back to 1973 has left Ohio's manufacturing employment at least 5% below its initial level by the 84th month.

The long-term trend has been a loss in manufacturing employment caused by recessions that never entirely recover in the subsequent recovery. Figure 6a shows that manufacturing employment in Ohio never fully recovered, even after seven years. As a result, at the onset of the 2007 recession, manufacturing employment was about 45% and 26%, respectively, below the level in 1979 and June 2000. Although it continued to recover, this left Ohio's manufacturing employment in June 2014 to be about 51% and 34%, respectively, below its level in 1979 and June 2000. As noted above, much of this is due to rapid productivity growth. Manufacturing output has continued to increase despite the decline in employment, raising the question of how Ohio is going to replace these relatively high-paying jobs.

Figure 5: Percentage Change in Nonfarm Employment

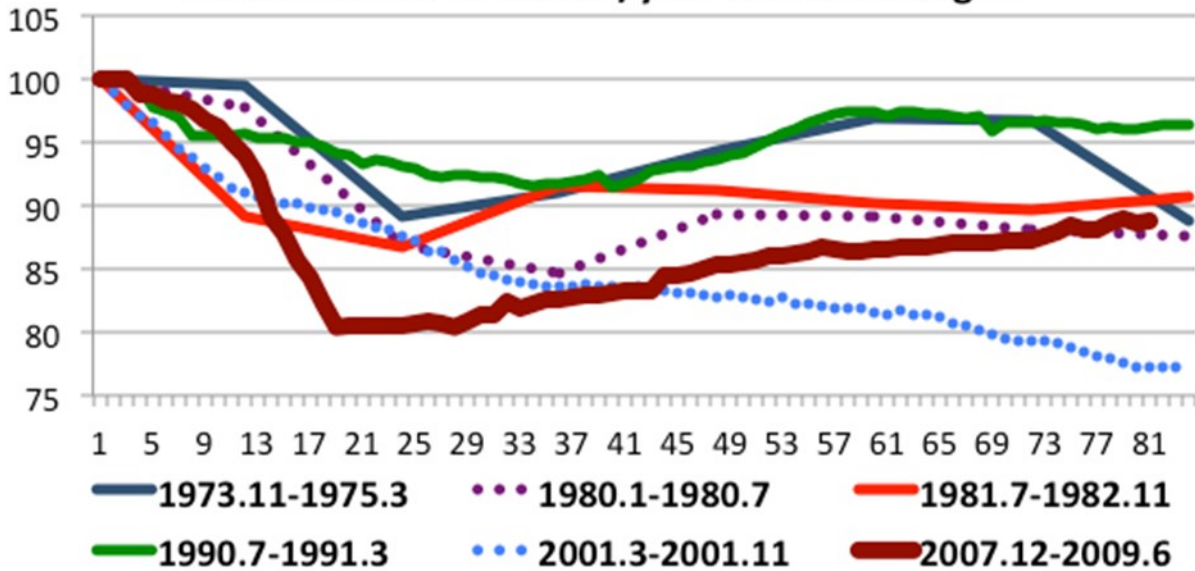


Source: Bureau of Economic Analysis

Note: Percentage change is calculated using the estimate for December from the previous year. For 2014, the preliminary estimate for August is used instead.

⁴The notes to Figure 5a and 5b show that we use BEA data before 1990 and BLS data afterwards due to data availability. The BEA data includes proprietors and self-employed while the BLS data includes only nonfarm wage and salary employees. As a result, because a smaller share of manufacturing employment is made up of proprietors and the self-employed, the BEA data modestly understates the manufacturing share of employment compared to the BLS data.

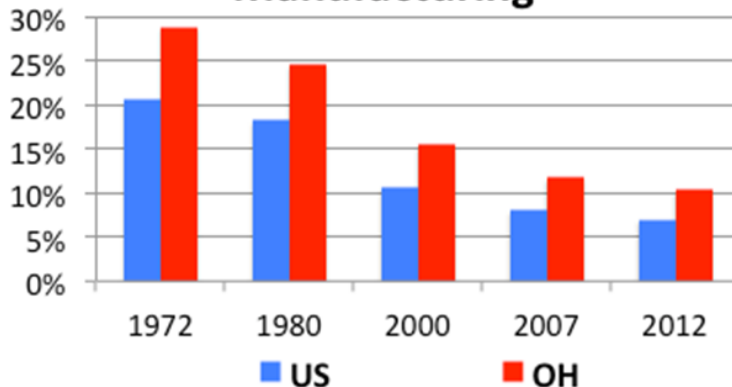
**Figure 6a: Ohio Manufacturing Employment
(84 months after the onset of the recession)
Benchmarked to month/year recession began**



Source: Bureau of Economic Analysis, Bureau of Labor Statistics
Note: Annual data from BEA is used for years prior to 1990. Monthly seasonally adjusted data is used beginning in 1990.

Figure 6b illustrates the general grind on manufacturing employment as it becomes relatively smaller. Historically, Ohio has had a greater share of manufacturing employees than the U.S. In 1972, 29% of Ohio's employees were in manufacturing, compared to 21% of national employees. The larger share in Ohio has been consistent up to 2012, but there has been a clear trend towards deindustrialization in both the U.S. and Ohio. The proportion of employees in the manufacturing sector has been declining, countering hopes for a "manufacturing renaissance" in terms of employment. The percentage of manufacturing employees in Ohio dropped by nearly 20 percentage points over 40 years, reaching 10% in 2012. Despite this dramatic decline, the share of employees in manufacturing remains greater than the U.S. share, indicating that fluctuations in Ohio's employment are not directly comparable to changes in national employment. As noted above, Ohio's employment is more volatile and any improvement in its relative performance will likely require other industries to lead the way, as manufacturing did for Ohio during the prosperous late 19th Century, up through the 1960s. To assess its performance with an appropriate peer group, Ohio is compared to other Great Lakes states, which are historically manufacturing states.

Figure 6b: Employment Shares in Manufacturing



Source: Bureau of Economic Analysis

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How Does Ohio Compare to Other Great Lakes States?

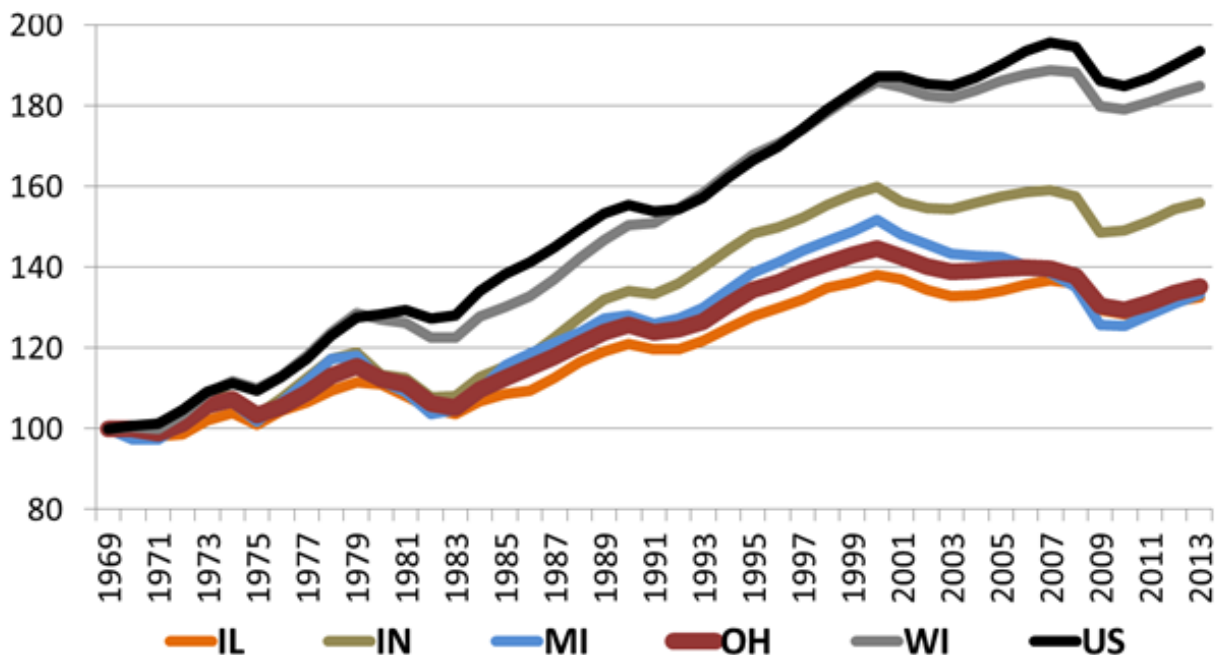
Historically, Great Lakes states have had a large proportion of employees in the manufacturing sector, which partially explains why the region exhibits more volatile employment fluctuations during economic cycles. However, this regional disparity has shrunk in recent decades. A possible explanation is the decline in manufacturing, which has created a more uniform labor market across the U.S. (Partridge and Rickman 2002). Although this decline reduced the volatility of employment fluctuations, a smaller manufacturing sector in terms of employment share may have also contributed to the lagging overall employment growth that Great Lakes states have experienced over the last few decades.

Figure 7 reports annual employment dating back to 1969 for the five Great Lakes states and the U.S. As shown in the graph, employment growth in most of these states has lagged. Wisconsin is the only state that has resembled the national employment trend; the remaining states have performed much worse over the years. By 2013, Illinois, Michigan, and Ohio had the lowest levels of employment growth at around 30% over the 44 year period. Employment in Indiana grew by 56%, and in Wisconsin and the U.S., it grew by around 80%. Although the disparity in economic growth started in the 1970s, it accelerated after 1979; the most recent economic recovery further widened the gap.

Figure 8 drills down to the relative performance of the Great Lakes states since the beginning of the Great Recession. Mirroring the employment trends depicted in Figure 7, Wisconsin's employment fluctuations have followed the nation's. Although Illinois's initial economic downturn also resembled the nation's, its

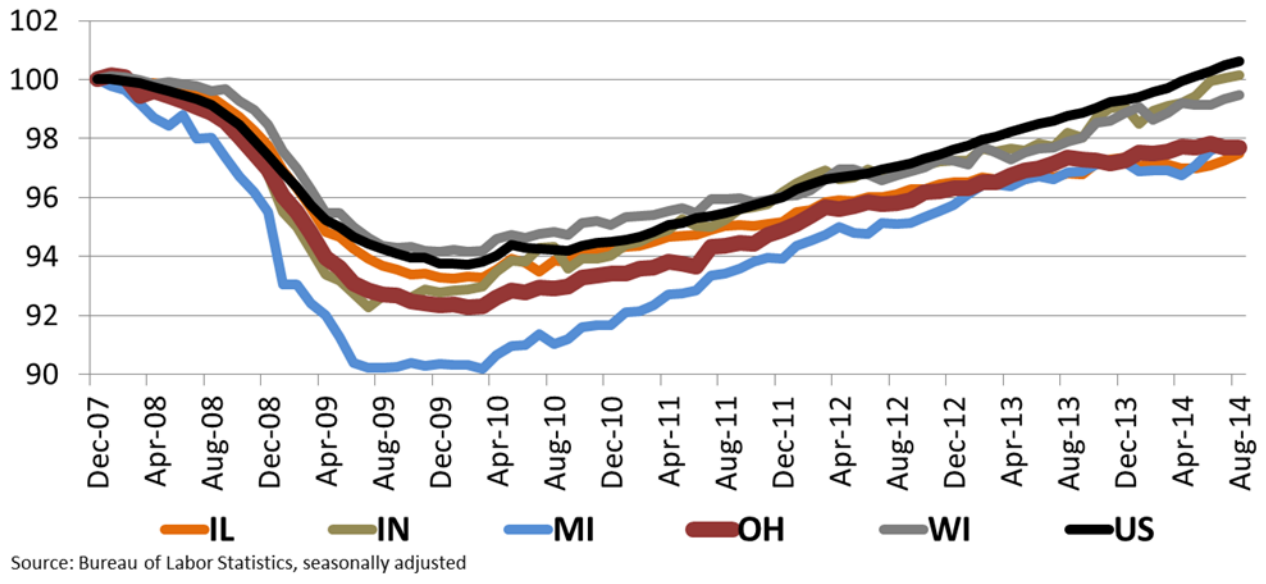
Figure 7: Great Lakes States Nonfarm Employment (1969-2013)

Benchmarked to 1969 = 100



Source: Bureau of Labor Statistics, not seasonally adjusted

**Figure 8: Great Lakes States Nonfarm Employment
(December 2007-August 2014)
Benchmarked to December 2007 = 100**



recovery has been slower than the rest of the region. Conversely, Indiana had a deeper decline in employment but recovered more quickly, resembling the resurgence in Wisconsin and the U.S. by June 2010. Michigan clearly suffered the worst: by July 2009, employment had declined by nearly 10%, the lowest across the Great Lakes states. However, it experienced a more rapid recovery than Ohio and Illinois beginning in April 2010. As a result, Illinois, Michigan, and Ohio have had the weakest recovery: by June 2014, they remained 2% below employment at the onset of the recession. Yet, Michigan's relative employment growth has matched the national average since the Great Recession ended. Given all of the structural problems in Michigan, its performance is the most impressive in the region and it will be interesting to see if that pattern continues.⁵

⁵Both Indiana and Michigan recently became right-to-work states. It will be interesting to monitor what effect this union-working policy has on their performance.

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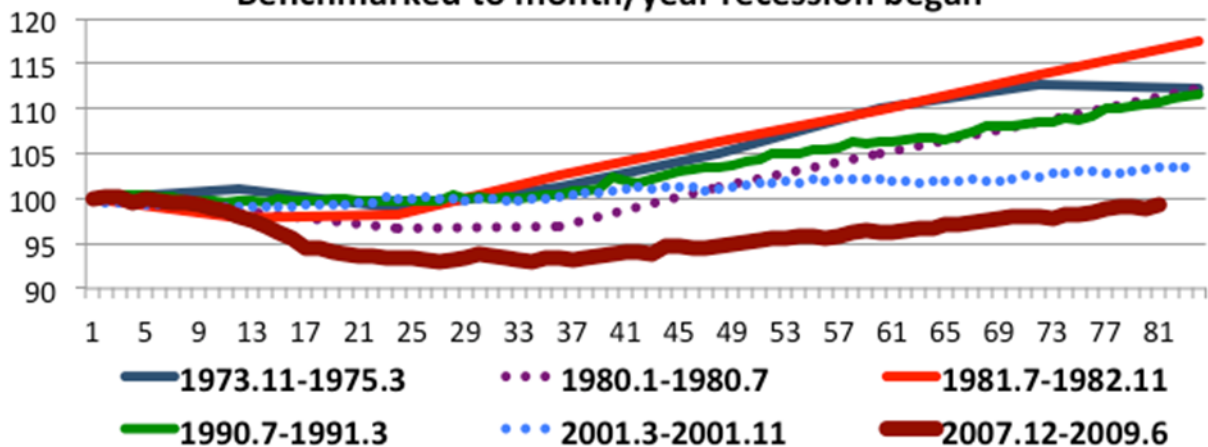
How Did Ohio's Cities Fare?

Employment changes in Ohio are largely driven by the three most populous metropolitan areas: Cincinnati, Cleveland, and Columbus; thus, we will focus on their performance.⁶ Yet their relatively divergent economic fortunes over the last few decades illustrates that an "average" Ohio story is somewhat misleading. Although Columbus has performed relatively well, Cincinnati and Cleveland suffered greatly during this last recession.⁷

By February 2012, 51 months after the onset of the recession, employment had fully recovered in Columbus. However, neither Cincinnati nor Cleveland had fully recovered by June 2014: employment remained about 1% and 3%, respectively, below employment in December 2007. This was largely the result of both cities having a more severe decline in employment and a slower recovery. Employment in Cleveland was further hampered by its inability to fully recover from the 2001 recession. Nevertheless, due to the severity of the Great Recession, even employment in the Columbus metropolitan area was only 4% above its initial level at the onset of the Great Recession in December 2007. In fact, the 2001 Recession and the Great Recession had the slowest recoveries for all three metropolitan areas.

Across all three metropolitan areas, Figure 9, 10, and 11 show that the latest recession had the most severe decline in employment.⁸ However, Cleveland and Columbus recovered faster than it did for the 2001 recession, even after excluding the months following the 81st month when the Great Recession began. In Columbus, this was the result of a recovery that started sooner and occurred more rapidly. However, in Cleveland, this was largely the result of a stagnant recovery from the 2001 recession. At the start of the Great Recession in December 2007, Cleveland's employment remained around 5% below its employment of March 2001. Despite the seemingly improved economy, as of June 2014, Cleveland metropolitan area employment remained around 1,039,000 employees, which is lower than any month following the 2001

**Figure 9: Cincinnati Nonfarm Employment
(84 months after the onset of the recession)
Benchmarked to month/year recession began**



Source: Bureau of Economic Analysis, Bureau of Labor Statistics

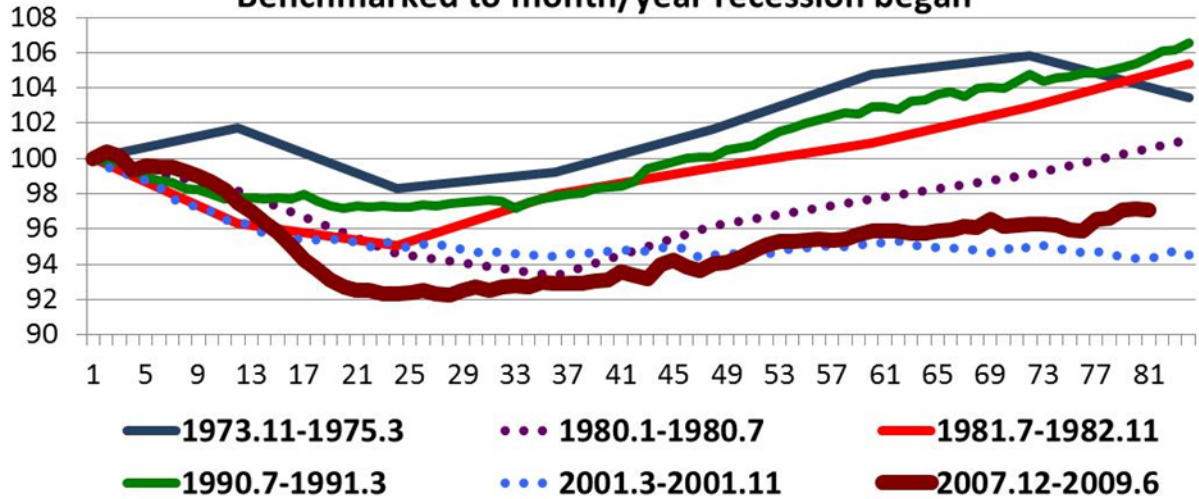
Note: Annual data from BEA is used for years prior to 1990 and monthly seasonally adjusted BLS data is used beginning in 1990. The data is collected for the Cincinnati Metropolitan area.

⁶Figure 16 and 17 in the Appendix shows nonfarm and manufacturing employment for additional metropolitan areas, specifically Akron, Canton, Dayton, Toledo, and Youngstown. Figure 18 in the Appendix illustrates nonfarm and manufacturing employment alongside each other for Akron, Canton, and Youngstown.

⁷In this discussion, we are referring to the entire metropolitan area and not just the principal cities Cincinnati, Cleveland, and Columbus.

⁸Figure 14 and 15 in the Appendix show the employment trend in nonfarm employment and manufacturing employment for all three metropolitan areas alongside each other, in addition to the U.S.

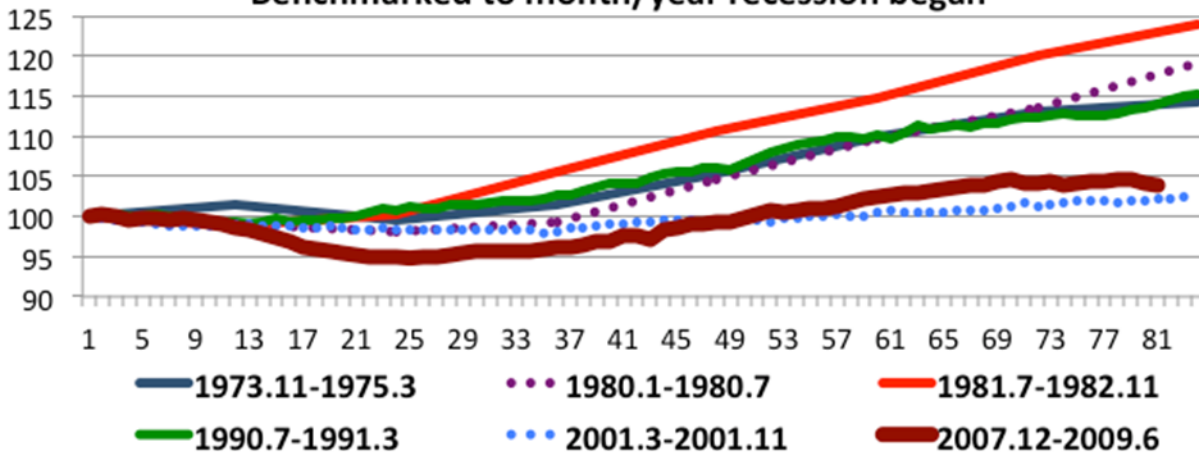
**Figure 10: Cleveland Nonfarm Employment
(84 months after the onset of the recession)
Benchmarked to month/year recession began**



Source: Bureau of Economic Analysis, Bureau of Labor Statistics

Note: Annual data from BEA is used for years prior to 1990 and monthly seasonally adjusted BLS data is used beginning in 1990. The data is collected for the Cleveland Metropolitan area.

**Figure 11: Columbus Nonfarm Employment
(84 months after the onset of the recession)
Benchmarked to month/year recession began**



Source: Bureau of Economic Analysis, Bureau of Labor Statistics

Note: Annual data from BEA is used for years prior to 1990 and monthly seasonally adjusted BLS data is used beginning in 1990. The data is collected for the Columbus Metropolitan area.

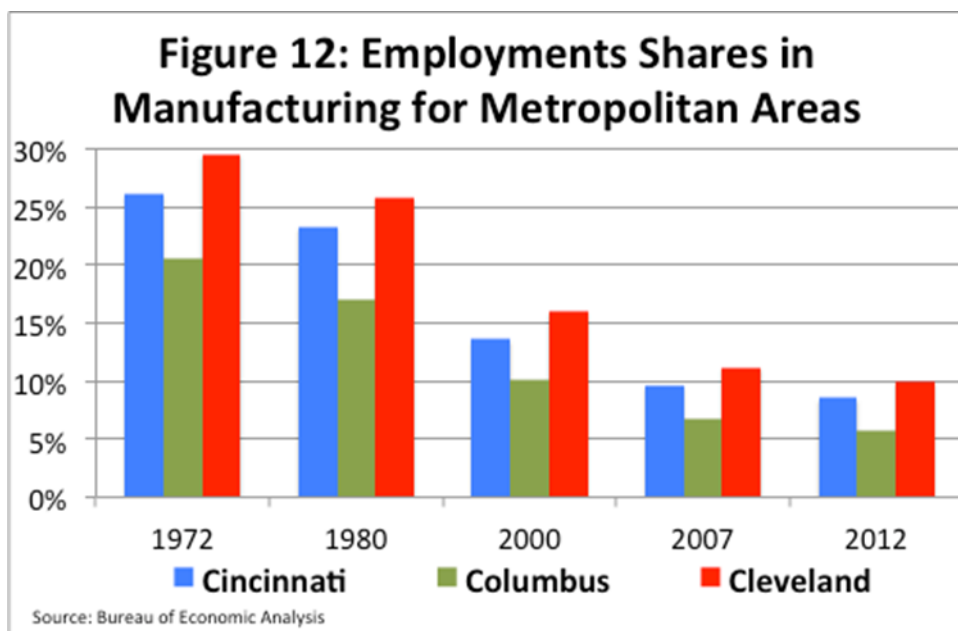
recession and the lowest since September 1994, when the Great Recession months are ignored. A large contributor is Cleveland’s consistently slower employment growth following recessions; Columbus generally performs the best in the recovery process, followed by Cincinnati. These differences across cities are driven partly by differences in the share of employment in manufacturing.

Historically, Cleveland was known for its manufacturing sector, particularly for automobiles and heavy manufacturing. Second only to Detroit, Cleveland became one of the largest centers for the automotive industry in the 1910s and the 1920s (Stapleton 1997). Despite the overall decline in manufacturing, the sector continues to dominate in Cleveland. Figure 12 shows that Cleveland and Columbus, respectively, have had the highest and lowest share of manufacturing employment since 1972.⁹ The larger service economy in Columbus has kept Central Ohio from being as exposed to global competition and the downsizing in manufacturing due to productivity growth, sparing it from the substantial decline during severe economic downturns that Cleveland suffers from. Nevertheless, all three cities have succumbed to the deindustrialization that has occurred across the nation. From 1972 to 2012, the share of manufacturing employment declined by about one-third in Cincinnati and Cleveland. In 2012, the share had dropped below 10% in Cincinnati and Columbus; Cleveland remained the highest at 10%.

A. A Comparison to Their Peers

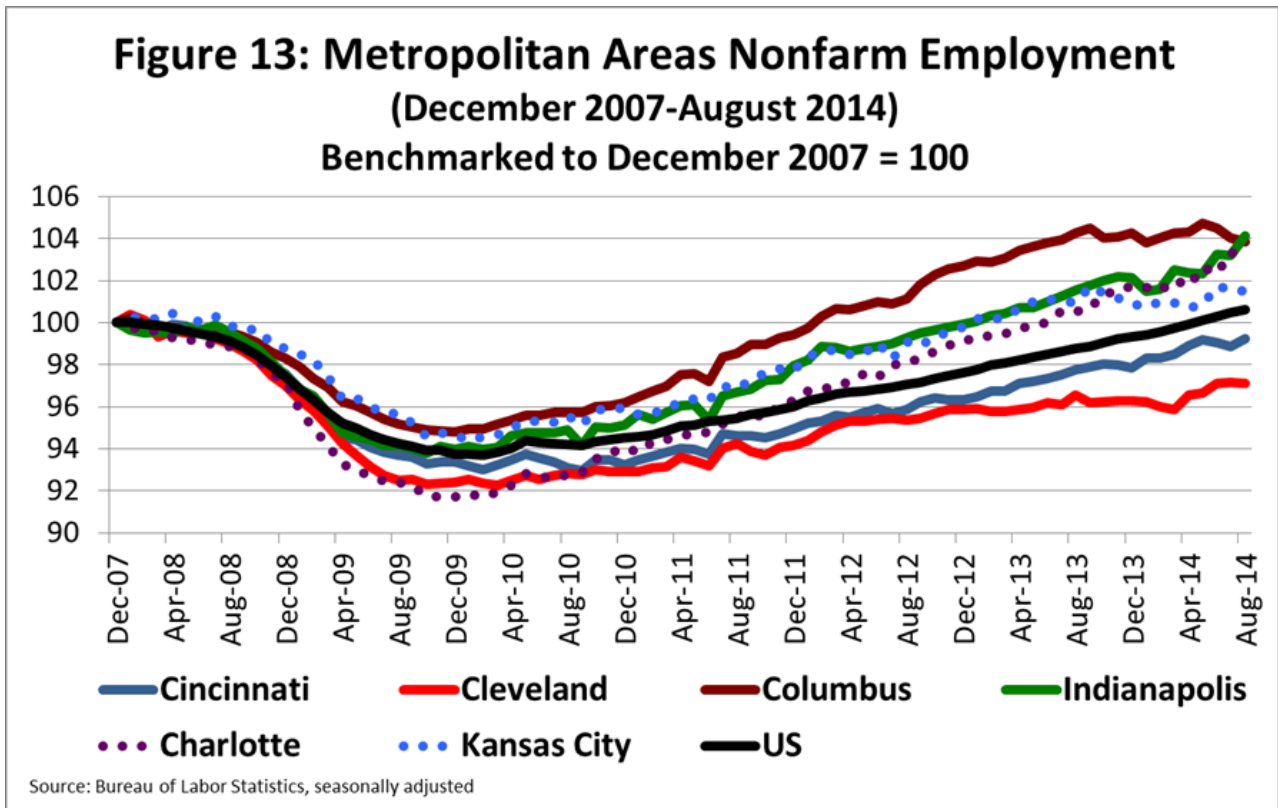
Given the higher manufacturing shares in Cincinnati and Cleveland, it is not surprising that Columbus has outperformed them since the Great Recession. Thus, we form another peer group of metropolitan areas with about 2 million people and economies that are more service dominated like Columbus. Doing so provides a better perspective of how well Columbus has actually performed.

Even compared to peer metropolitan areas, Columbus has clearly performed the best since the onset of the Great Recession: it had one of the lowest declines in employment and the fastest recovery. Figure 13 shows that Columbus recovered faster than any of the comparable metropolitan areas, with employment fully recovering by February 2012. Conversely, Cincinnati performed the worst, having one of the steepest declines in employment, along with Cleveland and Charlotte, NC. While Charlotte recovered quickly, Cincinnati had the slowest recovery after Cleveland. However, Cincinnati is not as comparable to these peer metropolitan areas as Columbus, and judging Cleveland’s performance according to these areas is unfair. A manufacturing intensive city, such as Detroit or St. Louis, would be more comparable to Cleveland. Overall, Columbus, Indianapolis, and Charlotte are the most impressive at the moment. Yet, it is concerning employment has become relatively stagnant in Columbus, whereas Indianapolis and Charlotte have



⁹Due to data availability, we use BEA data for the metropolitan area manufacturing employment. As described in footnote 4, BEA data likely (slightly) understates the manufacturing share of wage and salary employment because it includes proprietors and self-employed.

continued to mostly grow over these last few months. Nevertheless, this figure illustrates that Columbus has performed relatively well, despite the fact that Ohio as a whole had not recovered by June 2014, highlighting the varying economic performance across Ohio and the importance of disaggregating the region.



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Role of the State Government

As cities and towns across the nation struggle to recover from the Great Recession, the role of government in restoring economic growth is often raised, particularly for governors and state legislatures. When the economy is performing well or improving, state governments are commended for their policies that spurred this growth, and criticized when their economies are struggling. For the most part, state policies have a limited effect on their states because of the greater importance of national and global trends. Yet, state policies do matter, but even here, it takes time for their effect to be realized as expectations need to change, workers need to migrate, and businesses and entrepreneurs need to make tangible investments. It takes at least five years, usually closer to ten years, to identify a change in trends, as discussed further below.

In Ohio, in preparation for the upcoming gubernatorial elections, the Columbus Dispatch conducted a poll and found that the majority believed the economy was improving (Rowland 2014). Those who were interviewed stated that they intended to reelect Governor Kasich, attributing the economy's improvement to "Kasich's policies on taxes" and his attempts to "lower taxes, broaden revenue streams, and cut government spending." As mentioned earlier, voters oftentimes are unaware if there will be long-term changes from the policies due to the number of years that must elapse, but they can hopefully sense what is working from their everyday experiences.

Conversely, when the economy is performing poorly, state governments are often reprimanded for their policies by being unseated in the following election. In Iowa, Governor Culver was unseated in the 2010 election as the state struggled over its budget cuts and his handling of the state budget, particularly his moviemaking tax credit program (Beaumont 2009). As noted by Jacobson (2012), an incumbent governor rarely loses a reelection, but a struggling economy is one of the main reasons it happens, particularly if the incumbent is unable to portray how the problem is being addressed.

Despite the importance of a state's economic performance in gubernatorial elections, it is unclear how much the governor and state policies actually affect the state's economy. A recent study by Blinder and Watson (2014) found that the national economy grew faster when a Democrat was president, but the reason for this partisan gap seems to be the result of good luck, rather than good policy. Although state policies such as the 2005 Ohio tax cuts, are intended to spur economic growth, limited research has examined their true effects. Furthermore, it is difficult to correctly assess a legislation's effect until many years thereafter, in addition to the complexities of ensuring a state policy is not accredited for the economic performance when it may actually be caused by other factors. Thus, voters must use their discretion before commending or reprimanding governors for the economic performance of their state. Yet, the data is quite clear in the case of Ohio. The state's job growth is about the same as it has been since the late 1960s. If the state wants to change that trend, it will take a litany of good luck and good policy. In particular, the state may need to do a better job of differentiating itself from other states, almost all of whom have adopted fairly similar tax-cutting strategies.

One area that has been popular in many policy circles is taking advantage of a relatively slack labor market and historically low interest rates to rebuild and enhance the state's infrastructure (IMF, 2014). Infrastructure development has the short-term effect of stimulating demand and the long-term of advantage of enhancing productivity growth and living standards. Given the potential advantages, we urge consideration of such efforts as a way to boost long-term performance.

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Conclusion

While it is sensible to blame or praise policymakers for a state's economic performance, doing so does not guarantee future economic success. There are a myriad of other factors that must be accounted for and the ability to see the true effects of policy takes time. For Ohioans, comparing employment in Columbus, Cleveland, and Cincinnati bears good and bad news for Ohio's recovery from the Great Recession. Columbus recovered more quickly than the U.S., with employment fully recovering by February 2012. Conversely, excluding Cleveland, Cincinnati had a slower recovery than any peer metropolitan city included in Figure 13. The speed of recovery for these three cities coincides with the share of employees in the manufacturing sector.

Compared to other historically manufacturing states, Ohio was among the states with the slowest recovery and the steepest decline in employment. As a result, Ohio still has yet to fully recover from the Great Recession in terms of employment, raising questions on how to spur economic growth for the state. Rather than being whimsical of a past economy and hoping for a "manufacturing renaissance", efforts to induce economic growth should focus on transitioning to different sectors and encourage home-bred efforts to create businesses, particularly for Cleveland. Even doing so, however, does not guarantee future economic growth.

Although national employment fully recovered by May 2014, the severity of the Great Recession and the anemic "jobless" recovery may be indicators that the structure of our economy is changing. Technological advancements have eased labor requirements and created a worldwide labor market. Bivens and Shierholz (2014) suggest that the reason for long-term unemployment stems from a lack of job openings rather than a labor force that is unemployable, returning to the age-old question of which aspect of the economy stimulates economic growth: jobs created by businesses or the labor force (e.g. Partridge and Rickman 2003b). Policymakers oftentimes focus on one aspect and attribute any success to their efforts (e.g. Bai 2012). As the lengthy economic expansion makes a subsequent recession more likely, the severity of the Great Recession demonstrates the importance of assessing how the labor market and overall economy have changed to determine how to stabilize the economy in future economic downturns.

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References

- Avent, R. August 3, 2012. "America's Jobless Recovery: The Big Picture". The Economist. Retrieved from: <http://www.economist.com/blogs/freexchange/2012/08/americas-jobless-recovery>
- Bai, M. September 5, 2012. "Did Barack Obama Save Ohio?" The New York Times. Retrieved from: <http://www.nytimes.com/2012/09/09/magazine/ohio-economy.html?pagewanted=all&r=0>
- Beaumont, T. November 14, 2009. "Iowa Poll: Low Rating for Culver Reveals Vulnerability." The Des Moines Register. Retrieved from: <http://archive.desmoinesregister.com/article/20091114/NEWS09/911150335/iowa-poll-low-rating-culver-reveals-vulnerability>
- Bivens, J. and H. Shierholz. August 8, 2014. "Lagging Demand, Not Unemployment, Is Why Long-Term Unemployment Remains So High." Economic Policy Institute Briefing Paper #381. Retrieved from: <http://www.epi.org/publication/lagging-demand-is-behind-high-long-term-unemployment/>
- Blinder, A. and M. Watson. July 2014. "Presidents and the U.S. Economy: An Econometric Exploration." The National Bureau of Economic Research Working Paper #20324
- International Monetary Fund (IMF) 2014. World Economic Outlook. Downloaded November 11, 2014, available at: <http://www.imf.org/external/pubs/ft/weo/2014/02/>
- Jacobson, L. January 5, 2012. "What it Takes for a Governor to Lose Reelection." Governing: The State and Localities. Retrieved from: <http://www.governing.com/blogs/politics/what-it-takes-for-a-governor-to-lose-reelection.html>
- Marquis, Milton and Bharat Trehan. 2010. "Relative productivity growth and the secular "decline" of U.S. manufacturing." *Quarterly Review of Economics and Finance*. (50): 67-74.
- Partridge, M. and D. Rickman. 2002. "Did the New Economy Vanquish the Regional Business Cycle?" *Contemporary Economic Policy*, 20: 456-469.
- 2003a "Do We Know Economic Development When We See It?" *Review of Regional Studies* 33: 17-39.
- 2003b. "The Waxing and Waning of U.S. Regional Economics: The Chicken-Egg of Jobs Versus People." *Journal of Urban Economics*, 53 (1): 76-97.
- Perkins, O. August 31, 2014. "Is Long-Term Unemployment Here to Stay?" Cleveland.com. Retrieved from: http://www.cleveland.com/business/index.ssf/2014/08/is_long-term_unemployment_here.html
- Rowland, D. September 14, 2014. "Ohio Governor: Kasich Ahead by 30 point in New Poll." Columbus Dispatch. Retrieved from: <http://www.dispatch.com/content/stories/local/2014/09/14/1-kasich-way-ahead-by-30-points.html>
- Schierholz, H. and J. Bivens. March 31, 2010. "For Job Seekers, No Recovery in Sight – Why Prospects for Job Growth and Unemployment Remain Dim." Economic Policy Institute Briefing Paper #381. Retrieved from: <http://www.epi.org/publication/bp259/>
- Schwartz, Nelson D. (2014) "Boom in Energy Spurs Industry in the Rust Belt." *New York Times*. September 8. Available at: <http://www.nytimes.com/2014/09/09/business/an-energy-boom-lifts-the-heartland.html?module=Search&mabReward=relbias%3As%2C{%22%22%3A%22R%3A14%22}&r=0> [downloaded on September 14, 2014].
- Stapleton, D. Last modified July 11, 2007. "Automotive Industry – the Encyclopedia of Cleveland History." The Encyclopedia of Cleveland History. Retrieved from: <http://ech.case.edu/cgi/article.pl?id=A13>
- Tankersley, J. September 19, 2013. "Jobless Recoveries Are Here to Stay, Economists Say, But It's a Mystery Why." The Washington Post. Retrieved from: http://www.washingtonpost.com/business/economy/jobless-recoveries-are-here-to-stay-economists-say-but-its-a-mystery-why/2013/09/19/6034bcb4-20c7-11e3-966c-9c4293c47ebe_story.html
- Warnock, M. and F. Warnock. 2000. "The Declining Volatility of U.S. Employment: Was Arthur Burns Right?" Federal Reserve Board of Governors International Finance Discussion Paper #677.

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Appendix

Figure 14: Nonfarm Employment in Ohio's Largest Metropolitan Areas
(December 2007 - August 2014)
Benchmarked to December 2007 = 100

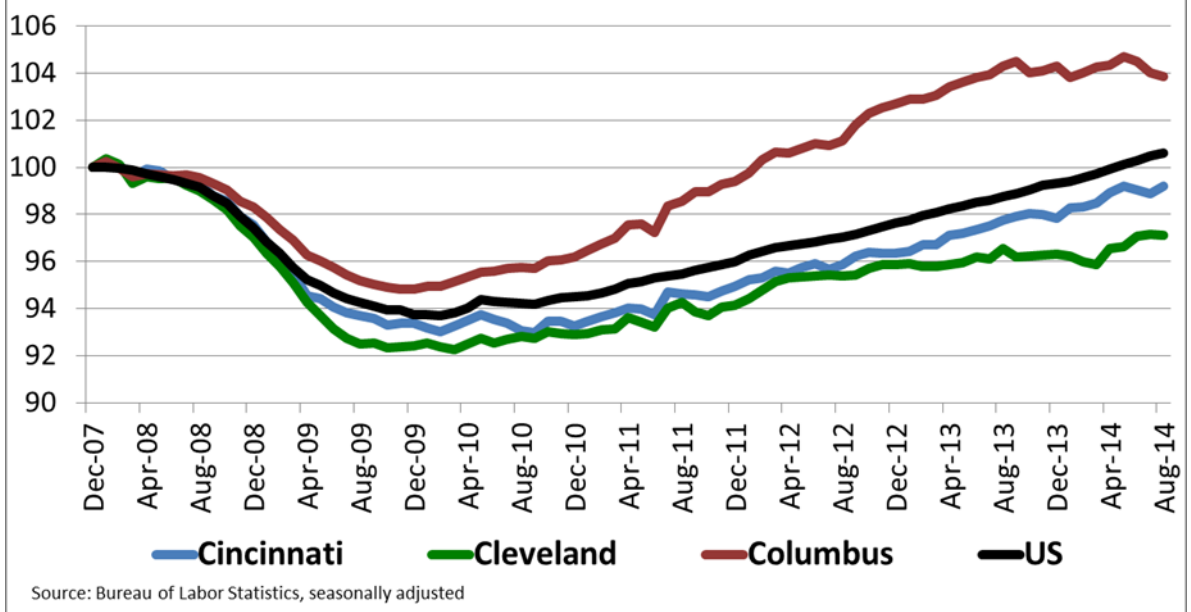


Figure 15: Manufacturing Employment in Ohio's Largest Metropolitan Areas
(December 2007 - August 2014)
Benchmarked to December 2007 = 100

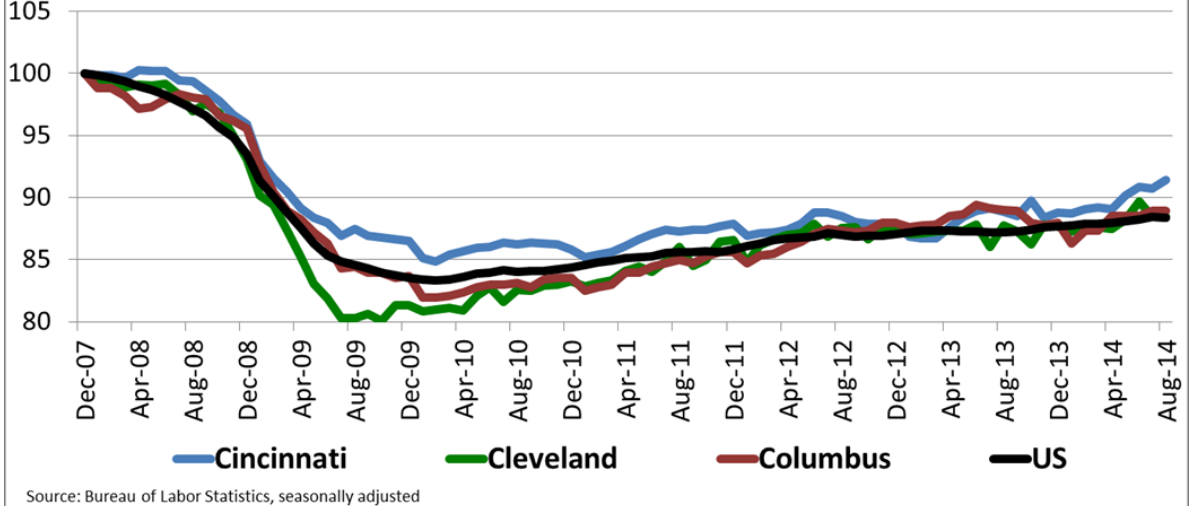
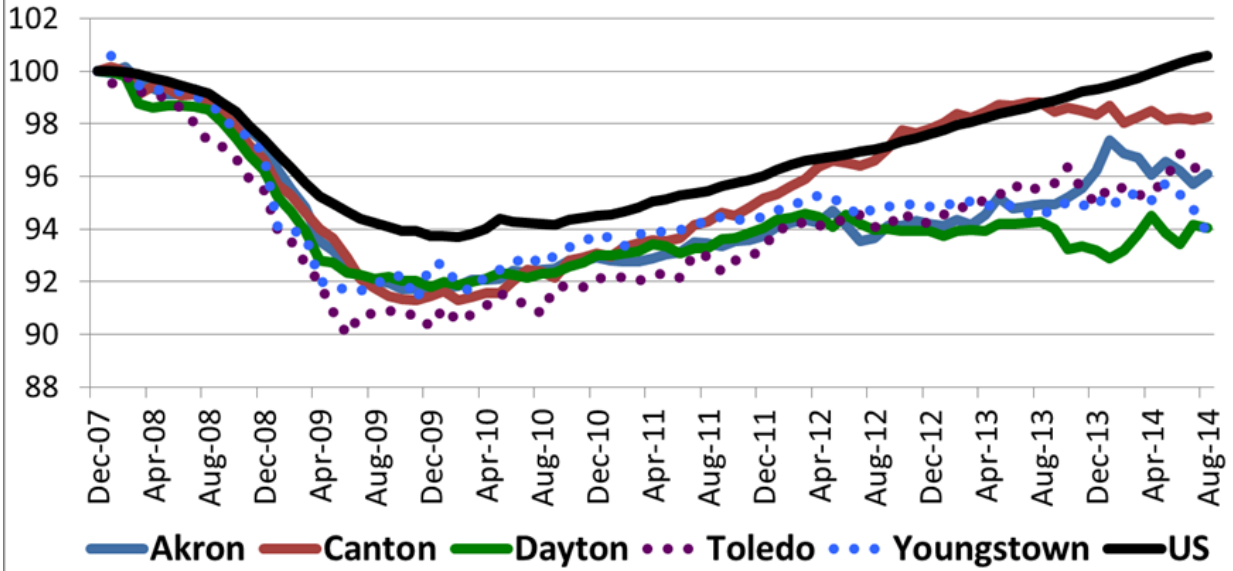


Figure 16: Nonfarm Employment in Ohio's Medium-Sized Metropolitan Areas

(December 2007 - August 2014)

Benchmarked to December 2007 = 100

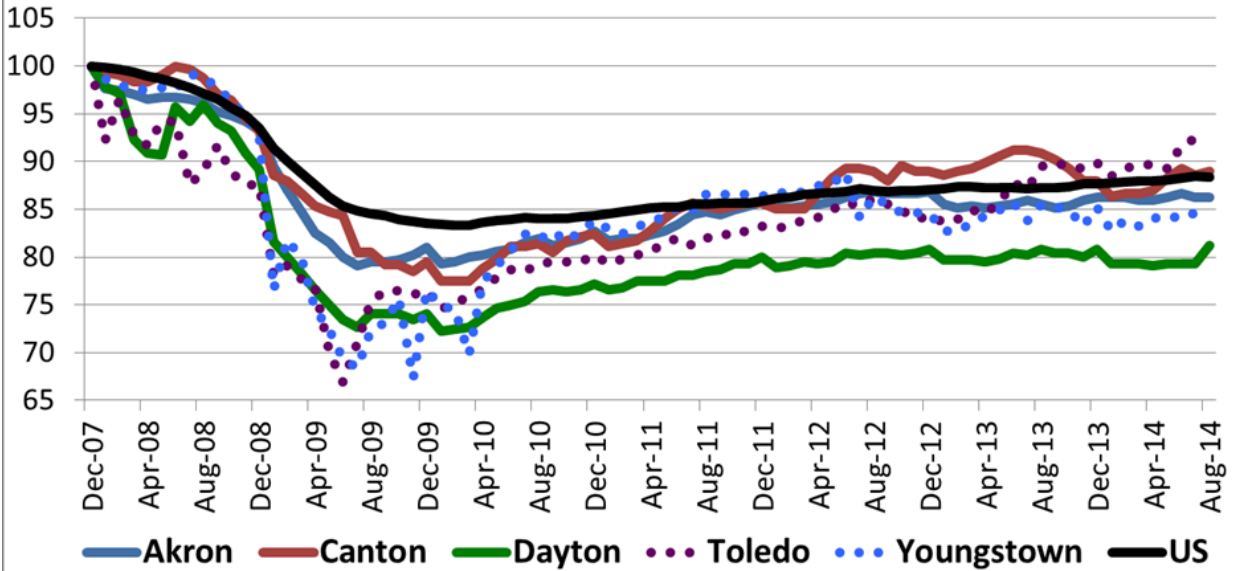


Source: Bureau of Labor Statistics, not seasonally adjusted

Figure 17: Manufacturing Employment in Ohio's Medium-Sized Metropolitan Cities

(December 2007 - August 2014)

Benchmarked to December 2007 = 100



Source: Bureau of Labor Statistics, not seasonally adjusted