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Federal Reserve Bank of Cleveland

Employment Growth, Job Creation, and Job Destruction in Ohio

by Yoonsoo Lee and Brian Rudick

Employment growth is a key measure of a region's economic performance. In Ohio lately, the news hasn't been good. Since the last business cycle peak in March 2001, Ohio's employment fell 3 percent, while the nation added nearly 1.6 percent new jobs. Relative to other states in the nation, Ohio fared none too well, ranking forty-seventh in terms of employment growth. Ohio's lagging employment growth hasn't just been a phenomenon of the recent business cycle either. After tracking and trailing the national average for different periods throughout history, Ohio has trailed the nation since the mid-1990s (see figure 1). In fact, from 1995 to 2001, Ohio's 0.6 percent average annual employment growth was well below the national average of 1.6 percent, placing it among the five states with the lowest employment growth over this period.

Why is Ohio's employment growth lagging the nation and other states? Until recently, it's been hard to tell for sure. Economists have relied mainly on aggregated data to study differences in net employment growth across regions. While net employment changes are usually tracked as a major indicator of the growth and decline of the economy, these numbers mask the underlying process of employment turnover. A growing number of studies have analyzed data at the firm level and found that job creation and destruction occur simultaneously on a large scale at all phases of the business cycle. In most of the industrial sectors and geographical regions that have been studied, it turns out that gross job creation and destruction, or the total number of jobs created and destroyed, is relatively large—far greater than one would suspect by looking at just the net change. Overall, this

line of economic research suggests that if we want to understand the dynamic underpinnings of regional employment growth, it is important to study patterns of job creation and destruction.

This *Economic Commentary* takes a preliminary step toward understanding employment dynamics in Ohio, focusing on why Ohio's employment growth has struggled over the past 10 years. Using recently available data from the Census Bureau and the Small Business Administration,¹ we examine how the entry and exit of firms in to and out of the economy, along with the growth of continuing firms, contributed to employment growth in Ohio from 1989 to 2001. We investigate how the patterns of job creation and destruction differ across states in order to identify any change in trends that contributed to slower employment growth in Ohio.

■ Job Creation and Destruction

Economies are much more dynamic than it seems at first glance. Every day the U.S. economy adds thousands of jobs, and every day thousands more are destroyed. This turnover occurs as firms respond to changing economic conditions or technological improvements.

Most new jobs—about two-thirds of them—are created by existing firms, but new firms represent an important source of job creation as well. Similarly, firms that downsize but remain in operation account for the most jobs lost, but about one-third of all jobs destroyed result from firms closing.

To illustrate the dynamics of employment growth, let's look at an example. In the 1990s, the United States averaged net employment growth of 2.0 percent.

Over the past several years, Ohio's employment has grown much more slowly than the national average. If we look at patterns of job creation and destruction in the state, we can start to get a handle on why. In the late 1990s, not only was the rate of job creation sluggish relative to the nation, but the rate of job destruction climbed rapidly.

This did not result from simply adding 2.0 percent more jobs every year; the process was much more intricate. This employment growth resulted from adding 16.7 percent new jobs every year while 14.7 percent of existing jobs were destroyed.

■ Sluggish Job Creation

Figure 2 shows job creation rates for Ohio and the United States. To illustrate how Ohio's performance compares to that of other states, we also plot the average job creation rate for the five states with the highest employment growth and the average job creation rate for the five states with the lowest employment growth over the sample period.

During the entire period from 1989 to 2001, Ohio recorded lower job creation rates than the United States. While on average 17 new jobs are created for every 100 existing jobs in the U.S. economy every year, Ohio added about 15. Ohio's job creation rate was small enough to place it seventh-lowest among the 50 states and the District of Columbia. In fact, Ohio's job creation rate was slightly lower over the sample period than the average of the five

FIGURE 1 EMPLOYMENT GROWTH

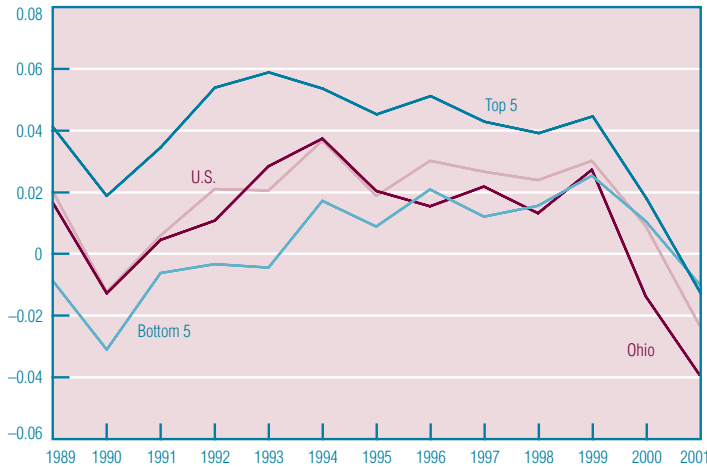


FIGURE 2 JOB CREATION RATES

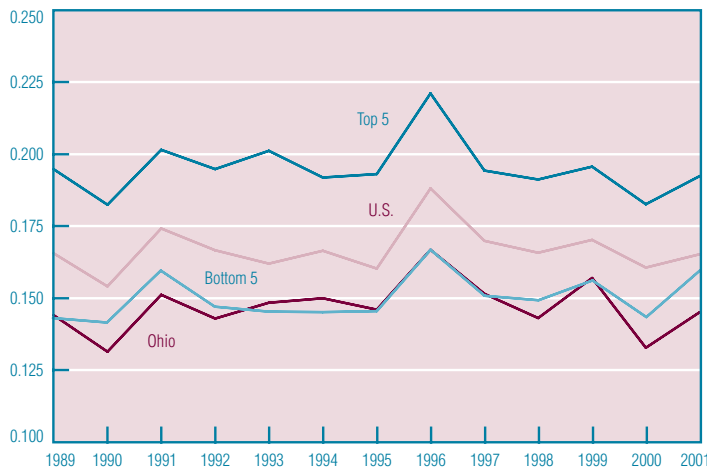
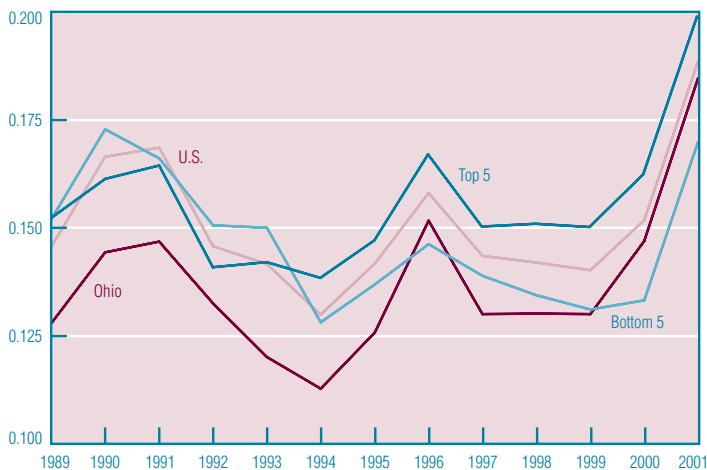


FIGURE 3 JOB DESTRUCTION RATES



NOTE: The top five states include Colorado, Arizona, Idaho, Utah, and Nevada. The bottom five states include Rhode Island, Connecticut, Maine, New York, and Hawaii.

SOURCE: U.S. Small Business Administration, Office of Advocacy, "Statistics of U.S. Businesses and Nonemployer Statistics," <<http://www.sba.gov/advo/research/data.html>>, accessed February 2006.

slowest-growing states. This low job creation rate significantly affects the number of jobs Ohio adds each year. For example, during the 1990s, there were about 4.5 million jobs in Ohio. The state's 14.9 percent job creation rate meant Ohio added 666,000 new jobs each year. But if Ohio had created new jobs at the same rate as the nation (16.7 percent), the state would have added an additional 85,000 jobs per year.

Job creation rates are relatively low in both manufacturing and nonmanufacturing industries, suggesting that weak job creation in Ohio is fairly broad based. Some might find this result a bit unsettling because it suggests that our slow employment growth cannot be attributed solely to manufacturing decline.

But job creation rates alone do not explain the decline in Ohio's employment growth relative to the nation. While job creation rates have fallen since the mid-1990s in both Ohio and the United States as a whole, Ohio's job creation rate has kept its position relative to the country and the five states with the lowest employment growth.

■ Rising Job Destruction

Figure 3 shows job destruction rates for the United States, Ohio, and the averages for the same group of high- and low-employment-growth states. Job loss in Ohio as a percentage of total employment is much smaller compared to the nation, and throughout most of the 1990s, Ohio had one of the lowest job destruction rates of all the states.

While lower job destruction rates are at odds with the common perception that Ohio has suffered a higher share of job losses due to establishment contractions and closings, a low job destruction rate is not a phenomenon unique to Ohio. In most Midwest states, job destruction rates, as well as job creation rates, are lower than the national average. This pattern can be traced to industry composition and population growth. Both theoretical and empirical studies find that older firms are less likely to shut down but are also less likely to grow. Since Midwestern states tend to have an older industrial structure than the nation as a whole, we are more likely to observe lower rates of job creation and destruction here. Furthermore, relatively lower population growth in these states may lower the birth rate of new firms, leading to slower job creation rates.

Why Rates, Not Number of Jobs?

When making comparisons across states, it is helpful to examine job creation and destruction in terms of rates, rather than the number of jobs. Rates can reveal which states have similar employment patterns, even though the size of the population differs across states. The job creation rate is calculated as the total number of jobs created by new firms or added at existing firms divided by the total employment of the state. Similarly, the job destruction rate for a state is calculated as the total number of jobs that were destroyed by either closing or contracting firms divided by the total employment of a state. The net employment change equals the job creation rate minus the job destruction rate.

Once a typical Midwestern state with lower rates of job destruction, Ohio has reversed position. Ohio used to have a lower job destruction rate than the average of the five lowest-employment-growth states (figure 3), but in the mid-90s, Ohio's rate began to increase relative to that average, surpassing it in 1996. Ohio's job destruction rate also increased compared to the nation; while Ohio's job destruction rate had been significantly lower than that of the United States, it began catching up in the mid-90s and is now in line with the U.S. average.

Although declines in manufacturing industries are partly responsible for this phenomenon, they aren't the whole story. In fact, rising job destruction rates weren't specific to manufacturing. In both manufacturing and nonmanufacturing firms, job destruction rates moved much closer to the national average.

Contributing to the job destruction rate are jobs that are destroyed because firms go out of business and those that are destroyed because firms reduce their workforces. When we look at these two sources of job losses separately, it reveals another interesting pattern. In general, closing establishments represent a relatively small share of total employment. It is job losses at continuing businesses that play a more important role in aggregate employment changes. In Ohio, job destruction at continuing establishments makes up about two-thirds of all job losses. And while the increase in job destruction rates is observed for both sources—closing businesses as well as those that are eliminating positions—the increase at continuing establishments is much more noticeable. In Ohio, job destruction at continuing establishments in 1989 was 8.5 percent, and by 2001 it had risen to 12.9 percent. Although job destruction rates at continuing establishments rose nationally over this

period as well, they rose faster in Ohio, and since 2000, Ohio's rate has exceeded the nation's. This finding suggests that the subpar employment growth in late 90s and early 2000s may be traced to downsizing at continuing establishments.

■ Transition Period?

Examining changes in job creation and destruction rates presents some intriguing findings on the dynamics of the Ohio labor market. While Ohio's job creation and job destruction rates were lower than the nation's, its employment performance was on par with the nation's until the early nineties. However, a rather dramatic increase in Ohio's job destruction rate relative to the nation has driven employment growth lower in the last decade.

Should we worry about the increase in the job destruction rate? While an increase in the rate may imply a decrease in job security for existing workers, it does not necessarily suggest that our economy has become less competitive. As firms innovate and new markets grow, workers are reallocated to jobs that better suit the needs of the economy. This transition of the economy usually involves some destructive and painful processes; workers are displaced from old jobs, and less efficient firms may be driven out of the market by competition. Economists generally think of this process of "creative destruction" as a natural and necessary step toward economic growth. In fact, our data show that growing states in general have not only higher rates of job creation but also higher rates of job destruction. This finding suggests that slowly growing states are not falling behind because they are losing more existing jobs, but because their labor market is stagnant; both job creation and destruction are relatively low. While this process of creative destruction creates tough times for those who are displaced,

in the long run, our economy becomes more competitive and better able to meet society's demands.

The bigger concern for Ohio's economy is the lack of job creation, rather than the increase in job destruction. Sluggish levels of job creation are broadly observed in both manufacturing and nonmanufacturing industries, raising a concern that our economy is not as vibrant as it needs to be to sustain healthy growth. What is missing or less evident in Ohio, compared to other growing states, is this "creative" part of creative destruction. Could the rise in job destruction be a rosy sign that our once stagnant economy is moving toward a more dynamic steady state with higher rates of job creation and destruction? Although we may hear a different story on the prospects of job creation as more recent data become available, there seems to be no clear turning point in the trend of job creation just yet. For the long-run growth of Ohio's economy, job creation, both from new firms and the expansion of existing ones, is the key. To ensure the future growth and success of the economy, we must employ innovative ways to recycle our labor to new and more productive jobs.

■ Footnotes

1. U.S. Small Business Administration, Office of Advocacy, "Statistics of U.S. Businesses and Nonemployer Statistics," <<http://www.sba.gov/advo/research/data.html>>, accessed February 2006.

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