#### Federal Reserve Bank of Cleveland

# Cleveland (on the) Rocks

by Guhan Venkatu

oncerns about Cleveland's economy are nothing new. While Cleveland was once one of America's leading commercial centers, it has not managed to maintain its economic importance through the years. When the turning point came is difficult to determine, though some suggest that it happened as long ago as 1930. Along the way, Clevelanders have been engaged in a long line of economic revitalization efforts. One such effort came early in the 1980s and was a response to the tumultuous '60s and '70s, when events from the fire on the Cuyahoga River to the city's financial crisis caused local leaders to search for solutions anew.

At that time, a group of concerned citizens turned to the Rand Corporation to determine the underlying causes of Cleveland's economic malaise. The Rand Corporation concluded that:

"Three broad trends characterize economic conditions in the Cleveland area over the past two decades ... The total population of the metropolitan area has been declining. Total employment has increased annually but at a much slower rate than the nationwide average. Employment in manufacturing industries has decreased, and employment in nonmanufacturing industries has increased."

This description suggests a slower-growing metropolitan area, which was losing population for the first time. It also indicates the shift toward service-sector industries that was taking place in Cleveland, as well as throughout the nation more generally. Many saw these two developments as interrelated. The question was what to do in response. While some sought to hasten this transition

toward the service-sector—arguing that the area's ties to manufacturing were weakening it economically—others thought that Cleveland should try to retain its importance as a manufacturing center.

How much have things changed since this report was written? Despite the positive attention that Cleveland garnered as a "comeback city" in the 1990s, not much. The three broad trends that the Rand Corporation used to characterize the 20-year period prior to 1980 look like a reasonably good description of the 20 years that followed. And just as before, many think that Cleveland's industrial structure is at the root of the region's recent lackluster economic performance. Some think that Cleveland has too much manufacturing employment as a share of its overall employment base, while others think the area has failed to attract the right industries—the technology-centered industries in either the manufacturing or service sectors that some see as the industries of the future.

But this *Economic Commentary* suggests that Cleveland's industrial structure has had little to do with the area's sluggish employment growth, at least during the last decade and a half. We must look to other factors—lifestyle amenities, access to capital, tax policies, the availability of qualified workers, and so on—for possible explanations.

## ■ Cleveland Fares Worse than the Nation

Figures 1 and 2 show cumulative private sector employment growth in the Cleveland metropolitan area and the United States from 1990 to 2003. Each bar breaks down the extent to which various sectors added to (those above zero) or subtracted from (those below zero) the

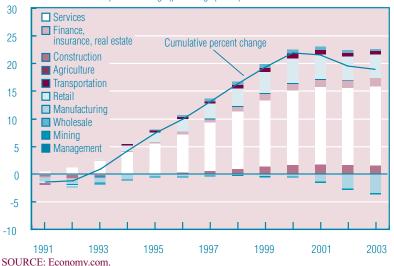
Cleveland's employment growth has lagged the nation's for nearly 15 years, a fact that is often blamed on the kinds of industries that are here—either the area is burdened with too much manufacturing, or it has failed to attract enough high-tech industries. But an analysis shows little support for that view.

cumulative employment increase in a given year, and the blue lines show the total cumulative change. What is readily apparent in figures 1 and 2 is that employment grew much more slowly in the Cleveland area than in the nation during this period. While national employment rose roughly 19 percent, employment gains in the Cleveland area were a mere 3 percent.

What is also apparent from the figures is that the manufacturing sector consistently subtracted from job gains in both Cleveland and across the nation throughout the 1990s and since. And because Cleveland has historically been a more manufacturing-intensive place than some other parts of the country, the assertion that the region's industrial structure is responsible for the employment lag seems reasonable. Throughout the period shown in figures 1 and 2, Cleveland's share of private employment in the manufacturing sector was between 3.5 to 5 percentage points higher than in the nation. Nevertheless, as we will see, this difference alone cannot account for the fact that the slice manufacturing took out of Cleveland's employment growth was more than twice as big as the one it

### FIGURE 1 EMPLOYMENT GROWTH IN THE U.S.<sup>a</sup>

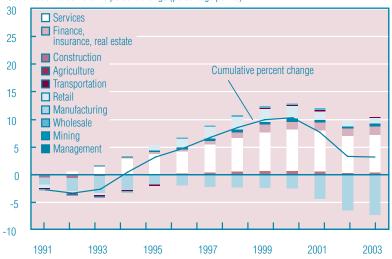
Contribution to cumulative percent change (percentage points)



a. Private-sector employment.

# FIGURE 2 EMPLOYMENT GROWTH IN THE CLEVELAND MSA<sup>a</sup>

Contribution to cumulative percent change (percentage points)



SOURCE: Economy.com. a. Private-sector employment.

took out of the nation's (-7.2 versus -3.5 percentage points).

But what is perhaps more striking in figures 1 and 2 is the difference outside of the manufacturing sector. While sectors outside of manufacturing generally gained employment both regionally and nationally over the period shown, growth was far weaker in the Cleveland area than in the nation. Collectively, nonmanufacturing sectors contributed about 10 percentage points to employment growth in Cleveland. This was about half as much as they contributed to national employment over the same span of time.

What could explain this dramatic divergence in outcomes? There are essentially two possibilities: The area had more industries in decline than the nation—an argument implicating Cleveland's industrial structure—or many of the area's industries simply performed more poorly in terms of employment growth than their national counterparts. In all likelihood, some combination of these two things occurred but which factor was more dominant?

#### ■ Too Much Manufacturing?

Would the Cleveland area have added more jobs over this period if it had fewer manufacturers and more service-sector

industries? We can start to answer that question with a simple experiment. First we calculate how much Cleveland's employment would have grown if its manufacturing and nonmanufacturing sectors had grown at the same rates as they did nationally, and then we compare the resulting hypothetical employment number to the actual change. If the hypothetical and actual numbers are close, then the source of the difference between Cleveland's and the nation's employment growth was mostly something other than differences in sector performance. It would have to have been Cleveland's industrial composition that caused the difference.

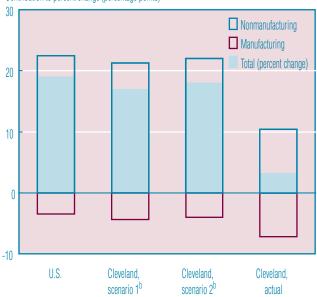
But the results of this experiment show that Cleveland's industrial composition, and in particular its above-average proportion of manufacturing employmentwhich was about 25 percent of private employment in 1990, versus about 20 percent nationally—was not the problem (see figure 3). From 1990 to 2003, Cleveland's employment would have risen roughly 17 percent if its manufacturing and nonmanufacturing employment had grown at the same rates as the nation's (roughly -18 percent and 28 percent, respectively). This hypothetical increase in employment for Cleveland turns out to be similar to the actual growth in national employment over this period, nearly 19 percent.

But the actual change in Cleveland's employment was 3.2 percent—less than one-fifth of what was generated in the exercise. In the experiment, manufacturing deducts 4.4 percentage points from Cleveland's employment growth over the period, while in actuality, it took away 7.2 percentage points. Nonmanufacturing industries, had they grown in Cleveland at the rate they did nationwide, would have added 21.3 percentage points to Cleveland's employment growth, but in reality, they added only 10.4 percentage points.

If industrial structure had been the culprit behind Cleveland's comparatively weak employment growth, our experiment would have generated results that looked like what actually occurred in Cleveland. In fact, the opposite pattern arises, suggesting that industrial structure, as conceived of broadly in this exercise, explains very little of Cleveland's poorer employment performance.

#### FIGURE 3 EMPLOYMENT GROWTH, 1990-2003a

Contribution to percent change (percentage points)

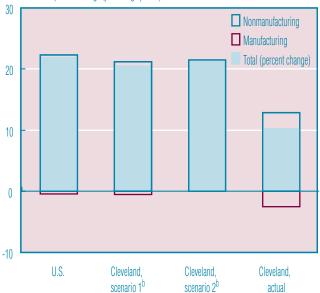


SOURCE: Economy.com.

- a. Private-sector employment.
- b. Scenarios include only industry groups (defined as three-digit NAICS industries) common to Cleveland and the U.S.

#### FIGURE 4 EMPLOYMENT GROWTH, 1990–2000<sup>a</sup>

Contribution to percent change (percentage points)



SOURCE: Economy.com.

- a. Private-sector employment.
- b. Scenarios include only industry groups (defined as three-digit NAICS industries) common to Cleveland and the U.S.

## ■ The Wrong Types of Industries?

Would Cleveland have added more jobs if it had attracted more New-Economy, high-technology industries in either the manufacturing or service sectors? Could Cleveland's modest employment growth stem from the fact that too many of its manufacturing industries—such as steel or autos—are in decline, rather than from the size of its manufacturing sector?

We can conduct an experiment similar to the previous one to assess whether this explanation fits the facts. Again, we calculate how employment in Cleveland would have changed if local industry groups had grown at the rates they did nationally. This time, however, we separate private sector employment into more than just manufacturing and nonmanufacturing. Instead, we examine the employment patterns of industries at the more detailed three-digit level of the North American Industrial Classification System (NAICS). At this level of detail, we can focus more precisely on the types of industries that are in Cleveland and see whether Cleveland had enough of the "right" industries in place. The data are divided into 80 industries, 21 of which are a part of the manufacturing sector, and 59 of which are outside of the manufacturing sector. Rather than examining each of the 80 industries in turn, we will

examine the combined contribution of industries in the manufacturing sector and the combined contribution of industries in nonmanufacturing sectors. Grouping the individual industries back into these two categories makes it easy to compare the results of this experiment with the first one. Remember, though, that these manufacturing and nonmanufacturing groups are different from those of the first experiment in that the particular industries each major group contains more closely match those that are found in the Cleveland area.

The results of this experiment suggest that Cleveland didn't have the "wrong" kinds of industries either. As before, the hypothetical employment measure created for Cleveland shows only slightly less employment growth than what took place nationally—an increase of 18 percent relative to roughly 19 percent for the nation.

Indeed, this more detailed accounting of Cleveland's industrial composition actually improves the experiment's estimated increase in employment compared to the initial exercise, both in and out of the manufacturing sector. This reveals, contrary to conventional wisdom, that the mix of industries in Cleveland within the two broader aggregates of manufacturing and nonmanufacturing

actually performed better than their national averages between 1990 and 2003. Manufacturing industries would hypothetically have contributed a loss of only 4.0 percentage points to the total change in employment, instead of the 4.4 percentage-point loss produced in the initial exercise. And nonmanufacturing industries would have generated a gain of 22.0 percentage points, rather than the 21.3 percentage-point gain produced using the less representative measure of the industries in Cleveland. Of course, these differences are modest relative to the gap between the scenarios and the actual change in employment that occurred over this period.

In addition, something striking is revealed when the second scenario is repeated for the time from 1990 to 2000: Cleveland's mix of manufacturers actually contributes no losses to total employment, unlike what occurs nationally. This suggests that Cleveland's portfolio of industries in the manufacturing sector was superior to the nation's in the 1990s. These results run completely counter to the notion that Cleveland has been beset by a host of declining industries and unable to attract those industries that are growing.

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### **■** What Else Could It Be?

So what can explain the dramatic divergence in employment growth between Cleveland and the nation from 1990 to 2003? We have considered industrial composition and found that it does not explain Cleveland's comparatively weak employment performance. Neither the region's particular industrial mix nor the overrepresentation of some sectors seems to be responsible.

What remains as an explanation is that many of the area's industries simply performed more poorly in terms of employment growth than their national counterparts. In fact, from 1990 to 2003 this was true for 67 of the 80 narrow industries examined. Such a widespread effect suggests either that several different factors were at play in different industries or that the factors causing the weakness were of the sort that could affect an array of industries in the region. Not only manufacturing industries were affected, so, too, were service-sector firms. Not only automakers and steel producers, but medical care and educational service providers did not do as well as elsewhere in the nation. What factors could affect so many different kinds of industries? Among the possibilities are a lack of

qualified workers, the quality of life, access to transportation or distribution networks, or regional regulation and tax policies.

Observers who focus on an overabundance of manufacturing as the explanation for the region's recent underperformance or on attracting the "right" mix of industries or the next new high-growth cluster that will remake the region seem to be missing a more fundamental problem, one that affects almost all of the area's industries. The breadth of this underperformance is striking and may suggest that some element of the region, or a combination of factors, has made the region a less favorable place for firms or individuals.

Clearly, there are many factors that could come into play. This simple analysis indicates that Cleveland's industrial structure, despite frequent assertions to the contrary, is not one of them, and does not appear to explain the region's recent employment experience. Accordingly, we would be well-advised to look for answers elsewhere.

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