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Is the Rust Belt's Revival Real?

by Gerald H. Anderson

The Great Lakes region was battered in the 1970s and early 1980s by a number of structural and cyclical adjustments. Heavy industry retrenched, manufacturing jobs were slashed by the thousands, and many factories were permanently closed. So severe were the economic woes felt here that the region became known nationwide as the Rust Belt, an area seemingly destined to suffer a continuing downward spiral in relative employment levels and living standards.

The region's recent economic showing is clearly inconsistent with that nickname, however. The Great Lakes region posted a significant turnaround from its usual recessionary performance in 1990–91, as it was affected considerably less than the nation at large in both the magnitude and duration of employment loss. In fact, compared with its historical pattern in post–World War II contractions, the Midwest has performed remarkably well in the past two years.

What caused this revival, and how permanent will it prove to be? While these questions are obviously important for Great Lakes workers and investors, they unfortunately cannot be answered with much precision. This *Economic Commentary* explores the causes of the turnaround and provides some insight on their likelihood of persistence.

■ The Great Lakes in 1990–91: Only Half Bad

The Great Lakes region — Illinois, Indiana, Michigan, Ohio, and Wisconsin — is an important part of the national economy, accounting for nearly one-fifth of the nation's employment and output. One of the Census Bureau's nine divisions of the United States, and one of the Bureau of Economic Analysis' eight regions, the Great Lakes area is often described as the nation's industrial heartland because it accounts for one-fourth of U.S. durable-goods production.[1] Consequently, it has traditionally been a particularly vulnerable region when economic conditions begin to deteriorate.

In all previous postwar recessions, employment fell much more in the Great Lakes than in the nation as a whole (see figure 1). In the six downturns prior to 1990–91, the percentage decrease in employment was roughly two to four times as large in the Great Lakes as in the United States. During the latest recession, however, the region's employment loss was *less than half* as large as that of the nation.[2]

Similarly, the duration of employment declines in previous recessions averaged one or two calendar quarters longer in the Great Lakes than in the nation, but in 1990–91, the slump appears to have been one calendar quarter *shorter* in the Great Lakes. Indeed, the latest downturn is the only one of the seven examined here that was briefer in this region than in the nation.

■ Industrial Mix and Industry Performance

What accounts for this remarkable turnaround in the relative performance of the Great Lakes? Two influences appear to be at work.

Welcome news during the past two years of national economic hardship was the improved relative performance of the Great Lakes states, which posted uncharacteristically mild levels and duration of employment loss. But can this improvement be sustained in future downturns? Evidence on the causes of the Rust Belt's turnaround leaves little reason for confidence that the region's relative performance will be as good in the next recession as it was in 1990–91.

Changes in the industrial mix of region and recession. The industrial mix of the Great Lakes has changed in the past decade, so that the region is now less dependent on sectors that are usually more vulnerable to recessions, and is more dependent on sectors that tend to be less sensitive to recessions.[3] For example, between 1972 and 1989, the share of total Great Lakes employment held by durable-goods manufacturing fell from 24 percent to 16 percent, while the service sector's share rose from 15 percent to 23 percent. Similar changes in industry mix occurred nationally, but were not nearly as pronounced.

By themselves, these factors would tend to moderate the relative severity of recessions in the Great Lakes, because a decline in durable-goods manufacturing jobs usually accounts for a large share of total

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employment lost, while service-sector employment often continues to expand.

In addition, the mix of industries affected in 1990–91 is much different than in the past, with overall positive consequences for the Great Lakes. For example, durable-goods manufacturing employment declined much less in this recession than in 1974–75 (see figure 2), and despite shrinking in relative importance to the region since the early 1970s, this industry is still more significant here than in the nation. By the same token, the finance, insurance, and real estate sector incurred greater employment losses in this recession than in 1974–75, and is a less-important employment source in the Great Lakes than in the nation at large.

Moreover, although the service and government sectors continued to expand in this recession, they grew much less than in 1974–75. Because those industries are relatively less significant in the Great Lakes, their sharply slower growth rates represented less of a blow here than in the nation.

Performance of specific industries locally and nationally. For many reasons, the performance of a specific industry can be different regionally than nationally. For example, during a recession, less-efficient establishments in a manufacturing firm or industry are likely to incur greater cutbacks in sales and employment, so if local firms and industries are more efficient than their counterparts in the rest of the nation, they would tend to fare better.

Differences in the final destinations of an industry's products also affect the degree to which its sales and employment shrink during economic declines. If, for example, the Great Lakes exports a much larger share of its goods than does the nation, then weak domestic demand coupled with strong foreign demand would lead to superior performance of the region's industries. Moreover, industries such as construction, services, transportation, utilities, and trade sell most of their output locally, making their performance dependent primarily on local rather than national conditions.

■ Measuring the Contribution of Each Cause

Measuring the impact of these two causes of the Great Lakes' improvement — changes in the industrial mix of the region and the recession, and differences between the national and regional performances of specific industries —requires a basis for comparison. Because the 1974–75 recession had an employment decline closest to the average of the six downturns prior to 1990–91, I chose to compare these two periods and to consider the changes that have taken place in the industrial mix since just prior to the earlier contraction.[4]

In the 1974–75 recession, the percentage decline in Great Lakes employment was 1.7 times greater than the loss nationally. Had the same ratio held in the 1990–91 downturn, Great Lakes employment would have fallen by 2.3 percent, or 435,000 jobs. In fact, however, it declined only 0.6 percent, or 122,000 jobs, from its peak in 1990:IIIQ to its trough in 1991:IQ. What accounts for this 313,000 shortfall in job loss?

A variation of shift-share analysis can be used to quantify the contribution of each cause of the difference.[5] This technique shows that the changes in the industrial mix of the region account for only about 13,000 jobs, or about 5 percent of the difference, and changes in the industrial mix of the recession account for about 65,000 jobs, or about 20 percent of the job-loss shortfall. In contrast, improvements in the performance of Great Lakes industries relative to their national counterparts—the market shares effect—constitute a whopping 236,000, or about 75 percent of the shortfall.

■ Components of the Market Shares Effect

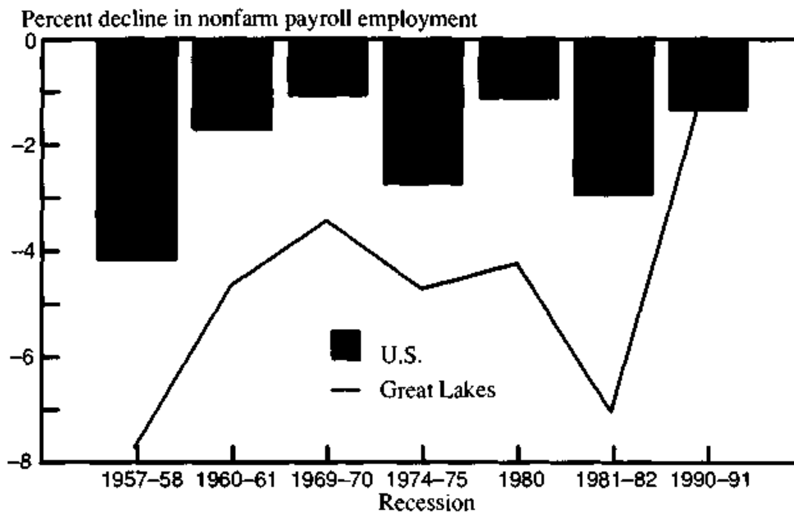
If the market shares effect has fueled most of the Great Lakes' revival, what has made the difference possible? Its largest components — construction, manufacturing, and retail and wholesale trade — together account for four-fifths of this effect.

Construction is responsible for about 10 percent of the market shares effect. In the earlier recession, construction employment fell slightly more in this region than nationally, but in the 1990–91 episode, the decline was only about half as great locally. Vacancy rates in 1990 for residential rental and homeowner units, office space, and industrial space were generally much lower here. This suggests that relatively less overbuilding occurred in the Great Lakes than nationally during the 1980s, and therefore there was less need in the region to cut back on construction activity during the recent recession.

More than a third of the market shares effect resulted from a relative improvement in manufacturing. In 1974–75, employment in this sector fell more in the Great Lakes than nationally, 12.1 percent versus 10.1 percent, while in 1990–91 it shrank less, 3.2 percent versus 3.8 percent. One reason for this relative upturn is that a larger share of Great Lakes manufacturing employment is export related, and nonagricultural exports expanded rapidly in 1990–91, but failed to grow at all in the 1974–75 recession. Thus, part of the region's turnaround in manufacturing resulted from developments abroad rather than from internal changes. But the Great Lakes also boosted its exports of manufactured goods by 28 percent in the latest recession, versus only a 17 percent gain for the United States. It is unclear whether this difference resulted from the mix of exports being demanded or from an improvement in the relative efficiency of the region's export-goods manufacturing.

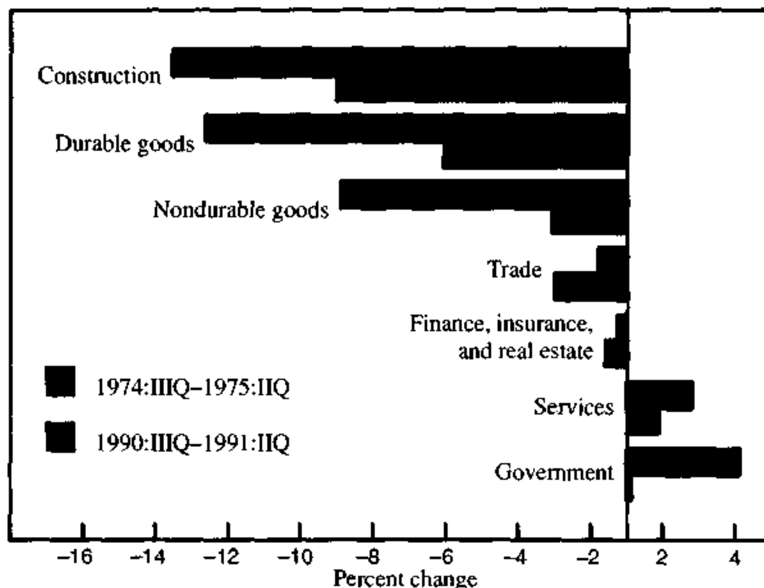
Wholesale and retail trade also account for more than a third of the market shares effect. In 1974–75, percentage employment declines in trade were 2.7 times greater in the Great Lakes than in the nation, but in 1990–91 they were only one-tenth as large. One possibility for this great shift is that there was less need for a shakeout in this industry regionally than nationally. Industry specialists say that excessive construction of retail floor space nationwide during the 1980s and increased financial leverage of retail trade firms resulted in a major industry downsizing over and above the normal cyclical effect in 1990–91. The

FIGURE 1 SEVERITY OF RECESSIONS — GREAT LAKES VS. UNITED STATES



SOURCE: Author's calculations based on data from U.S. Department of Labor, Bureau of Labor Statistics.

FIGURE 2 CHANGES IN U.S. EMPLOYMENT BY INDUSTRY



SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

percentage growth of retail floor space has been smaller in the Great Lakes than nationally, but when scaled by population growth, the buildups of retail floor space and trade employment were slightly larger here between 1974 and 1990. Thus, it is unlikely that the Great Lakes' relative improvement in trade employment loss can be attributed to a smaller need for industry shakeout here than in the nation at large.

Another possibility is that a downsizing in Great Lakes retailing has merely been forestalled because local conditions have not yet been bad enough to trigger it. Trade depends almost entirely on local rather than national conditions, and this region has been doing relatively better in other sectors, like construction and manufacturing, than has the nation.

■ **How Permanent Is the Revival?**
Some of the region's recent improvement in relative stability is likely to carry over into future recessions, but unfortunately, much of it probably will not. Changes in the mix of industries in the Great Lakes that have made this region more like the nation are likely to continue to be beneficial, but those changes accounted for only about 5 percent of the improvement in the region's relative performance in 1990–91.

In contrast, the share of improvement attributed to changes in the mix of recession, about 20 percent, cannot be considered permanent. Every recession is different, and we have no basis for predicting that the industrial mix of the next recession will be similar to that of the latest downturn.

Moreover, the market shares effect was responsible for about 75 percent of the revival. Construction, manufacturing, and trade are the leading components of this effect, and much of the advance in those sectors cannot be expected to continue.

The market shares effect in construction appears to have resulted from greater overbuilding nationally than in the region. It would be unreasonable to expect the lenders who financed overbuilding in the latest cycle to continue this practice in future cycles, and for that mistake to be made nationally but not in the Great Lakes. Thus, it seems likely that the portion of this effect attributable to construction is unlikely to recur in future recessions.

Part of the market shares effect in manufacturing seems to have resulted from the strength of export demand during the past two years—strength that was not always present in past recessions and that cannot be counted on with any certainty to be felt in future contractions. However, another portion of this effect might have its origin in increased competitiveness of the Great Lakes' export manufacturing industry, which could lend

some permanence to the turnaround in this sector.

Finally, the other major portion of the market shares effect occurred in retail and wholesale trade. This seems to have been a spillover effect from the relative strength in other sectors of the region, rather than from some inherent strength in Great Lakes retailing and wholesaling. In fact, it could be that a major restructuring in the region's trade sector is still waiting to be triggered by a more severe downturn in other sectors. Thus, the turnaround in the trade sector might not recur if demand for exports is weak in the next recession and if construction then is no healthier in the Great Lakes than nationally.

■ Conclusion

The economy of the Great Lakes region weathered the 1990–91 recession unexpectedly well, faring much better than the nation and much better than its experience in the six prior recessions. The region's employment loss was 313,000 jobs fewer than might have been anticipated based on its performance relative to the nation in the 1974–75 recession.

The 5 percent share of the Great Lakes' dramatic improvement in relative performance stemming from an improved industrial mix seems likely to recur in the next downcycle; however, the 20 percent portion attributable to a favorable change in the industrial mix of the recession cannot be assured in the next episode. In addition, the meager portion of improvement that resulted from fewer excesses in construction seems rather unlikely to return. Unfortunately, the bulk of the turnaround appears to depend on foreign demand for Great Lakes exports, which cannot be forecast, and on some increase in the relative efficiency of Great Lakes manufacturing, which has not been measured.

Thus, while the Great Lakes' dramatically improved relative performance in the latest recession was most welcome, the region's workers and investors cannot count on an equally dazzling encore.

■ Footnotes

1. The Census Bureau calls the five-state area the East North Central Division.

2. I use nonfarm payroll employment in the Great Lakes region and in the nation to identify peaks and troughs in the past seven recessions. At the time of this writing, debate continues as to whether the recession that began in 1990 has indeed ended. Because both Great Lakes and national employment levels increased in the spring or summer of 1991, and because assignment of a later date for the recession trough is unlikely to have a significant effect on the results, the assumption in this article is that the recession reached its trough in the Great Lakes in the first quarter of 1991, and in the nation in the second quarter of 1991.

3. The industries considered in this study are mining; construction; durable-goods manufacturing; nondurable-goods manufacturing; transportation, communication, and public utilities; retail and wholesale trade; finance, insurance, and real estate; services; and government.

4. Results very similar to those reported here were obtained when the 1990–91 recession was compared against the 1981–82 recession.

5. For a description and illustration of traditional shift-share analysis, see Judith Z. Kalbacher, "Shift-Share Analysis: A Modified Approach," *Agricultural Economics Research*, January 1979, pp. 12–25. Traditional shift-share analysis is typically used to explain the growth that has occurred in a region during a single period. My method instead explains the *difference* between the performances of a region in *two* periods. A description of this method is available on request.

Gerald H. Anderson is an economic advisor at the Federal Reserve Bank of Cleveland.
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Federal Reserve Bank of Cleveland
Research Department
P.O. Box 6387
Cleveland, OH 44101

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