

# Spring 2000

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# The Regional Economy

# **BUFFALO'S EMPLOYMENT ON THE RISE**

Employment growth in 1999 for the Buffalo metropolitan area was the strongest in a decade, according to recently revised figures from the New York State Department of Labor. Buffalo's job growth rate of 1.6 percent, however, was still less than that of the U.S., upstate, and New York State as a whole.<sup>1</sup>

Table 1: Average Annual Employment GrowthNonagricultural Employment

|           | 1999 | Ranking* | 1990-1999 | Ranking* |
|-----------|------|----------|-----------|----------|
| U.S       | 2.2% | -        | 17.6%     | -        |
| NY State  | 2.6% | 14       | 2.9%      | 48       |
| Upstate   | 2.2% | 22       | 3.6%      | 47       |
| Buffalo   | 1.6% | 71       | 1.2%      | 96       |
| Rochester | 1.9% | 57       | 7.0%      | 82       |

Sources: New York State Department of Labor; Bureau of Labor Statistics; authors' calculations.

Note: Upstate refers to a total of 52 counties in New York State. It does not include: New York City; Westchester, Putnam, and Rockland counties; and Nassau and Suffolk counties on Long Island.

\*The ranking sample is out of 50 for New York State, 51 for Upstate (counting upstate and downstate as if each were a separate state), and of the largest 100 metropolitan areas for Buffalo and Rochester, based on population.

Until the second quarter of 1999, Buffalo's economy had been seriously lagging the nation's. In fact, between 1990 and 1998, Buffalo's economy *lost* over 2,300 jobs – or 0.4 percent – while the U.S. gained 15 percent. Over the same period, the entire upstate New York region fared little better, increasing new jobs by only 1.4 percent.

But 1999 saw much more significant growth in jobs for upstate metropolitan areas, with Albany, Syracuse, Binghamton, and Utica all outpacing the U.S. While also showing improvement, Rochester and Buffalo continued to lag the nation.

#### Where is the Growth Coming From?

Buffalo's manufacturing job losses had a significant impact on its economy, with over 1,600 jobs lost (see figure 1). However, growth in other sectors more than compensated for these losses – particularly in the service sector. After years of tepid growth, job gains in Buffalo's service sector outpaced the U.S. for the first time in the 1990s, accounting for fully 85 percent of net job gains. Service job growth of nearly 5.5 percent, construction job gains of 6.7 percent, and Finance, Insurance & Real Estate (FIRE) growth of 3.8 percent were all above U.S. averages in these sectors. The remaining industries - wholesale, retail, transportation & public utilities, and government – all exhibited relatively weak job growth rates of less than one percent, substantially less than that of the rest of the country. Overall, these forces combined to increase total jobs for the region, but not enough to keep pace with the U.S. as a whole. (Continued on page 2, see Employment)

#### Figure 1: Weighted Contributions to Employment Growth Rates for 1999



Source: New York State Department of Labor; Bureau of Labor Statistics.

Note: Contribution rates are net job gains by sector divided by net job gains in total (for all sectors); this yields a percentage growth rate by sector weighted according to its impact on total growth.

# **RAILING FROM HIGH COSTS**

Western New York rail transportation underwent a significant transition this past year with the acquisition and division of Consolidated Rail Company (Conrail) by CSX Transportation Inc. (CSX) and Norfolk Southern Railway Company (NS). Recently, local concerns have been focused on the service problems arising since the break-up. But cost has been an issue for a number of years, with some officials and shippers suspecting that Buffalo area rail rates were high due to Conrail's dominance over the local rail market. This concern was somewhat validated when the Surface Transportation Board (STB)<sup>1</sup> noted that the conditions set forth in its decision on the CSX/NS transaction should improve local rail competition and result in lower shipping rates and better service.

This study uses STB data to further demonstrate that the region has in fact experienced rail rates in excess of what is typical around the country. In 1998, for example, it cost almost 40 percent more than the national average to ship grain mill products by rail out of the Buffalo-Niagara Falls area. That same year, the rate for motor vehicle parts and accessories exceeded the national average by over 30 percent. Due to the array of factors that affect rail rates, the causes of regional price differentials are difficult to determine. These factors and their relevance to the Western New York case are also discussed in this article.

# **Rail Shipping Costs and Economic Development**

The cost of shipping by rail continues to be an important factor in a region's economy, as railroads account for a greater proportion of U.S. intercity freight transportation (based on weight and distance) than any other mode. In 1996, railroads were responsible for 40 percent of the intercity freight market, almost 50 percent more than trucks. Trucking may provide shippers with increased flexibility and accessibility, but rail is more efficient in the transport of bulk freight, particularly over long distances. As a result, businesses that operate in bulk, such as the automobile, chemical, electric utility, primary metals, food processing and agricultural industries, tend to rely on rail transportation. For example, in 1996 railroads carried 70 percent of the nation's motor vehicles, 65 percent of its coal, and 40 percent of its grain and farm products.<sup>2</sup> Western New York retains to this day a substantial level of employment in rail dependent industries. In 1997, the automobile, chemical, primary metals and grain milling industries accounted for over 25,000 jobs in the region, about five percent of total employment and over ten percent of the area's payroll.<sup>3</sup>

# The Cost of Rail in Western New York

In order to investigate the local cost of rail, this study looked at the shipping rates of four commodities: grain mill products, industrial chemicals, primary metals, and motor vehicle parts and accessories. Figure 2 compares the four commodity aggregate rate for the Buffalo-Niagara Falls

## **EMPLOYMENT continued from page 1**

# **A Shrinking Population and Labor Force?**

Coupled with escalating employment are seemingly contradictory data regarding the population and labor force. Buffalo's labor force contracted by 0.4 percent in 1999, continuing its longstanding trend of a 3.1 percent decline since 1990. And, according to the Bureau of the Census, Buffalo's population fell by nearly one percent in each of the last three years. It is difficult to synthesize this with data indicating employment growth, except to say that population and labor force data are estimated in a different manner, and with some degree less certainty than employment.<sup>2</sup> Still, these data indicate at the very least a population and labor force not growing in tandem with employment. This is contributing to tight labor markets and may be cause for concern about future growth.

# Have We Turned Around?

The Buffalo area's economy has shown signs of improvement over the last year, and it may be that the tremendous national expansion has begun to reach the region. Buffalo's growth, however, is still below the nation's, and is coupled with troubling data indicating a decline in the population and labor force.

#### NOTES

<sup>&</sup>lt;sup>1</sup> All employment figures and growth rates are calculated from an average of monthly nonagricultural job totals provided by the Bureau of Labor Statistics; Buffalo refers to an aggregate of Erie and Niagara counties.

<sup>&</sup>lt;sup>2</sup> Employment counts through the second quarter of 1999 are a virtual census of establishments performed through the ES202 program by the New York State Department of Labor, then combined with its Current Employment Statistics (CES) survey; the second half of 1999 is estimated based on the CES and ES202. Population data are based on the 1990 census and utilize IRS tax data to determine year-to-year changes. Labor force and unemployment data are estimated by survey (the Current Population Survey) and utilize population estimates from the Bureau of the Census.

Business Economic Area (BEA)<sup>4</sup> to that of the U.S. from 1985 to 1998. Rail prices for both the U.S. and Buffalo-Niagara declined steadily over this period, a phenomenon largely attributable to efficiency improvements subsequent to railroad deregulation in 1981. However, the local aggregate rate was considerably above the U.S. average for the entire period studied. Table 2 shows the average rates for each commodity in 1998. Buffalo area rates exceeded national averages in every case, with differences ranging from 6 to 47 percent. Also shown is the rail shipping price in two other BEAs that shipped significant quantities of each studied commodity. The results of these regional comparisons are mixed, with Buffalo-Niagara demonstrating higher rates than half of the selected areas. Overall, it can be concluded that, on average, Western New York has had higher average rail shipping rates than the U.S.

#### Figure 2: Rail Shipping Rate

Four Commodity Aggregate, Constant 1998 Dollars



Sources: Surface Transportation Board; Bureau of Economic Analysis; authors' calculations.

## **Factors that Influence Rail Rates**

There are many factors that influence rail rates, and due to difficulties in obtaining data, it is not possible to draw definitive conclusions about causes. It is useful, however, to examine some possible explanations.

First, factors that drive up costs for rail companies will also drive up prices. The cost of serving a shipper generally hinges on fuel and labor requirements. Therefore, for a particular commodity, the cost per mile will be influenced by such factors as the length of haul, freight volume, origin and destination locations and packaging. Table 2 shows that, for all commodity groups, the nation's average length of haul is somewhat greater than Buffalo-Niagara's. This fact could partly explain lower U.S. prices, since rail rates typically decrease with increasing lengths of haul as fixed handling (labor) costs are spread over greater distances. Higher volumes will also lower costs. If the Buffalo region ships in lower volumes than the U.S. as a whole, the average cost would be pushed higher. Location also plays a role in cost, particularly in congested regions where there are increased delays and handling requirements. Higher than average tax burdens may drive up costs as well.

Second, rail rates may also be affected by competitive factors. Rail carriers must contend with competition from other railroads (intramodal), as well as from other modes of transportation such as truck and barge (intermodal). Research indicates that intramodal and intermodal competition restrict a railroad's pricing power and may result in lower rates.<sup>5</sup> A lack of intramodal competition in Western New York may partly explain the discrepancy between local and U.S. prices. During the period studied, Conrail controlled track access to the majority of shippers in the region. These firms could not move freight by rail without first going through Conrail. In addition, Conrail's local reciprocal switching charges, the fee assessed for the transfer of freight from one carrier to another, were generally high (\$390-\$450, compared to a national average of about \$180).<sup>6</sup> A railroad may be able to establish marketpower if it refuses to switch cars or charges an exorbitant fee for the service. Despite the presence of other rail carriers in Western New York (CSX, NS, Canadian National), switching fees may have been high enough to restrain competition. In the CSX/NS decision, the STB reduced area switching charges to \$250 specifically for procompetitive reasons.7

#### Table 2: Rail Shipping Rates, 1998

| GRAIN MILL PRODUCTSBuffalo 39% above U.S.Rate*Distance**U.S.2.6724Bflo-Nia3.6422Kansas City2.7702Toledo3.8543 | INDUSTRIAL CHEMICALS<br>Buffalo 6% above U.S.<br>Rate* Distance**<br>U.S. 3.4 850<br>Bflo-Nia 3.6 628<br>Mobile 3.8 571<br>New York/<br>Northern NJ 4.5 613     |
|---|---|
| PRIMARY METALSBuffalo 47% above U.S.Rate*Distance**U.S.3.0727Bflo-Nia4.4465Cleveland3.2643Chicago3.2625       | Motor Vehicle Parts/<br>Accessories<br>Buffalo 31% above U.S.<br>Rate* Distance**<br>U.S. 9.3 845<br>Bflo-Nia 12.2 663<br>Nashville 9.5 894<br>Detroit 12.2 709 |

Source: Surface Transportation Board; authors' calculations \* Rate is cents per ton-mile.

\*\* Distance is average length of haul, in miles.

#### Conclusion

While there has been considerable concern surrounding the cost of rail shipping in Western New York, most of the evidence has been anecdotal. This article presents data showing that rates for the four studied commodities have in fact been above national averages. Although it is difficult to determine the exact reasons for Buffalo's higher prices, some combination of higher costs and a lack of competition likely explain the differential.

The problems inherent in assessing rates underscores the difficulty faced by the STB as it tries to balance the transportation needs of communities with the economic health of railroads. In Western New York, the STB has demonstrated its interest in promoting more competition with its mandated reduction of reciprocal switching fees, but the impact of those reductions remains to be seen. It is estimated that only 30-50 percent of shippers has access

to more than one railroad through switching. The STB initiated a 3-year rate study to assess the effect of the Conrail break-up on local rail prices. This rate study may offer the Buffalo-Niagara region some comfort, but the STB will have the formidable task of interpreting any movement in rates.

#### NOTES

7 Surface Transportation Board.

## **Richard Deitz and Ramon Garcia**

The views expressed in these articles are those of the authors' and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System.

<sup>&</sup>lt;sup>1</sup> The Surface Transportation Board is an adjudicatory body organizationally housed within the U.S. Department of Transportation (DOT), with jurisdiction over certain surface transportation economic regulatory matters. Among the STB's duties are the approval and conditioning of railroad mergers.

<sup>&</sup>lt;sup>2</sup>Association of American Railroads, www.aar.org/comm/statfact.nsf, Mar. 1, 2000.

<sup>&</sup>lt;sup>3</sup> Bureau of the Census, County Business Patterns, 1997, authors' calculations.

<sup>&</sup>lt;sup>4</sup> Business Economic Areas are regional identifiers used by the Department of Commerce. <sup>5</sup> Koo, Won W.; John D. Bitzan; Denver D. Tolliver, "Railroad Pricing in Captive Markets: An Empirical Study of North Dakota Rail Rates," *The Logistics and Transportation Review* v29 n2, June 1993, pp123-138.

<sup>&</sup>lt;sup>6</sup> Surface Transportation Board, STB Finance Document No. 33388, CSX Corporation and CSX Transportataion, Inc. Norfolk Southern Corporation and Norfolk Southern Railway Company – Control and Operating Lease Agreement – Conrail, Inc. and Consolidated Rail Corporation, Decision No. 89 (July 20, 1989), p69, and the National Industrial Transportation League.