

# ECONOMIC COMMENTARY

## International Trade and the Fourth District's Recovery

by Robert H. Schnorbus

As a result, between 1972 and 1981, when manufacturing employment in the nation was virtually flat, employment devoted to the production of the exported goods nearly doubled (see table 1). Although only about 7 percent of manufacturing employment worked in the export sector by 1981, some industries, notably machinery, instruments, and transportation equipment, contained export sectors that were roughly twice as large as the share for the total manufacturing sector. Despite wide variation among industries, the export sector's contributions to growth among manufacturing industries has been all out of proportion to its relative size.

The Fourth District's experience with export sector growth has been the same as the nation's, with the usual twist: employment growth in the District's export sector between 1972 and 1981 was about two-thirds lower than the rest of the nation. Virtually every industry lagged its national counterparts by a substantial amount. Nevertheless, in 1982 half of the District's durable-goods industries were still specialized in export trade, in the sense of having a higher percentage of their employment devoted to export activity than is the case nationally. The below-average growth rates of the local export sector suggests that District producers face competitive disadvantages with other regions for expanding their overseas markets. While differences may exist between competition for domestic markets and for foreign markets, many factors, such as production cost differentials, would still be important.

not appear to be the case. See *Choosing a Future: Steps to Revitalizing the MidAmerican Economy Over the Next Decade*, prepared by Public Policy Center, Menlo Park, CA: SRI International, March 1984.

Federal Reserve Bank of Cleveland  
Research Department  
P.O. Box 6387  
Cleveland, OH 44101

**Address Correction Requested:** Please send corrected mailing label to the Federal Reserve Bank of Cleveland, Research Department, P.O. Box 6387, Cleveland, OH 44101.

Thus, the relatively poor performance of District producers in exporting their products should not be unexpected. What has often been ignored is that the export sector, relative to its size, has been a more important source of employment growth for the District than even the service sector.

Unfortunately, information about the amount of employment displaced by imports in the Fourth Federal Reserve District is not available by direct measurement, and efforts to estimate either the number of workers displaced by imports or the *net* effect of international trade have not been very successful.<sup>6</sup> Yet, it is probable that if District producers are less successful at competing with producers in other regions for foreign markets, they are going to have greater difficulty than producers in other regions in fending off foreign competition in their domestic markets. Such a conclusion is perfectly consistent with what District producers are reporting. Yet, until more can be learned about how the loss of employment due to imports is allocated among regions, more specific conclusions about the net impact of trade on District employment are risky.

### Implications for the District Outlook

The value of the dollar in world markets began drifting downward in recent months, making imports relatively more costly and, therefore, less competitive in the domestic market (assuming foreign producers do not lower their prices

and profit margins to offset their exchange-rate losses). The future course of the dollar is widely debated, but continued high trade deficits automatically introduce downward pressures on the exchange value of the dollar through the balance-of-payments mechanism, which should tend to lower the exchange rate of the dollar over time. If the downward trend in the dollar continues and remains orderly, it will contribute much to reversing the recent economic slowdown. But the responsiveness of domestic consumers and producers to even a sizable drop in the dollar is likely to be gradual. Ordering and shipping lags, especially for producers' durable goods, make quick adjustments to exchange rates movements often quite difficult. Moreover, the competitive problems of domestic producers run much deeper than fluctuations in exchange rates and will require many years of productivity-enhancing investment to correct.

For Fourth District producers, international trade will continue to be a source of some hope and much frustration, regardless of what the dollar does. Gains in local employment through exporting will continue to be swamped by employment losses through competition from foreign producers and from domestic producers in other regions. As long as production costs remain above the national average, the District will continue to lose its share of manufacturing employment. Imports of steel and other durable-goods imports into the Fourth District visibly highlight the importance of international competition in the changing structure of the region's economy.

BULK RATE  
U.S. Postage Paid  
Cleveland, OH  
Permit No. 385

With the thawing of Lake Erie each spring, a new shipping season opens bringing international trade through the St. Lawrence Seaway directly into the heart of the industrial Midwest.

Included among the first shipments of imported goods to reach Cleveland docks this year were steel, autos, and various types of machinery, all of which could be supplied in abundance by producers in the Fourth Federal Reserve District.<sup>1</sup>

The imports reaching Cleveland are symbolic of at least three aspects of the current economic expansion: 1) that the national expansion is still alive, 2) that imports are capturing the lion's share of growth in the demand for manufactured goods generated by that expansion, and 3) that imports are making deep inroads into traditional markets of Fourth District producers.

While much is known about the effect of international trade in the current economic expansion at the national level, information at the local level is largely undocumented. Reports of imported goods are kept at each port of entry, but little is known about the ultimate destination of these goods. Current export data are generally unavailable at the local level, although annual data for selected years do exist in sufficient detail to observe trends from which conclusions about the current situation can be drawn. Because of increasing concern about the impact of international trade, it is worthwhile to examine how businesses in the Fourth Federal Reserve District are faring in the current expansion.

Robert H. Schnorbus is an economist with the Federal Reserve Bank of Cleveland.

The views expressed herein are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.

### The National Setting

The national economy completed its third year of expansion late in 1985. The growing foreign trade deficits have had dampening effects across most sectors of the economy. Real gross national product (GNP) growth has already slowed from an average annual rate of 6.3 percent in 1983 (fourth quarter over fourth quarter) to 5.7 percent in 1984, but that is what usually happens between the first and second years of a recovery.<sup>2</sup>

Through the first half of 1985, however, real GNP growth has fallen sharply—only a 0.3 percent annual rate in the first quarter of 1985 and 1.9 percent in the second quarter—well below the typical third-year pace of 3.8 percent. Businesses have led the slowdown by drastically cutting their demand for investment goods in the first half of 1985. Real spending for producers' durable equipment (PDE) actually declined 5.8 percent (annual rate) in the first quarter. Over the first half of 1985, it has been growing far behind the 16.0 percent pace set in 1984 (fourth quarter to fourth quarter).

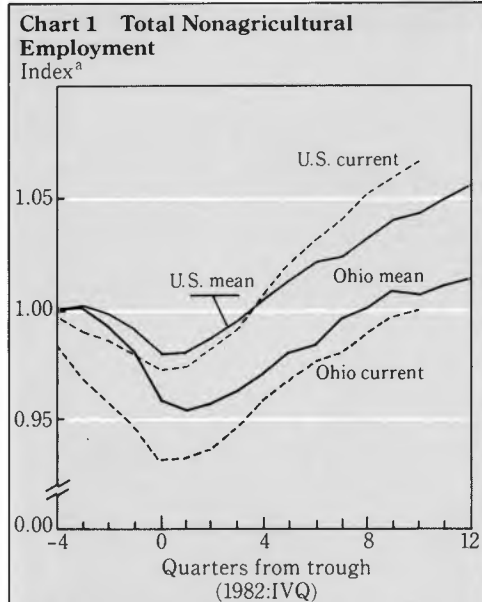
PDE spending had been making three times its typical contribution to real GNP growth over the first eight quarters of the current expansion, however, and a slowdown of substantial magnitude was probably inevitable. Producers may be simply "catching their breath" after an exceptionally vigorous investment boom in 1984. Other factors, however, such as declining profits, ample capacity, and uncertainty over economic prospects, may also be making producers cautious about their investment programs.

The slowing of real GNP growth was reflected in other measures of economic activity, including business sales, manufacturing employment, and industrial production. Indeed, each of these series has plateaued since mid-1984—halfway through the second year of expansion. After expanding at average annualized monthly rates of 12.6 percent between November 1982 (the reference cycle trough) and September 1984, for example, industrial production flattened, rising only 1.1 percent between September 1984 and September 1985 (most recent data available). Major sources of that production softness were market groups, such as consumer goods other than autos, industrial equipment, and textiles/paper/chemical materials, which had been lagging total production gains over the entire economic expansion. In other words, the recent economic slowdown has not represented an abrupt change in the composition of the expansion, but rather an unwinding of that expansion.

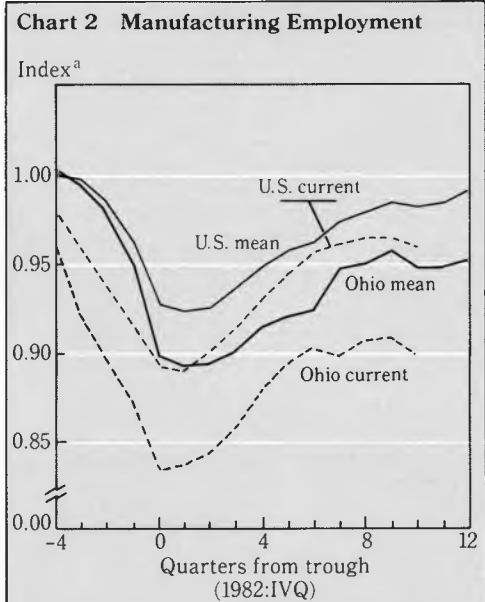
The slowdown reflected in real GNP and, particularly, in industrial production is, to some extent, a distortion of the underlying strength of the economy. Even with the plateau in production since August 1984, durable-goods output remained well above its typical recovery pace, because of rapid advances earlier in the expansion. Moreover, real domestic final sales (that is, goods and services purchased by domestic consumers and producers) continued to make solid gains in the third quarter of 1985, rising at an annual rate of 5.8 percent—lower on average than 1984's pace, but substantially better than the performance of industrial production.

1. The Fourth Federal Reserve District includes Ohio, western Pennsylvania, eastern Kentucky, and the northern panhandle of West Virginia.

2. For further discussion of the current expansion performance relative to typical recoveries, see *Economic Report of the President*. Transmitted to Congress, February 1985, U.S. Government Printing Office, pp. 29-32.



**Chart 1 Total Nonagricultural Employment Index<sup>a</sup>**  
 a. Index as percent of peak quarter employment. SOURCES: U.S. Department of Labor; and Ohio Bureau of Employment Services



**Chart 2 Manufacturing Employment Index<sup>a</sup>**  
 a. Index as percent of peak quarter employment. SOURCES: U.S. Department of Labor; and Ohio Bureau of Employment Services

The bulk of that growth in domestic final sales, however, went to the purchase of imports, most of which were manufactured goods. Net imports (imports minus exports) have been steadily rising over the current expansion, to record levels in 1984.

Services and defense-related production, which are both largely unaffected by international trade, have been among the few sectors of the economy that have been able to sustain their expansion into 1985. Thus, even though the economic expansion technically continues, it began to bypass domestic producers by mid-1984, as imports began to surge.

**Fourth District's Participation in the Expansion**

Economic slowdowns have always spelled trouble for Fourth District producers, and the recent slowdown has been no exception.<sup>3</sup> Nationally, total (nonfarm) employment has expanded as, in fact, has the District's employment (using Ohio as a proxy). Despite a severe recession in 1981-82, total employment nationally has recovered to a level, relative to its previous peak, that is well above levels typically attained in the third year of recovery (see chart 1). In

contrast, District employment started from a lower trough, recovered at a slower rate, and has yet to reach its typical third-year level. The recovery pattern is even more revealing in the manufacturing sector.

Because the District is heavily specialized in durable-goods production, such as steel, autos, and machinery, the nature of the recent slowdown—the substitution of imported goods for domestically produced durable goods has in some ways, been harsher for local producers than for those in other regions (see chart 2). Manufacturing employment expansion in the District took off quickly in 1983, led by a strong auto recovery that spurred auto- and steel-related production in the District. Indeed, over the entire expansion to date, the District's manufacturing employment has expanded at a faster pace than nationally (8.3 percent compared to 7.4 percent, respectively). With the import-related slowdown since mid-1984, however, the District's manufacturing employment has been floundering (District employment fell 2.1 percent between August 1984 and August 1985, compared to only a 0.8 percent slide nationwide).

The gap that appears to be opening between the performance of the District's manufacturing employment and the nation's during the slowdown may be due

to many factors, but the surge of durable-goods imports since mid-1984 must certainly be among the most important.

Competitive disadvantages in the District relative to other regions, such as above-average labor costs, aging or obsolete capital stock, and slow local-market growth, have always produced lagging local recovery rates that typically begin to flatten out by the third year of a national economic expansion. However, the District's specialization in capital-goods production has usually given District manufacturing employment a slight edge over other regions in the second and third years of recovery, as investment begins to drive the national economy. To be sure, the capital-goods sector has not experienced normal recovery, with employment in electrical and non-electrical machinery declining during what is typically their strongest phase of an economic expansion. However, local employment losses were far more severe than nationwide (4.2 percent, compared to 0.3 percent between August 1984 and August 1985). The fact that capital goods have failed to provide their typical support to local employment in the current expansion attests in some degree to the interference of imported durable goods.

Other factors in the District's performance included the severity of the 1981-82 recession, which may have permanently damaged the District's recovery potential through plant closings and other lasting economic disruptions, and an apparent tendency for District producers to expand hours worked to a greater extent than in the past as a substitute for adding workers. These factors are not necessarily independent of the effects of international competition; qualitative evidence for the District's three major industries suggest quite the opposite.

**Capital Goods.** Imports of capital goods in 1984 edged above exports nationwide for the first time since World War II, in what has traditionally been one of the nation's strongest trade performers.<sup>4</sup> Most of the trade deficit was accumulated in the third quarter, coinciding with the mid-1984 slowdown. Metalworking producers have been facing trade deficits over most of the recovery,

but even they absorbed their largest deficits in the third quarter of 1984. It was no coincidence that machine-tool producers, a major segment of the metalworking industry, began pushing hard for trade protection in 1984.

Based on 1982 employment levels, Ohio has the second largest metalworking industry in the nation and is the largest producer of general industrial machinery (including general industrial equipment, engines and turbines, and metalworking industries). One District producer of machine tools recently reported that perhaps 40 percent to 50 percent of his company's traditional market share has been lost to imports, which is four to five times the import share rate for machine tools nationwide. While far from conclusive evidence, such reports are indicative of responses from District capital-goods producers about their perception of the impact of foreign trade.

**Steel.** The steel industry's problems with foreign trade date back many years, but the rising volume and market share of imports in the current expansion has aggravated problems of domestic producers.<sup>5</sup> Indeed, what looked like a profitable steel expansion in 1984 collapsed by midyear because of an overabundance of steel inventories caused, in part, by greater-than-expected steel imports. Voluntary trade restrictions, which were supposed to limit imports to 18 percent of the domestic market (compared to their actual 27 percent share in the first quarter of 1985), were to go into effect in October 1984, but steel imports have continued to flow into the United States at much higher rates during the first half of 1985.

About 20 percent of raw steel produced nationally is made in the Fourth District, which includes the Lake Erie (mostly Cleveland), Youngstown, Pittsburgh, and Cincinnati steel-producing districts. To some extent, the Fourth District appears to have fared better than other steel-producing regions during the current economic expansion, because a large portion of its sales are linked to the still booming auto recovery. Nonetheless, the stress of foreign competition on the restructuring of the steel industry has aggravated problems facing local steel producers. Intense price competition with foreign producers

**Table 1 Export-Related Employment Growth between 1972 and 1981**

SIC code	Industry	United States			Ohio		
		Total growth (percent)	Export growth (percent)	Percent of trade employment in 1981	Total growth (percent)	Export growth (percent)	Percent of trade employment in 1981
	Total manufacturing	6.5	92.9	7.3	-9.4	36.9	7.9
28	Chemicals	6.7	66.2	10.1	-2.3	76.9	9.8
30	Rubber	11.9	110.1	4.5	-33.2	20.0	5.6
32	Stone/clay/glass	-5.4	82.9	3.6	-19.0	70.0	6.8
33	Primary metals	-7.0	43.1	3.8	-15.3	25.0	3.6
35	Nonelectrical machinery	30.2	88.6	16.3	-7.8	29.0	16.8
36	Electrical equipment	17.9	136.4	12.2	-10.7	51.5	10.5
37	Transportation equipment	1.8	87.1	14.6	-9.5	49.7	15.5
38	Instruments	34.9	139.7	16.7	18.0	63.6	15.7

SOURCE: U.S. Department of Commerce, Bureau of Census, *Origins of Exports*.

has contributed to the need for some local producers (Sharon Steel and Armco) to restructure their debts, and others (Wheeling-Pittsburgh Steel) to file for bankruptcy protection. LTV, the nation's second largest steel producer, closed its seven-mile-long Aliquippa Works near Pittsburgh in an effort to reduce costs and become more competitive.

The steel industry's restructuring is not limited to the Fourth District, but the above evidence suggests that a disproportionate share of that restructuring is concentrated in the District.

**Autos.** Although the automotive industry has also been struggling with imports for many years, the domestic industry has been something of an exception in the current economic expansion. The industry has enjoyed a robust recovery, protected in part by voluntary trade restraints that were in effect until March 1985. The industry was a significant, but temporary, contributor to the mid-1984 slowdown, only because labor strikes in both the U.S. and Canada disrupted production. The industry was back to virtually full capacity operation by the end of 1984 and has remained strong over the first half of 1985.

The District, being a heavy producer of autos and trucks and a supplier of parts and accessories, has clearly benefited from the auto recovery. Over the current economic expansion, employ-

ment in Ohio's transportation equipment industry has risen nearly 30 percent compared to 20 percent nationwide. Some of that employment growth, however, might be attributed to local production of foreign vehicles. The Honda plant near Columbus, Ohio is an example. Furthermore, the fact that employment in Ohio's transportation equipment industry is currently 12 percent below its 1979 peak level suggests that imports, along with other economic factors, are having a long-term effect on District producers.

**Lessons from Export-Employment Trends**

While assessment of the current impact of international trade in the Fourth District must be based on conjecture, inferences of underlying trends can be derived by export-employment data that are available for 1972 and 1981. While public attention has been focused on the problems that import competition has created for domestic producers, scant notice has been paid to the growing export sector of these same domestic producers. The increasing internationalization of the U.S. economy has brought with it greater opportunities to export through specializing in goods for which U.S. producers have comparative advantages.

3. An examination of Fourth District responsiveness to the national business cycle can be found in, Steven A. Monzel and Robert H. Schnorbus, "Industrial Structure and Recession in Ohio," *Economic Commentary*, Federal Reserve Bank of Cleveland, June 30, 1980.

4. For more details, see Robert H. Schnorbus, "Major Trends in Capital Formation," *Economic Commentary*, Federal Reserve Bank of Cleveland, June 15, 1985.

5. See, for example, George J. McManus, "Steel's Agony: How Steel Management is Coping," *Iron Age*, vol. 228, no. 10 (May 17, 1985), pp. 19-31.

6. Recent attempts have been made to capture the regional impact of imports. One approach has been to use the region's employment share in a particular industry. For example, see Amar K. Parai, "The Impact of Domestic Content Protection," *REI Review*, vol. 2, no. 2 (June 1985), pp. 28-34. Employment shares in a given year, however, fail to capture relative growth performance among

regions over time. Another study estimated the net trade impact on regional employment by calculating the loss of manufacturing sales due to net trade nationally over a 10 year period and applying that percentage loss to the region's total employment at the end of the 10 year period. Again, the assumption appears to be that regions share equally in national gains and losses, which does