Local producer services to be somewhat depressed by the long-term declines in local manufacturing, given the complementary relationship between certain producer service inputs and manufacturing output. As it turned out, some producer services performed well. Local business services (which include advertising, mailing, and data processing) experienced employment growth comparable to business services nationwide. Using Cuyahoga County as a proxy for metropolitan Cleveland's economy, local business service employment rose 15 percent between December 1982 and December 1983. On the other hand, local finance, insurance, and real estate employment, representing a major portion of producer services, remained at the same employment level in the second quarter of 1984 as when the recovery began. Nationwide, its employment had already expanded 4.5 percent. Even though producer services have not escaped the impact of structural decline, their performance has been impressive given the sharp declines in the manufacturing sector.

A sustained national economic recovery may yet allow a healthy expansion of service-sector employment in Cleveland. To be sure, some of the sluggishness in local service-sector employment may simply result from the narrow base of the local recovery within the manufacturing sector (mostly auto-related industries), and service jobs will pick up as the recovery spreads to more and more industries. Nevertheless, when Cleveland's current recovery is placed in the context of long-term employment trends, the influence of structural change on the local service sector seems unmistakable. Apparently, just as over the business cycle, structural changes that are taking place in the service sector are intertwined with structural changes taking place in the manufacturing sector. However, the timing of the employment adjustment to these structural changes differs for each sector. The persistence of service-sector employment growth in Cleveland and elsewhere within the Fourth District during the 1970s may have created the illusion that the local service sector could grow independently of the performance of the manufacturing sector. More likely, the adverse effects of a shrinking manufacturing sector on local service-sector employment were overshadowed by Cleveland's participation in the nationwide growth in demand for services associated with the transition from manufacturing to services. As the growth effect of the transition eased in recent years, the linkage effect has become more prominent.

### The Service-Sector Recovery in Cleveland

**by Robert H. Schnorbus and Lorie D. Jackson**

A popular belief in urban development is that the service sector provides a perpetual source of employment growth. Service-sector industries include transportation and public utilities, wholesale and retail trade, government, finance, insurance, real estate, and other consumer and business services. Except for an occasional quarter or two of employment loss during recessions, service-sector employment has increased steadily nationwide. Service-sector employment is especially important to the Fourth District to replace jobs lost in the shrinking local manufacturing sector. In many areas of the Fourth District, however, rates of service-sector growth often have been among the lowest in the nation. Moreover, in five of the first six quarters of the current national recovery, employment in Cleveland's service sector declined (see chart 1). Indeed, service-sector employment has been on a downward trend since 1980.

### Service-Sector Recoveries—Past and Present

Since World War II, the service sector nationwide has rarely experienced employment declines. Over the business cycle, service-sector employment typically slows its rate of growth during recession and accelerates during recovery. In the 1981-82 recession (the deepest in postwar experience), however, nationwide service-sector employment declined 0.3 percent (or 174,000 jobs), mostly in 1981:IIQ. In the current recovery, service-sector employment expanded 4.6 percent (or 3.1 million jobs) between the cycle trough in 1982:I1Q and 1984:IIQ. This performance was generally consistent with the 1971-72 and 1975-76 recovery experiences nationwide.

In contrast, Cleveland’s service sector frequently loses employment, both in recessions and in the early stages of recovery. Over the current business cycle Cleveland’s service-sector employment declined throughout the 1981-82 recession, losing over 1.7 percent of its employment (or 10,400 jobs) and continuing to lose employment in nearly every quarter since the recovery began nationwide. Indeed, local service-sector employment in 1984:IIQ, six quarters into the recovery, was 0.3 percent (or 1,600 jobs) below its level when the recovery began nationally (see chart 2).

In many ways, the current local recovery has been similar to recent recoveries. In both the 1970-71 and 1975-76 recoveries, local service-sector employment dropped about 0.5 percent locally during the first year of the current recovery, while growing over 2 percent nationwide. Cleveland’s lagging population growth might have begun to dampen demand for local medical care and educational services nationwide. On one hand, we might expect that the linkage effect has become more prominent.

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

Trends in Service-Sector Expenditures

Several underlying trends, both nationally and locally, might explain the intensity of the service-sector recovery. To begin with, the rapid growth in service-sector expenditures nationwide indicates a shift away from manufacturing. As a result, the slow-down trend to continue, service-sector expenditures in each successive quarter grew at a slower rate than in the last. Since the beginning of the current recovery, growth rates for service-sector expenditures have been weaker than those of the postwar trend.3

The slowing trend in service expenditures can be explained partly by income growth. As the prices rise, generally both consumers and producers use an increasing share of their incomes to purchase services. Much of the postwar growth in service expenditures is associated with rising income. To the extent that income growth has slowed since 1980 because of back-to-back recessions, some temporary slowdown in service-demand growth would be expected.

Another factor in the slowdown could be the rising prices of services compared with goods.4 If productivity in services has grown at a slower rate than in manufacturing, as is generally assumed, then productivity in services should be rising faster than the price of goods. If the demand for services becomes responsive to price changes, continued increases in service prices would reduce the quantity of services demanded by more than the price increase. In producer services with emerging economies of scale, the price effect might be overshadowed by productivity improvements associated with the introduction of new technologies.

The shift to new services has a cyclical impact to the extent that discretionary services have become more like the national average.5 There are several reasons, related to structural changes in the local economy, why Cleveland might have experienced disproportionately slow service employment growth over the postwar period. First, the link between the manufacturing and services sector is long-term as well as cyclical effects. Structural decline within the local manufacturing sector is likely to spill over into the service sector. Second, the loss of local population and income would be expected to slow the growth of services demanded by consumers. Third, the extent to which structural decline has occurred throughout the Fourth District, there may also have been a decline in the portion of service-sector employment in Cleveland devoted to the export of services to surrounding metropolitan areas.

Shifts in Composition

Over the last decade, Cleveland experienced a deeper decline in the share of manufacturing employment in the service-sector than the nation, largely because of the emergence of the new service sector. (Because of limited data, Cuyahoga County is used here as a proxy for metropolitan Cleveland's economy.) For example, the share of the manufacturing and nonproducer services, an industry that is cyclically sensitive, was almost 5 percent lower locally than nationally in 1973, but had become roughly equal to the national average by 1983. Even though producer services have increased their share of employment in Cleveland's service sector, the gains made locally were less than those made nationally. In Cleveland's manufacturing employment, the share of producer services employment was 7 percent greater than that of the nation, by 1983, the local share had dropped to only 4.1 percent less than in the nation. Because Cleveland has been less specialized in producing services relative to the nation than it was ten years ago, the cyclical contribution of this industry to the total service sector has become more like the nationwide contribution. The net effect of less specialization in producer services has most likely been a dampening effect on the already even less cyclically sensitive services (i.e., nonprofit services) that have taken over a larger share of the local service-sector economy.

Among other types of service, nonprofit services increased their share of Cleveland's service-sector employment have been higher than the national share in 1973 to nearly 30 percent higher in 1983. While reflecting long-term growth, these trends are quite sensitive to structural change in the local economy, which represent a large part of Cleveland's distributive services, employment declines since 1980 have been deeper than in overall service-sector employment. Employment gains in these industries did not occur until 1983, and once they occurred, they were mainly in the more cyclically sensitive portion of the service sector. For example, medical-
Another factor in the slowdown could be the rising prices of services compared with goods. If productivity in services has grown at a slower rate than in manufacturing, as is generally assumed, then the relative price of services would be rising faster than the price of goods. If the demand for services is price inelastic and responsive to price changes, continued increases in service prices would reduce the quantity of services demanded by more than the price increase. In producer services with emerging economies of scale, the price effect might be overshadowed by productivity improvements associated with the introduction of new technologies.

Trends in Service-Sector Expenditures
Several underlying trends, both nationally and locally, might explain the degree of weakness in the local service-sector recovery. To begin with, the rapid growth in service-sector expenditures nationwide in the 1970s and 1975-76 recoveries employment gains compared with the 1975–76 recovery, it would have gained nearly 240,000 service-sector jobs by the sixth quarter of the current recovery than it actually did.

Expenditures can be explained partly by rising incomes and rising incomes, generally both consumers and producers use an increasing share of their incomes for service expenditures. Much of the postwar growth in service expenditures is associated with rising income. To the extent that income growth has slowed since 1980 because of back-to-back recessions, some temporary slowdown in service demand growth would be expected.

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Shocks in Composition
Over the last decade, the service sector has been emerging, fostered by new technologies, most notably computers. New producer services (e.g., computer services and software) and nonprofit services (e.g., technological advances in diagnostic medical equipment) have increased their share of total services, while the more traditional government and distributive services have made up a declining share. This shift is readily apparent in the changing distribution of service-sector employment (see chart 3). In 1973, for example, employment in services was 1 percent greater than the national average; by 1983, the gains made locally were less than half of those made nationally. In 1983, for example, employment in services was 7 percent greater than in the nation; by 1983, the local share had dropped by only 2 percent below the national average. Because Cleveland has become less specialized in producer services relative to the nation it was ten years ago, the cyclical contribution of this industry to the total sector has become more like the national-wide contribution. The net effect of less specialization in producer services has been more heavily affected by the business cycle than producer and non-profit services. Producer services and manufacturing, where structural change has occurred in the service sector has been concentrated in mature economies, such as Cleveland's, where economic growth has been below the national average. There are several reasons, related to structural changes in the local economy, why Cleveland might have experienced disproportionately slow service employment growth over the postwar period.

First, the link between manufacturing and services has grown in a number of ways, including cyclical effects. Structural decline within the local manufacturing sector is likely to have significant effects on service employment. Second, the loss of population and income would be expected to slow growth of services demanded by consumers. Third, the extent to which structural decline has occurred throughout the Fourth District, there may also have been a decline in the portion of service-sector employment in Cleveland devoted to the export of services to surrounding metropolitan areas.

Over the last decade, Cleveland experienced a greater decline in the share of services to the nation, largely becap of the emergence of the new service sector (because of limited data, Cuyahoga County is used here as a proxy for metropolitan Cleveland's economy). For example, the importance of the manufacturing and distributive services, an industry that is cyclically sensitive, was almost 5 percent lower in 1983 than in 1973, but had become roughly equal to the national average by 1983. Even though producer services have increased their share of employment in Cleveland's service sector, the gains made locally were less than those made nationally. In Cleveland's manufacturing industries, the share of producer services employment was 7 percent greater in 1983 than it was ten years ago, the cyclical contribution of this industry to the total sector has become more like the national-wide contribution. The net effect of less specialization in producer services has been more heavily affected by the business cycle than producer and non-profit services. Producer services and manufacturing, where structural change has occurred in the service sector has been concentrated in mature economies, such as Cleveland's, where economic growth has been below the national average. There are several reasons, related to structural changes in the local economy, why Cleveland might have experienced disproportionately slow service employment growth over the postwar period.

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