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economic commentary

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.[1] In many areas of the Fourth District, however, rates of service-sector growth often have been among the lowest in the nation.[2] 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.

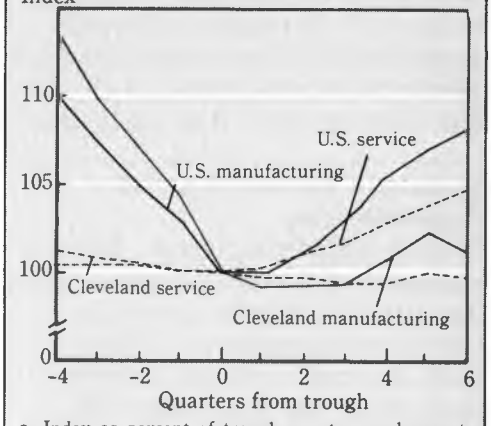
Service-Sector Recoveries—Past and Present

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 1982:IIIQ. In the current recovery, service-sector employment expanded 4.6 percent (or 3.1 million jobs) between the cycle trough in 1982:IVQ 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

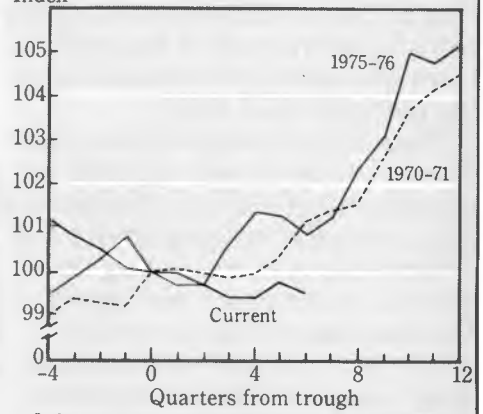
Chart 1 Manufacturing and Service-Sector Employment



a. Index as percent of trough quarter employment (1982:IVQ).

SOURCES: Ohio Bureau of Employment Services and U.S. Bureau of Labor Statistics.

Chart 2 Local Service-Sector Recoveries



a. Index as percent of trough quarter employment—1982:IVQ, 1975:IQ, and 1970:IVQ.

SOURCE: Ohio Bureau of Employment Services.

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

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.

2. See Roger H. Hinderliter and Robert H. Schnorbus, "Income Growth and Industrial Change in the Fourth District," *1978 Annual Report*, Federal Reserve Bank of Cleveland.

1 percent (or roughly 2,500 jobs) over six quarters before resuming an expansionary trend. In national recoveries, however, these declines lasted only two quarters. Moreover, by the sixth quarter in both the 1970–71 and 1975–76 recoveries, employment rose about 1 percent *above* the trough employment level. In the 1975–76 recovery, which also experienced a strong expansion in manufacturing employment, local service-sector employment rose 0.9 percent (or 4,900 jobs) between its trough and the sixth quarter of its recovery. If Cleveland were experiencing service-sector employment gains comparable with those in the 1975–76 recovery, it would have gained 7,000 more service-sector jobs by the sixth quarter of the current recovery than it actually did.

Trends in Service-Sector Expenditures

Several underlying trends, both nationally and locally, might explain the current weakness in the local service-sector recovery. To begin with, the rapid growth in service-sector expenditures nationwide appears to be slowing. If this slowing trend were to continue, service-sector expenditures in each successive recovery would be weaker than in the last. Since the beginning of the current recovery, growth rates for service-sector expenditures have been even weaker than the postwar trend rate.[3]

The slowing trend in service expenditures can be explained partly by income and price effects. As incomes rise, generally both consumers and producers use an increasing share of services compared with goods. 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.

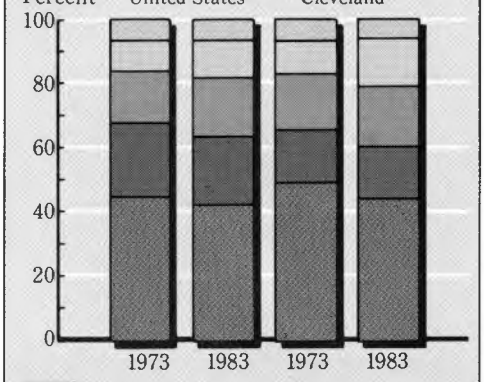
Another factor in the slowdown could be the rising prices of services compared with goods.[4] If productivity in services has grown at a slower rate than in manufacturing, as is generally assumed, the price of services should be rising faster than the price of goods. If the demand for services is now highly 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.

Linkages between Manufacturing and Services

Although service-sector expenditures have grown faster than manufacturing expenditures over the postwar period, service-sector performance has not been completely independent of the manufacturing sector. The demand for services is linked directly and indirectly to manufacturing activity. A direct link is created by producers' demand for services, essentially "invisible" inputs into the manufacturing process. An indirect link is created by consumers' demand for services in that many consumers' incomes depend on employment in the manufacturing sector. Thus, in metropolitan economies with manufacturing employment that typically lags the nation during economic recoveries, the local service sector would also be expected to lag the service-sector recovery nationwide. However, Cleveland's current manufacturing recovery has been somewhat stronger than past recoveries. The fact that the service-sector recovery is weaker than in the past suggests that long-term, or structural, problems are exerting a greater influence on Cleveland's service-sector recoveries than in the past.

The slowdown of expenditure growth in the service sector has been concentrated in mature economies, such as Cleveland's, where economic growth has been below 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.[6] First, the link between manufacturing and services has 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, to the extent that 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.

Chart 3 Service-Sector Employment



Consumer services:
hotel, personal, auto repair, motion picture, amusement, and private household.

Nonprofit services:
health, private education, and social.

Producer services:
finance, insurance, and real estate; business, legal, and membership organizations.

Government services:
public education, and federal, state, and local governments.

Distributive services:
transportation, public utilities, and wholesale and retail trade.

SOURCES: Ohio Bureau of Employment Services and U.S. Bureau of Labor Statistics.

3. A simple model was constructed to test the statistical significance of the ratio of change in expenditure growth. Service expenditure data in log form were correlated with a time trend (the direction of the expenditure growth), the square of the time trend (its rate of change), GNP (the business cycle control variable), and a dummy variable for the current recovery. The first three independent variables were statistically significant at the 1 percent confidence level, and the last variable at the 10 percent confidence level.

4. For an extended discussion of the price elasticity of demand for services, see Jonathan I. Gershung and Ian D. Miles, *The New Service Economy*, New York: Praeger Publishers, 1983.

Shifts in Composition

Over the years, a new service sector has been emerging, fostered by new technologies, most notably computers. New producer services (e.g., computerization of assembly lines) and nonprofit services (e.g., technological advances in diagnostic medicine) have accounted for a growing 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, 68 percent of all service employees in the nation were involved in either state or local governments or in the distribution of goods; 26 percent worked in producer and nonprofit services. By 1983, 64 percent of service jobs were in government and distributive services, and 30 percent were in producer and nonprofit services. (Consumer services, which include the stereotype of the hamburger stands and laundromats most commonly viewed as the service sector, have not been a major factor in the emergence of the new service sector.)

The shift to new services has a cyclical impact to the extent that distributive and government services have been more affected by the business cycle than producer and nonprofit services. Producer services are more closely tied with manufacturing, and hence are relatively more cyclically sensitive than nonprofit services; both types of services have experienced strong long-term growth trends with only minor cyclical fluctuations compared with distributive and government services. As the cyclical sensitivity of the service sector diminishes, each successive recovery would be expected to provide less service employment growth.

Over the last decade, Cleveland experienced a greater decline in the cyclical sensitivity of its 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 employment share of distributive services, an industry that is cyclically sensitive, was almost 5 percent higher 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 1973, for example, the local share of producer-services employment was 7 percent greater than in the nation; by 1983, the local share had dropped to only 2 percent greater than in the nation. Because Cleveland has become less specialized in producer 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 of cyclical sensitivity, because even less cyclically sensitive services (i.e., nonprofit services) have taken their place.

Among other types of services, nonprofit services increased their share of Cleveland's service-sector employment from 6 percent greater than the national share in 1973 to nearly 30 percent greater in 1983. While reflecting long-term growth, this dramatic increase in local specialization provides little additional employment gain that could be associated purely with the business cycle recovery. While these shifts would suggest an improvement in Cleveland's cyclical stability, they also would tend to produce a slower cyclical recovery than in the past (assuming service-sector industries follow a typical recovery pattern).

Service-Sector Trends

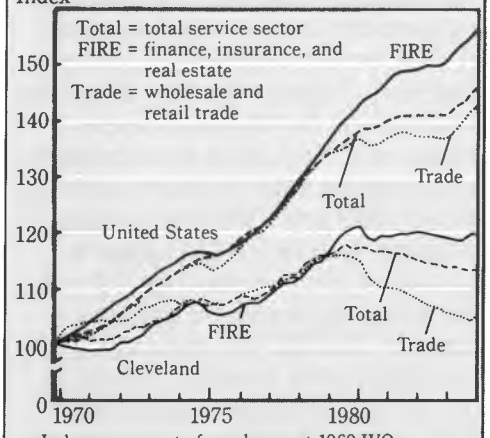
While there has been a steady decline in employment in Cleveland's service sector since 1980, employment nationwide has been accelerating in the current recovery in accordance with past behavior. A partial explanation for the poor performance of Cleveland's service sector since 1980 is that the last two recessions (1980 and 1981–82) were particularly severe for Cleveland's manufacturing industries. Manufacturing employment dropped roughly 100,000 jobs between 1970 and 1982, with about one-third of the job losses occurring between 1980 and 1982. Adjustments in the local sector to manufacturing losses appear to have continued into the current recovery. As a result, these structural adjustments have detracted from the employment gains in the service sector that normally would be expected to come with recovery in the business cycle.

Although there are a few bright spots, each of the service-sector groups bears some evidence of the local impact of structural decline (see chart 4). In contrast to past recoveries, cyclically sensitive government and distributive services have performed poorly in the current recovery, with employment declines between 1982:IVQ and 1984:IIQ of 1.3 percent (3,000 jobs) and 4.1 percent (4,800 jobs), respectively. In fact, since 1980, employment declines in these two groups have accounted for much of the total loss in service-sector employment. In wholesale and retail trade, which represent a large part of Cleveland's distributive services, employment declines since 1980 were much sharper than in overall service-sector employment. Employment gains in these industries did not occur until 1984:IQ—a full year into the national recovery. Even nonprofit services, which previously had shown a strong employment trend, have been struggling in this recovery. For example, medical-

5. Since expenditure data are not available on a regional basis, we cannot look specifically at Cleveland's expenditure trends.

6. For further discussion of factors that relate to the declining performance of Cleveland's economy, see Roger H. Hinderliter, "Sources of Regional Growth Disparity: The Case of Ohio's Industries," *Economic Commentary*, Federal Reserve Bank of Cleveland, December 19, 1983.

Chart 4 Employment Trends in the Service Sector



a. Index as percent of employment 1969:IVQ.
SOURCES: Ohio Bureau of Emloyment Services and U.S. Bureau of Labor Statistics.

care employment declined 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.

A notable exception to the relatively poor performance of local service-sector industries in this recovery has been the performance of producer services. On one hand, we would expect to find sizable employment gains in producer services locally, because expenditures on producer services nationally have expanded at over twice the rate of total service-sector expenditures. On the other hand, we might expect 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.

Conclusion

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.

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