brought to you by **CORE**

Industrial Restructuring in the New York Metropolitan Area

James Orr*

ndustrial restructuring is the ongoing process of reallocating workers among jobs in the economy as industries expand and contract. The New York metropolitan area economy underwent a significant amount of restructuring during the first half of the 1990s as a variety of factors-including new products, increased competition from other areas, and deregulation and fiscal problems—caused area firms and entire segments of industries to make permanent adjustments to employment levels. Downsizings, the sharp reductions in staffing by firms, were a prominent feature of the process. The area's steep 1989-92 downturn prompted many of these downsizings, but their persistence well into the recovery period contributed to a weakening job picture for several major sectors in the first half of the 1990s, particularly for manufacturing, finance, insurance, communications, chemicals, and the public sector.

Industrial restructuring is not new to the metropolitan area; jobs in manufacturing have been giving way to employment in the service sector since the late 1960s, and back-office functions have been on the move to other regions for more than a decade. In addition, bouts of restructuring naturally accompany periods of economic instability. The fact that employment downsizings have, however, continued well past the start of the area's economic recovery in 1992 raises questions about the fundamental soundness of the metropolitan economy. Moreover, the downsizings have been more pervasive in the 1990s than in the past, affecting a wide range of metropolitan area industries and increasing the risk of job loss for a significant fraction of the area's work force.

This paper analyzes the industrial restructuring process in the New York metropolitan area in the first half of the 1990s.¹ It shows that the restructuring was accompanied by a decline in the labor force, particularly in New York, where the decline persisted through the first half of the 1990s. The analysis also shows that a significant part of

^{*}James Orr is a senior economist in the Research and Market Analysis Group of the Federal Reserve Bank of New York.

the area's restructuring in this period represents a continuation of the long-term trend away from manufacturing toward a service-oriented economy. This shift, while broadly in line with nationwide trends, has been somewhat more intense in the metropolitan area. Downsizings in government employment, especially in New York City, have also been a key feature of the area's restructuring process. Together, job losses in government and manufacturing have lowered job growth in the area over the past three years by an average of 0.5 percentage point annually. As a result of these industrial restructuring patterns, the service sector has become significantly more important in shaping the area's economic performance.

THE CAUSES AND SCOPE OF RESTRUCTURING IN THE NEW YORK METROPOLITAN AREA

Like the nation, the New York metropolitan area has been undergoing gradual but steady restructuring of its industries for several decades. The relatively high cost of doing business in the New York metropolitan area, changes in technology, population growth trends, and industrial location patterns are driving these long-term trends in regional employment. A variety of economic "shocks" emanating from local, industry, and national sources have also significantly influenced the industrial landscape and caused layoffs in the metropolitan area.²

To assess the extent of restructuring in the New York metropolitan area in the first half of the 1990s, we examine two measures: the number of permanent job losses of metropolitan area workers and mass layoff announcements in the region. Determining the scale of job losses is the first step in identifying and estimating the impact of industrial restructuring on the work force.

ESTIMATES OF PERMANENTLY DISPLACED WORKERS

Our first measure of restructuring, the number of permanently displaced workers, comprises those workers of at least twenty years of age who have been displaced from a job held for three years or more because of plant closings, job eliminations, or lack of work. Biannual estimates of permanently displaced workers have been produced by the U.S. Department of Labor for the years 1979-93 for New York and New Jersey.³ In the most recent period, 1991-93, permanent displacements in New York and New Jersey together totaled 506,000, representing an average annual flow of slightly more than 165,000 (Table 1). This yearly average exceeds that of all earlier periods for which data are available. The rise in displacements during 1991-93 is not surprising because the period coincides with a deep regional recession that did not bottom out until late 1992.⁴ During these years, the displacement rate, or displaced workers as a share of total employment, averaged 1.5 percent annually. Although relatively high, this percentage is not completely out of step with the area's long-term restructuring patterns. Indeed, in the 1979-87 period, including the relatively high-growth years of the 1980s, displacements in New York and New Jersey still averaged between 80,000 and 100,000 annually, or about 0.7 percent of the work force. Thus, while the number of workers who have experienced permanent job loss has clearly risen in the 1990s, job displacements have been a natural part of the area's economy for many years.

More disturbing than the rise in the number of displacements is the rise in the area's share of nationwide displacements—from 8.4 percent in the 1979-83 period to 11.3 percent in the 1991-93 period. This rise occurred at the same time that the two states together experienced a decline in their share of nationwide employment. The con-

Table 1 ESTIMATES OF DISPLACED WORKERS IN NEW YORK STATE AND NEW JERSEY, 1979-93

	New York and New Jersey		As a Percent of U.S. Job Losses and Employment		
Period	Thousands	Percent of Employment ^a	Job Losses	Employment	
1979-83	428	0.8	8.4	11.7	
1983-87	322	0.6	6.9	11.5	
1987-91	598	1.1	10.7	11.0	
1991-93	506	1.5	11.3	10.3	

Source: U.S. Department of Labor.

Note: A displaced worker is defined as an individual of at least twenty years of age who was permanently displaced from a job held for three years or more because of a plant relocation or closure, lack of work, or the elimination of his or her position.

^a Displaced workers as a percentage of average annual employment in the two states during the period, unadjusted for tenure.

centration of national restructuring in nonmanufacturing industries, which have a strong presence in the area, may help explain the increased share of nationwide displacements (see Podgursky [1992]). Today, workers displaced from manufacturing industries account for less than 25 percent of all displaced workers compared with more than 35 percent a decade ago (Farber 1993). In the New York metropolitan area, nonmanufacturing jobs make up roughly 88 percent of total employment.

The 1990s also saw a sharp increase in the displacement of white-collar workers. In the most recent U.S. recession, white-collar workers accounted for about a third of the rise in unemployment nationwide. This rise corresponds to higher displacement rates found in service industries nationwide (Farber 1993; Gardner 1995), and it appears to be contributing to the rise in displacement rates in the metropolitan area's service sector. In particular, professional services, a key industry for the region, increased its share of overall displacements, and the FIRE and service sectors reached all-time-high displacement rates. The impact of these national trends was compounded by the rising displacement of workers in the area's government sector, particularly in local government. Significantly, the declining importance of manufacturing displacements in recent years and the relatively heavy concentration of nonmanufacturing sectors in the area have placed a large fraction of the area's work force—roughly 20 percent—at some risk of displacement.

MASS LAYOFF ANNOUNCEMENTS

Our second measure of restructuring is the annual number of reported layoffs in the New York metropolitan area. We use data for 1993-96 identifying individual firms announcing layoffs, the number of workers affected, and the location of the firms' headquarters.⁵ Although mass layoffs are similar in concept to the Labor Department's definition of permanently displaced workers, we consult both measures to balance out their limitations. For example, the number of workers actually laid off could differ from the announced total. Moreover, because the exact location of layoffs is not available, a firm identified in the report could be increasing employment in other establishments or operations, so that the firm's overall employment level might not decline. One strength of the layoff data is that they provide details about the industries undergoing major employment reductions and briefly describe the reported cause of the layoffs.

Roughly 292,000 workers in firms headquartered in the New York metropolitan area reportedly lost their jobs between 1993 and 1995 (Table 2). This amounts to an annual loss of about 100,000 jobs, or 1.5 to 2 percent of metropolitan area employment-close to the share of permanently displaced workers in New York and New Jersey reported by the U.S. Department of Labor for the 1991-93 period. Although layoff announcements occurred in a number of industries, they were clearly concentrated in manufacturing (including consumer goods, pharmaceuticals, and computers), communications, and finance. Significantly, layoff announcements in 1996 showed a sharp drop in the number of reported employment downsizings. In fact, with the exception of AT&T's announced downsizing in January 1996, annual layoffs were only about half the level announced in the 1993-95 period.

One reason firms are reducing staff is the high cost of doing business in the metropolitan area. Other forces, however, are also contributing to the wave of employment restructuring. In the pharmaceuticals industry, for example,

Table 2

REPORTED LAYOFFS IN THE NEW YORK METROPOLITAN AREA'S PRIVATE SECTOR, 1993-96

Industry	1993-95 (Thousands)	1996 (Thousands)
Computers/electronics	65.3	1.0
Consumer goods	28.9	4.5
Chemicals/pharmaceuticals	27.2	0.7
Aerospace/defense	3.8	0.1
FIRE	58.3	1.9
Banking	46.5	1.4
Insurance	18.8	0.5
Communications	46.7	40.2
Utilities	3.9	1.4
Health services	13.7	0.7
Retail	9.0	3.1
Media	2.3	1.3
Other	31.1	7.9
All industries	292.3	64.7

Source: Challenger, Gray, and Christmas.

Note: Data refer to announcements of layoffs in the private sector between January 1993 and July 1996. Industry definitions were created by the source. FIRE=finance, insurance, and real estate.

mergers in the face of exploding research and development costs and the introduction of managed health care have been significant factors in downsizings. Nationwide, health care employment is down roughly 20 percent, with more than 37,000 jobs lost between mid-1993 and mid-1994. In the area's defense and aerospace industries, reduced federal procurement is a major cause of shrinking employment. Nationwide defense-related employment declined by a third between 1985 and 1995. The consumer products industry has downsized in the region because of general cost-cutting pressures, and the computer industry, particularly IBM, has downsized as part of its efforts to reorient its business. Restructuring, mergers, and cost-cutting pressures are also cited as important motives for employment downsizing outside of manufacturing.

THE EFFECTS OF RESTRUCTURING ON THE LOCAL LABOR MARKET

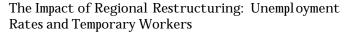
Studies consistently find that workers whose job losses are linked to restructuring face significant adjustment costs in the form of both spells of unemployment and losses in earnings (see Farber [1993] and Jacobson, LaLonde, and Sullivan [1995]). Estimates of adjustment costs experienced by New York metropolitan workers are not available; however, some evidence suggests that finding a new job in the area may be somewhat tougher than in other parts of the country. Nationwide, 67.9 percent of workers displaced between 1991 and 1993 had found new jobs by February 1994 (Gardner 1995), compared with 62.0 percent of displaced workers in New Jersey and 55.5 percent of displaced workers in New York, according to estimates by the U.S. Department of Labor. Moreover, in every period since 1979, New York's reemployment rate has been at least 5 percentage points below the national average, and its share of displaced workers out of the labor force has exceeded the national average. In New Jersey, the reemployment rate has been below that of the nation since 1987, and the state's share of displaced workers out of the labor force greatly exceeded the national average in the 1991-93 period.

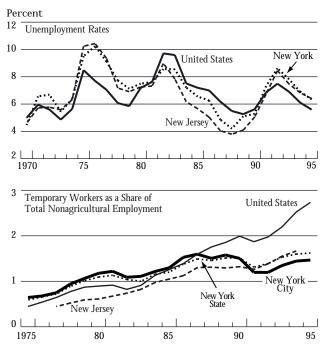
An increase in the number of displaced workers can lead to several long-term adjustments in the labor market. For example, rising displacements could raise the unemployment rate, and the weakened job market could lower labor force participation. In addition, the potential of, or fear of, displacement could make workers who have not been displaced less likely to leave their jobs voluntarily. Moreover, firms involved in cost-cutting efforts may increase their use of part-time or temporary help, shifting jobs away from full-time employees. Fortunately, our review of four trends shows that only one labor market adjustment—a decline in the size of the labor force appears to have left a lasting mark on the metropolitan area.

UNEMPLOYMENT RATES

After falling below the national average for much of the 1980s, unemployment rates in New York and New Jersey have remained roughly 1 percent above the national average since the downturn of the early 1990s (Chart 1, top panel). While this rise in the area's relative unemployment rate suggests a deteriorating labor market, it is not unprecedented: the unemployment rate in the area throughout

Chart 1







Note: Temporary workers are defined as employees hired from personnel supply service agencies.

the 1970s was also consistently above the national average. Furthermore, the two states' peak unemployment rates in the current downturn, about 8 percent, are below previous peak unemployment rates, and both states' unemployment rates dropped by almost 2 percent between 1992 and 1995. State unemployment rates have roughly returned to their pre-1980s' pattern in the past several years.⁶

An examination of local unemployment rates within the metropolitan area also shows little impact from downsizings. The structure of rates has hardly changed over the last decade: unemployment rates remain relatively high in Jersey City, Newark, and New York City, while they have stayed relatively low in Long Island and in Middlesex, Somerset, and Hunterdon counties.

TEMPORARY WORKERS

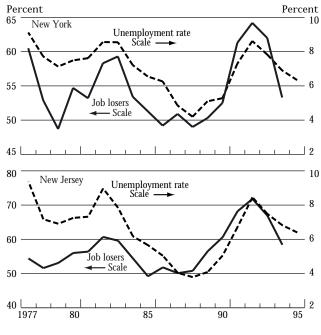
Another labor market adjustment that may occur as a result of downsizing is a rise in the use of temporary workers. One motive for downsizing is to cut the costs of permanent workers, including wages and benefits, and to maintain a more flexible work force. The increasing use of temporary workers does not seem to be a phenomenon unique to the metropolitan area. The share of temporary workers in total employment in New York State, New York City, and New Jersey has grown from roughly 0.5 percent in 1975 to about 1.5 percent today (Chart 1, bottom panel). This growth is far less dramatic, however, than the nationwide expansion in temporary workers over the same period—from 0.5 percent to more than 2.5 percent of the work force.

COMPOSITION OF UNEMPLOYMENT

The U.S. Department of Labor categorizes unemployed workers according to their reason for unemployment. Job losers, defined as workers who have involuntarily left their jobs, climbed sharply as a share of unemployed workers in New York State and New Jersey during the 1989-92 downturn (Chart 2).⁷ This rise implies that workers in the two states were increasingly unemployed as a result of layoffs from their jobs. A simultaneous decline in the share of workers who voluntarily left their jobs, or job leavers, suggests that employed workers were increasingly wary of

Chart 2

Job Losers as a Percentage of Unemployed Persons, New York and New Jersey



Source: U.S. Department of Labor.

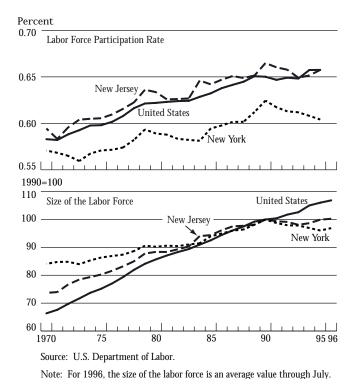
leaving their jobs to seek reemployment. Since the recovery in the region began, however, the number of job leavers as a share of total unemployment (not shown in chart) has risen. The implication is that job insecurity linked to downsizings or the threat of downsizings is no longer a primary factor discouraging workers from leaving their jobs.

LABOR FORCE PARTICIPATION

A decline in the area's labor force appears to be the biggest and most persistent effect of worker displacement and slow growth in the region. Data for New York show that the labor force participation rate, after peaking in 1989, declined relatively sharply through 1995; in New Jersey, the participation rate declined through 1993 and then began a mild turnaround (Chart 3, top panel). The decline in participation was much stronger and more persistent in New York: the participation rate in 1995 roughly equaled the rate in 1986 and was only slightly above the rate in 1979.

The pattern of changes in the size of the area's labor force is similar to that of participation rates. In New York, the size of the labor force steadily declined from

The Impact of Regional Restructuring: Labor Force Measures



1990 to 1995. In New Jersey it declined through 1993, followed by a modest upturn (Chart 3, bottom panel). While declining participation has characterized periods of weakness in the past in both states, the decline in the size of the labor force is unique to the 1990s. It appears that the generally weak economic conditions and job displacements that began with the downturn in the area in 1989 led many workers to either drop out of the labor force or leave the area altogether.⁸ Available data for 1996 suggest, however, that the steady decline in the size of New York's labor force has leveled off.

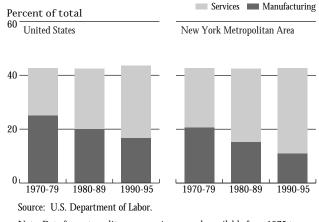
RESTRUCTURING OF METROPOLITAN AREA INDUSTRIES: MANUFACTURING AND SERVICES

We next investigate the net change in level and share of employment by industry. Not every layoff is part of a fundamental restructuring of activity in the area. Moreover, permanent job losses in one segment of an industry can be offset by gains in other segments. Thus, the net change in levels and share of area employment by industry provides a more in-depth look at restructuring. This measure has one drawback: it does not capture the churning of jobs at firms within an industry, a significant factor in a relatively high-turnover industry such as retail trade. The measure does, however, focus on performance by industry in a more detailed way than the other measures we have considered.

Since the early 1970s, the metropolitan area has experienced a steady erosion of employment in manufacturing and a corresponding rise in service industry employment (Chart 4). Today, these two sectors together account for about 43 percent of metropolitan area employment, a share that has remained relatively constant since the 1970s. Manufacturing, however, now comprises about 12 percent of that share—compared with more than 20 percent in the 1970s—while the service sector accounts for a little more than 30 percent—compared with about 20 percent in the 1960s. During the past decade, job losses in manufacturing have amounted to more than 500,000 jobs, or more than half of all net job declines in the area.⁹

The transition to service-oriented jobs is occurring nationwide. The shift within the region, however, has been somewhat more severe both in terms of the decline in manufacturing and the rise in services. In New York City, the manufacturing sector has shrunk to less than 10 percent of total employment, while service jobs have risen to more

Chart 4



A Shift from Manufacturing to Services

Note: Data for metropolitan area services are only available from 1975 to the present.

than 35 percent of total employment. (See Appendix A for a comparison of manufacturing and services employment.) Restructuring in the city now largely involves job shifting among nonmanufacturing industries.¹⁰

A comparison of jobs gained in services with jobs lost in manufacturing industries underscores the nature of the job opportunities created and eliminated over the past decade (Table 3). In the terminology of regional economics, both sectors have large "export-oriented" segments, meaning that many of the jobs and much of the income in the sector result from activity to meet demand outside of the metropolitan area market. For example, significant segments of the legal, engineering and management, educational, and business service industries are export-oriented. Moreover, roughly a third of the workers in health service industries-including workers in hospitals, doctors' offices, and health insurance providers-cater to a market beyond the metropolitan area (Lowenstein 1995). Of course, many segments of the health sector and the social service sector also meet demands within the metropolitan area.

In the New York metropolitan area, manufacturing losses have been largely concentrated in durable goods industries, including craft and production worker occupations. Job gains in services have spanned a variety of largely white-collar occupations, particularly in the managerial and administrative fields. Significantly, the majority of new service jobs are not as low paying as many people believe; with the exception of social service industries, the new jobs

Table 3

The Changing Composition of Regional Employment in Select Industries, 1985-95

Manufacturing Industry	Job Losses (Thousands)	Service Industry	Job Gains (Thousands)	
Chemicals	25.7	Health services	303.0	
Fabricated metals	35.9	Social services	138.1	
Industrial machinery	79.7	Business services	71.0	
Electrical machinery	119.2	Educational services	47.5	
Transportation equipment	29.1	Legal services	26.0	
		Engineering and management	17.0	

Source: U.S. Department of Labor.

Note: The table reports combined data for New York and New Jersey.

pay within 10 to 15 percent of the region's average.¹¹

RESTRUCTURING BEYOND SERVICES AND MANUFACTURING

More than half the labor force of the New York metropolitan area works outside of the manufacturing and service sectors, a share that has remained relatively constant for several decades. These workers are engaged in construction, trade, transportation and public utilities, FIRE, communications, and government. Although these industries have not typically been affected by restructuring, they underwent a number of large downsizings in the 1990s. The appearance of severe layoffs in these sectors has heightened concern in the metropolitan area about the breadth of restructuring and the effects on the local economy.

Despite the spread of restructuring, the share of employment accounted for by any single industry within nonmanufacturing and nonservice industries did not change significantly over the past decade (Table 4). Sizable job losses, however, did weaken area employment. Cumulative job losses during the 1989-92 downturn in the area's FIRE, transportation, communications, public utilities, and government sectors reached almost 150,000, about two-thirds of the job losses recorded in manufacturing (Chart 5). More troublesome, the job losses appear to be permanent—only the trade and the transportation, communications, and public utilities sectors have participated

Table 4

Tuble 1
EMPLOYMENT IN THE NEW YORK METROPOLITAN AREA:
Nonmanufacturing and Nonservice Industries
Percent of Total Employment

_	New York Metropolitan Area		 United States			
Industry	1985	1989	1995	1985	1989	1995
Construction	4.1	4.0	3.1	5.5	5.4	5.9
Trade	22.2	21.8	21.1	25.1	25.1	24.8
FIRE	10.9	11.5	11.1	6.4	6.5	6.1
Transportation, communications, and public utilities	6.7	6.3	6.6	5.7	5.5	5.5
Government	15.9	16.1	16.2	17.8	17.4	17.3
Total	59.8	59.7	58.1	60.5	59.9	58.6

Source: U.S. Department of Labor.

Note: FIRE=finance, insurance, and real estate.

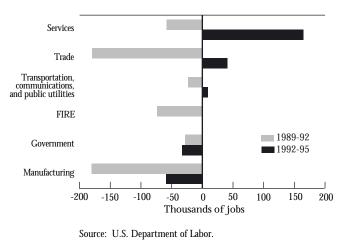
in the recovery of employment since 1992. Moreover, government job losses continued well into the recovery. Employment stagnation in the FIRE sector is also cause for concern; these export-oriented industries generate a significant amount of income for the region.

In New York City, only the brokerage component of the FIRE sector showed significant resilience in terms of job recovery. Employment in the city's banking and insurance industries declined relative to nationwide employment in these industries, and some of the activity in the brokerage sector shifted to New Jersey. Together, job losses in three sectors—FIRE; transportation, communications, and public utilities; and government—exceeded job losses in manufacturing. The public sector experienced major losses, on the order of 40,000 jobs, when the city government was downsized in response to structural budget problems. Government job losses persisted after the recovery began, while employment levels in the other sectors essentially stagnated. (See Appendix B for a comparison of job gains and losses in New York and New Jersey.)

A review of national job trends suggests that downsizings in several of these sectors paralleled nationwide trends. Each industry's location quotient, or the ratio of its share of employment in the New York metropolitan

Chart 5

Net Employment Change in the New York Metropolitan Area, 1989-95



Note: FIRE=finance, insurance, and real estate.

Table 5 Location Quotients for New York Metropolitan Area Industries

Industry	1985	1989	1995
Trade	.88	.86	.85
FIRE	1.66	1.75	1.81
Transportation, communications, and public utilities	1.17	1.15	1.17
Government	.88	.92	.92
Manufacturing	.79	.74	.67
Services	1.16	1.14	1.14

Source: U.S. Department of Labor

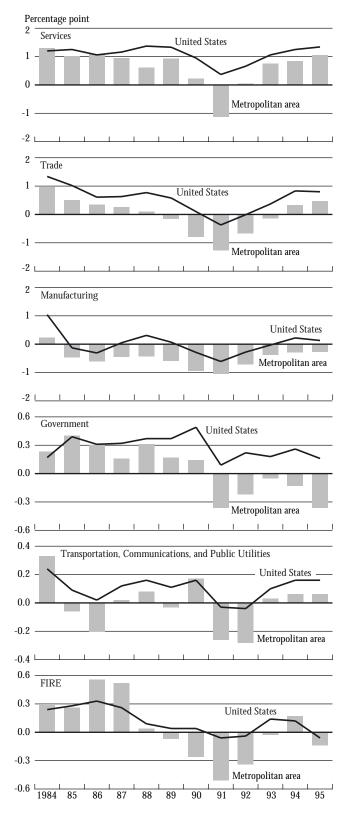
Notes: Location quotient is defined as the ratio of an industry's share of employment in the region to its share of employment in the nation. FIRE=finance, insurance, and real estate.

area to its share of employment in the nation, reveals similar declines in these industries at the national level. Declining quotients, which suggest that the industry's local job performance is falling behind its national performance, are observed only in manufacturing and trade (Table 5). For other nonmanufacturing and nonservice industries, the quotients are either stable or rising modestly.

THE OVERALL IMPACT OF RESTRUCTURING ON JOB GROWTH

Job growth in virtually all sectors of the metropolitan economy declined during the downturn of the early 1990s, and only the services and trade sectors have made any significant contribution to job growth since the 1992 recovery (Chart 6). The failure of most sectors in the area to bounce back from the downturn suggests that the downsizings accompanying the restructuring of the metropolitan economy have contributed to sluggish job growth. The biggest negative effect on the metropolitan area's overall job growth came from job losses in the manufacturing and government sectors. Together, the two sectors have lowered job growth by an average of 0.5 percentage point annually in each of the last three years. The drag on growth from the downsizings in the government sector began in 1991, with the largest negative contribution occurring in 1995, when declines took more than 0.3 percentage point off growth.

The performance of two other key metropolitan area sectors—transportation, communications, and public utilities and FIRE—has been mixed. The modest recovery



Contribution to Job Growth, Select Industries

Source: U.S. Department of Labor. Note: FIRE=finance, insurance, and real estate. in the transportation and public utilities sector from the relatively deep employment declines of 1991-92 resulted in a small positive impact on area job growth; job losses in the FIRE sector during 1990-92 had a significant negative impact on overall area growth; job declines shaved almost 0.6 percentage point off area growth in 1991, and 0.3 percentage point in 1992. Since 1992, the FIRE sector's contribution to job growth has fluctuated in a narrow range of plus or minus 0.2 percentage point.

The area's performance did diverge from that of the nation in the manufacturing and government sectors: Manufacturing nationwide recovered from the downturn of the early 1990s and contributed about 0.2 percentage point to growth in both 1994 and 1995. The government sector made consistently positive contributions of about 0.3 percentage point annually to the national recovery. Neither sector, however, has made a positive contribution to growth in the metropolitan area since 1991.

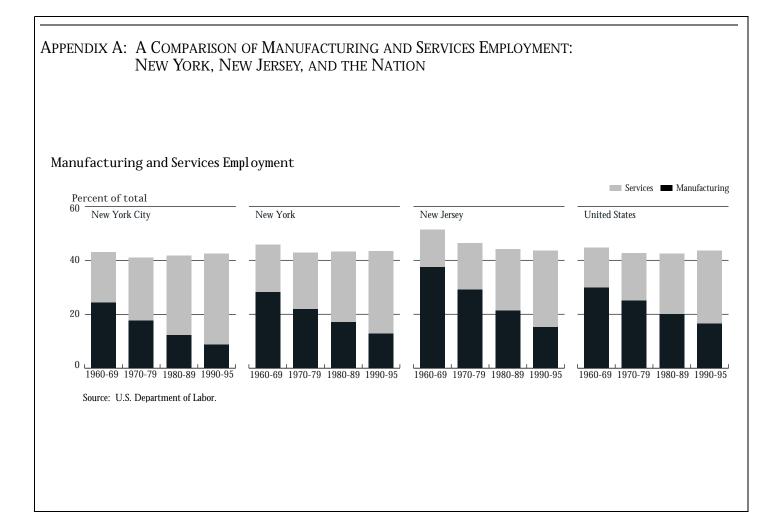
Although several sectors in the metropolitan area have recovered only sluggishly, an examination of nationwide growth rates suggests that the area's experiences are close to the norm. The trade and service sectors in the metropolitan area, like their national counterparts, contributed positively to job growth in 1994 and 1995. Despite the relative weakness of the FIRE sector in the New York metropolitan area for most of the 1990s, its contribution to area growth during the recovery has largely paralleled its contribution to national growth. The job losses that ballooned during the 1989-92 downturn, and thus affected the region much more than the nation, have largely eased, and the sector's recent performance in the metropolitan area is now moving in line with its performance in the nation as a whole. A look at the transportation, communications, and public utilities sector presents a similar picture: the 1991-92 gap between the area's growth contribution and the nation's has narrowed.

CONCLUSION

The rise in the number of permanently displaced workers in the metropolitan area during the 1990s reflects both the sharp downturn in economic activity and some pickup in the pace of industrial restructuring. Permanent displacements as a share of the work force roughly doubled from their rates of the 1980s, reaching an annual rate of about 1.5 percent. Although the long-term decline in manufacturing jobs remains at the center of the area's restructuring, downsizings and employment stagnation have also hit a number of the area's nonmanufacturing sectors, including FIRE, government, and transportation, communications, and public utilities. These local job trends, however, do not necessarily reflect a fundamental weakness in the regional economy because several of the trends also occurred nationwide. Even within the manufacturing sector, nationwide trends in health care provision and defense procurement have greatly affected the region.

Roughly 20 percent of the area's work force is employed in industries experiencing a rising risk of displacement. The downsizings have hindered the area's recovery from the 1989-92 downturn and have contributed to a relatively sharp decline in the area's labor force. Furthermore, research has shown that a significant recovery of labor force and employment growth from major job losses in an area can take several years. Nevertheless, despite the adverse consequences of industrial restructuring, policies that would slow or prevent the restructuring of area industries would likely fail to achieve their objectives. Industrial restructuring is essential to any dynamic market economy, and the restructured industries are more likely to prosper by building on an area's strengths. Policies that help smooth the transition to the new structure of jobs for both displaced workers and new entrants to the work force could be an effective complement to general growth policies. Training, in particular, is likely to improve the adaptability of the area's work force to structural change.

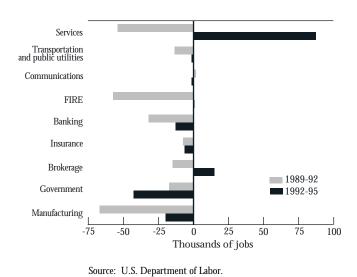
Policies that seek to limit the process of industrial restructuring in the area might also be ineffective at this point—some evidence suggests that restructuring of area industries is slowing. Government job losses have slowed and few major downsizings have been announced to date in 1996. The erosion of manufacturing will continue, but slow growth rather than downsizings is likely to characterize employment trends in the FIRE sector. Moreover, the region may benefit from one goal of restructuring—to improve the efficiency and profitability of local industries.



APPENDIX B: A COMPARISON OF EMPLOYMENT CHANGES: NEW YORK AND NEW JERSEY

Chart B1

Net Employment Change in New York City, 1989-95

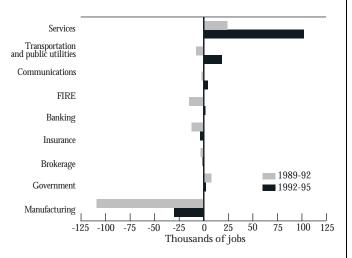


Notes: FIRE=finance, insurance, and real estate. Banking

encompasses depository and nondepository institutions.

Chart B3

Net Employment Change in New Jersey, 1989-95

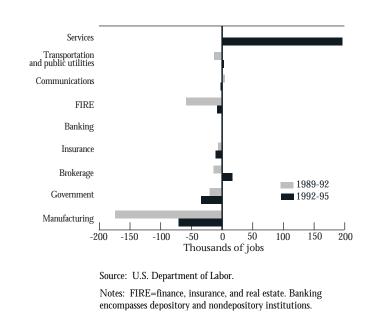


Source: U.S. Department of Labor.

Notes: FIRE=finance, insurance, and real estate. Banking is limited to depository institutions.

Chart B2

Net Employment Change in New York State, 1989-95



ENDNOTES

1. The availability of data determines the definition of the New York metropolitan area used in the different sections of this paper. In general, the New York metropolitan area is defined as New York City; Long Island; the counties north of New York City, including Westchester, Rockland, Dutchess and Putnam; and the northern New Jersey counties of Bergen, Passaic, Hudson, Essex, Somerset, Hunterdon, Middlesex, Monmouth, and Ocean. Where necessary, the analysis uses data covering all of New York State and New Jersey.

2. Unexpected employment developments, or "shocks," were found to be local in nature in the first half of the 1990s. National forces have played an important role in employment changes for the past several years. See McCarthy and Steindel (1997) and Kuttner and Sbordone (1997).

3. Data for displaced workers are not reported at the metropolitan-area level. The survey asks respondents to report job displacements over the past two years. The data are reported for five-year periods before 1991 and for the three-year period 1991-93.

4. Evidence that manufacturing firms tend to use recessions to conduct major downsizings is found in Davis, Haltiwanger, and Schuh (1996).

5. The layoff announcement data were tabulated by the firm Challenger, Gray, and Christmas, which tracks employment developments nationwide. To arrive at the metropolitan area layoff estimates, we used information on the location of the headquarters of firms conducting layoffs. Our definition of the metropolitan area here includes New York City, Long Island, the counties north of New York City, and all the counties in the northern half of New Jersey.

6. This finding is consistent with other evidence that state and local unemployment rates have a tendency to move toward a relatively stable structure over time.

7. The job loser category comes closest to the conventional notion of a displaced worker, although the category makes no distinction regarding the age or job tenure of the worker.

8. This pattern of labor market adjustment in the metropolitan area is captured by the model developed in Blanchard and Katz (1992).

9. Although recent job losses in manufacturing have been heavy, they are not without precedent; more than 600,000 jobs in the area were lost in the sharp economic decline of 1969-75.

10. The intraregional variation of job changes in the New York metropolitan area is discussed in Hughes and Seneca (1996).

11. We base the estimation of service wages on tabulations from the U.S. Bureau of the Census' Current Population Survey, March 1995.

The author wishes to thank Karen Aviles, Beethika Khan, Justin McCrary, Reagan Murray, and Jasminee Persuad for excellent research assistance.

REFERENCES

- Blanchard, Olivier, and Lawrence Katz. 1992. "Regional Evolutions." BROOKINGS PAPERS ON ECONOMIC ACTIVITY, no. 1.
- Davis, Steven, John C. Haltiwanger, and Scott Schuh. 1996. JOB CREATION AND JOB DESTRUCTION. Cambridge: MIT Press.
- *Farber, Henry.* 1993. "The Incidence and Costs of Job Loss: 1982-91." BROOKINGS PAPERS ON ECONOMIC ACTIVITY: MICROECONOMICS, no. 1.
- *Gardner, Jennifer.* 1995. "Worker Displacement: A Decade of Change." U.S. Department of Labor MONTHLY LABOR REVIEW, April.
- Hughes, James, and Joseph Seneca. 1996. "Regional Economic Long Waves: Employment Dynamics in the Tri-State Region." A RUTGERS REGIONAL REPORT. Rutgers University.
- *Jacobson, Louis, Robert LaLonde, and Daniel Sullivan.* 1995. "Long-Term Earnings Losses of High-Seniority Workers." Federal Reserve Bank of Chicago ECONOMIC PERSPECTIVES, November-December.

- *Kuttner, Kenneth N., and Argia M. Sbordone.* 1997. "Sources of New York Employment Fluctuations." Federal Reserve Bank of New York ECONOMIC POLICY REVIEW 3, no. 1.
- *Lowenstein, Ronnie.* 1995. "The Health Sector's Role in New York's Regional Economy." Federal Reserve Bank of New York CURRENT ISSUES IN ECONOMICS AND FINANCE 1, no. 5 (August).
- *McCarthy, Jonathan, and Charles Steindel.* 1997. "National and Regional Factors in the New York Metropolitan Economy." Federal Reserve Bank of New York ECONOMIC POLICY REVIEW 3, no. 1.
- *Podgursky, Michael.* 1992. "The Industrial Structure of Job Displacement: 1979-89." U.S. Department of Labor MONTHLY LABOR REVIEW, September.

The views expressed in this article 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. The Federal Reserve Bank of New York provides no warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability, or fitness for any particular purpose of any information contained in documents produced and provided by the Federal Reserve Bank of New York in any form or manner whatsoever.