The Philadelphia Area Economy: Faster Growth in the 1980s?

*John M. L. Gruenstein**

In the 1970s, economic growth in the Philadelphia area was slow, both absolutely and relative to the nation as a whole. Payroll employment growth, a commonly used measure of regional economic activity, lagged far behind the rest of the country. This, in turn, helped push the unemployment rate in the region significantly above the national average. By the end of the decade there were worries that the region was locked into a downward spiral of self-reinforcing slow growth, destined to be outperformed by booming areas elsewhere, especially in the South and West.

So far in the 1980s, the region's economy has shown a fairly small increase in absolute growth rates, but a very large increase relative to the nation. The large gap between annual average employment growth in the nation and in the region that characterized the 1970s has been greatly reduced. The region's unemployment rate has dipped below the U.S. average, and income is growing faster regionally than nationally.

*John M. L. Gruenstein is a Vice President and Economist in the Research Department at the Federal Reserve Bank of Philadelphia.

Whether the upturn in absolute and relative growth rates of regional economic indicators will persist is of concern to a variety of groups with interests in the region. Local bankers, for instance, want to keep an eye on potential future growth in loans and deposits, and on how this market will compare to others around the country. Real estate investors want to judge the level of new office and industrial development that is sustainable here, again in both absolute terms and relative to the rest of the nation. Policymakers want to be able to plan for changes in services and in the tax base, and to assess the effect of local economic development initiatives on local employment growth and unemployment rates. Future rates of growth in bank loans, deposits, office and industrial space, taxes, and public services are all related to future rates of growth of general regional economic indicators, such as employment.

Different explanations about what underlies the upturn lead to different expectations about its continuation. One possible explanation for the upturn in relative performance is the region's reaction to the longer period of recessions in the 1980s than in the 1970s. A second explanation often mentioned is the shift of employment from the slow-growing manufacturing sector to the fast-growing service sector in the region and the nation. Trying to assess the relative importance of these two factors gives some insight into the likely persistence of the turnaround in the region's relative economic performance.

REGIONAL ECONOMIC PERFORMANCE: THE 1970s VERSUS THE 1980s

The most striking aspect of the Philadelphia metropolitan area's economic performance in the 1980s is its sharp improvement relative to the nation since the 1970s. While the change in the absolute performance of the region between the two periods included some gains, a variety of commonly used economic indicators all showed much smaller gaps between the region and the nation in the 1980s.

Absolute Performance Mixed. Measures of both employment and income for the Philadelphia Primary Metropolitan Statistical Area (PMSA) indicate that there was faster growth in the 1980s than in the 1970s, although in some cases the change was not very large (Table 1).[1]

[1]The Philadelphia PMSA includes Philadelphia, Bucks, Chester, Delaware, and Montgomery counties in Pennsylvania and Burlington, Camden, and Gloucester counties in New Jersey.

TABLE 1

GROWTH IN THE PHILADELPHIA PMSA THE 1970s VERSUS THE 1980s

	Percentage Growth (Average Annual Rate) 1970s	1980s	Difference
Payroll Employment	+0.7	+0.8	+0.1
Residential Employment	+0.9	+1.2	+0.3
Real Personal Income	+1.0	+2.0	+1.0
Real Income Per Capita	+1.2	+1.7	+0.5
Unemployment Rate (level)	6.8	8.6	+1.8
Population[a]	-0.2	+0.3	+0.5

NOTE: For employment and unemployment, the 1980s include Jan. 1980 to Feb. 1985. Data are seasonally adjusted. For income, income per capita, and population, data are annual averages, and the 1980s include 1980 to 1983. The deflator for both Philadelphia income and U.S. income is the U.S. Consumer Price Index for all urban workers, which is not available separately for Philadelphia for 1970.

[a]Population is included in order to give information about the differences between income and income per capita, and employment and unemployment.

Two measures of regional employment flashed mildly positive signs in the first half of the 1980s: both payroll employment and residential employment recorded some acceleration in growth between the 1970s and the early 1980s. Employment is the summary indicator most commonly used by regional economists to measure the performance of metropolitan area economies. Employment is fairly well correlated with overall regional economic production (also termed Gross Regional Product, a statistic which is not consistently available for metropolitan areas), and employment is available on a much more timely basis than income.[2] The differences between the two employment measures stem from a variety of factors; a good part of the faster growth in residential employment in recent years probably reflects larger percentage gains in the number of self-employed people compared to those on company payrolls. (See MEASURING EMPLOYMENT: A JOB IS A JOB IS A JOB?)

Data on income growth gave a more favorable reading. Between 1980 and 1983, the last year for which data are available, total real personal income grew at a 2.0 percent annual rate—double the 1.0 percent rate of the prior decade. Total real income grew faster than employment principally because of faster growth in non-labor income—dividends, interest, rent, and transfer payments—rather than growth in wages and salaries. Per capita income growth also accelerated, but at a slower rate than total income, because of a rise in population in the 1980s compared to a loss in the 1970s.

Unemployment was up, a negative signal. Despite the fact that employment growth exceeded population growth, the 1980s marked a

[2]Currently Gross Regional Product figures are not available for the Philadelphia PMSA. In the past they were estimated by Wharton Econometric Forecasting Associates (quarterly), and by the City Economist for the City of Philadelphia (annually). Both sets of estimates were based primarily on payroll employment data.

MEASURING EMPLOYMENT: A JOB IS A JOB IS A JOB?

There are two generally available monthly employment series for the Philadelphia PMSA, *payroll employment* and *residential employment*. While these two series give about the same picture for the region's performance relative to the nation, they have significant differences in definition and coverage.

The payroll employment series (also referred to as the establishment or nonagricultural series) is derived from a monthly survey of a sample of business establishments conducted in conjunction with the state unemployment compensation program. The residential employment series (also referred to as the household survey) is derived from the monthly Current Population Survey of households. There are a number of conceptual and practical differences between the two series. Payroll employment does not include the self-employed, unpaid family workers, domestic workers, and workers absent from their jobs without pay. All are included in the residential series. Payroll employment measures employment by place of work, whereas residential employment measures it by place of residence, so commuters into or out of the metropolitan area would cause a divergence between the two series. Multiple jobholders are counted more than once in the payroll series, but only once in the residential series. Only workers over 16 are included in the residential series, but workers of all ages are included in the payroll series. Finally, since each series is derived from a sample, each is subject to variations in the particular sample drawn, which may be different from the entire group of business establishments and households. Since the samples for the two surveys are totally different, this sampling variation would also be different for the two groups.

For more information about the difference between the two series, see John F. Stinson, Jr., "Comparison of Nonagricultural Employment Estimates from Two Surveys," *Employment and Earnings*, March, 1984 and Gloria P. Green," Comparing Employment Estimates from Household and Payroll Surveys," *Monthly Labor Review*, December, 1969.

hefty increase in the local unemployment rate.[3] The rise was caused by a larger percentage of the population entering the labor force in the 1980s.

Broad Relative Improvement. Judging the Philadelphia area's economy in isolation gives a somewhat misleading picture of the region's underlying economic performance, however. As with all regions, the Philadelphia area's economic fate is linked closely to that of the national economy. One linkage is through demand for locally produced products. According to estimates by Professor Anita Summers of the Wharton School of the University of Pennsylvania, almost 90 percent of this area's manufacturing output and 25 percent of its nonmanufacturing output is sold outside the region, fairly typical figures for regions of this size.[4] Because of this strong demand-side linkage, the region's economy is greatly affected by national business cycles. Other examples of linkages are through national demographic shifts and national government policies, both of which have had strong impacts on unemployment rates and the growth of different income components.[5] Looking at the Philadelphia area economy's performance relative to the national economy's helps separate out national from local economic factors and shows a very clear picture of improvement in the early 1980s.

A common way to compare the region's performance to the nation's over time is to look at the gap—that is, the difference—between the national rate of growth of some measure of economic activity, like employment or income, and the regional growth rate for the same indicator.[6] Improvement in the region's economic performance relative to the nation can be defined as a reduction in the resulting gap, if it was negative to begin with, or a change from a negative to a positive gap. Using this definition, all of the commonly used broad economic indicators relay the same message: substantial relative improvement in the Philadelphia area's economy between the 1970s and the 1980s (Table 2).

The payroll employment growth gap between the Philadelphia metropolitan area and the nation has shrunk from 1.8 percentage points per year in the 1970s to only 0.5 percentage points per year during the last five years. Residential employment showed virtually the same improvement relative to the nation as payroll employment.

Income showed even larger gains relative to the nation than its absolute gains over the period. Total real income grew more slowly in the region than in the nation in the 1970s, but in the early 1980s the gap reversed, with the Philadelphia area outstripping the U.S. The change in relative terms was a gain of 1.7 percentage points, compared to an absolute improvement of 1.0. Per capita income also reversed a negative gap, to post a 1.1 percentage point per year improvement relative to the nation, about double its

[3]As with employment data, there is more than one source for unemployment data. The series presented in the text is an annual average of Current Population Survey data, which is the basis for the U.S. rate; this is generally regarded as the most accurate figure for unemployment on an annual basis. A second series, which is prepared monthly by the Pennsylvania State Office of Employment Security from a survey of firms, shows an even more dramatic regional turnaround, with the Philadelphia rate falling below the U.S. rate at the very beginning of the 1980s.

[4]See Anita A. Summers and Thomas F. Luce, *Economic Report on the Philadelphia Metropolitan Area, 1985* (Philadelphia: University of Pennsylvania Press, 1985).

[5]Thus, national comparisons can help adjust for changes over time in the way some regional economic indicators reflect actual underlying conditions. High unemployment rates in many regions of the U.S. over the last ten years, for example, probably reflect much more than specifically regional economic conditions; rather, high rates are related to a host of nationwide factors, including changes in the age structure of the population, increased participation of women in the labor force, changes in regulations regarding unemployment compensation and welfare, and cultural attitudes. For further discussion, see Norman Barrens, "Have Employment Patterns in Recessions Changed?", *Monthly Labor Review*, February, 1981, pp. 15-28.

[6]Ratios of growth rates have been calculated for the variables examined in this study and the results show a picture similar to those for differences.

TABLE 2
PHILADELPHIA PMSA—U.S. REGIONAL GAP

	Percentage Change (Average Annual Rate)		Difference
	1970s	1980s	
Payroll Employment	-1.8	-0.5	+1.3
Residential Employment	-1.4	-0.2	+1.2
Real Personal Income	-1.4	+0.3	+1.7
Real Income Per Capita	-0.1	+1.0	+1.1
Unemployment Rate (level)	+0.6	+0.3	-0.3
Population	-1.3	-0.7	+0.6

NOTE: See Table 1.

improvement in absolute terms.

Unemployment also showed a large relative improvement in the region, even though in an absolute sense it worsened. During the latter half of the 1970s, the region's unemployment rate remained suspended above the U.S. rate—by as much as 2 percentage points toward the end of the period. This positive gap persisted in 1980 and 1981, but in 1982 the situation turned around dramatically. Over the past three years, the Philadelphia region's unemployment rate has been lower than the nation's, with the difference reaching almost a full percentage point by 1984. Overall, the *average* gap between the Philadelphia area and U.S. unemployment rates shrank from 0.6 percentage points in the 1970s to half that size during the first five years of the current decade.

These figures suggest that Philadelphia's performance improved relative to the nation for all the commonly used broad indicators of economic performance in the first half of the 1980s. But is the improvement likely to persist? The answer to that question hinges on understanding the source of the improvement. Two of the most prominent explanations involve the region's reaction to the national business cycle and the shift of employment from manufacturing to services. And each leads to different expectations about the future.

PHILADELPHIA'S REACTION TO BUSINESS CYCLES

Any region's economy is likely to fluctuate with the nation's—more specifically, the *absolute* rate of economic growth will rise and fall over the business cycle, almost invariably moving in the same direction as national growth. What is less obvious is that the pattern of *relative* performance—the difference between a region's rate of growth and the nation's—may also vary systemically between expansions and contractions.

The pattern of the Philadelphia area's relative rate of growth over the national business cycle could account for the region's relative improvement in the early 1980s. Somewhat paradoxically, while the longer period of recessions in the 1980s than in the 1970s probably depressed the region's *absolute* performance, it could actually have contributed to the area's improved performance *relative to the nation*. This is because the Philadelphia area's economic structure is such that historically the gap between national and regional economic growth has been smaller during recessions than during expansions.

Smaller Gaps in Recessions. The best commonly available indicator for investigating the cyclical pattern of a metropolitan area's relative economic performance is payroll employment.[7]

[7] Employment data are available monthly, allowing a more precise division of the period under study into business cycles than annual data such as income, and are also much more up-to-date than income data for metropolitan areas. Payroll employment data are also available as a consistent series for a much longer time period than residential employment and unemployment data.

In the Philadelphia metropolitan area this indicator has shown a very consistent pattern relative to the nation (Table 3). The gap between payroll employment growth in the region and the nation narrows and sometimes even reverses—that is, turns positive—during recessions or periods of slow national growth. During expansions, however, the gap widens.[8] In fact between 1958 and 1985, the gap between employment growth in the Philadelphia region and the nation has been larger (more negative) during *any* expansion compared to *any* recession.

TABLE 3
PAYROLL EMPLOYMENT CHANGE EXPANSIONS AND RECESSIONS, 1958-1984
(Average Annual Rate)

Recessions	Date	Philadelphia — U.S.
1960s	4/60 — 2/61	+0.8%
1970s	12/69 — 11/70	-0.9%
	11/73 — 3/75	-0.6%
1980s	1/80 — 7/80	+0.8%
	7/81 — 11/82	+0.9%
Expansions	**Date**	**Philadelphia — U.S.**
1960s	4/58 — 4/60	-1.8%
	2/61 — 12/69	-1.0%
1970s	11/70 — 11/73	-2.3%
	3/75 — 1/80	-1.9%
1980s	7/70 — 7/81	-0.9%
	11/82 — 2/85	-1.3%

The region's pattern of relative performance over the business cycle—smaller gaps in recessions and larger gaps in expansions—probably stems from several factors. For one thing, Philadelphia's economy is very diversified, and therefore more resistant to swings in particular industries. In addition the Philadelphia area's economy is probably better at retaining jobs in existing firms than it is at generating jobs through expansions of area firms, openings of new branch plants, and start-ups of new firms.[9] Since more job generation takes place nationally during expansions than recessions, this would tend to enlarge the employment growth gap during expansions and reduce it during recessions.[10]

Longer Recessions Key to Relative Improvement? Whatever the reason for the Philadelphia

[8]This is equivalent to saying that employment in the Philadelphia region is more stable over the business cycle than national employment.

[9]For a general discussion of this issue, see John M.L. Gruenstein, "Targeting High Tech in the Delaware Valley", this *Business Review*, May-June, 1984.

[10]See David Birch, *The Job Generation Process*, M.I.T. Program on Neighborhood and Regional Change, Final Report to Economic Development Administration, 1979. Birch finds that, in general, the difference between fast- and slow-growing areas is that the former have a greater rate of new job creation through expansions of existing firms and openings of new firms and branch plants. Birch has not looked explicitly at business cycle behavior of different places, but since more job generation takes place during expansions, his results would seem to imply that the employment growth gap between fast- and slow-growing places should be larger during expansions than during contractions. Empirical studies do not show this pattern to be a characteristic of slow-growing areas generally, however, even though it does clearly describe Philadelphia's reaction to business cycles. Two somewhat different sets of results are presented in Janet Rothenberg Pack, *Regional Growth: Historic Perspective* (Washington, D.C.: Advisory Council on Intergovernmental Relations, 1980) and Marie Howland, "The Business Cycle and Long-Run Regional Growth" in William C. Wheaton, ed., *Interregional Movements and Regional Growth* (Washington, D.C.: Urban Institute, 1979).

area's smaller employment growth gaps during recessions than during expansions, this clear-cut cyclical pattern may provide the key to the area's improved relative performance during the 1980s. About 36 percent of the time between January 1980 and February 1985 was spent in recession, when the gap usually narrows or reverses. Only 22 percent of the 1970s was spent in recession, however. So Philadelphia's relative improvement in the early 1980s could be due just to the unfortunate fact that substantially more time than in the 1970s was spent in recessions, periods when the region's relative economic performance generally improves.

To the extent that the relative improvement of the 1980s was a result of longer periods of national recession, Philadelphia's relative economic improvement cannot be interpreted as a change for the better in the underlying structure of the local economy. Rather it would represent an unchanged response to external forces. If the second half of the 1980s were to be marked by mostly expansionary periods, this would tend to weaken the area's relative performance once again. Further, this cause of relative improvement presents a kind of Catch-22—a better relative performance due solely to longer recessions would almost certainly imply a worse absolute performance.

If this explanation holds, then we should find that the employment growth gaps of the region *during* the expansions of the 1980s were about the same as during the expansions of the 1970s, and similarly for recessions. But, in fact, the gaps for the expansions of the 1980s were uniformly smaller. The largest gap during the two expansions of the 1980s, -1.3 percent, was smaller than the smallest gap during the 1970s, -1.9 percent. Comparing recessions from both periods shows an even more striking pattern. In both recessions of the 1970s the Philadelphia region lost jobs at a faster rate than the nation. In the 1980s the opposite occurred; the Philadelphia region outperformed the nation in the sense that it lost jobs more slowly during recessions.

To help settle the issue of how much the longer period of recessions in the 1980s added to the Philadelphia area's relative improvement, we can ask a hypothetical question. What would the relative growth rate of employment have been in the early 1980s if the percentage of time spent in recession had been as low as that of the 1970s? The total employment growth gap for each period is the sum of the gaps during the expansions and recessions of that period, weighted according to their length. So the calculation is made by combining the growth gaps of the 1980s expansions and recessions with the weights of the 1970s. This calculation shows that most of the reduction in the employment growth gap between the two periods would have occurred even if the total time spent in recession in the 1980s had been the same as in the 1970s. The longer period of recessions in the 1980s accounts for less than 25 percent of the reduction in the gap.[11]

Thus, most of the closure of the relative employment growth gap was due to better relative performance during both expansions and recessions in the early 1980s, rather than just the longer period of recessions characterizing that period. This indicates that the relative improvement is the result of fundamental changes in the struc-

[11]To calculate how much the longer period of recessions of the 1980s contributed to the improved relative performance of the region, assume that the percentage of time spent in recessions in the early 1980s was 22 percent, as it was in the 1970s, rather than the actual figure of 36 percent. Apply this lower percentage to the average employment growth gap of the 1980s during recessions, which was +0.9 percent. Make a similar calculation for the expansions, using the higher percentage of time spent in the expansions of the 1970s, 78 percent, applied to the average employment growth gap during the expansions of the 1980s, -1.1 percent. Add the two results. The sum, -0.8 percent, is the employment growth gap for the 1980s that would have obtained if the percentage of time spent in recession in the early 1980s had been as low as it was in the 1970s. The actual employment growth gap for the early 1980s was -0.5, which is 0.3 percentage points smaller than the -0.8 calculated. Since the actual reduction in the gap from the 1970s to the 1980s was 1.3 percentage points, the longer period of recession in the 1980s accounted for 23 percent (0.3/1.3) of the reduction in the gap.

ture of the Philadelphia area's economy relative to the nation, which argues for a greater likelihood that the relative improvement will persist.

SHIFT TO SERVICES

One fundamental change that has often been advanced as an explanation for the region's relative improvement is the shift of employment from goods-producing industries to services-producing industries. This is a trend that has been occurring nationally and regionally, and the shift has been more marked in the Philadelphia area.

Changing Industrial Composition. Between 1970 and 1980 the national and regional shares of employment declined for goods-producing industries—generally defined to include construction, manufacturing, and transportation, communications, and public utilities—and rose for services-producing industries—generally defined to include wholesale and retail trade, finance, insurance, and real estate, general services, and government (Table 4). The sharpest changes were the drop in the share of manufacturing employment and the increase in the share of employment in general services; the latter includes such industries as health, higher education, business services, legal services, personal services, repair services, and social services.

The changes in shares for the U.S. came about because of much faster growth in services than in manufacturing during the 1970s, whereas the change in shares in Philadelphia reflected a large absolute loss of manufacturing jobs combined with gains in the service sectors (Table 5). In the early 1980s, Philadelphia maintained a relatively unchanged growth pattern, in absolute terms, except for increases in the construction and trade sectors and a drop in the government sector. The U.S., however, changed from a gainer to a loser of jobs in all the goods-producing sectors, at the same time that employment in all the services-producing sectors slowed sharply.

The shift of employment shares out of manufacturing and into services in the 1970s, both

TABLE 4

SECTORAL COMPOSITION OF PHILADELPHIA AND THE U.S. HAS SHIFTED TOWARD SERVICES

SECTOR	EMPLOYMENT SHARES					
	Philadelphia PMSA			U.S.		
	1970	1980	1985	1970	1980	1985
Construction	4.5	4.1	4.1	5.1	5.1	4.7
Manufacturing	31.7	23.3	19.9	28.4	23.3	20.4
Transportation, Communications, and Public Utilities	5.9	5.2	4.8	6.4	5.8	5.4
Trade	20.1	21.7	23.0	21.2	22.7	23.8
Finance, Insurance, and Real Estate	5.6	6.5	6.9	5.1	5.7	6.1
General Services	17.8	23.5	27.0	16.2	19.5	22.4
Government	14.5	15.7	14.4	17.5	17.9	17.3

NOTE: Data are seasonally adjusted for Jan. 1970, Jan. 1980, and Feb. 1985. Mining is excluded for the U.S. For the Philadelphia PMSA, the mining sector is small and is included in General Services.

nationally and regionally, by itself accounted for some of the narrowing of the total employment growth gap in the 1980s. The growth gap for the services sector was smaller than the manufacturing growth gap—indeed, services was the sector with the smallest gap. Because of this, the shift to services essentially increased the weight given to the smallest gap included in the total employment growth gap. The effect of this shift, then, was to narrow the total employment growth gap, and this would have been the case even if the difference between the sectoral growth rates—that is, the sectoral growth gaps—had remained unchanged.[12]

Most of Improvement Due to Smaller Sectoral Growth Gaps. Although the shift from manufacturing to services explains part of the relative improvement of the regional economy, most is explained by faster relative rates of growth of the individual sectors in the 1980s. The pattern of sectoral growth gaps (Table 6, p. 22) shows clearly the large impact of faster sectoral growth on the reduction in the total employment growth gap in the early 1980s. The growth rate gaps of all major sectors except government have declined by substantial amounts over the past five years. More than 80 percent of the overall reduction in the total employment growth gap in the

[12]The exact formula for the total employment gap can be expressed as the weighted (by the regional percentage of employment in each sector) sum of the differences between the regional sectoral growth rates and *weighted* national sectoral growth rates, where the weight on each national sectoral growth rate is the ratio of the national percentage of employment in that sector to the regional percentage of employment in that sector. The greater relative shift of employment from manufacturing to services in the region than in the nation, therefore, would have caused a further reduction in the total employment growth gap, over and above that caused by the general shift to services in both the region and the nation. Because the percentage composition of employment in the region is close to the nation's, however, the simple difference between the regional and national growth rates provides a close approximation to the more precisely defined gap.

TABLE 5

GROWTH RATES OF EMPLOYMENT BY SECTOR

(Average Annual Rate)

Sector	Philadelphia PMSA		U.S.	
	1970s	1980s	1970s	1980s
Construction	-0.1	+0.5	+2.6	-0.2
Manufacturing	-2.3	-2.3	+0.4	-1.4
Transportation, Communications, and Public Utilities	-0.5	-0.7	+1.4	-0.1
Trade	+1.5	+1.9	+3.1	+2.2
Finance, Insurance, and Real Estate	+2.2	+2.0	+3.5	+2.6
General Services	+3.6	+3.5	+4.4	+3.9
Government	+1.5	-0.9	+2.7	+0.5

NOTE: Data are seasonally adjusted for Jan. 1970, Jan. 1980, and Feb. 1985.

TABLE 6

ALL PRIVATE SECTORS SHOW SMALLER EMPLOYMENT GROWTH GAPS IN THE 1980s

Sector	Employment Growth Gap Philadelphia — U.S. 1970s	1980s*	Difference
Construction	-2.7	+0.7	+3.4
Manufacturing	-2.8	-0.9	+1.9
Transportation, Communications, and Public Utilities	-1.9	-0.6	+1.3
Trade	-1.6	-0.3	+1.3
Finance, Insurance, and Real Estate	-1.3	-0.6	+0.7
General Services	-0.8	-0.4	+0.4
Government	-1.2	-1.3	-0.1

*Jan. 80—Feb. 85.

1980s is accounted for by faster relative growth of individual sectors, and less than 20 percent is due simply to the shift from goods-producing to services-producing sectors of the 1970s.[13]

Given their relative contribution, how should the two components of the reduction in the total employment growth gap—the shift to sectors with smaller gaps, like the services, and the reduction in the sectoral growth gaps themselves—be viewed with regard to their impact on future relative performance of the region's economy?

The shift of employment towards services represents a fundamental change in the area's and the nation's economic structure that is unlikely to be greatly reversed. If it is not, and as long as the individual sectoral gaps remain about the same, this prior shift would continue to contribute to a permanent narrowing of the employment growth difference between the region and the nation, but the contribution would be limited.

The fact that most of the Philadelphia area economy's relative improvement in the early 1980s was due to smaller gaps for almost all sectors of the economy, rather than a shift from one sector to another, is a cause for greater optimism about the region's future relative performance. It implies that there is no necessary limit on how far the total gap could close, or even reverse. And the across-the-board nature of the sectoral improvement would appear to point to general factors at work rather than special factors that might be more easily reversed.

IN SUM

During the early 1980s, the absolute performance of the Philadelphia area economy strengthened somewhat (except for a rise in the unemployment rate), despite a substantial slowdown in the growth rates of employment and income at the national level. The result was a very significant improvement in the Philadelphia region's

[13]This calculation is made by taking the weighted sum of the 1980 Philadelphia sectoral growth rates, using *1970* employment shares as weights, and subtracting from it a similar weighted sum calculated for the U.S. The reduction in the total employment growth gap calculated this way is what would have occurred if no shift of employment to services-producing sectors had taken place in either Philadelphia or the nation between 1970 and 1980. This hypothetical reduction is less than 20 percent of the actual reduction.

A further calculation has been done to assess the effect of simultaneously assigning the sectoral weights and the length of recessions their 1970 values. This shows that combining the two effects simultaneously is approximately the same as adding the two effects together.

economic performance relative to the nation. Although it is normal for the region's relative performance to improve during times of slow national economic growth, the extent of the improvement indicated that there were more fundamental forces at work than merely longer periods of recessions in the nation. Furthermore, even though the relative improvement was related to the shift of employment from goods-producing sectors to services-producing sectors, which entailed large absolute declines in manufacturing employment in the region during the 1970s, most of the relative improvement of the 1980s has been the result of smaller employment growth gaps for all private sectors of the local economy. The combined effects of the shift to services and longer recessions in the 1980s account for no more than 45 percent of the reduction in the employment growth gap between Philadelphia and the nation.

Thus, the trends of the past five years are a source of optimism that the economic performance of the region can continue to be close to that of the nation through the end of the decade. Ten years ago, Philadelphia would have been ranked in a low position relative to the rest of the nation in terms of economic growth. Based on experience so far in the 1980s, this would no longer appear to be the case. So businesses and investors scanning the country for relatively fast-growing markets should have more reason than before to conclude that, on the whole, they'd rather be in Philadelphia.

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