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**NYC's LABOR FORCE
AND THE SERVICE ECONOMY:
How Good Is the Fit?**



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A SKILLS MISMATCH IN NEW YORK'S LABOR MARKET?

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The widely accepted job-skills mismatch theory and the conventional wisdom regarding local manufacturing decline offer poor guidance in addressing the economic problems confronting large portions of the city's low-income population. The conclusions presented here will facilitate more effective targeting of local economic development efforts.

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by
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Editor's note: *In a 1977 NEW YORK AFFAIRS article (Vol. 4, No. 1) by Charles Brecher, "The Mismatch Misunderstanding," the point was made that the job-skills mismatch theory could not explain central-city black unemployment problems. Rather, black unemployment was attributed to managers' prejudice and the tendency to move operations to areas with greater shares of white workers. The following article revisits the mismatch hypothesis—which still has many proponents—and finds it an unreliable guide to understanding and rectifying the problems of dislocated or unemployed workers in general.*

Research on urban poverty has generated a plethora of explanations, but none so compelling or long-lived as the idea of a mismatch between the skills of

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central-city residents and the requirements of urban employers. The mismatch argument is essentially a story about the passing of the city of production and its consequences for the urban poor: the industrial city grew because it possessed labor and what it demanded of its labor was willing hands and strong muscles—not diplomas or technical expertise. Immigrant-dominated industries like clothing, longshoring or construction asked for nothing more than a displaced artisan or peasant willing to subject himself to the hardships and dangers of industrial work. Neither literacy, language, nor technical ability counted for much in the eyes of urban employers since the few necessary skills could be acquired in “hands-on” fashion on the job.

However, manufacturing, as the mismatch story has it, is no longer a central-city phenomenon and what remains of the blue-collar complex suffers a steady leakage of jobs. For the specialized smokestack cities there is seemingly no replacement of industrial work, but the largest urban agglomerations, in particular New York City, have become host to a different set of activities centered on the processing of information and the transaction of high-level business deals. These advanced services are drawn to the large city because it alone offers the massive corps of lawyers, accountants, and financial analysts on which an international postindustrial business depends. For those city residents without specialized knowledge or extensive technical training, however, the new urban economy has little use. In the equation between the city’s economic function and its economic base, the unlettered, no matter how willing, have irrevocably lost out.

This story about the transition from goods production to services provides the most common and widely accepted diagnosis of the economic ills of our town. New York’s most serious woes, to be sure, appear now to be past us, but the nature of the city’s evolving economic base seems no less worrisome for the prospects of its low-income residents. In the local context, three developments—a persistently high rate of unemployment; a continued decline in manufacturing employment; and replacement of lower-level clerical functionaries by computers—suggest that the wave of dislocation is far from over. As Bureau of Labor Statistics Regional Commissioner Samuel Ehrenhalt noted in one of his periodic reviews of the local economy, presented in April 1982:

Projections issued recently by the New York State Department of Labor on average annual job openings for New York City over the next several years indicate that over 70 percent of the 286,000 annual job openings in the city will be white-collar with 30 percent in professional and managerial occupations characterized by substantial knowledge requirements. Such jobs place a premium on the ability to deal with information, computer, and communications skills rather than manual skills and tools. With the knowledge content of jobs increasingly significant, how does this match with New York City’s labor supply?

While New York City has a large and well qualified labor force, significant elements find themselves increasingly disadvantaged in functioning in New York City’s emerging white-collar, communications and computer-oriented, knowledge-using economy.

Despite the mismatch theory's now respectable career and the consensus that has crystallized around it, empirical support for the mismatch hypothesis is surprisingly weak. Its power stems largely from its plausibility; hence its basic assumptions about manufacturing decline and changing skill levels and their effects on low-income residents have never been carefully scrutinized. As we shall show, the emphasis on manufacturing decline is misplaced and the erosion of local manufacturing bears little relation to the considerable economic problems that confront large portions of New York's low-income population. Further, we will argue that the evidence on the transformation of the city's economy, rather than linking the growth of services to the disappearance of New York's bottom-tier jobs, shows that the service economy has been a continual source of new, low-level positions.

The Context of the Mismatch

The details of the postwar transformation of the city's economic base are well documented and therefore only a short summary will be presented here. New York shifted from goods to services earlier than the rest of the nation and the rapid build-up of its white-collar sector pushed employment to its historic peak of 3.8 million in 1969.¹ For the next seven years the local economy reeled under the joint impact of intensified international competition, the automation of low-level service jobs, and an extended stock market bust, with the result that employment fell about 15 percent by 1977. No sector of the economy escaped from the crisis unscathed, but the most severe hemorrhaging took place in manufacturing. Since 1977 the city's economic fortunes have improved. About 162,000 new jobs were generated between 1977 and 1983, thanks almost entirely to the expansion of a greatly reinvigorated business and professional-service sector. Furthermore, the 1981-82 recession, with its profoundly depressing impact on the industrial heartland, left New York relatively unscathed.

Nonetheless, there are many observers who doubt that these economic gains, welcome as they might be, will redound to the benefit of the city's poor. Growth appears to be concentrated among jobs with relatively high skills; most of the job gains have taken place in Manhattan with minimal overflow to the outer boroughs; and many of the newly created jobs have apparently been filled by upper-income commuters rather than New York City residents. Moreover, the recovery seems unbalanced, with major sectors of the city's economy—retailing, wholesaling and manufacturing, in particular—continuing their earlier downward slide. Though the pace of industrial decline has moderated somewhat since the crisis bottomed-out in the late 1970s, the 1981-82 recession produced a sizable erosion in production jobs.

¹Data on employment and unemployment in New York City is from Samuel Ehrenhalt, "The Outlook for the New York City Labor Market" (speech delivered to the Fifteenth Annual Institute on the Challenges of the Changing Economy of New York City), April 28, 1982. Updated data for 1983 and 1984 were provided by the New York Regional Office of the Bureau of Labor Statistics.

Indicators of persistent distress show up in unemployment, and in labor force participation rates that have never returned to their pre-1970 levels. As late as February 1984, joblessness was at the 9.2-percent level. (Labor force participation means that a person is either working or looking for work.) With the country's economy on the mend, the local unemployment rate, which had momentarily slipped beneath the national average during the trough of the recession, now again exceeds the national rate just as it has for the past ten years. Labor force participation rates for minority males, which lag behind those for the nation at large, have also maintained a steady downward slide. Personal income for New York City residents has also fallen relative to the nation. The local manufacturing sector—which was never high paying in contrast to the heavy industries of the smokestack cities—has seen its wages decline sharply relative to those in the rest of the country.

Still more disturbing is the situation among youth. Teenage unemployment soared from about 10 percent in 1969, when it was lower than the national youth unemployment rate, to over 30 percent in 1976, and since then the rate of youth joblessness has yet to register any substantial movement downward. Though only one-third of New York's teenagers is in the labor force, in comparison with over one-half nationwide, local teenage unemployment rates considerably exceed the national average. True, New York does not quite deserve the sobriquet of "youth unemployment capital of the United States," yet it remains the case that the gravity of its youth unemployment situation is surpassed by only a handful of severely depressed cities.

New Skills Versus Old:

In the conventional wisdom, these troubled workers find themselves jobless because labor demands in manufacturing have so radically declined and skill requirements in the white-collar sector bar the route to entry. What type of skills are demanded by the new advanced service economy?

According to the mismatch hypothesis, services demand higher-level capabilities than does industry—a central point to which we shall return shortly. There is, however, another possibility: namely that services require skills *different* from those of the manufacturing jobs that they replaced, not necessarily higher-level skills. Given the nature of New York's principal manufacturing industries, in which the demand for their final products was highly uncertain, a large proportion of blue-collar jobs fell into the craft category. Many of the jobs officially classified as semiskilled—for example, those of sewing machine operators in the dress and coat trades—actually required considerable manual proficiency. Skill can best be measured in terms of time needed to learn how to execute a series of tasks: in this respect, printers, machinists, and sewing machine operators spent more time accumulating their skills than does a word processing operator today.

In fact, the expansion of office activities over the past 30 years has bred a massive corps of low-skilled and generally poorly paid functionaries who have recorded, processed, and stored the information created by higher-level deal makers and analysts. Such low-skilled activities have burgeoned because the growing demand for services has greatly outpaced the ability of white-collar employers to produce

commensurate increases in productivity. But the prospects for low-level service employment are now in doubt because the advent of microtechnology may be altering the labor needs of office-sector employers.

The impact of this new computerized technology is influenced by the structure of clerical jobs. Office jobs fall into two categories: those involving the creation of information, and those involving the processing or communication of information. In most cases, low-level white-collar workers process or record information on the basis of sets of instructions or codes. Since workers performing these jobs are "programmed" to carry out their tasks, these same activities lend themselves to automation. Thus, with the diffusion of the new technology, computers are taking over processing and communications functions. As office automation takes hold, information will increasingly be fed into the computer and the computer will then refer non-standardized problems to "creative" decision makers and then process the remaining standardized jobs itself.

Thus, computerization hinges on the potential for standardization. However, which tasks can be standardized and where they stand in the job hierarchy is indeterminate. As the conventional scenario suggests, computerization is likely to attack the most repetitive of current office practices. But computers also have the capacity to routinize skilled and managerial jobs involving accumulated knowledge and experience, thus converting high-level to low-level tasks. The rate of technological change is also a factor—since as the technology in a computer-related function settles down, the potential for the standardization and skill-level reduction of the activity increases.

This indeterminacy is reflected in the views of office managers elicited by the Labor Market Information Network (1981) when it convened a task force on "Clerical Occupations: the Office of the Future." Most participants agreed "that there will be major changes in job content, in both the skills demanded at different levels and in the articulation between these levels," but no agreement was reached on the nature of those changes. According to the task force's report, "the seeming majority viewpoint was that for the present it is not an either/or situation. Some jobs will be deskilled and others will be enlarged."

Certainly employment in many relatively low-skilled occupations in the white-collar sector is declining, or disappearing altogether. Looking at six office industries—banking, credit agencies, securities, insurance, business services, and miscellaneous services—Matthew Drennan found a pattern of decline between 1970 and 1978 in certain back-office clerical occupations susceptible to standardization. Employment shrank significantly in six traditional low-level occupations (bookkeeping machine operator, calculator, keypunch operator, tabulator, and telephone and telegraph operator). Drennan further states in his report, "Implications for Computer and Communications Technology for Less Skilled Service Employment Opportunities":

Viewing the organization as a pyramid of jobs with a very broad base of clerical jobs ten years ago, one interviewee indicated that on-going computerization of office work was narrowing the base of the pyramid and even eliminating some of the clerical layers. Others assented to that view.

Nonetheless, Drennan's analysis also points to directly opposing trends. While some clerical occupations declined, growth in other clerical functions offset the loss. The increase in computer operators alone exceeded the loss in these six occupations by more than 25 percent. Though some computer operators are highly skilled, Drennan's interviews with managers indicate that other computer-operating jobs need few skills. With interactive systems, extensive prompting can be utilized so that relatively low-skilled users can perform functions with a minimum of training and yet with low error rates. Where such systems have been introduced, Drennan reports, training requirements have been greatly reduced. The high levels of turnover that are generally associated with clerical labor persist after computerization, further indicating that entry requirements are low. In underwriting, a traditionally skilled function, property casualty firms with interactive systems have succeeded in substituting less-skilled workers. Furthermore, Drennan also predicts that in the future, computers will begin to be able to replace managers and professionals, thereby mitigating the relative upward shift of required skills.

Within the white-collar sector, but outside office services, technological change has in some cases led to substantial skill downgrading. The department store industry has made a wholesale transition towards a less-skilled labor force, in part by investing heavily in electronic data-processing equipment, in part by moving decision-making responsibility further up in the management hierarchy, and in part by substituting advertising for the sales staff, leaving low-skilled store employees to simply ring up the purchases. As Thierry Noyelle has shown in his study of Macy's, sophisticated point-of-sales equipment has reduced the demand for bookkeepers and other clerical workers by improving inventory accounting. But this has also broken down the previously low-level managerial function of communicating between the stock and inventory departments and the sales departments. Similarly, advertising has allowed stores to substitute unskilled "order takers," many of whom are part-time employees with low labor force attachment, for career salespersons. With the transformation of the labor force, training requirements have been drastically curtailed in certain managerial as well as low-level functions. In their book, *The Retail Revolution*, Barry Bluestone et al. report that in a leading department store a sales manager receives only twelve weeks of on-the-job training and that throughout the industry, cash register clerks are typically given no more than two days of classroom and on-the-floor instruction.

During the first stages of its introduction, a new technology is usually associated with higher skill levels. But there is often a dynamic in which skills decline as the technology settles down. For example, computer programming exhibits a long-term trend towards a greater division of labor, with growing numbers of computer programmers possessing a narrow range of skills. Since the advent of "canned programs," certain programming tasks have been broken down and assigned to "applications programmers"—a new, lower-skilled category—who adapt standard programs and collections of programs to specific electronic data-processing jobs. Similarly, structured programming, which limits the choices available to programmers in writing programs, makes it possible to delegate programming modules to low-level programmers who follow rigid coding guidelines in order to program correctly. While coding and applications programming require higher-level skills than those demanded

in manufacturing jobs, the requirements do not include advanced professional degrees.

One of the common assumptions of the mismatch theory is that specific, computer-based clerical skills must be acquired prior to employment. To be sure, there are many employers that opt for this choice, largely to reduce the costs associated with the turnover of newly trained personnel. However such abilities can also be acquired within an organization. Skill training can be organized this way when firms induce stability by providing workers with a structured series of steps up the job ladder. Consequently, there is considerable flexibility within the advanced service sector over the skills that employers expect of their recently hired employees. In his paper, "The Mismatch Hypothesis and Internal Labor Markets," a study of a group of large white-collar firms, Paul Osterman reports that entry requirements are not so much a function of the nature of work "but rather the particular firm's commitment to internal promotion and on-the-job training."

At the city-wide level, attempts to track the changes in the required skill levels have also failed to turn up substantial increases. For example, in her recent study for the New York City Department of Employment, "Promising Occupations and Industries," Eileen Sullivan divided all occupations into two categories—those that required more and those that required less than eighteen months of pre-employment training specific to that job. In 1972, the low-skilled jobs accounted for 58 percent of New York's employment, and by 1981, that percentage had fallen by only 1 percent. She does point out though that the composition of those low-wage jobs has changed, shifting from blue-collar to white-collar, although, given the received wisdom, the change has been surprisingly moderate. The white-collar proportion of the low-skilled jobs increased from 42 to 45 percent over the decade. Her conclusion is that the city is retaining a fairly constant share of lower-skilled entry-level jobs. She states that "our continuing high unemployment rate and the share of our jobs going to non-city residents cannot be explained by a supposed trend toward a higher-skilled high-tech economy."

But while the evidence for an increase in the aggregate skill level of employment in the city is surprisingly weak, this does not mean that there are not formidable barriers to adjustment for the city's low-skilled workforce. First, comparisons of pre-employment training requirements do not capture requirements for general skills such as literacy and writing ability. Leaving them out makes sense if these are universally held skills, but, unfortunately, this is not the case. Even entry-level clerical jobs require higher levels of this type of skill than do the low-skilled manufacturing jobs they replaced. Furthermore, office jobs require a different type of socialization and interpersonal skills than does factory work. Therefore, while the general level of specialized skills may have increased only moderately or not at all, the nature of the skills has changed.

The second problem concerns the effect of the transition on individual workers who have already learned particular skills. Skilled or semiskilled blue-collar workers cannot easily switch to white-collar employment even if the old and new jobs are equal in terms of some abstract skill level. Recent research indicates that most displaced manufacturing workers recover their initial jobs and earnings position after

a job loss. But many suffer significant deterioration in both wages and hours, as well as an extended period of joblessness or intermittent employment that ensues before regaining permanent re-employment. Moreover, a substantial portion of those displaced fail ever to regain their previous occupational or earning position. Undoubtedly, many older New Yorkers made jobless by manufacturing decline have never returned to full-time employment.

Thus, the available direct empirical support of the widely accepted hypothesis that skills in the white-collar sector have been significantly upgraded is surprisingly weak. Requirements for white-collar entry-level workers do differ from the abilities sought by blue-collar employers. But other than a greater need for rudimentary literacy and arithmetic skills, the new white-collar jobs differ more in the nature than in the level of skills demanded. In any case, the evidence concerning the new technology suggests that it is sufficiently flexible that it can lead to either skill upgrading or downgrading. Which outcome takes place appears to be more a result of employer policy than of the inherent characteristics of the technology.

Two groups appear to be particularly vulnerable to the labor-market distress that results from the decline of manufacturing. One is made up of high school drop-outs who simply have failed to achieve the basic literacy skills required in many white-collar jobs. But those youth who do acquire this basic competence should be particularly suited to adapt to the new types of skills required. The other group includes older factory workers for whom the transition from manufacturing to service employment is likely to involve a difficult retraining process. But as we shall show in the next section, the importance of manufacturing as a source of employment for many groups of New York's troubled workers has been relatively slight for much of the recent past.

Impact on Selected Demographic Groups

That there is considerable distress among New York's low-income population is not seriously open to doubt, but whether their employment problems are due primarily to the shift from goods production to services is still an unsubstantiated assumption. That claim is subjected to empirical scrutiny by examining the recent employment experiences of teenagers, blacks, Puerto Ricans, and immigrants, and comparing them to those experiences for the city's population as a whole. As background, Table 1 presents the industrial distribution for employed New Yorkers in 1970 and 1980 and the growth rates of each industry over those ten years.

Teenage Workers. The employment situation for New York's teenagers is dismal and, more than any other labor market group, teenagers are the focus of public concern. In contrast to dislocated manufacturing workers, who have skills that no employer wants, the problem for youth is that they have no skills at all. Explaining youth employment problems, therefore, involves a special case of the mismatch hypothesis: their present displacement results from the mass disappearance of low-level, easy-entry manufacturing jobs.

Table 1
Industrial Distribution of Employed New York City Residents:
1970 and 1980

	Distribution: All Employed Residents		Percent Change in Total Employment
	1970	1980	
Total	100%	100%	-8.6%
Construction	3.5	2.7	-29.0
Durable Manufacturing	6.9	6.0	-20.0
Nondurable Manufacturing	13.7	11.7	-24.2
TCU ¹	9.9	10.0	-7.7
Wholesale	5.0	4.8	-13.3
Retail	14.3	13.3	-15.3
FIRE ²	10.7	12.0	+2.6
Business and Repair Services	5.3	6.6	+13.5
Personal Services	4.5	3.5	-30.4
Professional Services	18.8	23.1	+12.1
Public Administration	5.7	4.9	-22.0
Other	1.8	1.9	-2.3

¹ Finance, Insurance, and Real Estate.

² Transportation, Communications, and Utilities.

Source: U.S. Bureau of the Census, *Census of Population: 1970, Detailed Characteristics. Final Report PC(1)-D34, New York. Washington DC: U.S. Government Printing Office, 1972: Table 186.* And U.S. Bureau of the Census, *Census of Population: 1980, Detailed Population Characteristics. Final Report PC80-1-D34, New York. Washington DC: U.S. Government Printing Office, 1983: Table 228.*

The evidence, however, indicates that manufacturing decline is not the principal culprit. Manufacturing accounted for a small proportion of teenage employment in 1970, and they were considerably less dependent on manufacturing than New Yorkers at large. Of course, manufacturing's decline since 1970 has diminished the number of openings for youth, but only to a limited extent. Youth lost 37,000 jobs over the 1970s, of which 8,700 were in manufacturing. However, according to our investigations, only 54 percent of the manufacturing loss was due to overall employment decline; the rest was the result of a shift within manufacturing to other groups of workers, presumably immigrants.

The demand for the labor of any group depends on the fit between the characteristics of that group and the characteristics of the available jobs. New York's teenagers are mainly enrolled in school; and almost all students in the labor force are working in, or looking for, part-time jobs. What this means is that teenagers are hired for simple jobs that require little training or stability. Where jobs are complex, the scope for part-time teenage help is restricted.

Such changes in job requirements explain most of the changes in teenagers' employment between 1970 and 1980. Although employment in retailing fell by

over 15 percent, the teenage share of employment in these industries grew by over 12 percent. Therefore, the number of teenage jobs in retail fell by less than 1,000—or 2 percent of the 1970 total—despite the steady erosion of retailing employment throughout the 1970s. The reason for teenagers' growing share of retail jobs can be grasped by merely visiting a supermarket on a Sunday afternoon or a McDonald's: the industry has simplified its jobs and has shifted to extended schedules that make a part-time teenage labor force desirable.

The chief problem for youth is that the growing service industries are evolving in the opposite direction. Communications and the finance, insurance, and real estate (FIRE) sector were important employers of youth in 1970. These sectors grew substantially between 1970 and 1980, but in so doing they also moved into new lines and new ways of doing business that substantially reduced their demand for part-time youth. Thus teenage representation in these growing sectors fell dramatically over the decade, resulting in a loss of almost 20,000 jobs in transportation, communications, and utilities (TCU) and FIRE alone.

Blacks. The mismatch thesis occupies a venerable place in the literature on black poverty. While the empirical backing has always seemed wanting, the mismatch argument remains of undiminished appeal, if by force of repetition and the prestige of its proponents alone. The Kerner Commission, for example, argued that:

The Negroes who migrated to the great urban centers lacked the skills essential to the new economy; and the schools of the ghetto have been unable to provide the education that can qualify them for decent jobs. The Negro migrant, unlike the immigrant, found little opportunity in the city; he had arrived too late, and the unskilled labor he had to offer was no longer needed.

Writing almost ten years later, William J. Wilson echoed the identical arguments in his highly influential book, *The Declining Significance of Race*.

Nonetheless, the mismatch thesis offers little guide to understanding the employment problems of black New Yorkers. Manufacturing may be a stronghold of high-wage black employment in the smokestack cities, but in New York its importance is considerably reduced. Relative to whites, blacks were underrepresented in both durable and nondurable manufacturing in both 1970 and 1980. They were also underrepresented in other major industrial categories—in particular, construction, retailing, and wholesaling—that suffered job losses over the last decade. This suggests that even if the employment decline in these industries were arrested or reversed, there would be little impact on black employment in the absence of programs that would also increase the black share of jobs.

Blacks were most vulnerable in personal services, in which they were highly concentrated and in which employment fell by over 30 percent. The loss in black employment in this industry during the decade exceeded the net loss in all manufacturing industries combined by over 3,000 jobs. Many of the black workers in this sector, in particular that half of the personal-service labor force employed as

domestics in private households, held low-skilled positions having no opportunities for advancement. In this case, the reduction of black employment probably reflects improved access to better employment.

While blacks have been underrepresented in New York's declining sectors, they have had considerable access to the growth poles of the city's economy. In 1970 blacks were overrepresented in professional services, and slightly underrepresented in FIRE and business services. Over the course of the 1970s, blacks benefited greatly from the growth of all these industries. Black employment in FIRE, professional services, and business services grew by over 90,000 jobs in the 1970s, a figure that exceeded the total black employment in all manufacturing industries in New York City in 1980. In the process, blacks increased their share of employment in the growing industries, approaching proportionate representation in the crucial FIRE sector.

Despite improved access to employment in many of the growing industries, a more detailed disaggregation of black employment by industry and occupation suggests that opportunities remain restricted to the bottom of the job hierarchy. Professional services is one of the growth sectors in which blacks find themselves overrepresented, but here the chief locus of black employment is in hospitals, where blacks fill nurse's aides' jobs and low-level positions in the housekeeping and dietary departments. Furthermore, the widespread requirements for formal credentials for middle- and upper-level jobs in hospitals create serious barriers to promotion for low-skilled workers in the industry. In business services, blacks are similarly concentrated in such low-level activities as "services to buildings" and security, and they continue to be disproportionately dependent on marginal personal-service jobs.

Puerto Ricans. In contrast to blacks, Puerto Ricans were greatly overrepresented in manufacturing in 1970. Female Puerto Ricans, in particular, were twice as dependent on manufacturing as white females and almost three times as dependent as black females. Retail trade, which lost over 15 percent of its employment during the decade, was the only other sector in which Puerto Ricans were overrepresented in 1970. Moreover, Puerto Ricans had gained much less access than had blacks to the growth sectors of the New York economy. That Puerto Ricans were particularly vulnerable to manufacturing's precipitous decline during the 1970s is suggested by their experience during the 1960s, when the erosion of manufacturing took place at a much slower rate. As Lois Gray showed in her 1975 Bureau of Labor Statistics report, "A Socio-Economic Portrait of Puerto Rican New Yorkers," there was a sharp decline in the percentage of Puerto Ricans in the New York City labor force. Rosemary Cooney compared labor force participation rates for Puerto Rican women in ten cities in her 1979 *Journal of Human Resources* article, "Intercity Variations in Puerto Rican Labor Force Participation." She showed that while labor force participation decreased in New York, other cities with large concentrations of Puerto Ricans experienced stable or increased labor force activity. Of the factors associated with these intercity variations in Puerto Rican participation rates, Cooney argued, nondurable operative demand (of which the most important New York City component is apparel) exercised the greatest effect. In a second article written with A.C. Warren, "Declining Female Participation Among Puerto Rican New Yorkers: a Comparison

With Native, Non White Non Spanish New Yorkers," *Ethnicity*, 1979), Cooney compared Puerto Rican and native white New York women and showed that increases in the educational levels associated with changes in the occupational structure best predicted shifts in labor force activity.

Available data for 1980 suggest that the labor market position of Puerto Ricans in New York continues to be distressed, and considerably more so than that of other Hispanic minorities. Although the 1970 and 1980 U.S. Census data on Puerto Ricans are not strictly comparable,² New York State data (89.5 percent of all New York State Puerto Ricans in 1980 lived in New York City) indicate that unemployment for the group stood at 12.1 percent in 1980, up from 6.7 percent for New York City Puerto Ricans in 1970. Furthermore, 38.6 percent of the state's Puerto Rican families had incomes below the poverty level. In contrast, non-Puerto Rican Spanish-origin residents of the state had a 9.3 percent unemployment rate and 22 percent of their families had incomes below the poverty level. Thus, in this one case the mismatch hypothesis is supported by the evidence. The decline of manufacturing appears to have been a primary factor in the deterioration of the employment conditions of Puerto Ricans.

Immigrants. New York is America's quintessential immigrant city, and since 1965 it has resumed its role as a mecca for the country's latest newcomers. Roughly 80,000 immigrants have arrived in New York annually over the past nineteen years and—according to Emanuel Tobier's "Foreign Immigration" in *Setting Municipal Priorities*, 1983—with the exception of a two-year period during the mid-1970s, the New York-bound migration flow as a percent of the total flow to the U.S. has remained remarkably stable. Replenished by new immigrant stock, the foreign-born accounted for 25 percent of New York's population in 1980, as against 17 percent in 1970.

What we know of the most recent immigrants suggests that they too have been lured by the promise of New York's golden door. But in contrast to turn-of-the-century immigrants, there is little in the background of the latest arrivals or in the local environment that would seem to favor economic success. The occupational background of New York's newest arrivals seems rooted in industrial and agricultural work; the proportion of immigrants with the training and education presumably required by New York's advanced service sector diminished over the course of the 1970s, according to Tobier. Moreover, the main points of entry for immigrants have been the not-so-golden doors of New York's declining sectors. And yet they have fared relatively well.

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²In the 1970 Census, Puerto Ricans included those who were born or whose parents were born in Puerto Rico. For the 1980 Census, anyone with Puerto Rican ancestry was classified in this group. This suggests that New York City data for 1980 using the 1970 definition would show an even worse situation for Puerto Ricans both because movement out of New York City may be associated with an improved economic position and because the 1980 definition captures some third or higher generation Puerto Ricans who may be better off economically than recent arrivals.

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In 1970, immigrants were highly overrepresented in manufacturing. Relative to native-born New Yorkers, they were also overdependent on other declining industries and underrepresented in the growth activities. Furthermore, their representation in manufacturing and other declining sectors such as retail and personal services grew during the 1970s.

The data needed to assess the present economic condition of New York's immigrants have not been published. However, the available sources do suggest that the foreign-born have secured a viable niche in the labor market, despite their dependence on shrinking industries and their lack of high-level skills. For example, while in 1980, the city's unemployment rate stood at 7.7 percent and its labor force participation rate at 57.2 percent, 70 percent of New York City's Asians were in the labor force in 1980 and less than 5 percent were unemployed, even though this group was 78 percent foreign-born. Comparable data at the local level for individual nationality groups cannot be gleaned from published census reports. However, data available at the state-wide level provides a good proxy for such immigrant-dominated ethnic groups as Chinese or non-Puerto Rican Hispanics, of whom 86 and 82 percent, respectively, live in New York City. For the Chinese, two declining sectors, manufacturing and retailing, together account for 58 percent of total employment. Yet only 3.9 percent of this population was unemployed and 67 percent were in the labor force. Non-Puerto Rican Hispanics were also heavily concentrated in manufacturing (31 percent). With 9.1 percent jobless and 63 percent the labor force, the indicators for this group are more troubling than in the case of the Chinese. But in comparison with other similar New Yorkers, in particular blacks and Puerto Ricans, the situation of non-Puerto Rican Hispanics appears in a considerably more favorable light.

To some extent, these data exaggerate the prospects for immigrants, since some newcomers who are unable to find jobs may return to their home countries. Furthermore, several factors cloud the future for the new immigrants. One potential problem is the continued shrinkage of manufacturing, and poor command of English may become an increasing handicap in the growing white-collar sectors. But as a group the settlers and the new arrivals have weathered the decade well and they have done so by increasing their share of employment in declining industries. In particular, they have come to dominate employment in the marginal and least institutionalized sectors of the manufacturing and retail industries. We have analyzed the causes of this elsewhere, and two important reasons emerge. One is the willingness of immigrants to work at very low wages, a factor that is reflected in their low incomes despite high labor force participation and relatively low unemployment rates, and the other involves certain factors inherent in the immigration process, that give immigrants organizational advantages in small-firm industries where familial and informal group resources compensate for technological and capital deficiencies.

Conclusions and Policy Implications

Longevity is a rarity in urban research and the venerable and still vigorous status of the mismatch thesis testifies to its considerable intellectual appeal.

Applied to the New York context, the mismatch theory explains the paradox of persistent unemployment despite steady economic growth as a problem of structural change; the increase in advanced service employment, where entry is conditional on extensive training and technical expertise, has outpaced the adjustment of a labor force whose skills reflect the needs of New York's dying manufacturing base.

To be sure, training and retraining of specific groups are necessary components of a policy response to the labor market problems associated with the economy's structural change. Nevertheless, the mismatch hypothesis, as it is usually defined, bears up poorly under empirical scrutiny, and consequently, it a poor guide to policy.

The weaknesses of the mismatch hypothesis are two-fold. First, its guide to the shifting job requirements of urban employers exaggerates the extent and nature of skill changes. As we have shown, the transition from manufacturing to services tends to alter, not eradicate, low-level skill requirements. The new growth sectors contain both higher and lower-level jobs; and the diffusion of new technology into white-collar fields seems to upgrade some activities and reduce the requisite skill level of others simultaneously.

Secondly, historical dependence on manufacturing is not directly related to current labor market distress; the various groups that compose New York's low-level labor force have differed greatly in their adjustment to the economy's transition. Neither youth nor blacks were overdependent on manufacturing in 1970, and the sector's decline of the 1970s produced small job losses for both groups. Immigrants were overdependent on manufacturing in 1970, and equally so a decade later. Yet they emerged from the 1970s with labor market indicators that were no worse, and in some cases significantly better, than those of the average New Yorker. Alone among the city's troubled worker groups, Puerto Ricans, heavily reliant on manufacturing in 1970, found themselves severely dislocated by the outflow of the city's industrial jobs.

For much of New York's low-income population the source of labor market distress lies not in manufacturing but rather in other sectors of the economy. Despite considerable access to the FIRE and business and professional-service sectors, blacks remain concentrated in low-level jobs in those industries where credentialism raises entry thresholds and discrimination appears still to impede mobility to the best jobs. The decline of public-sector employment has in part offset the gains achieved by blacks in private-sector fields. For teenagers, new technologies in the FIRE and communications industries have produced a significant fall-off in jobs. As with blacks, concentration in a declining sector, in this case retail, has also clouded the employment situation.

In addition to a description of labor market conditions in New York, the mismatch thesis has implications for policy. Given its inaccurate diagnosis, these prescriptive implications are inadequate. The mismatch argument suggests two policy responses—more training for New York City residents and the development of programs aimed at retaining and attracting manufacturing jobs. Of course it is hard to argue with the suggestion that more training is necessary, but there are many different types of training programs that could be aimed at different groups of workers. The

mismatch hypothesis provides no guidance in choosing among these alternatives. No training program can equip young disadvantaged inner-city workers to compete with professionals. Even at a much lower level, the mismatch thesis fails to distinguish among different types of skills—in particular between basic literacy and arithmetic skills, and more specialized skills. Our review of job requirements indicates that entry into the clerical sector is primarily conditioned on basic literacy skills broadly applicable in a wide number of different white-collar work situations. Improving the articulation between schools and work means ensuring that young people leave school with an adequate command of these minimal white-collar skills. The central problem for New York City's youth is that too many leave school lacking not computer know-how, but rather that they enter the labor market without basic arithmetic and literacy proficiency.

The implications of the mismatch thesis with respect to manufacturing retention are of limited value. The external environment for New York City's manufacturing is becoming increasingly harsh, and there are severe constraints on local government's ability to counteract the growing pressures from international competition. However, the adjustment difficulties experienced by dislocated manufacturing workers makes curbing the pace of manufacturing decline an important goal. While the mismatch thesis suggests that manufacturing retention will produce blanket results, the demographic analysis undertaken here allows policy makers to pinpoint the likely beneficiaries of their efforts. Slowing the decline of manufacturing will have a direct impact on Puerto Ricans; on older blue-collar workers who now often find themselves permanently displaced; and on the large number of blue-collar immigrants, who are a new and probably permanent component of the city's labor force. Other troubled labor force groups, in particular blacks and youth, will be unlikely to gain much from any manufacturing-retention program. While city government has a limited number of instruments with which it can promote manufacturing activities, its arsenal of programs should take into account the needs of New York's immigrant-owned manufacturing firms, which have provided some of the few successes in an otherwise dismal scene. What these firms require are not grants for large capital spending or major tax incentives. Rather they need assistance for leasehold improvements, gradual technological upgrading, and skill training. Fortunately, there are signs that city government is currently moving in this direction.

But as we have emphasized, the critical points of weakness for many New York City workers lie in the growing, not the shrinking, sectors. For this problem, it would make more sense to address the situation in these sectors directly. As we have argued, the new service technology is sufficiently flexible that many outcomes are possible; the key for policy is to provide the incentives that would induce office employers to deploy technology in ways that lower entry thresholds. Particular attention should be given to organizing training processes. Since similarly positioned organizations seem to differ greatly in the potential for on-the-job training, firms should be encouraged to extend the job ladder in ways that maximize the potential for internal skill acquisition. This could be accomplished by working with employers to connect low-level jobs more directly to higher opportunities and encouraging them to

apply new technologies that would both employ unskilled workers and create more structured promotion opportunities.

Another possibility is to develop links between unskilled jobs in one industry and better opportunities in others. Many jobs in the health industry, supermarkets, fast-food outlets, and other retail establishments provide work experience, but teach few skills and offer few promotion opportunities. While various aspects of these industries make it difficult to provide internal promotion opportunities, public and private labor market intermediaries as well as personnel departments of large firms should be encouraged to use the employees in these jobs as a labor supply pool for other opportunities that still require relatively low skills, but may offer better future prospects.

New York's economy has now turned around and its newly dominant service activities appear firmly attached to the local area. Large portions of the city's population, however, have yet to share in the benefits of the recovery. The central task of public officials and policy makers is to give these troubled workers a secure and meaningful place in the advanced service economy. Doing so, however, requires an accurate assessment of the nature of the city's labor market problems. That type of diagnosis is not to be found in the focus on manufacturing decline inherent in the mismatch thesis. This analysis provides a more critical estimate of the real job requirements of white-collar employers and a more refined way of understanding the employment problems of labor market groups that prove quite distinct. Moving from analysis to policy and program is always a difficult job. But if this paper provides policy makers with guidelines for targeting the groups needing assistance and developing instruments that speed their adjustment, then it has contributed to that task.