

An Even Greater "U-Turn" Latinos and the New Inequality

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A CHANGING U. S. POLITICAL ECONOMY

Since the mid-1970s the United States has been experiencing a profound shift in both the nature and political management of the post-World War II pattern of economic development and income distribution. This "Great U-Turn," so labeled by Bluestone and Harrison (1988), has been characterized by the dramatic reversal after 1973 of the postwar rise in real wages and relative stability or decline in inequality. Since that time, real wages have stagnated or fallen and the distribution of income and wealth has become more unequal.

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What is not as well known, however, is that all minority groups, and especially Latinos, have experienced an *even greater* reversal in real and relative income levels. After making significant strides in real income growth relative to whites from the 1940s through the 1960s, the recent past has produced

1. A widening of the gap between minority male and white male mean income, as minority real incomes fell more rapidly than white male decline in real income
2. A widening between minority female and white female incomes despite a narrowing of the overall gender income gap
3. A more rapid widening of the income gap among Latinos and among African-Americans than that among whites.

These trends are particularly disturbing given the rapidly expanding share of Latinos in the work force—a trend that is expected to continue into the next century. Note that in this chapter we concentrate on Census and Current Population Survey (CPS) data for the relative incomes of only those workers with jobs, thus introducing a conservative bias in estimating the actual level of ethno-racial inequality.¹

In this chapter, we describe first the dimensions of this reversal in real and relative wage levels and then attempt to determine the key causal dynamics behind the sharp turnaround toward greater income inequality among Latino, African, and European white Americans. With the use of regression and simulation methodologies, we have sought to examine the relative explanatory power of the four major factors traditionally put forward in the literature for explaining inequality: (1) differences in human capital endowments (including education, age, and immigrant status); (2) the persistence of wage discrimination against different ethno-racial groups; (3) the pattern of industrial-occupation structural change; and (4) continued immigration.

Our research findings show that from the 1940s through the 1960s, declining inequality was due primarily to

1. The shift in the structure of Latino employment from agriculture to industry and services
2. Significant increases in the proportion of Latinos with high school education
3. Intermittent yet sharp declines in discrimination in the 1940s and especially in the 1960s, when it was the dominant factor in increasing Latino relative incomes.

¹Although the analysis presented here is for the sum total of the labor force, in a longer manuscript we have differentiated between full- and part-time workers (see Carnoy, Daley, & Hinojosa, 1990).

The research also indicates that the principal dynamics responsible for increased wage inequality since the mid-1970s are:

1. A widening gap between higher- and lower-income earners and a declining share of middle-income earners within most ethnic/gender subgroups of the population
2. A widening gap between the white concentration in upper-income groups and a disproportionate minority concentration in lower-income groups
3. A widening gap between immigrant and nonimmigrant incomes
4. Widening gaps in high and low educational achievement
5. Renewed increased ethno-racial wage discrimination.

We conclude the chapter with some thoughts on what the experience of Latinos tells us about the dynamics of late twentieth-century political economy in the United States, concentrating on what trends and processes are commonly impacting all groups and what are the key areas for innovation in public policy.

DIMENSIONS OF THE REVERSAL

The "Great U-Turn" is best characterized by a reversal of the 60% rise in real weekly earnings from 1947 to 1973, to a 15% decline in real earnings from 1973 to 1987. This reversal was accompanied by a slowdown in productivity growth from 2.4% annually in the previous period to 0.8% after 1973. In addition, during the two most recent recessions (1974–1975 and 1980–1982) real wages fell sharply, 7% in 1974–1975 and 8% in 1980–1982, while the subsequent periods of economic recovery resulted in minimal increases in net earnings.

Throughout this reversal in relative incomes, the composition of the labor force has also changed dramatically. Fifty years ago, the employed labor force was predominantly white male (65%), and about 70% male. Now it is only about 45% white male and 56% male (see Table 1). Nonwhites were 9% of employed males in 1960 but almost 20% in the late 1980s. Among employed females, the percentage of nonwhites also increased, from 13 to 20%. The fastest growing groups—Latinos and Asian-Americans—together increased their share of employment from 3% to almost 10% in this period, with most of the increase occurring in the last 20 years.

The rise and fall in real wages of those in the labor force who have jobs, however, has been very different for each ethnic and gender subgroup. Although white male real wages rose 26.9% in the 1960s, they stagnated in the 1970s and fell –6.6% from 1980–1986. Real wages of Latino males, on the other hand,

Table 1. Percentage of Ethno-Racial and Gender Composition of the Labor Force

Group	1940	1950	1960	1970	1976	1980	1983	1988
White males	64.6	62.8	60.8	54.8	54.0	49.1	49.2	46.1
White females	24.4	26.6	26.6	31.0	32.3	34.1	35.4	36.0
Latino males	0.7	0.7	1.8	2.5	2.8	3.3	3.4	4.5
Latino females	0.1	0.2	0.7	1.2	1.5	2.2	2.1	2.9
Black males	6.3	5.9	5.9	5.3	5.1	4.8	5.0	5.2
Black females	3.6	3.4	3.5	4.2	4.3	4.7	4.9	5.2
Asian males	0.2	0.3	0.4	0.6	—	0.9	—	—
Asian females	0.0	0.0	0.2	0.4	—	0.8	—	—

SOURCES: 1/1000 Public Use Census Sample, 1960, 1970, 1980; Current Population Survey, 1976, 1980, 1983, 1986, 1988. In CPS years, those workers who are not white, Latino, or black are excluded from the sample; therefore, the percentage shown represent the percentage of the sample including only those three groups. If the 2-3% of "other" workers were included, the percentage of whites, Latinos, and blacks would be slightly lower.

peaked at the end of the 1960s and then fell -4.2% in the 1970s and -11.3% in the 1980s. Native Mexican males experienced the deepest total declines with -6.7% in the 1970s and -9.5% in the 1980s. Native Puerto Rican males fell -2.2% in the 1970s and -12.2% in the 1980s.

By contrast, female real income has improved steadily over the last 30 years, despite intermittent setbacks. White female real income increased substantially in the 1960s (+21%), slowed in the 1970s (+2.4), and rebounded in the 1980s (+4.8). Real income of Latino females also rose dramatically in the 1960s (+49.5%) but then increased very slowly in the 1970s (+.2%) and in the 1980s (+1.6%). Cuban females in the 1970s and 1980s and Puerto Rican females in the 1980s have recently outstripped even white female income growth while Mexican females continue to lag even further behind.

Growing Overall Income Inequality

Since the mid 1970s, increasing inequality has become endemic in society in the United States. Differences in real income change across ethnic groups has resulted in increasing income inequality *between* race and ethnic groups. During this period, the United States also experienced increases in income inequality *within* virtually all ethnic/gender subgroups. Rising inequality between whites and minorities and inequality within minority groups is becoming an increasingly important determinant of the dramatic overall growth in inequality in the work force as a whole.

Given the uneven declining trends in real wages, it is not surprising to find a widening gap in relative income *between* whites and minorities (see Table 2).

Even though in the late 1960s Latino male income had reached its peak of 71% of white male income, this ratio has continued to fall to 64% in 1987. Black to white male income ratios continued to rise through the late 1970s to 66% and then dipped to 64% by 1987. Latino female income relative to white female income also peaked in the late 1960s at 87% and has widened to 83% by 1987. Although the black-to-white female income ratio did close dramatically until it reached parity in 1979, it has since 1987 widened to 90%.

We measured inequality *within* groups by calculating the variance of log income for the work force as a whole and for its component subgroups. Here we deal with observations on *individuals* from Census and CPS data for all *employed and self-employed workers*, but with "extreme" observations removed.² The variance of incomes in these sets of individuals is less than in the entire labor force or of all income earners and the changes over time may also be different.³

After decades of falling or relatively stable overall wage-income inequality, a substantial surge in inequality within the work force occurred after 1975. Among all workers, wage inequality measured by the variance of log income, went up from .887 in 1975 to 1.070 in 1985. Our results (see Table 3) suggest that income distribution became more unequal among employed individuals in the labor force in the United States, particularly after 1975. The most interesting facet of this greater inequality is that much of it occurred in a period of declining real mean income and that it occurred in almost every group, male and female.⁴ Income inequality among employed male workers also became more similar to female worker income distribution, as male inequality grew more rapidly to catch up with the traditionally higher female levels.⁵

Inequality within Ethnic/Gender Subgroups

During the period that we witnessed the surge in overall inequality and inequality among subgroups, we also witnessed increasing inequality within all major subgroups in the population. Among white males, the variance of log

²Such extreme observations were defined in terms of unusually low or high hourly and weekly incomes (see Smith & Welch, 1986).

³Income distribution measures, such as the variance of log income or the Gini coefficient, are extremely sensitive to the definition of the set of income earners included in the distribution. The set of all income earners yields the most unequal distribution; the variance of incomes of everyone in the labor force, employed and unemployed, is also high. The distribution of family incomes can vary significantly from the distribution of individual incomes.

⁴The data also suggest some variation where the time worked is analyzed. In the 1960s, when real incomes were increasing, income inequality was rising among full-time workers as rapidly or more rapidly than among all workers. In the 1970s, particularly after 1975, income inequality among all workers (part-timers included) increased more rapidly than among full-time workers (see Carnoy *et al.*, 1990).

⁵Income distribution of full-time male workers, however, remained much more unequal than that of full-time female workers.

Table 2. Employed and Self-Employed Mean Incomes, by Ethno-Racial Origin and Gender, as a Proportion of White Male Mean Incomes

Subgroup	1940	1950	1960	1970	1976	1980	1988
White males	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Black males	0.43	0.51	0.52	0.61	0.65	0.66	0.64
Latino males	0.49	0.56	0.64	0.71	0.69	0.67	0.64
MOL males	0.46	0.55	0.65	0.68	0.65	0.63	0.60
PROL males	0.81	0.56	0.60	0.68	0.68	0.66	0.61
COL males	—	—	0.76	0.74	0.83	0.78	0.73
White females	0.58	0.57	0.48	0.46	0.47	0.47	0.54
Black females	0.24	0.31	0.30	0.38	0.44	0.47	0.49
Latino females	0.32	0.44	0.35	0.41	0.39	0.41	0.45
MOL females	0.30	0.42	0.33	0.38	0.37	0.38	0.40
PROL females	0.59	0.49	0.40	0.52	0.40	0.41	0.46
COL females	—	—	0.36	0.42	0.45	0.45	0.52

SOURCES: 1/1000 Public Use Census Sample, 1960, 1970, 1980; Current Population Survey, 1976, 1980, 1983, 1986, 1988. Sample of all employed and self-employed workers with income; "extreme" observations removed. MOL = Mexican-origin Latinos; PROL = Puerto Rican-origin Latinos; COL = Cuban-origin Latinos.

income rose from .748 in 1975 to .986 in 1982. Among Latino males, it rose from .653 in 1975 to .928 in 1982. Income inequality rose much more rapidly among employed black workers, males and females, than among whites or Latinos.⁶

Among women we also found increasing inequality between race/ethnic subgroups as well as within them. Among white females, the variance of log has increased from .784 in 1975 to .980 in 1985. Among Latinas, it rose from .754 in 1975 to .936 in 1985.

Table 3 also shows differences and changes over time in log income vari-

⁶These results differ from those based on family incomes, and for good reason. Levy (1988) estimated that the Gini coefficient of the distribution of family income declined in the 1960s, from 0.361 to 0.349, then rose to 0.365 in 1979 and 0.385 in 1984 (see his Table 2.1). In part, the difference with our figures can be explained by the use of Ginis, which tend to emphasize changes at the high-income end of the distribution, whereas variance of log income puts a lower weight on high-income end changes. But another part of the explanation comes from combining male and female incomes into a family income. In the 1960s, the distribution of female income was more unequal than male, but female inequality declined during the decade as male increased. If low-income females tend to marry low-income males, then declining inequality would offset rising male inequality in the family income computations. Similarly, Levy's results for the 1980s, showing more rapid increases in family income inequality than we showed for individual incomes, is partially caused by the more rapidly increasing inequality among female incomes accentuating male income inequality.

Table 3. Income Distribution of Employed and Self-Employed Workers, by Race, Ethnic Group, and Gender (Variance of Log Income)

Group	1960	1970	1976	1980	1983	1986	1988
All workers	.882	.923	.887	1.004	1.068	1.070	1.039
All Latinos	.780	.826	.763	.889	.935	.912	.893
White males	.696	.756	.748	.868	.986	.937	.946
Black males	.686	.694	.676	.883	1.167	1.104	1.028
Latino males	.659	.679	.653	.817	.928	.848	.845
MOL males	.704	.682	.703	.794	.937	.824	.843
PROL males	.525	.551	.539	.755	.905	.906	.804
COL males	.700	.654	.574	.958	.870	1.028	.867
White females	.847	.818	.784	.889	.926	.980	.943
Black females	.853	.809	.819	.876	.953	1.101	1.013
Latino females	.812	.860	.754	.843	.852	.936	.895
MOL females	.942	.891	.825	.873	.878	.979	.894
PROL females	.326	.780	.609	.807	.829	.846	.825
COL females	.978	.816	.511	.626	.604	.682	.965

SOURCES: 1/1000 Public Use Census Sample, 1960, 1970, 1980; Current Population Survey, 1976, 1983, 1986, 1988.

ance among Latino subgroups. The variance was more equal among groups in 1969 than in the mid-1980s. But income inequality increased most rapidly for Cuban males and least rapidly for Cuban females. Exactly the opposite occurred for Mexican males and females when compared with other ethnic groups of the same gender. Variance did generally decrease for both male and female subgroups (with the notable exception of Puerto Rican females) in 1959–1969 and generally increased substantially in 1969–1985, especially in 1975–1985. Mexican males, who had the most unequal income distribution in 1975 and more unequal than Puerto Rican males in 1969, had the most equal distribution among males in 1985. Mexican females, with the most equal income distribution in 1969, were most unequal in 1985.

EXPLAINING INCREASING INEQUALITY

What can explain this sharp turnaround in the minority male economic position even relative to declining white male real income? Also what explains the relative decline of minority female incomes relative to (rising) white female incomes?

Previous studies (e.g., Barrera, 1979; Bergman, 1986; Hartmann, 1981; Myrdal, 1944; Reich, 1981) have focused on the larger issue of explaining wage discrimination against minorities of color and of women in the labor market.

Although they discussed changes in relative wages, the importance of their analyses lies more in their explanation of discrimination (the persistence of wage differences) and what is its impact on the American labor market. The essence of their argument is that the nature, or structure, of America's economy and society keeps minorities and women in low-income jobs and pays them less for similar work. In different degrees, the analysis contends that discrimination serves the system (even though it may be contradictory to the system's avowed ideology); so it is maintained.

There are those who argue that the discrimination factor is less important than the amount of human capital brought to the labor market by minority groups. This argument suggests that increased education is the key to increasing relative wages for minorities (e.g., Freeman, 1976; Hanushek, 1981; McCarthy & Burciaga Valdez, 1985; Smith & Welch, 1986, 1989). McCarthy and Burciaga Valdez argue that a key variable explaining lower relative income of Latinos (primarily Mexican-origin) is their lower rate of attending and completing college; and that college completion, unlike many other variables, does not increase appreciably as Latinos move two and three generations away from initial immigration. These researchers also show that in addition to improvements in education, shifts out of agriculture and from the South to the North were significant in raising black male relative incomes in the period before 1960, and that the Civil Rights Movement had a significant impact on black male relative incomes after 1960.

Yet a third argument claims that structural changes in the economy are fundamental to understanding changes in the relative wages of minorities and women who were discriminated against. Historical shifts from an agricultural to a manufacturing-based economy and, more recently, from traditional manufacturing to restructured manufacturing and services because of increased world economic competition have, in this instance, had an important effect on the relative economic position of various groups in the economy. In particular, these changes, combined with the reaction of American business to them and the discrimination that is endemic in society, have produced greater inequality (Bluestone & Harrison, 1982; Levy, 1988; Thurow, 1987; Wilson, 1987).

Continued immigration also has been presented as an argument for increasing the inequality gap. These immigration-focused arguments are really based on the theories previously examined: immigrants are either more discriminated against, possess less education and language skills, and lack entrepreneurial drive, or they are seen to function in very segmented labor markets, competing with any native workers who are also localized in those segments.

Drawing on these previous studies, we have developed a set of independent variables and a simulation methodology that analyzes the relative incomes of minorities from 1959 to 1987. Our results suggest that two major changes in the

American labor market since 1973 go far in explaining the decline in Latino and black incomes in the late 1970s and the 1980s: namely, the various "gaps" and "price discrimination."

Five crucial gaps in minority group labor market attributes have increased in the 1970s and 1980s. First, there is the increasing gap in the number of minority members who have completed a college education. Black and Latino males and females are involved primarily in levels of education (high school and incomplete college) that have become less valuable in the 1980s than in the 1960s and early 1970s. This gap is critical for Latino males and females but less so for black females. Second, for both black males and females and for Latino males, there is the increasing gap in employment in higher-paying occupations, which is tied in part to the education gap, but also to segmentation. Third, there is, for Latino males, the increasing gap in employment in higher-paying industries. Fourth, there is the increasing gap in time worked by minorities in the high unemployment environment of the late 1970s and 1980s. Fifth, there is the increasing gap between immigrant and nonimmigrant incomes, within the Latino community but more so with respect to white workers.

The tendency to *price discriminate* against minorities in the labor market has increased in the 1980s. The wages paid to minority males and females for work in the same industries and for the same human capital went down relative to the wages paid to whites. The tendency is more marked for younger minorities and for those in certain education groups (i.e., those who have completed high school). As such, minorities are becoming less valued in the labor market, no matter what their education and experience, or where they work.

After estimating the importance of each of these gaps, we compiled a rank ordering of the relative importance of these factors on increasing inequality.

Human Capital Gaps

The data indicate that while there is a convergence in the percentages of white and minority workers with middle-level education, there is growing divergence at the lower- and upper-educational levels. Improvements have been made in closing the gap in middle-educational levels (i.e., high school completion and some college). Yet Latinos are dropping further behind in the very rewarding college completion and postgraduate levels. Although whites and even blacks have made important strides in reducing the number of workers who did not complete high school, Latinos are still making very little progress in this regard.

The average years of schooling in the employed labor force has increased substantially in the past twenty years for every group (see Table 4), but education differences among these groups remain substantial, especially in terms of the percentage of those employed workers who have completed college or graduate

Table 4. High School Completion, College Education, and College Completion, by Race, Ethnic, and Gender Group, 1960-1988 (as Percentage of All Workers in Group)

	1960	1970	1976	1980	1983	1986	1988
White males							
High school completed	27	33	38	36	39	38	39
Some college ^a	11	14	17	19	18	20	19
College completed	11	15	20	22	25	26	27
Latino males							
High school completed	13	23	27	27	31	31	30
Some college ^a	6	10	11	14	14	14	14
College completed	4	8	8	9	8	9	11
MOL males							
High school completed	13	23		26			29
Some college ^a	5	9		12			12
College completed	2	3		2			5
PROL males							
High school completed	11	24		26			35
Some college ^a	5	4		16			16
College completed	2	2		3			8
COL males							
High school completed	11	22		25			31
Some college ^a	22	15		21			19
College completed	4	4		8			12
White females							
High school completed	37	43	46	44	46	45	44
Some college ^a	12	16	16	20	21	22	23
College completed	10	11	15	17	20	21	22
Latino females							
High school completed	22	30	38	33	39	38	38
Some college ^a	7	11	12	19	16	18	19
College completed	2	6	5	8	10	10	12
MOL females							
High school completed	24	33		32			38
Some college ^a	7	11		15			16
College completed	2	5		4			6
PROL females							
High school completed	26	30		39			42
Some college ^a	2	8		18			21
College completed	0	2		4			9
COL females							
High school completed	33	25		35			32
Some college ^a	0	11		19			24
College completed	0	3		8			14
Graduate school	0	6		8			6

^a"Some college" represents less than four years of college completed. "College completed" also includes postgraduate work.

SOURCE: 1/1000 Public Use Census Sample, 1960, 1970, 1980; Current Population Survey, 1976, 1983, 1986, 1988.

study. In 1960, 51% of white males and 77% of Latino and black males who were employed had not completed high school. The average education of employed females was higher, but even so, more than 40% of employed white women and about 70% of Latino and black women had less than four years of high school completed.

By 1988 (only one generation later), a drastic change had occurred: only 15% of employed white males, 44% of Latino males, and 26% of black males had not completed high school. For females, the percentages were 11%, 32%, and 20%. At the other end of the spectrum, the 11% of white males who had completed college or graduate study in 1960 had risen to 27% in 1988. For Latino males, the figure had risen from 4 to 11%, and for black males, from 3 to 12%. Although the proportion of white females with completed college or graduate study increased less rapidly than for white males, the opposite was the case for minority females. Yet, particularly among males, the percentage of whites who came to the labor market with completed college or graduate studies was much higher than the percentage of Latinos and blacks with those levels, and the percentage of whites who entered the labor force with high school completed or less was much lower.

Data on Latino subgroups are also shown in Table 4. Until 1980, the education of employed Mexican and Puerto Rican males was equally low, and that of Cuban males was much higher, with the percentage of those who had completed college or graduate study about the same as for white males. Apparently, in 1980 and since then, with the influx of Cuban immigrants of much lower socioeconomic (SES) origins, education of the average male Cuban has dropped, and, as we show, below, so has relative mean Cuban income. Education of the Puerto Rican male, on the other hand, rose more rapidly than for Mexicans, especially in terms of college completion or graduate study. This difference is especially striking between Mexican and Puerto Rican females, both of whom have considerably higher average education than their male counterparts. The difference between Mexican females and males, however, is primarily in the percentage that completes high school, whereas for Puerto Rican females it is in the percentage that completes high school and goes to college.

The growing differences in relative educational structures between race/ethnic groups, particularly at the upper- and lower-educational levels, has an even greater impact on income inequality because of the shifting rates of returns to education for each group. Real wages for a given level of education, or for returns to education, are generally falling for the lower- and middle-educational levels and increasing only at the upper levels. Real incomes of college educated Latinos are rising as fast as comparable white incomes but real wages of the middle- and lower-educational levels for Latinos are falling faster. Under these circumstances, gradual improvements in average education are no longer a guarantee of increasing income.

Industrial-Occupational Employment Gaps

American industries have also changed dramatically during the period studied. In 1960, about 30% of males were employed in traditional manufacturing, but by 1987, this percentage had dropped to 20% (see Table 5). About 20% of women also worked in the same industry in 1960; by 1987, only about 12% did. Most of the males in traditional manufacturing shifted into the service sector (a high fraction into office and professional work), and a very small percentage advanced into high tech manufacturing. These shifts were broadly similar across male race/ethnic groups, except for two notable exceptions: in the 1960s, a significant shift from agriculture occurred for Latino and black males—a shift that was completed earlier for white males. Similarly, the shift out of traditional manufacturing was slower for Latino and particularly black males than for white males, so that the sharp drop in the percentage of black workers in manufacturing did not occur until the 1980s, whereas for white workers, it had already occurred in the 1960s and 1970s.⁷

Sectoral shifts in female employment vary much more across race/ethnic groups. Also, females are much more highly concentrated in a few industrial sectors, but these sectors vary across groups. Like white males, about 10% of employed white females shifted from traditional manufacturing to service industries between 1980 and 1987. This shift was mostly to office and professional work (high services), and a small percentage into high tech manufacturing. By 1986, 46% of white females were working in high services. The shift for Latino females was similar but greater, with a higher share working in manufacturing in 1960, and a larger shift from manufacturing to services (with some also shifting into retail trade). For black females, however, the shift was not from manufacturing into services but within the service sector, from low services (housework) into high services (office and professional work), and some shift into retail trade.

By the 1980s, Mexican, Puerto Rican, and Cuban males worked in similar industries, except that more Mexican males were still employed in agriculture and construction and less in office and low services than were either Puerto Rican or Cuban males (Table 6). This was not always the case. Until recently, because of their concentration in the northeastern states, Puerto Rican males were more apt to work in traditional manufacturing jobs. Thus, they were potentially hit much harder by the decline of manufacturing than were other groups. As we

⁷For full-time minority male workers, the shift out of manufacturing has also been much slower. The percentage of Latino males in traditional manufacturing evolved from 28% in 1970 and 27.3% in 1980 to 24.5% in 1987. For black males, the traditional manufacturing percentage rose from 27.6% in 1970 to 28.7% in 1980 and then fell to 13.7% in 1987.

Table 5. Characteristics of Employed and Self-Employed Labor Force, by Race, Ethnic, and Gender Group

Variable	White males	Latino males	Black males	White females	Latino females	Black females
Industrial sector	1960					
Agriculture	7.5	14.8	10.7	0.8	3.9	2.1
Traditional manufacturing	29.6	28.3	26.3	22.1	32.1	11.2
Low services	4.7	7.5	7.3	8.7	15.5	43.5
High services	17.2	11.1	15.7	37.4	21.1	24.5
Retail trade	13.1	12.1	10.2	18.7	13.4	9.7
Hightech management	0.5	0.4	0.2	0.4	0.5	0.1
Defense management	1.5	1.6	0.5	0.5	0.5	0.2
Industrial sector	1970					
Agriculture	4.4	7.1	4.8	0.6	2.1	0.9
Traditional manufacturing	25.3	27.0	26.9	17.4	28.3	12.4
Low services	5.0	7.7	6.1	7.5	11.9	22.3
High services	21.0	15.9	18.9	40.1	32.4	40.1
Retail trade	13.4	13.6	9.3	18.7	12.6	8.6
Hightech management	1.4	1.2	0.5	1.4	1.4	1.0
Defense management	1.9	1.0	1.3	0.7	0.4	0.5
Industrial sector	1980					
Agriculture	3.8	7.3	2.9	1.0	2.9	0.5
Traditional manufacturing	23.4	25.2	27.8	14.9	22.4	16.7
Low services	5.7	8.2	7.3	7.7	11.9	14.6
High services	22.8	16.9	22.3	45.2	34.4	48.1
Retail trade	13.5	14.4	10.6	20.0	17.3	10.4
Hightech management	2.2	2.0	1.3	1.9	3.0	1.6
Defense management	1.3	1.2	1.1	0.6	0.5	0.5
Industrial sector	1986					
Agriculture	3.3	6.8	2.5	0.9	1.7	0.2
Traditional manufacturing	20.3	22.1	21.3	11.7	18.1	12.5
Low services	7.0	10.0	10.7	10.4	14.7	16.6
High services	23.7	16.0	23.1	45.8	36.4	44.8
Retail trade	13.8	16.7	13.8	19.8	18.5	14.8
Hightech management	2.3	1.3	1.4	1.8	2.0	1.7
Defense management	1.5	1.4	1.0	0.7	0.9	0.6

SOURCE: 1/1000 Public Use Census Sample, 1960, 1970, and 1980. Income data refer to previous year. Current Population Survey, 1986. Income data refer to 1985.

Table 6. Sector of Employment, All Worker Latino Sample (in Percent)

Ethnic origin/gender/sector	Year				
	1960	1970	1980	1986	1988
MOL males					
Agriculture	18.9	10.6	10.4	9.7	11.2
Traditional manufacturing	22.9	23.3	24.7	22.2	21.8
Low services	6.8	7.3	7.3	8.1	9.6
High services ^a	11.3	14.3	14.0	13.3	14.4
Retail trade	11.2	11.5	14.6	16.3	14.9
Construction	10.7	10.2	11.4	14.2	13.5
PROL males					
Agriculture	4.4	0.7	0.9	1.6	1.4
Traditional manufacturing	47.8	38.2	32.6	25.9	22.7
Low services	6.9	7.2	6.5	14.2	9.4
High services ^a	6.9	16.7	21.2	22.4	25.1
Retail trade	16.7	15.7	13.8	17.3	14.8
Construction	1.5	3.4	4.3	3.9	7.8
COL males					
Agriculture	0.0	2.5	0.9	0.8	2.2
Traditional manufacturing	44.4	26.2	21.8	20.3	15.6
Low services	18.5	10.0	11.4	13.3	12.5
High services ^a	3.7	16.9	25.8	20.0	21.4
Retail trade	11.1	21.9	15.3	13.0	16.5
Construction	3.7	6.3	9.6	12.3	8.2
MOL females					
Agriculture	6.2	2.9	5.0	2.6	2.5
Traditional manufacturing	16.9	21.4	21.9	17.6	16.1
Low services	19.4	14.1	11.6	14.0	16.2
High services ^a	27.7	34.1	32.5	34.4	35.7
Retail trade	15.7	15.1	18.8	20.8	18.6
PROL females					
Agriculture	0.0	0.8	0.4	0.4	0.0
Traditional manufacturing	69.2	43.2	27.1	19.6	14.6
Low services	5.5	4.5	10.2	12.7	14.8
High services ^a	8.8	28.8	40.3	45.3	49.1
Retail trade	7.7	9.8	12.7	15.3	12.2
COL females					
Agriculture	—	2.2	0.0	0.5	1.0
Traditional manufacturing	—	36.0	29.7	22.2	16.1
Low services	—	10.1	11.5	10.4	13.8
High services ^a	—	34.8	32.7	39.4	35.5
Retail trade	—	7.9	10.3	13.7	13.3

^aIncludes public administration.

show below, this was apparently the case after 1979, because the shift in the 1970s for Puerto Rican males was out of manufacturing and into office services, where salary levels were not significantly different from those in traditional manufacturing. After 1979, however, the job shift was from manufacturing to low-paying low services and construction, with a slowdown in the move to high services. COL males also left traditional manufacturing jobs and went into lower-paying low services, retail trade, and construction. After the shift out of agriculture in the 1960s, Mexican employment distribution was amazingly stable. What is notable is that the distribution for the other groups had become more like that for the Mexicans.

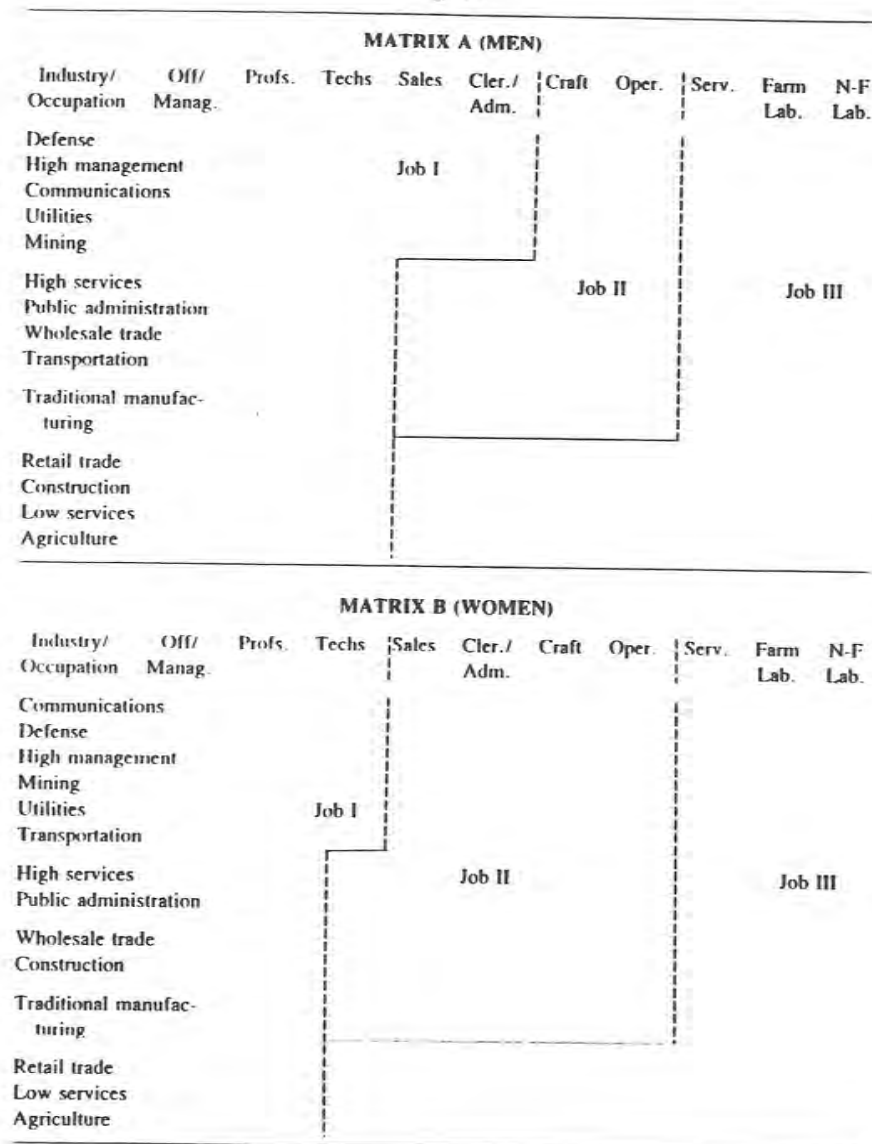
The same pattern can be observed for Mexican females. Their sectoral employment distribution has not been quite as stable as that of Mexican males, with some job shifts for females in the 1980s from traditional manufacturing to low and high services. But the job shift out of traditional manufacturing even in the 1980s has been less marked for Mexican females than for either Puerto Rican or Cuban females. All three groups shifted from manufacturing jobs to low services, but Puerto Rican females also had the largest shift to office services and other sectors (transportation and communication), whereas jobs for Cuban females shifted to retail trade and other sectors. By 1988, the employment percentage of the three female groups in traditional manufacturing and low services was similar.

A Polarization in Jobs

The reversal in income inequality has been accompanied by a renewed polarization in the job structure of the United States. The kinds of jobs whites, Latinos, and blacks work in has changed significantly in the 1980s when compared with the 1960s, but even after twenty years of increased incorporation into "better jobs," blacks and Latinos are still disproportionately employed in low-income jobs. What is even more important, the changes occurring in the employment structure for minorities and whites in the 1980s suggest a significant slowdown in the incorporation process of the previous two decades.

To measure these differences, we constructed a matrix of high- to low-income one-digit industries and high- to low-income one-digit occupations (see Figure 1). The industries and occupations were ranked in each data year according to the relative mean incomes of those who worked in that industry or occupation. Although in time a few rankings changed, a consistency of high- and low-paying industries and occupations was maintained when incomes were estimated separately for males and females. Note, however, that mean real incomes rose in the 1960s and fell in the 1970s and 1980s. So the terms *high-paying* and *middle-paying* are relative to a declining mean. More important, relative incomes for

Figure 1



high-paying jobs rose relative to middle- and low-paying jobs in the 1970s and 1980s.

Once the high-to-low income ranking shown in the Matrices A (for males) and B (for females) was constructed, we divided jobs into three categories based on 1988 data: high-, middle-, and low-paying, which were defined as Job I, Job II, and Job III. We then estimated the percentage of each ethnic/gender group in each job definition in 1960, 1970, 1980, 1986, and 1988. The results of this analysis are shown in Table 7. The data suggest a general trend in relative job

Table 7. Employment Shares by Industry/Occupation, and Ethnic-Gender Group, All Workers

Job level/group	1960	1970	1980	1986	1988
Total employed					
Job I (high)	24.6	25.5	28.2	30.9	32.4
Job II (middle)	40.2	39.6	38.2	34.5	34.2
Job III (low)	35.1	35.0	33.6	34.5	33.4
White males					
Job I	28.4	29.4	32.3	35.6	37.2
Job II	41.2	38.9	36.5	32.3	32.1
Job III	30.4	31.8	31.3	32.1	30.7
Black males					
Job I	7.9	9.1	13.8	15.4	16.3
Job II	30.8	40.3	42.6	37.2	37.0
Job III	61.4	50.7	43.5	47.3	46.7
Latino males					
Job I	10.5	13.9	16.2	15.5	16.9
Job II	37.8	40.2	37.8	34.8	33.7
Job III	51.6	45.8	46.0	49.6	49.4
White females					
Job I	19.2	20.2	24.6	28.6	30.5
Job II	47.5	46.0	43.7	40.2	39.4
Job III	33.2	33.8	31.7	31.2	30.4
Black females					
Job I	9.1	13.5	17.8	18.5	18.8
Job II	19.0	33.3	42.2	39.8	41.1
Job III	71.8	53.1	40.0	41.8	40.2
Latino females					
Job I	5.2	11.5	13.6	15.6	17.3
Job II	50.0	52.3	46.1	44.8	42.5
Job III	44.9	36.2	40.3	39.7	40.3

SOURCE: U. S. Department of Commerce, Bureau of the Census, 1/1000 Public Use Sample, 1960, 1970, 1980; Current Population Survey, 1986, 1988.

growth toward higher-paying jobs and a decline in middle-income jobs, with an accentuation of this trend in the 1980s. This polarization, however, was experienced differently by each ethnic/gender subgroup. Among white males, there has been a steady shift which accelerated in the 1980s from middle- to higher-income jobs, whereas the percentage of white males in lower-paying jobs has stayed the same.

Among Latino males, although there was an expansion of middle- and higher-paying jobs in the 1960s, this trend has been reversed in the 1980s with an expansion in lower-paying jobs, a decline in middle-paying jobs, and slow growth in the upper-paying jobs. In the 1960s, Mexican males had the largest expansion in middle-income jobs as they moved out of agriculture into traditional manufacturing. Puerto Ricans have shifted out of middle-income jobs since 1960. The polarizing trend toward upper- and lower-income jobs of the 1980s was most pronounced among Puerto Rican males, whereas Mexican males experienced a declining middle- and upper-share with an expanding lower share. Cuban males, on the other hand, displayed a shift from lower- and middle- to upper-income jobs.

Among white females, a rapid and steady shift occurred from both lower- and middle-paying jobs to higher-paying jobs. Latino women experienced a similar job shift in the 1960s but then began experiencing a declining middle and a polarizing growth in the upper and lower shares. Again, Puerto Rican females exhibited the most pronounced upper and lower polarizing trends whereas Mexican females' middle-income job loss was absorbed by upper-income jobs. Although having the highest share of upper-level jobs among Latinos, Cuban females have recently expanded their lower-level share as well.

Immigration and Demographic Change

Immigration played different roles in relative income determination for all three Latino subgroups in ways that are not typically expected. Mexican-origin Latinos displayed the highest percentages of native born that peaked in 1970 and then fell in 1980 with the influx of new immigrants (Table 8). The native born do not earn significantly more than immigrants, although the gap between foreign and native-born Mexicans widened in the 1970s (Table 9). No corresponding data are available from the CPSs, so we do not know how the most recent immigrants compare to native-born Mexicans in the 1980s. The results have suggested to some that a large part of the decline of relative incomes for Mexicans in the 1970s was due to the increased percentage of foreign-born Mexicans and the decline in their incomes, as the new immigration brought in younger and lesser-educated workers than either the existing foreign-born or native-born work force (see the increases in percentages of foreign-born by level of education and age in Table 10). But the data also show that even the relative median incomes of

Table 8. Proportion of Native-Born Latinos by Ethnic Origin

Ethnic origin/gender	Year				
	1940	1950	1960	1970	1980
All males	0.52	0.55	0.72	0.69	0.60
MOL males	0.55	0.63	0.72	0.74	0.64
PROL males	0.00	0.05	0.11	0.24	0.31
COL males	—	—	—	0.18	0.10
All females	0.59	0.58	0.76	0.68	0.66
MOL females	0.66	0.79	0.82	0.80	0.73
PROL females	0.00	0.05	0.07	0.26	0.40
COL females	—	—	—	0.11	0.09

SOURCE: U. S. Census 1/1000 Public Use Sample, 1940, 1950, 1960, 1970, 1980.

native-born Mexicans fell in the 1970s. It is also true, as the figures in Table 10 suggest, that for most schooling and age levels, the foreign-born workers earn less than native-born, and the income gap did increase somewhat between the two groups in the 1970s after decreasing in the 1960s, once schooling and age are controlled for. These results mean that among Mexicans the effect on income of foreign birth apparently increased in the 1970s. After controlling for age and education, income differences of the native and foreign born can be attributed to the fact that the native born working more often during the year than the foreign born. We tested this proposition more systematically below.

Table 9. Median Incomes of Native- and Foreign-Born Mexican-Origin Latinos Relative to White Male Incomes

Group/gender	Year				
	1939	1949	1959	1969	1979
Native-born male MOLs/WM	0.42	0.62	0.67	0.72	0.69
Foreign-born male MOLs/WM	0.57	0.48	0.57	0.70	0.61
All male MOLs/WM	0.48	0.56	0.64	0.72	0.66

SOURCE: U. S. Census 1/1000 Public Use Sample, 1940, 1950, 1960, 1970.

Table 10. Incomes of Employed Mexican and Puerto Rican-Origin Foreign-Born Males Relative to All Employed Mexican and Puerto Rican-Origin Males

Level of education	MOL males			PROL males		
	1959	1969	1979	1959	1969	1979
	Age 16-24 years old					
< High school	0.87 (17)	1.02 (22)	1.04 (46)	1.01 (88)	1.08 (61)	1.27 (37)
Completed high school	0.49 (10)	1.34 (13)	0.93 (15)	1.10 (83)	1.02 (67)	1.61 (15)
	Age 25-34 years old					
< High school	0.74 (21)	0.95 (34)	0.98 (60)	0.94 (85)	0.92 (88)	1.00 (82)
Completed high school	0.85 (7)	0.88 (14)	0.91 (24)	1.00 (100)	0.86 (70)	1.12 (67)
	Age 35-44 years old					
< High school	0.77 (29)	0.96 (31)	0.89 (57)	0.99 (95)	0.92 (83)	0.97 (96)
Completed high school	1.20 (17)	0.83 (9)	0.90 (9)	0.83 (60)	0.85 (70)	0.93 (80)

*Percentage of foreign born in each cell in parentheses below income ratio.

SOURCE: 1/1000 Public Use Census Sample, 1960, 1970, 1980.

In contrast, for Puerto Rican males, birth on the island implies more of an earnings cost relative to native birth. This gap has been falling, however, since more Puerto Ricans in the United States in the 1980s are also native born. For all Latino females, the impact of being foreign born is not as important as for males. This variety of results further substantiates the claim that immigration status *per se* is not a reliable indicator of economic performance but rather depends heavily on the specifics of the international, regional, and labor market experience of each Latino subgroup population in which immigrants are situated.

The employed labor force became younger (and less experienced) in the 1960s and 1970s and is now (in the 1990s) becoming older (and more experienced) again. This pattern has two important elements: (1) those employed from whatever race, ethnic, or gender group were younger in the 1960s and 1970s; (2) the average age of the total number of those who were employed dropped somewhat because the Latino labor force, which is younger than other groups, grew more rapidly than the others. By 1980, 20% of the employed males and 25% of the employed females were under 25. One other important point: the percentage of under-25 Latino males increased less rapidly than the percentages among white or black males who were employed in the 1960s; but in the 1970s, it rose more rapidly. As we shall see below, the surging growth of under-25,

native-born, Mexican-origin males has played a more significant part in the fall of Mexican-origin males than has Mexican immigration.

THE RELATIVE IMPORTANCE OF ALTERNATIVE EXPLANATIONS

To assess the relative strength of each of these factors in explaining increased inequality, we used a technique for simulating relative incomes that was based on coefficients obtained from estimated regression equations. In this section, we used the estimated coefficients to estimate a simulated log income—the log income that would be earned by individuals in a particular group assuming that each individual in that group received a value equal to the estimated regression coefficients for his or her (or some other group's) human capital attributes, where they worked (industry and region), their civil status, the time they worked, and so forth.

In such a simulation, individual attributes within a group can vary, but the "prices" (or regression coefficients), which they receive for those attributes, are fixed. We fixed those "prices" as the set of regression coefficients estimated for a particular group (Latino males, black males, etc.) or for white males or white females, depending on the comparison. Using such simulations, we can then estimate the effect that changing the prices has on estimated log income for the group. Similarly, we can keep prices the same but change the attributes of individuals in the group: we can assume that they have the attributes of another reference group—in this case white males, or, for minority females, the attributes of white females.

All this manipulation allows us to assess the effect on differences in income that these different groups in the labor force receive when compared to white males (or females) for different sets of variables—industrial structure (which industry they worked in), their human capital, the time worked during the year, and the region they worked in, and also their marital status. We can also implicitly assess the effect that differences in attributes have on differences in income by using white income coefficients in simulating the log income of the other groups. With this technique we can determine how much of the inequality in relative income between whites and minorities is due to differences in each group's characteristics (education, age, industry worked in, time worked, region, and civil status) and how much is due to differences in what is paid for the same characteristics across groups (thus measuring discrimination).⁸

⁸To explain differences in relative incomes, we adapted a method of simulation analysis that uses estimated regression equations to simulate the incomes of minority groups, assuming that they had the attributes of the white male population in a particular year. Similarly, we simulated white incomes, assuming that the white population had the attributes of the minority population that same year.

Tables 11 and 12 present the results of the white and Latino simulations with column (1) showing inequality ratios of simulated incomes, column (2) showing the effect of wage discrimination, and column (3) showing the effect of differences in characteristics. The results in Table 11 indicate that income inequality between Latino and white males is due more to differences in characteristics than to wage discrimination given the same characteristics. For Latino males, the discrimination effect decreased in the 1960s, has gradually increased in the 1970s, and was relatively constant during the 1980s. On the other hand, for Latino females compared to white males (Table 11), the discrimi-

With this method, the regression equation provides an estimated relationship between, say, experience and education as independent variables and log income as the dependent variable. With the estimated coefficients for Latino males, we estimated a "new" mean log income by running this estimated equation on the white male sample data. For each set of independent variables, we know how much giving Latinos the same attributes as white males in that same year (but retaining the Latino payoff to those attributes) would increase Latino mean log income. This simulation yielded the price effect on, say, Latino male income—the effect that lower Latino payoffs have on income, even were Latino labor market attributes the same as white males. Economists would refer to this as the "price discrimination" effect (i.e., the lower payoffs to discriminated-against groups for the same human capital and other variables offered in the labor market).

Similarly, we ran white male estimated regression coefficients on, say, the Latino male sample in each year to estimate the mean log income for whites, assuming that they had the attributes of Latinos but white payoffs for those attributes. This simulation measured the impact on relative incomes of lower-income groups from having lower-valued labor market attributes, such as a lower-valued distribution of education and experience in that group's labor force, working in lower-paid industries or lower income regions, being less or more likely to be married, or working less time per year.

We called this the "attributes" effect, although some others could argue that it, too, has discriminatory elements, such as certain groups having less access to school; other groups being crowded into low-paying industries and occupations; and other groups working less time than they would find desirable because of the lack of full-time work and high unemployment rates.

We therefore estimated three simulated mean log incomes: (1) the simulated mean for each minority group based on its regression coefficients applied to its own sample data in each year; (2) the simulated mean based on its regression coefficients applied to the white male sample in each year; and (3) the simulated mean based on the white male regression coefficients applied to the sample data for each minority group in each year. The three simulated means were then divided by the simulated means for white males in each year. These simulations and their comparisons to simulated white male log income are represented by these equations:

$$R_k = \text{Estimated mean } (\log Y)_k - \text{Estimated mean } (\log Y)_{AM}$$

$$= b_{jk} \cdot x_{ijk} - b_{jAM} \cdot x_{ijAM}$$

$$P_k = P_k \cdot Q_{AM} / P_{AM} \cdot Q_{AM} = b_{jk} \cdot x_{ijAM} - b_{jAM} \cdot x_{ijAM}$$

$$C_k = P_{AM} \cdot Q_k / P_{AM} \cdot Q_{AM} = b_{jAM} \cdot x_{ijk} - b_{jAM} \cdot x_{ijAM}$$

where R_k = the ratio of the simulation estimate of the log income of group k (e.g., Latino males) and the simulation estimate the log income of white males; P_k = the price effect for group k ; C_k = the attributes effect for group k ; b_{jk} = the estimated regression coefficient for the j th variable in the estimated regression equation for group k ; and x_{ijk} = the value of variable j for individual i in group k .

Table 11. Mean Log Incomes of Latino Males and Females Relative to White Males, Based on Simulations from Various Regression Estimates for All Workers' Equations, by Type of Estimate and Year, 1940–1988

Year and regression estimate	(1) ^a	(2) ^a	(3) ^b	(4) ^b	(5) ^c	(6) ^c
	Income ratios		Discrimination		Characteristics	
	LM/LM relative to WM/WM	LF/LF relative to WM/WM	WMd/LMc relative to WM/WM	WMd/LFc relative to WM/WM	WMc/LMd relative to WM/WM	WMc/LFd relative to WM/WM
1960 Census (1959)						
Industry	0.66	0.34	0.70	0.39	0.98	0.98
Human K	0.66	0.34	0.90	0.38	0.85	0.84
All factors	0.66	0.34	0.94	0.63	0.79	0.61
1970 Census (1969)						
Industry	0.74	0.39	0.76	0.42	0.97	1.00
Human K	0.74	0.39	0.84	0.44	0.94	0.87
All factors	0.74	0.39	0.94	0.61	0.89	0.68
1974 CPS (1973)						
Industry	0.70	0.39	0.70	0.41	0.96	1.01
Human K	0.70	0.39	0.81	0.45	0.89	0.89
All factors	0.70	0.39	0.86	0.57	0.85	0.69
1980 Census (1979)						
Industry	0.69	0.42	0.72	0.44	0.96	0.96
Human K	0.69	0.42	0.87	0.49	0.85	0.84
All factors	0.69	0.42	0.89	0.64	0.82	0.66
1983 CPS (1982)						
Industry	0.68	0.46	0.72	0.50	0.93	0.98
Human K	0.68	0.46	0.87	0.57	0.80	0.80
All factors	0.68	0.46	0.90	0.66	0.78	0.68
1988 CPS (1987)						
Industry	0.65	0.45	0.70	0.50	0.92	0.96
Human K	0.65	0.45	0.84	0.57	0.80	0.82
All factors	0.65	0.45	0.88	0.70	0.78	0.66

^aSimulated mean log income from regression estimated equation for Latinos run on Latino data relative to simulated mean log income from regression estimated equation for white males run on white male data.

^bSimulated mean log income from regression estimated equation for Latinos run on white male data relative to simulated mean log income from regression estimated equation for white males run on white male data.

^cSimulated mean log income from regression estimated equation for white males run on Latino data relative to simulated mean log income from regression estimated equation for white males run on white male data.

SOURCE: Regression estimates which served as the basis of these simulations were made from the 1/1000 Public Use Sample, U. S. Census, 1960, 1970, and 1980, and the Current Population Survey data, 1974, 1983, and 1988.

Table 12. Mean Log Incomes Based on Simulations from Various Regression Estimates for All Workers' Equations, by Type of Estimate and Year, 1939-1987

Year and regression estimate	(1) Income ratios		(3) Discrimination		(6) Characteristics	
	MNB/MNB ^a relative to WM/WM	MI/MI ^b relative to WM/WM	WMd/MNBc relative to WM/WM	WMd/Mlc relative to WM/WM	WMC/MNBd relative to WM/WM	WMC/Mld relative to WM/WM
1960 Census (1959)						
Industry	0.69	0.58	0.73	0.68	0.93	0.82
Human K	0.69	0.58	0.95	0.74	0.88	0.87
All factors	0.69	0.58	0.97	0.73	0.82	0.66
1970 Census (1969)						
Industry	0.73	0.68	0.76	0.75	0.97	0.93
Human K	0.73	0.68	0.90	0.79	0.91	0.89
All factors	0.73	0.68	0.97	0.86	0.84	0.80
1980 Census (1979)						
Industry	0.69	0.61	0.71	0.64	0.96	0.90
Human K	0.69	0.61	0.91	0.82	0.78	0.78
All factors	0.69	0.61	0.94	0.86	0.78	0.78

^aMexican origin U. S. native born = MNB.

^bImmigrant males = MI.

SOURCE: 1/1000 Public Use Sample, U. S. Census, 1960, 1970, and 1980, and the Current Population Survey data, 1974, 1983, and 1988.

nation effect was more important than differences in characteristics in the 1960s and 1970s. In the 1980s, the discrimination effect diminished whereas the impact of differences in characteristics began to increase. Discrimination relative to white females, however, has increased for Latinas in the 1980s.

In analyzing the impact of differences in characteristics between white and Latino males, human capital differences were more important than differences in what industries were worked in. Yet, although differences in industrial characteristics became less important in the 1960s, they have grown in importance in the 1970s and 1980s much faster than have differences in human capital. The sectoral composition of employment for minorities relative to white males is consistently the largest for Latino males among minority males and females. Furthermore, for all minority groups, the industry attributes effect decreased in the 1940s, 1950s, and 1960s, and increased in the 1980s for minority males, especially in this all worker sample of Latino males. For that group, the attributes effect increased from 4% to 8% in 1979-1987. We have previously suggested

that this was probably due to a shift of Latino males from traditional manufacturing into lower-paying construction, retail trade, and service jobs rather than into higher-paying service jobs (as in the case of white males). Differences in time worked and regional concentration, while less important than industry, also diminished in the 1960s and then also grew in the 1970s and 1980s.

For Latino females compared to white males (Table 11), human capital differences were also more important than differences in industrial employment. Although when examined at the same education level discrimination fell significantly in the 1960s, differences in educational attainment nonetheless grew in the 1970s and 1980s. Differences in industrial work narrowed in the 1960s, grew in the 1970s, and then remained stable in the 1980s. Discrimination within industries increased more for Latino females than for males. The impact of differences in time worked and regional concentration also declined in the 1960s and then increased in the 1980s. Differences in time worked were more important in explaining lags in incomes of Latino females than for Latino males but grew worse after the 1982 recovery.

The Immigration Issue

Table 12 also shows the results of the simulation exercise applied to immigrant and native-born Mexican males compared to white males. The results suggest that the large difference in median income between native- and foreign-born Mexicans in 1960 declined substantially by 1970 for two main reasons: (1) wage discrimination suffered by the foreign-born fell 10 percentage points to 17%, whereas wage discrimination against the native-born rose 3 percentage points to a still low 6%; and (2) the attributes gap fell substantially, mainly because of a sharp drop in foreign-born workers in agriculture (from 33% to 18% of the foreign-born labor force) and a sharp increase in the number of weeks worked per year by foreign-born workers.

The results showed that while overall discrimination has been increasing for native-born and falling for immigrant workers, immigrants were still much more discriminated against than native-born Mexican males. In the 1970s, discrimination increased for both native-born and immigrant workers, given a similar pattern of industrial employment as white males. The rate of discrimination declined, however, when given a similar pattern of educational attainment.

In the 1970s, the income difference increased slightly between natives and foreign-born even though both medians were falling relative to white incomes. The main reasons for the drop in the relative medians were different for each group, though both reasons came from an increasing attributes gap. For native-born MOLs, the attributes gap increased because the native-born Mexican-origin labor force grew younger very quickly in the 1970s, even more quickly than the white male labor force. For the foreign-born Mexicans, the attributes gap grew

also, but mainly because their average education grew more slowly than that of White males or native-born Mexican-origin males. In addition, foreign-born Mexicans worked increasingly in lower-paying industries in the 1970s, and got paid increasingly less than white males in those industries, even though for the same education and age, they got paid somewhat more than white males in 1979 than in 1969.

These results suggest that the falling incomes of the native-born Mexican-origin Latinos (MOLs) did not result from increased competition with new immigrants, but rather from the increased youthfulness of the native-born MOL labor force relative to white males. This is an effect that is independent of immigration and of the changing structure of jobs in the labor market and also suggests that the declines in the 1980s for MOL relative incomes as a whole were the result of forces that affected all workers of lower education rather than those groups, such as MOLs, where large numbers of working people came into the labor market from abroad.

PUBLIC POLICY IMPLICATIONS AND FUTURE RESEARCH

The results of our research have a number of implications for the debate on what is the appropriate public-policy response to the growing inequality of whites and minorities. Our results also point to new directions where research needs to be advanced in order to understand the dimensions and dynamics of this new inequality.

First, our research indicates that the major areas that have historically been the focus of public policy—particularly discrimination and poor education—remain significant problems. Important changes have occurred however, in the nature of these problems that require renewed attention and policy innovation.

Since the important progress in the 1960s, inequality because of discrimination in the labor market has not declined over the last 20 years. Discrimination has actually increased for Latino women compared to white women, for Mexican native-born males compared to white males and for Mexican immigrants given similar patterns of industrial employment compared to white men. This persistence and/or renewal of discrimination coincides with the end of major initiatives and some reversals in the area of affirmative action. Research by the General Accounting Office on the 1986 Immigration Reform and Control Act has already found discrimination to increase against Latinos. The slowdown in public employment has also contributed to the closing off of some arenas where discrimination was less of a problem than in the private sector labor market. Research on the evolution of discrimination in the private sector should be advanced, a task that has been made more difficult since important data sources,

like the Equal Employment Opportunity Commission, have been curtailed in the 1980s.

Although progress has been made in the Latino completion of middle-educational levels, there is increasing urgency to focus attention on the dynamics that lead to the persistence among Latinos of the highest national rates of high school dropouts, which is particularly urgent because of the falling real wages for high school dropouts. This trend is caused, in part, by the swelling of the number of people competing for lower paying jobs as employers continue to up-grade the educational requirements for all jobs. Continued immigration of less educated workers places additional supply pressures on the lowest wage sector of the labor market.

Immediate attention must also be directed at increasing the rate of Latino college completion and enrollment in graduate schools. With cutbacks to aid in higher education, Latino enrollment fell back significantly relative to whites. In part this is responsible for the shortage, and rising relative costs, of high-skilled workers in the United States. Finally, continuing progress must also be made in Latino attainment at middle-educational levels; yet attention must also be placed on why this level of education is becoming less rewarding. More research needs to be conducted on the causes and implications of growing polarization in returns to education, including changes in the interface between educational policy, changing skill requirements, and the structural evolution of the economy. Simply concentrating on a gradual improvement in average education is no longer a guarantee of increasing relative incomes.

Second, our research has pointed to a disturbing dynamic that is driving the new inequality: overall polarization in employment and wage growth in the American job market. The nature of this dynamic, however, is much more complicated, and the public-policy issues much less specific than the traditional explanations and policy approaches to inequality. What is clear is (1) that this is the most rapidly growing source of the increase in inequality; (2) that any policy agenda that is serious about Latino economic advancement and inequality in general must begin to address these issues; and (3) that these trends are impacting all minority groups of the population and are thus creating the need and constituency for concerted action.

Further research conducted as part of this project suggests that the sources of this polarized structural change are of both a domestic and international nature.⁹ Domestically, this polarization is linked to the collapse of the "Fordist" social pact that was characterized by balanced mass production manufacturing growth tied to improving real wages and income distribution, all regulated under a government commitment to education, employment generation, and civil rights

⁹See Carnoy, Daley, and Hinojosa-Ojeda (1990).

enforcement. International factors accelerated polarization through import competition and a collapse of manufacturing export markets in the United States, particularly because of the Latin America debt crisis that is also exacerbating migratory pressures toward the low wage sectors of the American labor market.

There is a need to understand clearly how changes in the international economy and the role of the United States are impacting on labor market polarization in order to analyze adequately Latino inequality in the broader debates concerning macroeconomic and incomes policies, as well as industrial, regional, international trade, investment, and migration policies. Thus, this study should be seen as a first contribution, along with other parallel regional and binational studies of Latinos in a changing economy project, toward laying the foundation for broader research and a policy agenda in the United States.

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3

The Effects of Literacy on the Earnings of Hispanics in the United States

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In March 1989, close to 20 million persons (or about 8%) of the population of the United States was of Spanish origin. In recent years, the economic condition of Hispanics has received much attention, and studies examining the determinants of earnings among this group have proliferated (see, for instance, Bean & Tienda, 1987; Borjas & Tienda, 1985; and DeFreitas, 1990). One aspect that has not received much attention in this literature is the role that literacy skills play in constraining the economic opportunities of Hispanics.

Broadly speaking, *literacy* refers to the set of skills required to use printed and written information to function effectively in society and to pursue one's goals and aspirations. One can thus expect literacy to be a key factor influencing individual performance on the job and, therefore, employment and earnings (see Sum, Harrington, & Goedicke, 1986, 1987; Venezky, Kaestle, & Sum, 1987). In this chapter, I intend to specify statistically the relative importance of literacy skills as a determinant of Hispanic earnings.

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