
Social Differentiation and Social Inequality

Essays in Honor of John Pock

EDITED BY

James N. Baron
David B. Grusky
Donald J. Treiman


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Income Differences Among 31 Ethnic Groups in Los Angeles

Donald J. Treiman and Hye-kyung Lee

The Los Angeles metropolitan area, with a current population of more than 15 million—about the size of the Netherlands—is sometimes called the “capital of the Pacific Rim” or, more derisively, the “capital of the Third World.” Boosters are fond of pointing out that if the metropolitan area were a separate country, it would have the eleventh largest economy in the world (Security Pacific Bank 1988:8). But what is truly distinctive about Los Angeles is what is captured in the second epithet—the fact that over the past quarter century it has become the major destination of immigrants in the world. Since 1970, when most of the population was of European origin¹ (“Anglo,” in the local parlance), nearly 3 million international immigrants, most from Latin America and Asia, have settled in the area.² By 1990, 27.3 percent of the population were foreign-born. Just under half the population (48.6 percent) was of European origin and nearly one-third (32.4 percent) was of Latin American origin; 9.3 percent were of Asian origin, 7.1 percent were of African origin, and 1.8 percent were of Middle Eastern origin.³ In Los Angeles County, the core of the metropolitan area, the shift to a non-European origin population was even more pronounced: The corresponding percentages were 39.3, 37.4, 10.8, 9.4, and 2.4; and one-third (32.7 percent) of the population was foreign-born. Finally, 151 different languages were spoken in the five-county metropolitan area and 132 in Los Angeles County.⁴

The shift in the population of Los Angeles from a mainly native-born to a substantially immigrant population has been occurring at a time when the economy of the area, in common with much of the remainder of the country, has been undergoing very substantial restructuring away

from heavy manufacturing and toward low-paying, low-skill jobs in light manufacturing, for example, furniture and garment manufacture (Schmick 1989). In addition, Los Angeles (along with New York, London, and Tokyo) has become a "capital of capital" (Soja 1987), which has resulted in an increase both in high-end jobs in banking, finance, and professional services and low-end jobs in hotels, restaurants, and other service industries.

The combination of massive and (as we shall see) very diverse immigration together with substantial shifts in the economy of the area gives rise to an obvious question: How have new immigrants been incorporated into the economy of Los Angeles? Have they followed the traditional immigrant route of concentration in low-level jobs, or have they found a greater variety of opportunities? With the shift from an "Anglo"-dominated to a truly multiethnic population, has there been a corresponding shift to true "equality of opportunity," the ability of persons of all ethnic origins to secure jobs and income commensurate with their individual qualifications, their "human capital"?

In this chapter we consider these questions. We begin with a socioeconomic profile of the 31 largest ethnic groups in the metropolitan area. As we will see, there is enormous diversity, especially in incomes—the ratio of the mean incomes of the richest and poorest groups is about five to one, and the sources of income differ substantially across groups. We then consider to what extent ethnic-group differences in income can be attributed to ethnic group differences in human-capital. As it turns out, human capital differences are part of but by no means the whole story. We consider why this is so by analyzing whether ethnic groups differ in the kinds of jobs they hold net of human capital differences. It turns out that they do. We then show that when ethnic group differences in both human capital and job characteristics are taken into account, ethnic group differences in income are largely, although not entirely, explained. We conclude with a discussion of how ethnic differences in income arise and some conjectures about what explains the differences that remain net of human capital assets and occupational characteristics.

Data

The data used in this analysis are from the 5 percent Public Use Microdata Sample (PUMS) from the 1990 U.S. Census of Population (U.S. Bureau of the Census 1993). From the California Microdata File, we extracted all persons residing in the five counties constituting the Los Angeles metropolitan area (Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties). Although these counties cover a vast region

of Southern California, from the Pacific Ocean to the Arizona border, over 90 percent of their combined population live within 60 miles of the Los Angeles city hall, and on a variety of measures the region clearly constitutes a single metropolis and a single labor market (Security Pacific Bank 1979, 1988). The area had a population of something over 14 million in 1990, and the 5 percent sample consists of 705,938 persons.

In the present analysis we restrict the sample to males age 20–64 who were not in school at the time of the data collection, had worked at any time in 1989, and had nonzero incomes in 1989. We excluded those without income and, for the regression analyses, the 374 men who reported negative incomes. These restrictions reduce the sample to 162,982 and, for the regression analysis, to 162,608. We focus on men because in this population there are complex interactions among ethnicity, gender, and socioeconomic attributes. Separate analyses of men and women would therefore be warranted, which would have nearly doubled the length of this essay. We leave such an analysis for another time. We restrict the sample to men age 20–64 in order to avoid the usual biases associated with age at entry into the labor force (those destined for high-paying jobs are likely still to be in school until around age 20) and continuing employment after the conventional retirement age (which tends to be restricted to those either at the very high or the very low end of the occupational status distribution).

For the analysis, we have divided the sample into 31 ethnic categories: eight Asian origin groups, nine Latin American origin groups, six European origin groups, three Middle Eastern origin groups, three African origin groups, American Indians, and an "other" category. As Table 3.1 shows, there is great internal variability within the aggregated categories. Hence, much that is interesting about the immigrant and ethnic groups of Los Angeles is lost when comparisons are restricted to gross categories such as "Asians," "Hispanics," or "whites." We will have more to say about this later.

Since our interest was in producing a detailed account of differences in the way various groups are incorporated into the economy of Los Angeles, we tried to create the most detailed classification that could sustain the analysis. To do this, we distinguished every identifiable non-European-origin group with at least 20,000 persons in the population of the metropolitan area (and hence at least 1,000 persons in the 5 percent PUMS sample), and every European-origin group with at least 20,000 *foreign-born* persons in the population. The specification of a 1,000-person minimum in the sample seemed a workable criterion since it would produce at least a few hundred respondents from each ethnic group, even from subsets of the population such as the employed males age 20–64 uti-

TABLE 3.1 Selected Socioeconomic Characteristics of 31 Ethnic Groups, Los Angeles Metropolitan Area, 1990 (Male Labor Force Age 20-64)

Ethnic Group	Mean Income in 1989	Percent Upper Non-manual ^a	Mean Years of School	Percent Speaking Non-English Language at Home	Percent		Percent Immigrated 1980 or Later	Percent Immigrated 1987 or Later	Mean Years of Labor Force Experience	Percent of Total Male Labor Force		N
					Foreign Born	U.S. Born				Male Labor Force	Female Labor Force	
Total	36,058	27.5	12.5	37.7	33.3	15.5	4.1	19.8	100.0	162,982		
Asian origin												
Asian Indian	43,396	51.4	15.5	85.5	97.6	46.8	10.0	18.1	.6	920		
Cambodian	23,107	15.6	10.5	97.0	99.3	61.5	2.2	19.0	.1	135		
Chinese	36,665	43.1	14.1	88.3	87.0	42.5	8.9	20.3	2.0	3,179		
Filipino	27,571	26.7	14.3	87.7	88.1	45.4	10.9	19.6	1.9	3,040		
Japanese	45,998	44.9	14.5	41.4	32.1	16.2	7.9	20.9	1.3	2,151		
Korean	37,206	32.2	14.2	96.5	97.7	53.3	12.3	21.0	1.2	1,935		
Vietnamese	25,872	21.5	12.7	98.4	98.9	52.5	6.6	18.0	.8	1,341		
Other Asian	29,549	26.6	13.5	71.4	69.2	34.4	6.9	18.7	.7	1,065		
Total	34,906	35.1	14.1	81.6	80.8	41.4	9.3	19.8	8.4	13,766		
Latin American origin												
Cuban	31,797	23.6	12.1	87.8	85.6	14.1	1.3	22.9	.4	681		
Guatemalan	14,307	4.9	8.3	97.8	98.3	69.1	22.5	18.5	.8	1,296		
Mexican	19,891	8.0	9.2	82.9	67.3	31.1	9.0	19.1	24.5	39,978		

Nicaraguan	19,114	14.7	11.6	95.2	93.4	59.9	18.0	18.0	.2	272		
Puerto Rican	28,521	18.9	12.2	68.6	4.6 ^b	10.3 ^c	4.1	18.8	.4	681		
Salvadoran	14,214	5.7	8.2	96.9	98.7	67.9	12.4	18.7	1.3	2,192		
South American	27,596	21.9	12.6	90.9	90.2	34.7	8.1	19.8	.6	999		
Other Central American	20,690	11.6	10.3	94.5	92.5	51.7	15.6	18.6	.2	346		
Other Hispanic	22,700	14.2	10.4	77.5	71.6	39.7	9.9	19.3	1.6	2,538		
Total	20,079	8.9	9.4	83.8	69.9	34.0	9.5	19.1	30.1	48,983		
European origin												
English	49,220	42.1	14.3	2.6	7.1	2.4	.7	22.0	7.7	12,539		
German	45,077	35.7	13.9	5.1	3.3	.4	.2	19.9	12.2	19,925		
Italian	45,440	34.7	13.8	9.8	6.2	1.1	.2	19.4	3.3	5,301		
Polish	51,455	45.1	14.6	10.3	10.6	4.3	.9	19.7	1.6	2,585		
Russian	69,458	56.5	15.5	10.0	7.6	2.2	.7	21.4	1.6	2,608		
Other European	43,815	35.1	13.8	8.1	7.6	2.2	.6	20.0	27.0	43,980		
Total	45,979	37.1	14.0	6.8	6.5	1.8	.5	20.2	53.3	86,938		
Middle Eastern origin												
Armenian	41,390	32.9	13.1	76.5	74.2	28.7	8.6	21.7	.6	1,009		
Iranian	43,066	47.4	15.5	90.6	97.5	38.2	7.1	17.3	.5	870		
Other ME., North African	44,532	39.3	14.0	70.5	76.2	32.6	7.4	19.0	.7	1,210		
Total	43,093	39.5	14.1	78.1	81.5	32.9	7.7	19.4	1.9	3,089		

(continued)

TABLE 3.1 (continued)

Ethnic Group	Mean Income in 1989	Percent Upper Non-manual ^a	Mean Years of School	Percent Speaking Non-English Language at Home		Percent Foreign Born	Percent Immigrated 1980 or Later	Percent Immigrated 1987 or Later	Mean Years of Labor Force Experience	Percent of Total		N
										Male Labor Force	Female Labor Force	
African origin												
U.S. blacks	27,561	20.0	13.0	4.1		0.0	.1 ^d	.0	19.4	5.2		8,509
West Indian	26,166	21.5	12.7	14.9		80.7	24.1	7.0	20.5	.1		228
Foreign born blacks (exc. W.I.)												
Total	28,092	27.3	13.9	47.9		100.0	42.8	7.1	17.1	.2		311
American Indian	27,544	20.3	13.0	5.9		5.5	2.2	.4	19.3	5.6		9,048
Other	28,672	20.2	12.8	14.3		3.7	1.9	.6	19.3	.5		803
	28,483	19.7	11.8	46.8		34.4	16.9	1.7	19.0	.2		355

^a Percent in administrative or professional occupations, as defined in the 1990 U.S. Census Classification of Industries and Occupations (U.S. Bureau of the Census 1992).

^b These could be persons who immigrated to Puerto Rico from other countries and later came to Los Angeles. Or they could have erroneously thought of Puerto Rico as a foreign country.

^c This number clearly is in error since it is larger than the number of "foreign-born" Puerto Ricans. Perhaps some respondents gave the year they immigrated from Puerto Rico to the mainland.

^d There should be no positive responses to the year of immigration to the United States since this category includes only those born here.

lized here. The decision to separately identify European-origin groups only when they included at least 1,000 foreign-born persons reflected our special interest in immigrant groups but also kept the number of groups from increasing substantially.

Defining ethnic groups in the U.S. census is not an easy matter, since the census utilizes a hodgepodge of lumpy and overlapping indicators. (An example of the lumpiness: "white" is one race, but each of the Asian origin groups shown in Table 3.1 is treated as a separate "race"; an example of the overlap: those of "Hispanic origin" may be of any race.) After exploring a number of options, we settled upon a classification based on a combination of the "Hispanic origin," "race," "ancestry 1," and "place of birth" questions. We first distinguished those of Hispanic origin from others and then used the Hispanic-origin question and the ancestry question to make further distinctions among Latin American origin groups; we included those of Iberian origin—Spanish and Portuguese—in the "other European origin" category. For the remainder (the non-Hispanic origin population) we then distinguished those of Asian, African, and American Indian origin on the basis of race. For Asians, the race variable was sufficient to distinguish each group, except that we moved "other Hispanics" who claimed an Asian race into the appropriate Asian category. This mainly applies to Filipinos, who sometimes claim to be "other Hispanics." For those of African origin, we distinguished those with West Indian origins on the basis of ancestry and non-West Indian foreign-born blacks on the basis of place of birth. From the remainder we distinguished those of Middle Eastern origin (Armenians, Iranians, and others) on the basis of ancestry. From the remainder we then distinguished those of European origin on the basis of race ("white") and used the ancestry variable to make further distinctions. The small percentage of the population that did not meet any of these criteria was included in a residual category, "other."⁵

Descriptive Information

Table 3.1 provides pertinent social and economic information about each of the 31 ethnic groups. Note first the absolute and relative size of each of the categories. The right-hand column gives the number of persons in each ethnic group included in the sample. The groups range in size from 135 Cambodians, who constitute about one-tenth of 1 percent of the sample (as we can see from the next column to the left), to 43,980 of "other European origin"—non-Hispanic whites who do not identify their main ancestry as English, German, Italian, Polish, or Russian—who constitute just over a quarter of the sample. Just over half of the employed men in the Los Angeles metropolitan area are of European origin, nearly

one-third are of Latin American origin, 8 percent are of Asian origin, 6 percent are of African origin, and the remainder are of Middle Eastern, American Indian, or "other" origin. Multiplying the number of cases in the sample by 20 gives an approximate estimate of the size of each group in the population. Thus there were about 2,700 ($= 135 \times 20$) Cambodian men age 20–64 in the metropolitan labor force in 1990, and so on.

Income differences among ethnic groups are very substantial, even when the aggregate groups normally analyzed are considered. Those of European origin average about \$46,000 per year, and those of Middle Eastern origin do nearly as well, averaging about \$43,000 per year. Then come Asians (averaging about \$35,000), blacks (averaging about \$28,000), and finally those of Latin American origin, who average about \$20,000. But these gross distinctions mask important variation between specific groups within the aggregate categories. While the incomes of all European origin groups are relatively high, those of Russian origin (who are mainly Jews—see Rosenthal 1975) do much better than all of the remaining groups, earning nearly 60 percent more per year than those of "other European origin." Similarly, Japanese earn about twice as much as do Cambodians, and Cubans earn more than twice as much as do those from Guatemala and El Salvador.

Income differences among ethnic groups are substantially but not completely mirrored in differences in education and occupational status. In general, those of Asian, European, and Middle Eastern origin have relatively high socioeconomic status: Members of these groups average about two years of college and more than one-third are professionals or managers. Blacks average a year less education, and only about 20 percent are in professional or managerial jobs. Those of Latin American origin average less than nine years of schooling, and less than 10 percent have professional or managerial jobs. However, just as with income, there are important ethnic-group differences in both education and the likelihood of holding a professional or managerial job within the aggregate categories. For example, on average, Asian Indians have five years more schooling than do Cambodians (15.5 compared to 10.5), and those from South America have over four years more schooling than those from El Salvador (12.6 compared to 8.2). Similarly, more than half of the Indians but only 16 percent of the Vietnamese have professional or managerial jobs, and the same is true of more than 20 percent of the Cubans and less than 5 percent of the Guatemalans.

The same story of aggregate differences but of important variations between specific groups within each aggregate category can be seen by inspection of the columns indicating the percentage foreign-born and the percentage speaking a language other than English at home. In general,

large fractions of those from Asian, Latin American, and Middle Eastern origins and small fractions of the remaining groups are foreign-born and speak a non-English language at home. But among the Asians, the Japanese stand out as a largely native-born group—the low level of recent immigration from Japan reflecting its position as a wealthy nation. And among Latin Americans, those of Mexican origin and "other Hispanic origin" (who appear to be mainly Mexican origin) stand out as distinctively more likely to be native-born than the remainder.⁶

Table 3.2 shows the sources of total income for each ethnic group. In all ethnic groups most men have wage and salary earnings. But there are important variations among the groups with respect to the percentage with income from self-employment and the percentage with income from interest and rents. With respect to self-employment income, the Koreans are distinctive, as is well known (Light and Bonacich 1988): More than one-third are self-employed, followed by the three groups of Middle Eastern origin and Russians, which have self-employment rates ranging from 25 to 30 percent. At the other extreme, less than 10 percent of Filipinos, most of those of Latin American origin, and blacks (except West Indians) have self-employment income. As these figures indicate, the within-aggregate-group differences are striking: Koreans versus Filipinos; South Americans and Cubans versus Mexicans and Central Americans; and Russians versus the remaining European-origin groups.

Similarly striking contrasts emerge with respect to the percentage who have income from interest or rents: around half of those of Chinese, Japanese, and Russian origin; more than one-third of Asian Indians and the remaining European-origin groups; and less than 10 percent of those of Mexican or Central American origins. Among those with income from interest or rents, the largest returns are for Asian Indians, Koreans, all of the Middle Eastern-origin groups, foreign-born (non-West Indian) blacks, and all of the European-origin groups, but especially those of Russian origin.

What Tables 3.1 and 3.2 convey is the complexity of the story. The ethnic groups considered here have distinctive patterns of migration to Los Angeles and of incorporation in the local economy. Clearly, these histories must be taken into account in order to explain group differences in average income. But we would have one sort of story if income differences between ethnic groups are simply a matter of group differences in human capital and a different sort of story if substantial differences remain after human-capital attributes are taken into account. In the former case the focus would be on the factors accounting for differentially selective migration, while in the latter case it would be necessary to consider variations in the way different ethnic groups fare in Los Angeles.

TABLE 3.2 Components of 1989 Income for 31 Ethnic Groups in Los Angeles (Male Labor Force Age 20-64)

Ethnic group	Percent with				Mean Income of Those with Income			
	Wage and Salary Earnings	Self- employment Income	Interest, Rental Income	Income from Other Sources	Wage and Salary Earnings	Self- employment Income	Interest, Rental Income	Income from Other Sources
Total	91.6	13.9	26.6	7.1	33,090	28,004	4,986	7,312
Asian origin								
Asian Indian	90.9	18.7	39.3	2.8	38,949	31,416	5,076	4,673
Cambodian	88.9	13.3	21.5	8.9	20,153	30,650	2,234	7,049
Chinese	89.6	18.2	47.8	4.8	33,111	24,058	4,888	5,741
Filipino	96.2	7.1	22.9	5.7	26,370	18,436	2,386	5,896
Japanese	90.5	15.7	47.9	6.1	43,534	27,356	3,693	8,927
Korean	71.9	36.3	22.3	2.4	32,919	32,984	6,538	3,421
Vietnamese	92.8	11.7	21.3	7.2	24,738	18,270	1,924	5,194
Other Asian	92.0	12.1	20.8	4.2	27,573	26,929	3,329	5,224
Total	89.3	16.8	33.2	5.0	32,117	27,090	4,131	6,105
Latin American origin								
Cuban	86.0	17.6	22.2	5.7	30,585	25,566	3,063	5,139
Guatemalan	95.1	6.5	2.7	3.2	13,815	15,786	1,755	3,277
Mexican	95.3	6.6	7.6	5.2	19,105	18,366	3,375	4,027
Nicaraguan	95.2	5.1	7.7	4.8	18,731	21,708	997	1,762
Puerto Rican	95.4	6.8	16.0	9.3	26,947	29,430	2,202	4,980
Salvadoran	95.0	6.4	3.4	3.0	13,874	13,983	1,723	2,384
South American	86.9	18.7	14.8	4.4	25,387	25,352	3,720	5,468

Other Central American	91.3	10.7	9.8	2.6	19,932	21,164	887	5,203
Other Hispanic	94.4	9.2	11.5	5.1	21,137	21,264	4,654	4,828
Total	94.9	7.2	7.9	5.1	19,210	19,126	3,359	4,072
European origin								
English	89.9	17.6	43.8	9.2	45,062	30,678	5,417	9,872
German	91.0	16.4	39.0	8.3	41,415	28,855	4,945	8,785
Italian	89.5	18.3	34.4	6.9	41,892	31,449	4,991	7,281
Polish	90.6	18.3	44.5	6.5	47,203	30,746	5,698	8,280
Russian	85.0	27.6	53.6	7.7	62,009	39,731	9,777	6,447
Other European	90.3	17.0	34.3	8.4	40,277	29,655	5,030	8,394
Total	90.2	17.4	37.6	8.3	42,148	30,261	5,299	8,607
Middle Eastern origin								
Armenian	78.4	30.2	28.5	5.5	38,130	29,044	8,106	7,432
Iranian	82.5	25.9	30.8	3.1	39,148	32,873	6,527	7,908
Other M.E.								
North African	82.7	25.1	30.6	3.6	39,994	35,114	7,651	7,828
Total	81.3	27.0	30.0	4.1	39,165	32,289	7,467	7,672
African origin								
U.S. blacks	95.0	8.3	11.9	9.9	25,895	23,267	3,112	6,893
West Indian	91.2	11.4	11.8	5.3	25,029	25,444	1,848	4,037
Foreign-born blacks (exc. W.I.)								
Total	93.6	9.0	13.5	7.4	26,205	26,076	5,939	5,711
American Indian	94.8	8.4	12.0	9.7	25,885	23,446	3,191	6,794
Other	93.4	10.7	18.7	9.1	27,281	18,597	3,099	6,830
Total	92.7	10.7	13.2	5.4	27,017	25,318	3,196	5,818

Analytic Strategy

To decide between these alternatives, we develop a model of income attainment that allows us to estimate the effect of ethnic group membership net of the human-capital assets of individuals and, of course, the effect of personal characteristics net of ethnic-group membership. We do this by estimating two equations. We first estimate an equation of the form

$$\widehat{\ln(Y)} = a + \sum b_i X_i \quad (1)$$

where Y is the total income received in 1979 and the X_i are personal characteristics thought to affect income. We then estimate an equation of the form

$$\widehat{\ln(Y)} = a + \sum b_i X_i + \sum c_j G_j \quad (2)$$

where Y and the X_i are human capital attributes and the G_j are dummy variables for the ethnic groups, scored one for individuals who are members of the group and zero otherwise. We will have more to say in the next section about the interpretation of these two equations (and of corresponding equations that include job characteristics as additional independent variables). But first we need to define the variables included in them.

Dependent Variable

Income. $\ln(Y)$ = the natural log of total income in 1989 from all sources. The total income variable was created by the Census Bureau as the sum of income reported from each of eight sources: wage and salary earnings; earnings from nonfarm self employment; earnings from farm self-employment; income from interest, dividends, and rents; income from social security; income from public assistance; retirement income; and income from other sources. Total income from all sources is analyzed rather than wage and salary earnings because other sources of income, particularly income from self-employment, vary substantially among ethnic groups, as we have seen. Moreover, it is the total income differences, not merely earnings differences, that are consequential. In our preliminary analysis we estimated the income equations using both the metric and log form of income and investigated various heteroskedasticity measures. Because the log form produces a better fit to the data (the R^2 's are higher) and because the distributions of the variables are much better behaved, we report the analysis based on the log form of the income variable. To facilitate handling the logged income variable, we

omitted the 374 men who reported negative incomes. Thus the analysis is restricted to men with positive incomes in 1989. There are two additional advantages to the log form. First, individual income tends to be distributed log-normally so the log of income is distributed normally, a convenient property. Second, and more important, when the dependent variable is in (natural) log form, the coefficients associated with the independent variables can be interpreted as indicating approximately the proportional increase in the dependent variable for a one-unit increase in the independent variable.⁷

The remaining variables fall into three groups: measures of human capital attributes, characteristics of the jobs held by respondents, and a set of dummy variables distinguishing the 31 ethnic groups.

Human Capital Attributes

Education. E = years of school completed, which is a standard summary measure of educational attainment. It is well established that amount of schooling is the single strongest determinant of occupational status (e.g., Treiman and Ganzeboom 1990:117). We also include the square of education, to permit the possibility that the value of each additional year of education increases as the level of education increases (Treiman and Terrell 1975). If it does, the coefficient associated with the squared term will be positive.

Education completed in the United States. U is a dummy variable indicating whether the respondent's education was completed in the U.S. ($U = 1$) or abroad ($U = 0$). Since the census includes no direct indicator of where education was completed, we estimated this variable by assuming that the men in our sample began school at age six and completed their education without interruption. This provided the year in which they completed their education. If this year was later than the midpoint of the period of immigration to the United States, they were assumed to have completed their education in the United States (as were those who immigrated prior to 1965 or were native-born).⁸ The reason for including this variable was our suspicion that education completed abroad is not as valuable as education completed in the United States because of the greater relevance of American education to the United States labor market as well as the presence of specific vocational guidance that is a standard part of the curriculum in the United States. To test the claim that returns to education completed in the United States are greater than returns to education completed abroad, we included the interaction terms EU and E^2U .

Labor force experience. Income is known to increase substantially with labor force experience, but in a curvilinear fashion—at first rapidly but then more slowly (Treiman and Roos 1983). We thus include both a main

term and a squared term for labor force experience, with the expectation that the coefficients of the squared term will be negative. Since the census includes no direct measure of years of labor force experience, we approximate total labor force experience in the conventional way, as $T = \text{age} - \text{education} - 6$.⁹

English language competence. $L_2 \dots L_5$ is a set of dummy variables indicating the degree of English-language competence. The hypothesis is, of course, that English-language competence has a positive net effect on income. The omitted category consists of those who are monolingual in English. Members of the remaining categories all speak a language other than English at home. L_1 is scored one for those who, by the report of whoever completed the census form (themselves or another member of their household), speak English "very well" and zero otherwise. L_2 is scored one for those who speak English "well" and zero otherwise. L_3 is scored one for those who speak English "not well" and zero otherwise. L_4 is scored one for those who do not speak English at all and zero otherwise.

Recent immigration. R is a dummy variable scored one for those who immigrated to the United States between 1988 and 1990 and zero otherwise. The assumption is that very recent immigrants will not yet have learned the ropes nor acquired the contacts necessary to be economically successful. The disadvantaged position of very recent immigrants is reflected in the folk terms applied by many immigrant groups to newcomers: *greenhorns*, *jobs* (for "fresh off the boat"), and so on.

Job Characteristics

While some analysts (e.g., Grusky and Baron, in personal communication) regard income as an attribute of jobs like any other—for example, the nature of the employment relationship (employer, employee, etc.), the status of the occupation that defines the job, and so on—others (e.g., Duncan 1961; Ganzeboom, de Graaf, and Treiman 1992) regard jobs as intervening between education and income. In this formulation, which we prefer, human-capital assets qualify individuals for jobs with certain attributes; the kind of jobs people do plus their performance on the job plus other attributes together determine their income. Since there is a good deal of variance in the incomes of individuals who do nominally identical jobs—we need look no further than our own university departments to be convinced of this—it seems sensible to us to treat job attributes as one, but only one, of the sets of factors that affect the income of individuals. To assess the effect of job attributes as intervening between human-capital and income, we estimate a second set of equations corresponding to equation 1 and equation 2 but that include both human-capital factors and job attributes as independent variables. The job attributes we analyze are the following.

Employment status. ($C_1 \dots C_3$). Immigrants (and members of different ethnic groups) may be incorporated into the labor force in a variety of ways, with important consequences for their income. Most will be employed as wage or salary workers (the reference category), but some will have sufficient capital to establish enterprises, and still others will work without regular pay in family enterprises. Those who establish incorporated businesses—and therefore are listed by the census as employees of their own businesses (C_1)—should have the highest incomes, since they are in a position to take profits. By contrast, it is unclear whether self-employment in an unincorporated business (C_2) is an advantage or disadvantage relative to a wage or salary. What surely is true is that small businesses often entail extremely long hours of labor, so that the return to hour spent working is likely to be smaller for the self-employed than for wage or salary workers. Finally, those who work without regular pay in family enterprises (C_3) are likely to have low personal incomes. In most cases they will be the spouse or the grown children of the owner of the enterprise and thus will partake of whatever income from the business accrues to the family.

Time spent working. H = the natural logarithm of the usual hours worked per week in 1989. W = the natural logarithm of the number of weeks worked in 1989. Together, these variables take account of the possibility that ethnic differences in hours worked per year partly account for ethnic differences in annual income. Since the dependent variable is not earnings but rather income, the coefficients are not quite measures of effects on earnings but are close.¹⁰

Occupation. Because we are interested in the way different ethnic groups are incorporated into the economic life of Los Angeles, it is more useful to represent occupational position by a set of dummy variables for occupational categories than to utilize a global summary measure. We have distinguished the 13 occupational categories shown in Table 3.3 plus the reference category, managers and administrators. The 13 categories shown in the table are ordered in terms of their mean income.

Ethnic Group Membership

$G_1 \dots G_{31}$ is a set of dummy variables representing the 31 ethnic groups described in the "Data" section above. Each variable is scored one for individuals who are members of the ethnic group and zero otherwise.

Results

Table 3.3 shows the coefficients associated with four models predicting (ln) income. Model 1 includes only the human-capital variables listed; model 2 includes in addition the 30 dummy variables for ethnic groups.

TABLE 3.3 Coefficients of Determinants of (ln) Total Income for 31 Ethnic Groups in Los Angeles (Male Labor Force 20-64)

	Model 1 (human capital)	Model 2 (human capital plus ethnic dummies)	Model 3 (human capital plus job features)	Model 4 (human capital, job features, and ethnic dummies)
R ²	.330	.343	.551	.556
Standard Error of Estimate	.800	.793	.656	.652
BIC	-64,977	-67,803	-129,846	-131,306
Intercept	8,649	8,781	4,224	4,370
E: Years of schooling	.0036	.0042	.0104	.0100
E ² : Squared years of schooling	.00339	.00304	.00190	.00177
U: Completed education in U.S.	-.301	-.272	-.010	-.002
EU: Years of school by U.S. completion	.0318	.0248	-.0016	-.0055
E ² U: Squared years of school by U.S. completion	.000159	.000400	.000977	.001100
X: Years of labor force experience	.0658	.0651	.0468	.0468
X ² : Squared labor force experience	-.000965	-.000971	-.000601	-.000613
L ₁ : Speaks English "very well" ^a	-.102	-.013	-.076	-.010
L ₂ : Speaks English "well"	-.164	-.072	-.126	-.058
L ₃ : Speaks English "not well"	-.360	-.268	-.264	-.197
L ₄ : Speaks English "not at all"	-.515	-.417	-.360	-.290
R: Immigrated 1987-1990	-.352	-.357	-.176	-.181
C ₁ : Self-employed (unincorporated) ^b			-.061	-.077
C ₂ : Employee of own corporation			.308	.293

C₃: Help out in family business

H: ln(hours usually worked per week)

W: ln(weeks worked per year in 1989)

O₁: Professionals^cO₂: Sales personnel (high)O₃: TechniciansO₄: Clerical workersO₅: Skilled manual workersO₆: Transportation operatorsO₇: Sales clerksO₈: Protective service workersO₉: Machine operatorsO₁₀: Other service workersO₁₁: LaborersO₁₂: Farming, forestry, fishing workersO₁₃: Private household service workers^a The reference category is those who speak only English at home.^b The reference category is wage and salary workers.^c The reference category is managers and administrators. Occupational groups are arrayed in the order of their mean observed income with no controls.

Models 3 and 4 parallel models 1 and 2 except that they also include variables for the job characteristics.

Human Capital

Consider model 1 first. There is little that is surprising here. By and large, the variables behave as expected. Net of education, labor force experience, and recency of immigration, those who speak a non-English language at home but who speak English "very well" experience a 10 percent reduction in income relative to native English speakers. As English-language competence declines, the income gap relative to native speakers increases, so that the cost of not speaking English at all is to reduce average incomes by more than one-third net of other factors. Precisely, those who do not speak English at all have expected incomes about 60 percent ($.598 = e^{-.515}$) as large as those of native speakers. Similarly, recent immigrants earn about 30 percent less ($.703 = e^{-.352}$) than do longer-term immigrants or the native-born with similar education, labor force experience, and English-language skill.

The coefficients associated with years of school completed, where education was completed, and labor force experience cannot be interpreted directly from Table 3.3 because of the presence of squared terms and interaction terms. To facilitate interpretation, we graph the effects of years of education completed in the United States and abroad (in Figure 3.1) and labor force experience (in Figure 3.2). These graphs are estimated by evaluating equation 1 at the mean of the remaining variables to produce an equation in two unknowns, which can then be graphed. For example, Figure 3.1 is derived from

$$\begin{aligned}\widehat{\ln(Y)} &= .0036(E) + .00339(E^2) - .301(U) + .0318(EU) + .000159(E^2U) \\ &\quad + a + \sum b_i X_i \\ \widehat{\ln(Y)} &= .0036(E) + .00339(E^2) - .301(U) + .0318(EU) + .000159(E^2U) \\ &\quad + 9.476,\end{aligned}\quad (3)$$

where $\sum b_i X_i$ is the product of the coefficients associated with and means of all the variables in the model except those involving education.¹¹ For those who completed their education in the United States, $U = 1$, and therefore the equation simplifies to

$$\begin{aligned}\widehat{\ln(Y)} &= (.0036 + .0318)E + (.00339 + .000159)E^2 + (-.301 + 9.476) \\ &= .0354(E) + .00355(E^2) + 9.175\end{aligned}\quad (4)$$

FIGURE 3.1 Expected Income by Years of School Completed, Net of Other Human Capital Attributes, Los Angeles Metropolitan Area, 1990 (Male Labor Force Age 20–64)

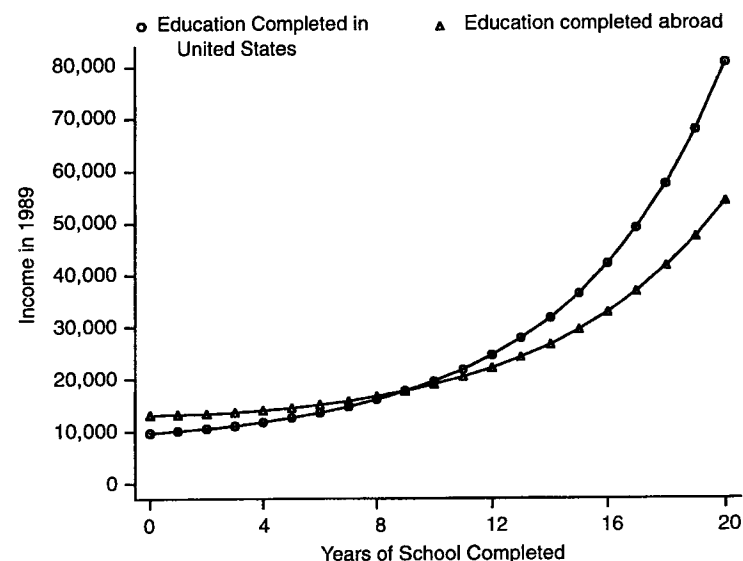


FIGURE 3.2 Expected Income by Years of Labor Force Experience, Net of Other Human Capital Attributes, Los Angeles Metropolitan Area (Area Male Labor Force Age 20–64)



and for those who completed their education abroad $U = 0$ and therefore the equation simplifies to

$$\widehat{\ln(Y)} = .0036(E) + .00339(E^2) + 9.476. \quad (5)$$

Equations 4 and 5 are graphed in Figure 3.1. Figure 3.2 is created in a similar way.

Figure 3.1 reveals that, as expected, income increases with education and returns to higher levels of education are greater than returns to lower levels of education. Also, as expected, returns to education completed in the United States are greater than returns to education completed abroad, although this result reverses at very low levels of schooling. Among those with less than nine years of schooling, men whose education was completed abroad do a bit better, on average, than equally poorly educated men who completed their education in the United States. In the U.S., where secondary education is both free and required, it is likely that those who get less than nine years of schooling are seriously dysfunctional in a variety of ways. By contrast, for those who completed their education abroad, particularly those from Latin America, many men obtain very little schooling through no fault of their own. Thus even immigrants very poorly educated by American standards may be *positively* selected with respect to skill, motivation, discipline, and intelligence, whereas poorly educated Americans may be *negatively* selected with respect to the same traits.

As expected, income increases with labor force experience, but at a decreasing rate, and begins to decline at 34 years of experience.¹² As has been observed elsewhere (e.g., Treiman, McKeever, and Fodor 1996), the effect of labor force experience on income is small relative to the effect of education.

So far we have a conventional analysis of the effect of human-capital on income attainment. The central focus of this chapter, however, is on whether there are ethnic-group differences in returns to human-capital. To assess these, we estimated model 2. Model 2 is identical to model 1 except that it includes in addition to the variables in model 1 a set of 30 dummy variables for ethnic-group membership, $G_1 \dots G_{22}$, $G_{24} \dots G_{31}$ (G_{23} , "other European origin," is the omitted category). The inclusion of dummy variables for the ethnic groups permits the decomposition of group differences in income into a portion associated with group differences with respect to the variables shown in Table 3.3 and a portion associated with other factors. The results of this decomposition are shown in Table 3.4.

TABLE 3.4 Decomposition of Ethnic Group Differences in Mean Income

Ethnic Group	Ratio of Observed Group Mean to Overall Mean	Ratio of Adjusted Group Mean to Overall Mean	
		Model 2: Controlling for Human Capital	Model 4: Controlling for Human Capital and Job Characteristics
Asian origin			
Asian Indian	1.20	1.01	.99
Cambodian	.64	.82	.95
Chinese	1.02	.95	.94
Filipino	.76	.82	.87
Japanese	1.28	1.23	1.14
Korean	1.03	1.01	.98
Vietnamese	.72	.89	.94
Other Asian	.82	.90	.92
Total	.97	.96 ^a	.96
Latin American origin			
Cuban	.88	1.04	1.01
Guatemalan	.40	.78	.82
Mexican	.55	.91	.93
Nicaraguan	.53	.81	.83
Puerto Rican	.79	.95	1.00
Salvadoran	.39	.77	.81
South American	.77	.91	.93
Other Central American	.57	.86	.90
Other Hispanic	.63	.83	.88
Total	.56	.89	.92
European origin			
English	1.37	1.10	1.08
German	1.25	1.12	1.07
Italian	1.26	1.16	1.11
Polish	1.43	1.13	1.08

(continued)

TABLE 3.4 (continued)

Ethnic Group	Ratio of Observed Group Mean to Overall Mean	Ratio of Adjusted Group Mean to Overall Mean	
		Model 2: Controlling for Human Capital	Model 4: Controlling for Human Capital and Job Characteristics
Russian	1.93	1.25	1.19
Other European	1.22	1.08	1.06
Total	1.28	1.10	1.07
Middle Eastern origin			
Armenian	1.15	1.08	1.03
Iranian	1.19	1.06	1.00
Other M.E., N. African	1.24	1.13	1.07
Total	1.20	1.09	1.04
African origin			
U.S. blacks	.76	.74	.85
West Indian	.73	.84	.89
Foreign-born blacks (exc. W.I.)	.78	.81	.87
Total	.76	.75	.85
American Indian	.80	.81	.87
Other	.79	.89	.91

^a The averages for major ethnic groups are derived by taking the antilog of the weighted average of the adjusted coefficients for the component ethnic categories.

Before discussing Table 3.4, however, we note that the coefficients for the individual level variables shown for model 2 in Table 3.3 are on the whole very similar to the corresponding coefficients for model 1. The only important differences are the stronger effects of English-language competence in model 1. Moreover, the variance explained by model 2 is hardly greater than that explained by model 1, an increment of .013.¹³ Taken together, these results suggest that ethnic-group differences in average income are largely due to ethnic differences with respect to the variables in Table 3.3. Still, this is not the whole story, as we shall see.

Table 3.4 shows a decomposition of ethnic differences in mean income into two components: a portion due to group differences in the factors measured in Table 3.3 and a portion due to group differences in other factors. Column 1 shows the ratio of the actual mean income of each group to the overall mean; this is just a transformation of the values in the left-hand column of Table 3.1. Columns 2 and 3 express the ratio of each group's *expected* mean to the overall mean, controlling for the variables in Table 3.3. The coefficients in column 2 are just transformations of the coefficients associated with the dummy variables for ethnic group membership in model 2, where the transformation involved first converting the coefficients to deviations from the grand mean rather than deviations from the omitted category¹⁴ and then taking antilogs. Column 3 shows the corresponding coefficients derived from model 4.

Consider first the figures in column 1. As we have already noted in discussing Table 3.1, there are very large differences between groups in average income. Column 1 expresses these in ratio to the overall mean and shows a range of about 40 percent of the overall mean for Guatemalans and Salvadorans to 193 percent of the overall mean for those of Russian origin. All the black and Hispanic groups have ratios of less than unity and all of the European-origin and Middle Eastern groups have ratios of greater than unity, while the Asian-origin groups are less consistent.

The more interesting figures, however, are those in column 2, which show the ratio of each group's average income to the overall mean income *net of the variables in model 2*. These coefficients can be interpreted as indicating the effect of ethnic-group membership on income among individuals who are indistinguishable with respect to the human-capital attributes assessed in Table 3.3. Of course, what the effect of ethnic-group membership means is unclear. Logically, the coefficients associated with ethnic-group membership are surrogates for whatever variables not included in the equation are correlated with ethnic-group membership and correlated with income. Still, inspection of the pattern of coefficients in column 2 provides some clues.

It is evident that ethnic-group differences in human-capital—in years of schooling, English-language competence, labor force experience, and recency of immigration to the United States—account for a substantial fraction, but by no means all, of the observed group differences in average income. One way to see this is to compare various measures of variability across ethnic groups with respect to observed incomes and expected incomes net of human-capital factors. Consider the two series involving ratios. Both the range across the ratios and the weighted standard deviation of the ratios (weighted by the relative population size) are reduced by two-thirds when human-capital factors are controlled and the

unweighted standard deviation of the ratios is reduced by nearly 60 percent. In this sense we can say that ethnic-group differences in human capital—primarily the level of education but also English-language competence, length of labor force experience, and recency of immigration—account for about two-thirds of group variability in income.

But what about the remaining third? How can we account for ethnic differences in average income that do not simply reflect ethnic differences in human-capital assets? Why do those of European and Middle Eastern origin, Japanese, and Cubans do better than would be expected on the basis of their human capital; Asian Indians and Koreans about as expected; and the remaining groups less well than expected?

We have already suggested that the various ethnic groups of Los Angeles are incorporated into the economy in very different ways, depending upon the particular circumstances of their arrival. Los Angeles is, after all, a city of immigrants—if not from other countries then from other parts of the United States. That group differences in returns to human capital are large—which is what is implied by the coefficients in column 2—suggests that Los Angeles is a *multiethnic* rather than a *non-ethnic* society. Far from being the individualistic place it sometimes is portrayed to be, where success depends only upon one's skill and drive and luck, Los Angeles is a place where ethnicity matters, where one's life chances depend upon the kind of niche one's group has found in the economic life of the city. These niches, in turn, are the product of the historical circumstances that produced particular kinds of immigrant flows at particular historical periods.

While the number of ethnic groups analyzed here precludes a full accounting of the circumstances of each group, we can get some handle on the processes involved by considering the extent and pattern of ethnic differences in income remaining when account is taken not only of group differences in human capital but also of group differences in job characteristics.

Human Capital and Job Characteristics

The coefficients in column 3 of Table 3.4 are similar to those in column 2 but are derived from the ethnic-group coefficients from model 4. Before assessing the remaining effect of ethnic-group membership, we need to consider how human-capital factors and job characteristics jointly affect income. That is, we need first to compare the coefficients for the human-capital variables in the two right-hand columns of Table 3.3 with the corresponding coefficients in the two left-hand columns and, second, to consider the role of job characteristics as determinants of income net of human-capital differences.

Not surprisingly, the coefficients associated with the human-capital variables continue to behave as expected, albeit they are somewhat smaller than the corresponding coefficients for models 1 and 2. This is exactly as we would expect: The characteristics of the jobs people do are partly dependent upon their human capital, and job characteristics intervene between human capital and income. The reduced effect of the human capital variables is easy to see in the case of English-language competence and recency of immigration. Introducing job characteristics reduces the expected income gap between those who cannot speak English at all and those who speak English only from 40 percent ($.598 = e^{-.515}$) when ethnicity is not controlled, or 34 percent ($.659 = e^{-.417}$) when ethnicity is controlled, to 30 percent ($.698 = e^{-.360}$) and 25 percent ($.748 = e^{-.290}$), respectively. Similarly, controlling for job characteristics reduces the cost of very recent immigration by about half. The effects of education and work experience are similarly reduced, although the effects cannot be so readily seen without graphing the relationships (as in Figures 3.1 and 3.2). We do not show these graphs here because of limitations of space.

Now consider the effect of job characteristics on income, controlling for human-capital factors. As anticipated, those who are employees of their own corporations—an indicator of owning a corporation large enough or profitable enough to warrant incorporation—do well. Their incomes average about one-third more than those of otherwise similar wage and salary workers. In contrast, those helping in family businesses without pay have very low independent incomes—less than half of those of wage and salary workers—although presumably they benefit from the collective profits of the enterprise.

Weeks worked in 1989 and hours per week usually worked in 1989 are expressed in log form. For such variables, the associated regression coefficients are interpreted as indicating the percentage change in the dependent variable for a 1 percent change in the independent variable; such coefficients are known in the economics literature as elasticity coefficients. Hours and weeks worked are converted to log form because we would expect increases in earnings to be proportional to increases in hours spent working. Interestingly, weeks worked per year is more important than hours worked per week (the elasticities are, respectively, .80 and .53), perhaps because a large fraction of the labor force is paid on a salaried rather than an hourly wage basis and differences in the normal work week (e.g., 35 or 37.5 or 40 hours) are not reflected in pay differentials.

Finally, occupational groups differ substantially in their mean income, net of human capital differences and differences in the other job characteristics. Relative to their education, English-language competence, and so on, managers, professionals, and high status sales personnel have the

highest incomes, followed by technicians; then by skilled manual workers, protective service workers, and transportation operators; then by clerical workers and machine operators; then by sales clerks and laborers; then by other service workers and agricultural workers; and finally by private household service workers.

Together, human-capital attributes and job characteristics account for more than half of the variance in (ln) incomes, far more than human capital alone. Controlling for ethnic-group membership has little effect on the remaining variables except for English-language competence: Just as for model 2, controlling for ethnic-group membership in model 4 reduces the importance of English-language competence as a determinant of income. Moreover, the addition of dummy variables for ethnic-group membership increases the explained variance by only one half a percentage point, which suggests that few ethnic-group differences in income remain once account is taken of qualifications (the human-capital attributes) and the types of jobs people hold.

To assess remaining ethnic-group differences in income, net of both human-capital factors and job characteristics, we can inspect the coefficients in the right-hand column of Table 3.4. It is evident that controlling for job characteristics as well as human capital reduces the ethnic differences in income still further. All but one of the residual ratios is reduced relative to the corresponding coefficients in column 2 (only the Chinese coefficient remains essentially unchanged). Comparing the same measures of variability in the ethnic group coefficients as before, we find that both the range across the ratios and the weighted standard deviation of the ratios is reduced by about three-quarters and the unweighted standard deviation of the ratios by more than 70 percent. Thus most of the variability in incomes across ethnic groups in Los Angeles can be explained by ethnic-group differences in human capital and in the kinds of jobs men hold.

In particular, the large difference in the average incomes of Asians and Hispanics observed in column 1 is almost entirely accounted for by differences between these groups with respect to the variables shown in Table 3.3, particularly the human-capital variables: The ratio of average incomes is reduced from 1.73 to 1.08 when only human capital is controlled (column 2) and to 1.04 when job characteristics are also controlled (column 3). This result puts a rather different light on journalistic accounts of the unusual success of Asian immigrants, which tend to emphasize cultural values. The considerable success of recent Asian immigrants, especially in comparison to other groups such as immigrants from Latin America, is the consequence of selective migration—the average Asian immigrant arrives with at least some college education and—judging from the figures in Table 3.2 and Appendix Table 3A.3—

with considerable financial capital as well. By contrast, the average Latin American immigrant arrives with little education and little capital. It is no great surprise, then, that the Asians do better in the struggle for socioeconomic success.

Remaining Ethnic-Group Differences in Income

The differences between ethnic groups that remain after controlling for human capital and job characteristics, although quite small, are very systematic. Net of their human capital and the sort of work they do, men of European origin have about a 7 percent income advantage relative to the average earner, those of Middle Eastern origin have a 4 percent net advantage, those of Asian origin a 4 percent disadvantage, those of Latin American origin an 8 percent disadvantage, and those of African origin a 15 percent disadvantage. All of the European-origin and Middle Eastern groups except Iranians have above average net incomes, with Iranians exactly average, while all of the Asian, Latin American, and black groups have below average net incomes, with the exception of Puerto Ricans and Cubans, who are just about average, and Japanese, who have the second highest net incomes of all, exceeded only by those of Russian origin.

Seldom are results so clear-cut. Yet the explanation for these remaining differences is far from clear. While the nearly perfect division of "whites" and "non-whites" into groups with, respectively, higher and lower incomes than expected from their human capital and job characteristics invites an inference of some sort of "discrimination," it is not evident what the mechanisms of discrimination might be. This is particularly true because when occupational status (TSEI)¹⁵ is predicted from human-capital attributes plus ethnic-group membership—in an analysis not shown here because of space limitations—the coefficients associated with the ethnic dummies are very highly correlated with the coefficients reported in the right-hand column of Table 3.4 ($r = .80$). This tells us that groups that have higher than expected *occupational status* returns to their human capital also tend to a considerable degree to have higher than expected *income* returns to their human capital and *job characteristics*. So whatever mechanisms of status differentiation of ethnic groups are operative appear to be quite general, creating a distinctive advantage or disadvantage with respect to both occupational and income attainment. Moreover, with one exception, the differences in the coefficients for particular ethnic groups within aggregated origin groups are large relative to the differences among the aggregated groups, as is evident from inspection of the right-hand column of Table 3.4. This again suggests that we need to turn to the particular history and circumstances of each ethnic group and not to settle for generalizations about "whites," "Asians," "Hispanics," and "blacks."

Blacks. The exception is for those of African origin, who have an aggregate coefficient of .85 and disaggregated coefficients that are not much different. The .85 coefficient tells us that blacks earn only about 85 percent of what would be expected given their human capital and job characteristics. Moreover, black incomes are only about 75 percent as large as would be expected from their human-capital characteristics alone (column 2 of Table 3.4), which differ little from those of European origin: Virtually all are competent at English and were born in the United States, and blacks get only about one year less schooling on average than do those of Asian, European, and Middle Eastern origin. Yet black incomes are far lower. That the ratio of actual to expected incomes is substantially lower when only human-capital characteristics are considered than when job characteristics are controlled as well implies that blacks are far less able than average to convert their human capital into desirable jobs—an inference that is clearly supported by the evidence in Appendix Table 3A.2. Finally, both West Indian and other foreign-born blacks suffer the same fate as those born in the United States, which again undercuts claims about a culture of dependency (Sowell 1978:41–8) as a major explanation of the income gap. Rather, an inference of continuing and substantial discrimination against blacks seems difficult to avoid. But, again, it is important to pin down the exact mechanisms involved.

One obvious distinction between blacks and other groups is the much greater residential segregation than is true of any other group, which holds for Los Angeles even more than elsewhere (Massey and Denton 1989, 1993). Given the lack of capital within the black community (Oliver and Shapiro 1995:86, 94), which precludes the establishment of black enterprises, residential segregation puts blacks at a severe disadvantage when it comes to competing for jobs (Wilson 1987). In short, blacks are disadvantaged at every turn.

Russians. At the other extreme are those of Russian origin, who earn about 25 percent more than would be expected from their human-capital and about 19 percent more than would be expected from their human-capital plus the kinds of jobs they hold. These are mainly Jews whose parents and grandparents immigrated to the United States around the turn of the century (Rosenthal 1975). But the Jews were the “Asians of yesterday,” to turn the phrase around. That is, in the context of late nineteenth and early twentieth century immigration, the Jews arrived with a substantial competitive advantage over their fellow immigrants: literacy and urban origins. Although for the most part they had little material capital, they had great human capital. In consequence, they were enormously successful, and they were able to pass their advantages on to their children and grandchildren, who, as these data show, are very well educated and disproportionately likely to work at professional and adminis-

trative jobs, own businesses, and control considerable wealth. Since we have taken account of group differences in education, occupational status, and self-employment propensities, it is probable that the substantial wealth of those of Russian origin is implicated in their unusually high income net of these factors (cf. Chiswick 1983). But, again, the limitations of our data preclude further analysis here.

Japanese. The other group with strikingly high incomes net of human capital and job characteristics is the Japanese-origin population. This group is distinctive in another way as well: It is the only non-European-origin group with substantially higher income than would be expected on the basis of its human capital and job characteristics. From a socioeconomic point of view, those of Japanese origin are similar to those of European origin. Actually, there are two quite distinctive Japanese communities in Los Angeles: those from families that arrived in the late nineteenth or early twentieth century, who are thus fourth- or fifth-generation Americans, and the foreign-born, who are to a large extent not immigrants at all but temporary sojourners, sent by their enterprises to work in America for a few years (among the foreign-born, 25 percent arrived in the United States in 1987 or later and 32 percent were managers, both more than for any other ethnic group). Japan is distinctive among Asian countries in that—not surprisingly for a wealthy country—there is very little current immigration. In consequence, most people of Japanese origin in Los Angeles were born in the United States. Native-born men of Japanese origin are very similar to those of European origin: 82 percent speak only English at home, and they have similar levels of education and work at similar jobs. Foreign-born Japanese are actually quite similar to the native-born except that they are more likely to be managers than to be professionals (whereas the native-born are more likely to be professionals) and tend to have higher incomes, averaging \$50,730 (in contrast to \$43,938 for the native-born), which is exceeded only by those of Polish and Russian origin.

Mexicans and Central Americans. Like the Japanese population, the Mexican population can be divided into the native-born (about one-third) and immigrants (about two-thirds). These two populations are sharply differentiated. The foreign-born population is similar to those from Guatemala and El Salvador. They are even less well educated, averaging 7.8 years of school; substantial fractions are very recent immigrants—46 percent since 1980 and 13 percent since 1987; more than half have substantial difficulty with English—34 percent speak English “not well” and 18 percent do not speak English at all; only a very small fraction hold professional or managerial jobs—4.7 percent; and they are disproportionately likely to work at service jobs (14.5 percent), semi- or unskilled laboring jobs (39.5 percent), or agricultural jobs, mainly as gardeners (9.3

percent). Not surprising, their average income is also very low, \$16,252, commensurate with those from Guatemala and El Salvador—most of whom also arrived very recently with little education and limited English.

The native-born population of Mexican origin is much better educated, averaging 12.0 years of schooling, and is correspondingly more likely to work at managerial or professional jobs (14.4 percent) and less likely to work at service jobs (6.3 percent), semi- or unskilled manual jobs (28.4 percent), or agricultural jobs (2.8 percent). However, the superior education and occupational status of the native-born does not translate into any greater likelihood of self employment. Neither group has much income from self-employment nor is likely to own their own incorporated businesses. Finally, in contrast to the Japanese, a majority of even native-born men of Mexican origin are not monolingual English speakers: 55 percent speak Spanish at home.

In short, despite sharp differences between the foreign- and native-born, the Mexican origin population as a whole still is what it has been historically—a largely working-class population—which means that when newcomers arrive their information networks tend to be restricted to knowledge of working-class jobs. Moreover, even though there is a very large ethnic enclave in East Los Angeles and a number of other sizable areas of Latino settlement, there has never been a commensurate development of ethnic enterprise. As Appendix Table 3A.4 shows, those of Mexican origin are very unlikely to own businesses, and the businesses they do own tend to be very small. Thus there is little opportunity to find work in an enterprise owned by a co-ethnic. Most men of Mexican origin work for non-Hispanics and thus gain none of the advantages of employment in ethnic enterprises (Portes and Bach 1985: ch. 6 and 7).

Filipinos. Among Asians, Filipinos are a distinctive group. While on average they are as well educated as Chinese, Japanese, and Koreans, they are much less likely to become managers, professionals, or high-level sales workers than are members of the other three groups (see Table 3.1 and Appendix Table 3A.2) and also are far less likely to engage in entrepreneurial activity, as indicated by the dearth of self-employment activity or income (see Table 3.2 and Appendix Tables 3A.3 and 3A.4). The reasons for this are not entirely clear but may be related both to circumstances in the Philippines and to the historical character of Filipino immigration to the United States. Some have suggested that industrial development was deliberately suppressed by American colonial authorities in order to secure a market for American goods and that commerce was left to the Chinese in order to ensure a labor supply for hacienda agriculture (Shalom 1986; Anderson 1988). Perhaps as a result, there is no "Little Manila" comparable to Little Tokyo, Koreatown, Little Saigon,

Chinatown, or Monterey Park (a large and very wealthy Chinese community just east of downtown Los Angeles), and an attempt to develop a commercial center in an area of relatively dense Filipino concentration near Koreatown failed (Espiritu 1992). Thus the kinds of occupational opportunities that develop in ethnic enclaves may not be available to Filipinos. Second, Filipinos initially came to the United States—mainly to Hawaii and California—as agricultural laborers, much like Mexican immigrants (Allen 1977:195–6). So, even when immigration broadened after 1965 (Liu, Ong, and Rosenstein 1991), there was no established commercial community to provide jobs. Finally, a seeming advantage—generalized English-language competence because English is the language of instruction in the Philippines (Min 1986:55)—actually may have disadvantaged Filipinos by putting them into direct competition with the native-born for jobs, especially professional jobs. The result is that, uniquely among Asians, Filipinos have substantially lower incomes than would be expected from their human capital and the kind of work they do.

Koreans. Koreans are distinctive in a different way. Compared to other groups with comparable education, they are unusually deficient in English. For example, among Chinese and foreign-born Japanese, fewer than one-quarter speak English "not well" or "not at all," whereas this is true of 34 percent of Koreans (see Appendix Table 3A.1). As a consequence, many men who worked at professional jobs in Korea become entrepreneurs in the United States, often opening small businesses in inner-city neighborhoods (Light and Bonacich 1988). The well-known conflict between Koreans and blacks arises directly from the presence of Korean petty merchants in black neighborhoods (Light and Bonacich 1988:211–7). But Koreans also are able to operate businesses in the large and thriving enclave known locally as Koreatown, where most of their activity is conducted in Korean. Indeed, in 1980 about 40 percent of Koreans in Los Angeles County were employed by other Koreans, which resulted in a total of 62 percent either self-employed, helping in family enterprises, or employed in the Korean enclave (Light and Bonacich 1988:3). The distinctive mode of incorporation of Koreans into the economy is reflected in Appendix Table 3A.3, which shows that 40 percent of Koreans, more than any other group, are self-employed. Additional analysis, not shown for lack of space, indicates that net of the human capital variables in Table 3.3, Koreans were more than twice as likely than average to own their own incorporated businesses—a rate higher than all other groups except for those of Russian or Middle Eastern origin. Since these odds are net of English-language competence, they suggest that once a particular mode of incorporation—in this case entrepreneurship—becomes established, it is exploited in preference to

alternative possibilities. This probably reflects the acquisition of social capital, in Coleman's (1988) sense—specifically the collective knowledge in the ethnic community about how to establish a business and the lack of corresponding knowledge about how to obtain and retain jobs outside the ethnic community.

Middle Easterners. Finally, those of Middle Eastern origin—Armenians, Iranians, and men from elsewhere in the Middle East or North Africa—are quite similar to men of European origin except for their unusual propensity to own their own businesses. As Appendix Table 3A.3 shows, along with Koreans and those of Russian origin, men of Middle Eastern origin are far more likely to be self-employed than are members of other groups. Iranians who fled Iran after the fall of the shah and Armenians who also fled Iran or the civil war in Lebanon¹⁶ apparently were able to bring substantial amounts of capital with them, enabling them to establish businesses in the United States. But Iranians are also disproportionately likely to be self-employed professionals, which reflects the fact that many came to the United States as students (Bozorgmehr and Sabagh 1988).

Common patterns. The general point that emerges from this review of the circumstances of specific ethnic groups is that group resources matter. It is not simply that some immigrants arrive with substantial education and/or substantial funds to invest but that some groups are composed of a high proportion of such people and others of a very low proportion. When a substantial fraction of the ethnic community is well endowed with skills and funds, it is likely that a vibrant ethnic community will develop, which will provide jobs and opportunities for its less fortunate members, enabling them to do better than would be expected from their individual attributes. And of course the opposite is true when the ethnic community is poorly endowed with such assets, particularly financial assets.

Conclusions

As we have seen, Los Angeles is enormously diverse, the new home to people from dozens—indeed hundreds—of places, both elsewhere in the United States and abroad. Despite fires, floods, earthquakes, and riots, and a shaky economy to boot, people keep flooding in, following their families or compatriots or pioneering a migration stream. For them, Los Angeles is the land of opportunity—a destination that, whatever its troubles, is preferable to the place from which they have come. They come hoping for success, for good jobs that pay well—or at least for a better life than the one they left behind. Presumably, most find such a life, or else the migration stream would dry up; people would return home or move on.

But of course some do much better than others, just as we would expect: There is no society in which some individuals do not achieve more than others. More to the point, some groups do better than others. Why is this so? What we have shown here is that to a very considerable degree group differences in income simply reflect group differences in the factors that affect income. While the ethnic groups of the Los Angeles area vary widely in their average incomes, they also vary widely in their education, their ability to speak English, and the likelihood that they are very recent immigrants. Group differences in these human-capital endowments account for about two-thirds of the group differences in average incomes. This fraction goes up to about three-fourths when account is also taken of group differences in the ability to convert human capital into desirable jobs.

But what about the remaining fraction? If ethnicity didn't matter, there would be no remaining fraction. Ethnic differences in income net of human capital differences and differences in job characteristics, although generally small, are highly systematic. They appear to reflect two general processes. The first is some sort of systematic distinction between "whites" and "non-whites": Whites do a little better than would be expected on the basis of their human capital and job characteristics, and non-whites do a little less well. Second, those groups that have been unable to generate substantial ethnic enterprise because they arrived without financial capital and were incorporated into the local economy in working-class roles—Filipinos, Central Americans, and blacks—have fared particularly badly.

Still, there are many exceptions to these generalizations, which reflect the distinctive histories of each group sketched in the previous section. While the search for generalizations is an admirable sociological goal, sometimes the richness of the story is in the specifics. The rich diversity of Los Angeles, one of the world's most fascinating cities, is a case in point.

Notes

An earlier version of this essay, based on 1980 census data, was prepared while the first author was an ASA/NSF/Census research fellow at the U.S. Bureau of the Census in 1987–1988. That version was presented at the annual meeting of the Population Association of America, April 1988; a meeting of the Research Committee on Social Stratification and Social Mobility, International Sociological Association, Haifa, Israel, April 1988; and Reed College, November 1988. We thank Jim Baron, David Grusky, and Nelson Lim for helpful comments on earlier drafts and David McFarland for special advice to the senior author.

1. In 1970, 13.8 percent of the population were of "Hispanic heritage" and 8.3 percent were black; those of Asian origin were not numerous enough to be

counted as a separate category. Also, 9.8 percent were foreign-born. Computations are from U.S. Bureau of the Census 1973.

2. This is the net immigration figure. The 1990 population of the area includes about 2.8 million people who immigrated to the United States since 1970.

3. The remaining .8 percent were of American Indian or "other" origin.

4. We counted each language spoken by at least one person in the 5 percent sample.

5. Anyone wishing to examine the SPSS code used to make these distinctions should contact the first author via e-mail: treiman@dudley.sscnet.ucla.edu.

6. Puerto Ricans born in Puerto Rico are, of course, counted as native-born in the Census classification.

7. To see this, consider the equation $\ln(Y) = a + b(X)$. Now consider two individuals who differ by one unit with respect to X . Their expected values with respect to $\ln(Y)$ can be expressed by $\ln(Y_1) = a + b(X_1)$ and $\ln(Y_2) = a + b(X_2)$

So, subtracting, $\ln(Y_1) - \ln(Y_2) = (a - a) + b(X_1 - X_2) = b$.

But we know from the properties of logs that $\ln(Y_1) - \ln(Y_2) = \ln(Y_1/Y_2)$.

So we have $\ln(Y_1/Y_2) = b$.

Then, taking the antilog of both sides, we have $Y_1/Y_2 = e^b$.

Now let's look at the relationship of b to $e^b = Y_1/Y_2$ for various values of b .

b	e^b	b	e^b
.01	1.01	-.01	.99
.05	1.05	-.05	.95
.10	1.11	-.10	.90
.15	1.16	-.15	.86
.20	1.22	-.20	.82
.30	1.35	-.30	.74
.40	1.49	-.40	.67

So we see that for b less than about .2, b is a good approximation to the expected proportional increase in Y for a one unit increase in X . For larger values of b , b underestimates the proportional increase in Y .

8. While the assumption that all pre-1965 immigrants completed their education in the United States is surely not strictly correct, whatever error is introduced is unlikely to be very consequential since those who both left school and immigrated prior to 1965 had a minimum of 25 years of U.S. labor force experience by 1990 and therefore the impact of where they completed their education is likely to be trivial.

9. This estimate closely approximates actual labor force experience for men (Treiman and Roos 1983:620-1, n.9).

10. Lee (1987:147), in an analysis of the determinants of income among Koreans and Filipinos in Los Angeles, gets nearly identical results using a measure of earnings (the sum of wage and salary earnings, earnings from nonfarm self-employment, and earnings from farm self-employment) and a measure of total income from all sources.

11. Actually, this is not precisely correct. We substituted the square of the mean number of years of labor force experience so that the constant would correctly reflect the expected value for a man with average labor force experience. Note that the mean of the squared term is not identical to the square of the mean. Also, by taking the means (= the proportions) for the dummy variables, we have in some sense represented the "typical" English-language competence and recency of arrival in the United States.

12. It can be shown that for an equation of the form $\hat{Y} = a + b(X) + c(X^2)$ where \hat{Y} = expected (ln) income and X = years of labor force experience, the maximum (ln) income, m , is given by $m = a - b^2/4c$, and the number of years at which the maximum is reached, F , is given by $F = -b/2c$. In the present case, we have $\hat{Y} = 9.24 + .0658(X) - .000965(X^2)$, which implies that $F = 34.1$ and $m = 10.36$, which in turn implies that the maximum expected income is \$31,571 ($= e^{10.36}$).

13. The increment in R^2 is statistically significant beyond the .01 level; because of the extremely large sample size, virtually any coefficient will be statistically significant. We also report the Bayesian information coefficient (BIC), introduced by Raftery (1995). BIC is a measure of whether a model is true, given the data. The more negative the BIC, the more likely the model is true. For an OLS regression model, k , $BIC_k = n [\ln(1 - R_k^2)] + p_k [\ln(n)]$, where p_k = the number of independent variables and n = the number of cases in the sample. In the present case the more negative BIC implies that model 2 is more likely to be true than model 1.

14. To express coefficients as deviations from the grand mean, we compute

$$a_{ij} = b_{ij} - \sum_j p_{ij} b_{ij},$$

where a_{ij} = the transformed coefficient for the j th category of predictor i , b_{ij} = the corresponding dummy variable regression coefficient, and p_{ij} = the proportion of cases in the j th category of predictor i (Andrews et al. 1973:46).

15. We use a version of the well-known Socioeconomic Index of Occupations originally developed by Duncan (1961) and updated for the 1990 census categories by Hauser and Warren (1996). The Hauser-Warren version (TSEI) is a weighted average of the percentage of incumbents of each occupation with at least some college in 1990 and the percentage earning at least \$14.30 per hour in 1989; see Hauser and Warren 1996 for details.

16. The foreign-born of Armenian ancestry are from a wide variety of places but mainly from the former Soviet Union, Iran, and Lebanon. For corresponding 1980 data, see Der-Martirosian, Sabagh, and Bozorgmehr 1993.

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TABLE 3A.2 Percentage Distribution Across Occupation Groups, 31 Ethnic Groups, Los Angeles Metropolitan Area, 1990 (Male Labor Force Age 20-64)

<i>Ethnic Group</i>	<i>Managers</i>	<i>Professionals</i>	<i>High Sales</i>	<i>Technicians</i>	<i>Clerical</i>	<i>Skilled Manual</i>	<i>Trans. Ops.</i>	<i>Sales Clerks</i>	<i>Protective Service</i>	<i>Machine Ops.</i>	<i>Other Ser.</i>	<i>Laborers</i>	<i>Agricultural Workers</i>	<i>Private Household Service</i>
Total	14.7	12.8	8.1	3.5	7.1	19.8	5.9	3.0	2.3	8.0	6.5	5.5	2.6	.1
Asian origin														
Asian Indian	21.4	30.0	9.6	5.4	8.0	6.6	2.2	8.0	1.0	3.7	2.1	1.6	.3	0
Cambodian	6.7	8.9	7.4	5.9	11.9	20.7	.7	5.9	.7	18.5	10.4	2.2	0	0
Chinese	20.8	22.3	11.4	5.4	6.6	9.4	1.5	3.2	.3	4.5	12.3	1.6	.4	.2
Filipino	14.1	12.6	4.6	8.6	18.7	12.7	3.1	2.9	3.0	7.2	8.2	3.5	.8	.2
Japanese	23.5	21.4	9.9	5.8	8.1	11.0	1.4	2.6	1.2	2.4	5.3	2.3	5.0	.0
Korean	19.9	12.4	19.4	2.8	4.8	16.4	1.1	9.2	.6	5.4	5.2	1.9	.9	.2
Vietnamese	6.8	14.7	5.1	12.3	7.8	18.6	2.6	3.3	.4	17.4	6.5	3.1	1.5	0
Other Asian	16.2	10.3	7.5	4.7	11.4	19.6	4.5	4.0	2.0	6.9	7.3	3.7	1.8	.1
Total	17.8	17.3	9.7	6.4	9.9	13.0	2.2	4.3	1.3	6.4	7.6	2.5	1.5	.1
Latin American origin														
Cuban	12.6	11.0	11.2	3.8	8.7	19.2	7.8	3.8	1.6	7.5	8.2	3.5	1.0	0
Guatemalan	3.2	1.6	2.3	.8	5.2	25.4	8.5	2.9	1.3	20.4	15.7	9.8	2.4	.5
Mexican	5.1	3.0	3.0	1.5	5.8	23.4	7.9	2.1	1.4	17.2	11.7	10.8	7.2	.1
Nicaraguan	8.1	6.6	7.7	1.5	8.1	21.7	8.1	3.3	2.6	15.4	8.5	6.3	2.2	0
Puerto Rican	9.4	9.6	5.0	4.7	11.7	20.4	9.0	2.9	3.2	8.5	7.2	6.5	1.8	.1
Salvadoran	3.9	1.9	2.6	1.3	5.4	25.2	8.4	3.8	.9	18.3	14.8	10.0	3.4	.1
South American	12.1	9.8	8.0	3.3	8.1	20.8	6.5	4.7	.9	10.6	9.1	4.6	1.3	.1
Other Central American	7.5	4.0	5.2	1.7	6.1	27.2	7.8	3.5	1.7	11.3	10.1	11.3	1.7	.9
Other Hispanic	8.0	6.2	4.7	2.7	7.4	23.2	7.4	2.8	1.9	12.6	11.3	8.5	3.3	.2
Total	5.5	3.4	3.4	1.6	6.0	23.4	7.9	2.3	1.4	16.6	11.8	10.3	6.3	.1
European origin														
English	22.3	19.8	10.3	4.5	6.7	16.6	4.3	2.7	2.8	3.5	2.6	2.7	.9	.0
German	19.3	16.5	10.4	4.0	6.6	21.1	5.4	2.8	2.9	3.9	2.8	3.4	1.0	.0
Italian	19.8	14.9	12.9	3.5	7.4	19.0	4.1	3.5	2.9	3.6	4.3	3.5	.6	.0
Polish	20.9	24.2	11.7	4.1	6.1	15.0	3.1	3.4	2.1	3.6	2.6	2.4	.7	.1
Russian	25.4	31.1	16.0	3.3	4.6	7.8	1.9	3.8	1.2	1.6	1.9	1.1	.3	0
Other European	18.7	16.4	10.3	4.0	6.7	20.3	5.6	3.2	2.7	3.9	3.6	3.5	1.1	.0
Total	19.7	17.5	10.7	4.0	6.6	19.4	5.1	3.1	2.7	3.8	3.2	3.3	1.0	.0

(continued)

TABLE 3A.2 (continued)

Ethnic Group	Managers	Professionals	High Sales	Technicians	Clerical	Skilled Manual	Trans. Ops.	Sales Clerks	Protective Service	Machine Ops.	Other Ser.	Laborers	Agricultural Workers	Private Household Service
Middle Eastern origin														
Armenian	17.7	15.2	12.3	2.9	5.1	23.6	5.2	5.5	.8	5.6	2.4	2.9	1.0	0
Iranian	22.2	25.2	19.4	3.3	4.4	10.2	2.4	6.4	.1	1.3	2.8	2.3	0	0
Other M.E. and N. African	22.6	16.8	15.6	3.6	4.2	14.4	4.1	6.1	1.7	3.2	3.7	3.3	.5	.1
Total	20.9	18.6	15.6	3.3	4.5	16.2	4.0	6.0	1.0	3.5	3.0	2.9	.5	.0
African origin														
U.S. blacks	10.3	9.7	5.0	3.3	14.5	15.4	9.5	2.7	6.2	6.0	9.5	6.7	1.1	.1
West Indian	11.4	10.1	3.5	4.4	12.7	21.9	7.9	5.3	4.8	3.5	8.8	4.4	.9	.4
Foreign-born blacks (exc. W.I.)	12.2	15.1	6.8	3.5	10.9	13.5	9.3	4.2	4.5	5.1	9.0	4.5	1.0	.3
Total	10.4	9.9	5.0	3.3	14.4	15.5	9.4	2.8	6.1	5.9	9.5	6.6	1.1	.1
American Indian	11.1	9.1	5.1	3.2	6.8	27.4	8.1	2.0	4.2	6.6	6.8	7.8	1.6	0
Other	11.0	8.7	4.8	3.7	8.2	21.7	9.3	4.2	2.8	9.6	7.3	7.0	1.7	0

TABLE 3A.3 Selected Characteristics of Jobs Held, 31 Ethnic Groups, Los Angeles Metropolitan Area, 1990 (Male Labor Force Age 20-64)

Ethnic Group	Percentage Distribution of Employment Status					Mean	
	Employee	Self Employed	Own Corporation	Helping in Family Business	Hours Worked per Week	Weeks Worked per Year	
Total	86.5	9.8	3.6	.1	43.1	46.4	
Asian origin							
Asian Indian	83.4	10.8	5.5	.3	44.2	47.2	
Cambodian	87.4	11.9	.7	.0	41.2	43.5	
Chinese	79.8	12.0	7.9	.3	43.1	46.6	
Filipino	93.9	4.5	1.6	.0	41.7	46.7	
Japanese	83.3	10.8	5.8	.1	44.4	48.6	
Korean	58.9	31.0	9.2	.9	46.6	45.9	
Vietnamese	89.9	8.0	2.0	.1	40.6	46.2	
Other Asian	87.7	8.5	3.6	.2	42.7	46.3	
Total	82.4	12.1	5.2	.4	43.2	46.8	
Latin American origin							
Cuban	81.1	15.3	3.4	.3	42.8	46.7	
Guatemalan	93.3	5.0	1.6	.1	40.9	43.5	
Mexican	93.3	5.2	1.4	.1	41.5	44.9	
Nicaraguan	91.9	4.8	2.6	.7	41.0	44.8	
Puerto Rican	93.1	5.0	1.8	.1	42.8	45.5	
Salvadoran	93.5	5.3	1.1	.1	40.9	44.2	

(continued)

TABLE 3A.3 (continued)

Ethnic Group	Percentage Distribution of Employment Status				Mean	
	Employee	Self Employed	Own Corporation	Helping in Family Business	Hours Worked per Week	Weeks Worked per Year
South American	81.5	15.0	3.5	.0	42.7	45.6
Other Central American	89.6	8.7	1.7	.0	41.0	44.9
Other Hispanic	91.1	6.1	2.7	.0	41.9	44.4
Total	92.7	5.6	1.5	.1	41.6	44.8
European origin						
English	83.5	11.6	4.7	.1	43.9	47.5
German	85.0	10.9	4.1	.1	44.0	47.7
Italian	82.2	12.8	4.9	.1	43.9	47.7
Polish	81.6	11.3	7.0	.1	44.4	47.8
Russian	69.8	18.5	11.6	.1	45.1	47.8
Other European	84.0	11.6	4.3	.1	44.0	47.3
Total	83.5	11.7	4.6	.1	44.0	47.5
Middle Eastern origin						
Armenian	66.3	24.9	8.6	.2	44.3	46.5
Iranian	67.8	19.8	12.4	.0	45.5	47.2
Other M.E. and N. African	71.5	19.8	8.6	.2	44.5	46.8
Total	68.8	21.4	9.7	.1	44.7	46.8
African origin						
U.S. blacks	93.1	5.6	1.3	.1	41.4	44.6
West Indian	88.2	10.1	1.8	.0	42.1	45.9
Foreign-born blacks (exc. W.I.)	90.4	6.8	2.6	.3	42.3	46.0
Total	92.9	5.7	1.3	.1	41.4	44.7
American Indian	90.5	7.5	1.9	.1	43.4	44.9
Other	88.2	8.2	3.7	.0	43.6	46.2

TABLE 3A.4 Statistics on Business Ownership for Selected Ethnic Groups, Los Angeles County, 1987

Ethnic Group	Firms per Capita ^a	Mean Sales and Receipts (\$ thousands)	Firms with Paid Employees		
			Percent of All Firms	Mean Number of Employees	Mean Sales and Receipts (\$ thousands)
Asian					
Asian Indian	.17	149	26	4.0	407
Chinese	.11	122	27	4.8	334
Filipino	.05	44	13	2.4	210
Japanese	.12	84	19	4.1	314
Korean	.21	145	32	4.4	346
Vietnamese	.12	61	22	4.6	180
Hispanic					
Cuban	.08	91	23	4.8	302
Mexican	.03	59	18	3.5	218
Puerto Rican	.05	86	20	3.0	346
Black	.05	54	15	3.1	251

^a Denominator estimated from the 1990 census file as the number of adults (persons age 20 and older) not enrolled in school, multiplied by 20.

Source: U.S. Bureau of the Census 1991a: table 7; 1991b: table 7; 1991c: table 4. Since we could not readily locate the figures for blacks, we estimated them by subtracting the figures for Hispanics and Asians from the total figures reported in 1991c.

4

The Structure of Career Mobility in Microscopic Perspective

Jesper B. Sørensen and David B. Grusky

Although more attention has been lavished on mobility tables than perhaps any other type of sociological data, only rarely have sociologists sought to map the underlying contours of mobility between actual *occupations*, where these are understood as functionally defined positions in the division of labor (cf. Rytina 1992; Evans and Laumann 1978). The prevailing practice has been to examine patterns of mobility between "classes" or "strata" formed by aggregating detailed jobs or occupations in terms of their measured (or presumed) work conditions, market position, consumption practices, mobility chances, or socioeconomic standing. While there is surely no consensus on any single class schema, the shared and unchallenged assumption has been that some sort of aggregation into supraoccupational categories is appropriate. The latter assumption has limited empirical inquiry into such fundamental matters as (1) the extent of social closure at the detailed occupational level, (2) the size and location of interoccupational cleavages, disjunctures, and discontinuities in mobility chances, and (3) the macrolevel sources and causes of occupational persistence and mobility. This chapter provides new insights into these issues by presenting a disaggregate occupational classification and calibrating it against one of the standard data sets in the field.

The tabular and event history approaches to mobility analysis differ in many respects, but they evidently share the foregoing preference for extreme aggregation. In some cases, event history analysts use language suggestive of a suboccupational level of analysis, but such language is easily misunderstood. It should be borne in mind that many, if not most, event history analysts resort to modeling job shifts between categories