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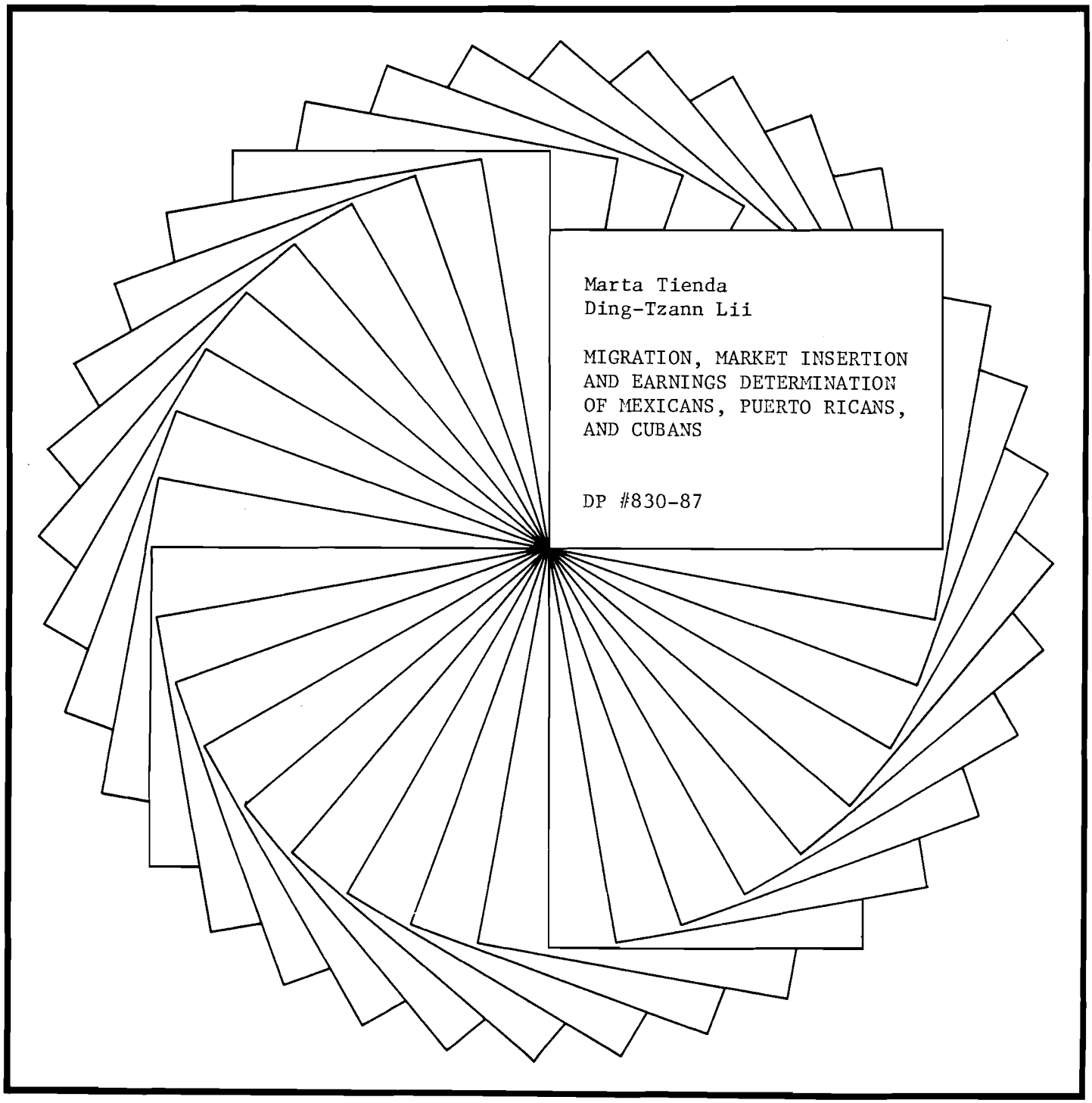

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MIGRATION, MARKET INSERTION AND EARNINGS DETERMINATION OF MEXICANS, PUERTO RICANS, AND CUBANS

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Abstract

This paper examines the role of migration in economically stratifying the Hispanic population by national origin. It develops a conceptual framework that links earnings with migration, ethnic density and "preferential status" of workers (referring to the assignment of jobs on the basis of ethnicity). It then formalizes these relationships in statistical models of income determination.

The analyses employ data on working-age Mexican, Puerto Rican, and Cuban men in the labor force, drawn from a 5 percent sample of the public use tapes from the 1980 census and supplemented with the 1970 census 15 percent State files. The results point to marked earnings differences by national origin and migrant status. The static model shows, for example, that high Hispanic density imposes relatively greater economic costs on recent Puerto Rican migrants and Cuban nonmigrants than on Mexicans, irrespective of their migration status. Results from the dynamic model indicate that the Puerto Rican income-determination process is generally more complex than that of either Mexicans or Cubans, but that those who participated in concentrated migration incurred income penalties of approximately 50 percent relative to nonmigrants.

The concluding section discusses several key findings and weighs the limitation of a statistical approach as compared to a multilevel research design.

MIGRATION, MARKET INSERTION AND EARNINGS DETERMINATION OF MEXICANS, PUERTO RICANS, AND CUBANS

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Despite the voluminous literature documenting the relationship between spatial and social mobility (Lee, 1966; Ritchey, 1976; Clark, 1982), the available studies for the Hispanic population are limited both in number and in scope. Most research on internal migration focuses on the experiences of Mexicans (see Tienda, 1983), to the relative neglect of Puerto Ricans and Cubans. Yet, when considered comparatively, the migration and employment experiences of the three largest Spanish-speaking nationalities leave unanswered many questions about why geographic mobility in the United States economically benefits some more than others.

While many authors have established important links between geographic mobility and economic well-being (see Wilson, 1985a, 1985b), most of this research is about non-Hispanic populations. For Hispanics the emphasis has been on international migration (see Portes and Bach, 1985), to the relative neglect of internal migration.[1] The resurgence of policy and academic interest in the social and economic consequences of immigration perhaps explains this emphasis, but the relative neglect of internal migration in the study of economic well-being is unfortunate because it may provide clues about why Hispanic labor market integration experiences differ according to national origin, and how inter- and intra-ethnic relations may have been influenced by residential configurations.

We address the problem posed by the declining economic well-being of Puerto Ricans compared to the modest to moderate improvements experienced by Mexicans and Cubans during the 1960s and 1970s (Tienda, 1984; Bean and Tienda,

1987) by analyzing the role of migration in producing these outcomes. As a group, Puerto Ricans not only have experienced less social mobility than Mexicans and Cubans, but during the 1970s suffered a decline in overall welfare, as evidenced by falling rates of labor force participation, high unemployment and poverty rates, and a drop in real family income (Bean and Tienda, 1987: Chapters 9 and 10). The declining welfare of Puerto Ricans residing on the mainland is puzzling because they, unlike Mexican and Cuban immigrants, have enjoyed the preferential legal status conferred by U.S. citizenship and virtually unrestricted access to the U.S. mainland (Nelson and Tienda, 1985). While the Puerto Rican experience testifies that preferential legal status does not ensure a protected labor market status, post hoc explanations focusing on discrimination and/or skill differences fail to account for the modest improvements in the economic position of Mexicans during the 1970s. Furthermore, because Puerto Ricans have a slight educational advantage over Mexicans, explanations of their deteriorating circumstances must go beyond arguments about skill-related productivity differences.

As a working hypothesis, we propose that, unlike Mexicans and in a different manner from Cubans, Puerto Ricans never have been "preferred" workers in the United States, despite their unrestricted access to the mainland and the legal privileges afforded by citizenship. Our concept of preferred workers embraces the idea that ascribed criteria, such as national origin or race, are used to "reserve" jobs for workers. Preference, as we use it, does not refer to desirable jobs in the primary labor market unless ethnicity is the basis for their allocation. More generally, our definition of preferred workers is rooted in the notion of a cultural division of labor, with the lines of demarcation based on ethnicity (Hecter, 1978). Used as a

basis for recruiting or "preferentially" allocating workers, ethnicity or national origin may shield some individuals from the competitive market by reserving niches for them. It is in this sense that Mexicans, who historically furnished a primary source of seasonal labor for U.S. agriculture, can be regarded as "preferred" workers (Tienda, 1981, 1983; Nelson and Tienda, 1985).[2]

Accordingly, this paper is an initial attempt to examine the role of internal migration in stratifying the Hispanic population within the context of a cultural division of labor. We ask three specific questions: (1) Do migrant streams increase or decrease ethnic density? (2) Does the preferential status of Mexicans, Puerto Ricans, and Cubans differ in high- and low-density areas? and (3) Does preferential status condition the influence on earnings of migration? Our primary objective is to examine directly the hypothesis that the disadvantaged economic position of Puerto Ricans results both from their labor market incorporation as nonpreferential workers, and from the different character of their migration streams (i.e., whether their residential mobility involves net concentration or dispersion).

We develop our arguments in several steps. In the following section we elaborate a conceptual framework linking migration, ethnic density, and preferential status to socioeconomic outcomes, and formalize these ideas into statistical models of income determination. Following a brief foray into the diverse employment experiences of men of Mexican, Puerto Rican, and Cuban origin between 1960 and 1980, we empirically test hypotheses about the role of ethnic density and preferential status in economically stratifying the Hispanic population by national origin. The concluding section summarizes the key findings and insights, and weighs the limitations of a statistical approach compared to a multilevel research design.

Migration, Ethnicity, and Socioeconomic Outcomes: Theoretical Considerations

Migration is fundamentally a demographic process that affects both the size and composition of a population. Its sociological content derives from how it alters the social, economic, and demographic configurations of sending and receiving areas (Shryock and Siegal, 1976), as well as the life chances of migrants themselves. From a macroeconomic perspective, migration is a process which equilibrates spatial imbalances among various factors of production (Morrison, 1977; DaVanzo and Morrison, 1981; Wood, 1981), especially land, labor, and capital. Owing to their selective character, migrant streams also may alter the residential configuration of a population with respect to race, age, social class, or other characteristics (Clark, 1982). Therefore, and depending on their direction and composition, migrant streams can promote ethnic consolidation or disintegration.

As a macro process, migration produces and expresses changes in the density and composition of social aggregates. Changes in social density[3] brought about by population redistribution not only establish new social boundaries within which individuals interact, but also produce new constraints which limit choices. Density is a static phenomenon, but it can be expressed dynamically in terms of migration flows. Moves from high- to low-density areas produce <u>dispersion</u>; moves from low- to high-density areas produce concentration, while moves within low- or high-density areas maintain the density of social aggregates.

In trying to understand the role of migration in stratifying the Hispanic work force by national origin, we question whether the change in ethnic density produced by the geographic redistribution of Hispanics has contributed to economic diversification according to national origin. Geographic moves

involving dispersion could render migrants substantial economic advantages if the basis for recruitment involves human capital skills, and if market forces rather than cultural and social forces (such as ethnic alliances) determine the choice of destination.[4] Conversely, concentrated migration flows, which frequently are motivated by noneconomic considerations (such as the desire to reside in closer proximity to relatives or friends of like ethnicity) may render migrants negligible economic returns. This would follow if the reinforcement of cultural and ethnic bonds through concentrated flows involves a trade-off between economic and psychic rewards.

The recent economic experiences of Mexicans, Puerto Ricans, and Cubans challenge these interpretations, and bring into focus the existence of a cultural division of labor demarcated spatially and according to national origin. This consideration finds its extreme expressions in the involvement of Cubans in the Miami enclave (Portes and Bach, 1985: Chapter 6) and the disproportionate persistence of Mexicans in farm work, even under the pressures of extensive mechanization.

Briefly, the Cuban incorporation experience is defined by the establishment and consolidation of the enclave economy in Miami, while the dominant feature of Mexican workers consists of their preferential recruitment into the secondary labor market (see Portes and Bach, 1985: Chapters 6 and 7). Migration reinforced the enclave economy by expanding the labor pool and consumer base of the Cuban owned and operated businesses. For Mexicans spatial mobility has maintained their status as "preferred" workers in the urban secondary labor market as agricultural mechanization displaced farm workers from rural to urban areas. The labor market position of Puerto Ricans, as well as the circumstances governing their entry and incorporation, illustrates yet a third form of articulation among class, ethnicity, and labor

market dynamics. Theirs is a history of extreme concentration in a single labor market without the political resources or material capital to protect their jobs (Campos, 1980; Tienda, 1984; Nelson and Tienda, 1985).

Because ethnic density has been shown to affect individual economic outcomes above and beyond productivity characteristics (Tienda and Lii, forthcoming), we hypothesize that the preferential status of workers will modify the economic significance of density, both in its static and dynamic expressions. Substantively, this means that the boundaries for preferred workers will differ in high- and low-density areas.

If our reasoning is sound, then predictions about the economic effects of migration which explicitly model the economic consequences of the joint association (interaction) between ethnic density and workers' preferential status should clarify the role of migration in producing divergent paths of labor market insertion for Mexicans, Puerto Ricans, and Cubans. Specifically, we expect that the economic gains from concentration or dispersion should differ for workers who capitalize on their achieved versus their ascribed characteristics. Our formulation does not ignore the psychic costs and benefits associated with dispersed and concentrated flows, but rather points to the social and economic complementarity of these associations when appraised against the cultural division of labor.

In short, ethnic density, conceived either as a static or dynamic (migration) aspect of social structure, can be either advantageous or disadvantageous to individuals, depending on the prevailing cultural division of labor and the emergence of organizational forms conducive to the preferential recruitment of ethnic workers. These ideas are examined empirically below as we formalize static and dynamic models that portray alternative paths of labor market insertion.

Data and Methods

We based our statistical analysis on a 5 percent sample of the Public Use Microdata Samples (PUMS) of the 1980 Census and also conducted auxiliary analyses using the 1970 PUMS 15 percent State files. Although migration data were coded for half of all persons aged 5 and over in 1980, this sample still assures sufficient observations of small populations, such as Puerto Ricans and Cubans, who each comprised less than one percent of the total U.S. population in 1980. We restricted our analysis to men of Mexican, Puerto Rican, and Cuban origin, aged 16-64, who were not in school or in the military in 1975 and 1980, and had nonzero earnings in 1979 and did not reside in institutional quarters at the time of the census.[5]

The theoretical issues elaborated above focus our attention on the main effects and conditional relationships among three variables--migration type or density, preferential worker status, and the dependent variable: 1979 logged annual earnings. So as not to bias our estimates of the dependent variables, we introduce in our models a set of controls for individual and labor market characteristics known to influence earnings. Table 1 summarizes all variables used in the earnings functions and provides a brief operational description.

The control variables included in the models are grounded in a vast theoretical and empirical literature, and hence require no further explanation.[6] However, the operational specification of three variables--density, migration form, and preferential status--warrants discussion. Migrants are defined as persons who changed their state of residence during the 5 years prior to the census. Our distinction between high- and low-density areas is based on the state distribution of Hispanics

Table 1

VARIABLES INCLUDED IN THE MULTIVARIATE ANALYSIS

Variables	Operational Description
Independent	
Density	Categorical variable coded as dummies for two types of density:
High	If 1980 state of residence was Arizona, California, Colorado, Florida, Illinois, New Jersey, New Mexico, New York, or Texas
Low	Remaining states
Migration Type	Categorical variable coded as dummies for three types of moves:
Concentrated	Moves from low to high Hispanic density states
Dispersed	Moves from high to low Hispanic density states
Intradensity	Moves within high or low Hispanic density states
Nonmigrants	No state of residence changes
Preferential Status[a]	Categorical variable coded as dummies for two preferential statuses:
Preferred Workers	Denotes jobs cells in which Hispanic workers were overrepresented relative to non-Hispanic whites in 1970
Nonpreferred Workers	Denotes job cells in which Hispanic workers were underrepresented relative to whites in 1970
Nondifferentiated Workers	Denotes job cells in which Hispanic workers were approximately equally represented relative to non-Hispanic whites in 1970
Controls	
Education	Years of grade school completed, trichotomized to denote less than High School; High School completed and some college; or college completed
Experience	Labor market experience proxy derived as (age - education - 6)
(Experience)^2	Square of experience
Married	Dummy variable coded 1 if respondent was married; else = 0
Health Status	Dummy variable coded 1 if respondent had no work-limiting disability; else = 0
Nativity	Dummy variable coded 1 if respondent was foreign born; else = 0
English Ability	Ordinal variable indicating respondent's ability to speak and understand English
Weeks	Number of weeks worked in 1979
Hours	Usual number of hours worked per week
g	Inverse of Mill's ratio, predicted from reduced form probit equation for being in wage sample
Wage	Average manufacturing wage rate in SMSA's or nonmetro county groups
Dependent	
Earnings	(log) 1979 annual earnings: wages and salary only

[a]Methodology for determining over- and underrepresentation is detailed in Appendix *B*.

(see Appendix Table A-1) rather than the Hispanic composition of states for two reasons. First, our interest in comparisons among the Hispanic-origin groups requires a common metric. Second, our concern with how migration flows influence labor market outcomes by altering the spatial configuration of ethnicity makes the distribution measure preferable to the state-specific composition measure. This line of reasoning draws from Simmel's (1950) and Blau's (1977) premises about how population distributions delineate the structural features of a society and thereby determine patterns of intergroup relations, including processes of status attainment and social mobility (see Tienda and Lii, forthcoming).[7]

By combining information from the migration status and density variables, we devised a typology representing the density effects of migration. Individuals were classified into one of four categories depending on whether they changed their state of residence between 1975 and 1980, and whether the interstate move involved a shift from high- to low-density states (dispersion), low- to high-density states (concentration), within density states (intradensity), or no change in residence (nonmigrant). Technically this typology portrays density interactions between origin and destination in a mobility table, but it is more parsimonious than the fully saturated model which distinguishes between intradensity moves within high and low Hispanic concentration states. Theoretical reasons guided our decision to collapse these flows, since neither involves a change in social density.

Measurement of workers' preferential status was more complicated than coding migration types. The details of the statistical procedures we used are provided in Appendix B, but we highlight here the logic used in constructing our typology. We began with a 30-cell matrix representing a 2-way classification of 6 industry sectors and 5 occupation groups based on the 1970

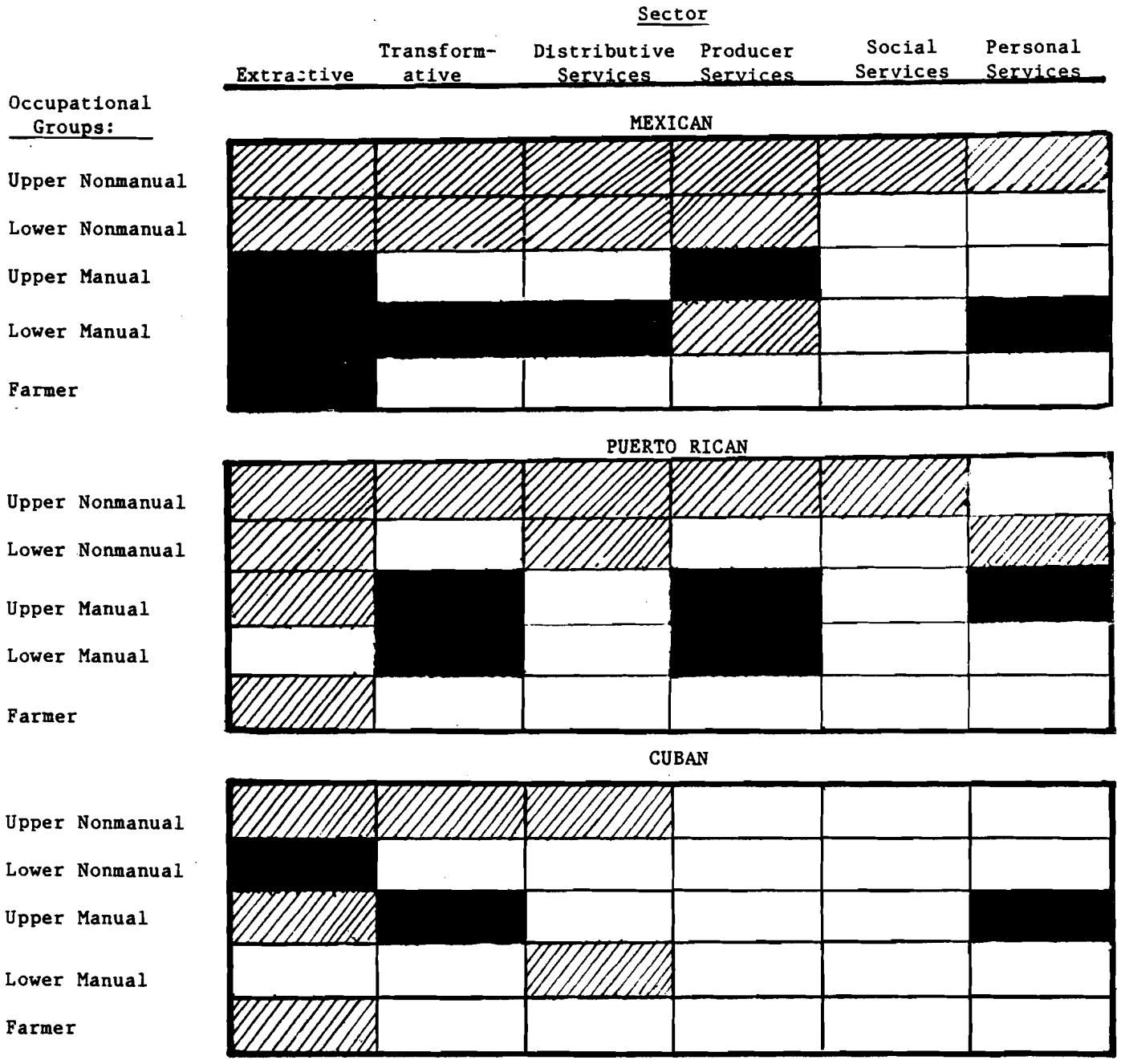
census data.[8] Four sector-by-occupation matrices were computed for each of the three Hispanic-origin groups and non-Hispanic whites. Based on the results of a log-linear analysis, we classified job cells according to whether each Hispanic group was over, under, or approximately equally represented relative to non-Hispanic whites. Our classification of preferential status for each Hispanic group is summarized graphically in Figure 1. Although the results are substantively interesting, we do not dwell on them here, as this would digress from our methodological concerns. However, we refer to them in the substantive interpretation of the preference status effects.

Modeling

Our assessment of the influences of ethnic density, migration type, and preferential status on the 1979 logged annual earnings of Hispanic men assumes both a dynamic and a static formulation. The static formulation is designed to examine whether the economic effects of preferential worker status depend on ethnic density, while the dynamic model emphasizes how different forms of spatial mobility, by redefining the cultural division of labor (i.e., preferential worker statuses relative to density levels), produces distinct patterns of income determination for Mexicans, Puerto Ricans, and Cubans. Because the dynamic model requires information on workers' state of residence in 1975 and 1980, which is not available for individuals who immigrated during the interval, recent immigrants are excluded from the estimation of the dynamic model. However, the static model, when applied to samples of recent international migrants and nonmigrants, enables us to establish the importance of ethnic density and preferential status in structuring alternative modes of labor market insertion for Mexicans, Puerto Ricans, and Cubans.[9] We formalize these ideas as follows.

FIGURE 1

Preferential Status and Hispanic Origin



Source: Table B-2.

: underrepresented relative to whites--nonpreferred. ($\leq$ -.04)

: overrepresented relative to whites--preferred. ($\geq$ +.04)

: equally represented relative to whites--nondifferentiated (-.03 to +.03)

Static Model. Our conceptualization of modes of labor market insertion focuses on the importance of preferential status and density in the income determination process of recent immigrants and nonmigrants of like ethnicity. Our simple additive formulation is of the form:

$$Y_i = \alpha + \beta D_j + \gamma_k P_k + Z_i + e_i, \quad (1)$$

where Y_i = logged annual earnings of the i^{th} individual;

D_j = density and j = 1,0 for high- and low-density states, respectively;

P_k = preferential status and k = 2, 1, 0 for preferred, nonpreferred and nondifferential preferences statuses, respectively;

Z_i = a vector of controls enumerated in Table 1;

e_i = random disturbances.

This model establishes whether preferential status, denoted by γ, and density, denoted by β, influence the earnings of Mexican, Puerto Rican, and Cuban recent immigrants and nonmigrants. While the earnings stratifying effect of ethnic density has been established (Tienda and Lii, forthcoming), the potentially unique and conditional influence of preferential status in structuring modes of market insertion has not.

Interpretations of the preferential status effects reflect our hypotheses about which stratifying mechanisms operate. If preferred workers gain financially compared to those who are equally preferred to non-Hispanic whites, then $\gamma_2 > 0$. This result would imply that sociocultural mechanisms are more powerful than market forces in stratifying the incomes of Hispanic men. However, if nonpreferred Hispanic workers earn more than their (statistical) counterparts who are equally preferred (represented in jobs), then $\gamma_1 > 0$. These results would indicate market supply and demand forces

as more salient than sociocultural factors in stratifying the income-determination process of Hispanic men.

Since recent immigrants tend to concentrate residentially in ethnically dense areas, it is conceivable that the income effect of preferential status depends on density. Model (2), of the form

$$Y_i = \alpha + \beta D_j + \gamma_k P_k + \delta_k (D_j P_k) + Z_i + e_i \qquad (2)$$

relaxes the assumption that the effects of preferential status are similar in high- and low-density areas. If δ_1 and $\delta_2 = 0$, then the income effects of preferential status do not vary by density. Alternatively, if δ_1 and $\delta_2 > 0$, then preferred and nonpreferred workers benefit financially from residence in high-density relative to low-density areas, but the obverse would be true if δ_1 and $\delta_2 < 0$.

Dynamic Model. Our migration typology converts the static formulation of density into its dynamic expression by specifying the earnings consequences of interstate migration on Hispanic residential concentration. We begin with a simple formulation which estimates as effects the impact of migration types and preferential status on the earnings of Hispanic men:

$$Y_i = \alpha + \beta_j M_j + \gamma_k P_k + Z_i + e_i, \qquad (3)$$

where M_j = migration type, and j = 3, 2, 1, represent dispersion, concentration, and intradensity flows, respectively, and other parameters are the same as in Model 2.

The baseline dynamic model estimates the net effects of migration type and preferential status independently of any possible joint association. Our predictions about the influence of migration types on density are informed by the results of the static model. Accordingly, if we show that residence in

high- (low-) density areas influences earnings, then the main effects of concentration (dispersion) should be nonzero, or β_2 and $\beta_3 \neq 0$.

However, the simple additive effects of migration types do not consider the possibility that earnings gains associated with spatial mobility depend on resulting changes in the cultural division of labor--in our formulation, the preference status configuration. To evaluate this possibility, we introduce in model (3) a set of interaction terms $\delta_{jk}(M_jP_k)$, representing the conditional association between migration type and preferential status. The model takes the form

$$Y_i = \alpha + \beta_j M_j + \gamma_k P_k + \delta_{jk}(M_jP_k) + Z_i + e_i \cdot \quad (4)$$

If results from the static model showed that preferred workers residing in high-density areas increased (lost) earnings relative to (statistically) comparable men who did not migrate, we expect preferred workers to gain (lose) from participating in concentrated flows. Alternatively, preferred workers who participated in dispersed migration flows should gain (lose) if the static model produced a positive (negative) association between high density and preferred job status. Finally, if density exerted no independent effect on the earnings of Hispanic-origin men, then the main effects of migration types, as well as the joint effects with preferential status, should be zero.

Results

We begin our analysis by presenting descriptive statistics for the key independent variables used to establish the existence of different forms of labor market insertion. Table 2 shows that the residential distribution of Hispanic men among states of high Hispanic density differs by national origin,

Table 2

DESCRIPTIVE STATISTICS FOR DENSITY, MIGRATION TYPE AND PREFERENTIAL STATUS ACCORDING TO NATIONAL ORIGIN

	Mexicans			Puerto Ricans			Cubans		
	Static		Dynamic	Static		Dynamic	Static		Dynamic
	Post-1975 Immigrants (1)	Nonmigrants 1975-80 (2)	Natives and pre-1975 Immigrants (3)	Post-1975 Entrants (4)	Nonmigrants 1975-80 (5)	All persons except post-1975 Entrants (6)	Post-1975 Immigrants (7)	Nonmigrants 1975-80 (8)	Natives and pre-1975 Immigrants (9)
Density									
% High	91.7	89.5	—[b]	69.1	82.1	—[b]	89.4	87.8	—[b]
% Low	8.3	10.5		30.9	17.9		10.6	12.2	
Migration Type									
% Concentrated	—[c]	—[c]	1.0	—[c]	—[c]	1.1	—[c]	—[c]	1.9
% Dispersed	—	—	1.3	—	—	2.1	—	—	1.4
% Intradensity	—	—	2.7	—	—	4.0	—	—	5.9
% Nonpreferred			95.0			92.8			90.8
Preferential Status[d]									
% Nonpreferred	8.4	17.9	16.9	17.6	17.2	17.5	15.5	16.9	17.2
% Preferred	45.7	29.4	34.0	53.6	46.5	47.6	23.7	29.3	28.0
% Nondifferentiated	45.9	52.7	49.1	28.8	36.3	34.9	60.8	53.8	54.8
[N]	[4,448]	[6,050]	[13,096]	[755]	[3,174]	[7,289]	[207]	[2,030]	[4,425]

Source: 1980 PUMS A sample, restricted to men aged 16-64, not in school, in the military, or institutionalized, with earnings in 1979.
[a]Includes both natives and pre-1975 immigrants.
[b]Not applicable to dynamic model.
[c]Not applicable to static model.
[d]Defined in text.

but also by migrant status. Recent Cuban immigrants were about as likely as their nonmigrant counterparts to reside in traditionally Hispanic areas---mainly south Florida, New York, and New Jersey--in 1980. For Mexicans, the propensity of recent immigrants to reside in high-density Hispanic states was only marginally greater than for nonmigrants; the five southwest states and Illinois were the preferred states of residence for this group. By contrast, recent Puerto Rican migrants were considerably less likely than their nonmigrant ethnic counterparts to reside in the Northeast or any other high-Hispanic-density state in 1980. This suggests that the recent labor flows between the island and the mainland may consist largely of repeat migrants who may be familiar with the labor market difficulties in the Northeast, and consequently move elsewhere in search of better alternatives.

The tendency toward greater geographic dispersion of Puerto Ricans is confirmed in the second panel in Table 2, which shows the distribution of migrants by type. Among individuals residing in the United States in 1975, Cubans were the most geographically mobile, as 9.2 percent moved across state lines during the 1975-1980 period, compared to 7.2 percent of Puerto Ricans and 5.0 percent of Mexicans. And, while the distribution of migrants by type of flows differed by national origin, intradensity moves were the modal movement type for all three groups, accounting for 64 percent of interstate residence changes made by Cubans (5.9 ÷ 9.2), and, respectively, 56 and 54 percent of those made by Puerto Ricans and Mexicans.

That migration produced uneven changes in Hispanic social density according to national origin is evident in the sizes of dispersed and concentrated flows for Puerto Ricans and Cubans. Approximately one in five Cuban migrants who changed states of residence between 1975 and 1980 participated in concentrated flows (1.9 ÷ 9.2), while 17 percent moved away

from states of traditional Hispanic concentration. The Puerto Rican story is reversed, as nearly 30 percent (2.1 ÷ 7.2) of those who moved across state boundaries during the late 1970s opted to live outside the states of traditional concentration. Mexicans exhibit yet a third pattern in that the share of concentrated and dispersed flows were approximately offsetting, although dispersed flows were slightly more pervasive. Since our tabulations of migration types exclude recent immigrants, and in light of the information presented in columns (1), (4), and (7) of Table 2, the contrasts among migration types by national origin would be even sharper. This is because of the substantially higher tendency of recent Puerto Rican migrants to reside in low-Hispanic-density states, and higher tendency of recent Mexican immigrants to live in high-Hispanic-density states.

Our characterization of Hispanic men according to preferential status (panel 3, Table 2) also shows differentiation by national origin and migrant status. For Mexicans, recent immigrants were 1.5 times more likely than nonmigrants to hold jobs in which Mexicans traditionally have been overrepresented (relative to non-Hispanic whites)--predominantly in the lower-status jobs in the secondary urban labor market and in the agricultural sector (see Figure 1). By contrast, over half of Mexican nonmigrants occupied nondifferentiated preference jobs. This finding lends support to our argument about the preferential recruitment of Mexican immigrant workers, a phenomenon apparently less applicable either to Puerto Ricans or Cubans.

The advantaged labor market position of Cubans over Puerto Ricans is evident in the larger shares of Cubans occupying nondifferentiated jobs in 1980. This was not so for Puerto Rican men, whose share of workers in nondifferentiated preference jobs ranged from 29 percent for recent entrants to 36 percent for nonmigrants. The large number of nonshaded cells in Figure

1 indicate that Cubans' job distribution was more similar to that of non-Hispanic whites in 1970 compared to the Mexican and Puerto Rican distributions. Indices of dissimilarity reported in Table B-1 reinforce this conclusion, showing that 17 percent of Cubans would have to change jobs for their distribution to resemble exactly that of non-Hispanic whites, while for Mexicans and Puerto Ricans, the corresponding numbers were 21 and 23 percent, respectively.

Static Model. Table 3 presents the results of the additive and multiplicative formulations of the static model for recent Mexican, Puerto Rican, and Cuban immigrants and their nonmigrant ethnic counterparts (including previous migrants) who resided in the United States in 1975. A quick inspection of the pattern of significant effects reveals marked differences by national origin. Among recent immigrants, density effects emerge only for Puerto Ricans, but among nonmigrants, density effects emerged only for Mexicans and Cubans. All significant density effects are negative. The additive specification shows that recent Puerto Rican migrants who resided in high-density Hispanic states earned 29 percent less than their counterparts who resided in nontraditional areas, but nonmigrants were not penalized, nor did they profit financially from residence in high-density states. By contrast, Mexican and Cuban nonmigrants who resided in high-Hispanic-density states earned significantly less than their (statistical) counterparts who resided in low-density states. For Cubans, the earnings loss associated with residence in high-density states was on the order of 16 to 20 percent, and for Mexicans the earnings loss was 7 percent.

Preferential status effects on earnings also reveal substantial diversity among the national-origin and migrant-status groups. For recent Mexican immigrants, incumbency in preferential jobs--predominantly low-skill jobs in

Table 3

STATIC MODEL: SIMPLE ADDITIVE AND FIRST-ORDER INTERACTION EFFECTS[a]
OF DENSITY AND PREFERENTIAL STATUS ON 1979 ANNUAL EARNINGS
OF MEXICAN, PUERTO RICAN, AND CUBAN MEN
(Standard Errors in Parentheses)

	Mexicans[b]				Puerto Ricans[b]				Cubans[b]			
	Post-1975 Immigrants		Nonmigrants, 1975-80		Post-1975 Arrivals		Nonmigrants, 1975-80		Post-1975 Immigrants		Nonmigrants, 1975-80	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Additive Terms												
High Density	.010	-.058	-.015	-.071*	-.288***	-.240**	-.089**	.098	-.193	-.204	-.160***	-.207***
	(.041)	(.073)	(.033)	(.044)	(.066)	(.124)	(.038)	(.065)	(.211)	(.253)	(.050)	(.068)
Nonpreferred	.029	.069	-.071**	-.108	.133	.169	.045	.229**	.171	.148	.103**	.068
	(.042)	(.161)	(.028)	(.087)	(.090)	(.164)	(.040)	(.101)	(.166)	(.854)	(.043)	(.129)
Preferred	-.091***	-.196**	-.165***	-.313***	.032	.082	.046	.278***	.103	.071	.019	-.089
	(.023)	(.084)	(.023)	(.069)	(.067)	(.125)	(.029)	(.071)	(.146)	(.411)	(.037)	(.100)
First Order Interactions with High Density												
Nonpreferred	—[c]	-.044	—[c]	.042	—[c]	-.048	—[c]	-.214**	—[c]	.025	—[c]	.040
		(.166)		(.090)		(.194)		(.108)		(.872)		(.137)
Preferred	—	.114	—	.166**	—	-.071	—	-.277***	—	.036	—	.124
		(.087)		(.073)		(.149)		(.078)		(.434)		(.107)
Constant	7.386	7.430	6.222	6.276	6.981	6.943	6.367	6.220	6.834	6.842	6.739	6.777
R^2	.372	.372	.410	.410	.473	.473	.409	.411	.549	.549	.413	.414

Source: See Table 2.

[a]Net of a vector of controls identified in Table 1

[b](1) and (2) refer to the additive and multiplicative equations in the text.

[c]Not included in additive model.

*$p \leq .10$
**$p \leq .05$
***$p \leq .01$

the secondary sector--translated to earnings approximately 9 percent below those of nondifferentiated workers (Model 1), but "preferred" workers in low-density areas were even more disadvantaged, registering earnings almost 20 percent below those of their counterparts residing in high-density areas (Model 2). Results for nonmigrants are similar, except that the magnitude of the earnings losses associated with incumbency in preferred jobs was substantially greater, on the order of 16 percent. However, this effect was conditioned by density, with Mexican nonmigrants in low-Hispanic-density states earning 31 percent less than their statistical counterparts and those in high-density states earning 15 percent less (-.313 + .166 = .147).

Income penalties for incumbency in "preferred" jobs reveals that market supply and demand factors are more decisive than ethnicity in the income-determination process of Mexican workers, while positive income effects for preferred workers would indicate the opposite. That the pattern of density and preference effects was generally similar between recent Mexican immigrants and nonmigrants, with the exception of differing point estimates, calls attention to the role of ethnicity and preferential status in shaping a distinct path of labor market insertion for Mexicans, particularly since the main effects of preference, as well as those conditional upon density, differ from those of Puerto Ricans and Cubans.

For recent Cuban immigrants we detected no significant effects of preferential worker status, but the signs of the preferred and nonpreferred worker job categories are informative about the significance of ethnicity in defining a path of labor market insertion that is different for them from that of Mexicans. That is, the positive (albeit insignificant) effect of incumbency in a "preferred" job suggests that social factors may be more decisive than economic factors in the income determination process of new

Cuban immigrants. However, the statistical insignificance of these effects, which is partly a function of the relatively small sample size (N = 207), renders this interpretation tentative.

The complexity of the Cuban income-determination process is further indicated by the fact that, unlike Mexican nonmigrants, Cuban nonmigrants employed in nonpreferred jobs--where Cubans are underrepresented relative to non-Hispanic whites--earned 11 percent more in 1979 than their (statistical) counterparts employed in nondifferentiated jobs. This effect appears to be conditioned by density, however, as it was attenuated and rendered statistically trivial after the introduction of the first-order interaction terms.

Results for Puerto Ricans illustrate yet a third pattern of labor market insertion, as revealed by the effects of preferential status on earnings. For nonmigrants the positive coefficients for both preferred and nonpreferred workers reveal that both market and social factors operate to stratify the earnings of Puerto Rican workers. Specifically, the additive specification shows that nonmigrant Puerto Ricans in jobs where they were underrepresented or overrepresented relative to non-Hispanic whites earned approximately 4.5 percent more than their (statistical) counterparts in job categories in which Puerto Ricans were represented equally with non-Hispanic whites. If statistically significant, these effects would indicate that both market (nonpreferred) and social (preferred) factors were significant in the income-determination process of Puerto Rican men. However, as the multiplicative model shows, these effects differ sharply depending on density.

Nonmigrant Puerto Rican men who resided in low-density areas and were engaged in preferred or nonpreferred job categories earned respectively 28 and 23 percent more, on an average annual basis, than (statistically) equivalent

incumbents holding nondifferentiated jobs. However, residence in high-density areas largely offset the earnings bonuses received by Puerto Rican men living in low-density areas, reducing them to 2 percent (-.21 + .23 = 2) for nonpreferred workers and to 0 (-.277 + .277) for preferred workers relative to workers holding nondifferentiated jobs. A roughly similar pattern of preference status effects emerged for recent Puerto Rican migrants, except that the corresponding point estimates were statistically trivial.

The results of the static models appear to suggest that because high Hispanic density imposes relatively greater economic costs to recent Puerto Rican migrants and Cuban nonmigrants, the economic gains from dispersed migration flows are likely to be greater for them. For Puerto Ricans, dispersed migration flows may be especially attractive, since the industrial restructuring of the New York labor market seems to be eliminating the kinds of jobs traditionally held by this group (Tienda, 1984). If this line of reasoning is correct, then the greater prevalence of dispersed flows among Puerto Ricans may be understood partly as an economic response to declining employment opportunities which alter the costs and benefits of residing in the traditional Puerto Rican areas. Our dynamic model allows us to examine this possibility directly.

Dynamic Model. Our predictions about the effects on earnings of migration types are informed from those based on density. Specifically, groups who were financially penalized by residing in high-density areas should profit from dispersed migration, and, conversely, incur substantial earnings losses from concentrated migration. Alternatively, individuals for whom residence in high-density areas rendered positive economic gains should benefit from concentrated migration and lose from dispersed migration. Finally, we expect intradensity migration flows to be relatively inconsequential for the earnings

determination of Hispanic men, unless they significantly alter the employment opportunities of individuals. This outcome would be gauged by the conditional associations with preference status categories.

Results of our dynamic model (see Table 4), which portray the consequences of migration in altering density levels, are only partly consistent with those based on the static model. That is, the negative density effects for Mexican nonmigrants is paralleled by the strong negative effects on earnings of concentrated migration flows. Substantively, Mexican workers who moved from low- to high-Hispanic-density states between 1975 and 1980 incurred average annual earnings losses ranging from 11 to 21 percent, depending on their preferential status. Also, the negative effect on earnings associated with incumbency in "preferred" job categories persists for Mexicans, rendering both migrants and nonmigrants an earnings penalty of 14 percent compared to their (statistical) counterparts employed in nonpreferred or nondifferentiated jobs.

From the information presented in Table 2 and Figure 1, we can trace this effect to the disproportional representation of Mexicans in lower, blue-collar jobs, and the persistence of occupational immobility (Snipp and Tienda, 1985) which maintains their stronghold in the lower manual jobs. Figure 1 shows that all seven job categories in which Mexicans were overrepresented relative to non-Hispanic whites involved manual occupations, five of these in lower manual occupations and two in upper manual occupations. The persistence of Mexicans in the secondary market may be disadvantageous in that it limits the amount of income mobility experienced by this group, but the fact that some of these jobs are "reserved" for Mexicans may offset these negative consequences to some extent. We do not explore this employment issue here (e.g., whether jobs are actually reserved for Mexicans), as it is the topic of another paper, but reconsider it again in the discussion comparing the economic position of

Table 4

DYNAMIC MODEL: SIMPLE ADDITIVE AND FIRST-ORDER INTERACTION EFFECTS[a] OF MIGRATION TYPE AND PREFERENTIAL STATUS ON 1979 LOGGED ANNUAL EARNINGS OF MEXICAN, PUERTO RICAN, AND CUBAN MEN
(Standard Errors in Parentheses)

	Mexican[b]		Puerto Rican[b]		Cuban[b]	
	(3)	(4)	(3)	(4)	(3)	(4)
Additive Terms						
Migration Type						
Concentrated	-.110*	-.208**	.081	.448***	.008	-.074
	(.067)	(.102)	(.086)	(.158)	(.076)	(.105)
Dispersed	-.008	-.100	-.038	-.134	.137	.168
	(.057)	(.089)	(.062)	(.109)	(.091)	(.119)
Intradensity	-.030	-.074	-.075*	-.051	-.046	-.029
	(.040)	(.059)	(.046)	(.086)	(.044)	(.058)
Preferential Status						
Nonpreferred	.001	-.009	.046*	.043	.102***	.110***
	(.020)	(.020)	(.027)	(.028)	(.029)	(.030)
Preferred	-.136***	-.140***	.056***	.062***	.039	.035
	(.015)	(.015)	(.020)	(.021)	(.025)	(.026)
First-Order Interactions with Migration Type						
Concentrated x Nonpreferred	—[c]	.298*	—[c]	-.515**	—[c]	.234
		(.166)		(.235)		(.189)
Concentrated x Preferred	—	.067	—	-.526***	—	.114
		(.157)		(.203)		(.188)
Dispersed x Nonpreferred	—	.251	—	.205	—	-.305
		(.162)		(.172)		(.242)
Dispersed x Preferred	—	.115	—	.114	—	.104
		(.127)		(.140)		(.221)
Intradensity x Nonpreferred	—	.102	—	.123	—	-.157
		(.102)		(.136)		(.122)
Intradensity x Preferred	—	.066	—	-.085	—	.036
		(.092)		(.105)		(.106)
Constant	6.235	6.240	6.580	6.563	6.525	6.530
R^2	.402	.402	.414	.414	.407	.408

Source: See Table 2.

[a]Net of a vector of controls identified in Table 1.

[b](3) and (4) refer to the additive and multiplicative equations in the text.

[c]Not included in additive model.

*$p \leq .10$

**$p \leq .05$

***$p \leq .01$

Mexicans and Puerto Ricans. Overall, what is striking about the results for Mexicans is that geographic mobility did little to improve their economic mobility, irrespective of whether or not moves involved changes in density.

Density effects for Cubans were somewhat ambiguous, as most were nonsignificant but were of opposed sign for recent immigrants and nonmigrants. Our dynamic model aids in disentangling these effects. Results of the dynamic specification (Model 3) show neither earnings gains nor losses associated with geographic movement of any kind relative to nonmovement, an outcome which differs from the results of the static model. This outcome may be related to the uniqueness of the enclave sector which absorbs a large share of Cuban migrants (Portes and Bach, 1985: Chapter 6), as we discuss later.

That nonpreferential status effects are statistically significant and positive reveals the salience of economic over sociocultural factors in the income-determination process of Cuban men. Cubans who were underrepresented in job categories relative to non-Hispanic whites (see Figure 1 and Appendix Table B-1) earned approximately 11 percent more than their statistical counterparts engaged in nondifferentiated job categories in 1979. The positive effects of underrepresentation in jobs (nonpreferred) can be traced to market mechanisms (i.e., excess demand relative to supply), but neoclassical economic logic cannot explain the higher returns of preferred workers relative to those who are nondifferentiated. Although the positive income effects of preferential status are smaller both in magnitude and on the margin of statistical significance compared to those associated with nonpreferred jobs, they nonetheless underscore the importance of ethnicity in the recruitment and remuneration of Cuban workers.

The results for Puerto Ricans combine elements from those of Cubans and Mexicans, yet they do not exactly reproduce either pattern. For example, in

Model 3 the influence of concentrated and dispersed migration flows on earnings are statistically trivial, while intradensity movers incurred earnings penalties (7.5 percent). As for Cubans, preferential-status effects on earnings were highly significant and positive, although of differing magnitudes. In substantive terms these results show that returns for incumbency in nonpreferred and preferred jobs, respectively, were on the order of 5 to 6 percent. For preferred workers to earn more than nondifferentiated workers, social factors must play a role in the income-determination process. Because the jobs in which Puerto Ricans are preferred involve only manual occupations (see Figure 1), unionization may be responsible for their positive returns on preferential status.

That the positive income returns associated with preferential status correspond to nonmigrants lends support to the unionization argument, since tenure usually is a condition for the benefits it affords. In fact, both preferred and nonpreferred workers who participated in concentrated migration incurred substantially lower returns--roughly 53 to 51 percent, respectively--relative to nonmigrants. This outcome was presaged by the static model showing substantial earnings losses associated with residence in high-Hispanic-density states. Overall, the Puerto Rican income-determination process appears to be more complex than that of either Mexicans or Cubans, since nondifferentiated workers were not penalized by concentrated flows, but instead earned 45 percent more than nonmigrants holding nondifferentiated jobs. Although the negative main effects associated with dispersed flows were nonsignificant, interactions with preference-status effects were positive. Finally, the main and multiplicative effects on earnings of intradensity flows were mixed in sign and significance. This complexity defies easy explanations, and begs for further disaggregation and reformulation. We consider this issue in the concluding section.

Discussion

In drawing conclusions, several key findings warrant emphasis. First, our results showing that the economic costs and benefits of residing in high-density states differ according to national origin and for recent immigrants versus nonmigrants address the critical importance of reception factors in structuring the longer-term income streams of Hispanic men. Evidence about the differential influence of preferential job configurations according to national origin and nativity bolster this conclusion. Our results concerning the economic significance of preferential recruitment patterns is strongest for Mexicans and Puerto Ricans. Although both groups are preferred (i.e., overrepresented in low-skill jobs in the secondary labor market), our results suggest the salience of economic forces in structuring the income streams of new Mexican immigrants into the secondary labor market, while both sociocultural and economic factors influence the income attainments of recent Puerto Rican migrants.

For Mexicans, the negative effect of incumbency in preferred jobs is not conditioned by social density, but rather by deeply rooted and well-documented historical antecedents. Alternatively, the insertion of Puerto Rican workers in the secondary labor market, and the income streams associated with this mode of economic incorporation, depend on social density, such that preferred and nonpreferred workers are penalized financially for residence in high-density areas. This economic toll partly stems from the industrial restructuring of the New York City labor market away from the types of jobs traditionally occupied by Puerto Ricans, but it also reflects the crowding effects resulting from the continual influx of migrants from the island. Our reasoning implies that Puerto Ricans should benefit financially from migration

flows which decrease Hispanic density, and lose from those which increase it. That our results corroborate this pattern confirms the responsiveness of Puerto Ricans to alternative market opportunities outside the areas of their traditional concentration. Also, to the extent that the pattern of dispersed migration flows continues, this outcome promises to improve the economic position of the population in the future. However, this optimism about the potential improvements in the economic status of Puerto Ricans must be tempered by our results showing positive preferred-status effects in the income-determination process, since the "social" supports afforded by residence in high-density areas would be absent or weak in areas of low Hispanic density. Second, our analyses based on earnings do not speak to the issue of the role of social density and preferential status in determining whether Puerto Ricans secure jobs in the first place. As we noted above, disproportionately high rates of joblessness have become a defining feature of the Puerto Rican employment experience. Furthermore, the industrial restructuring away from Puerto Rican jobs in New York City, coupled with our results showing that their incumbency in "preferred" jobs reflected the dominance of sociocultural rather than market factors in their income determination, bodes ill for their future employment profile.

From this vantage point, Mexican men engaged in "preferred" jobs may have an advantage over their Puerto Rican counterparts, despite the negative income effects associated with such incumbency, if preferential recruitment into typically "Mexican" jobs "reserves" slots for them. While Mexican labor history provides support for this interpretation, there exist fewer data on Puerto Ricans. Not only have their unemployment levels risen during the past decade (Bean and Tienda, 1987), but our results showing that recent Puerto Rican migrants who reside in high-Hispanic-density areas are significantly

worse off than their counterparts engaged in low-Hispanic-density labor markets suggest that the poor economic position of Puerto Ricans compared to Mexicans stems from the fact that "preferred" worker status for them does not mean the same thing as for Mexicans. Specifically, the existence of "preferred" jobs seems not to "reserve" positions for Puerto Ricans in the same way as is true for Mexicans.

This interpretation of our results goes beyond the data we have assembled and suggests areas for additional research. Additional work which uses our approach to study employment effects promises to increase our understanding about the role of social density, migration, and ethnicity-based preferential recruitment strategies in shaping distinct paths of labor market insertion for Mexican, Puerto Rican, and Cuban men. Furthermore, our attempt to study the role of migration in stratifying the Hispanic population by altering the cultural division of labor is quite coarse in its use of states as analytic units to define social density and migration flows because it portrays labor market concentration quite imprecisely. And, while our results are suggestive and interesting, future extensions and replications using census data should consider county groups as the units for measuring migration flows.

Finally, our use of preferential status as a basis for portraying the cultural division of labor, while relatively successful for Mexicans and Puerto Ricans, was less so for Cubans, whose job configuration is quite similar to that of non-Hispanic whites. For them a more fruitful specification of the cultural division of labor and the role of internal migration in fostering ethnic consolidation should use class density, as portrayed by the prevalence of self-employment. Using this criterion, Cubans stand apart not only from Mexicans and Puerto Ricans, but also from non-Hispanic whites. Pursuit of this line of inquiry should provide

additional information about the importance of wage labor flows in defining and consolidating distinct modes of Hispanic labor market insertion, and thereby maintaining socioeconomic inequities among Hispanic men according to national origin and nativity.

We would be remiss if we failed to insert a word of caution about the limitations of our approach and results. In recommending extension of our portrayal of paths of labor market insertion, we do not view the quantitative approach as a substitute for structural historical and qualitative research, but rather as a complement to alternative research strategies that generate richly textured information about the social dynamics of migration. The key advantage of our approach is its empirical rigor, while its main disadvantages stem from the imprecision in portraying social processes and forms. However, the correspondence of our findings with those of others based on totally different methods and data provides some assurance that our approach is not totally inappropriate, and holds some promise for rendering intelligible the processes which stratify the Hispanic population by national origin.

On balance, our results are revealing about the role of migration in stratifying the earnings of the Hispanic male work force by altering the cultural division of labor, and they lend support to claims about alternative paths of labor market insertion for men of Mexican, Puerto Rican, and Cuban origin. Our focus on preferential status and social density both in dynamic and static expression provides but one way of investigating empirically the relative importance of market and social factors in the income determination process of Hispanics. Moreover, comparing and contrasting Mexicans, Puerto Ricans, and Cubans has shed some light on the social forces which reinforced the disadvantaged position of Mexican and Puerto Rican workers (Nelson and Tienda, 1985). Although they are less successful in demonstrating the

stratification processes which shape the Cuban path of labor market insertion and income determination, even for this group our findings are revealing and suggestive.

Appendix A
Table A-1

RESIDENTIAL DISTRIBUTION OF ADULT HISPANIC MEN BY ORIGIN:
STATES OF MAJOR CONCENTRATION, 1979
(In Percentages)

State	Mexican	Puerto Rican	Cuban	Total
Arizona	4.6	--	--	3.5
California	41.0	4.6	8.0	32.0
Colorado	2.4	--	--	1.9
Connecticut	--	4.4	--	--
Florida	--	4.9	58.0	6.0
Illinois	4.6	6.4	2.2	4.7
Massachusetts	--	3.6	--	--
New Jersey	--	12.2	11.1	3.1
New Mexico	2.7	--	--	2.0
New York	--	49.4	10.2	9.9
Ohio	--	1.6	--	--
Pennsylvania	--	4.2	--	--
Texas	32.1	--	1.7	24.3
Total	87.4	91.3	91.2	87.4
Remaining states	12.6	8.8	8.9	12.8
Overall total	100.0	100.1	100.1	100.2

Source: 1980 PUMS A sample, restricted to men aged 16-64, not in school, in the military, or institutionalized, with earnings in 1979.

Appendix B
Estimation of Preferential Status

For the estimation of preferential status we used a sample from the 1970 Public Use Microdata Files of Hispanic and non-Hispanic white men aged 16-64 who worked within the five years preceding the census and had nonmissing industry and occupation in 1970. First we arrayed the data into a 6 * 5 * 4 * 2 matrix representing 6 industry sectors, 5 occupational groups, 4 ethnic groups, and 2 density groups. Table B-1, which is based on this matrix, shows the relative allocation of Mexican, Puerto Rican, Cuban and non-Hispanic white men among the thirty "job" cells.

To establish whether Hispanics are "preferred" workers relative to non-Hispanic whites, we computed a log-linear analysis to determine the associations among density, ethnicity, occupation, and industry. The log-linear model is of the form:

$$\log m_{ijkl} = u + u_i + u_j + u_k + u_l + u_{ij} + u_{ik} + u_{jk} + u_{il} + u_{jl} + u_{kl} + u_{ijk} + u_{ijl},$$

where i = industry sector (1, ... 6)

j = occupation group (1, ... 5)

k = ethnic group (1, ... 4)

l = density (1, 2)

In its abbreviated notation, the hierarchical model estimated is:

[123] [34] [124]

From the 120 estimated parameters we computed the net effects of preference for Mexicans, Puerto Ricans, and Cubans using the following formula:

$$\log m_{ij(k = 2, 3, 4)} = u_{(k = 2, 3, 4)} + u_{i(k = 2, 3, 4)} + u_{j(k = 2, 3, 4)} + u_{ij(k = 2, 3, 4)}.$$

The results of these computations, reported in Table B-2, indicate whether each of the Hispanic groups was over-, under- or approximately equally represented compared to non-Hispanic whites. The summary of the differential effects provided the basis for the trichotomous representation of preference-status categories, wherein preferred job categories included those with scores greater than or equal to +.4; nonpreferred job categories included those with scores less than or equal to -.4, and nondifferentially preferred job categories obtained scores between .03 and -.03, inclusive.

Table B-1

EMPLOYMENT CLASSIFICATION OF MALE HISPANIC AND NON-HISPANIC WHITE WORKERS: 1970

Sector and Occupation	National Origin			
	Mexican	Puerto Rican	Cuban	Non-Hispanic White
Extractive	10.7	1.4	1.8	4.7
Upper Nonmanual	0.2	0.0	0.1	0.3
Lower Nonmanual	0.1	0.0	0.2	0.2
Upper Manual	1.4	0.1	0.2	0.7
Lower Manual	0.8	0.2	0.4	0.3
Farmer	8.2	1.1	0.9	3.2
Transformative	31.9	44.7	41.2	32.5
Upper Nonmanual	1.5	1.1	2.9	4.7
Lower Nonmanual	2.8	4.3	3.5	5.1
Upper Manual	22.7	35.9	32.3	20.0
Lower Manual	4.9	3.4	2.5	2.7
Farmer	0.0	0.0	0.0	0.0
Distributive Services	20.2	17.3	19.8	23.0
Upper Nonmanual	1.6	1.0	2.2	3.8
Lower Nonmanual	7.6	7.5	9.6	11.3
Upper Manual	7.5	6.0	5.8	5.7
Lower Manual	3.5	2.8	2.2	2.2
Farmer	0.0	0.0	0.0	0.0
Producer Services	5.7	9.2	8.8	8.4
Upper Nonmanual	1.0	1.2	2.1	2.2
Lower Nonmanual	3.3	4.8	5.0	5.3
Upper Manual	0.7	1.0	0.6	0.3
Lower Manual	0.7	2.2	1.1	0.6
Farmer	0.0	0.0	0.0	0.0
Social Services	16.9	15.2	14.4	20.8
Upper Nonmanual	4.3	4.4	6.9	9.9
Lower Nonmanual	4.7	4.4	3.1	4.8
Upper Manual	1.8	1.0	1.1	1.2
Lower Manual	6.1	5.4	3.3	4.9
Farmer	0.0	0.0	0.0	0.0
Personal Services	14.8	12.3	14.0	10.6
Upper Nonmanual	0.8	0.9	1.5	1.4
Lower Nonmanual	1.0	1.0	1.5	1.2
Upper Manual	2.8	2.6	2.6	1.6
Lower Manual	10.2	7.8	8.4	6.4
Farmer	0.0	0.0	0.0	0.0
Totals	100.2	100.1	100.0	100.0
Dissimilarity Index Between Groups (vs. Whites)	21.4	22.6	16.7	

Source: 1970 PUMS Files.

Note: Upper Nonmanual includes professionals, semiprofessionals and managers.
Lower Nonmanual includes clericals and sales.
Upper Manual includes crafts and operatives.
Lower Manual includes service workers and laborers.
Farmer includes farmers and farm laborers.

Table B-2

PREFERENCE EFFECTS BY ETHNICITY AND DENSITY

Occupational Groups	Extractive	Transformative	Distributive Services	Producer Services	Social Services	Personal Services
			Mexican			
Upper Nonmanual	-0.6	-1.0	-1.1	-0.9	-0.7	-0.7
Lower Nonmanual	-0.4	-0.7	-0.7	-0.5	-0.2	-0.3
Upper Manual	0.8	0.2	0.1	0.5	0.2	0.3
Lower Manual	0.7	0.8	0.5	-0.5	0.1	0.4
Farmer	1.0	--[a]	--[a]	--[a]	--[a]	--[a]
			Puerto Rican			
Upper Nonmanual	-1.4	-1.2	-1.5	-0.7	-0.5	-0.3
Lower Nonmanual	-9.5	-0.2	-0.6	-0.2	-0.2	-0.5
Upper Manual	-0.6	0.7	0.1	0.8	0.0	0.5
Lower Manual	0.2	0.7	0.2	1.2	0.1	0.2
Farmer	-0.4	--[a]	--[a]	--[a]	--[a]	--[a]
			Cuban			
Upper Nonmanual	-0.5	-0.4	-0.5	0.2	0.1	-0.2
Lower Nonmanual	0.6	-0.1	-0.1	-0.1	-0.3	-0.1
Upper Manual	-1.9	0.4	-0.2	0.2	0.0	0.5
Lower Manual	0.1	-0.2	-0.4	-0.1	-0.1	0.2
Farmer	-1.1	--[a]	--[a]	--[a]	--[a]	--[a]

Source: 1970 PUMS Files. All men who worked between 1965 and 1970 and had valid industry and occupation codes.
Note: Negative signs indicate underrepresentation while positive signs indicate overrepresentation.
[a]These cells are structurally impossible because farmers and farm laborers only occur in the agricultural industry (extractive sector).

Notes

1. See Tienda (1981) for a critical review of the internal migration literature for the Chicano population.

2. The transition of the Chicano population from a rural to an urban work force has not eliminated the preferential status of Mexican workers in U.S. agriculture, although the share of Mexican farm workers has declined substantially since 1960. Rather, the urbanization of the Chicano population altered the basis of preferential status to satisfy the requirements of the secondary urban labor market (Tienda, 1981; Portes and Bach, 1985: Chapter 7).

3. There are numerous forms of social density, such as class density, ethnic density, and age density, which are modified by population redistribution, and which affect individual behavior in manifold ways.

4. Affirmative action hiring on the basis of ethnicity in areas where members of a given race or ethnic group are scarce renders ethnicity or race into a form of human capital in that it embodies a set of experiences or knowledge about the population being served.

5. Restricting the sample to persons who were not in the military or in school avoids attaching substantive significance to these moves, which are more frequent for nonlabor reasons, and do not conform to conventional streams.

6. We computed the inverse of the mills ratio, (λ), to correct for selection bias resulting from sharp differences in labor force participation rates among the three groups of men. This term reached statistical significance only for Puerto Rican men, attesting to the difficulties faced by Puerto Rican men in securing a job. The implications of this result are further elaborated in the conclusions.

7. That over 85 percent of the total Hispanic population resided in just 9 states in 1979 made our task of identifying high- and low-density areas

relatively easy. Because of the high residential concentration, the distinction between the distributional and compositional measures of Hispanic density is less critical empirically than theoretically because the two measures are highly correlated. We computed z-scores using the percent Hispanic for the total U.S., and confined the subset of high-density states to the subset with non-zero scores, and generated the same set of states. Our use of the distributional measure of Hispanic density reflects its greater appeal for theoretical reasons.

8. Our analysis of preference status was based on 1970 rather than 1980 industry by occupational classifications so as to avoid a simultaneity bias of the kind discussed by Sandefur and Tuma (1986). To base this analysis on the 1980 industry by occupation classification would have introduced a distortion which captured the effects of migration on density. Since we are interested in how migration between 1975 and 1980 altered the preference structure, it would be misleading to use 1980 as the date to measure the preference structure since this presumably changed as a consequence of migration. By determining our preference classification prior to the migration interval studied, we avoid this potentially serious pitfall.

9. For the static analyses, we used separate subsamples of recent international migrants and nonmigrants. Sample sizes were 6,050 nonmigrants and 4,449 recent international migrants of Mexican origin; 3,174 nonmigrants and 755 recent migrants of Puerto Rican origin; and 2,030 nonmigrants and 207 recent international migrants of Cuban origin. For the dynamic models, sample sizes were 13,096 Mexicans, 7,289 Puerto Ricans and 4,425 Cubans. Use of the static expression of density is necessary for recent international migrants whose state of residence in 1975 is unavailable to classify them into the migration typology.

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