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## JOB TRANSITIONS IN AN IMMIGRANT METROPOLIS: ETHNIC BOUNDARIES AND THE MIXED ECONOMY\*

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*We examine the job transitions of Asian immigrants in the metropolitan economy of Los Angeles. In such ethnically heterogeneous cities, ethnic boundaries are porous and are mediated by an intermediate mixed economy. Ethnographic interviews reveal that many immigrants prefer jobs outside the ethnic economy to obtain higher wages and fairer work rules. Multivariate analyses find that, across a succession of jobs and over time, immigrants tend to drift away from the more informal ethnic economy of the metropolis, a move that leads to higher earnings. The use of ethnic ties to locate jobs also declines. The main attraction of participation in the ethnic economy is the opportunity for self-employment. Our model of the immigrant labor market moves beyond the dualist representation of the ethnic enclave economy. We conceive of the metropolitan labor market as shaped by firm size, degree of bureaucratization, and governance structure in which interethnic economic transactions are mediated through a growing mixed economy.*

Immigrant workers and entrepreneurs are a growing presence in metropolises throughout the advanced industrial world. The growth of immigrant ethnic economies has dramatically altered the urban landscape. Analysts have studied the recruitment and maintenance of the immigrant labor force (Sassen 1988; Massey, Goldring, and Durand 1994), the labor market participation and internal migration of immigrant minorities (Bean and Tienda 1987), the origin of ethnic enterprise (Light 1972; Bonacich 1973), the rewards that accrue to participants in ethnic economies (Portes and Bach 1985), and the institutional arrangements that join immigrant workers with co-ethnic entrepreneurs

(Bailey and Waldinger 1991). We examine the social boundaries of the ethnic economy: To what extent is the immigrant labor market separated from the rest of the urban economy? Segmented-labor-market theory (Gordon 1964; Edwards 1975) posits closed boundaries between primary and secondary labor market sectors, which results in “a fundamental dichotomy between the jobs of migrants and the jobs of natives” (Piore 1979:35). In place of this dualist representation, our conception of the urban labor market emphasizes porous ethnic boundaries, which are manifested in the frequency of job transitions across sectors of the immigrant metropolis.<sup>1</sup>

By providing a structural theory of ethnic and gender disadvantage, the dual labor market hypothesis influenced subsequent re-

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<sup>1</sup> Our hypotheses apply best to advanced industrial societies in which immigrant workers can become naturalized citizens and enjoy legal equality. Undocumented migrants pose a special problem because they lack legal status, hence are not protected by state regulation of the workplace. Instead, undocumented migrants concentrate in the unregulated informal economy because they must evade the regulatory sanctions of the state. The institutional constraints that shape the labor market experiences of undocumented migrants therefore are predominantly informal.

search on labor markets. Although researchers sought to move away from the dualist imagery of impermeable boundaries, they retained the original terms of primary and secondary segmentation of the labor market (Kalleberg, Wallace, and Althaus 1981; Gordon, Reich, and Edwards 1982). Along this line, Wilson and Portes (1980) formulated their enclave economy hypothesis, which argued that the enclave economy represents an alternative opportunity structure that enables immigrant minorities to achieve wages or returns on human capital comparable to those obtained by workers in the primary labor market. The enclave economy offers immigrant workers a protected niche of opportunities for career mobility and self-employment that are not available to them in the secondary labor market, where they are trapped in low-wage, dead-end jobs. A central assumption of the hypothesis is that the ethnic enclave mobilizes ethnic solidarity to create opportunities for immigrant workers (Portes and Bach 1985).

The enclave economy hypothesis galvanized research on immigrant minorities. It specified social mechanisms that enabled immigrant minorities to surmount structural barriers to economic mobility. It also challenged the claim of assimilation theory—that structural isolation worked to the disadvantage of ethnic minorities. Consequently, the hypothesis has frequently been tested empirically. The claim of positive returns on human capital investments for immigrant workers was disputed in a study using 1980 Census data (Sanders and Nee 1987). The ensuing debate centered on the appropriate empirical definition of the enclave economy (Portes and Jensen 1987, 1992; Nee and Sanders 1987; Zhou and Logan 1989; Model 1991; Sanders and Nee 1992).<sup>2</sup> All efforts to verify

the enclave economy hypothesis have been plagued by measurement error. Whether the enclave is defined by industrial sector, place of residence, or place of work, census data can provide only rough approximations of the enclave economy. A more serious problem stems from conceptual vagueness about its boundaries. Portes and Bach (1985) suggested spatial, ethnic, and network criteria for conceptualizing the immigrant enclave economy, but they were unable to specify its boundaries.

Without a reliable definition of the enclave, analysts have difficulty determining the consequences of enclave economies. Are restaurant workers in a Chinese restaurant in an upstate town part of the New York Chinatown enclave economy? The restaurant purchases its fresh produce, seafood, and specialized supplies from Chinatown wholesalers and recruits its assistant cooks through an employment agency in Chinatown; but its waitresses are spouses of Chinese students at a nearby university, and its dishwasher comes from the locality. Similarly, are Korean-owned laundries in Santa Monica or Korean-owned Mom-and-Pop shops throughout greater Los Angeles a part of the Korean enclave economy?<sup>3</sup>

Immigrant communities and their associated ethnic economies appear to be foreign territories because they encompass highly visible ethno-cultural groups, but this impression may be deceptive. Koreatown in Los Angeles, for example, is spatially concentrated just west of downtown, but Korean-owned businesses and residences are scattered throughout the metropolitan area. In many ways, the appearance of being separated from the dominant society belies the fact that contemporary ethnic economies are

<sup>2</sup> Empirical tests of the enclave economy hypothesis have found that immigrant entrepreneurs obtain similar returns on human capital whether in the ethnic enclave economy or not, whereas immigrant employees experience disadvantages relative to their counterparts in the open economy. Portes and Jensen (1987) criticized Sanders and Nee (1987) for operationalizing the enclave by place of residence rather than place of work. In fact, Sanders and Nee used three operational definitions of the enclave, including place of work and place of residence anywhere within

greater Dade county, Florida. Their findings were consistent across the three operationalizations—immigrant workers in the ethnic enclave received lower returns on investments in human capital than immigrant workers in the open economy.

<sup>3</sup> An *ethnic economy* refers to the self-employed, employers, and co-ethnic employees of any ethnic or immigrant group (Bonacich and Modell 1980); whereas the concept of an *ethnic enclave economy* requires locational clustering, vertical and horizontal integration of firms, and co-ethnic employees (Light, Bozorgmehr, Der-Martirosian, and Sabagh 1992).

deeply embedded in the metropolitan economy in which they are located.

### A THEORY OF THE IMMIGRANT LABOR MARKET

Critics of segmented-labor-market theory have questioned whether the distinction between primary and secondary sectors of the labor market is real or nominal (Cain 1976). Might the dualist imagery of enclave and nonenclave differences also involve nominalist and arbitrary distinctions?

Contrary to the dualist claim of segmented boundaries separating workers inside and outside the enclave economy, ethnic and mainstream labor markets are part of the metropolitan labor market, a market in which there are varying degrees of ethnic participation. Worker outcomes vary within the ethnic economy, just as they do across the mainstream labor market. Barth (1956; 1969) argued that cultural practices are not uniform within the same ethnic group. He rejected, therefore, any approach that identified the attributes of ethnic groups. Rather than focus on the internal characteristics and histories of ethnic groups, he analyzed ethnic boundaries and boundary maintenance. Light, Sabagh, Bozorgmehr, and Der-Martirosian (1994) demonstrated the importance of social boundaries within ethnic groups giving rise to "internal ethnicity." Likewise, Hannan and Freeman (1989) suggested a focus on blending and segregating processes in the maintenance of social boundaries. We believe that an understanding of the dynamics of the social boundaries of the ethnic economy is crucial for new insights into the nature of the ethnic economy.

#### *The Mixed Economy*

The metropolitan labor market can be characterized by two related continua: (1) the density of ethnic participation, ranging from the open mainstream economy to the closed ethnic enclave; and (2) the degree of workplace formality, ranging from informal work environments to formal workplace conditions and procedures. In general, the degree of formality in the work environment covaries with size of firm, the extent of bureaucratization, and the market power of the firm. Rather

than segmented boundaries dividing the ethnic enclave from the open metropolitan economy, we contend that an intermediate mixed economy exists that provides a porous social boundary. Many immigrant entrepreneurs and employees conduct their economic activities within the mixed economy. The defining feature of the mixed economy is hybrid firms—firms that depend on ethnic and nonethnic social and financial resources, labor pools, and workplace rules.

Many firms that immigrants own or work in are part of the mixed metropolitan economy—consider, for example, a gasoline station in an ethnically mixed neighborhood owned by a Korean family that employs both Korean and Hispanic workers. Most production in the garment industry of greater Los Angeles takes place in Asian-owned shops that employ mostly Hispanic workers, but some Asian immigrants as well.

Blending and segregating dynamics in the mixed economy pressure ethnic firms and immigrant workers simultaneously toward greater openness and increased closure of ethnic boundaries. The pursuit of social mobility by immigrant workers and the search for new markets by ethnic firms involve choices and activities that open ethnic boundaries. Workers seeking jobs in the open economy place high priority on learning English language skills and the cultural practices of the receiving society. Ethnic enterprises that seek to expand their market into the open economy accommodate the cultural tastes and social practices of their anticipated clientele. In general, blending processes are strongest when social interaction between native-born citizens and immigrants occurs daily, either in the workplace or during commercial transactions.

By contrast, segregating processes are strongest in the "closed" domain of the immigrant community where social interaction with representatives of the host society is infrequent. Lack of interaction outside the ethnic community perpetuates linguistic isolation (Stevens 1992). Collective efforts by immigrant entrepreneurs to evade state regulations also contribute to the closure of ethnic boundaries (Nee and Nee [1973] 1986).

Segregating processes are also present in the mixed economy. Competition for jobs and resources in ethnically mixed labor mar-

kets can spark ethnic conflicts (Olzak 1989). Also, ethnic conflicts stemming from a hostility to middleman firms involve powerful segregating pressures that contribute to closure of ethnic boundaries (Bonacich and Modell 1980). Tensions in the workplace may promote segregating processes in residential location and social interaction. These segregating processes may persist or grow stronger along certain boundaries while diminishing along other boundaries. To gain acceptance in the majority economy and society, middleman entrepreneurs may increase their social distance from minority customers (Loewen [1971] 1988). The intensity of tensions between Korean shopkeepers and Black residents was evidenced in the recent riots in Los Angeles.

Insofar as buyers and sellers seek to optimize gains from trade, market relationships widen circles of interaction (Weber [1922] 1978). Entrepreneurs may prefer to hire co-ethnic workers for ease of communication and trust, but if labor from an alternative source is more pliant and less expensive, their preferences will shift in that direction. Similarly, entrepreneurs may prefer to do business with co-ethnics, but if the potential market for the firm's products extends beyond the ethnic group, entrepreneurs will expand their markets. If the firm's products can sell for a substantially higher price in another ethnic market, middleman entrepreneurs will move their businesses there, despite costs imposed by ethnic hostility and cultural differences. Workers seek higher wages and better working conditions. Despite the ease of social interaction in their own ethnic community, if wages and work conditions are better elsewhere, many workers will seek employment in these locations. The greater the disparity between markets in wages and working conditions, the more likely it is that workers will seek jobs in the sectors offering better terms of employment. Consumers also seek favorable terms of trade. Although ethnic consumers may prefer to shop in co-ethnic stores, if the prices in ethnic shops are substantially higher or the quality poorer, consumers will shop in stores outside the ethnic community. Only entrepreneurs with an effective monopoly on specialized ethnic products can secure a "captive" ethnic clientele. In sum, the choices of rational workers,

entrepreneurs, and consumers in a heterogeneous metropolitan economy produce a mixed economy involving firms with ethnically mixed labor forces and markets.

The metropolitan labor market ranges along a continuum from the open economy to the ethnic economy. At the open pole of the continuum, firms have formal rules and procedures; business culture represents mainstream social practices; firms here are medium-sized or larger; firms' markets reach beyond the neighborhood and often beyond the metropolitan area; sources of capital are banks, equity markets, and other formal financial institutions. Their workers find jobs through formal search procedures, involving employment agencies, labor unions, open searches, and other legitimated recruitment procedures. Although these firms may be predominantly Anglo in composition, legally they cannot discriminate by race or ethnicity and may be pressured to hire and promote minorities and women. In general, the larger the firm, the more bureaucratic the work environment and the more likely the firm is to be regulated by the state.

At the ethnic end of the continuum, firms operate within an exclusively ethnic institutional setting. These firms, whether small or medium-sized, derive their markets, labor forces, and governance from members of their own ethnic group. Their resources, such as factor products and financial capital, are from co-ethnic sources. Ethnic institutions (e.g., rotating credit associations) and co-ethnic ties (family and friends) provide an important source of capitalization for immigrant enterprises (Light 1972; Waldinger 1986).

The degree of formality in the workplace forms a second continuum. One end of the continuum is the informal sector of the economy, made up of small firms and staffed by immigrant workers or unregistered aliens. Participants in this domain of the economy may belong to the underground economy, which is characterized by informality and social regulation of markets, labor force, and resources (Castells and Portes 1989). Firms in the informal economy depend on social networks based on common ethnicity, friendship, or family relationships for the allocation of resources, recruitment of workers, and governance of interfirm relations. Firms in the informal economy evade state regula-



tions on minimum wages, conditions of employment, and legal codes prohibiting discrimination in hiring practices (Portes 1994). Although state regulations apply to these firms, monitoring and enforcement is costly.

The mixed economy arises between the extremes of the open/ethnic and informal/formal continua. Firms in the mixed economy also embody aspects of both formal and informal organizational behavior: They may recruit workers partly through personal ties and partly through impersonal search procedures; they may observe some state regulations, but evade others that impose costly constraints; they may rely on banks for capital, but supplement this with loans from informal sources; they may be formally incorporated, yet rely on informal family procedures for governance of the firm. Firms in the mixed economy are regulated, not only by market forces and the state, but above all by social norms, as is widely acknowledged in small family-owned firms and partnership arrangements.

The size of the mixed economy is a function of ethnic heterogeneity. In general the more heterogeneous the urban population, the larger will be the relative size of the mixed economy. Blau's (1977) heterogeneity theorem posits a positive relationship between heterogeneity and probability of intergroup relations. Thus, ethnic heterogeneity, in combination with the propensity to truck and barter (Smith [1776] 1985), increases the chances of economic transactions between members of different ethnic groups. However, the larger the size of an immigrant group, the greater the probability of in-group interaction. The boundaries of large immigrant groups are better maintained than are those of smaller groups. As the viability of ethnic institutions depends on the size of the immigrant group, so does the immigrant ethnic economy. Nonetheless, the more ethnically heterogeneous the urban population, the greater the opportunity for interethnic economic transactions, and the larger the size and span of firms in the mixed economy.

The mixed economy entails continuous exchanges of resources and commodities, which create an interdependence among workers, entrepreneurs, managers, shopkeepers, and consumers belonging to different ethnic groups. Sustained economic transac-

tions promote social activity over and above what is required by the division of labor and terms of exchange, giving rise to stable social structures (Homans 1950, 1974). Over time, sustained face-to-face social exchanges give rise to common social practices, norms, and sentiments of common identity (Shibutani and Kwan 1965). The characteristic feature of the mixed economy is routine daily transactions between members of different ethnic groups. Information about jobs and other opportunities flows along these cross-ethnic connections. For these reasons, the aggregation of interethnic exchanges constitute the effective social boundary of ethnic groups involved in the mixed economy. The larger the mixed economy, the greater the frequency of interethnic transactions, the more porous the social boundaries of the ethnic groups. Porous and broad band ethnic boundaries attenuate social and economic segmentation along ethnic lines. Sizable mixed economies increase the likelihood of job transitions that cut across various dimensions of the metropolitan labor market.

### *Hypotheses*

H<sub>1</sub>: Immigrant labor markets in heterogeneous cities are not segmented by impermeable boundaries. Thus, job transitions among immigrant workers will involve routine moves across ethnic boundaries, fields of work, and sectors of the labor market.

Firms located toward the open and formal poles of the continua tend to be large, bureaucratic, and have high market power. Working conditions are regulated by state guidelines, wages often are high, nonwage benefits like medical insurance and pension plans are good, and guidelines for promotion and retention are formally specified and subject to state regulation. Institutional changes after the civil rights era, manifest in formal and informal rules and myths, increase the costs of discrimination in large bureaucratized firms.<sup>4</sup> Consequently, many immigrant work-

<sup>4</sup> In advanced industrial economies in which citizenship rights are not legally extended to immigrants, immigrant minorities are more likely to concentrate in the informal underground economy.

ers seek jobs in the formal/open domain of the economy. However, lack of the appropriate human capital, especially language skills, and concerns over ethno-cultural hostility often hinder seeking out or obtaining such jobs. Over time, however, human capital can be obtained, and immigrants increase their competitiveness for desirable jobs beyond the ethnic economy. Furthermore, as immigrants adjust to the receiving society, they become more willing to seek employment outside the informal/ethnic domains of the economy.

H<sub>2</sub>: The metropolitan labor market has porous boundaries and jobs in the formal/open domain offer higher wages and better working conditions. Thus, across a succession of jobs and over time, job transitions will shift away from the informal/ethnic domain.

Although immigrant workers may initially prefer to work for co-ethnic entrepreneurs because of cultural affinity and proximity to the place of work, if the conditions of work and structure of wages are substantially worse than those in the mixed or open economies, then rational workers will seek jobs outside the ethnic economy despite cultural and linguistic difficulties. Whereas jobs toward the ethnic and informal poles of the labor market continua are often secured through personal ties, entry-level jobs in the formal/open domain are often found through formal search procedures (e.g., employment agencies and newspaper advertisements). This occurs because personal ties in the ethnic community are less likely to generate information about good jobs beyond the boundaries of the ethnic economy.<sup>5</sup> Indeed, once immigrants acquire the skills and credentials needed to use formal resources effectively, many prefer these methods as a means to broaden the range of opportunities available to them.

<sup>5</sup> The longer immigrants work in the mixed or formal/open domains of the metropolitan economy, the larger the relative number of personal contacts that cross ethnic boundaries. This increases the probability of obtaining new information on jobs unfamiliar to their immediate circle of ethnic acquaintances. An increase in cross-ethnic ties thus increases information leading to "good" jobs (Granovetter 1973; Lin 1982; Campbell, Marsden, and Hurlbert 1986).

H<sub>3</sub>: Reliance on personal ties limits job choices to the opportunity structure of the informal/ethnic domain of the metropolitan labor market. Thus, across a succession of jobs and over time, immigrant workers will rely less on informal personal ties to secure employment.

## DATA AND METHODS

We explore the validity of these hypotheses with qualitative and quantitative analyses of job transitions in the metropolitan economy of Los Angeles. During the summers of 1989 and 1990 a multi-ethnic research team conducted 134 face-to-face interviews in Chinese, Filipino, and Korean immigrant households in greater Los Angeles. Interviews, which were conducted in the preferred language of the respondent, typically took place over two days, and lasted three to five hours. When possible, the interviews included spouses of household heads as well as other resident adults. The interviews focused on: (1) job histories in the United States, and (2) residential histories in the United States. The interviews explored how these two histories were influenced by the financial resources immigrants brought to this country or hold in the home country, by families' (nuclear and extended) adaptive strategies, and by participation in ethnic institutions and social networks. Because field researchers collected job histories for all adult members of a household who were present at the interview, 171 job histories were obtained from the 134 interviews. Fourteen informants experienced short spells of joblessness (usually one month) after the first job, usually due to family matters. Twenty-two respondents reported at least one job in the United States prior to coming to Los Angeles. These jobs were also in large, ethnically diverse cities (San Francisco, New York, Washington, D.C.-Baltimore, Chicago, Seattle, Houston, and Dallas).

The sample of Koreans was drawn randomly from the Korean Directory of Southern California. Many names and telephone numbers were out of date, and the turndown rate was approximately 50 percent despite a financial inducement. Many Koreans said they were too busy to take part in the study. The Filipino sample was drawn randomly from lists of naturalized immigrants obtained

Table 1. Descriptive Data by Ethnicity: Asian Immigrants in Los Angeles, 1989 to 1990

Variable	Chinese (N = 80)	Korean (N = 52)	Filipino (N = 39)
<i>Individuals (at time of interview)</i>			
Average number of jobs	4.5	4.8	5.7
Average years in U.S.	8	12	8
Average age	41	44	44
Percent with foreign college degree	46.3	59.6	66.7
Percent with U.S. college degree	20.0	19.2	7.7
Number of females	36	19	18
Number of males	44	33	21
<i>Jobs</i>			
Average duration in months	20.9	29.8	17.9
For self-employed jobs	34.9	38.3	21.8
Percent of jobs that are self-employed	11.6	25.1	4.4
Female	8.6	22.6	1.0
Male	13.8	26.0	7.7
Percent of current jobs that are self-employed	22.5	36.5	10.3
Percent of jobs obtained via promotion	3.3	1.1	26.2
Average hours worked per week	46	49	38
For self-employed jobs	56	59	60
Average hourly earnings (1987 dollars)	\$8.70	\$9.50	\$8.20
For self-employed jobs	\$13.70	\$16.60	\$11.30
Percent with co-ethnic boss (not self-employed)	51.3	40.9	8.3
Percent in government (not self-employed)	5.8	9.5	15.9
Percent of jobs obtained via personal ties (not self-employed)	44.9	45.5	29.3
<i>Job Changes</i>			
Percent into self-employment	12.7	32.0	4.2
Percent to a co-ethnic boss	50.3	38.4	8.5
Percent into government	6.1	9.5	17.5
Percent via personal ties	41.6	42.5	26.3

from the Immigration and Naturalization Service. Because most Filipino surnames are not distinctive, the sample of Filipinos is restricted to naturalized citizens. Few Filipinos refused to be interviewed. The Chinese sample was drawn in three ways: random selection from Pacific Bell telephone directories, random selection from lists of naturalized immigrants obtained from the Immigration and Naturalization Service, and follow-up snowball sampling in Chinatown near downtown Los Angeles. The snowball

sample compensated for possible sampling bias resulting from the omission of unnaturalized immigrants without telephones.<sup>6</sup>

Descriptive data for the three ethnic groups are summarized in Table 1. A number of inter-

<sup>6</sup> Unfortunately, a shortage of funds prevented us from undertaking a similar follow-up snowball sampling of unnaturalized Filipinos. However, Filipino immigrants have the lowest poverty rate of any Asian immigrant group because of the high concentration of technical and professional workers in this immigrant stream.



ethnic differences are apparent. Filipinos have the highest average number of jobs, but many of these job changes are intraorganizational promotions. Compared to the other groups, Filipinos are more likely to work in large organizations with internal job ladders like the government sector; they are least likely to work for co-ethnics or to be self-employed. Koreans stay in jobs for the longest spells, but this is a result of the higher prevalence of long spells of self-employment. At the time of the interview, 36 percent of Koreans were self-employed and approximately one-half of the Korean men had experienced at least one spell of self-employment. Hours of work and hourly earnings are higher among the self-employed. Filipinos are more likely to have a foreign college degree, whereas Chinese and Korean immigrants are more likely to have a U.S. college degree.

The in-depth interviews, which explored the life experiences of immigrants, were transcribed (translated in the case of the Chinese and Koreans) and coded for both qualitative (using *The Ethnograph* [Seidel, Kjolseth, and Seymour 1988]) and quantitative analyses. Rather than choosing excerpts from interviews on an ad hoc basis, we were able to produce text from computer files of all interviews for an array of variables. Our ethnographic analysis summarizes the texts for a particular variable to reveal the subjective experiences of immigrant workers and entrepreneurs. The ethnographic analysis demonstrates the realism of our conceptual framework. We then test the hypotheses derived from our theoretical logic in a quantitative analysis. Close correspondence between the ethnographic findings and multivariate analyses increases confidence in the validity of our results (Whyte and Parish 1984).

#### ETHNOGRAPHIC ANALYSIS OF JOB CHANGES

Asian immigrants in our sample do not describe an isolated ethnic economy; instead they describe specialized ethnic niches intertwined with a mixed economy composed of firms with ethnically heterogeneous labor forces and clienteles. The desire of immigrant workers for broader and more secure labor markets, and the desire of entrepreneurs for broader consumer markets while

retaining inexpensive labor, push Asian immigrants beyond the bounds of their ethnic group. Similarly, the desire of Hispanic workers to secure job opportunities in the Asian immigrant economies increases ethnic heterogeneity in immigrant firms.

Placing the jobs held by immigrants along the formal/informal and open/ethnic continua yields a complex socioeconomic space. Many positions fall into the intermediate mixed economy. Although immigrant workers are found in jobs throughout the metropolitan labor market, most expressed a desire to move toward the open and formal domains. Many such workers avoid jobs in the informal and ethnic domains; they would rather work in well-established, formally organized and regulated firms, often in the public sector. These job characteristics are especially important to recent immigrants, whose social networks are confined to the immigrant community and who experience difficulty expressing themselves in formal interviews even though they have skills and good work habits.

My score on the [post office] test was 98. I felt that I could be selected. If you get 98, you could get through interview and other procedures. (Taiwanese respondent)

I was preparing the exam for getting a job at a post office. From what I've heard, a post office is the best place for those having a language problem to work as a federal public official. (Korean respondent)

Information passed through family and ethnic ties often directs workers to jobs in the public sector and away from the informal and ethnic poles of the labor market continua. The following excerpts from interviews with Filipinos are typical:

When I was with customer service, I learned about civil service testing for the state. And I said, oh this is government work—I have been looking for this also. . . . My sister-in-law called me up one time, and she sent me an application.

I was responsible for developing resources of where people go for jobs. Well, you're doing that so I may as well follow my own advice and see what happens and go to City Hall and look for job listings. It was actually easier than I thought.

A friend of mine who works for the federal government told me about the civil service

exam. I was told there was an opening, well lots of openings. And what I could do was go down to the office and take the exam and if you pass the exam, you could be interviewed the same day, so that's what I did. My brother helped me to look for a job. He took me to the human resources building where I can find a job listing. . . . I was referred by a friend of a friend of my brother-in-law. What I did was before I took the exam, I rented a typewriter, and I practiced for a month. So when I took the exam I got really good.

Personal ties, official postings, direct application, and ethnic and nonethnic newspapers are used in their job searches.

Practically speaking you get help from all kinds of friends. They tell you how to go to prepare a resume, use the placement center, and how to go to an interview. As far as the job itself, the availability of that I found out by myself. (Taiwanese respondent)

Immigrants with clerical skills favor the post office, municipal government, and large banks. A post office in Los Angeles may have numerous immigrant employees. Many immigrant clerical workers advance to supervisory and middle-level positions, but few move into the upper levels of management because they lack the advanced degrees, personal contacts, facility at interpersonal interaction, and other characteristics important for promotion into upper management.

Immigrants with good English language skills but whose foreign educational degrees are not recognized initially experience downward mobility: Accountants become bookkeepers, engineers become technicians, and so on. In some cases, immigrants do not list their university degrees on application forms so as not to appear over-qualified.

Immigrants who experience the greatest difficulty regaining their pre-immigration occupational status tend to be older workers with weak English skills. For example, many Filipinos who held important posts in the Marcos government or the Philippine military and left for political reasons could only secure menial positions in the United States.

Immigrants with limited English and an option of co-ethnic employment, like many of the Korean and Chinese immigrants in our sample, often begin in ethnic or family enterprises. These immigrant workers then

change jobs often, frequently crossing ethnic boundaries, in the search for better working conditions and incomes:

At first I got a dish-washing job at a Korean restaurant not knowing English at all. . . . It was so hard to work there I quit after one month. I entered a sampling factory next. . . . An American [White-owned] company. . . . After that I entered a Korean sewing company for several years, and moved to a Jewish-owned sewing company. (Korean female respondent)

Because ethnic businesses are often poorly capitalized and operate in highly competitive markets, they demand long hours with minimal compensation. They may also rely on informal work arrangements to avoid labor regulations. Many workers express dissatisfaction with their positions in the ethnic economy:

Chinese bosses are very strict. They ask you to work long hours at low pay. The boss wants you to work without resting and he treats you like a working machine. . . . Chinese bosses are much stricter than American bosses.

My English was not good, and because of that there was not hope for me to get desirable jobs. The only jobs available were those taken by the Mexicans who were downtrodden; you could not find good jobs. Since I cannot be a boss myself, why should I go back and work in Chinese restaurants? I thought as a last resort I would go back to Chinese restaurants to work. For the present, I would try some other alternatives. And I got some improvement in my English, and I wanted to try outside. I tried some non-Chinese companies, but I did not have any specialized skill. I went to the school opened by the state government, and I wanted to try with their help to find some other job which was not Chinese-owned.

However, workers with little English and few skills may be trapped in jobs with few prospects for career mobility.

My relatives and friends all told me try not to work in Chinese circles any more. Once you plunge yourself into it, you cannot free yourself, because you always face Chinese and never have the chance to speak English. You study English in school, but speak Chinese everyday, so you will forget what you learn in school. So I said that I hoped I could work in American companies. . . . American bosses treat workers better. And Chinese people, if they are

boss, they are more likely to squeeze all your labor. And people share this feeling and saying. But if you don't know English and you want to work for Americans, this is not easy. So you have to move only in a Chinese circle. (Respondent from People's Republic of China)

Sometimes [Chinese employers] pay me one dollar an hour. I didn't have experience so they pay me very low wages. I painted the entire house, and they only paid me \$90. It took me about one month to paint the house. . . . I sometimes paint houses, clean drives, or repair sinks for people or friends. (Respondent from People's Republic of China)

Job progressions move toward the formal and open domains of the labor market, although at very different rates. For example, the first job of a female immigrant worker from Taiwan was as a receptionist in a Chinese traditional medical clinic. She then worked as a waitress in a Chinese restaurant, while she studied for a real estate license, and subsequently found a job in a White-owned real estate office with a predominantly White staff. A Korean male's first job was in a Korean-owned laundromat. He then sold shoes in a Korean-owned retail store, and then worked for Wang assembling computers. Later he started his own gardening business and hired a Mexican worker, then he established a fast-food restaurant and hired a Mexican-American and an Anglo worker. Finally, he got a job with the postal service.

Many Korean and Chinese immigrants, especially those unable to secure professional positions, turn to entrepreneurship.<sup>7</sup> For immigrants who lack fluency in English and marketable educational credentials, small businesses are the best way to secure higher incomes and middle-class status. Many open businesses outside their ethnic communities in niches that require little direct communication with customers (e.g., grocery stores and dry cleaners). Preferred businesses are those that require little start-up capital and limited expertise. Many Korean immigrants, for example, open small businesses in Afri-

can American or Hispanic neighborhoods because the start-up capital is modest and the opportunity to profit is substantial.

Immigrant entrepreneurs seek competitive advantage by employing low-wage labor or family members. Language can be a force toward single-ethnicity enterprise:

The cooks can't read English writing so those who take orders have to be Chinese in order to translate into Chinese for those cooks. (Taiwanese respondent)

But as businesses become established and more diverse, they become more multi-ethnic. For example, a restaurant is owned by a Korean woman and her husband, who employ two of her sisters and their husbands, as well as two other Koreans and three Mexicans. The restaurant, which is part of a franchise fast-food chain, serves mostly African Americans. Another Korean restaurateur explained his preference for hiring non-Korean workers:

I hired a Mexican as a cook and a young American for the front counter. . . . Korean employees are difficult to manage. The ease in communication is the bright side. But Koreans usually have high self-respect and always think they are doing a lower job than what they deserve. That is why Koreans are difficult to use as employees. And there are few chances to find Korean workers in this neighborhood.

In another example, a combination gasoline station and mini-mart owned by a Korean couple has four employees: one each from Korea, Mexico, Argentina, and El Salvador.

Businesses catering to a diverse clientele and relying on an ethnically mixed labor force belong to the growing mixed economy of greater Los Angeles. As customers become more diverse, the advantages of hiring a more diverse work force increase:

It is good to hire some non-Chinese employees. . . . I feel if your restaurant becomes bigger then those customers—I don't mean in Monterey Park, I mean those in [White] American areas—are not Chinese so it is better to hire some non-Chinese employees as waiters and the restaurant's quality will become better. Because those [White] Americans still discriminate a little bit against Chinese people. If you hire some non-Chinese employees then those American customers will think this restaurant is different.

<sup>7</sup> The movement of workers out of the ethnic economy is offset in part by the return of professionals serving an ethnic clientele. Because of the large influx of new immigrants into Los Angeles, the ethnic financial and real estate markets provide lucrative opportunities.

Hiring was word of mouth, and we had very, very few Chinese applicants. . . . I have to admit this is a French Continental Restaurant. In the first place there are very few Chinese applicants, but also the fact this is a French Continental restaurant, we have to maintain to a certain extent the so-called environment, the mood. . . . We don't have too many Chinese applicants because we are not running a basically Chinese restaurant. And that's why it's basically [White] Americans and Mexicans. (Taiwanese respondent)

My nephew's wife sometimes works in my shop. I give her \$50 per day. . . . There are Mexican students, too. We can easily find them. Some came in and asked whether they can work. Mexicans are good to hire, as most of them are bilingual—Spanish and English. So they can speak English to Black customers, while they can speak Spanish to Latin Americans. [Korean customers] are very rare. Further, they ask too much discount, if they buy anything. (Korean respondent)

The porous nature of ethnic boundaries in Los Angeles is also seen in the composition of the ethnic economy's work force. The ethnic enclave economy is quite fluid in its membership. For example, an employment agency in Chinatown specializes in placing restaurant workers. Most of the applicants at this agency, however, are Mexican or Latin American. Thus, in the ethnic potpourri of central Los Angeles, this agency has a strong ethnic character, but is a multi-ethnic operation.

Workers with entrepreneurial aspirations who work in restaurants and small shops hope to learn the business, but full involvement in business finances and operations is often limited to family members. In a highly competitive marketplace, employers are not eager for workers to gain skills and information that will make them more adept future competitors.

I worked in a Chinese bank. They worried that you might learn the skill and then leave. On the other hand, they worried that you might take away their customers.

When the machinist asks the boss to do the job [to be allowed to run certain machines], he turns down his request. The boss fears that he might leave after he has learned to run these three machines. I am a female worker. Probably he takes no precautions against me. He allows me to run those machines instead of as-

signing such work to that machinist. This machinist wants to open his own business. He wants to obtain skills as much as possible. But the boss doesn't allow him to do that.

A concentration of ethnic firms provides entrepreneurial opportunities for some, but the intense competition pushes new entrepreneurs to other parts of the city.

In sum, the ethnographic evidence is consistent with the view of the metropolitan economy as an ethnically heterogeneous urban marketplace. A mixed economy that involves routine interethnic transactions clearly exists. There are gradations in ethnic content and a mix of social and formal regulation of labor market processes. The ethnographic analysis reveals the extent to which immigrants' adaptive strategies are based upon rational calculations of the costs and benefits of specific jobs. Job transitions are not constrained by impermeable boundaries, but are governed by calculations of these costs and benefits. Many workers and entrepreneurs leave the confines of their ethnic groups to participate in the open or mixed economies. In this way, the marketplace fosters integration.

#### MOBILITY: MOVING AWAY FROM THE INFORMAL ECONOMY

To test our three hypotheses, each job in a respondents' job history is specified in four ways:

(1) *Field of employment*. Codes are: blue-collar, technical/sales/professional (excluding clerks in small retail shops), and service (including clerks in small retail shops, restaurant workers, custodians, etc.). Jobs in the service field are disproportionately concentrated in the informal and ethnic domains of the economy, whereas jobs in the other fields are distributed throughout the informal-formal to ethnic-open continua.

(2) *Sector of employment*. Codes are: self-employed, private sector, and government sector. Government jobs fall in the formal/open domain of the economy; private sector jobs can fall in any domain; self-employment tends to fall in the informal/ethnic domain.

(3) *Ethnicity of boss* (for employees). Codes are co-ethnic and non-co-ethnic (primarily White non-Hispanics). Co-ethnic bosses tend to fall into the informal and eth-



Table 2. Cross-Classification of Origin Jobs by Destination Jobs for Field of Employment: Asian Immigrants in Los Angeles, 1989 to 1990

Origin Job	Destination Job			Total
	Blue-Collar	Technical/Sales/Professional	Service	
Blue-collar	30	19	27	76
Technical/sales/professional	6	203	24	233
Service	15	38	125	178
Total	51	260	176	487

Table 3. Cross-Classification of Origin Jobs by Destination Jobs for Sector of Employment: Asian Immigrants in Los Angeles, 1989 to 1990

Origin Job	Destination Job			Total
	Self-Employed	Private Sector	Government	
Self-employed	30	18	1	49
Private sector	46	321	24	391
Government	2	19	26	47
Total	78	358	51	487

nic domain whereas other bosses are distributed throughout the economy outside the closed enclave.

(4) *Ethnicity of coworkers* (for employees) and *ethnicity of employees* (for the self-employed). Codes are: mostly co-ethnic, multi-ethnic (usually Hispanic), and mostly White non-Hispanic. The code for lone employees is based on the boss's ethnicity. Working with co-ethnics tends to fall in the informal-ethnic domain of the economy, whereas working with Whites tends to fall in the formal/open domain. Working with other minorities can fall in any domain in a metropolitan area like Los Angeles where most workers are not White non-Hispanics.

Tables 2 through 5 address Hypothesis 1. These tables report on all job *changes* for our respondents since coming to the United States. The frequencies refer to adjacent jobs. (The final job is not used as an origin job, as the job history is censored at that point.) When a respondent holds two jobs simultaneously, the ordering of jobs is based on the date each job began. Table 2 indicates that service jobs and technical/sales/professional jobs are the most common positions, accounting for 37 percent (178/487) and 48 percent (233/487), respectively, of the origin jobs and 36 percent (176/487) and 53 percent (260/487) of the destination jobs. Moves out of these fields are relatively infrequent—87 percent (203/233) of the technical/sales/professional origin jobs lead to another technical/sales/professional job; 70 percent (125/178) of service jobs lead to another service job. By contrast, 60 percent [(19+27)/76] of

the workers in blue-collar jobs move on to service or technical/sales/professional jobs. The overall pattern of adjacent job transitions reveals an increase in technical/sales/professional jobs and a decrease in blue-collar jobs.

Table 3 shows that most job changes occur within sectors. However, 59 percent (46/78) of self-employed destination jobs come from jobs in the private sector. Furthermore, 37 percent (18/49) of the self-employed origin jobs moved to private sector jobs. This change is usually the result of a business failure.

Table 4 reveals that 23 percent (42/180) of those employed by a co-ethnic boss in the origin job moved on to work for a boss not of the same ethnic group, whereas only 16 percent (42/256) of those employed by a non-co-ethnic boss moved on to work for a co-ethnic boss. Of the transitions into self-employment, 33 percent originated (26/78) from employment by a co-ethnic boss and 28 percent (22/78) originated from employment by a non-co-ethnic boss. Overall, when the boss in the origin job is a co-ethnic, 14 percent (26/180) moved into self-employment, whereas when the boss in the origin job was not of the same ethnic group, 9 percent (22/256) moved into self-employment. Thus, working for a co-ethnic boss increases the likelihood of self-employment. The finding is somewhat skewed, however, because most Filipinos are employed by non-co-ethnics in the origin job, and few move to self-employment. Omitting Filipinos, approximately 15 percent (25/167) of employees with a co-eth-



Table 4. Cross-Classification of Origin Jobs by Destination Jobs for Ethnicity of Boss: Asian Immigrants in Los Angeles, 1989 to 1990

Origin Job	Destination Job			Total
	Co-Ethnic Boss	Non-Co-Ethnic Boss	Self-Employed	
Co-ethnic boss	112	42	26	180
Non-co-ethnic boss	42	192	22	256
Self-employed	12	6	30	48
Total	166	240	78	484

nic boss and 14 percent (19/132) of employees with a non-co-ethnic boss move into self-employment.

Table 5 shows that 42 percent (195/466) of the origin jobs and 40 percent (185/466) of the destination jobs are multi-ethnic situations. Respondents are more likely to work with co-ethnics than with White non-Hispanics in origin and destination jobs (33 percent versus 23 percent). A majority of job changes are to a firm whose labor force resembles that of the origin job.

These mobility tables support Hypothesis 1: Adjacent job changes characterized by field of work, sector of employment, ethnicity of boss, and ethnicity of coworkers and employees reveal frequent status changes, although most destination jobs resemble origin jobs. This is not surprising inasmuch as these job transitions are limited to adjacent jobs. What is surprising is the extent to which job

transitions cross fields of work, labor market sectors, and ethnic boundaries. Hypothesis 1 predicts the routine nature of these cross-cutting job transitions.

THE METROPOLITAN LABOR MARKET

Job transitions across fields of work and sectors of the labor market are not as common as moves across ethnic boundaries. As immigrants gain local work experience and increase their human capital, they are more willing to search for work outside the informal/ethnic domain of the economy. Hypothesis 2 predicts that, over time, immigrants move toward jobs in the formal/open domain of the metropolitan labor market. This hypothesis is examined with two analytical approaches. First, a latent factor representing the metropolitan labor market is estimated. Although it comprises two analytically distinct continua, we treat them together because they are strongly correlated and have similar effects on earnings. This factor is the dependent variable in an equation estimated with least squares regression. The second approach uses proportional hazards models to conduct an event history analysis on transitions into jobs located within the informal/ethnic domain of the labor market.

Eight variables that capture five dimensions of the metropolitan labor market were factor analyzed. The dimensions are (1) field of work, (2) sector of employment, (3) ethnicity of boss, (4) ethnicity of coworkers, and (5) reliance on family labor. Reliance on family labor is a dummy variable coded 1 for firms that primarily employ family members

Table 5. Cross-Classification of Origin Jobs by Destination Jobs for Ethnicity of Coworkers and Employees: Asian Immigrants in Los Angeles, 1989 to 1990

Origin Job	Destination Job				Total
	Multi-Ethnic	Mostly White (Non-Hispanic)	Mostly Co-Ethnic	Self-Employed (No Employees)	
Multi-ethnic	122	24	48	1	195
Mostly White (non-Hispanic)	20	63	16	7	106
Mostly co-ethnic	37	18	88	10	153
Self-employed (no employees)	6	1	3	2	12
Total	185	106	155	20	466

Table 6. Factor Pattern Loadings for Variables Relating to the Metropolitan Labor Market

Variable	Factor Pattern Loadings	
	Tetrachoric Correlation	Pearson Product-Moment Correlation
<i>Field of Employment</i>		
Technical/sales/professional	-.693	-.733
Service	.689	.717
<i>Sector of Employment</i>		
Government	-.886	-.476
Self-employment	.358	.180
<i>Ethnicity of Coworkers</i>		
Mostly White (non-Hispanic)	-.854	-.628
Mostly co-ethnic	.888	.688
Co-ethnic boss	.795	.668
Relies on family labor	.129	.061

Note: Total number of jobs is 636.

(no more than one nonfamily employee). Reliance on family labor indicates a very small business, a scale of operations that is typical of immigrant-owned firms.

Because the observed indicators of the latent labor market are dummy variables, estimating the factor loadings with tetrachoric correlations may yield more accurate estimates than estimates based on Pearson product-moment correlations (Olsson 1979). Tetrachoric correlation matrices are sometimes singular, however, especially when dummy variables distinguish categories of polytomous variables. The tetrachoric matrix of the eight observed variables that we estimated is singular. Though this does not prevent the estimation of factor loadings, it suggests the need for an alternative estimation procedure for comparative purposes. Consequently, we also estimate the latent factor with Pearson product-moment correlations (a nonsingular matrix).

The method of principal components was used to estimate the loadings of the latent factor on the observed variables. Table 6 indicates that the pattern of loadings is similar for tetrachoric and Pearson product-moment correlations. Essentially, the two correlation matrices produce the same latent variable.

Hypothesis 2 is examined by modeling the latent factor as a function of several predictors. The first three independent variables—years in the United States, the number of jobs since immigrating, and an interaction term—directly address Hypothesis 2. The interaction term considers that the effect of number of jobs may vary by years in the United States and vice versa.

Controls in the equation include age (in years), sex (0 = female), marital status (0 = married and living together), and the interaction between sex and marital status. This interaction distinguishes jobs held by single men who temporarily left their families behind to find work in the metropolis. Such immigrants are less likely to invest in the cultural competence required for jobs in the formal/open domain and, consequently, are more likely to remain in the immigrant ethnic economy (Nee and Sanders 1992). Dummy variables that denote English language skills (0 = strong skills) and college degrees obtained in the United States or elsewhere (1 = yes), are also included in the equation. To control for group-specific differences, dummy variables for Koreans, Filipinos, and Taiwanese (other Chinese are the reference category) are specified. Distinguishing the Taiwanese from other Chinese immigrants controls for the advantages in education, financial resources, and familiarity with Western customs enjoyed by the Taiwanese. We examine interactions involving Filipinos and English language skills, and Filipinos and college degrees earned prior to coming to the United States. Interactions involving foreign college degree and number of prior jobs, and foreign college degree and number of years since immigration are likewise specified, but were not significant and were thus omitted from the reported analysis. In recent years demand has increased for professionals trained in Asia as firms increase trade with Pacific Rim countries. These firms favor foreign-trained health-care workers and engineers. Recent immigrants with foreign college degrees benefit from the improving quality of Asian higher education, and this should be reflected in returns to human capital over a series of jobs, especially for Filipinos who attend English-speaking schools in the Philippines. A dummy variable also controls for

Table 7. OLS Estimates for Regression of Metropolitan Labor Market Factor Score on Selected Independent Variables: Asian Immigrants in Los Angeles, 1989 to 1990

Independent Variable	Dependent Variable	
	Tetrachoric Correlation Factor Score	Pearson Product-Moment Correlation Factor Score
Intercept	.636 (.327)	.299 (.230)
Number of jobs in the U.S.	-.146** (.053)	-.099** (.037)
Years in the U.S.	-.071** (.018)	-.047** (.013)
Years in the U.S. × Number of jobs in the U.S.	.016** (.005)	.010** (.004)
Age	.008 (.005)	.005 (.003)
Sex (0 = female)	-.051 (.123)	-.036 (.086)
Marital status (0 = married)	-.010 (.159)	-.003 (.112)
Sex × Marital status	.529** (.194)	.393** (.136)
Foreign college degree (1 = yes)	-.046 (.120)	-.045 (.084)
Filipinos × Foreign college degree	-.490* (.225)	-.328* (.158)
U.S. college degree (1 = yes)	-.664** (.162)	-.511** (.114)
English skill (0 = strong skills)	.809** (.143)	.561** (.101)
Filipinos × English skill	-1.019** (.368)	-.695** (.259)
Korean	-.065 (.154)	-.068 (.108)
Filipino	-.615** (.235)	-.474** (.165)
Taiwanese	-.491** (.159)	-.374** (.112)
Recession year	.069 (.114)	.057 (.080)
Degrees of freedom	619	619
R <sup>2</sup>	.378	.385

\**p* < .05      \*\**p* < .01 (two-tail tests)

+*p* < .05      ++*p* < .01 (one-tail tests)

Notes: Numbers in parentheses are standard errors.

In each equation, the following interactions were not statistically significant: Years in the U.S. × Foreign college degree, and Number of jobs in the U.S. × Foreign college degree. These interactions were omitted from the analysis reported above.

years of recession in southern California (1971, 1975–1976, 1982–1983). (Results are the same using the statewide unemployment rate.)

Table 7 presents OLS estimates predicting the metropolitan labor market factor score. A negative factor score represents jobs in the formal/open domain of the economy; a positive factor score represents jobs in the informal-ethnic domain of the economy. Age and the control for Koreans and recession fail to reach conventional standards of statistical significance. Although the main effects of sex, marital status, and holding a foreign degree are not significant, each variable is part of a statistically significant interaction. Approximately 40 percent of the variance in the latent factor is accounted for by the independent variables.

The estimates support Hypothesis 2: On average, jobs move toward the formal/open domain of the labor market as number of years in the United States and number of prior jobs increases. The interaction term indicates that the effect of years in the United States declines as the number of prior jobs increases. Similarly, the effect of the number of prior jobs diminishes as years in the United States increase.

Other findings also conform to expectations. Having good English language skills or holding a degree from a U.S. college leads to jobs in the formal/open domain of the labor market. Having a degree from a foreign college leads to formal/open employment only for Filipinos, who are often graduates of technical and medical programs based on those at American universities. In comparison to other immigrants, the jobs of single men tend toward the informal/ethnic domain of the labor market.

#### EVENT HISTORY ANALYSIS OF WORK IN THE ETHNIC ECONOMY

Two characteristics—being employed by a co-ethnic and self-employment—are appropriate indicators of employment in the ethnic domain of the economy (Bonacich and Modell 1980). We use this definition for additional tests of Hypothesis 2.

Movement into self-employment is often preceded by a rapid series of job changes that provide immigrants with work experience

and practical knowledge of the business fields they may want to pursue as entrepreneurs. Furthermore, prior to moving into self-employment, immigrants usually need time to accumulate capital and acquire an understanding of local economic opportunities and general business know-how. Because these tendencies weaken the relationships described by Hypothesis 2, separate analyses of the two indicators of participation in the ethnic economy are conducted.

Proportional hazards models carry out the event history analyses and are reported in Table 8. Hypothesis 2 predicts that the hazard of transition into jobs in the ethnic economy should decline as the number of prior jobs and the years in the United States increase. Jobs are the unit of analysis. Duration in the origin job is measured in months, and the values of the independent variables are allowed to vary across a respondent's job history.

Model 1 predicts whether a respondent is self-employed or employed by a co-ethnic boss. The censoring event is coded 1 for destination jobs in the ethnic economy, and 0 otherwise (including the right-censored cases). All independent variables used in Table 7 are specified. In addition, a dummy variable controlling for the origin status (in ethnic economy or not) is specified. Interactions involving the origin status, the number of prior jobs, and years in the United States are estimated, but only the statistically significant interactions are retained in the final analysis.

In Model 1 the coefficients for number of prior jobs and years in the United States are negative, as predicted by Hypothesis 2, but only years in the United States is statistically significant.<sup>8</sup> On average, an additional year in the United States is associated with a seven percent ( $\exp -.07 = .93$ ) decline in the hazard of a transition into a job in the ethnic economy.

Movement into self-employment (Model 2) differs sharply from Model 1. In Model 2, the

censoring event is coded 1 for self-employed destination jobs, and 0 otherwise. The hazard of transition into self-employment is significantly related to the number of prior jobs in the United States. However, because of the interaction between number of prior jobs and years in the U.S., this relationship weakens as years in the United States increase. At three years residence in the United States, an additional prior job increases the hazard of moving into self-employment by 30 percent. At six years residence in the United States, an additional job produces a 20 percent increase in the hazard of moving into self-employment. Only after 12 years residence in the United States does the relationship between number of prior jobs and movement into self-employment decline to zero. These results suggest that the finding from Model 1, that additional years of residence in the United States reduces the hazard of transition into ethnic economy jobs, is not applicable to moves into self-employment.

Movement into self-employment also increases if the origin job was employment by a co-ethnic, although the relationship is significant only if a one-tailed test is applied ( $p = .03$ ). Such a test is consistent with the work of Portes and his co-researchers (e.g., Portes and Bach 1985). Holding a U.S. college degree reduces the hazard of a transition into self-employment by 70 percent. Immigrants who acquire human capital valued in the domestic labor market seek careers in corporate America rather than pursue high-risk small business ventures (Nee and Sanders 1992).

Model 3 estimates movement into employment by a co-ethnic boss. The censoring event in Model 3 is coded 1 for destination jobs in which the immigrant is employed by a co-ethnic, and 0 otherwise. Consistent with Hypothesis 2, a transition into working for a co-ethnic boss is inversely related to the number of prior jobs and years in the United States. One additional prior job or additional year in the U.S. produces a 10 percent reduction in the hazard of a transition into employment by a co-ethnic boss. Both coefficients are substantially larger than their counterparts in Model 1. Immigrants with weak English skills who are older, male, or single have a comparatively greater hazard of moving into employment by a co-ethnic boss.

<sup>8</sup> Most immigrants in our sample experienced two or more events. Therefore, the assumption of independence is probably violated to some extent. This will probably bias the standard errors downward, but leave the hazard estimates unaffected. The problem is inherent in event history analysis and reinforces the need for a replication study to evaluate the reliability of our findings.

Table 8. Proportional Hazards Estimates of Employment in the Ethnic Economy: Asian Immigrants in Los Angeles, 1989 to 1990

Independent Variable	Destination Job		
	(Model 1) Self-Employed or Employed by a Co-Ethnic Boss	(Model 2) Self-Employed	(Model 3) Employed by a Co-Ethnic Boss
Years in the U.S.	-.069** (.016)	.067 (.045)	-.088** (.021)
Number of jobs in the U.S.	-.034 (.039)	.333** (.130)	-.087* (.051)
Years in the U.S. × Number of jobs in the U.S.	— <sup>a</sup>	-.025* (.011)	— <sup>a</sup>
<i>Origin Status</i>			
Self-employed or employed by a co-ethnic boss	.501** (.165)	—	—
Self-employed	—	.763* (.325)	-.614 (.349)
Employed by a co-ethnic boss	—	.643 (.339)	.603** (.208)
Age	.004 (.008)	-.014 (.014)	.023* (.011)
Sex (0 = female)	.387** (.152)	.418 (.291)	.399* (.179)
Marital status (0 = married)	.577** (.169)	-.424 (.337)	.932** (.209)
Foreign college degree (1 = yes)	.038 (.160)	-.135 (.276)	.033 (.194)
U.S. college degree (1 = yes)	-.342 (.278)	-1.224* (.530)	.079 (.345)
English skills (0 = strong skills)	.248 (.203)	-.185 (.311)	.627* (.280)
Korean	.008 (.182)	1.049* (.455)	-.162 (.211)
Filipino	-.403 (.387)	-.104 (.655)	-.123 (.424)
Taiwanese	-.381 (.216)	.816 (.491)	-.435 (.253)
Filipino × Foreign college degree	-1.328** (.506)	— <sup>a</sup>	-2.575** (.817)
Recession year	-.075 (.165)	-.136 (.306)	-.074 (.200)
Number of jobs	655	652	652
Number experiencing a transition	245	78	166
-2 log-likelihood	2620.9	776.8	1740.1

\**p* < .05    \*\**p* < .01 (two-tailed tests); \**p* < .05    \*\**p* < .01 (one-tailed tests)

<sup>a</sup> Coefficient was not significant in preliminary analyses; it was omitted from the final run of the model.

*Note:* In each equation the following interactions were not statistically significant: Sex × Marital status, Filipino × English skills, Years in the U.S. × Origin status, Number of jobs in the U.S. × Origin status, Years in the U.S. × Foreign college degree, and Number of jobs in the U.S. × Foreign college degree. These interactions were omitted from the analysis reported above.



## EARNINGS AND LOCATION IN THE METROPOLITAN ECONOMY

Do earnings correspond to position in the metropolitan economy? Table 9 addresses this question. Model 1 includes as an independent variable the latent factor score based on tetrachoric correlation; Model 2 includes the latent factor score based on Pearson product-moment correlation; and Model 3 replaces the factor scores with dummy variables for self-employment and employment by a co-ethnic.<sup>9</sup>

Recall that positive values of the latent factor indicates the informal/ethnic domain. Models 1 and 2 show that earnings increase as immigrants move toward the formal/open domain of the metropolitan economy. Because self-employed workers enjoy an earnings advantage, these parameter estimates are larger when self-employed cases are dropped (analyses not shown).

Interactions in Models 1 and 2 show that earnings increase as the number of prior jobs increases. This relationship is strongest for immigrants who acquired a college education before coming to the United States. Interactions also suggest that foreign educational credentials are more helpful to recent arrivals. This finding may reflect increased demand for immigrant professionals and tech-

nicians in firms involved in the growing trade with Pacific Rim countries and the improved quality of higher education in Asia. Holding a college degree from a U.S. college is rewarding: Such immigrants earn almost \$6.00 per hour more than other immigrants. English skill (0 = strong skill) also increases earnings.

Several of the demographic variables are statistically significant. Men have a substantial earnings advantage over women, and this advantage interacts with marital status. Among married persons, men enjoy almost a \$3.00 per hour earnings advantage over comparable women. The gender gap, however, is not significant for single immigrants. The effects of marital status shed light on the male earnings advantage: Being married relates to a \$3.00 per hour earnings advantage for men whereas the effect for women is not significant.

With the exception of one nonsignificant interaction, Model 3 replicates the pattern of findings reported in Models 1 and 2. Model 3 demonstrates the earnings advantage of self-employment: On average, the self-employed earn \$6.00 per hour more than comparable immigrants who are not self-employed or who are employed by a co-ethnic. Net earnings are lowest among immigrants who are employed by a co-ethnic. Findings are unchanged when earnings are logged.

## THE ROLE OF INFORMAL TIES IN THE JOB SEARCH

Hypothesis 3 states that as the number of prior jobs and years in the United States increase, immigrants are less likely to rely on informal personal ties to secure employment. Table 10 cross-classifies origin jobs and destination jobs by how jobs were found. Means of finding jobs (given that the job is not self-employment) are coded as direct ties (the job was offered to by a family member, friend, or acquaintance, or the job was so arranged), *indirect ties* (formal application for a job learned about from a family member, friend, or acquaintance), *impersonal search* (job agency, newspaper advertisement, "help wanted" sign), and *promotion*. Among those relying on direct ties to secure employment, we distinguish between those who work for a relative and those who do not.

<sup>9</sup> Twenty-five cases were lost due to incomplete data on earnings; 14 of these involve self-employment. A sample selection equation estimates that self-employment relates to an 8.5-fold increase in the odds that data on earnings were missing. No other variable predicts the cases with missing data once self-employment is controlled for. Because self-employment is taken into account in the earnings equations, the sample selection covariate is virtually linearly dependent on information already in the model. This redundancy, and the extreme multicollinearity that results, led us to omit the covariate. Interviews provide the most important information pertaining to sample selection. For example, data about current and former residences or automobiles owned by individuals and families give no indication that the missing cases are exceptionally high or low in earnings (the interviews usually occurred at the place of business or in the home). Further, the coded data show that the independent variables are not censored—that is, there is no indication of censoring or truncation in the model, two conditions that can lead to serious sample selection biases (Berk 1983).

Table 9. OLS Estimates for Regression of Average Hourly Earnings (in 1987 Dollars) on Selected Independent Variables: Asian Immigrants in Los Angeles, 1989 to 1990

Independent Variable	Model 1	Model 2	Model 3
Intercept	3.173 (2.279)	3.038 (2.275)	6.332 (2.113)
Factor score (tetrachoric)	-.591 <sup>+</sup> (.282)	—	—
Factor score (Pearsonian)	—	-.969 <sup>++</sup> (.400)	—
Self-employed	—	—	6.021 <sup>++</sup> (1.088)
Employed by a co-ethnic boss	—	—	-1.448 <sup>+</sup> (.816)
Number of jobs in the U.S.	.429 (.236)	.429 (.235)	1.108 <sup>**</sup> (.215)
Years in the U.S.	-.019 (.108)	-.018 (.108)	-.243 <sup>**</sup> (.074)
Number of jobs in the U.S. × Foreign college degree	.829 <sup>**</sup> (.316)	.827 <sup>**</sup> (.316)	.803 <sup>**</sup> (.306)
Years in the U.S. × Foreign college degree	-.300 <sup>*</sup> (.137)	-.302 <sup>*</sup> (.137)	— <sup>a</sup>
Age	.080 <sup>*</sup> (.035)	.081 <sup>*</sup> (.035)	.064 (.034)
Sex (0 = female)	2.854 <sup>**</sup> (.878)	2.859 <sup>**</sup> (.877)	2.094 <sup>**</sup> (.845)
Marital status (0 = married)	.989 (1.106)	.999 (1.104)	.932 (1.070)
Sex × Marital status	-4.243 <sup>**</sup> (1.361)	-4.188 <sup>**</sup> (1.360)	-3.208 <sup>**</sup> (1.314)
Foreign college degree (1 = yes)	.427 (1.815)	.432 (1.813)	-2.094 (1.200)
U.S. college degree (1 = yes)	5.808 <sup>**</sup> (1.152)	5.705 <sup>**</sup> (1.154)	6.477 <sup>**</sup> (1.106)
English skill (0 = strong skills)	-1.891 <sup>*</sup> (.979)	-1.834 (.977)	-1.900 <sup>*</sup> (.934)
Korean	2.173 <sup>*</sup> (1.065)	2.153 <sup>**</sup> (1.064)	.962 (1.048)
Filipino	-1.111 (1.318)	-1.234 (1.319)	-.742 (1.291)
Taiwanese	2.564 <sup>*</sup> (1.128)	2.491 <sup>*</sup> (1.128)	2.140 <sup>*</sup> (1.088)
Recession year	-1.753 <sup>*</sup> (.813)	-1.737 <sup>*</sup> (.812)	-1.918 <sup>*</sup> (.786)
Degrees of freedom	594	594	594
R <sup>2</sup>	.215	.216	.261

\* $p < .05$     \*\* $p < .01$  (two-tailed tests); \* $p < .05$     \*\* $p < .01$  (one-tailed tests)

<sup>a</sup> Coefficient was not significant in preliminary analyses; it was omitted from the final run of the model.

*Note:* In each equation the following interactions were not statistically significant: Years in the U.S. × Number of jobs in the U.S., Filipino × English skill, and Filipino × Foreign college degree. These interactions were omitted from the analysis reported above.

Table 10. Cross-Classification of Origin Jobs by Destination Jobs for Means of Finding Employment: Asian Immigrants in Los Angeles, 1989 to 1990

Origin Job	Destination Job					Total
	Direct Personal Ties	Indirect Personal Ties	Impersonal Search	Promotion	Self-Employed	
Direct personal ties	7	12	8	0	8	35
Indirect personal ties	6	58	45	13	16	138
Impersonal search	4	31	130	19	21	205
Promotion	2	6	5	23	2	38
Self-employed	5	4	9	0	30	48
Total	24	111	197	55	77	464
Direct personal tie, employer is a relative	2	5	5	0	4	16

The marginals show a tendency to move away from the use of personal ties and toward the use of impersonal means for securing employment. The use of direct personal ties declines between origin and destination jobs—destination jobs are usually found through indirect personal ties or an impersonal search. This pattern also holds for those who used direct personal ties to secure the origin job and their employer was a relative. The use of direct personal ties to secure the origin job fails to lead to a single promotion. In part, this reflects the small scale of most firms with jobs available through strong personal ties. When the origin job was obtained using indirect personal ties, the destination job was just as likely to be obtained through an impersonal search or promotion by indirect personal ties. When the origin job was obtained through an impersonal search or a promotion, the destination job was usually obtained in the same way. Table 11 presents a proportional hazards model used to estimate the hazard of transition into destination jobs found through personal ties (direct and indirect). The censoring event is coded 1 for jobs found through personal ties, and 0 otherwise (including the right-censored cases). Duration in the origin job is measured in months. The independent variables are identical to those in Table 8 except that *origin status* controls for how jobs were found.

Hypothesis 3 implies that additional years in the United States and additional prior jobs

reduce the hazard of transition into jobs found through personal ties. According to the estimates, the hazard of this type of transition declines 12 percent given an additional prior job. The decline is 5 percent after another year of residence in the United States. Both coefficients are statistically significant. Transitions through personal ties are strongly related to origin jobs found in the same way.

## CONCLUSION

Job trajectories of Asian immigrants provide a better understanding of ethnic boundaries in the urban labor market. Immigrant minorities come from outside the social system and are more likely than White non-Hispanic workers to experience barriers to mobility. Their job trajectories illuminate the nature of the institutional environments that comprise the metropolitan labor market. Limited human capital, especially skills in English, educational credentials, and work experience, sharply limit employment opportunities in the mainstream economy. Reliance on the ethnic economy for employment is both a blessing and a hardship, however. Given the limited human capital characteristic of many immigrants on arrival in the United States, job opportunities in the ethnic economy help them get their feet on the ground. Yet the small scale and family orientation of most businesses in the ethnic economy limit career mobility for those who sell their labor to nonkin

Table 11. Proportional Hazards Estimates of Reliance on Personal Ties to Find Jobs: Asian Immigrants in Los Angeles, 1989 to 1990

Independent Variable	Reliance on Personal Ties
Years in the U.S.	-.070** (.023)
Number of jobs in the U.S.	-.182** (.063)
<i>Origin Status</i>	
Job found through personal tie	.869** (.199)
Self-employed	-.369 (.388)
Age	-.004 (.011)
Sex (0 = female)	.223 (.193)
Marital status (0 = married)	.442* (.220)
Foreign college degree (1 = yes)	.315 (.249)
U.S. college degree (1 = yes)	-.162 (.343)
English skill (0 = strong skills)	.126 (.279)
Korean	-.498 (.295)
Filipino	.497 (.388)
Taiwanese	-.452 (.304)
Filipino × Foreign college degree	-.849* (.434)
Recession year	.381* (.196)
Number of jobs	623
Number experiencing a transition	135
-2 log-likelihood	1427.6

\**p* < .05      \*\**p* < .01 (two-tailed tests)

+*p* < .05      ++*p* < .01 (one-tail tests)

Note: In the model, the following interactions were not statistically significant: Years in the U.S. × Number of jobs in the U.S., Sex × Marital status, Filipino × English skill, Years in the U.S. × Origin status, Number of jobs in the U.S. × Origin status, Years in the U.S. × Foreign college degree, and Number of jobs in the U.S. × Foreign college degree.

co-ethnics. Consequently, for the immigrant generation, movement into self-employment or the acquisition of the human capital necessary to pursue better jobs in the mainstream labor market are the primary means to social mobility. The main strength of the ethnic economy is that through its formal and informal institutions and its vitality, which is largely attributable to a continuing influx of linguistically isolated cheap labor, an expanding entrepreneur base is generated (Kim 1981; Light and Bonacich 1988; Evans 1989).

An eventual move into entrepreneurship is associated with rapid movement through a series of jobs that initially involve employment by a co-ethnic. Later job shifts, however, may involve skilled or blue-collar work in large firms outside the ethnic economy where wages are higher and capital can be accumulated more quickly. The acquisition of human capital and pursuit of employment outside the ethnic economy does not usually lead immigrants back to the ethnic economy via self-employment. Once a trajectory away from the ethnic economy begins, many immigrants stay the course and continue to pursue employment opportunities in the mainstream economy.

These findings call into question a dual labor market perspective. Rather than finding impermeable barriers to job mobility, we find that job transitions involve a gradual movement away from ethnic firms, which are characterized by small size, dense ethnic ties, and informal governance structures, and a movement toward jobs in the formal/open domain of the metropolitan economy. Thus, the metropolitan labor market is more accurately characterized by a joint distribution of firm size, degree of bureaucratization, and governance structures. The pattern of job transitions reveals an urban labor market that is relatively open to movement across fields of work, labor market sectors, and ethnic boundaries.

Because many Asian immigrants seek better economic opportunities, their job changes reflect calculations of the costs and benefits of specific jobs. Their job trajectories indicate that those who acquire the requisite human capital move away from employment in the ethnic economy. Net of human capital, increases in years since immigration and number of jobs held in the United States

lower the odds of working in the ethnic economy, unless the immigrant operates his or her own business. As immigrants obtain jobs that better match expectations based on their human capital, their reservation wage—the minimum acceptable wage—rises. As a result, the likelihood of employment by a co-ethnic declines, as the scale of most ethnic-owned firms does not allow for advancement and wages tend to be low.

The social network of newly arrived immigrants typically comprises a small circle of relatives and perhaps a few close friends; it may also include social connections based on common backgrounds such as graduating from the same school back home. Initial jobs in the ethnic economy are frequently obtained through personal ties. Over time, the social networks of immigrants expand but as long as employment is confined to the ethnic economy, these networks are densely co-ethnic. The high frequency of early job changes for immigrants suggests dissatisfaction with jobs obtained through personal ties within the ethnic community. Many turn toward more formal institutional means to locate better jobs. This transition usually requires improving language skills or acquiring other forms of human capital. When immigrants first try to locate jobs in the formal/open domain of the economy, they usually rely on formal institutions because of the regulated governance and bureaucratic procedures of such firms and because the immigrants are unlikely to have helpful social contacts outside the ethnic group. Consequently, as immigrants move away from the ethnic economy, their use of personal ties to find jobs diminishes. Given enough time, however, this pattern may reverse if the nonethnic social networks of an immigrant develop to the point where informal social ties open opportunities for jobs and promotions within the mainstream economy. Waldinger (1994), for example, documented the process by which immigrants secured niches in the municipal bureaucracy of New York City. A necessary prior condition was demand for foreign professionals as municipal jobs became less attractive to White workers due to increasing uncertainty about New York City's fiscal health. Once a niche is secured, network ties are more likely to serve as conduits for information about the availability of jobs

in the formal/open domain of the metropolitan labor market. The well-educated second generation should benefit from such social ties. This suggests that the relationship between status and use of personal ties may be curvilinear. Granovetter (1974) found that upper-level personnel are more likely than middle-level personnel to use personal ties. Our findings suggest that the lowest positions are also more likely to be found through personal ties than are the more bureaucratized middle-level positions.

The growth of the mixed economy in large cities has broad long-term social consequences. The theory of the immigrant labor market we outline turns on the degree of ethnic heterogeneity in a metropolitan labor market. The increasing ethnic heterogeneity of major cities promotes expansion of the mixed economy. The mixed economy constitutes the effective social boundaries of ethnic groups in major cities. The greater the level of ethnic heterogeneity in advanced industrial societies, the greater the probability of intergroup contact, the larger the size of the mixed economy, and the more porous the social boundaries of ethnic groups participating in it. Although segregating factors may harden boundaries in certain areas, market relationships encourage open social relationships. For this reason, markets function as an integrative institution. Workers gradually adapt their behavior to gain advantages in the labor market, shopkeepers customize their services and products to meet consumer tastes, and firms seek the best qualified and least expensive workers, regardless of ethnicity. In metropolises throughout the advanced capitalist world, increasing ethnic heterogeneity has stimulated concerns about the incorporation of immigrants into their host society. Despite increased tension and conflict, an expanding mixed economy sustains ongoing economic and social exchanges among diverse ethnic groups in the workplace and marketplace. The social history of American immigration indicates that periods of ethnic conflict have been followed by the assimilation of the American-born offspring of immigrant groups. Although we are unsure whether high-volume immigration will continue as the U.S. immigration policy, we believe that inclusion will probably be the outcome of immigrants already in the United States.



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