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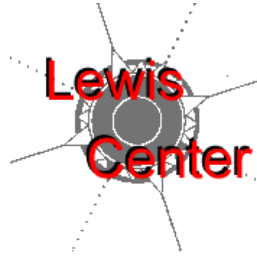
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The Industrial Division of Labor among Immigrants and Internal Migrants to the Los Angeles Economy

By: Mark Ellis and Richard Wright

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The Industrial Division of Labor among Immigrants and Internal Migrants to the Los Angeles Economy

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ABSTRACT

Between 1985 and 1990, the Los Angeles CMSA received about 400,000 working immigrants and about 575,000 working native in-migrants. We subdivide these native- and foreign-born migrants by national origin and race to examine the processes that channel recent arrivals into different industrial sectors. Our analysis extends previous research on migrant employment and the ethnic division of labor in two ways. We compare the employment of recent arrivals to that of residents for several groups across a large, diverse, regional economy. We also consider the role educational qualifications play in the allocation of different migrant groups to jobs. The results show that both native- and foreign-born groups channel into particular industrial sectors. The strength of group channeling, however, varies by national origin and ethnic group. For example, we find that native-born, white in-migrants typically take jobs based on their educational qualifications, whereas ethnic group effects dominate the choice of industry for recent Korean immigrants. Overall, white and black native-born residents and Filipino residents have employment distributions most dissimilar from those of recently arrived migrant groups other than their own. The employment distribution of Mexican residents is most like that of Mexican newcomers, but also quite similar to that of other recently arrived groups. The analysis suggests Mexican residents' experience more labor market competition from migrants than other groups.

INTRODUCTION

New migrants to large metropolitan areas arrive from both abroad and from origins within the country. For example, twenty five percent of all the immigrants to the United States in the work force in 1990 who declared they came to stay between 1985 and 1990 chose the Los Angeles CMSA as their destination (U.S. Census 1993). This heavy concentration of immigrants in the Southern California labor market, however, tends to overshadow the fact that greater Los Angeles continued to be a major destination for migrants from other parts of the U.S. during the 1980s. At the same time that about 400,000 new workers from other countries found employment in the Los Angeles CMSA in the late 1980s, over 575,000 native-born workers joined the greater Los Angeles work force, moving from other parts of the United States (U.S. Census 1993). Thus, in the late 1980s, the Los Angeles regional labor market attracted a larger number of native- than foreign-born recent migrants. Put another way, Los Angeles met its labor needs by simultaneously drawing on supplies of workers from both inside and outside the U.S. The Los Angeles labor market of the 1980s was a place where native- and foreign-born labor came together, literally (cf. Waldinger and Bozorgmehr 1996).¹

Most studies of native-immigrant labor market interactions assess whether or not immigrants take jobs from or depress the wages of native-born workers. Our concern lies with the impact of migration on the ethnic division of labor. We therefore ask, how similar are the employment patterns, by industry, of new immigrants and new native-born in-migrants in Los Angeles? Further, what forces channel new migrants from different national origins into distinctive industrial sectors? We approach these questions from the perspective that the employment of recent arrivals is a window on the labor market processes that sort workers into different areas of the local economy (Sayer and Walker 1992). We do this by comparing the employment distributions of new immigrants and recent in-migrants across 15 broadly defined industries in Los Angeles. We also compare the employment distribution of each migrant group with those of established residents. We disaggregate migrants and residents by national origin and education to illuminate the effects of ethnic background and educational qualifications on the sectoral allocation of new arrivals.

By centering attention on immigrants and native in-migrants, this project complements the recent analysis of the linkage between international and intranational flows of workers across U.S. metropolitan areas. Immigration links to internal migration in complicated and disputed ways (cf. Frey 1995; Wright, Ellis, and Reibel 1997). Previous analyses of the relationship between flows of immigrants to metropolitan areas and internal flows tended to concentrate on the net migration of the native-born (e.g., Filer 1992; Frey 1995; White and Imai 1994; Wright, Ellis, and Reibel 1997). While the literature now has several system-wide accounts based on questions such as this, it

¹ Of course, the Los Angeles CMSA also experienced considerable outmigration of native-born workers in the 1980s. Slightly more native-born workers arrived (575,815) between 1985 and 1990 than left (564,029). Therefore, the number of native-born workers grew slowly during the 1980s (but only at a fraction of the rate of the foreign-born) so the native-born work force declined from 78.7 percent of the region's labor in 1980 to about two-thirds in 1990. Focusing on this trend alone, however, obscures the fact that native in-migrants filled more jobs in Los Angeles than did immigrants between 1985 and 1990.

contains few examples of the association between immigration and internal migration for individual metropolitan areas. The research reported in this paper, which compares the employment allocation outcomes of different categories of migrants in Los Angeles, is a small attempt to fill that void.

This paper also speaks to several current and interrelated debates in the social sciences about how new arrivals fit into local economies. The literature offers several theories about how new entrants to a labor market from abroad find work. A persuasive explanation of the process centers on the idea of ethnic queues, where Aentire groups of people are *ordered* in terms of desirability for preferred jobs, with skill relevant characteristics serving as additional weights (Waldinger 1996, 18--emphasis in the original). These queues do not operate in a straightforward way. Groups tend to concentrate in particular sectors of the labor market. Moreover, these concentrations vary over time (Waldinger 1996, 19). In other words, along certain key dimensions, metropolitan labor markets are segregated, and this segmentation shifts as demand changes over time.

The interaction of ethnicity with the metropolitan economy frequently builds directly or indirectly on the idea that individuals are embedded in social networks (Granovetter 1985). Social networking often is approached in the literature using terms like, Aethnic facilitation (Light and Bonacich 1988), Atraining systems (Bailey and Waldinger 1991), and Abounded solidarity and enforceable trust (Portes and Zhou 1992). In their own ways, these models refer to the process of job channeling by group, stressing the role of networks over human capital attributes in migrant communities. These networks sustain ethnic niches and enclave economies (e.g., Boyd 1989, Massey 1988, Light and Bonacich 1989).

In this paper, we elaborate this process by explicitly introducing migrant status into an analysis of employment. This system-wide account compares the sectoral employment distribution of the newest entrants (i.e., those that arrived from elsewhere in the quinquennium preceding the census) with that of already settled members of the same and other groups. Comparing the pattern of the industrial allocation of recent arrivals with those of the resident foreign- and native-born allows us to ask some new questions about the connections between migrant networks, ethnic niches, and the job queue. For example, do new immigrants concentrate in the same sectors as their co-ethnics and co-nationals already at work in the local labor market? And, how do human capital attributes (measured by years of education) interact with ethnic characteristics in the process of industrial sector employment allocation for new immigrants?

Placing the analytical emphasis on the region rather than the group allows us to identify areas of job channeling by industrial sector and ethnic group. There is a rich literature on the emergence of ethnic niches and economies for individual immigrant groups in Los Angeles.² Our intention is to complement these individual group accounts by conducting a comparative analysis of job channeling for all major groups in the economy of metropolitan Los Angeles. This scale of analysis reveals considerable variation in co-ethnic job channeling between residents and newcomers by groups. It also shows that conceptualizations of labor markets predicated on the idea of job channeling gloss

² For example, Koreans (e.g., Light and Bonacich 1988), Chinese (e.g., Tseng 1994), Israelis (e.g., Gold 1994), and Armenians, Arabs and Iranians (e.g., Bozorgmehr, Der-Martirosian, and Sabagh 1996).

over a lack of co-ethnic solidarity between residents and new arrivals in specific industrial categories.

A focus on recent arrivals also raises questions about the job channeling of native-born newcomers in local labor markets. As with immigrants, the job placement of native-born in-migrants should depend on some combination of skills and network connections to resident members of the same ethnic group. We hypothesize that the sectoral allocation of in-migrating, native white workers occurs more along the lines of skill than ethnicity. In contrast, the employment prospects for in-migrating African Americans, a group with lower levels of educational attainment than in-migrating whites, may be restricted to existing centers of native black job concentration (Johnson and Roseman 1990; McHugh 1988). Native-born blacks tend to concentrate in particular sectors, partly because native whites numerically dominate them and partly because they occupy an inferior position in the job queue (Waldinger 1996; Wright and Ellis 1996, 1997). Consequently, African American in-migrants may channel into African American employment concentrations to the same extent that recent immigrant arrivals work in ethnic niches.

As we contemplate the economic effects of immigration to the U.S., we must also consider what is the most appropriate referent group by which to gauge the employment experience of immigrants. Researchers frequently compare immigrants with native-born groups or previous cohorts of newcomers to the U.S. Social scientists rarely compare immigrants with migrants who have not crossed a national boundary separating the origin from the destination.³ Yet all newcomers of working age in a place are alike in one important respect: they moved to the same local labor market at the same time for work. This paper is a first attempt at unraveling how these migrants of diverse origin and talent fit together as labor for the Los Angeles economy.

MIGRATION AND THE ETHNIC DIVISION OF LABOR

In a recent study of New York's ethnic division of labor, Roger Waldinger (1996) casts migration and the timing of arrival of different groups in a central role. Waldinger shows that the ethnic division of labor in New York in the 1950s and 1960s reflected the temporal sequencing of migrant waves dating back to the turn of the Twentieth Century. Southern and Eastern European immigrants, who arrived in the two decades spanning the beginning of this century, entered and secured employment niches in a wide range of low-level jobs. This situation held until the 1960s when a massive white exodus from these jobs, either through outmigration or retirement, created openings for a new generation of immigrants. In the following decade, the seeds of a new ethnic division of labor were sown as the first arriving members of post-1965 immigrant groups found employment in sectors previously dominated by ethnic whites. Subsequently, networks channeled later arrivals into industries where co-ethnics already worked.

³ Kristin Butcher's work (1994) comparing immigrant black employment outcomes with those of African American internal migrants is one notable exception.

New York's experience suggests that migration was a crucial force of change in the ethnic division of labor when replacement labor opportunities were numerous. Subsequently, migration became a force for consolidating the ethnic division of labor as later arrivals used ethnic ties to get jobs. We suggest that ethnically diverse migration streams can generate these forces in any local labor market and that the composition of the ethnic division of labor will depend partly on local labor demand. Specifically, the propensity for new arrivals to find work outside ethnic employment concentrations should increase with the level of job demand in the local labor market. In local labor markets with high levels of labor demand, newcomers may use networks to find work in ethnic niches. They also may find it relatively easy to enter jobs outside the niche, potentially establishing new ethnic employment bases for later arriving migrants to consolidate. In local labor markets with weak demand, newcomers may be more apt to rely on networks of co-ethnics as job opportunities outside the niche will be relatively hard to find.

In terms of labor demand, Los Angeles and New York City in the 1970s and 1980s are a story of contrasts. Employment in New York City declined in the 1970s to rebound only modestly in the 1980s, whereas in metropolitan Los Angeles the work force grew 30 percent in the 1970s and 36 percent in the 1980s. Even in the 1980s, native-born whites continued to increase in absolute numbers in Los Angeles's work force (Wright and Ellis 1997). This sort of employment growth meant that Los Angeles-bound immigrants were not restricted to replacement labor opportunities, as were newcomers to New York. Instead, recent arrivals in Los Angeles could more easily find work in a range of sectors outside ethnic niches. Ettliger and Kwon's (1994) analysis supports this view by finding greater diversity in various Asian groups' industrial and occupational profiles in Los Angeles than in New York. With weaker ethnic queuing constraints, it seems likely that in Los Angeles the distribution of newcomers, Asians and others, across industrial sectors has only partly been a function of group membership.

All newcomers to Southern California in the 1970s and 1980s confronted the wide range of jobs available in the region's dynamic labor market. Accordingly, a proportion of recent arrivals from each group should have filtered into jobs outside existing ethnic employment concentrations. This proportion, however, is likely to vary across groups for three reasons. First, the probability that a newcomer finds work in an ethnic employment niche will depend on the strength of ethnic group networks channeling job information from residents to migrants. Previous literature suggests these networks are most active in groups with vibrant ethnic economies and well-defined employment niches (Portes and Bach 1985; Light and Bonacich 1989; Waldinger 1995). Second, independent of the effectiveness of its networks, the size of a group's resident work force relative to its migrant flow may affect the likelihood of newcomer employment in a niche (Lieberson 1980, 379). Ethnic niches will be able to absorb most new arrivals only if the migrant flow is small relative to the size of its resident work force. The opposite situation occurs when the flow is large relative to the size of the work force. In this case, the niches will be unable to absorb all newcomers; consequently, migrants are more likely to spill over into sectors outside existing ethnic employment concentrations.

Finally, newcomers may not work in traditional areas of group employment if they have different skills than resident members of their co-ethnic group. In this instance, both skills and ethnic affiliation should influence the sectoral allocation of migrant employment. Greater skill differentials between residents and migrants should increase the difference between their employment distributions. While all migrants make use of both skills and ethnic networks to find employment, they do so in different combinations. Natives with skills tend to be able to use them to obtain work. For relatively well-educated immigrants and native minority groups, barriers to entry (e.g., unrecognized foreign credentials, language ability) and discrimination may inhibit the ability to gain employment on the basis of skills or qualifications. Groups themselves may constrain the ability of newcomers to use their skills effectively. Specifically, newcomers of above average skill who join a working class community of co-ethnics may experience pressure to conform to employment traditions (Portes and Rumbaut 1996, 87).

While ethnic networks may be a more important source of employment information for immigrants than natives, not all immigrant groups have strong networks. For the skilled, weak ethnic networks should accentuate the role of expertise in allocating migrants to different industries. Conversely, for the unskilled, weak networks may be the only employment resource for recent arrivals. In these circumstances, some newcomers will no doubt end up working in sectors with co-ethnics, but many others will have to search for jobs with little co-ethnic assistance, finding work where they can. In some situations, newcomers may find co-ethnics to be more a source of labor market competition rather than a resource for finding work (Mahler 1995). Network vitality varies among groups for a complex mixture of reasons, including the cultural and socioeconomic characteristics of the groups themselves (Mahler 1995; Portes and Rumbaut 1996), and also the economic and political structures in places where groups live (Fernandez-Kelly 1995). Menjivar's (1997) work on Salvadorans in San Francisco shows that network effectiveness also depends on the material circumstances of residents. Impoverished and marginalized residents tend to be less able to provide much useful job assistance to recent arrivals.

To help organize these ideas, we adopt Light and Rosenstein's (1995) concepts of group and specific resources. Light and Rosenstein developed these tools to understand group variation in ethnic entrepreneurship. We think these concepts also have utility for interpreting the roles of skills and ethnicity in the employment of recent arrivals. In the context of migrant employment, general resources (the most important of which is skill) allow recent arrivals to find work in sectors where there is demand. In contrast, specific resources are those that derive from group membership. In other words, they are the ethnic networks that give newcomers access to employment in niches. What we suggest is that some groups of recent arrivals have abundant general and specific resources; others have more of one than the other; some have few of either. The mixture of these resources influences the distribution of recent arrivals by industrial sector.

DATA, METHODS, AND ANALYSIS

The data for this study come exclusively from the Public Use Micro Samples of the U.S. Census (U.S. Bureau of the Census 1983, 1993). We define four major categories of workers.

1. Resident native-born are workers born in the U.S. (excluding Puerto Rico and U.S. territories) resident in Los Angeles on April 1, 1985 and April 1, 1990.
2. Resident foreign-born are workers born outside the U.S. and its territories, who were resident in Los Angeles on April 1, 1985 and 1990.
3. Recent in-migrant workers are persons born in the U.S. (excluding Puerto Rico and U.S. territories) who lived and worked in Los Angeles on April 1, 1990 but lived elsewhere in the U.S. in 1985.
4. Recent immigrant workers are persons born outside the U.S. (but not to a U.S. parent) who lived abroad on April 1, 1985, came to stay in the U.S. between 1985 and 1990, and lived and worked in Los Angeles on April 1, 1990.

Most definitions of recent immigrants include all those who came to stay in the five-year period before the census. We add the restriction that recent immigrants had to be outside the U.S. on April 1, 1985, as well. This makes the definition of immigration compatible with that of in-migration; it also reduces the volume of recent immigration to Los Angeles by close to a third (Ellis and Wright 1997).⁴ Table 1 lists the major immigrant and native-born internal migrant groups who moved to the Los Angeles CMSA between 1985 and 1990. It shows that, between 1985 and 1990, native-worker arrivals out-numbered newly arrived immigrant workers by over 180,000. Some of our analysis compares aggregate in-migrant and immigrant employment patterns, but the majority of the research involves the comparison of individual groups. Here, we restrict ourselves to the six largest immigrant groups (Mexicans, Salvadorans, Filipinos, Guatemalans, Koreans, and Chinese). Each of these groups has more than 10,000 recent migrants in the work force--sufficient numbers for a meaningful sectoral analysis of the regional economy. Together, these six groups comprise 72 percent of the immigrants who arrived in the Los Angeles CMSA between 1985 and 1990.

⁴ We have excluded a third migrant group from the analysis: foreign-born workers resident elsewhere in the U.S. in 1985 and living and working in Los Angeles in 1990. Foreign-born migrants in the U.S. cannot be classified as either internal migrants or immigrants because they are both; in many respects they are a distinct migrant group which requires separate analysis.

Table 1. Major immigrant and native in-migrant groups in the work force who came to the Los Angeles CMSA, 1985-90

| 1985-90 immigrants in work force^a | | |
|---|----------------|----------------|
| Mexico | 180074 | 45.79% |
| El Salvador | 27006 | 6.87% |
| Philippines | 25756 | 6.55% |
| Guatemala | 19757 | 5.02% |
| Korea | 16067 | 4.09% |
| China | 14221 | 3.62% |
| Vietnam | 9787 | 2.49% |
| Iran | 9112 | 2.32% |
| Japan | 5969 | 1.52% |
| Former USSR | 5295 | 1.35% |
| Other | 80179 | 20.39% |
| Total | 39,3223 | 100.00% |

| 1985-90 native in-migrants in work force^b | | |
|---|----------------|----------------|
| White | 478277 | 83.06% |
| Black | 44967 | 7.81% |
| Hispanic | 37220 | 6.46% |
| Asian | 9384 | 1.63% |
| Other | 5967 | 1.04% |
| Total | 57,5815 | 100.00% |

^a Immigrants are defined as those who came to stay between 1985 and 1990, lived outside the U.S. in 1985 and in Los Angeles in 1990.

^b Native in-migrants are defined as those born in the U.S., who lived outside Los Angeles but in the U.S. in 1985, and in Los Angeles in 1990.

For native in-migrants, we only examine the two largest groups, which are whites and African Americans. Combined, these two groups make up 90 percent of native-born, in-migrant workers in the Los Angeles CMSA. Note that African American in-migrants are the third largest recent migrant group, overall, after native-born whites and Mexicans. We excluded native Hispanics from the native-born group analysis because our interests center on the employment of in-migrants, who are ethnically distinct from major immigrant groups. In this way, we avoid having to unpack an unknown mix of ethnic effects from those due to nativity.

At various points in the analysis, we subdivide workers by their educational achievement. We use three categories of education: high school or less (0-12 years of education); some college (13-15 years of education); and college (16 or more years of education). This measure of human capital is available in the PUMS, whereas other measures (such as "previous work experience") are not. Education, of course, is bound with social class and class resources (Light and Rosenstein 1995), wherein networks of individuals with higher levels of education can access broader networks than those that do not. We also recognize that educational achievement is only one measure of worker skills. Qualifications, nevertheless, do broadly correspond with basic requirements for certain types of work. Industries with relatively high demand for skilled labor generally employ disproportionate numbers of college-educated workers and industries with low demand for skilled workers have relatively few college-educated workers.

We compare the employment distributions of migrant groups across 15 sectors. Many of these are the standard divisions of an economy, but we subdivide manufacturing and the service sector to obtain a more detailed view. We subdivide manufacturing into durable and non-durable to separate employment in the aerospace and high-technology complex from that in low value-added, highly competitive industries, such as garments and furniture. We partition the service sector into some standard subsectors (business, personal, entertainment), some non-standard ones (health and education), and a residual category. We recognize that these 15 sectors do not capture every nuance of group employment dynamics in Los Angeles. Nevertheless, they provide enough detail about job dynamics and ethnic group employment specialization for analysis at the scale of the regional economy (Wright and Ellis 1997). Furthermore, analysis with more than 15 sectors has sample size problems for the smaller immigrant groups when subdivided by educational category.

Part of our analysis identifies employment concentrations using a simple measure of the relative overrepresentation of group employment in each industrial sector. No theory suggests what level of overrepresentation signifies a meaningful employment concentration. Model (1993) identified niches as sectors where a group's percentage of employment is at least 1.5 times its percentage of the total work force, a criterion that Waldinger (1996) later adopted.⁵ While Model (1993) admitted problems in identifying niches with a fixed level of overrepresentation because of variation in the size of group work forces, she provided no rationale for choosing the 1.5 level. We used this level at first but rejected it when it failed to reveal distinctive group employment concentrations, probably because our analysis uses coarser sectoral divisions than did either Model or Waldinger. After experimentation, we determined "overrepresentation to be when a group's percentage of employment in a sector is at least 1.2 times its percentage share of the total work force."⁶ For example, 2.71 percent of all workers hold jobs in entertainment services whereas 4.49 percent of recent native-born

⁵ Formally, Model (1993) identified a niche for group i in sector j when $(E_{ij}/E_j)/(E_i/E_{..}) \geq 1.5$. E_{ij} is the number of workers in ethnic group i in industry sector j . E_j is the total number of workers in sector j . E_i is the total number of workers in group i in the regional economy. And $E_{..}$ is the total of all workers in the regional economy.

⁶ Higher levels identify too few concentrations to highlight distinctive group employment patterns for some groups; lower levels identify too many sectors to distinguish group employment profiles from one another.

migrants work in that sector. The ratio of these two percentages exceeds 1.2; therefore, we consider this an employment concentration for recent in-migrants.

Besides highlighting individual sectoral differences, we also measure the overall difference in employment distribution between groups using the familiar index of dissimilarity. This index ranges between 0 and 100 and indicates the percentage of workers of one group who would have to shift jobs for the two employment distributions to be identical.⁷ On the one hand, if migrant networks are the most powerful force channeling recent arrivals into employment, we expect to find the lowest indices of dissimilarity between the employment distribution of newcomers and that of resident co-ethnics--irrespective of educational attainment. If, on the other hand, educational qualifications condition migrant networks, then indices of dissimilarity should be lowest between newcomers and co-ethnic residents with similar education levels. Finally, if migrant-resident employment differences are lower within educational categories than within ethnic groups, it would suggest that forces other than ethnically based migrant networks have greater impact on where migrants find employment. In such circumstances, we must conclude that migration does not reinforce the existing ethnic division of labor in contemporary Los Angeles. Instead, it creates turbulence. Many newcomers will find work outside traditional centers of ethnic employment in sectors where their skills are in demand.

ANALYSIS

We begin by comparing patterns of employment between all foreign- and native-born residents and newcomers. The shaded numbers in Table 2 indicate employment concentrations for the four categories of workers in the Los Angeles CMSA and highlight a clear division of labor between the resident native-born and the resident foreign-born. The former focus in a variety of private and public services, particularly education and public administration, while the latter are overrepresented in agriculture, manufacturing and personal services.

Recent migration does not necessarily reinforce these employment patterns. The employment specializations of recent native in-migrants differ slightly from those of the resident native-born. Recent native arrivals concentrate more in FIRE (Finance, Insurance, and Real Estate), entertainment, and other professional services, but only by less than two percent. Recent immigrant arrivals share employment concentrations with the resident foreign-born in agriculture, non-durable manufacturing, and personal services but differ in their concentration in construction and retailing. Unlike the resident foreign-born, recent immigrants do not concentrate in durable manufacturing.

⁷ The index is $\sum_i |X_i - Y_i|/2$, where X_i is the percentage of group X employed in sector i and Y_i is the percentage of group Y employed in sector i .

Table 2. The industrial distribution of native- and foreign-born workers in the Los Angeles CMSA, 1990

| | Total 1990^a | Resident native-born^b | Resident foreign-born^c | Recent native in-migrants^d | Recent immigrants^e |
|--------------------------------|-------------------------------|---|--|--|--------------------------------------|
| Agriculture and Mining | 2.89% | 1.75% | 4.40% | 1.49% | 9.44% |
| Construction | 6.97% | 6.79% | 6.75% | 7.19% | 9.46% |
| Non-Durable Manufacturing | 6.36% | 4.44% | 10.38% | 4.26% | 11.05% |
| Durable Manufacturing | 13.14% | 12.14% | 16.67% | 10.14% | 11.60% |
| Transp., Comm., Pub. Utilities | 6.54% | 7.73% | 4.68% | 6.40% | 2.92% |
| Wholesale Trade | 4.87% | 4.76% | 5.11% | 4.88% | 4.92% |
| Retail Trade | 16.03% | 15.19% | 16.98% | 15.90% | 20.61% |
| FIRE | 7.58% | 8.57% | 5.82% | 9.27% | 3.22% |
| Business Services | 6.19% | 5.98% | 6.37% | 6.35% | 7.20% |
| Personal Services | 3.56% | 2.49% | 5.34% | 2.92% | 7.28% |
| Entertainment Services | 2.71% | 3.11% | 1.60% | 4.49% | 1.32% |
| Health Services | 6.83% | 7.21% | 6.56% | 6.74% | 3.83% |
| Education Services | 6.56% | 8.13% | 3.72% | 7.35% | 2.60% |
| Other Prof. Services | 6.53% | 7.49% | 4.15% | 9.03% | 3.87% |
| Public Administration | 3.23% | 4.21% | 1.47% | 3.58% | 0.67% |
| N | 7370328 | 4343306 | 1861707 | 575815 | 393223 |

Note: Highlighted numbers indicate an employment concentration--where the group's percentage of employment in a sector is at least 1.2 times the group's percentage of the total work force.

^aThe sum of resident and migrant groups is less than the total because the following groups are excluded from the analysis: foreign-born internal migrants, those born in or moving from overseas U.S. possessions, and U.S. citizens born abroad.

^bNative-born workers resident in Los Angeles in 1985 and 1990.

^cForeign-born workers resident in Los Angeles in 1985 and 1990.

^dNative-born in-migrants, 1985-90.

^eImmigrants who came to stay between 1985 and 1990 and were abroad in 1985.

In Table 3, we quantify differences between the overall employment distributions of recent migrants and residents using the index of dissimilarity. As expected, the employment distribution of recent native-in-migrants is most like that of the resident native-born. Recent immigrant employment patterns are most like those of the resident foreign-born. At first blush, this suggests that migration helps to maintain the existing division of labor between native- and foreign-born workers in Los Angeles. Closer inspection, however, reveals it does so very unevenly: the index of dissimilarity between recent immigrant arrivals and foreign-born residents is almost three times larger than that between native in-migrants and residents. In other words, migration status is a more important basis of difference in the distribution of employment for the foreign-born than it is for the native-born.

Table 3. Indices of dissimilarity between the industrial distribution of migrants and resident workers by nativity status, Los Angeles CMSA 1990

| | Resident native-born^a | Resident foreign-born^b |
|--|---|--|
| Recent native in-migrants^c | 5.64 | 19.31 |
| Recent immigrants^d | 28.56 | 14.83 |

^aNative-born workers resident in Los Angeles in 1985 and 1990.

^bForeign-born workers resident in Los Angeles in 1985 and 1990.

^cNative-born in-migrants, 1985-90.

^dImmigrants who came to stay between 1985 and 1990 and were abroad in 1985.

Ethnicity and Nativity

To help assess whether individual ethnic and national origin groups replicate these trends between aggregate native- and foreign-born groups, Table 4 lists the employment of eight groups subdivided into residents and recent arrivals. As before, shaded cells indicate employment concentrations. The broad similarity between the employment concentrations of newcomers and residents in each group is clear. For the most part, both native and foreign-born newcomers appear to channel into the same sectors as their resident co-ethnics. Nevertheless, some specific differences stand out. Black in-migrants concentrate more in FIRE, entertainment, and other professional services than their resident counterparts do. Recent Mexican immigrants differ from Mexican residents most notably in three sectors: agriculture, where both concentrate (but immigrants have almost double the concentration of residents); durable manufacturing, which employs one in five residents but only 13 percent of recent immigrants; and retailing. Recent Salvadoran immigrants have employment concentrations in agriculture and construction, whereas resident Salvadorans do not.

Table 4. The industrial distribution of select resident and recent migrant groups in the Los Angeles CMSA, 1985-90

| | Resident Whites | Recent White In-migrants | Resident Blacks | Recent Black In-migrants | Resident Mexicans | Recent Mexican Immigrants | Resident Salvadorans | Recent Salvadoran Immigrants |
|----------------------------------|-----------------|--------------------------|-----------------|--------------------------|-------------------|---------------------------|----------------------|------------------------------|
| N | 3081885 | 478277 | 446996 | 44967 | 793357 | 180074 | 116903 | 27006 |
| Percentage of Group's Work Force | 86.57% | 13.43% | 90.86% | 9.14% | 81.50% | 18.50% | 81.23% | 18.77% |
| Sectoral Distribution | | | | | | | | |
| Agriculture and Mining | 1.46% | 1.38% | 2.10% | 1.65% | 7.42% | 13.65% | 3.17% | 9.48% |
| Construction | 7.28% | 7.52% | 3.53% | 4.12% | 8.79% | 12.64% | 6.67% | 12.27% |
| Non Durable Manufacturing. | 4.27% | 4.35% | 3.74% | 2.88% | 14.02% | 13.82% | 13.94% | 12.69% |
| Durable Manufacturing | 12.24% | 10.45% | 10.46% | 7.87% | 20.71% | 12.74% | 13.57% | 11.68% |
| Transp., Comm., Pub. Utilities | 6.85% | 5.91% | 12.39% | 10.48% | 3.76% | 1.73% | 3.93% | 1.29% |
| Wholesale Trade | 5.00% | 5.03% | 3.07% | 3.81% | 5.31% | 4.24% | 3.90% | 3.56% |
| Retail Trade | 15.05% | 15.65% | 11.83% | 15.53% | 16.62% | 21.50% | 17.39% | 16.59% |
| FIRE | 9.21% | 9.45% | 7.38% | 9.58% | 2.33% | 0.93% | 2.89% | 1.58% |
| Business Services | 6.11% | 6.34% | 6.50% | 6.48% | 6.00% | 6.81% | 10.31% | 10.11% |
| Personal Services | 2.35% | 2.91% | 2.92% | 2.76% | 4.81% | 6.78% | 12.54% | 14.50% |
| Entertainment Services | 3.51% | 4.73% | 2.11% | 3.66% | 1.32% | 1.01% | 1.22% | 1.10% |
| Health Services | 6.75% | 6.40% | 10.50% | 9.66% | 3.44% | 1.44% | 5.56% | 1.99% |
| Education Services | 8.10% | 7.45% | 9.46% | 6.38% | 2.68% | 0.46% | 1.65% | 0.37% |
| Other Prof. Services | 8.13% | 9.25% | 6.76% | 8.25% | 1.97% | 1.99% | 2.70% | 2.65% |
| Public Administration | 3.68% | 3.18% | 7.23% | 6.90% | 0.82% | 0.26% | 0.56% | 0.14% |
| Relative Entropy | 0.949 | 0.952 | 0.947 | 0.947 | 0.877 | 0.827 | 0.886 | 0.848 |

Table 4 continued

| | Resident Filipinos | Recent Filipino Immigrants | Resident Guatemalans | Recent Guatemalan Immigrants | Resident Koreans | Recent Korean Immigrants | Resident Chinese | Recent Chinese Immigrants |
|-------------------------------------|-----------------------|-------------------------------|-------------------------|------------------------------------|---------------------|-----------------------------|------------------|------------------------------|
| N | 111989 | 25980 | 56025 | 19757 | 64114 | 16067 | 57763 | 14293 |
| Percentage of Group's Work Force | 81.17% | 18.83% | 73.93% | 26.07% | 79.96% | 20.04% | 80.16% | 19.84% |
| Sectoral Distribution | | | | | | | | |
| Agriculture and Mining | 0.66% | 2.28% | 3.17% | 7.00% | 1.31% | 3.93% | 0.96% | 2.33% |
| Construction | 2.98% | 2.01% | 9.05% | 8.77% | 5.38% | 8.18% | 2.51% | 3.06% |
| Non Durable Manufacturing. | 4.46% | 5.48% | 12.61% | 13.34% | 8.25% | 10.57% | 8.67% | 14.62% |
| Durable Manufacturing | 12.65% | 10.65% | 13.77% | 9.43% | 7.40% | 5.91% | 11.12% | 8.19% |
| Transp., Comm., Pub. Utilities | 6.75% | 5.28% | 4.08% | 1.08% | 3.93% | 2.30% | 5.69% | 5.23% |
| Wholesale Trade | 3.68% | 3.89% | 4.76% | 3.91% | 6.10% | 5.97% | 8.76% | 11.05% |
| Retail Trade | 10.59% | 18.56% | 14.93% | 18.07% | 30.82% | 32.84% | 21.69% | 22.91% |
| FIRE | 12.25% | 9.46% | 2.47% | 1.50% | 7.75% | 7.07% | 11.79% | 4.97% |
| Business Services | 4.67% | 5.96% | 10.46% | 11.04% | 6.01% | 9.52% | 3.85% | 2.71% |
| Personal Services | 2.48% | 4.10% | 13.08% | 18.60% | 6.01% | 3.82% | 3.78% | 5.39% |
| Entertainment Services | 1.39% | 0.76% | 0.82% | 0.41% | 1.56% | 1.41% | 1.52% | 0.89% |
| Health Services | 22.87% | 18.14% | 4.29% | 1.30% | 6.70% | 2.76% | 6.60% | 2.94% |
| Education Services | 4.04% | 2.93% | 2.28% | 0.39% | 3.33% | 2.73% | 4.89% | 8.96% |
| Other Prof. Services | 6.13% | 7.47% | 3.38% | 4.68% | 4.59% | 2.52% | 6.24% | 6.54% |
| Public Administration | 4.39% | 3.03% | 0.84% | 0.48% | 0.86% | 0.47% | 1.94% | 0.20% |
| Relative Entropy | 0.889 | 0.897 | 0.897 | 0.836 | 0.868 | 0.838 | 0.902 | 0.876 |

Note: Highlighted numbers indicate an employment concentration-- where the group's percentage of employment in a sector is at least 1.2 times

The Guatemalan pattern is very similar to the Salvadoran one, except that both Guatemalan residents and newcomers concentrate in construction. Recent Korean immigrants also concentrate in agriculture and construction, unlike resident members of their group. In contrast, the Korean specialization in retailing is consistent across groups, accounting for almost a third of total group employment for both residents and migrants. Filipino residents and migrants heavily concentrate in health services. Finally, Chinese immigrants and residents both specialize in non-durable manufacturing, with immigrants almost twice as likely to work in this sector as residents are. Furthermore, Chinese residents are approximately three times more likely than recently arrived Chinese immigrants to work in the FIRE sector.

Table 4 also reports a measure of concentration--relative entropy,

$$G = [-\sum P_i \ln(P_i)] / \ln(k)$$

where P_i is the proportion of employment in sector i and k is the number of sectors analyzed. G ranges from 0 (perfect concentration--all employment concentrated in one sector) to 1 (perfectly evenly distributed employment across all sectors). Employment concentrations vary in importance among groups, but we feature three notable trends. First, resident native whites and recent native white migrants concentrate the least while recent immigrants from Mexico, Guatemala, and Korea concentrate the most. Second, in only two groups--native whites and Filipinos--are newcomers less likely to work in employment concentrations than are residents. For most groups, employment concentrations tend to be more important as a source of employment for recent arrivals than they are for residents. Third, employment concentrations for newcomers stem not only from their high concentration in residents' niches, but also from newcomers usually concentrating in more and different sectors than do co-ethnic residents. Thus, migration replicates the existing division of labor between groups, but does so imperfectly because divisions of labor exist within groups by time of arrival in Los Angeles.

We summarize the correspondence between newcomer and resident employment profiles for each group in Table 5. On the basis of our expectations about the importance of migrant networks, we expect that the employment distribution of recent migrants should be most like that of resident members of the same group. In this instance, the diagonal of the matrix should have the lowest values in each row. With the exception of Salvadorans, this occurs. Salvadorans have an employment distribution marginally closer to that of resident Guatemalans than resident members of their own group. Interestingly, native white and black in-migrants have the lowest indices of dissimilarity with residents of their groups. Furthermore, Chinese and Mexicans recent arrivals have the highest indices with their co-ethnic residents.

Table 5. Indices of dissimilarity between the industrial distribution of recent migrant and resident workers for select native- and foreign-born groups, Los Angeles CMSA 1990

| | Resident Mexicans | Resident Salvadorans | Resident Filipinos | Resident Guatemalans | Resident Koreans | Resident Chinese | Resident Whites | Resident Blacks |
|---|----------------------|-------------------------|-----------------------|-------------------------|---------------------|---------------------|--------------------|--------------------|
| Recent Mexican Immigrants | 17.76 | 20.91 | 50.01 | 22.02 | 32.08 | 35.57 | 39.17 | 48.02 |
| Recent Salvadoran Immigrants | 20.03 | 13.88 | 49.80 | 12.96 | 36.36 | 39.85 | 39.11 | 46.70 |
| Recent Filipino Immigrants | 33.24 | 30.18 | 15.07 | 32.59 | 23.78 | 17.60 | 18.92 | 21.26 |
| Recent Guatemalan Immigrants | 22.17 | 15.11 | 50.72 | 14.30 | 33.50 | 38.37 | 39.27 | 46.53 |
| Recent Korean Immigrants | 25.82 | 25.25 | 45.33 | 25.51 | 13.27 | 27.41 | 33.30 | 41.12 |
| Recent Chinese Immigrants | 28.18 | 27.88 | 39.84 | 29.84 | 22.02 | 17.37 | 29.02 | 32.63 |
| Recent White Immigrants | 30.40 | 29.85 | 23.63 | 29.20 | 23.55 | 18.15 | 4.32 | 17.54 |
| Recent Black Immigrants | 39.07 | 36.40 | 22.24 | 37.34 | 27.47 | 23.37 | 11.83 | 10.24 |

Note: Highlighted numbers indicate the lowest index of dissimilarity across each row.

The conclusion that natives have stronger networks seems unlikely given the wealth of studies that demonstrate the power of networks in foreign-born groups (see Boyd 1989 for a review). A more likely explanation is the inability of foreign-born employment concentrations to absorb newcomers. This must derive, at least in part, from the relative size of the inflow to immigrant communities. Recent arrivals comprise a relatively higher percentage of the foreign-born in the labor force than do the native-born (see the top two rows of Table 4). For example, in most immigrant groups, approximately one in five workers is a recent arrival; for Guatemalans it is one in four. The inability of foreign-born resident groups to absorb recent immigrant co-ethnics could also stem from the idea that some groups are very new to Los Angeles. If the earlier arriving group is not yet established, networks may not be mature enough for ethnic facilitation to function properly. In addition, foreign-born residents concentrate in sectors experiencing little job growth, such as durable and non-durable manufacturing.

Table 5 also speaks to the issue of inter-group job competition from newcomers, which focuses primarily on the effect of immigrant employment on native-born groups, particularly African Americans. Examining the columns of resident whites and blacks we can gauge how similar the employment of immigrants is to that of these two groups. The indices of dissimilarity indicate that both resident whites and blacks have substantially different employment distributions from all but one group of recent immigrant arrivals-- Filipinos. This accords with the information on sectoral employment specializations in Table 4--Filipinos specialize in health care and FIRE, and have high employment concentrations in other service sectors. The employment profile of resident blacks differs most from those of recent immigrant newcomers, particularly Mexicans, Salvadorans and Guatemalans.

This information allows us to determine where the employment of recent arrivals undermines the existing ethnic division of labor. For example, column one indicates that Mexican residents are closest to recent Mexican arrivals in their employment distribution. Salvadoran and Guatemalan newcomers also have reasonably similar employment distributions to Mexican residents, and those of Korean and Chinese recent arrivals are also close. Therefore, while recent Mexican migration sustains resident Mexican employment patterns, other groups of newcomers obtain employment in sectors where resident Mexicans work.

Although Salvadoran, Guatemalan and Mexican employment profiles are similar, those of Guatemalans and Salvadorans are particularly alike. The four indexes of dissimilarity for recent and earlier arriving Guatemalan and Salvadoran immigrants range only from 12.96 to 15.11. This pattern could occur for several reasons. Violence, or the threat of violence, forced many Salvadorans and Guatemalans to leave their homeland during the 1980s. In fact, about 25 percent of the Salvadorans and 17 percent of the Guatemalans in Los Angeles in 1990 arrived there in 1980 and 1981--the years when political violence peaked in both of these Central American countries (Lopez, Popkin and Telles 1996). Furthermore, many Salvadorans and Guatemalans settled in the same areas of Los Angeles. Perhaps the combination of refugee status (officially recognized or not), arrival in the Los Angeles labor market at the same time, settlement in the same neighborhoods, and shared language background (in most cases) promoted the development of similar employment profiles for these two groups.

Filipino residents have an employment distribution closest to that of Filipino immigrants, but very unlike any other recent immigrant group. Korean residents' employment is closest to that of Korean immigrants and furthest from immigrants from Mexico and Central America. Interestingly, while the employment distribution of Chinese residents is most similar to that of recently arrived Chinese, it is also similar to Filipino and native white in-migrants. As in the Korean case, the employment distribution of Chinese residents is most unlike that of Mexican and Central American newcomers.

These trends suggest that Mexican, Salvadoran, and Guatemalan residents are more likely than others to have non-co-ethnic newcomers enter their sectors of employment specialization. In other words, they experience the most interethnic job competition by industry. Most of this competition comes from other Latino groups. Resident Filipinos and native-born groups experience the least competition from recent arrivals in their employment centers other than that of their co-ethnics. The other groups come somewhere in-between, tending to experience more entry by newcomers from the same region than elsewhere (e.g., Salvadorans and Guatemalans--Central America; and Koreans and Chinese--East Asia).

Education

To this point, we have compared group employment without a consideration of education. We now assess the extent to which educational attributes offset ethnic background or national origin in the allocation of migrants to employment. Groups differ considerably in their educational qualifications (Table 6). Filipinos are clearly the most educated group--over 50 percent of both residents and recent migrants have a college education. Other highly educated groups include the Chinese, Koreans, and native whites. For Chinese and Koreans, the residents are considerably more educated than recent migrants, but for native whites the reverse occurs. Native blacks have fewer years of

formal education than do native whites but follow the same trend--much higher levels of education in newcomers than residents. Mexicans, Salvadorans, and Guatemalans have uniformly modest levels of formal education that tend to be even lower among recent arrivals than residents.

The greatest differences in educational levels between migrants and residents occur in the native-born groups. Hence, if educational qualifications play a major role in the allocation of workers to sectors, we should find that the employment distributions of recent native in-migrants and residents to be more dissimilar than immigrant newcomers are from the resident foreign-born. Recall, however, that Table 5 implies the opposite--native white and black newcomers have employment distributions more like their resident groups than is the case for any foreign-born group.

Table 6. Educational characteristics of resident and migrant groups in the Los Angeles CMSA, 1990

| | HS and less | Some College | College |
|-------------------------------------|--------------------|---------------------|----------------|
| Resident Whites | 32.05% | 39.49% | 28.46% |
| Recent White in-migrants | 24.56% | 34.66% | 40.77% |
| Resident Blacks | 40.83% | 43.08% | 16.09% |
| Recent Black in-migrants | 31.85% | 43.61% | 24.54% |
| Resident Mexicans | 86.13% | 11.29% | 2.58% |
| Recent Mexican immigrants | 89.08% | 8.06% | 2.86% |
| Resident Salvadorans | 84.06% | 13.29% | 2.66% |
| Recent Salvadoran immigrants | 89.71% | 7.33% | 2.97% |
| Resident Filipinos | 17.49% | 30.73% | 51.78% |
| Recent Filipino immigrants | 21.44% | 28.33% | 50.23% |
| Resident Guatemalans | 82.64% | 14.11% | 3.25% |
| Recent Guatemalan immigrants | 86.10% | 10.15% | 3.75% |
| Resident Koreans | 32.00% | 29.69% | 38.31% |
| Recent Korean immigrants | 46.69% | 21.26% | 32.05% |
| Resident Chinese | 29.94% | 23.86% | 46.20% |
| Recent Chinese immigrants | 39.24% | 19.98% | 40.78% |

A more systematic way to approach this issue is to compare employment distributions within and between groups by educational category. Table 7 has index of dissimilarity values that measure the similarity between the employment distribution of newcomers and three resident groups by

educational category. These groups are: resident members of the same group, other resident foreign-born, and other resident native-born.⁸ We highlight the cells in each row with the three lowest indices of dissimilarity. If group effects dominate, then highlighted cells should occupy the three leftmost columns of the table. If education effects dominate, then even distribution of shading across the table should predominate, with highlights in cells within educational categories (i.e., on the diagonals).

This table is rich in information and we accent only the essential trends. Generally, the left side of the table contains the areas with the most highlighting, indicating that recent arrivals tend to have employment distributions most like resident members of their own group, regardless of their education. Nativity status is also important--immigrant newcomers tend to have more highlights in the columns headed, Aother resident foreign-born; native-in-migrants tend to have more highlighting in the Aother resident native-born sections. Overall, group and nativity effects appear to have more effect on the employment distributions of recent migrants than does education. Group effects, though, vary in strength.

Koreans have the strongest group effect--all but two of their highlighted cells are between recent Korean arrivals and resident Koreans. The situations for the five other immigrant groups vary, but some trends emerge. Whatever their level of education, recent Mexican immigrants tend to work in sectors that employ residents with the fewest years of schooling, whether those resident workers are Mexican, other foreign-born, or native-born. In other words, neither education nor ethnic affiliation appears to have that much effect on the employment distribution of recent Mexican arrivals. In contrast, relatively uneducated Salvadoran, Guatemalan, and Chinese recent arrivals cluster in sectors where resident members of their own groups work.

A division of labor by education is evident between Chinese recent immigrants with a college education and relatively uneducated newcomers from China. That is, the most educated recent arrivals from China cluster in industries where college residents of all groups work rather than in sectors employing relatively uneducated Chinese residents. Recent Filipino arrivals tend to work in sectors that employ residents with the same educational qualifications, whether they be Filipino, other foreign-born, or native-born. And education is also important for the employment allocation of native white and black in-migrants--only three highlighted cells for white native newcomers are off the diagonals (i.e., not within educational categories), four for native black in-migrants.

Education is not always the primary influence on newcomer employment profiles. For example, a majority of Korean residents and newcomers have at least some college education, but Korean recent arrivals at all levels of education tend to cluster in sectors where resident Koreans work. The

⁸ For example, Mexican recent arrivals are compared to Mexican residents, to all the other foreign-born excluding Mexicans, and to all resident native-born workers. And native-white in-migrants are compared to native-white residents, to all resident foreign-born workers, and to all the other native-born excluding whites.

concentration of Koreans illustrates the differential power of ethnic effects in the allocation of migrants to jobs. Whites, blacks, Chinese and Filipino newcomers are well educated and their qualifications affect where they work in the Los Angeles economy. Korean recent arrivals are also well educated, but they tend to find work in the same sectors as their co-ethnic residents. Recent arrivals in all five groups have the general resources to take advantage of labor market opportunity wherever it emerges in Los Angeles, but specific resources appear to play a much larger role in the employment of Korean newcomers than any other group.

DISCUSSION AND CONCLUSIONS

The division of labor is a key structural feature of most economies that must be engaged empirically and theoretically (Sayer and Walker 1992; Walker 1996). By studying the newest entrants to the Southern Californian economy by broad industrial category, we provide insight on the varying importance of co-ethnic job channeling among groups of foreign- and native-born recent arrivals. Overall, migrants in all groups tend to work where co-ethnic residents are employed. In other words, this research adds to the evidence that metropolitan labor markets are segmented. Moreover, migration is implicated in all this. It helps sustain the existing ethnic division of labor.

The research also highlights some shortcomings in human capital explanations of migrant employment. While education has a strong effect on the allocation of native-born white and black migrants to industries, it has a much weaker effect on where foreign-born recent arrivals work, with the exception of the Filipinos and the college-educated Chinese. Most immigrant groups channel into specific industrial sectors irrespective of educational credentials. The tendency to channel is stronger in some groups, most notably Koreans, than in others, such as Mexicans. Like newly arrived immigrants, native white and black in-migrants also find work in sectors that employ co-ethnics. In fact, their channeling is stronger than for immigrant newcomers. We think this reflects the relatively small migration streams of the native-born compared to the resident population and the absorptive power of large resident work forces rather than the vitality of ethnic networks.

While migration reinforces the ethnic division of labor in Los Angeles, the education of migrants also affects the industrial sector in which they work--notably for some groups of well-educated recent arrivals. A division of labor by education occurs within groups of native white, black, Filipino and Chinese migrants. This is not the case for Korean recent arrivals who work in the same sectors as Korean-born residents at all levels of education. In contrast, Mexican newcomers, irrespective of years in school, work in the same sectors as the least educated residents, whether they be Mexican, other foreign-born, or native-born. Thus Mexican recent arrivals do not experience an industrial division of labor by education. Nor do they cluster as much as other groups in sectors that employ co-ethnic residents. The niche for Mexican newcomers appears to be unskilled jobs wherever they may be.

Our analysis suggests a different way of exploring native-immigrant interaction in the labor market. The sectoral employment distributions of immigrant newcomers' work are distinct from those of native-white and black residents. Only recent Filipino immigrants have an employment profile close to those of whites and blacks. Mexican, Salvadoran, and Guatemalan newcomers have employment distributions most unlike those of resident native-whites and blacks. Table 5 also suggests that Mexican and Central American residents are more likely to have experienced competition for jobs than are whites or blacks. This accords with the idea that new immigration generates the most labor market competition for recently settled immigrant groups (Borjas 1990).

Ultimately, a full account of where migrants get jobs and an explanation for the division of labor between newcomers and residents cannot come from analysis of the characteristics of groups alone. Weak networks and educational differences may explain why some migrants end up working in sectors different from their co-ethnic residents. These effects almost certainly also interact with industrial restructuring and changing sectoral patterns of labor demand. Southern California has experienced elevated levels of immigration since the late 1960s. In this thirty-year period, the region's economy has undergone profound transformation, shifting from manufacturing, particularly durables, to services and entertainment (Wright and Ellis 1997). Furthermore, many of the jobs that migrants filled in the late 1960s and early 1970s are in sectors that are no longer dynamic or constitute a large share of the labor market.

Gordon's (1954) analysis of migration and the California economy in the early post World War II era included comment on the employment patterns of different waves of migrants. Those that entered the California labor market between 1940 and 1945 found work in an array of flourishing wartime industries. In contrast, those that came in the immediate post-war era confronted an economy with a much different set of opportunities as war production rapidly tailed off. Consequently, post-war arrivals found employment in different sectors than those that came just a few years before. In our view, Gordon's (1954, 17) key observation is that wartime arrivals tended to remain employed in the industries where they first got jobs rather than redistribute themselves through the California economy.

We suspect that restructuring has had similar effects on the waves of native- and foreign-born migrants entering Southern California's labor market since the 1960s. Those who came in the 1960s and 1970s faced a different mix of job opportunities than those who came in the late 1980s. The extent to which earlier arriving migrants secured niches in sectors that subsequently declined, or failed to grow as rapidly as the rest of the economy, has consequences for those who come later. In these circumstances, networks can provide only limited job assistance for recent arrivals because the co-ethnic resident employment base has limited opportunities. Moreover, the process of restructuring can render network support unstable as residents employed in sectors undergoing rapid change or decline have to scramble themselves to find work (Menjivar 1997). Mexicans are the most obvious example of this phenomenon in Los Angeles. In 1990, one in five Mexican residents worked in durable manufacturing, a sector that in the aggregate grew during the 1980s, but at a rate much below that of the region's economy. Moreover, between 1980 and 1990, this sector lost over

70,000 jobs for those with a high school education or less. So even if recent Mexican immigrants had connections to help them secure jobs in durable manufacturing, the sector had few jobs to offer to this group of migrant workers. The relative size of the Mexican migration stream would further exaggerate this mismatch. Mexican residents secured employment in durable manufacturing at a time when the sector was more dynamic, during the 1960s and 1970s, and it remained an important source of employment for resident Mexicans through 1990. The ground had shifted for Mexicans who arrived in the late 1980s. This group found employment elsewhere, in fast growth sectors such as retailing.

New patterns of residential settlement for recent waves of migrants relate to alterations in the structure of job opportunity. Immigrants who came before 1980 settled in traditional ethnic concentrations in central and east Los Angeles. Later arriving groups have gone straight to more suburban and outlying areas where the industrial structure is different. Scott (1989, 1993) has shown how firms draw on supplies of labor at much finer spatial scales than the Los Angeles metropolitan region (cf. Hanson and Pratt 1995). Workers find jobs within a relatively short distance of their homes. It follows that the difference in employment profiles between residents and newcomers of the same ethnic or national origin group is bound up with changes in the settlement patterns of successive waves of migrants. Such a process includes intrametropolitan residential mobility after initial settlement. By focusing on regional economic restructuring, the nature of local labor markets, and the settlement patterns of waves of migrants within metropolitan areas, future research can begin to link migrant employment profiles and processes to the changing contexts of reception places and the evolution of residential settlement patterns. Like Menjivar (1997), we suspect that migrant economic well-being and the effectiveness of group networks for support are contingent on local economic context.

Table 7. Indices of dissimilarity between the industrial distribution of selected (im)migrant and resident groups by education, for Los Angeles CMSA 1990.

| | | Resident Mexicans | | | Other resident foreign-born | | | Other resident native-born | | |
|----------------------------------|--------------|--------------------------|--------------|---------|------------------------------------|--------------|---------|-----------------------------------|--------------|---------|
| | | HS and less | Some College | College | HS and less | Some College | College | HS and less | Some College | College |
| Recent Mexican immigrants | HS and less | 17.21 | 31.79 | 43.43 | 19.81 | 36.99 | 49.79 | 27.24 | 41.69 | 57.82 |
| | Some College | 15.89 | 27.53 | 39.84 | 15.09 | 32.74 | 45.53 | 22.90 | 36.28 | 53.07 |
| | College | 19.32 | 15.80 | 28.05 | 17.33 | 20.66 | 33.54 | 15.56 | 24.32 | 41.27 |

| | | Resident Salvadorans | | | Other resident foreign-born | | | Other resident native-born | | |
|-------------------------------------|--------------|-----------------------------|--------------|---------|------------------------------------|--------------|---------|-----------------------------------|--------------|---------|
| | | HS and less | Some College | College | HS and less | Some College | College | HS and less | Some College | College |
| Recent Salvadoran immigrants | HS and less | 13.80 | 30.24 | 37.25 | 20.57 | 37.04 | 49.87 | 32.43 | 41.12 | 57.10 |
| | Some College | 14.69 | 19.46 | 26.03 | 20.60 | 26.60 | 40.75 | 26.75 | 31.02 | 48.04 |
| | College | 28.27 | 27.53 | 40.00 | 23.00 | 32.40 | 46.16 | 27.94 | 37.18 | 54.13 |

| | | Resident Filipinos | | | Other resident foreign-born | | | Other resident native-born | | |
|-----------------------------------|--------------|---------------------------|--------------|---------|------------------------------------|--------------|---------|-----------------------------------|--------------|---------|
| | | HS and less | Some College | College | HS and less | Some College | College | HS and less | Some College | College |
| Recent Filipino immigrants | HS and less | 15.59 | 28.90 | 43.48 | 22.07 | 19.77 | 28.12 | 20.47 | 28.40 | 38.98 |
| | Some College | 16.80 | 12.92 | 25.07 | 34.68 | 17.75 | 22.98 | 20.89 | 21.86 | 33.41 |
| | College | 23.70 | 13.32 | 16.13 | 41.71 | 21.52 | 17.22 | 29.01 | 22.00 | 27.34 |

| | | Resident Guatemalans | | | Other resident foreign-born | | | Other resident native-born | | |
|--|-------------|-----------------------------|--------------|---------|------------------------------------|--------------|---------|-----------------------------------|--------------|---------|
| | | HS and less | Some College | College | HS and less | Some College | College | HS and less | Some College | College |
| | HS and less | 13.92 | 31.00 | 36.53 | 22.71 | 38.41 | 51.81 | 33.41 | 42.98 | 59.25 |

| | | | | | | | | | | |
|-------------------------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Recent Guatemalan immigrants | Some College | 21.84 | 21.84 | 29.82 | 21.64 | 27.94 | 40.79 | 25.72 | 34.41 | 47.08 |
| | College | 39.91 | 43.47 | 47.80 | 41.02 | 39.18 | 41.04 | 43.56 | 40.30 | 42.74 |

| | | Resident Koreans | | | Other resident foreign-born | | | Other resident native-born | | |
|---------------------------------|--------------|-------------------------|--------------|---------|------------------------------------|--------------|---------|-----------------------------------|--------------|---------|
| | | HS and less | Some College | College | HS and less | Some College | College | HS and less | Some College | College |
| Recent Korean immigrants | HS and less | 10.73 | 19.97 | 34.93 | 21.86 | 36.22 | 50.05 | 26.30 | 39.45 | 56.41 |
| | Some College | 13.94 | 16.81 | 31.49 | 25.65 | 32.99 | 45.50 | 23.94 | 35.32 | 51.86 |
| | College | 22.30 | 14.67 | 20.39 | 30.22 | 26.02 | 38.77 | 25.29 | 30.40 | 46.41 |

| | | Resident Chinese | | | Other resident foreign-born | | | Other resident native-born | | |
|----------------------------------|--------------|-------------------------|--------------|---------|------------------------------------|--------------|---------|-----------------------------------|--------------|---------|
| | | HS and less | Some College | College | HS and less | Some College | College | HS and less | Some College | College |
| Recent Chinese immigrants | HS and less | 15.84 | 36.29 | 52.15 | 29.56 | 41.30 | 52.77 | 37.60 | 47.54 | 59.52 |
| | Some College | 24.91 | 28.14 | 40.96 | 30.36 | 32.36 | 43.63 | 30.67 | 36.70 | 51.60 |
| | College | 45.09 | 23.57 | 21.17 | 39.84 | 24.37 | 23.33 | 28.95 | 25.50 | 20.91 |

| | | Resident Whites | | | Other resident foreign-born | | | Other resident native-born | | |
|--------------------------------|--------------|------------------------|--------------|---------|------------------------------------|--------------|---------|-----------------------------------|--------------|---------|
| | | HS and less | Some College | College | HS and less | Some College | College | HS and less | Some College | College |
| Recent White immigrants | HS and less | 7.37 | 19.64 | 39.83 | 26.79 | 20.40 | 34.33 | 16.89 | 27.20 | 43.17 |
| | Some College | 13.48 | 5.78 | 25.48 | 27.76 | 9.80 | 19.94 | 12.48 | 15.44 | 30.77 |
| | College | 30.48 | 18.40 | 7.89 | 42.14 | 21.23 | 13.71 | 28.53 | 21.33 | 18.22 |

| | | Resident Blacks | | | Other resident foreign-born | | | Other resident native-born | | |
|---------------------------------|--------------|------------------------|--------------|---------|------------------------------------|--------------|---------|-----------------------------------|--------------|---------|
| | | HS and less | Some College | College | HS and less | Some College | College | HS and less | Some College | College |
| Recent Black in-migrants | HS and less | 9.88 | 18.12 | 32.83 | 28.85 | 14.35 | 25.78 | 15.20 | 12.47 | 30.41 |
| | Some College | 13.83 | 12.30 | 26.44 | 40.47 | 17.02 | 23.58 | 25.51 | 14.17 | 27.64 |
| | College | 26.45 | 17.27 | 19.84 | 48.03 | 24.48 | 15.03 | 34.34 | 20.61 | 14.01 |

Note: Highlighted numbers identify the three lowest indices of dissimilarity across each row

REFERENCES

- Bailey, T., and R. Waldinger. 1991. Primary, Secondary, and Enclave Markets: A Training Systems Approach. *American Sociological Review* 56 (4): 432-55.
- Borjas, G. J. 1990. *Friends or Strangers*. New York: Basic Books.
- Boyd, M. 1989. Family and Personal Networks in International Migration: Recent Developments and New Agendas. *International Migration Review* 23 (3): 638-70.
- Bozorgmehr, M., Der-Martirosian, C., and G. Sabagh. 1996. Middle Easterners: A New Kind of Immigrant. Pp. 345-78 in *Ethnic Los Angeles*, ed. R. Waldinger and M. Bozorgmehr. New York: Russell Sage.
- Butcher, Kristin F. 1994. Black Immigrants in the United States: A Comparison with Native Blacks and Other Immigrants. *Industrial and Labor Relations Review* 47 (2): 265-84.
- Ellis M., and R. Wright. 1997. When Immigrants are Not Migrants: Counting Arrivals of the Foreign-Born Using the U.S. Census. *International Migration Review*. Forthcoming
- Ettlinger, N., and S. Kwon. 1994. A Comparative Assessment of the Role of Immigrants in U.S. Urban Labor Markets: A Case Study of Asians in New York and Los Angeles. *Tijdschrift voor Economische en Sociale Geografie* 85 (5): 417-33.
- Fernandez-Kelly, M. P. 1995. Social and Cultural Capital in the Ghetto: Implications for the Economic Sociology of Immigration. Pp. 213-47 in *The Economic Sociology of Immigration*, ed. A. Portes. New York: Russell Sage.
- Filer, R. 1992. The Effect of Immigrant Arrivals on Migratory Patterns of Native Workers. Pp. 245-70 in *Immigration and the Work Force: Economic Consequences for the United States and Source Areas*, ed. G. J. Borjas and R. B. Freeman. Chicago: University of Chicago Press.
- Frey, W. 1995. Immigration and Internal Migration: Flight' from U.S. Metropolitan Areas: Toward a New Demographic Balkanization. *Urban Studies* 32: 733-57.
- Gold, S. 1994. Patterns of Economic Cooperation among Israeli Immigrants in Los Angeles. *International Migration Review* 28: 114-35.

- Gordon, M. 1954. *Employment Expansion and Population Growth. The California Experience: 1900-1950*. Berkeley: University of California Press.
- Granovetter, M. 1985. Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology* 91: 481-510.
- Hanson, S., and G. Pratt. 1995. *Gender, Work, and Space*. London and New York: Routledge.
- Johnson, J. H., Jr., and C. Roseman. 1990. Increasing Black Outmigration from Los Angeles: The Role of Household Dynamics and Kinship Systems. *Annals of the Association of American Geographers* 80 (2): 205-22.
- Lieberson, S. 1980. *A Piece of the Pie*. Berkeley and Los Angeles: University of California Press.
- Light, I., and E. Bonacich. 1988. *Ethnic Entrepreneurs: Koreans in Los Angeles, 1965-83*. Berkeley: University of California Press.
- Light, I., and C. Rosenstein. 1995. Expanding the Interaction Theory of Entrepreneurship. Pp. 166-212 in *The Economic Sociology of Immigration*, ed. A. Portes. New York: Russell Sage.
- Lopez, D.E., E. Popkin, and E. Telles. 1996. Central Americans: At the Bottom, Struggling to Get Ahead. Pp. 279-304 in *Ethnic Los Angeles*, ed. R. Waldinger and M. Bozorgmehr. New York: Russell Sage.
- Mahler S. J. 1995. *American Dreaming: Immigrant Life on the Margins*. Princeton: Princeton University Press.
- Massey, D. S. 1988. Economic Development and International Migration in Comparative Perspective. *Population and Development Review* 14(3): 383-413.
- Massey, D. S., et al. 1987. *Return to Aztlan: The Social Process of International Migration from Western Mexico*. Berkeley: University of California Press.
- McHugh, K. E. 1988. Determinants of Black Interstate Migration 1965-70 and 1975-80. *Annals of Regional Science* 22: 36-48.
- Menjívar, C. 1997. Immigrant Kinship Networks and the Impact of the Receiving Context: Salvadorans in San Francisco in the Early 1990s. *Social Problems* 44 (1): 104-23.

- Model, S. 1993. The Ethnic Niche and the Structure of Opportunity: Immigrants and Minorities in New York City. Pp. 161-93 in *The Underclass Debate*, ed. M. B. Katz. Princeton, N.J.: Princeton University Press.
- Portes, A., and R. L. Bach 1985. *Latin Journey: Cuban and Mexican Immigrants in the United States*. Berkeley: University of California Press.
- Portes, A., and R. Rumbaut 1996. *Immigrant America*. 2nd Edition. Berkeley and Los Angeles: University of California Press.
- Portes, A., and M. Zhou. 1992. Gaining the Upper Hand: Economic Mobility among Immigrant and Domestic Minorities. *Ethnic and Racial Studies* 15 (4): 491-522.
- Sayer, A., and R. Walker. 1992. *The New Social Economy: Reworking the Division of Labor*. Cambridge, MA: Basil Blackwell.
- Scott, A. J. 1989. *Metropolis: From the Division of Labor to Urban Form*. Berkeley and Los Angeles: University of California Press.
- Scott, A. J. 1993. *Technopolis: High-Technology Industry and Regional Development in Southern California*. Berkeley and Los Angeles: University of California Press.
- Tseng, Yen-Fen. 1994. Chinese Ethnic Economy: San Gabriel Valley, Los Angeles County. *Journal of Urban Affairs* 16: 169-89.
- U.S. Bureau of the Census. 1993. *1990 Census of Population Public-Use Micro-Data Sample*. Washington D.C.: Government Printing Office.
- Waldinger, R. 1996. *Still The Promised City? African Americans and New Immigrants in Postindustrial New York*. Cambridge, MA: Harvard University Press.
- Waldinger, R., and M. Bozorgmehr, eds. 1996. *Ethnic Los Angeles*. New York: Russell Sage.
- Walker, R. 1996. For Better or Worcester: Reflections on Gender, Work, and Space. *Antipode* 28 (4): 329-37.
- White, M. J., and Y. Imai. 1994. The Impact of U.S. Immigration upon Internal Migration. *Population and Environment* 15: 189-209.

Wright, R., and M. Ellis. 1996. Immigrants and the Changing Racial/Ethnic Division of Labor in New York City, 1970-1990. *Urban Geography* 17 (4): 317-53.

Wright, R., and M. Ellis. 1997. Nativity, Ethnicity, and the Evolution of the Intra-urban Division of Labor in Los Angeles. *Urban Geography*. 18 (3). Forthcoming.

Wright, R., M. Ellis, and M. Reibel. 1997. The Linkage between Immigration and Internal Migration in Large Metropolitan Areas in the United States. *Economic Geography* 73 (2): 232-52