Where Do the New U.S. Immigrants Live?

Ann P. Bartel

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Ann P. Bartel, *Columbia University and National Bureau of Economic Research*

Analyzing the location choices of the post-1964 U.S. immigrants results in three main findings: (1) these immigrants are more geographically concentrated than natives of the same age and ethnicity and reside in cities with large ethnic populations; (2) education plays a key role in location choice, reducing geographic concentration and the likelihood of being in cities with a high concentration of fellow countrymen and increasing the probability of changing locations after arrival in the Unites States; (3) internal migration within the United States occurs more frequently among immigrants than natives and facilitates the process of assimilation for the more educated individuals.

I. Introduction

The 1965 amendments to the Immigration and Nationality Act abolished the national origins quota system and replaced it with an ethnic-blind preference system. The process by which the immigrants admitted under these new rules have become integrated into American society has been the subject of much research. Economists, sociologists, and demographers have examined the economic status (e.g., Chiswick 1978, 1979; DeFreitas

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1979, 1982; Borjas 1985), fertility (e.g., Jaffee and Cullen 1975; Kritz and Gurak 1976), residential segregation (e.g., Massey 1979, 1981), and political participation (e.g., Buehler 1977) of these new immigrants. An obvious aspect of the assimilation process of the new immigrants into American society are their settlement patterns in this country. To date, however, almost no research exists on this subject. While researchers have studied the existence of residential segregation within an urban area, no one has yet conducted a comprehensive study of location choice for the new immigrants.[1] Utilizing data from the 5% Public Use Sample of the 1980 Census of Population, this article will address the following questions. (1) Where do the new immigrants first locate in the United States? (2) What variables can explain these location choices? (3) How do the location decisions of the various ethnic groups in the immigrant population differ from each other? (4) As time in the United States elapses, do immigrants change locations, and, if so, does internal migration lead to increased geographic dispersion?

The study of the geographic distribution of U.S. immigrants has a number of important policy implications. First, in order to forecast regional needs for funding to provide economic and social services to the new immigrants, policymakers need information on the determinants of the immigrants' location choices. The results of my analysis will aid in predicting which cities can expect to receive future immigrants as well as earlier arrivals who are relocating within the United States. Second, my analysis can help in the design of policies to prepare for, and adjust to, the societal impact of immigration to the United States. If it is shown that immigrants tend to cluster where their countrymen are located, planners in these cities may need to design bilingual or even multilingual programs to implement the delivery of services; this could, in turn, lead to a more permanently segregated U.S. society.

In the next section, the 1980 geographic distributions of the new immigrants are presented. In Section III, a cross-sectional model of the determinants of location choice is estimated. It is shown that the main determinant of the recent immigrant's location choice is the percentage of his ethnic group that resides in a standard metropolitan statistical area (SMSA). In Section IV, internal migration within the United States is studied, and it is shown that the more educated immigrants are significantly

[1] One exception is a paper by Vasegh-Daneshvary, Herzog, and Schlottman (1985) that analyzed the 1980 interstate distribution of college-educated immigrants who arrived between 1970 and 1974. This study is extremely limited because it looks at a very small percentage of the new immigrant population. A study was conducted by Dunlevy (1980) that examined the intended versus lifetime settlement patterns of the ninteenth-centurty European immigrants to the United States. Dunlevy found that most of these immigrants initially settled in New York City and then spread out throughout the United States.

more likely to make a relocation decision after their initial choice of location. The impact of this mobility on assimilation is explored. Conclusions and policy implications are discussed in Section V.

II. 1980 Geographic Distributions of Various Immigrant Groups

The first step in the analysis is to examine the geographic distribution of the new immigrants in order to see if there are patterns or trends that require further study. The analysis is restricted to individuals who reside in SMSAs. It is more appropriate to use SMSAs than states as the location unit because in the economic model of location choice the key determinants of that choice are labor market conditions. Standard metropolitan statistical areas are generally viewed as close approximations to homogeneous labor markets. Three samples of male immigrants (not residing in group quarters) were selected from the 5% Public Use B-Sample of the 1980 Census of Population: (1) individuals aged 22–54 in 1980 who arrived in the United States between 1975 and 1979, (2) individuals ages 27–59 in 1980 who arrived in the United States between 1970 and 1974, and (3) individuals aged 32–64 in 1980 who arrived in the United States between 1965 and 1969. These selection rules result in a sample of immigrants who were approximately the same age when they arrived in the United States. In 1980, we are observing the "initial" location choices of the 1975–79 arrivals while for the other two groups we are observing "initial" location choices for individuals who are still in their first SMSA, and "subsequent" location choices for those who have changed locations in the United States. The location choice set is defined as the 25 largest SMSAs plus four regional groupings of all the remaining SMSAs in the United States.[2] This results in a choice set of 29 locations.

Table 1 shows the 1980 distribution of the male immigrants aged 22–54 who arrived in this country between 1975 and 1979. As a frame of reference, the table also shows each location's share of the total population. In column 1 the distribution across the 29 locations of immigrants from all countries is shown. Columns 2–4 show the distributions for three ethnic groups: Asians, Hispanics, and Europeans. Below each column, I report the coefficient of geographic association, an index that geographers use to compare the geographic distributions of different groups.[3] The G coefficient is given by the formula

$$G = \{\sum f_i\}/100, \tag{1}$$

[2] Washington is deleted from the analysis in order to exclude diplomats whose location behavior requires a unique model. Admittedly, only the diplomats in Washington could be deleted from my sample, but this procedure led to a small number of immigrants remaining in the Washington, D.C., sample.

[3] See Haggett, Cliff, and Frey (1977) for a discussion of the index.

Table 1
1980 Geographic Distribution of Male Immigrants Aged 22–54 Who Arrived between 1975 and 1979

	SMSA's Share of Total Population	All Countries (N = 7,763) (1)	Asians (N = 2,742) (2)	Hispanics (N = 2,925) (3)	Europeans (N = 979) (4)
SMSA:					
1. Anaheim	1.2	3.2	3.0	4.5	1.9
2. Atlanta	1.2	.6	.8	.3	.9
3. Baltimore	1.3	.6	.5	.2	.9
4. Boston	1.7	2.1	2.1	1.3	3.4
5. Chicago	4.3	6.7	6.3	7.3	8.2
6. Cleveland	1.1	.5	.6	.1	1.4
7. Dallas	1.8	2.1	1.7	3.1	.6
8. Denver	.9	.7	.9	.5	.7
9. Detroit	2.6	1.2	2.0	.2	1.7
10. Houston	1.8	4.1	3.6	5.6	1.6
11. Los Angeles	4.5	19.4	18.3	26.7	8.0
12. Miami	1.0	3.5	.7	7.0	1.8
13. Minneapolis/St. Paul	1.3	.7	1.2	.2	1.0
14. Nassau/Suffolk	1.6	.7	.4	.5	2.3
15. Newark	1.2	1.7	1.0	1.5	3.9
16. New York	5.5	13.5	11.1	14.5	15.3
17. Philadelphia	2.8	1.7	1.8	.5	3.4
18. Phoenix	.9	.6	.3	.9	.6
19. Pittsburgh	1.4	.3	.5	.1	.3
20. Riverside	.9	.8	.5	1.1	.3
21. St. Louis	1.4	.3	.3	.1	.2
22. San Diego	1.1	1.9	2.5	1.6	1.2
23. San Francisco	2.0	4.8	8.4	2.3	3.6
24. Seattle	1.0	1.0	1.7	.2	1.1
25. Tampa	.9	.4	.3	.3	.6
All other SMSAs in:					
26. Northeast	11.0	6.4	5.9	3.8	15.1
27. North Central	14.4	4.4	6.2	1.6	5.1
28. South	20.5	7.6	7.9	6.1	8.8
29. West	8.9	8.4	9.5	8.1	5.8
Coefficients of geographic association:					
a. Immigrants	...	.372	.348	.501	.308
b. Natives of same ethnicity*	...	.270**	.563	.363	.064
% outside the top 25 SMSAs:					
a. Immigrants	...	26.8	29.5	19.6	34.8
b. Natives of same ethnicity*	...	49.2	31.7	49.8	56.9

* Natives are males aged 22–54.
** Refers to all natives.

where f_i is the deviation between the group's share in SMSA i and the total population share in SMSA i, and only positive deviations are summed. Geographers refer to groups with high values of G as "localized"; those with values close to zero follow the general distribution of the population.[4] The G coefficient is calculated for the immigrants and, for comparison, natives of the same age and similar ethnicity.[5] In addition, the percentages of immigrants and natives outside the 25 largest SMSAs are also shown below each column.

Column 1 shows that the male immigrants who arrived between 1975 and 1979 are more geographically concentrated than natives of the same age, as measured by the G index. They are also much more likely to be concentrated in the 25 largest SMSAs; while three-quarters of the immigrants reside in one of these cities, only 50% of the natives are located here.

Distinguishing the immigrants according to their ethnicity shows important differences. The G coefficients for the Asians and Europeans are lower than the index for the Hispanics. The Hispanics are also more concentrated in the top 25 SMSAs, with only 19.6% of them outside these SMSAs, compared to 29.5% and 34.8% for the Asians and Europeans, respectively. While the Hispanics stand out when compared to the other immigrants, the Asians are unique when immigrants are compared to natives of the same ethnicity; the Asian immigrants are actually less geographically concentrated than their native counterparts.

Table 2 shows the 1980 geographic distribution of the 1970–74 immigrants, that is, 5–10 years after their arrival in this country, and table 3 shows the 1980 geographic distribution of the 1965–69 immigrants some 10–15 years after their arrival in the Unites States. Comparing the G indices in tables 1, 2, and 3 shows remarkable stability in the degree of localization of the different ethnic groups. For each cohort, the Hispanic immigrants are more geographically concentrated than the Asians and Europeans and are less likely to be residing outside the top 25 SMSAs. Some cities are always popular with particular ethnic groups. Asians are most likely to be found in Los Angeles, New York, and San Francisco. Hispanics are mainly in Los Angeles, Miami, and New York. European immigrants are primarily located in New York and other northeastern cities.

Finally, table 4 presents measures of dispersion calculated separately by education category for each of the immigrant groups in each of the three cohorts. Three education categories have been defined: (1) less than 12 years, (2) 12 years, and (3) more than 12 years. These numbers show that education plays a significant role in the degree of geographic concentration

[4] I have consulted with a number of statisticians and no one has been able to come up with a test of significance for the G coefficient. Therefore, we can only compare the numerical differences in the coefficients remembering that G lies between zero and one.

[5] European immigrants are compared to white, non-Hispanic natives.

Table 2
1980 Geographic Distribution of Male Immigrants Aged 27–59 Who Arrived between 1970 and 1974

	SMSA's Share of Total Population	All Countries (N = 5,362) (1)	Asians (N = 1,473) (2)	Hispanics (N = 2,452) (3)	Europeans (N = 929) (4)
SMSA:					
1. Anaheim	1.2	2.3	2.9	2.6	.4
2. Atlanta	1.2	.5	.5	.1	.8
3. Baltimore	1.3	.6	1.4	.2	.8
4. Boston	1.7	1.8	1.8	.6	4.5
5. Chicago	4.3	7.9	8.4	7.3	9.5
6. Cleveland	1.1	.6	1.0	...	1.8
7. Dallas	1.8	1.6	1.6	1.6	1.2
8. Denver	.9	.6	.5	.6	.5
9. Detroit	2.6	1.6	2.9	.2	3.1
10. Houston	1.8	2.9	3.1	3.8	.5
11. Los Angeles	4.5	18.4	15.7	26.3	5.8
12. Miami	1.0	4.3	.7	7.7	1.6
13. Minneapolis/St. Paul	1.3	.4	.5	.1	.8
14. Nassau/Suffolk	1.6	1.0	.9	1.0	1.7
15. Newark	1.2	2.5	2.0	2.1	5.2
16. New York	5.5	19.2	17.0	18.9	23.7
17. Philadelphia	2.8	1.5	2.4	.3	3.0
18. Phoenix	.9	.7	.3	.9	.8
19. Pittsburgh	1.4	.4	.7	.1	.9
20. Riverside/San Bernardino	.9	.8	.7	1.0	.2
21. St. Louis	1.4	.3	.6	...	.5
22. San Diego	1.1	1.3	1.4	1.7	.5
23. San Francisco	2.0	3.8	8.2	2.1	1.4
24. Seattle	1.0	.6	1.4	.1	.8
25. Tampa	.9	.3	.1	.2	.5
All other SMSAs in:					
26. Northeast	11.0	8.3	5.7	5.3	18.9
27. North Central	14.4	2.8	3.9	1.3	3.7
28. South	20.5	6.0	5.6	7.0	2.9
29. West	8.9	7.0	8.1	7.0	4.0
Coefficient of geographic association:					
a. Immigrants	...	.403	.382	.502	.416
b. Natives of same ethnicity*	...	.270**	.572	.365	.073
% outside the top 25 SMSAs:					
a. Immigrants	...	24.1	23.3	20.6	29.5
b. Natives of same ethnicity*	...	48.9**	29.8	49.4	57.2

* Natives are males aged 27–59.
** Refers to all natives.

Table 3
1980 Geographic Distribution of Male Immigrants Aged 32–64 Who Arrived between 1965 and 1969

	SMSA's Share of Total Population	All Countries (N = 4,078) (1)	Asians (N = 808) (2)	Hispanics (N = 1,751) (3)	Europeans (N = 1,089) (4)
SMSA					
1. Anaheim	1.2	1.9	4.1	1.1	1.5
2. Atlanta	1.2	.5	.5	.2	.7
3. Baltimore	1.3	.5	.9	.3	.6
4. Boston	1.7	2.3	2.1	1.1	4.3
5. Chicago	4.3	6.7	7.3	6.1	8.6
6. Cleveland	1.1	.6	.2	.1	1.6
7. Dallas	1.8	.9	1.0	1.0	.6
8. Denver	.9	.3	.4	.1	.3
9. Detroit	2.6	1.9	3.2	.2	3.9
10. Houston	1.8	2.0	2.5	2.6	.8
11. Los Angeles	4.5	14.4	14.4	19.7	6.2
12. Miami	1.0	8.1	.4	16.1	1.4
13. Minneapolis/St. Paul	1.3	.2	.4	.1	.3
14. Nassau/Suffolk	1.6	1.7	1.1	.4	2.6
15. Newark	1.2	2.7	1.7	2.5	4.0
16. New York	5.5	19.6	12.3	23.5	19.7
17. Philadelphia	2.8	1.4	2.1	.5	2.3
18. Phoenix	.9	.5	.5	.2	.7
19. Pittsburgh	1.4	.4	.5	. . .	1.0
20. Riverside/San Bernardino	.9	.7	.6	.6	.9
21. St. Louis	1.4	.3	.7	.1	.5
22. San Diego	1.1	1.5	1.7	1.3	1.7
23. San Francisco	2.0	5.1	13.9	2.7	3.0
24. Seattle	1.0	.7	.9	. . .	1.5
25. Tampa	.9	.7	.1	.9	.5
All other SMSAs in:					
26. Northeast	11.0	10.1	6.3	7.1	17.3
27. North Central	14.4	3.3	6.4	.9	4.0
28. South	20.5	6.0	6.6	5.7	4.5
29. West	8.9	5.1	7.3	3.8	5.1
Coefficient of geographic association:					
a. Immigrants	. . .	.404	.375	.525	.377
b. Natives of same ethnicity*	. . .	.270**	.584	.364	.067
% outside the top 25 SMSAs:					
a. Immigrants	. . .	24.5	26.6	17.5	30.9
b. Natives of same ethnicity*	. . .	48.4**	31.5	48.6	55.7

* Natives are males aged 32–64.
** Refers to all natives.

Table 4
Measures of Dispersion by Education Group

	Asians (1)	Hispanics (2)	Europeans (3)
I. Coefficients of geographic association:			
A. 1975–79 arrivals:			
1. EDUC < 12	.366	.540	.448
2. EDUC = 12	.420	.538	.341
3. EDUC > 12	.340	.438	.272
B. 1970–74 arrivals:			
1. EDUC < 12	.529	.509	.524
2. EDUC = 12	.497	.536	.458
3. EDUC > 12	.354	.513	.330
C. 1965–69 arrivals:			
1. EDUC < 12	.527	.554	.466
2. EDUC = 12	.519	.571	.407
3. EDUC > 12	.340	.523	.298
II. % outside the 25 SMSAs:			
A. 1975–79 arrivals:			
1. EDUC < 12	29.9	19.5	33.0
2. EDUC = 12	23.4	15.0	32.4
3. EDUC > 12	30.8	24.0	36.8
B. 1970–74 arrivals:			
1. EDUC < 12	16.0	21.4	29.1
2. EDUC = 12	15.6	18.7	28.0
3. EDUC > 12	25.5	19.6	31.2
C. 1965–69 arrivals:			
1. EDUC < 12	21.9	19.0	31.9
2. EDUC = 12	17.8	14.7	27.4
3. EUDC > 12	28.9	16.7	32.1

NOTE.—EDUC = years of education.

of all of the Asian and European immigrants, and in the case of the Hispanics, for the recent arrivals only. Immigrants (in these groups) with more than a high-school education are more dispersed and are more likely to be residing outside the 25 largest SMSAs than those with less education.

III. Cross-sectional Analysis of 1980 Location Choices

In this section, an econometric model is specified that can be used to explore the determinants of the 1980 geographic distributions that were presented in Section II. Part A describes the multinomial logit framework and the variables that are used in the empirical analysis, and part B presents the results.

A. The Multinomial Logit Framework

Assume that an individual has a set of N possible location choices and that there is a given level of utility, U_{ij}, for individual i at location j. The individual will compare the utilities associated with each of the N locations

and choose that location in which the utility is largest. Hence the probability that individual i chooses location j is given by

$$P_{ij} = P(U_{ij} = \text{MAX}[U_{i1}, U_{i2}, \ldots U_{iN}]). \tag{2}$$

In order to estimate equation (2), information is needed on the utility levels in each of the N locations. Utility levels are impossible to observe, however; hence, an alternative approach is to specify those variables that determine utility in each location. The individual's utility level at each location will be a function of a set of location characteristics, L_{ij}, and a set of personal attributes, X_{ij}. Assuming a linear relationship results in

$$U_{ij} = \alpha L_{ij} + \beta X_{ij} + e_{ij}, \tag{3}$$

where α and β are the parameters to be estimated, and e_{ij} is the error term. For convenience, rewrite equation (3) as

$$U_{ij} = \gamma Z_{ij} + e_{ij}, \tag{4}$$

where

$$Z_{ij} = [L_{ij}, X_{ij}],$$

and

$$\gamma = [\alpha, \beta].$$

Using equation (4) we can write the probability of choosing location j as

$$\begin{aligned} P_{ij} = P(&Z_{ij} + e_{ij} > Z_{i1} + e_{i1}, Z_{ij} + e_{ij} > Z_{i2} + e_{i2} \ldots \\ &\ldots Z_{ij} + e_{ij} > Z_{iN} + e_{iN}). \end{aligned} \tag{5}$$

It has been shown (McFadden 1973) that if the e's are all assumed to be independently identically distributed Weibull, then (5) can be rewritten as

$$P_{ij} = \exp(Z_{ij}\gamma) / \sum_{n=1}^{N} \exp(Z_{in}\gamma). \tag{6}$$

Equation (6) is the likelihood function for any individual i observed to be in location j. The log of this likelihood function can be summed across all individuals and maximized with respect to the γ's. The resulting estimates

of γ provide information on the impact of the vector of Z variables in a particular location on the underlying utility level that the individual associates with that particular location. If a variable in Z_{ij} increases utility, its estimated coefficient will be positive, that is, it has a positive effect on the probability that a location is chosen over all the alternative locations.

Tables 1, 2, and 3 in the previous section showed that the percent distributions of successive immigrant cohorts are very similar. This suggests that a location characteristic that is likely to be a key determinant of the utility level of each locations is the percentage of the particular ethnic population that resides in that location in 1980. This variable is calculated from the 1980 Census of Population for the three ethnic groups and is labeled PCETH. Similarly, distance from the country of origin should affect utility levels since distance will be correlated with the financial, psychic, and information-gathering costs of relocating in a new country.[6] This is especially relevant for the most recent arrivals in the United States who are observed in 1980 in their initial U.S. locations. Data on air distances between each of the foreign countries and each of the SMSAs (DISTANCE) are obtained from Fitzpatrick and Modlin (1986). A third locational characteristic affecting utility levels is population (POP), which is likely to be correlated with job opportunities and general economic activity. Finally, in previous research on migration,[7] economic characteristics such as wage levels, unemployment rates, and welfare benefits have been studied as determinants of location choice. While these variables are included in the equations I estimate, their signs cannot be predicted. These variables should not have consistent effects on location choice because geographic wage and unemployment differences are known to persist in equilibrium and, hence, are likely to be utility equalizing. The measures used are WAGE, the average wage rate in the SMSA, calculated from the 1980 Public Use Sample for native-born males ages 20–64 residing in the SMSA who reported earnings, hours per week, and weeks worked per year; UNRATE, the unemployment rate of males 20–64 years old in the SMSA; and GENAST, the average monthly general assistance payment per recipient, calculated from the *Public Assistance Statistics*.[8]

The data presented in the previous section of this article also demon-

[6] It is likely that PCETH and DISTANCE will be highly correlated since the costs associated with distance will have had similar impacts on the geographic distributions of earlier waves of immigrants. Hence, we may not observe a significant effect of DISTANCE when PCETH is included in the equation.

[7] See Greenwood's (1975) survey that summarizes research on internal migration in the United States.

[8] The acronym GENAST is a proxy for the level of social services in the SMSA and is likely to be highly correlated with the local tax burden. As such, it measures the generosity of welfare payments net of the offsetting impact of tax burden. See U.S. Department of Health, Education, and Welfare (1970).

strated the importance of personal attributes in determining the utility levels of a location. Ethnic differences were found to be a dominant pattern in the data. It is possible that these differences reflect the location choices of earlier immigrants from the same origin and would therefore be captured by the PCETH variable. Or, different ethnic groups may have unique responses to the location variables (e.g., some groups rely more heavily on PCETH), suggesting an independent role for the ethnicity variable; to account for this, equation (6) is estimated separately for each ethnic group. Second, as we saw in table 4, there is a relationship between education level and the degree of geographic concentration of each immigrant group. In the multinomial logit framework utilized here, education will play an independent role if individuals of different education leveles have distinct utility values for the location choices. This could happen if some cities have amenities and lifestyles that are more appealing to more educated individuals or if education influences the impact of the location characteristics on the location's utility level (e.g., more educated individuals place less weight on the stock of fellow ethnics or face lower costs in acquiring information about locations that are far from their country of origin.)

A third personal attribute to consider is the amount of time the immigrant has lived in the United States. Although the data in tables 1, 2, and 3 show that the geographic distributions of successive immigrant cohorts are very similar, some differences were observed, suggesting that the earlier arrivals may have moved from their initial locations in the United States or, in the absence of such mobility, that there are indeed cohort differences in *initial* location choices.[9] If subsequent mobility does occur, we would expect to see a decrease in the importance of the PCETH variable as immigrants become more assimilated into American society. In the cross-section, this would be observed as a smaller impact of PCETH on the 1980 location choices of the 1965–69 arrivals as compared to the later arrivals, and, possibly, a weaker effect for the 1970–74 arrivals compared to the 1975–79 cohort. In addition, we would expect the distance variable to become less important (i.e., have a weaker negative effect) as time spent in the United States enables the immigrant to learn about locations that are distant from the port of entry.[10]

These hypotheses regarding the impact of experience in the United States should ideally be tested on a longitudinal sample of immigrants. In the 1980 Public Use Sample, half of the immigrants who arrived prior to 1975 were questioned regarding their U.S. location in 1975; thus a 1975–80

[9] For example, among the Asians, San Francisco is more popular for the 1965–69 arrivals, while Los Angeles is a more frequent choice for the 1975–79 arrivals. Among the Hispanics and Europeans, New York is less frequently chosen by the 1975–79 arrivals than the earlier cohorts and Los Angeles has become more popular.

[10] This is precisely what Dunlevy (1980) found in his study of nineteenth-century immigrants.

panel can be constructed for this group, and their mobility behavior will be studied in the next section of the article. The cross-sectional approach used in this section also allows the hypotheses to be studied since earlier arrivals will have acquired more U.S. experience by 1980. Simulating a panel through a cross-sectional analysis will be biased, however, if there are cohort differences in unobserved quality that are uncorrelated with trends in educational attainment.[11]

B. 1980 Cross-Section Results

Table 5 presents the results of estimating the multinomial logit model on the 1980 cross section for each of the three ethnic groups within each of the three cohorts.[12] The main result is that PCETH is positive and significant in all nine equations, even for immigrants who arrived 10–15 years ago. As predicted, PCETH is the most important regressor in all of the equations. DISTANCE has a negative and significant effect for the Hispanics only; for the other ethnic groups, DISTANCE was negative and significant when PCETH was deleted from the equation. There is no evidence from table 5 that experience in the United States reduces the immigrant's reliance on the location of fellow ethnics in choosing his U.S. location. Of course, this may reflect biases resulting from cohort trends in unobserved quality, and, as explained earlier, the role of experience is best studied in the context of a panel sample.

The effect of education on location choice was examined by adding interaction terms of education with each of the location characteristics.[13] Only the interactions with PCETH proved to be significant and they are reported in table 6 along with the corresponding coefficient on PCETH itself. The results show that the impact of PCETH on location choice is weaker for the more educated Asian and European immigrants. This is consistent with the notion that the more educated individuals need not rely on the location of fellow ethnics in order to adapt to U.S. society. We have already seen in table 4 that this process results in greater geographic dispersion among the more educated Asian and European immigrants.[14]

[11] Chiswick (1986) shows how changes in U.S. immigration policy contributed to cohort differences in the educational attainment of post-1964 arrivals.

[12] Since a substantial number of Vietnamese refugees arrived in this country in 1975, it could be argued that the composition of the Asian cohorts changed dramatically after 1974. In order to deal with this problem, I tried eliminating the Vietnamese from the three Asian samples and reestimated the equations without them. The results were virtually identical to those reported in the table.

[13] Only one interaction term was used at a time.

[14] Education does not play the same role for the Hispanic immigrants. PCETH is just as important for the educated Hispanics and, as we saw in table 4, the educated Hispanics are no more dispersed than the less educated ones.

Table 5
Multinomial Logit Analysis of 1980 Location Choices of Male Immigrants Arriving between 1975 and 1979, 1970 and 1974, or 1965 and 1969 (*t*-Values are Given in Parentheses)*

	1975–79 Arrivals			1970–74 Arrivals			1965–69 Arrvials		
Variables	Asians (1)	Hispanics (2)	Europeans (3)	Asians (4)	Hispanics (5)	Europeans (6)	Asians (7)	Hispanics (8)	Europeans (9)
PCETH	.16	.14	.115	.177	.139	.147	.137	.150	.124
	(29.87)	(50.46)	(12.54)	(24.00)	(46.79)	(16.71)	(14.16)	(42.2)	(14.73)
TOTPOP	.02	.006	.037	−.003	.021	.007	.028	.017	.025
	(5.73)	(1.82)	(7.20)	(−.60)	(6.27)	(1.25)	(4.36)	(4.06)	(4.70)
WAGE	1.28	.653	1.05	.770	1.52	1.25	1.56	2.16	1.28
	(6.16)	(2.85)	(3.05)	(2.93)	(5.87)	(3.68)	(4.18)	(7.32)	(4.03)
UNRATE	−.007	−.314	−.053	.041	−.211	.033	.047	−.158	.043
	(−.42)	(−14.15)	(−1.88)	(1.88)	(−8.53)	(1.19)	(1.61)	(−5.22)	(1.75)
GENAST	.006	.020	.009	.011	.025	.006	.010	.021	.011
	(6.05)	(22.85)	(5.45)	(8.27)	(23.95)	(3.69)	(5.80)	(18.52)	(6.91)
DISTANCE	.088	−.924	.063	2.77	−1.18	−.127	−.48	−1.18	.018
	(.28)	(−29.26)	(1.83)	(6.52)	(−29.89)	(−3.22)	(−.83)	(−29.22)	(.55)
N	2,742	2,925	979	1,473	2,452	929	808	1,751	1,089

NOTE.—PCETH = percentage of ethnic group that resides in the SMSA; TOTPOP = total population; WAGE = average wage rate; UNRATE = unemployment rate; GENAST = average monthly general assistance payment; and DISTANCE = air distances between each foreign country and SMSAs.

* 1975–79 cohort is aged 22–54 in 1980, 1970–74 cohort is aged 27–59 in 1980, and 1965–69 cohort is aged 32–64 in 1980.

Table 6
Education Interactions

	Asians		Hispanics		Europeans	
	b	*t*	*b*	*t*	*b*	*t*
I. 1975–79 arrivals:						
PCETH	.181	(13.96)	.139	(28.09)	.146	(8.75)
EDUC*PCETH	−.0015	(−1.80)	−.0002	(−.33)	−.0024	(−2.21)
II. 1970–74 arrivals:						
PCETH	.241	(12.17)	.136	(23.55)	.190	(13.61)
EDUC*PCETH	−.0042	(−3.50)	.0003	(.47)	−.0039	(−3.91)
III. 1965–69 arrivals:						
PCETH	.207	(8.20)	.155	(20.82)	.166	(12.94)
EDUC*PCETH	−.0046	(−3.02)	−.0005	(−.70)	−.0039	(−4.31)

NOTE.—*t* = *t*-statistic; *b* = regression coefficient.

IV. Internal Migration Patterns

Utilizing the 1980 cross-section data, we have seen that the immigrants who arrived in the United States between 1965 and 1979 were located in 1980 in SMSAs that had high percentages of the relevant ethnic populations. The more educated Asians and Europeans, however, were more geographically dispersed and less likely to choose cities based on the location of fellow ethnics. Cross-sectional data, however, do not permit us to study whether these more educated immigrants were more dispersed because of their initial locations or because they relocated a few years after they arrived in the United States. The question whether immigrants relocated after their initial settlement has important implications for understanding the process by which assimilation occurs. Fortunately, it is possible to create a panel sample from the data in the Public Use Sample since 50% of the immigrants were asked to report their location in the United States in 1975. Thus, for those individuals in the 1965–69 and 1970–74 cohorts who were asked this question, we have information on their locations in the United States at two points in time. This restricted sample can be used to study the extent of internal migration between 1975 and 1980, the determinants of relocation, and the impact of relocation on assimilation.

A. Description of Internal Migration

Table 7 reports several migration rates for each ethnic group in the panel sample, where each group has been separated into three educational categories. The migration rates are (1) the percentage of individuals who changed locations between 1975 and 1980, where location is defined as one of the 25 largest SMSAs or one of the four groupings of SMSAs; (2) the percentage of individuals changing SMSAs (this differs from the first measure in that it allows for a change of SMSA within the four groupings

Table 7
1975–80 Migration Rates for Immigrants and Natives*

	1970–74 Arrivals						1965–69 Arrivals					
	EDUC < 12		EDUC = 12		EDUC > 12		EDUC < 12		EDUC = 12		EDUC > 12	
	I	(N)	I	(N)	I	(N)	I	(N)	I	(N)	I	(N)
A. Asians:												
1. % changing locations	13.9	(4.9)	15.9	(8.6)	28.9	(12.7)	4.0	(4.0)	15.9	(5.1)	21.8	(9.9)
2. % changing SMSAs	16.4	(4.9)	15.9	(8.6)	31.3	(13.8)	8.0	(4.0)	15.9	(5.1)	24.4	(10.6)
3. % moving "out"	5.9	(3.2)	3.6	(2.6)	10.4	(3.4)	.0	(2.8)	3.0	(2.5)	9.8	(3.1)
4. % moving "in"	16.7	(.0)	38.5	(10.3)	29.4	(5.4)	.0	(.0)	36.4	(5.3)	15.5	(3.9)
B. Hispanics:												
1. % changing locations	7.4	(4.4)	7.9	(8.0)	16.1	(12.6)	5.2	(3.3)	9.8	(6.3)	13.6	(11.4)
2. % changing SMSAs	8.2	(6.4)	8.7	(9.4)	17.0	(15.3)	5.8	(4.2)	9.8	(7.3)	14.1	(12.8)
3. % moving "out"	2.5	(3.0)	.5	(5.0)	4.6	(8.6)	1.3	(2.3)	2.8	(3.2)	4.3	(7.6)
4. % moving "in"	4.7	(2.1)	15.6	(2.8)	28.6	(4.2)	10.3	(1.0)	11.1	(2.6)	14.8	(3.3)
C. Europeans:												
1. % changing locations	7.2	(4.2)	9.8	(7.2)	17.1	(14.7)	5.7	(4.7)	6.0	(6.5)	18.0	(12.5)
2. % changing SMSAs	7.7	(6.8)	10.8	(9.4)	18.4	(18.9)	5.7	(7.9)	10.3	(8.4)	19.9	(16.0)
3. % moving "out"	5.2	(3.9)	2.6	(5.8)	7.6	(9.3)	2.5	(4.2)	2.4	(4.3)	7.3	(8.2)
4. % moving "in"	.0	(.9)	11.5	(2.6)	13.0	(6.7)	2.9	(.8)	6.1	(2.4)	10.8	(3.3)

NOTE.—See text for definitions of migration rates.
* Natives are of same ethnicity and same age as immigrants (I). Native data (N) are shown in parentheses next to immigrant data.

of SMSAs); (3) the percentage of individuals who resided in one of the 25 largest SMSAs in 1975 and moved to one of the smaller SMSAs by 1980, labeled "% moving 'out' "; and (4) the percentage of individuals who resided in one of the smaller SMSAs in 1975 and moved to one of the 25 largest SMSAs by 1980, labeled "% moving 'in.' " For purposes of comparison, the migration rates are also calculated for native-born men of the same age and ethnicity as the immigrants.

From rows 1 and 2 in each panel of the table, several findings emerge. First, for the immigrants, there is little mobility within the grouped SMSAs; defining migration based on my definition of "location" captures virtually all of the migration. Second, the more educated individuals within each cohort and each ethnic group have the highest mobility rates. Third, even among the highly educated immigrants, the Asians are more mobile than

the Hispanics and the Europeans. Fourth, immigrants are more likely to change locations than comparable natives but the immigrant/native differential is much larger for Asians than for Hispancis and Europeans.

Rows 3 and 4 describe the direction of mobility within the United States, and there are some striking results. First, among the immigrants, the probability of moving from one of the small SMSAs to one of the large ones is significantly greater than the probability of moving in the reverse direction. Second, increased education raises both the probability of moving "out" and the probability of moving "in." Third, natives move in the opposite direction from the immigrant movers. Hispanic and European natives are actually more likely to move "out" than to move "in," and Asian natives have very similar "in" and "out" mobility rates. Recall from tables 2 and 3 that the 1970–74 and 1965–69 immigrants were less likely to reside outside the top 25 SMSAs in 1980 than their native counterparts. The data in table 7 imply that there is no tendency for this to change over time. Indeed, quite the opposite happened between 1975 and 1980 as individuals residing outside the 25 SMSAs moved "in" at a much more rapid rate than those already "in" moved "out."

B. Who Moves?

Table 8 presents the results of estimating a binary logit equation where the dependent variable is the probability of changing locations between 1975 and 1980. Based on the discussion in Section III, we would expect that individuals who are better able to acquire and process information about potential opportunities and who face lower psychic costs of relocating in a strange country are more likely to change locations. In the case of the

Table 8
Determinants of Internal Migration between 1975 and 1980

	Asians		Hispanics		Europeans	
Variables	1965–69	1970–74	1965–69	1970–74	1965–69	1970–74
EDUC	.12	.14	.08	.10	.10	.10
	(2.23)	(4.02)	(2.53)	(4.06)	(2.52)	(2.61)
AGE	−.08	−.05	−.02	−.02	−.04	−.03
	(−2.91)	(−3.15)	(−1.12)	(−1.32)	(−1.73)	(−1.34)
WAGE	−.11	−.20	−.03	.02	.59	.05
	(−.42)	(−1.32)	(−.17)	(.16)	(1.95)	(.23)
VERYWELL	−.09	−.16	.22	−.29	.17	.23
	(−.29)	(−.73)	(.67)	(−.94)	(.46)	(.64)
Constant	−.06	−1.07	−2.44	−2.62	−2.97	−2.22
	(−.05)	(−1.38)	(−2.90)	(−4.17)	(−2.28)	(−2.26)
N	324	566	757	1,021	429	409
% moving between 1975 and 1980	18.7	25.7	8.0	9.2	9.7	11.1

NOTE.—For definitions of EDUC, AGE, and WAGE, and VERYWELL, see text.

1970–74 arrivals, moves that occurred between 1975 and 1980 can safely be labeled "moves from the initial location in the United States." For the 1965–69 cohort, this label is more difficult because moves may have occurred between the date of arrival and 1975. An individual's ability to acquire and process information about locations, as well as his psychic costs of relocation, can be proxied by several variables that are available in the Public Use Sample. First, it has long been argued that education makes individuals better able to acquire information and adapt to environmental changes.[15] Second, older individuals probably face higher psychic costs of relocation, especially in the case of immigrants who rely on ethnic enclaves for emotional support. Third, the immigrant's English language proficiency will be correlated with his ability to acquire information about alternative locations; the variable VERYWELL is coded one if individuals report that they speak English very well.[16] Fourth, the more skilled immigrants, as measured by their wages, may also be more likely to relocate for reasons similar to those regarding education and migration.[17] The results in table 8 show, however, that only education has a consistently significant effect. The wage is significant only for the Europeans arriving between 1965 and 1969; even when education was deleted from the equation, the wage rate was not significant for the other groups. AGE is negative in all six equations and significant in three, while English language proficiency has no effect. Hence, the conclusion drawn from Table 8 is that education is the factor that distinguishes immigrants who move within the United States from those who do not.

C. Internal Migration and Assimilation

Tables 7 and 8 have demonstrated that immigrants are more likely to change locations in the United States than comparable natives, and that within the immigrant population, it is the more educated individuals who move. Whether internal migration facilitates the assimilation process is an issue of obvious policy significance. The link between internal migration and assimilation can be studied by examining whether individuals move to cities that have smaller shares of the relevant ethnic population than the cities they left. This view assumes that individuals who live in cities

[15] Schwartz (1973) showed that education reduced information costs associated with long distance moves. In another context, Welch (1970) and Bartel and Lichtenberg (1987) have shown that more educated individuals are better able to adapt to changes induced by the introduction of new technology.

[16] English language proficiency is measured as of 1980, so it is likely to overestimate language proficiency in 1975; measurement error could, therefore, bias the coefficient.

[17] The wage rate is calculated based on income earned in 1979; I am, therefore, implicitly assuming that individuals with high wages in 1979 also had high wages in 1975.

with small percentages of the ethnic population are, in effect more assimilated into American society. Although the exact definition of assimilation is elusive, it has long been argued by sociologists that "an important aspect of assimilation is the degree to which immigrant groups are spatially isolated from the mainstream of U.S. society."[18] Immigrants who reside in cities with small ethnic shares would be more likely to come into contact with "the mainstream of U.S. society."

Mean values of PCETH were calculated for 1975 and 1980 for the individuals in the sample who changed locations between 1975 and 1980. In other words, the mean for PCETH is first calculated, based on the cities chosen in 1975 and is then compared to the mean calculated, based on the cities chosen in 1980. The difference between these means is shown for the various ethnic groups in columns 1 and 3 of table 9. For purposes of comparison, columns 2 and 4 show how the mean values of PCETH would have changed had the individuals remained in their 1975 locations. The results in table 9 show that internal migration results in a significant decrease in the mean value of PCETH for some Hispanics and Europeans, but for none of the Asians. Among the Hispanics, the decrease occurs for the more educated immigrants only, while for the Europeans, the decrease occurs only for those immigrants who have been in the United States at least 5 years prior to the move. Note that although the Asians were found to be considerably more mobile than the Hispanics and Europeans, their relocation within the United States does not lead to greater assimilation as we have used the term here. Thus, it appears that internal migration among U.S. immigrants is not necessarily associated with a move to a city with a smaller ethnic concentration.

These results need to be analyzed in conjunction with the EDUC-PCETH interaction coefficients shown earlier in table 6. There we observed that for the Asian and European immigrants, the more educated individuals were less likely to be found in cities with a high value of PCETH in 1980. Studying the 1975–80 changes in PCETH for those individuals who changed locations can now explain how education and internal migration contribute to the assimilation process. In the case of the Hispanics, the more educated immigrants are initially found to be in cities with a value of PCETH that is just as high as the value for the less educated.[19] But, when the more educated individuals change locations, the value of PCETH falls significantly as we have seen in table 9. The snapshot picture in 1980

[18] This is quoted from Massey's (1981) review article in which he also discusses several other measures of assimilation such as fertility, political participation, intermarriage, and social mobility.

[19] The "initial" location is the 1975 location, which, as stated previously, is a more accurate term for the 1970–74 arrivals. The 1975 values of PCETH for the different education groups were compared and found not to be significantly different.

Table 9
Change in PCETH for 1975–80 Movers

	1965–69 Arrivals		1970–74 Arrivals	
	Destination Minus Origin (1)	Change at Origin (2)	Destination Minus Origin (3)	Change at Origin (4)
Asians:				
1. All	.30	−.02	−.02	−.06
2. EDUC < 12	3.02*	−.25	1.03	−.38
3. EDUC ≧ 12	−.41	−.01	−.10	−.04
Hispanics:				
1. All	−1.26	−.18	−1.61*	.28
2. EDUC < 12	1.01	.06	−.63	.65
3. EDUC ≧ 12	−2.45*	−.31	−2.55*	−.09
Europeans:				
1. All	−2.86*	−.06	.50	−.06
2. EDUC < 12	−4.64*	−.13	1.88	−.10
3. EDUC ≧ 12	−2.23*	−.04	−.07	−.05

* The difference between the mean values of PCETH at 1975 and 1980 locations is significant at the 5% level.

did not find a significant EDUC-PCETH interaction because few Hispanics actually moved between 1975 and 1980. For the Asians and Europeans, the story is different. The more educated immigrants (1965–69 and 1970–74 arrivals) are "initially" (i.e., in 1975) found to be in cities with a low value of PCETH compared to the value for the less educated. Internal migration then further reduces the value for the more educated 1965–69 arrivals, although the effect is not significant for the Asians. Hence, in 1980, the more educated 1965–69 arrivals from Asia and Europe are less likely to be in cities with a high value of PCETH for two reasons: (1) their initial locations have smaller values of PCETH, and (2) those who relocated, move to cities with lower values of PCETH than the origin location.[20]

V. Conclusions

The major results presented in this article and their implications for policymaking can be organized around two themes.

First, the new immigrants to the United States are geographically concentrated. Three-quarters of them live in the top 25 SMSAs in the country, compared to 50% of the native-born population. There is no overall tendency for this concentration to diminish over time; indeed, the immigrants who lived outside these cities in 1975 moved into one of them (by 1980) at a much more rapid rate than those who were already "in," moved "out." To the extent that immigrants require more and/or different public services

[20] Although internal migration also reduces the value of PCETH for the less educated 1965–69 arrivals from Europe, so few of these individuals move that their behavior is not sufficient to affect the 1980 cross-sectional result.

than natives, these findings imply that a special burden will exist for government officials in these cities. The influx of future immigrants as well as earlier ones who are relocating into these cities will also have an effect on the city's labor market. Depending on their degree of substitutability with the immigrant workers, some natives in these cities will be benefited by the increased supply of labor, and others will lose.

Second, important differences in location-choice behavior are observed when the immigrant population is stratified by education level. The more educated immigrants are less geographically concentrated, more likely to reside outside the top 25 SMSAs, and more likely to change locations in the United States after initial settlement. Among the Asian and European immigrants, the more educated individuals rely less on the location of immigrants of similar ethnicity in choosing their initial U.S. locations, and some of these individuals further reduce their attachment to fellow ethnics as they relocate to other cities. For the Hispanic immigrants, however, secondary migration within the United States plays a critical role in the process by which the more educated individuals loosen their ties to their fellow ethnics. If government officials believe that it is appropriate to encourage a wider dispersion of immigrants throughout the United States, these findings suggest that one way this could be accomplished is through rationing visas based on an individual's skill level. Under our current system, there is no evidence that less educated individuals will disperse throughout the United States in the absence of a forced resettlement policy.

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