Immigrants and Natives: Comparative Economic Performance in the U.S., 1850-60 and 1965-80

JOSEPH P. FERRIE
Department of Economics
Northwestern University
2003 Sheridan Road
Evanston, IL 60208-2600
847 491 8210
ferrie@nwu.edu
and NBER

January 1995
Revised September 1996

Abstract

Immigrants who arrived in the U.S. before the Civil War were less likely to reside in locations with high immigrant concentrations as their time in the U.S. increased. This is contrary to the experience of recent immigrants who show no decrease in concentration after arrival. The reduced isolation of antebellum immigrants was not due to their own movement to places with fewer immigrants but due to the movement of the native-born into places (particularly cities) with large immigrant concentrations. The isolation of contemporary immigrants even after several years in the U.S. thus results more from the reluctance of the native-born to relocate to places with many immigrants than from immigrants' reluctance to move to places with fewer immigrants. Contemporary immigrants had greater success than antebellum immigrants avoiding unskilled jobs as they entered the U.S. job market, though they moved out of unskilled jobs less often than antebellum immigrants when comparing their occupations at two points in time after arrival. Improvements in occupational mobility between antebellum and recent immigrants were most apparent among those in other than unskilled jobs. These findings suggest the need to re-evaluate some of the premises upon which the concerns about the economic performance of recent immigrants are based.

Introduction

The volume of immigration into the U.S. during the 1970s and 1980s has prompted an intense interest in the economic performance of immigrants after their arrival. Most research has centered on the degree to which immigrants become assimilated as their time in the U.S. increases, with assimilation measured in a variety of ways. Geographic dispersion, occupational attainment, and income growth are

The National Science Foundation (Grant No. SES 950989), the Olin Foundation, and the Center for Urban Affairs and Policy Research at Northwestern University provided generous financial support. Research assistance was provided by Taylor Holsinger, Katie Holsinger, Amber Starr, Shannon Holsinger, and Mark Wolthuis. Extremely helpful comments were provided by the editor and an anonymous referee and participants in presentations at The All-UC Economic History Conference (1995), Northwestern University, UCLA, USC, the University of Illinois at Chicago, the University of Illinois at Urbana, Vanderbilt University, the American Economic Association Meetings (1995), the Seventh World Congress of the Econometric Society (1995), and the Social Science History Association Meetings (1995).

among the most frequently used metrics.[1] Our understanding of the performance of past immigrants to the U.S. along these dimensions is less complete. For example, though studies of immigrant settlement patterns tell us where immigrants were located at some date after their arrival at New York (Dunlevy 1980), it is difficult in such studies to isolate the effect of time since arrival from the effect of changes in the choice of initial location across arrival cohorts.[2] Though we know a good deal about the occupational mobility of immigrants in the second half of the nineteenth century who remained in the same city or county for a decade or more (Thernstrom 1964 and 1975; Bodnar 1985), such "persisters" are a non-random (and generally less successful) group than the total immigrant population (Ferrie 1995d). Finally, data on the incomes of nineteenth century immigrants are rare.[3]

The lack of data on historical immigrants comparable to that on contemporary immigrants has two unfortunate consequences. The first is our inability to distinguish transitory from genuinely long-run phenomena. For example, concern has been expressed regarding the failure of the most recent immigrants to disperse to locations with lower immigrant concentrations as their time in the U.S. increases (Bartel 1989; Bartel and Koch 1991). Underlying this concern is a belief that past waves of immigrants became less geographically concentrated in the years after their arrival, by migrating to locations with smaller immigrant populations. While this may have been the case during the rapid economic growth from the 1950s to the early 1970s, there is no basis on which to assert that dispersion has been the norm over a

[1] Massey (1981), Bartel (1989), and Bartel and Koch (1991) examine immigrant settlement patterns, Massey (1981) and Chiswick (1978 and 1994) examine immigrant occupational mobility, and Borjas (1994) and Chiswick (1994) summarize research on the income growth experienced by immigrants after their arrival.

[2] This is part of a more general problem: separating the impact of duration, cohort, and period effects in a single cross-section. Borjas (1994) describes this problem and how it can be overcome using a sequence of cross-sections and some assumptions on the relationship between the immigrant labor market and the native-born labor market. Jasso and Rosenzweig (1988) demonstrate, however, that even these procedures are subject to bias due to selective return migration.

[3] Hatton (1995) summarizes a number of studies using data from state labor bureau reports, but it is difficult to generalize from these studies of particular locations or occupations to the experience of immigrants more generally.

longer time horizon.[4]

The second result of our ignorance regarding the performance of historical immigrants is our inability to assess the impact on how immigrants fare after arrival caused by important changes in the structure of the U.S. economy and in U.S. immigration policy. The historical record of immigrant achievement, if used with the proper care, can provide a useful control group against which to measure the performance of contemporary immigrants. For example, as we shall see below, by examining the relative economic performance of immigrants and the native-born at several points in time, it is possible to isolate the influence of factors that had an impact only on immigrants (such as increasingly selective U.S. immigration policy) from the influence of factors that had an impact on both immigrants and the native-born (such as business-cycle conditions and shifts in the U.S. industrial and occupational structures). In fact, history may provide the only laboratory within which such comparisons can be made.

The remainder of this essay takes up the challenge offered by the lack of data on nineteenth century immigrant economic performance comparable to that on contemporary immigrants. I use two new samples of antebellum Americans that together provide information on the experience of more than six thousand immigrants and natives and document several of the same measures of economic performance as contemporary sources. I focus on two non-income dimensions of immigrant performance: geographic dispersion and occupational mobility. I compare immigrant performance in two eras, separated by just over a century (1850-60 and 1965-80). This makes it possible to consider the impact of a broad range of changes in the U.S. economy and in U.S. immigration policy. Section I describes the framework that will be used for the analysis. Section II describes the historical and contemporary data and addresses some issues of comparability. Section III considers geographic dispersion. Section IV considers occupational mobility

[4] Massey (1981, pp. 67-68) cites a number of studies from the 1970s demonstrating that, except for Puerto Ricans, the residential segregation of immigrants was not great. These studies, however, generally do not account for time since arrival, and if they do are subject to the identification problem mentioned in note 2 above.

(both between pre-migration and post-migration occupation and between occupation within the U.S. at two points in time). Section V provides some tentative conclusions.

I. A Framework for the Analysis

Our goal is to compare the performance of immigrants in the 1850s to the performance of immigrants in the 1960s and 1970s. This will make it possible to say how much of recent immigrant performance is in line with long-run trends, and also to say how much of the difference between past and present performance can be explained by changes in the U.S. economy and U.S. immigration policy. But the differences between these two periods make it difficult to compare the absolute performances of immigrants over time. For example, the occupational structure changed significantly between the 1850s and the 1970s. If we assume, however, that aggregate conditions had an equal influence on immigrants and natives in each decade, then we can examine how the *relative* performance of these groups has changed over 120 years.[5] We can compare the difference between immigrant and native settlement patterns or occupational mobility in the 1850s with the corresponding difference in the 1965-80 period.

This is the "difference-in-differences" procedure used in LaLonde and Topel (1992) and Borjas (1986 and 1987). Consider some underlying variable of interest ϵ_{it} for an immigrant at time t who arrived in cohort i. This can be written as the sum of three components:

[5] This assumption in clearly unreasonable in the case of immigrants arriving in the mid-1850s. As Fogel (1989, pp. 355-362) notes, the movement of immigrants into many Northern urban industries previously dominated by craft workers came directly at the expense of native-born workers. Native-born urban craft workers were faced as well with higher rent and food prices as a result of the influx of these European immigrants. The combination of reduced employment and higher prices produced a "hidden depression" for native craft workers during this period. The immigrants in the sample used below, however, all arrived in the U.S. before 1850, so they faced competition in the job market and higher urban prices in the mid-1850s just as native-born craft workers did. A more serious objection to the assumption that the impact of aggregate forces was equal for immigrants and natives is that immigrants and natives are effectively employed in separate labor markets. This is by no means a settled question for twentieth century immigrants; it is even less settled in the case of nineteenth century immigrants.

$$\epsilon_{it} = a_{it} + b_{it} + u_i$$

where a_{it} measures assimilation (what LaLonde and Topel call "*accumulated* U.S.-specific human capital embodied in members of arrival cohort *i*"), b_{it} measures the impact of labor market conditions in the U.S. at time *t* on cohort *i*, and u_i measures the average value of unobservable characteristics for cohort *i*.[6] These vintage, time, and cohort effects cannot be separately identified in a single cross-section, but they can be identified with two cross-sections and a native-born comparison group. For example, with information at time *t* and time *t+10* on both immigrants in arrival cohort *i* and the native-born, the assimilation effect can be measured as

$$(\epsilon_{i,t+10}-\epsilon_{i,t})-(\epsilon_{t+10}-\epsilon_t)=(a_{i,t+10}-a_{i,t}+b_{i,t+10}-b_{i,t})-(b_{t+10}-b_t)$$

where ϵ_t is the underlying variable for the native-born, and b_t is the time effect for the native-born. The assimilation effect $a_{i,t+10}$-$a_{i,t}$ can be identified if the time effect *b* is the same for immigrants and natives:

$$E(b_{i,t+10}-b_{i,t})-E(b_{t+10}-b_t)=0$$

In this framework, changes between the 1850s and the 1965-80 period in the difference between immigrant and native settlement patterns or occupational mobility can be attributed to changes in the rate of assimilation as it relates to settlement patterns or occupational mobility, rather than to changes in the aggregate economy or in the quality of subsequent immigrant cohorts.

Assimilation calculated in this way may be a biased measure of true assimilation if the time effect

[6] LaLonde and Topel (1992, p. 75; italics in original). In their framework, the quantity ϵ_{it} is adjusted by regression for the effects of age, schooling, and experience. Since we lack information on schooling and experience for the antebellum period, the results that follow adjust only for age, and do so only by constraining the samples to have the same maximum and minimum ages.

b changes differently for immigrants and natives.[7] In order to ensure that the difference in the time effect between immigrants and natives is as small as possible, LaLonde and Topel (1992) and Borjas (1986) use native-born members of the same ethnic background as the reference group for each immigrant cohort. For the nineteenth century, this is not possible, since information on parents' birthplace was not collected until 1880 by the federal census. To make the findings for the nineteenth and twentieth century immigrants comparable, the reference group in both cases will be the native-born population, without regard for parental birthplace.

As Jasso and Rosenzweig (1988) note, however, even if the time effect *b* is identical for immigrants and natives, this method of measuring immigrant assimilation is still subject to bias: the bias from the selective migration of some members of a particular arrival cohort.[8] Return migration is unlikely to present a problem in measuring the impact of duration in the U.S. for antebellum immigrants, since return migration rates were probably below five percent in this period (Ferrie 1992, Chapter 2). For contemporary immigrants, measured assimilation will represent a lower bound on true assimilation if the most successful immigrants are the most likely to re-migrate.

Given this framework, it is necessary to group the changes that occurred between the 1850s and the 1965-80 period into those that had an impact on both immigrants and natives and those that had an impact only on one of these groups. Changes that had an equal impact on both groups will be differenced out by the procedure described here, while changes peculiar to either group or for which the impact differed across groups will show up in measured assimilation. Among the changes that affected both immigrants

[7] For example, if the return to skill increases over a decade, and new immigrants are largely unskilled, then assimilation estimated by this method will *understate* the true amount of assimilation that occurs. Chiswick (1994, p. 108) suggests that this accounts for the finding by Borjas (1985) that assimilation is slow and quality is relatively lower among post-1965 immigrants to the U.S.

[8] They find, for example, that higher-occupation immigrants are more likely to emigrate, and that this imparts a downward bias to the return to duration in the U.S. when it is estimated using census data (Jasso and Rosenzweig 1988, p. 251).

and natives, the most important are probably:

1. the shift in the industrial structure, with movement away from agriculture (60% of the labor force in 1850, 5% in 1970) and into manufacturing (25% in 1850, 35% in 1970) and the tertiary sector (15% in 1850, 60% in 1970);
2. the shift in the occupational structure, with movement away from skilled manual (35% in 1850, 15% in 1970) and farm jobs (20% in 1850, 5% in 1970) and into white collar (20% in 1850, 45% in 1970) and unskilled manual jobs (25% in 1850, 35% in 1970); and
3. the growth of cities, with the fraction of the population living in places of 2,500 or more people rising from under one sixth in 1850 to more than three fourths in 1970.

Immigrants were probably uniquely affected by

1. changes in the volume of immigration, which in the decade before 1850 averaged 171,000 per year into a country that numbered 23 million — a rate of 7.4 immigrants per thousand population — and which in the decade before 1970 averaged 332,000 per year into a country of 203 million — a rate of 1.6 immigrants per thousand population;
2. changes in formal immigrant selection mechanisms, with the imposition of the quota system (based on national origin after 1921 and a combination of national origin, skill, and family connections after 1952) for immigrants from outside the Western Hemisphere, and relaxation of these restrictions after 1965;
3. changes in the quantity and quality of information available to immigrants about labor market opportunities in the U.S.;
4. changes in the countries sending immigrants, with a shift away from Europe as the principal origin and a rising share from elsewhere in the Americas and Asia; and
5. changes in the skills immigrants bring with them, with more immigrants in the 1970s than in the 1850s arriving with white collar skills, slightly fewer arriving with no skills, far fewer arriving as farmers, and roughly the same fraction arriving as craftsmen.

When cohort and period effects have been eliminated, the measure of assimilation will thus include the impact of changes in the volume of immigration (with a greater volume of immigration more likely to produce a crowing effect in labor and housing markets, making immigrant adjustment more difficult in the 1850-60 period than in the 1965-80 period), and the increasing selectivity of immigration from the Eastern Hemisphere between 1921 and 1965 (selectivity largely on the basis of pre-migration occupational and familial connections in the U.S.). Changes introduced in the 1965 amendments to the Immigration and Nationality Act may have reduced selectivity among European immigrants (by placing more weight on family ties and less on occupation), and increased selectivity among Western Hemisphere immigrants and

Asians (by subjecting them for the first time to a quota system that takes some account of occupation).[9] Since the data I use describe each immigrant's country of origin and pre-migration occupation, it will be possible to control for changes in the composition of sending countries and changes in immigrants' skills at arrival.

Finally, measured assimilation will also include the influences of factors common to immigrants and natives that had a greater impact on one group. For example, though urbanization has increased, this increase may have had different impacts for immigrants and natives. Cities in the middle of the nineteenth century were places of remarkable economic opportunity for both immigrants and natives, particularly in the west (Galenson 1991). But cities also served another role for immigrants: as places where immigrants could find a community that represented a source of employment or customers in normal times and a social safety net when times were more difficult. Though this aspect of cities has probably not changed a great deal for immigrants, the role of cities as sites of extraordinary economic opportunity may have diminished.[10] Though immigrants may still be drawn to cities for the externalities their immigrant communities provide, their attractiveness to the native-born may have been reduced. [11]

II. The Data

For the antebellum period, two new samples have been created that will allow me to compare

[9] The 1965 amendments would have reduced selectivity among immigrants from Europe if the constraint on the flow of immigrants prior to 1965 was binding. For at least some origins, this was not the case. For example, from 1960 to 1965, the United Kingdom was allotted 65,000 visas per year, even though only 28,000 U.K. immigrants per year entered the U.S. on average in this period (Borjas 1992b, pp. 22-23).

[10] Though transportation improvements now make it possible to proceed directly to an ultimate destination without having to pass through New York or another east coast port, recent research suggests that even in the antebellum period immigrants spent no more than a few weeks at the port of debarkation before reaching a destination in the interior that they may have chosen before their departure (Ferrie 1995a).

[11] Combined with the fact that most native-born Americans are now born in cities, this suggests that we should not expect to see a particular cohort of the native born relocating in large numbers to urban areas.

immigrant and native economic performance between 1850 and 1860: 1) a sample of 2,100 adult male immigrants who arrived between 1840 and 1850 and have been located in both passenger ship records and the manuscript schedules of the 1850 and/or 1860 federal censuses (Ferrie 1997); and 2) a nationally representative sample of 4,800 adult male Americans linked from the 1850 Public Use Sample of the federal census to the 1860 federal census manuscripts (Ferrie 1996).[12] The first sample provides information on the location (state, county, city or town, and ward or enumeration district if given) and occupation (self-reported occupational title) in 1850 and 1860 of each immigrant, as well as his occupation before arrival and date of arrival. The second sample contains similar information on location and occupation in 1850 and 1860.

For the contemporary period, the Public Use Microdata Samples of the 1970 and 1980 federal censuses provide comparable information. The 1970 census provides information on occupation in 1965 and 1970; for post-1965 immigrants, this provides information on pre-migration occupation, while for the native born and pre-1965 immigrants, it provides information on occupation in the U.S. five years prior to the occupation reported in the census year. Both censuses contain information on location (county group and Standard Metropolitan Statistical Area or SMSA) and occupation in the census year.[13] In addition, the 1980 census contains information on location (county group) in 1975 for half the individuals surveyed. Though the 1990 census Public Use Sample provides information on more recent immigrants, I use the 1970 and 1980 censuses because of the unique information on pre-migration occupation in 1970. In order to separate out duration and cohort effects in examining settlement patterns, an adjacent census was needed as well. Since the 1960 census did not contain a question on date of arrival, the 1980 census was the logical choice.

[12] The second sample has previously been used to examine the characteristics of the population migrating to the western frontier over the 1850s (Ferrie 1995b) and the impact of immigration on labor markets in the 1850s (Ferrie 1995c).

[13] "County groups" are combinations of contiguous counties. Every county in the country is included in a county group.

The greatest difficulty in using these four samples to examine changes in immigrants' relative performance over 120 years is ensuring comparability. The first issue that must be considered is how the definition of an "immigrant" has changed between the two periods. Though only individuals born outside the U.S. to parents born outside the U.S. were described as immigrants in both eras, the 1850 and 1860 censuses contained more of the total U.S. immigrant population than contemporary censuses. As there were no restrictions on immigration in the mid-nineteenth century, there were no "illegal" immigrants at this time, so there was no incentive for immigrants to avoid enumeration in the census for fear of being exposed and deported. By the 1960s and 1970s, a non-trivial fraction of the resident immigrant population is living in the U.S. illegally (though a much smaller fraction than in the 1980s and 1990s). If legal and illegal immigrants behave differently in settlement patterns or occupational mobility, the comparisons presented below between antebellum and contemporary immigrants' relative performance may be somewhat misleading. Conclusions can only be drawn regarding the behavior of the legal immigrant population.

A second issue to consider is the relevant unit of observation for examining immigrants' relative settlement patterns. Recent research in this area (Bartel 1988; Bartel and Koch 1991) has used the SMSA, and focused on the largest SMSAs. There is no comparable unit of observation for the antebellum period. The advantage of SMSAs is that they generally coincide with what we think are distinct labor markets, since they are defined partly by commuting distance and patterns. For the antebellum period, the county defines the largest unit that we can consider a unified labor market, but many counties in 1850 and 1860 had very dispersed populations, particularly outside the northeast. The city or town might seem a better measure of a unified market, but with the small fraction of the U.S. population in large urban divisions at this time, this would exclude much of the population from the analysis. The course chosen here is to define an "urban county" as a county that encompasses a subdivision (city or town) with a population of 10,000 or more in 1850. The urban county in the 1850s (of which there were 54 in 1850) will be used as the unit

comparable to the SMSA in 1970 and 1980. In 1970 and 1980, the analysis will be restricted to the 50 largest SMSAs in population.

Finally, since I will consider occupational mobility in two very different eras, I need a comparable measure of occupational attainment and occupational mobility. The mechanics of achieving such comparability are straightforward: in creating the 1850 Public Use Sample, a set of rules for coding occupational titles into 1950 Census Bureau occupational categories was developed. Those rules were applied to the reported occupations in both antebellum samples. The categories reported in 1970 and 1980 were also converted to the 1950 classification. These 1950 categories were further collapsed into two larger groups (shown with their corresponding three-digit code based on the 1950 system):

1. High White Collar and Low White Collar Workers
   000-099: professional, technical, and kindred workers
   200-299: managers, officials, and proprietors (except farm)
   300-399: clerical and kindred workers
   400-499: sales workers
   Farmers
   100-199: farmers and farm managers
   Skilled and Semi-Skilled Blue Collar Workers
   500-599: craftsmen, foremen, and kindred workers
   600-699: operatives and kindred workers

2. Unskilled Blue Collar Workers
   700-799: service workers
   800-899: farm laborers and foremen
   900-996: laborers (except farm and mine)

Occupational mobility will be indicated by movement between these two categories; movement within the categories will be ignored. To the extent that workers can improve their circumstances through movement within categories, this will tend to understate the true extent of improvement that occurs between two points in time. The advantage of this procedure is that it reduces the number of possible occupational transitions that must be considered, a substantial benefit in the absence of a metric (such as income) consistent across the two eras studied by which occupations can be ranked directly. I will explore

occupational mobility between pre-migration and post-migration occupation and between occupation at two points after arrival in the U.S. (1850 and 1860 for the antebellum group, and 1965 and 1970 for the contemporary group).

Though there is no problem defining the relevant unit of observation for this exercise as there was in the case of geographic concentration, there remains the question of the relevant comparison group. For example, to whose occupational mobility should we compare the occupational mobility of immigrants between their pre-migration and post-migration occupations? I have opted to use both recent native-born labor market entrants (males age 20 to 25 at the census) and all native-born males as reference groups for this exercise. For the comparison between occupation at two points in time after arrival, I have used the entire native-born male population age 20 to 65.

III. Geographic Dispersion

Two recent studies of the settlement patterns of contemporary immigrants have found little change in immigrants' geographic isolation as their time in the U.S. increases (Bartel 1988; Bartel and Koch 1991). Bartel (1988) calculated what she called an "index of geographic association." Using 1980 SMSAs as the unit of observation, she calculated the share of the immigrant and total population in each location, the difference between the immigrant and native shares in each location, and the sum of those differences across all locations. She normalized the index by dividing by two, so it must lie between one (if immigrants live only in places where there are no non-immigrants) and zero (if immigrants are distributed across locations just as the total population). She calculated separate measures for three cohorts of arrivals (1965-69, 1970-74, and 1975-79) and three ethnic groups (European, Hispanic, and Asian).

Unfortunately, as Bartel (1988, p. 381-382) and Bartel and Koch (1991, p. 124) note, it is not possible to estimate the impact of time since arrival on geographic concentration using data solely from

1980: differences across cohorts in initial settlement patterns could produce a correlation between diffusion and duration even in the absence of mobility after the choice of an initial location. Thus, although Bartel (1988, pp. 374-377) finds somewhat greater isolation (a higher index of geographic concentration) among immigrants who have been in the U.S. longer, we cannot conclude anything from this about trends over time within cohorts.

Table 1 presents new calculations using Bartel's methodology for the antebellum and contemporay periods. Attention is restricted to urban places in both eras, because the geographic isolation about which concerns have been raised is an urban phenomenon in both eras; though rural immigrant enclaves were prevalent in the mid-nineteenth century, they were far less worrisome than the concentrations of immigrants found in the nation's cities. In order to identify the impact of duration, the same arrival cohorts were followed through two censuses. The ages of each cohort at the census date were chosen so all cohorts arrived at roughly the same age (to eliminate the influence of age on the location decision). [14] Comparing values within the same column for adjacent censuses tells how a particular cohort's settlement pattern changed over a decade.[15] For example, the figures in the first column show that European immigrants who arrived before 1845 were settled more like the total U.S. population in 1860 than they had been in 1850, with the same true (though the change is smaller in magnitude) for European immigrants who arrived after 1845. By contrast, the third and fourth columns show that European immigrants experience no decrease in geographic concentration between 1970 and 1980, with perhaps a slight increase in concentration instead.

[14] Thus, the cohort that arrived within five years of the census was age 20 to 50 at the first census (1850 or 1970) and age 30 to 60 at the second census (1860 or 1980). The previous cohort was age 25 to 55 at the first census, and age 35 to 65 at the second census.

[15] By comparing the immigrant and aggregate settlement patterns in each census year, this procedure identifies the duration effect and eliminates the period effect. By looking at changes in the index across census years, the cohort effect is eliminated as well, leaving the pure duration effect. The resulting measure of assimilation, however, is still subject to bias resulting from selective re-migration. Since the comparison of immigrant and aggregate patterns is embedded in the index, it is not possible to offer a decomposition of this measure of assimilation into duration, period, and cohort effects. Rather, the differences going down each column for each ethnic group reveal the pure duration effect.

The same is true for both Asian and Hispanic immigrants. The last two columns are provided for comparability with Bartel's original study: the direction of the difference between the 1975-79 and 1970-74 cohorts in 1980 is the same as she found, though the magnitude found here in slightly smaller.

This suggests that antebellum immigrants, unlike contemporary immigrants, indeed increasingly likely to be living in the same places as the general population as their time since arrival increased. Table 2 presents additional, though somewhat weaker, evidence of the same pattern: the Herfindahl index of concentration (the sum of the squares of the shares in each location) for each arrival cohort at each census, the measure of concentration used by Bartel and Koch (1991). Higher values of the index (which ranges between zero and one) indicate greater degrees of immigrant concentration. Each entry must be compared to the index for the total population in the same year. Since the index for the two cohorts of antebellum immigrants does not change between 1850 and 1860, while the index for the total population rises slightly, the relative concentration of these immigrants again seems to fall. By contrast, though the index falls slightly for two contemporary cohorts (Europeans who arrived between 1960 and 1964 and Hispanic immigrants who arrived between 1960 and 1964), the index for the total population fell slightly over the same period, leaving relative isolation virtually unchanged for these cohorts and slightly higher for the others. Though the figures calculated for the contemporary immigrants are slightly different from the Herfindahl indexes in Bartel and Koch (1991), they exhibit the same pattern across groups and the same lack of change across cohorts within 1980.

The clear decrease in relative isolation for both cohorts of antebellum immigrants and the lack of such a decrease in the contemporary data suggest that there has been a change in immigrant assimilation. If one measure of assimilation is how closely immigrants live to the rest of the population, antebellum immigrants' became more assimilated as their time in the U.S. increased, while contemporary immigrants do not. We cannot simply attribute this change to the behavior of immigrants, however. Recall that any

change that has a different impact on natives and immigrants will show up as a change in assimilation. If the settlement patterns of the native-born population have changed as the attractiveness of cities (particularly cities with large numbers of immigrants) as destinations has changed, we might observe this pattern even absent a change in immigrants' behavior.

In order to shed some light on this question, Table 3 presents a comparison of the concentration of each individual's own ethnic group at the origin and destination for immigrants and natives who moved between counties (in the 1850s) or county groups (in the 1970s).[16] For immigrants, a positive value indicates movement to a location with a greater concentration of immigrants than at the original location; a negative value indicates movement away from immigrants and toward the native born. For the native born, a positive value indicates movement toward the native born, and a negative value indicates movement toward a greater concentration of immigrants.

The entries for both cohorts of antebellum immigrants indicate that movement between 1850 and 1860 was toward locations with even greater numbers of immigrants. This seems surprising in light of the results in Table 1 and Table 2 showing decreased immigrant isolation over time for each cohort, until the movement of the native born is considered: between 1850 and 1860, natives moved on average to places with an immigrant share nearly 5 percentage points higher than the share at their original location. By contrast, contemporary immigrants, when they change county group, move to places with only slightly smaller immigrant shares, while the native born move to places with roughly the same immigrant share. A recent examination of the same data on 1975 and 1980 location in the 1980 census by Filer (1992) concluded that the native-born were less likely to move into and more likely to move out of SMSAs that had recently received large numbers of recent immigrants. The findings in Table 3 do not conflict with these results, since Filer looked at the impact of a *change* in the number of *recent* immigrants, while I have

[16] This comparison is not limited to those in the 54 urban counties or the 50 largest SMSAs. The change in the unit of observation is necessary in order to have an exhaustive partition of the country.

looked at the impact of the *stock* of *all* immigrants. Taken together, my findings and Filer's suggest that places that experienced a sudden influx of recent immigrants saw (1) more out-migration of natives to places with the same fraction of immigrants but more immigrants who have been in the U.S. for several years than recent immigrants and (2) less in-migration of natives from places with the same fraction of immigrants but more immigrants who have been in the U.S. for several years than recent immigrants.

The results in Tables 1 and 3 suggest that what has changed between the 1850s and the 1970s is not so much the behavior of immigrants as the behavior of the native born: while in the antebellum period they were eager to move to locations (particularly rapidly growing cities in the midwest) that had large immigrant concentrations, such places have lost much of their appeal by the 1970s. It is not the case that immigrants have abandoned the notion of moving out of their enclaves; rather, the native born have abandoned the notion of moving into such places. The result is the perception that contemporary immigrants are less willing to assimilate. The reality is that the help they once got from the native born in assimilating is now absent.

IV. Occupational Mobility

Studies of contemporary immigrants have devoted considerably more attention to the behavior of immigrants in the labor market than to their settlement patterns. Research has focused mainly on how immigrants' incomes change as their time in the U.S. increases (Chiswick 1978a; Borjas 1994). Immigrants entering before 1965 were thought by some to achieve income parity with the native born within a few years. More recent immigrants seem to have more difficulty, though much of this apparent decline in quality is accounted for by changes in the mix of sending countries (Borjas 1994). Though we cannot push this line of research back into the antebellum period, since no comparable measures of income are readily available, we are able to examine a closely related dimension of immigrant economic performance:

occupational mobility.[17] The discussion in Section I above suggests several reasons why contemporary immigrants (at least those who arrived before 1965) might have fared better in the U.S. labor market than antebellum immigrants.

Table 4 compares the post-migration occupations of immigrants in 1850 and 1970 who were in the U.S. fewer than 5 years at the time of the census. This gives a rough idea of the first occupation pursued by immigrants after they entered the U.S. Two reference groups are presented: all native-born males, and native born males age 20 to 25 at the census (who would have entered the labor force in the 5 years before the census). The first two columns examine all immigrants in the U.S. fewer than five years; the remaining columns distinguish between immigrants who were unskilled in their place of origin and immigrants who were in occupations other than unskilled in their place of origin.[18] Each entry shows the fraction found in the census in unskilled occupations. If assimilation occurs, this fraction should decline after adjusting for cohort and period effects. To account for cohort effects, we would need to know the post-arrival occupation of immigrants at a second date (in addition to 1850 or 1970). Though this is possible for antebellum immigrants, it is not possible for recent immigrants.[19] Comparing immigrant and native occupations in 1850 or 1970 eliminates only the period effect.

The results in the first two columns of Table 4 show that antebellum immigrants faced a far more

[17] The data on pre-migration and post-migration occupation from the 1970 census have also been examined by Chiswick (1978b).

[18] This distinction was based on the occupation reported in the passenger ship lists (Ferrie 1997) for antebellum immigrants. For recent immigrants, the reported 1965 occupation was assumed to be the pre-migration occupation, since these immigrants arrived in the U.S. after 1965. The question on occupation in 1965 appears in 3 versions of the 1/100 1970 Public Use Sample: the County Group, Neighborhood Characteristics, and State Samples based on the 5% questionnaire. These three samples have been pooled for this analysis.

[19] Though a synthetic cohort approach could be adopted for recent immigrants be examining the 1980 occupations of immigrants who arrived in the U.S. between 1965 and 1969 and comparing that to the figures in Table 4, the results would be subject to the bias resulting from return migration noted by Jasso and Rosenzweig (1988). It would also not be possible to distinguish immigrants in 1980 by pre-migration occupation since the 1980 census provides no information on pre-migration occupation.

difficult entry into the U.S. labor market than contemporary immigrants. Though only 15 percent of native-born males were found in unskilled jobs in 1850, nearly half of European immigrants who entered the U.S. between 1845 and 1849 were found in such jobs. In 1970, only 18 percent of European immigrants were unskilled after fewer than five years in the U.S., while 14 percent of native-born males were in unskilled jobs. Among contemporary immigrants, Asians did slightly better and Hispanics slightly worse than Europeans in moving quickly out of unskilled jobs. When the reference group is recent native-born labor market entrants, the large gap in performance between immigrants and natives in the antebellum period is reduced: immigrants were 1½ times more likely than young native males to be found in unskilled jobs in 1850, though they were 3 times more likely to be found in such jobs than all native males. Contemporary European and Asian immigrants actually out-perform natives when the younger comparison group is used. Only Hispanic immigrants fared worse than young natives in their first 5 years in the U.S.

The last four columns of Table 4 reveal that this change in the ease of adjustment between the antebellum and contemporary periods was concentrated among immigrants who were in other than unskilled occupations before arrival. Among immigrants who were unskilled in their place of origin, the fraction found in unskilled jobs was four times the fraction of natives in unskilled jobs in 1850. By 1970, that multiple had actually increased slightly. Among immigrants in jobs other than unskilled before entering the U.S., antebellum arrivals did better than those who were unskilled before arrival but still did more than twice as poorly as natives. By 1970, European and Asian immigrants in jobs other than unskilled before arrival were actually 36 percent *less* likely than all natives and half as likely as young natives to be found in unskilled jobs. Hispanic immigrants who were in jobs other than unskilled before arrival were also less likely than either natives generally or young natives to be found in unskilled jobs.

When we turn to occupational mobility between two points after arrival in the U.S., differences between antebellum and recent immigrants are also apparent. Table 5 compares the occupations reported

by immigrants at two dates after their arrival to the occupations reported at the same dates by native-born males.[20] The first two columns show that antebellum European immigrants moved out of unskilled jobs in the years after their arrival more rapidly than natives between 1850 and 1860, but were still three times more likely than natives to be in unskilled jobs in 1860. Immigrants in the 1970s displayed far less mobility, both absolutely and relative to natives. Between 1965 and 1970, the share of European immigrants in unskilled jobs fell by only 2.2 percentage points, though the share for natives fell 10.4 percentage points over the same period. The drop was only slightly larger for Asian and Hispanic immigrants. Note, though, that the fraction in unskilled jobs was already quite low among both European and Asian immigrants by 1965. By 1970, natives had merely caught up to the fraction immigrants had nearly achieved five years earlier.[21]

Occupational mobility is shown separately by occupation in the initial year in Table 6. As in the analysis of pre-migration and post-migration occupations in Table 4, the greatest change between the two eras occurred among those in other than unskilled jobs. Over the 1850s, just over half of European immigrants who started the decade as unskilled workers ended the decade in such jobs, compared to under

[20] The reference group in this and the following table is all native-born males, rather than young native-born males. The interval between the two dates is 10 years for antebellum immigrants, but only 5 years for recent immigrants. Though immigrants will be compared to natives over both intervals, this is nonetheless a potential source of incompatibility between the two eras. The following analysis assumes that the relationship between the probability of moving out of unskilled work and the time between the two dates for both immigrants and natives in either era is linear and that the probability of moving out of unskilled work when the time between the dates is zero is identical for immigrants and natives in either era. This ensures that the ratio of the probability for immigrants to the probability for natives evaluated at five years will equal the ratio of these probabilities evaluated at ten years if the relationships for immigrants and natives do not change between the two eras

[21] The finding of little assimilation between 1965 and 1970 measured in terms of occupational mobility relative to natives contrasts sharply with the findings of LaLonde and Topel (1992, p. 81). They show impressive rates of assimilation in earnings after accounting for cohort and period effects using 1970 and 1980 census data and the synthetic cohort approach. This suggests that immigrants' greatest adjustment in the recent period may be changes in earnings *within* occupations rather than changes associated with *crossing* occupational boundaries. As there are no comparable data on earnings for the antebellum period, it is not possible to say whether the greater assimilation of antebellum immigrants in occupational attainment came at the expense of earnings growth within occupations. An analysis of immigrants' patterns of wealth accumulation in this period, accounting for duration and cohort effects, shows wealth rising 15 percent per year among the most recent arrivals and the effect of duration positive for up to 20 years after arrival (Ferrie 1997, Chapter 6).

a third of natives. Between 1965 and 1970, three quarters of unskilled immigrants remained in unskilled jobs, compared to 44 percent of unskilled natives. The performance of unskilled immigrants relatives to natives was thus somewhat worse for contemporary immigrants than for antebellum immigrants. A quarter of European immigrants who were not in unskilled jobs in 1850 were found in unskilled jobs by 1860, compared to 7 percent of natives; antebellum immigrants were thus more than three times more likely to fall into unskilled jobs from other jobs than antebellum natives. By the 1960s, European and Asian immigrants who were not in unskilled jobs in 1965 were actually less likely to fall into such jobs by 1970 than natives who were not in unskilled jobs in 1965.

The results in Table 4 show an easier occupational transition among recent immigrants (particularly Europeans and Asians) than among antebellum immigrants. This change between the two eras is not likely to have resulted from changes in the structure of the U.S. economy (particularly the occupational shift into white collar jobs and away from farming, and the industrial shift away from agriculture and into the tertiary sector), as immigrants' occupational mobility was measured relative to that of natives in each period. This change is also not the result of changes in the sources of immigration, as European immigrants were examined in both eras and Asian and Hispanic immigrants also performed impressively in this respect in the recent period. This change is also not the result of the imposition of the quota system after 1921 and the explicit selection of immigrants based on occupation after 1952, as all of the immigrants in the recent era examined in Table 4 arrived after 1965 and the relaxation of the quota system. Finally, it is not the result of a change in the skills brought by immigrants, since it is particularly apparent when immigrants are distinguished by their pre-migration occupations. In fact, the easier occupational transition at arrival is seen only among immigrants who arrived in other than unskilled occupations. We are left, then with three possible explanations for the better performance of more recent arrivals as they entered the U.S. labor market: a cohort effect, less crowding in U.S. labor markets in the recent era, and better information about

labor market opportunities in the U.S. in the recent era.

Recall that the results in Table 4 do not allow us to difference out the impact of arrival in a particular cohort. If economic conditions in source countries in 1845-49 produced immigrants who were of lower average quality within occupations than conditions in 1965-69, the better performance of recent immigrants at arrival may reflect nothing more than this. It is not clear that 1845-49 European immigrants were of lower average quality than immigrants in the antebellum period more generally, however. Though this period witnessed the Irish Famine beginning in 1846, a closer examination of the post-migration occupational mobility of Irish antebellum immigrants revealed no discontinuity in the pattern of average quality at arrival with the Famine's onset (Ferrie 1997, Chapter 5). This period also saw the arrival after 1848 of skilled and white collar German immigrants fleeing the effects of the Revolutions of 1848, which seems to have increased the average quality of German immigrants arriving in the late 1840s (Ferrie 1997, Chapter 5). The plausibility of a cohort effect as the principal explanation for the change in relative performance across the two eras is reduced further when the results in Tables 5 and 6 are considered as well: when it is possible to control for cohort effects, recent immigrants also fare impressively compared to natives, and the best results are again among those who were in jobs other than unskilled laborer.

This leaves reduced crowding in U.S. labor markets and better information about opportunities in the U.S. as the likely explanations for the improvement in performance between the two eras. Though the immigration rate in the 1840s was close to the historic high it reached in the 1850s, and several times greater than the immigration rate in the 1960s, the pressure placed on the U.S. labor market by antebellum immigrants must have been felt primarily by workers other than those in unskilled jobs if reduced crowding is to explain the change in performance between the two eras. This is because the improved performance from the antebellum period to the recent period is seen most among immigrants in other than unskilled jobs. The available evidence suggests that pressure was indeed placed on craft workers by the influx of

immigrants beginning in the late 1840s, but this pressure was felt mainly by native-born craft workers in the urban Northeast (Ferrie 1995c). In fact, antebellum immigrants in skilled and white collar jobs who went to locations experiencing rapid population growth — where labor market crowding was probably most severe — actually had better occupational mobility than otherwise identical immigrants who went elsewhere (Ferrie 1997, Chapter 5).

The only explanation for the better performance of recent immigrants in other than unskilled occupations consistent with the evidence presented here is improvements in the information available to immigrants before their departure about opportunities in the U.S. These improvements could be the result of more frequent direct recruitment of workers by U.S. employers, better communication of information on the specific skills needed in the U.S., or the development of networks organized by occupation or professional interest that transmit such information across national borders.

V. Conclusions

Our reaction to the performance of contemporary immigrants is often colored by our perceptions of how immigrants have performed historically. The results presented here suggest that such implicit comparisons may be misleading if they are based on a history that extends back no farther than the 1960s. These results also suggest the attention that must be paid to some of the subtle shifts in the U.S. economy (such as the declining importance of cities as sites of economic opportunity for the native born) as well as more discontinuous policy shifts (such as the imposition of the quota system in 1921 and its relaxation in 1965).

Specifically, I find that the lack of convergence between contemporary immigrant and native settlement patterns as immigrants' time in the U.S. increases may be a recent development, but the patterns of movement displayed by immigrants have changed little over 120 years. What have changed profoundly

are the settlement patterns of the native born population. The geographic concentration of contemporary immigrants springs more from the unwillingness of natives to join immigrants in the nation's cities as they had in large numbers in the nineteenth century than from a new reluctance on the part of immigrants to relocate. The changed native born pattern may reflect a reduced attraction to urban locations as economic opportunities in suburban locations have increased, an increased hostility toward immigrants as the origins of immigrants have changed, or a greater desire and ability to avoid urban labor markets feeling the impact of the arrival of large numbers of immigrants than was apparent in the antebellum period. The occupational mobility of recent immigrants is better than that of antebellum immigrants, measured either as the change from pre-migration to post-migration occupation or as the change from one occupation to another between two dates after arrival in the U.S., though this improvement is concentrated among immigrants in other than unskilled jobs. Taken together, these findings suggest less cause for alarm at the experience of recent immigrants than studies that take a shorter term perspective.

References

Bartel, Ann (1989), "Where Do the New U.S. Immigrants Live?" *Journal of Labor Economics* 7, 371-391.

Bartel, Ann, and Koch, Marianne J. (1991), "Internal Migration of U.S. Immigrants," in John M. Abowd and Richard B. Freeman (eds.), *Immigration, Trade, and the Labor Market*. Chicago: Univ. of Chicago Press.

Bodnar, John (1985), *The Transplanted*. Bloomington: Indiana University Press.

Borjas, George J. (1985), "Assimilation, Changes in Cohort Quality, and the Earnings of Immigrants," *Journal of Labor Economics* 3, 463-489.

——— (1986), "The Self-Employment Experience of Immigrants," *Journal of Human Resources* 21.

——— (1987), "Self-Selection and the Earnings of Immigrants," *American Economic Review* 77.

——— (1992a), "The Economics of Immigration," *Journal of Economic Literature*.

——— (1992b), "National Origin and the Skills of Immigrants in the Postwar Period," in George J. Borjas

and Richard B. Freeman (eds.), *Immigration and the Work Force: Economic Consequences for the United States and Source Areas*. Chicago: The University of Chicago Press.

Chiswick, Barry R. (1978a), "The Effects of Americanization on the Earnings of Foreign-Born Men," *Journal of Political Economy* 86 (October), 897-921.

——— (1978b), "A Longitudinal Analysis of the Occupational Mobility of Immigrants," in Dennis Barbara (ed.), *Proceedings of the Industrial Relations Research Association*. Madison: Industrial Relations Research Association.

——— (1994), "The Performance of Immigrants in the United States Labor Market," in Herbert Giersch (ed.), *Economic Aspects of International Migration*. Berlin: Springer-Verlag.

Dunlevy, James A. (1980), "Nineteenth-Century European Immigration to the United States: Intended versus Lifetime Settlement Patterns," *Economic Development and Cultural Change* 28.

Ferrie, Joseph P. (1992), "'We Are Yankeys Now': The Economic Mobility of Antebellum Immigrants to the U.S.," Ph.D. diss., University of Chicago.

——— (1995a), "The Geographic Mobility of Antebellum Immigrants to the U.S. After Their Arrival at New York," *Research in Economic History* 15.

——— (1995b), "Westward Who? Migration to the Frontier in Antebellum America," unpublished, Northwestern University.

——— (1995c), "The Impact of Immigration on Antebellum Labor Markets," unpublished, Northwestern University.

——— (1995d), "Up and Out or Down and Out? Immigrant Mobility in the Antebellum U.S.," *Journal of Interdisciplinary History* (Summer).

——— (1996), "A New Sample of Antebellum Americans Linked From the 1850 PUMS to the 1860 Federal Manuscript Census Schedules," *Historical Methods* (Fall).

——— (1997), *'Yankeys Now': Immigrants in the Antebellum U.S., 1840-60.* New York: Oxford University Press, forthcoming.

Filer, Randall K. (1992), "The Effect of Immigrant Arrivals on Migratory Patterns of Native Workers," in George J. Borjas and Richard B. Freeman (eds.), *Immigration and the Work Force: Economic Consequences for the United States and Source Areas*. Chicago: The University of Chicago Press.

Fogel, Robert W. (1989), *Without Consent or Contract: The Rise and Fall of American Slavery*. New York: Norton.

Galenson, David W., (1991), "Economic Opportunity on the Urban Frontier: Nativity, Work, and Wealth in Early Chicago," *Journal of Economic History* 51 (September), 581-603.

Hatton, Tim (1995), "The Immigrant Assimilation Puzzle in Late Nineteenth Century America," unpublished, University of Essex.

Jasso, Guillermina, and Rosenzweig, Mark R. (1988), "How Well Do U.S. Immigrants Do? Vintage Effects, Emigration Selectivity, and Occupational Mobility," *Research in Population Economics* 6.

LaLonde, Robert J., and Topel, Robert H. (1991), "Labor Market Adjustment to Increased Immigration," in John M. Abowd and Richard B. Freeman (eds.), *Immigration, Trade, and the Labor Market*. Chicago: University of Chicago Press.

Massey, Douglas S. (1981), "Dimensions of the New Immigration to the United States and the Prospects for Assimilation," *Annual Review of Sociology* 7.

Thernstrom, Stephan (1964), *Poverty and Progress: Social Mobility in a Nineteenth Century City*. Cambridge: Harvard University Press.

——— (1975), *The Other Bostonians.* Cambridge: Harvard University Press.

U.S. Bureau of the Census (1970), Census of Population and Housing: United States Public Use Microdata Sample, County Group, Neighborhood Characteristics, and State Samples, 1% Sample, 5% Questionnaire. Washington, D.C.

U.S. Bureau of the Census (1980), Census of Population and Housing: United States Public Use Microdata Sample, B Sample, 1% Sample. Washington, D.C.

Table 1 Index of Geographic Association By Arrival Cohort and Census Year, Calculated for 54 Urban Counties (1850 & 1860) and 50 SMSAs (1970 & 1980), Males

	Arrival Cohort					
Origin and Year	1840-44	1845-49	1960-64	1965-69	1970-74	1975-79
European						
1850	0.28	0.24				
	(349)	(339)				
1860	0.21	0.20				
	(263)	(336)				
1970			0.30	0.29		
			(824)	(1,065)		
1980			0.31	0.30	0.34	0.29
			(883)	(983)	(830)	(1,036)
Asian						
1970			0.30	0.28		
			(328)	(869)		
1980			0.32	0.34	0.32	0.30
			(317)	(796)	(1,420)	(2,612)
Hispanic						
1970			0.43	0.42		
			(1,021)	(1,368)		
1980			0.45	0.45	0.43	0.45
			(1,143)	(1,708)	(2,439)	(2,997)

Notes: Cell sizes in parentheses. The Index of Geographic Association is calculated as

$$G = \tfrac{1}{2} \Sigma \left| immigrant\ share_i - total\ share_i \right|$$

where $immigrant\ share_i$ is the share of the U.S. immigrant population from a particular country of origin located in Urban County i (1850-60) or SMSA i (1970-80), and $total\ share_i$ is the share of the total U.S. population located in the same place. The Urban Counties included are the 54 counties that contained a city of 10,000 or more persons in 1850. The SMSAs included are the 50 largest in population in 1970.

Source: Linked Ship List Sample (Ferrie, 1997); Seventh Census of the U.S.; Eighth Census of the U.S.; 1970 PUMS (5% Questionnaire, County Group 1% Sample); 1980 PUMS (1% B Sample).

Table 2 Herfindahl Index By Arrival Cohort and Census Year, Calculated for 54 Urban Counties (1850 & 1860) and 50 SMSAs (1970 & 1980), Males

	Arrival Cohort					
Origin and Year	1840-44	1845-49	1960-64	1965-69	1970-74	1975-79
European						
1850	0.06	0.07				
	(349)	(339)				
1860	0.06	0.07				
	(263)	(336)				
1970			0.16	0.15		
			(824)	(1,065)		
1980			0.14	0.15	0.20	0.12
			(883)	(983)	(830)	(1,036)
Asian						
1970			0.10	0.10		
			(328)	(869)		
1980			0.10	0.10	0.10	0.09
			(317)	(796)	(1,420)	(2,612)
Hispanic						
1970			0.19	0.20		
			(1,021)	(1,368)		
1980			0.18	0.20	0.19	0.16
			(1,143)	(1,708)	(2,439)	(2,997)

Notes: Cell sizes in parentheses. The Herfindahl Index is the sum of the squared shares of a group located in each location *i*:

$$H = \Sigma (share_i)^2$$

where $share_i$ is the share of the group's total population in the U.S. located in Urban County *i* (1850-60) or SMSA *i* (1970-80). The Urban Counties included are the 54 counties that contained a city of 10,000 or more persons in 1850. The SMSAs included are the 50 largest in population in 1970. The Herfindahl Index for the total U.S. population was 0.03 in 1850, 0.04 in 1860, 0.05 in 1970, and 0.04 in 1980.

Source: Linked Ship List Sample (Ferrie, 1997); Seventh Census of the U.S.; Eighth Census of the U.S.; 1970 PUMS (5% Questionnaire, County Group 1% Sample); 1980 PUMS (1% B Sample).

Table 3 Difference Between Share of Migrant's Ethnic Group at Destination and Origin, for Male Migrants Between Counties (1850-60) or County Groups (1975-80)

	Origin			
Arrival Cohort	Native	European	Asian	Hispanic
MOVEMENT BETWEEN COUNTIES, 1850-60				
1845-49 arrivals		3.68		
		(127)		
1840-44 arrivals		3.26		
		(110)		
total	-4.61			
	(1,818)			
MOVEMENT BETWEEN COUNTY GROUPS, 1975-80				
1970-74 arrivals		-0.52	-0.64	-1.52
		(171)	(414)	(431)
1965-69 arrivals		-0.41	-0.64	-1.05
		(188)	(223)	(262)
1960-64 arrivals		-0.42	-0.62	-1.34
		(139)	(88)	(182)
total	-0.04			
	(58,288)			

Notes: Cell sizes in parentheses. Each entry shows the difference between the ethnic composition at the destination and at the origin for movers (between counties or county groups). The ethnic composition is the share of an ethnic group located in the location. For example, for European immigrants, each entry shows the difference between the share of the total European population at the destination and the share at the origin. Positive values indicate moves *toward* members of the same ethnic group; negative values indicate movement *away* from the same ethnic group.

Source: Linked Ship List Sample (Ferrie, 1997); Linked 1850 PUMS Sample (Ferrie, 1996); Seventh Census of the U.S.; Eighth Census of the U.S.; 1980 PUMS (1% B Sample).

Table 4 Percent of Male Natives and Immigrants in U.S. Less Than 5 Years Employed as Unskilled Laborers in 1850 and 1970, By Pre-Migration Occupation for Immigrants

	All Pre-Migration Occupations		By Pre-Migration Occupation			
			Unskilled		Other	
Origin	1850	1970	1850	1970	1850	1970
European	46.7	18.3	58.4	65.1	35.3	9.2
	(478)	(2,777)	(239)	(450)	(239)	(2,327)
Asian		17.5		82.5		10.3
		(1,439)		(143)		(1,296)
Hispanic		25.5		65.5		13.9
		(2,679)		(603)		(2,076)
Native 20-65	15.1	14.4				
	(2,663)	(382,881)				
Native 20-25	28.9	20.7				
	(726)	(73,410)				

Notes: Cell sizes in parentheses. "Unskilled" is Service Workers (including Private Household) and Laborers (including Farm). "Other" is all other occupations. For 1850, the sample includes all 1845-49 arrivals. For 1970, the sample includes all 1965-69 arrivals.

Source: Linked Ship List Sample (Ferrie, 1997); Linked 1850 PUMS (Ferrie, 1996); 1970 PUMS (5% Questionnaire, County Group, State, and Neighborhood Charac-teristics 1% Samples).

Table 5 Percent of Male Natives and Immigrants Employed as Unskilled Laborers in 1850-60 and 1965-70

Origin	1850	1860	1965	1970
European	45.5	37.2	18.8	16.6
	(887)	(887)	(8,120)	(8,120)
Asian			21.3	17.1
			(1,452)	(1,452)
Hispanic			32.1	27.7
			(5,386)	(5,386)
Native	15.1	10.7	25.8	14.4
	(2,663)	(2,663)	(382,881)	(382,881)

Notes: Cell sizes in parentheses. "Unskilled" is Service Workers (including Private Household) and Laborers (including Farm). For 1850, the sample includes all pre-1850 arrivals. For 1970, the sample includes all pre-1965 arrivals.

Source: Linked Ship List Sample (Ferrie, 1997); Linked 1850 PUMS (Ferrie, 1996); 1970 PUMS (5% Questionnaire, County Group, State, and Neighborhood Charac-teristics 1% Samples).

Table 6 Percent of Male Natives and Immigrants Employed as Unskilled Laborers in 1860 and 1970, By Occupation in 1850 and 1965

	Unskilled in 1850 and 1965		Other in 1850 and 1965	
Origin	1860	1970	1860	1970
European	53.4	74.6	23.8	3.2
	(404)	(1,529)	(483)	(6,591)
Asian		75.1		1.4
		(309)		(1,143)
Hispanic		72.7		6.4
		(1,728)		(3,658)
Native	30.4	44.2	7.3	4.0
	(401)	(98,703)	(2,262)	(284,178)

Notes: Cell sizes in parentheses. "Unskilled" is Service Workers (including Private Household) and Laborers (including Farm). "Other" is all other occupations. For 1850, the sample includes all pre-1850 arrivals. For 1970, the sample includes all pre-1965 arrivals.

Source: Linked Ship List Sample (Ferrie, 1997); Linked 1850 PUMS (Ferrie, 1996); 1970 PUMS (5% Questionnaire, County Group, State, and Neighborhood Charac-teristics 1% Samples).