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Abstract

The 1990s witnessed a significant geographic redistribution of immigration away from the traditional immigrant-receiving states, mainly California, and towards other parts of the country, mainly the Southern states that have not historically been immigrant-receiving states. This paper documents the impact of this change in immigrant settlement patterns on the skill endowment of the workforce in Southern states. The empirical analysis indicates that the recent change in immigrant settlement patterns led to the rise of a sizable foreign-born low-skill workforce in the South, particularly outside Florida and Texas. This workforce developed both as a result of increased settlement of many newly arrived low-skill immigrants in those states, and increased internal migration of low-skill immigrants from the non-South to the South.

THE RISE OF LOW-SKILL IMMIGRATION IN THE SOUTH

George J. Borjas*

I. Introduction

There has been a resurgence of large-scale immigration in the United States and in many other countries in recent decades. Not surprisingly, the impact of immigration on economic conditions in the host country is often a topic of contentious policy debate. In the U.S. context, this concern has motivated a great deal of research that attempts to document how the U.S. labor market adjusted to the large-scale immigration in the past few decades. Much of this research has focused on analyzing the determinants of the skill composition of the foreign-born workforce (see the survey in Borjas, 1994). This analytical focus can be easily justified by the fact that the skill composition of the immigrant population—*and how the skills of immigrants compare to those of natives*—is perhaps the key determinant of the social and economic consequences of immigration.

For example, the connection between the skill composition of the immigrant population and the fiscal impact of immigration is self-evident. The many programs that make up the welfare state tend to redistribute resources from high-income workers to persons with less economic potential. Skilled workers, regardless of where they were born, typically pay higher taxes and receive fewer social services. As a result, high-skill immigrants would probably have a negligible impact on the cost of social insurance programs—and might even contribute to their funding.

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Skilled immigrants may also assimilate quickly. They might be more adept at learning the tools and “tricks of the trade” that can increase the chances of economic success in the United States, such as the language and culture of the American workplace. Moreover, the structure of the American economy changed drastically in the 1980s and 1990s, and now favors workers who have valuable skills to offer (Katz and Murphy, 1992). It seems, therefore, as if high-skill immigrants would have a head start in the race for economic assimilation.

The skill mix of immigrants also determines which native workers are most affected by immigration. Low-skill immigrants will typically harm the economic opportunities of low-skill natives, while high-skill immigrants will typically harm the economic opportunities of high-skill natives.

Finally, the skills of immigrants determine the economic benefits from immigration. The United States benefits from international trade because it can import goods that are not available or are too expensive to produce in the domestic market. Similarly, the country benefits from immigration because it can import workers with scarce qualifications and abilities.

In addition to measuring the relative skill endowment of immigrants, the existing literature also stresses the economic consequences that arise from the fact that immigrants typically cluster in a small number of geographic areas (Friedberg and Hunt, 1995; Card, 2001).¹ Figure 1 summarizes the extent of this clustering. In 1990, 73 percent of working immigrants lived in the six main immigrant-receiving states—California, New York, Texas, Florida, Illinois, and New Jersey—with 32.9 percent living in California alone. Figure 1 also shows, however, that the 1990s witnessed what may be a “softening” of this geographic clustering, particularly in

¹ There are remarkably few studies the factors that determine the geographic settlement of immigrants. An important exception is the analysis of Bartel (1989). She finds that the internal migration decision of immigrants is less responsive than that of native workers to inter-regional wage differentials.

terms of the number of immigrants who chose to reside in California. By 2000, the fraction of immigrant workers living in California had declined to 28.5 percent; the fraction of immigrant workers living in the “other immigrant states” had remained stable at 40.8 percent; and the fraction of immigrant workers living in the “rest of the country” had increased from 26.6 percent in 1990 to 31.6 percent.

The top panel of Figure 2 continues the analysis by illustrating the trend in the share of the immigrant population that chose to reside in each of the main immigrant-receiving states outside California. Only one of those states, Texas, experienced a significant rise in immigration. All the other states saw the fraction of the immigrant population moving to those states either remain stable (e.g., Florida), or decline (e.g., New York). The bottom panel of the figure shows roughly the same pattern even when one considers the *marginal* settlement pattern of immigrants: the location decision of newly arrived immigrants (defined as immigrants who have been in the country fewer than five years as of the Census date). As before, only Texas experienced an increase in the relative number of newly arrived immigrants who chose to move there. All the other large immigrant-receiving states saw their shares of new immigrants either remain stable or decline.

Moreover, it turns out that not all regions outside the main immigrant-receiving states experienced an increased immigrant influx as immigrants began to settle outside California. The top panel of Figure 3 illustrates what happened to the fraction of immigrants living in particular regions of the country *outside the six main immigrant-receiving states*. The figure shows that the Southern region—excluding Florida and Texas—experienced the fastest growth in the immigrant

population.² Between 1990 and 2000 the fraction of immigrants living in those states rose from 7.6 to 10.4 percent. Immigration also grew relatively fast in the states that make up the West region outside California: 6.9 percent of immigrants lived in those states in 1990 and 9.4 percent lived there in 2000. In contrast, the relative number of immigrants who live in the Northeast (outside New York and New Jersey) continued to fall, while the number of immigrants who lived in the Midwest (outside Illinois) rose only slightly.

The bottom panel of Figure 3 shows that the geographic redistribution of immigrants towards the Southern region was much more striking when one looks at the location decision of newly arrived immigrants. In 1990, 8.3 percent of the newly arrived immigrants chose to live in the Southern states outside Florida and Texas. By 2000, 15.2 percent of newly arrived immigrants were living in those states.

Figures 1 to 3, therefore, document an important change in the geographic sorting of immigrants during the 1990s. In particular, there was a significant redistribution of immigration away from the traditional immigrant-receiving states, mainly California, and towards other parts of the country, mainly the Southern states that have not historically been immigrant-receiving states. This paper documents the impact of this change in immigrant settlement patterns on the skill endowment of the workforce in Southern states. The empirical analysis uses all of the available Census microdata between 1960 and 2000 to examine two related questions that inevitably lie at the core of any study of the economic impact of immigration in the South:

1. Which types of immigrants have chosen to settle in the Southern region?

² As defined by the Census, the South region includes Alabama, Arkansas, Delaware, the District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

2. And how do these immigrants compare to the native-born population of the Southern region and to the immigrants who choose to settle elsewhere?

The evidence reported in this paper indicates that the change in immigrant settlement patterns in the 1990s led to the rise of a sizable foreign-born low-skill workforce in the South, particularly outside Florida and Texas. This workforce developed as a result of both the settlement of many newly arrived low-skill immigrants in those states, as well as the internal relocation of low-skill immigrants from other states into the South. The demographic, social, and economic impact of this significant change in the geographic sorting of immigrants in the United States will surely be felt for many years to come.

II. Basic Trends

The resurgence of large-scale immigration since the 1960s has dramatically altered the size and skill composition of the workforce. Table 1, for example, reports the trend in the immigrant share, the fraction of the workforce that is foreign-born, in each decennial Census since 1960.³ In the non-South, the immigrant share rose from 6.7 percent to 14.8 percent between 1960 and 2000, with more than half of this increase occurring in the 1990s. In other words, not only is the demographic importance of immigration in this region increasing, but it is increasing at an increasing rate. The immigrant share in the states that compose the Southern region rose from 1.6 percent to 10.6 percent during the same period, and again about half of the increase occurred in the 1990s. As the third row of the table indicates, however, the immigrant share rose even faster in the subset of states in the South region that excludes Florida and Texas. The

³ All of the data reported in this section is drawn from the 1960-2000 Integrated Public Use Microdata Samples of the U.S. Census (IPUMS). The statistics refer to a sample of persons aged 18-64 who worked at least

immigrant share in these states rose from 0.9 in 1960 to 3.0 percent in 1990, and then *doubled* to 6.1 percent in 2000. Note that this doubling in the immigrant share occurred at a time when the size of the native workforce in this subset of southern states was also rising rapidly.

The remaining rows of the table reveal that not all states in the Southern region experienced equally large increases in immigration. Of course, the immigrant share rose rapidly in the 1990s in the two southern states that have long been popular destinations for immigrants, Florida and Texas (from 14 to 20 percent in Florida, and from 11 to 18 percent in Texas). More remarkably, the immigrant share rose proportionately faster in two other southern states that have not traditionally been immigrant destinations, Georgia and North Carolina. In Georgia, the immigrant share almost tripled from 3.2 to 8.9 percent between 1990 and 2000, while in North Carolina the immigrant share more than tripled from 1.9 to 6.7 percent during the period.

Table 2 presents the data from a different perspective by calculating the fraction of immigrants who live in particular regions or states. The top panel conducts the calculations using the stock of immigrants, while the bottom panel uses the flow (i.e., the immigrants who have been in the country fewer than 5 years as of the Census date). The bottom panel of Table 2 shows that during the 1990s the share of newly arriving immigrants settling in the South rose from 21.9 to 34.3 percent, a 12.4 percentage point rise. More than half of this rise is attributable to immigrants settling southern states outside Florida and Georgia. In 1990, for example, 1.2 percent of newly arrived immigrants chose to settle in Georgia and an additional 0.7 percent settled in North Carolina. By 2000, these statistics had tripled: 3.6 percent were settling in Georgia and 3.1 percent were settling in North Carolina. Put differently, two southern states that

one week in the year prior to the Census, are not enrolled in school, and do not live in group quarters. The data will be described in more detail in the next section.

as recently as 1970 received less than 1 percent of the immigrant flow are now receiving almost 7 percent of the flow.

Concurrent with the increased number of immigrants who are choosing to reside in non-traditional destinations in the South, there has been an important shift in the national origin of the foreign-born population in the Southern region. Partly as a result of the policy changes introduced by the repeal of the national origins quota system in the 1965 Amendments to the Immigration and Nationality Act, the national origin mix of immigrants shifted from Europe and Canada to countries in Latin America and Asia beginning in the 1970s. Table 3 shows, for example, that in the non-South 76.7 percent of the newly arrived immigrants in 1960 originated in either Canada or Europe. By 2000, the fraction of immigrants originating in these regions had fallen to 18.5 percent. In contrast, the fraction of immigrants in the non-South who originate in Mexico rose steadily from 6.6 to 33.4 percent between 1960 and 2000.

In the Southern region (exclusive of Florida and Texas), there was also a decline in the relative number of immigrants who originate in Canada or Europe, from 72.1 percent in 1960 to 14.1 percent in 2000. Remarkably, however, these states did not experience a large increase in Mexican immigration until very recently. As late as 1980, only 2.5 percent of the immigrants in this region originated in Mexico. This fact changed drastically during the 1990s. By 2000, Mexican immigrants made up 37.4 percent of all immigrants in the Southern states exclusive of Florida and Texas. In an important sense, the trends in the size and national origin composition of immigrants in the South, particularly outside Florida and Texas, suggest that the South is simply experiencing what many other states have already experienced in terms of the resurgence of large-scale immigration, but with a decades-long delay.

III. The Skills and Earnings of Immigrants

The skill composition of the immigrant population—and, particularly, how the skills of immigrant workers compare to those of native workers—is the key determinant of the economic impact of immigration. This section examines how the skills and economic performance of immigrants in the South compare to those of foreign-born workers in other regions of the country, and documents the extent to which regional differentials in immigrant skills and economic performance has changed over time.

The empirical analysis uses data drawn from the 1960-2000 Integrated Public Use Microdata Series (IPUMS) of the U.S. Census.⁴ These data contain information on the skills and labor market outcomes of millions of workers in the United States. In 1960 and 1970, the data provide a 1 percent random sample of the population. In 1980, 1990, and 2000, the data provide a 5 percent sample. All of the available observations in these large surveys are used in the analysis that follows. Throughout the study, persons who are not citizens or who are naturalized citizens are classified as immigrants; all other persons are classified as natives.⁵ In the remainder of the paper, where the focus is on documenting trends in relative immigrant skills, the samples are restricted to male workers aged 25 to 64 who are not in the military and are not enrolled in school.⁶

⁴ These data are available at the University of Minnesota's IPUMS website: <http://www.ipums.umn.edu/usa/index.html>.

⁵ This definition implies that persons born abroad of American parents or persons born in American territories are classified as natives. Some of the variables reported in the Census (such as annual earnings) refer to the year prior to the survey. I avoid confusion by always referring to the data in terms of the Census year.

⁶ The trends in the relative wage of immigrant women (and interregional differences in those trends) are likely to be heavily influenced by the selection issues that characterize the huge differences in female labor force participation rates both across groups and across regions.

Much of the empirical research is based on comparisons of the Southern Census region with the non-South (i.e., all other Census regions). Because the Southern region includes two states (Florida and Texas) that have been large recipients of immigrant flows prior to 1990, I will also compare what used to be the “non-immigrant South” (the Southern region, exclusive of Florida and Texas) to the non-South region.

Table 4 documents the trend in the distribution of educational attainment for native and immigrant workers. Due to the rising educational attainment of the native population, Table 4 documents a significant decline in the fraction of native workers who are high school dropouts in all regions between 1960 and 2000. Outside the South, for example, the fraction of male native workers who are high school dropouts dropped from 49.9 to 6.2 percent between 1960 and 2000. In the subset of southern states that exclude Florida and Texas, the decline was even steeper: from 63.1 to 11.8 percent.

The table also indicates that the fraction of immigrant workers who lack a high school diploma declined continuously in all of the three regions under study *through 1990*: from 66.6 to 31.9 percent in the non-South, from 62.5 to 33.3 percent in the South, and from 49.3 to 16.0 percent in the so-called non-immigrant South. Because the rate of decline in the fraction of high school dropouts was slower for immigrants, the data clearly suggest a relative decline in the educational attainment of immigrants through 1990 in all three regions under consideration.

The 1990s, however, introduced an important twist in the regional variation of these trends. In both the non-South and the South, the fraction of immigrants who lack a high school education remained relatively stable over the decade, hovering between 30 and 33 percent. In the subset of southern states that excludes Florida and Texas, however, there was a dramatic *rise* in the number of immigrants who lack a high school diploma, from 16.0 percent in 1990 to 26.8

percent in 2000. Put differently, the data indicate that the non-immigrant South became an important destination for many foreign-born high school dropouts in the 1990s.

The inter-regional differences in the changing relative education of immigrants are equally striking when one looks at the upper end of the education distribution. Outside the South, natives are now slightly more likely to have a college education than immigrants, with the gap widening since 1980. In contrast, the Southern region that excludes Florida and Texas has always attracted a relatively large number of foreign-born college graduates. In 1970, for instance, 36.7 percent of the immigrants in those states had a college diploma, as compared to only 13.3 percent of the native workforce. The educational advantage enjoyed by immigrants in this subset of the South region, however, narrowed substantially in the past two decades. By 2000, 35.3 percent of immigrants and 26.0 percent of native workers had a college education.

The data in Table 4, therefore, suggests that the trends in the educational attainment of immigrants and natives differed strikingly between the non-South region and the subset of Southern states that traditionally composed the “non-immigrant” section of the South. In 1960, foreign-born workers in the non-immigrant South were relatively skilled—with lower high school dropout rates and higher college graduation rates—than native workers. By 2000, much of this skill advantage had disappeared, with much of the reversal occurring during the 1990s.

Some of the impact of these trends in inter-regional differences in the relative education distribution of foreign-born workers is evident in Table 5, which summarizes the trend in the log wage differential between male immigrant and native workers over the past four decades. Consider initially the trend in the log wage gap between the average immigrant and native worker. In the non-South, the two groups had rough wage parity in 1960. Over time, immigrants began to exhibit a growing wage disadvantage. The log wage gap stood at -.030 in 1970; -.102 in

1980; $-.156$ in 1990; and $-.204$ in 2000. Applying a simple difference-in-differences estimator to these gaps implies that the relative earnings of immigrants outside the South declined by about 20 percentage points between 1960 and 2000.

The same declining relative immigrant wage is seen in the South, where immigrants and native workers had wage parity in 1960, and immigrants had a wage disadvantage of about 19.2 percent in 2000. Again, a simple difference-in-differences calculation implies a fall of about 20 percentage points in the relative wage of immigrants in the South over the period.

This trend, however, is markedly different if one looks at the subset of Southern states that excludes Florida and Texas. In 1960, the typical immigrant in the non-immigrant south earned about 30.4 percent *more* than the typical native-born worker. By 2000, the typical immigrant man earned about 7.0 percent less. The relative wage of immigrants in this subset of the South region, therefore, fell by about 37 percentage points between 1960 and 2000, roughly twice as much as the decline observed in other parts of the country. Note, moreover, that roughly half of this decline in the relative wage of immigrants occurred during the 1990s, when the log wage gap between immigrant and natives residing in the non-immigrant South fell from $+.097$ to $-.079$.

Many studies in the modern literature on the economics of immigration focus on analyzing how the earnings potential of immigrant workers adapts to the host country's labor market.⁷ In the past two decades, this literature has concentrated on measuring both the "assimilation" and "cohort" effects that jointly determine the evolution of the relative wage of immigrants over time (Chiswick, 1978; Borjas, 1985, 1995). The assimilation effect arises because immigrants acquire relatively more human capital than native workers as they

accumulate experience in the U.S. labor market. As a result, the human capital stock of immigrants grows relative to that of natives, and immigrants experience faster wage growth. Cohort effects arise because there may be permanent differences in skills among immigrant waves. For example, the immigrants who arrived in the late 1990s may be different (as reflected, for example, by the entry wage) than the immigrants who arrived in the late 1970s, who, in turn, might differ from those who arrived in the late 1950s.⁸

Table 5 also summarizes the evidence on inter-regional differences in cohort effects over the past 40 years. In particular, the table reports the log wage gap between native workers and immigrants who belong to a specific cohort (e.g., immigrants who have been in the United States 5 to 10 years as of the Census date). Consider initially the row indicating the trend in the relative wage of newly arrived immigrants outside the South. These immigrants arrived in the five-year period prior to each decennial Census. The trend in this relative wage clearly indicates that the relative wage of consecutive immigrant cohorts declined quite steeply until 1990, from $-.134$ in 1960 to $-.353$ in 1980, and a further decline to $-.419$ in 1990. Interestingly, this trend was reversed in the 1990s. By 2000, the relative wage of newly arrived immigrants in the non-South region was $-.324$. Overall, the data indicate that the relative wage of new immigrants declined by about 19 percentage points between 1960 and 2000.

The comparison of this U-shape trend in the non-South with the respective trends in the South and in the non-immigrant South yields two interesting findings. First, the significant “uptick” in the relative skills of newly arrived immigrants is not found in the South at all. In the

⁷ Representative studies include Carliner (1980), Duleep and Regets (1996), and LaLonde and Topel (1992). Borjas (1999) and Smith and Edmonston (1997) survey this extensive literature.

⁸ The cross-section correlation may also be contaminated by cohort effects if there is selective out-migration of immigrants, so that the trend in the earnings of “survivors” over time will not measure the actual earnings growth experienced by a particular immigrant cohort.

South, the relative skills of immigrants declined from 1960 through 1990 (the log wage gap fell from $-.179$ to $-.331$), and then remained stable at around $-.32$ through 2000. The comparison of the two endpoints in this trend indicates that the relative wage of new immigrants in the South declined by about 14 percentage points between 1960 and 2000.

The trend in the relative wage of new immigrants in the subset of southern states that excludes Florida and Texas is the most striking of all. In particular, the decline in the relative wage of new immigrants was much steeper in the non-immigrant South than in other parts of the country. In 1960, newly arrived immigrants earned about 20 percent more than native workers. By 1990, they earned 13 percent less, and by 2000, they earned 26 percent less. Applying a difference-in-differences estimator to this trend suggests that the relative wages of newly arrived immigrants in the non-immigrant South fell by around 46 percentage points between 1960 and 2000.

It is worth noting that the “uptick” observed in the late 1990s in the relative wage of newly arrived immigrants in the non-South seems to be specific to that cohort, and does not indicate an overall improvement in the earnings of other cohorts. Table 5 also reports the trend in the relative wage of three other immigrant cohorts: those present in the United States for 5 to 10 years; those present in the country for 10 to 15 years; and those present in the United States for 15 to 20 years.⁹ The wage trends for these cohorts refute the conjecture that all immigrant cohorts in the non-South experienced an improvement in their relative wage between 1990 and 2000. In fact, the relative wage of immigrants in each of these cohorts either remained stable or declined substantially for all cohorts of immigrants who have been in the United States at least 5 years. Put differently, the rising relative wage experienced by immigrants who migrated to the

non-South region between 1995 and 1999 does not “transfer” to other cohorts or to other regions, so it does not indicate a general improvement in the economic conditions facing all immigrants. Rather, it seems to represent an improvement in the economic opportunities available to that specific cohort in the non-South region.

Borjas and Friedberg (2004) have recently shown that the uptick in cohort quality for immigrants who arrived in the late 1990s (at the national level) can be explained in terms of a simple story that has significant policy relevance. In particular, the entire uptick disappears when the relatively small number of immigrants who are employed as computer scientists and engineers is excluded from the analysis.¹⁰ Panel A of Table 6 illustrates this basic result. Prior to 1990, the trend in the relative wage of newly arrived immigrants in the non-South is roughly the same, regardless of whether the high-tech workers are included in the calculations. There is, however, a significant divergence between the two trend lines in the 1990-2000 period. As Panel B of Table 6 also indicates, only 4.4 percent of the newly arrived immigrants in the non-South worked in the high-tech occupations in 1990. By 2000, however, 12.4 percent of the newly-arrived immigrants worked in these occupations. This seemingly small increase in the number of high-tech workers in the immigrant flow is sufficiently strong to reverse the decades-long downward trend in the relative wage of new immigrants in the non-South.

Although the Census data does not provide information on the type of visa that immigrants use to enter the country, it is probably not a coincidence that this increase in the relative number of high-tech immigrants occurred at the same time that the size of the H-1B visa

⁹ The data reported in the 1960 Census do not allow for the identification of specific immigrant cohorts (except for the immigrants who arrived between 1955 and 1960).

¹⁰ The occupation codes used to define the sample of computer scientists and engineers in each Census are: 80-93 in 1960; 3, 4, 6-23, in 1970; 44-59, 64, 229 in 1970 and 1980; 100-111, 132-153 in 2000.

program grew substantially. This program allows employers to sponsor the entry of temporary workers in “specialty occupations.” In fact, most of the workers entering the country with an H-1B visa are employed either in computer-related occupations or in engineering (70 percent in 2000).¹¹ Between 1990 and 1994, the number of H-1B visas hovered around 100,000 annually. In 1996, this number increased to 144,548; to 240,947 in 1998; and to 302,326 in 1999.¹² It seems, therefore, that this “importation” of high-tech workers through the H-1B program reversed the long-standing trend of declining relative skills in successive cohorts of new immigrants in the non-South.

Although the data on cohort effects reported in Table 5 did not indicate an “uptick” in the relative wage of newly arrived immigrants in the South, the increase in the number of high-tech workers arriving during the 1990s attenuated the decline in the relative wage of newly arrived immigrants that would otherwise have been observed had these immigrants not been admitted. Between 1990 and 2000, for example, the relative wage of new immigrants in the subset of southern states that excludes Florida and Texas dropped by 13 percentage points. This drop would have been even steeper—18 percentage points—had there been no high-tech workers in the new immigrant cohort. The reason is that there was a substantial increase in the number of new immigrants in the South who worked as computer scientists or engineers (from 5.9 to 10.6 percent in the non-immigrant South).

Although I have aggregated the data into regions, there is a great deal of interstate variation—even within the South—in the trend of the relative wage among newly arrived immigrants. Table 7 reports the relative wage of newly arrived immigrants for each of the states

¹¹ U.S. Immigration and Naturalization Service (2002).

¹² U.S. Immigration and Naturalization Service (various issues).

that compose the South Census region. In both Florida and Texas, the relative wage of newly arrived immigrants rose during the 1990s; from -.42 to -.33 in Florida, and from -.52 to -.44 in Texas. However, in the two states that became important immigrant destinations during the 1990s, Georgia and North Carolina, there was a very steep drop in the relative wage of newly arrived immigrants, from -.14 to -.39 in Georgia, and from -.25 to -.38 in North Carolina. These trends, therefore, indicate that many of the immigrants flocking to the “non-traditional” destination states in the South had relatively low skill levels.

Finally, it is worth investigating if the wage differentials between particular cohorts of immigrants and native workers documented in each of the regions can be explained by differences in socioeconomic characteristics, such as differences in the educational attainment or age distribution of the groups. To investigate this question, I estimated the following regression model separately within each Census and within each region:

$$(1) \quad \log w_{ijt} = X_{ijt} \beta_t + \delta_t I_{ijt} + r_j + \varepsilon_{ijt},$$

where w gives the hourly wage rate of worker i residing in state j at time t , X_{ijt} is a vector of socioeconomic characteristics; I_{ijt} is a vector of dummy variable indicating if the worker belongs to a specific immigrant cohort (and set to zero for native workers), and r_j is a vector of fixed effects indicating the state of residence. The variables in X include a vector of dummy variables indicating the worker’s educational attainment (high school dropout, high school graduate, some college, or college graduate), and the worker’s age (introduced as a fourth-order polynomial).

Table 8 reports some of the relevant coefficients in the vector δ , which give the adjusted log wage differential between particular immigrant cohorts and natives. The table reveals two

significant findings. First, controlling for educational attainment, age, and state of residence does not typically explain the sometimes sizable wage gap between immigrants and natives in any region or at any point in time. Even after controlling for all of these variables, for example, the log wage gap between newly arrived immigrants and natives is $-.235$ in the non-South and $-.172$ in the subset of southern states that excludes Florida and Texas. Secondly, the trend in the adjusted wage differential of newly arrived immigrants over time in this subset of southern states does *not* suggest a precipitous drop in relative wages. In contrast, the adjusted relative wage of newly arrived immigrants is negative and relatively stable, hovering between 10 and 20 percent over much of the period. This finding suggests that the precipitous decline in the observed relative wage of newly arrived immigrants in the non-immigrant South is due mainly to changes in observable characteristics of the new immigrant population, particularly their worsening educational distribution.

The 1960-2000 Census data also can also be used to measure the extent of “economic assimilation,” the improvement in the relative wage of a specific immigrant cohort over time. One problem with using this type of “tracking” methodology to measure economic assimilation is that many immigrants may return to their country of origin over time. Suppose that the return migrants are disproportionately composed of workers with lower than average wages. The intercensal tracking of a particular immigrant cohort would then indicate an improvement in relative wages even if no wage convergence is taking place. Alternatively, if the return migrants are the “successes” the rate of wage convergence would be underestimated. Because of data limitations (i.e., the United States does not systematically collect any data on out-migration behavior by either natives or immigrants), the selection mechanism generating the return

migration flow is not well understood.¹³ This lack of information about the selection mechanism that generates the sample of out-migrants, however, has not detracted researchers from using repeated cross-sections to measure the rate of economic assimilation.

It is tempting to apply the same methodology to measure rates of economic assimilation within specific regions of the country. This approach, however, would likely lead to a very misleading picture of economic assimilation in the South. As I will document below, the rate of inter-regional internal migration (even among broadly defined regions such as the South and the non-South) in the immigrant population is very large. These flows of internal migrants across regions suggests that the tracking of specific cohorts (defined in terms of age, year of arrival in the United States, and region of residence) will confound both the economic assimilation effect as well as any other wage effects caused by selective inter-regional migration. Instead of conducting this tracking analysis, the next section will document the nature of the selection that characterizes those immigrants who move in and out of the Southern region, and document how this selection has changed over time.

I conclude this section by showing how the changing occupation distribution of newly arrived immigrants in the various regions directly reflects the underlying changes in the skill distributions. Table 9 reports the occupation distribution for newly arrived immigrants in the non-South and in the South.¹⁴ One key feature of the trends documented in the table is the very steep decline in the fraction of immigrants in the subset of states in the South region that excludes Florida and Texas who are classified as professionals or technical workers. In 1970,

¹³ An important exception is the work of Ramos (1992), who analyzes the return migration decisions of Puerto Ricans living in the United States.

¹⁴ The table uses the IPUMS recoding of occupations into the 1950 basis to make comparisons across Censuses.

46.8 percent of the newly arrived immigrants in the South were classified as professional; by 2000, this fraction had fallen to 22.5 percent. This decline in the number of new immigrants employed in high-skill occupations stands in sharp contrast to the trend observed in the non-south region, where the fraction of immigrants classified as professional fell only from 25.1 to 24.1 percent from 1970 to 2000.

At the same time, the fraction of newly arrived immigrants in this subset of southern states classified as operatives or laborers rose rapidly, from 10.0 percent in 1970 to 29.1 percent in 2000. In contrast, the number of new immigrants in the non-South employed in these low-skill occupations actually declined, from 29.1 percent in 1970 to 26.6 percent in 2000.

IV. Internal Migration

As I showed in the introductory section, although much of the immigration influx over the past 40 years affected a relatively small number of states, the 1990s witnessed a “spreading out” of immigration to other parts of the country, particularly the South. In this section, I show that the increased immigration into the Southern region can be explained both in terms of a change in the number of newly arrived immigrants who have chosen to reside in the South, as well as in significant in-migration from earlier immigrants who originally chose to settle outside the South but are now moving into the South. Moreover, there is a significant difference in these settlement patterns across education groups.

Consider initially the settlement patterns of newly arrived immigrant working men in the United States (i.e., immigrants who have been in the United States fewer than 5 years as of the Census date). The top panel of Table 10 reports the fraction of these immigrants who chose to settle in the South and the non-South. The data clearly show a substantial decline in the fraction

of new immigrants who chose to settle outside the south between 1990 and 2000. In 1960, for example, 87.3 percent of newly arrived immigrant men chose to settle outside the South. This fraction had fallen to 78.4 percent in 1980, and to 64.6 percent by 2000. Note also that much of the decline occurred between 1990 and 2000, when the fraction of immigrants living in the non-South declined by almost 14 percentage points.

The top panel of the table also shows that an important part of the increased immigration in southern states occurred in the subset of states that were not traditional receiving states prior to 1990. The proportion of newly arrived immigrant men who chose to live in the South rose from 21.7 to 35.4 percent between 1990 and 2000—a 13.7 percentage point rise. Similarly, the proportion of newly arrived immigrant men who chose to live in the subset of southern states that excludes Florida and Texas rose from 8.0 to 15.9 percent over the period, a 7.9 percentage point rise. In other words, nearly 60 percent of the shift can be explained by new immigrants choosing to reside in non-traditional southern states.

The bottom four panels of the table report the same information on the location choice of newly arrived immigrant men by educational attainment. The inter-regional differences in the settlement pattern of new immigrants belonging to different education groups are striking. The largest decline in the relative number of immigrants settling outside the South occurred among high school dropouts, where the fraction of new immigrants locating in that region fell from 87.0 to 60.2 percent between 1960 and 2000, with much of the decline occurring in the 1990s. In contrast, the fraction of newly arrived high school dropouts who chose to settle in the non-immigrant south rose from 5.6 to 17.5 percent between 1990 and 2000. It is worth contrasting this rise with the trend in the fraction of newly arrived college graduates who choose to settle in these states: this statistic rose from only 12.8 to 15.1 percent between 1990 and 2000. In sum,

there clearly was a change in the settlement pattern of new immigrant working men, with more of them choosing to settle in the South, and particularly in the Southern states that have not been traditional immigrant destinations. This relocation pattern, however, was much more evident among low-educated than high-educated workers.

As suggested above, the spreading out of low-skill immigration to the non-immigrant South occurred not only in terms of the settlement pattern of newly arrived immigrants, but also in terms of how earlier waves of immigrants chose to relocate themselves within the United States after they had arrived.

Since 1970 the U.S. Census contains detailed information on the state of residence five years prior to the Census. These data, combined with the information on geographic location at the time of the Census, can be used to compute in-, out-, and net-migration rates for the various skill-region-time cells. I now use these data to calculate the migration rates of immigrant workers between the South and the non-South. I restrict the calculations to immigrants who have been in the United States for at least 5 years as of the Census date.

To illustrate the interpretation of the calculated migration rates, consider the data available in a particular Census. I break up the country into two regions: the South and the non-South. The foreign-born worker is an out-migrant from the “original” region of residence (i.e., the region of residence five years prior to the Census) if he lives in a different region by the time of the Census. The worker is an in-migrant into the current region of residence if he lived in a different region five years prior to the Census. If the region of residence is the same in both years, the person is a stayer. I define the in-migration and out-migration rates (at the region level) by dividing the total number of in-migrants or out-migrants in a particular region-time cell by the

size of the foreign-born workforce in the baseline region.¹⁵ The net migration rate is then defined as the difference between the in-migration and the out-migration rate. Note that these migration rates report the propensity of immigrants to move across regions over a five-year period.

To illustrate the nature of the analysis, it is instructive to begin by considering a specific example. The top panel of Table 11 reports the calculated in-migration rates into the non-South. In 1970, 1.8 percent of immigrant workers living in the non-South had migrated there from the South region. This in-migration rate was relatively constant over the next 30 years. By 2000, for example, 1.9 percent of the immigrant workers living in the non-South had migrated there from the South.

In the Southern region, in-migration rates of foreign-born workers have historically been quite high. In 1970, for example, 12.0 percent of the immigrants living in the South had moved there from the non-South region. By 2000, the in-migration rate stood at 9.2 percent.

The third row of the table calculates the in-migration rate into the subset of states in the Southern region that excludes Florida and Texas. It is important to stress that the in-migration rate presented in this row includes only those in-migrants that came from *outside* the South. The in-migration rate of foreign workers into the so-called non-immigrant South stood at roughly 12 to 13 percent between 1970 and 1990, and rose to 14.5 percent by 2000.

The next panel of the table reports the calculated out-migration rates. Out-migration rates in the non-South region rose over the period, from 1.7 percent in 1970 to 3.4 percent in 2000. At the same time, out-migration rates declined dramatically in the South region, from 12.4 percent in 1970 to 5.2 percent in 2000. The decline is even more precipitous in the subset of states that I

¹⁵ The baseline state is the original state of residence when calculating out-migration rates and the current state of residence when calculating in-migration rates. Let N_a be the number of native workers in the baseline state (in a particular skill group) five years prior to the Census, and let N_b be the number of workers in the same state at the time of the Census. The denominator of the in- and out-migration rates is then given by $(N_a + N_b)/2$.

have called the non-immigrant South: the out-migration rate of foreign-born workers living in this subset of states dropped from 20.8 percent in 1970 to 7.3 percent in 2000.

As a result of the increasing in-migration rates and falling out-migration rates of workers in the subset of southern states that excludes Florida and Texas, the third panel of the table documents a significant rise in the net migration rate of foreign-born workers into that region. The net-migration rate of foreign-born workers in the non-immigrant South stood at -8.4 percent in 1970, but had changed to a +7.2 percent by 2000.

The remaining panels of Table 11 illustrate that this remarkable rise in the net migration rate into the non-immigrant South region holds true for all education groups, but is particularly striking for low-skill immigrants. Among high school dropouts, for example, the net migration rate into the non-immigrant South rose from -11.1 percent in 1970 to +11.4 percent in 2000. In contrast, the net migration rate of college graduates into the non-immigrant South rose from only -4.5 percent in 1970 to +2.3 percent in 2000.

Tables 10 and 11, therefore, indicate that the emergence of a large low-skill foreign-born workforce in the South region, and particularly in those states of the South that had not been traditional immigrant states, occurred both because of a change in the settlement pattern of new immigrants and because of a rapid rise in the net-migration rate of low-skill immigrants into that region.

An alternative way of measuring the changing selection of the immigrants who choose to reside in the various regions—due either to changes in the settlement pattern of new immigrants or to changes in the net migration rates of older immigrants—is simply to compare the relative wages of the various groups over time. At a given point in time *and* within each region, the entire male workforce can be classified into five mutually exclusive groups: (1) natives who have

resided in that region throughout the past five years; (2) natives who migrated to that region in the past five years; (3) immigrants who have just entered the country (i.e., in the past five years); (4) immigrants who have been in the country for more than five years but who moved to that particular region in the past five years; and (5) immigrants who have been in the country for more than five years and have been in that region throughout the past five years.

A comprehensive summary of the various (unadjusted) selection biases that might distinguish these groups can be obtained by estimating a simple regression model where the log wage is the dependent variable and the regressors are fixed effects describing membership in each of these five groups. The resulting coefficients, of course, give the observed log wage differentials among the various groups. These differences, relative to the group of native stayers, are reported in Table 12.

The trend in the fixed effect for a particular group over time provides valuable information about how the selection of that group changed between 1970 and 2000. As indicated earlier, it is clear that the relative wage of newly arrived immigrants declined steeply in the non-immigrant South. Table 12 shows that the relative wage of newly arrived immigrants in the subset of southern states that excludes Florida and Texas dropped from $+0.128$ in 1970 to -0.272 in 2000.

Table 12, however, shows that there is even a larger change in the selectivity that characterizes the subsample of immigrants who choose to migrate internally from the non-South to the non-immigrant South. In 1970, for example, the immigrants who had just moved to this subset of southern states from the non-South had a relative wage of $+0.538$. By 2000, the relative wage of these immigrants stood at -0.046 , with nearly half of this decline occurring during the 1990s.

In sum, the 1990s witnessed the rise of a sizable foreign-born low-skill workforce in the South, particularly in those states that had not been traditional destinations for immigrants prior to the 1990s.¹⁶

V. Summary

This paper used data drawn from the 1960-2000 Integrated Public Use Microdata Samples of the U.S. Census to document the rise of a sizable low-skill foreign-born workforce in the South during the 1990s, particularly in those southern states that have not been traditional destinations for immigrants. Traditionally, this subset of southern states had been the destination of a relatively small number of high-skill immigrants. For instance, newly arrived immigrant men in those states earned around 12 percent more than native-born working men in 1970. By 2000, newly arrived immigrants in those states had a wage disadvantage of nearly 26 percent.

The empirical analysis also documents that, in addition to the increased settlement of newly arrived low-skill immigrants in these southern states, there was an internal relocation of low-skill foreign-born workers from other states into the South. Net migration rates of low-skill workers from states outside the South into these southern states increased rapidly between 1970 and 2000, with much of the increase occurring in the 1990s. The rise of the low-skill workforce in these southern states will inevitably play a major role in the evolution of economic and social conditions in this region in future decades.

¹⁶ It is of interest to determine if these changes in the allocation of skill groups across regions can be explained in terms of a simple Roy model that stresses differential changes in the trend of the rate of return to schooling across regions. As the Appendix Table shows, however, such an explanation may not go very far. The relative differences in the wage gap across schooling groups remained relatively the same across regions (particularly for the differential between high school graduates and college graduates) over the 1960-2000 period.

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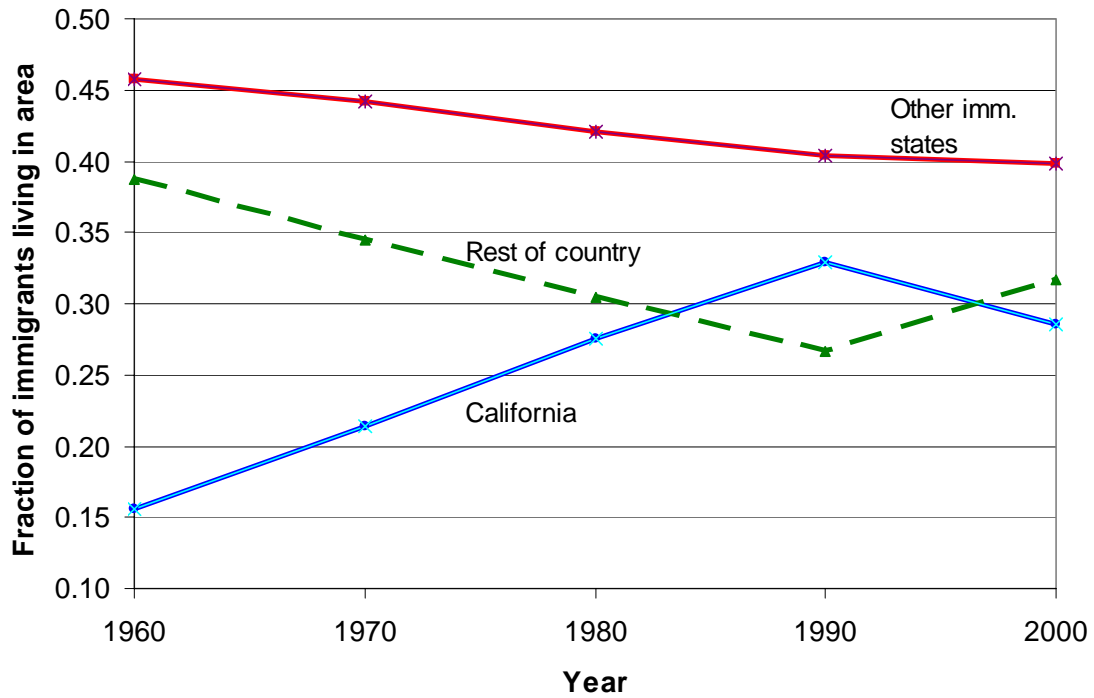
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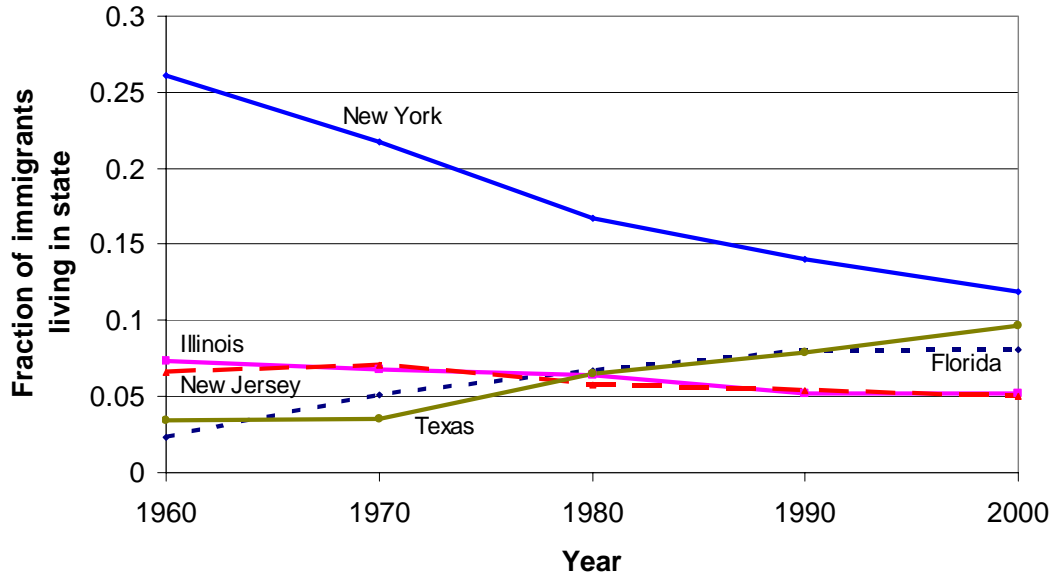
Figure 1. Settlement of immigrant workers in different parts of the country



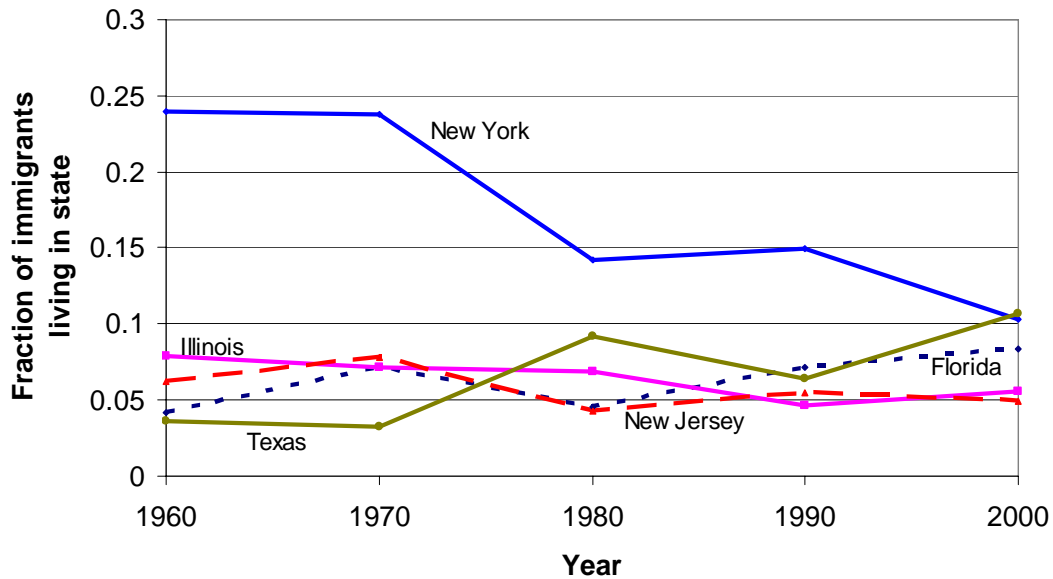
Notes: The workforce is defined as the group of persons aged 18 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The other immigrant states include Florida, Illinois, New Jersey, New York, and Texas.

Figure 2. Settlement of immigrants in main immigrant-receiving states (other than California)

A. All immigrants



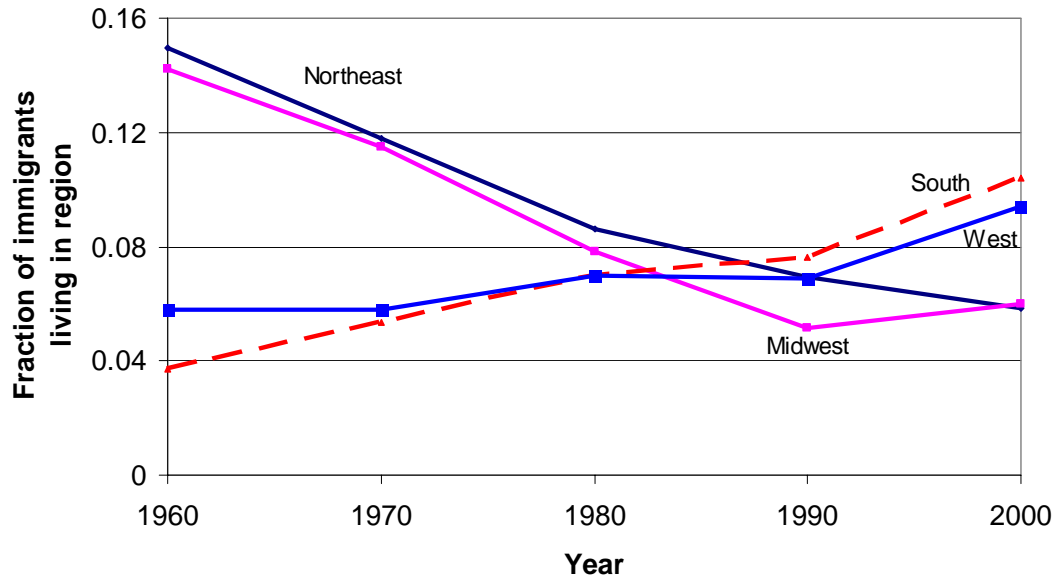
B. Newly arrived immigrants



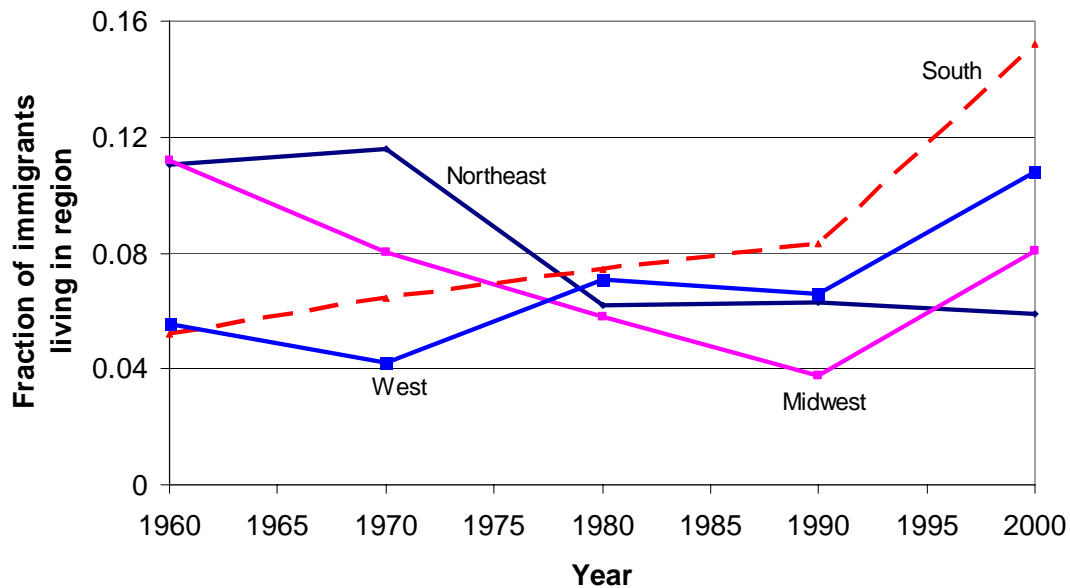
Notes: The workforce is defined as the group of persons aged 18 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The main immigrant-receiving states are California, Florida, Illinois, New Jersey, New York, and Texas. The newly arrived immigrants arrived in the United States in the five-year period prior to the Census.

Figure 3. Settlement of immigrants outside main immigrant-receiving states, by region

A. All immigrants



B. Newly arrived immigrants



Notes: The workforce is defined as the group of persons aged 18 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The main immigrant-receiving states are California, Florida, Illinois, New Jersey, New York, and Texas. The newly arrived immigrants arrived in the United States in the five-year period prior to the Census.

Table 1. Trends in the immigrant share, by region

<u>Region:</u>	1960	1970	1980	1990	2000
Non-South	6.7%	6.0%	7.9%	10.4%	14.8%
South	1.6	2.2	4.1	6.2	10.6
South, excluding Florida and Texas	0.9	1.2	2.1	3.0	6.1
By state in South region:					
Alabama	0.3	0.6	1.0	1.2	2.4
Arkansas	0.4	0.3	1.0	1.3	3.5
Delaware	2.4	3.2	2.9	3.9	6.9
District of Columbia	5.2	5.5	7.4	11.4	17.5
Florida	4.3	7.8	11.1	14.3	20.1
Georgia	0.6	0.8	1.8	3.2	8.9
Kentucky	0.4	0.6	0.9	1.0	2.3
Louisiana	0.9	1.2	2.2	2.5	3.5
Maryland	3.0	3.4	5.2	7.6	12.1
Mississippi	0.3	0.5	1.0	0.9	1.7
North Carolina	0.3	0.7	1.3	1.9	6.7
Oklahoma	0.5	0.7	1.8	2.4	4.9
South Carolina	0.3	0.9	1.5	1.5	3.6
Tennessee	0.4	0.6	1.1	1.4	3.4
Texas	3.4	3.1	6.7	10.5	17.6
Virginia	1.3	1.9	3.8	6.1	10.2
West Virginia	0.9	0.7	1.0	1.0	1.3

Notes: The statistics are calculated in the sample of persons aged 18 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The immigrant share gives the fraction of the workforce that is foreign-born. The “non-south” region is composed of all states outside the South Census region.

Table 2. Percent of immigrants living in particular parts of the country

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
All Immigrants					
Non-south	90.6%	86.0%	79.8%	76.5%	71.9%
South	9.4	14.0	20.2	23.5	28.1
South, excluding FL and TX	3.7	5.4	7.0	7.6	10.4
By state in the South region:					
Alabama	0.1	0.2	0.2	0.2	0.3
Arkansas	0.1	0.0	0.1	0.1	0.2
Delaware	0.1	0.2	0.1	0.1	0.1
District of Columbia	0.5	0.5	0.3	0.3	0.3
Florida	2.3	5.1	6.7	8.0	8.1
Georgia	0.2	0.4	0.7	1.0	2.0
Kentucky	0.1	0.2	0.2	0.2	0.2
Louisiana	0.3	0.4	0.6	0.4	0.4
Maryland	1.0	1.4	1.5	1.8	1.8
Mississippi	0.1	0.1	0.1	0.1	0.1
North Carolina	0.2	0.4	0.5	0.6	1.5
Oklahoma	0.1	0.2	0.4	0.3	0.4
South Carolina	0.1	0.2	0.3	0.2	0.4
Tennessee	0.1	0.2	0.3	0.3	0.5
Texas	3.4	3.5	6.5	7.9	9.6
Virginia	0.5	0.9	1.4	1.8	2.0
West Virginia	0.2	0.1	0.1	0.1	0.1
Newly arrived immigrants					
Non-south	86.9	83.1	78.8	78.1	65.7
South	13.1	16.9	21.2	21.9	34.3
South, excluding FL and TX	5.2	6.4	7.4	8.3	15.2
By state in the South region:					
Alabama	0.1	0.1	0.2	0.2	0.4
Arkansas	0.1	0.1	0.2	0.1	0.3
Delaware	0.1	0.2	0.1	0.1	0.2
District of Columbia	1.0	1.0	0.4	0.5	0.4
Florida	4.2	7.2	4.6	7.2	8.4
Georgia	0.4	0.5	0.7	1.2	3.6
Kentucky	0.2	0.1	0.2	0.1	0.4
Louisiana	0.4	0.4	0.7	0.2	0.3
Maryland	1.2	1.6	1.5	2.0	1.8
Mississippi	0.1	0.1	0.1	0.1	0.2
North Carolina	0.1	0.4	0.5	0.7	3.1
Oklahoma	0.2	0.2	0.5	0.2	0.6
South Carolina	0.2	0.3	0.3	0.2	0.6
Tennessee	0.2	0.2	0.3	0.3	0.9
Texas	3.7	3.3	9.2	6.4	10.7
Virginia	0.9	1.2	1.7	2.3	2.4
West Virginia	0.0	0.1	0.1	0.0	0.0

Notes: The statistics are calculated in the sample of persons aged 18 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The "non-south" region is composed of all states outside the South Census region. The newly arrived immigrants arrived in the United States in the five-year period prior to the Census.

Table 3. National origin distribution of newly arrived immigrants

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Non-south					
Canada	10.0%	5.2%	2.2%	1.7%	2.4%
Mexico	6.6	9.3	23.6	28.4	33.4
Central America	1.5	2.5	4.4	7.6	5.5
Cuba	2.5	6.3	0.3	0.3	0.6
West Indies	1.9	8.4	6.3	5.9	4.3
Europe	66.7	37.8	17.4	13.1	16.1
China	1.2	3.2	4.9	5.7	4.8
Korea	0.1	1.1	4.5	3.4	2.0
Philippines	0.9	4.8	7.4	7.0	4.0
Vietnam	---	0.1	3.8	1.6	1.9
India	0.2	2.2	4.2	4.5	8.0
South					
Canada	9.2	4.6	3.5	2.4	2.3
Mexico	18.9	10.7	25.8	22.5	40.2
Central America	3.6	3.2	3.7	14.0	9.8
Cuba	15.1	33.1	2.8	3.9	6.0
West Indies	3.1	3.4	7.1	7.8	3.9
Europe	39.0	22.1	13.5	11.4	9.5
China	0.2	1.3	2.6	2.8	2.1
Korea	0.2	1.9	4.0	3.1	1.1
Philippines	0.2	2.4	2.9	3.2	1.5
Vietnam	---	0.4	7.6	1.9	1.9
India	0.9	2.2	4.9	4.0	5.4
South, excluding FL and TX					
Canada	6.4	5.5	3.5	2.5	2.5
Mexico	0.9	0.4	2.5	9.5	37.4
Central America	7.3	5.3	4.6	12.9	11.8
Cuba	1.8	6.9	0.3	0.2	0.7
West Indies	3.2	4.4	4.1	4.0	1.9
Europe	65.7	38.1	20.8	16.4	11.6
China	0.5	1.6	3.8	4.6	2.9
Korea	0.5	4.0	8.3	5.9	1.8
Philippines	---	4.0	5.3	4.9	1.9
Vietnam	---	1.1	11.3	2.9	2.3
India	2.3	4.2	7.8	7.0	7.3

Notes: The statistics are calculated in the sample of persons aged 18 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The "non-south" region is composed of all states outside the South Census region. The newly arrived immigrants arrived in the United States in the five-year period prior to the Census.

Table 4. Education distributions of native and immigrant working men

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Non-South:					
Natives					
High school dropouts	49.9%	36.3%	20.6%	10.1%	6.2%
High school graduates	28.2	35.6	37.7	34.2	32.3
Some college	9.9	12.0	17.8	28.1	30.8
College graduates	12.0	16.0	23.9	27.6	30.7
Immigrants					
High school dropouts	66.6	50.1	38.7	31.9	30.2
High school graduates	15.9	21.9	23.4	23.6	25.0
Some college	7.8	10.7	13.4	18.5	17.5
College graduates	9.7	17.4	24.5	26.1	27.4
South:					
Natives					
High school dropouts	61.0	48.3	30.5	16.9	10.9
High school graduates	20.5	27.4	32.7	33.7	33.9
Some college	8.3	10.3	15.9	25.4	28.4
College graduates	10.2	14.0	20.9	24.1	26.9
Immigrants					
High school dropouts	62.5	45.3	36.8	33.3	33.5
High school graduates	14.7	21.2	21.4	21.8	23.4
Some college	9.4	10.9	14.0	18.1	16.9
College graduates	13.5	22.6	27.8	26.8	26.2
South, excluding FL and TX:					
Natives					
High school dropouts	63.1	50.1	32.8	18.5	11.8
High school graduates	19.7	27.2	33.0	34.9	35.5
Some college	7.5	9.4	14.4	23.6	26.8
College graduates	9.7	13.3	19.8	23.1	26.0
Immigrants					
High school dropouts	49.3	28.2	18.7	16.0	26.8
High school graduates	17.3	21.8	22.0	20.2	21.6
Some college	12.1	13.4	15.1	19.9	16.2
College graduates	21.3	36.7	44.3	44.0	35.3

Notes: The statistics are calculated in the sample of working men aged 25 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The “non-south” region is composed of all states outside the South Census region.

Table 5. Log wage differentials between immigrant and native working men, by cohort

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Non-South					
All immigrants	.005 (.005)	-.030 (.005)	-.102 (.002)	-.156 (.002)	-.204 (.001)
Immigrants, 1-5 years in US	-.134 (.015)	-.246 (.012)	-.353 (.005)	-.419 (.004)	-.324 (.003)
Immigrants, 6-10 years in US	---	-.085 (.013)	-.237 (.004)	-.335 (.004)	-.341 (.003)
Immigrants, 11-15 years in US	---	-.005 (.013)	-.098 (.005)	-.198 (.004)	-.301 (.003)
Immigrants, 16-20 years in US	---	.021 (.013)	-.012 (.005)	-.103 (.004)	-.206 (.003)
South					
All immigrants	.006 (.017)	.005 (.014)	-.057 (.004)	-.153 (.003)	-.192 (.002)
Immigrants, 1-5 years in US	-.179 (.047)	-.145 (.029)	-.215 (.009)	-.331 (.007)	-.323 (.005)
Immigrants, 6-10 years in US	---	-.041 (.030)	-.121 (.010)	-.321 (.006)	-.297 (.005)
Immigrants, 11-15 years in US		.045 (.039)	-.058 (.010)	-.173 (.007)	-.252 (.005)
Immigrants, 16-20 years in US		.103 (.046)	.041 (.011)	-.093 (.008)	-.197 (.005)
South, excluding FL and TX					
All immigrants	.304 (.027)	.297 (.023)	.140 (.007)	.097 (.005)	-.079 (.004)
Immigrants, 1-5 years in US	.203 (.078)	.118 (.048)	-.061 (.016)	-.129 (.012)	-.259 (.007)
Immigrants, 6-10 years in US	---	.245 (.058)	.102 (.017)	-.082 (.012)	-.198 (.008)
Immigrants, 11-15 years in US		.389 (.065)	.214 (.019)	.093 (.013)	-.137 (.009)
Immigrants, 16-20 years in US		.342 (.072)	.266 (.022)	.264 (.015)	-.042 (.009)

Notes: Standard errors are reported in parentheses. The statistics are calculated in the sample of working men aged 25 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The “non-south” region is composed of all states outside the South Census region.

Table 6. High-tech immigration and the relative wage of recent immigrants

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Panel A					
Non-South					
Recent immigrants	-.134 (.015)	-.246 (.012)	-.353 (.005)	-.419 (.004)	-.324 (.003)
Recent immigrants, excluding high-tech workers	-.148 (.015)	-.265 (.012)	-.363 (.005)	-.434 (.004)	-.406 (.004)
South					
Recent immigrants	-.179 (.047)	-.145 (.029)	-.215 (.009)	-.331 (.007)	-.323 (.005)
Recent immigrants, excluding high-tech workers	-.208 (.048)	-.153 (.030)	-.228 (.009)	-.343 (.008)	-.377 (.005)
South, excluding FL and TX					
Recent immigrants	.203 (.078)	.118 (.048)	-.061 (.016)	-.129 (.012)	-.259 (.007)
Recent immigrants, excluding high-tech workers	.181 (.080)	.114 (.049)	-.076 (.016)	-.146 (.012)	-.330 (.007)
Panel B					
Non-South					
% of natives in high-tech jobs	2.5	3.5	3.4	3.9	5.5
% of recent immigrants in high-tech jobs	5.1	7.1	4.5	4.4	12.4
South					
% of natives in high-tech jobs	1.7	2.9	2.7	3.4	4.8
% of recent immigrants in high-tech jobs	4.6	4.5	4.7	4.0	8.6
South, excluding FL and TX					
% of natives in high-tech jobs	1.6	2.7	2.5	3.2	4.6
% of recent immigrants in high-tech jobs	5.7	5.5	7.2	5.9	10.6

Notes: Standard errors are reported in parentheses. The statistics are calculated in the sample of working men aged 25 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The “non-south” region is composed of all states outside the South Census region. The recent immigrants arrived in the United States in the five-year period prior to the Census. The “high-tech” workers are employed either as engineers or computer scientists.

Table 7. Log wage differential between newly arrived immigrants and natives in the South region, by state

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Alabama	-.667 (.509)	-.158 (.295)	.045 (.088)	-.083 (.086)	-.260 (.042)
Arkansas	.487 (.745)	-.592 (.472)	-.115 (.102)	-.228 (.110)	-.291 (.047)
Delaware	.703 (.614)	.250 (.191)	.175 (.188)	-.110 (.083)	.010 (.059)
District of Columbia	-.139 (.136)	-.080 (.131)	-.178 (.074)	-.243 (.053)	-.173 (.053)
Florida	-.354 (.077)	-.394 (.045)	-.253 (.020)	-.419 (.013)	-.326 (.010)
Georgia	.036 (.364)	.001 (.165)	-.080 (.052)	-.140 (.030)	-.386 (.015)
Kentucky	.179 (.526)	1.182 (.470)	-.095 (.099)	.051 (.086)	-.143 (.037)
Louisiana	.299 (.279)	-.044 (.197)	-.245 (.051)	-.242 (.066)	-.016 (.049)
Maryland	.070 (.144)	-.207 (.087)	-.201 (.032)	-.296 (.023)	-.303 (.020)
Mississippi	---	.147 (.677)	.109 (.128)	-.014 (.135)	-.276 (.062)
North Carolina	---	.155 (.188)	.003 (.059)	-.249 (.038)	-.383 (.015)
Oklahoma	-.554 (.403)	.709 (.379)	-.283 (.062)	-.201 (.073)	-.367 (.037)
South Carolina	.376 (.311)	-.080 (.236)	.205 (.074)	-.061 (.071)	-.273 (.032)
Tennessee	-.613 (.527)	.354 (.254)	-.005 (.073)	.047 (.058)	-.319 (.027)
Texas	-.562 (.087)	-.225 (.066)	-.379 (.014)	-.521 (.014)	-.438 (.009)
Virginia	.355 (.170)	.137 (.108)	-.128 (.033)	-.283 (.023)	-.182 (.018)
West Virginia	-.048 (.660)	.176 (.294)	-.074 (.133)	.158 (.176)	.202 (.123)

Notes: The statistics are calculated in the sample of working men aged 25 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The newly arrived immigrants arrived in the United States in the five-year period prior to the Census.

Table 8. Adjusted log wage differentials between immigrants and natives, by cohort

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Non-South					
1-5 years in US	-.180 (.014)	-.278 (.011)	-.294 (.004)	-.348 (.004)	-.235 (.003)
6-10 years in US	---	-.109 (.012)	-.173 (.004)	-.261 (.003)	-.214 (.003)
11-15 years in US	---	-.034 (.012)	-.089 (.004)	-.159 (.004)	-.178 (.003)
16-20 years in US	---	-.026 (.012)	-.038 (.005)	-.113 (.004)	-.143 (.003)
South:					
1-5 years in US	-.305 (.043)	-.240 (.027)	-.207 (.009)	-.265 (.007)	-.198 (.004)
6-10 years in US	---	-.158 (.028)	-.111 (.009)	-.198 (.006)	-.152 (.005)
11-15 years in US	---	-.062 (.036)	-.086 (.009)	-.117 (.006)	-.116 (.005)
16-20 years in US	---	-.038 (.042)	-.024 (.010)	-.081 (.007)	-.109 (.005)
South, excluding FL and TX					
1-5 years in US	-.109 (.071)	-.149 (.044)	-.184 (.014)	-.212 (.011)	-.172 (.006)
6-10 years in US	---	-.020 (.053)	-.061 (.016)	-.138 (.010)	-.122 (.007)
11-15 years in US	---	.078 (.059)	.001 (.018)	-.048 (.011)	-.084 (.008)
16-20 years in US	.118 (.028)	.055 (.066)	.039 (.021)	.025 (.014)	-.073 (.008)

Notes: Standard errors are reported in parentheses. The regressions are estimated in the sample of working men aged 25 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The “non-south” region is composed of all states outside the South Census region. The regressors include a vector of dummy variables indicating the worker’s educational attainment (high school dropout, high school graduate, some college, or college graduate), a fourth-order polynomial in the worker’s age, and a vector of fixed effects indicating the state of residence.

Table 9. Occupation distributions of newly arrived immigrants

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Non-South					
Professional, technical	18.9%	25.1%	17.9%	16.4%	24.1%
Farmers	0.4	0.1	0.3	0.4	0.2
Managers, officials, and proprietors	5.7	5.4	11.2	11.2	10.0
Clerical and kindred	6.3	6.6	6.4	7.1	6.1
Sales workers	3.5	3.2	3.5	3.8	3.2
Craftsmen	23.5	17.2	15.2	14.0	13.3
Operatives	19.6	23.2	22.0	17.9	17.4
Service workers	9.4	11.3	13.8	16.4	14.2
Farm laborers	2.4	2.1	3.4	3.5	2.3
Laborers	10.2	5.9	6.3	9.4	9.2
South					
Professional, technical	18.4	27.4	20.7	17.3	18.5
Farmers	0.8	0.2	0.2	0.5	0.3
Managers, officials, and proprietors	8.0	8.1	13.4	12.9	9.8
Clerical and kindred	5.9	6.4	5.4	5.9	5.8
Sales workers	7.1	3.2	3.7	3.4	2.6
Craftsmen	20.5	19.9	17.0	16.3	19.4
Operatives	12.1	16.3	17.0	14.6	16.9
Service workers	10.5	9.9	10.2	14.9	12.1
Farm laborers	8.8	2.4	2.9	3.5	2.0
Laborers	7.9	6.4	9.3	10.7	12.7
South, excluding FL and TX					
Professional, technical	31.0	46.8	32.0	25.7	22.5
Farmers	0.0	0.5	0.3	0.3	0.4
Managers, officials, and proprietors	10.4	8.5	16.5	16.3	9.4
Clerical and kindred	9.2	3.5	6.8	6.5	5.5
Sales workers	5.7	1.5	2.9	2.8	1.9
Craftsmen	19.6	15.1	13.3	13.3	17.3
Operatives	6.9	7.0	12.3	11.5	17.3
Service workers	11.5	13.1	10.2	14.7	11.9
Farm laborers	0.0	1.0	0.9	1.4	2.0
Laborers	5.7	3.0	4.9	7.6	11.8

Notes: The statistics are calculated in the sample of working men aged 25 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The “non-south” region is composed of all states outside the South Census region. The newly arrived immigrants arrived in the United States in the five-year period prior to the Census.

**Table 10. The geographic settlement of newly arrived immigrants, by education
(Percent of immigrants living in particular region)**

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
All recent immigrants					
Non-South	87.3%	83.9%	78.4%	78.3%	64.6%
South	12.7	16.1	21.6	21.7	35.4
South, excluding FL and TX	4.0	5.8	6.8	8.0	15.9
High school dropouts					
Non-South	87.0	84.1	79.3	78.7	60.2
South	13.0	15.9	20.7	21.3	39.8
South, excluding FL and TX	2.5	3.0	3.3	5.6	17.5
High school graduates					
Non-South	89.2	83.6	78.8	79.9	65.6
South	10.8	16.4	21.2	20.1	34.4
South, excluding FL and TX	3.2	7.0	7.9	7.1	14.9
Workers with some college					
Non-South	87.5	88.3	76.3	77.2	64.8
South	12.5	11.7	23.7	22.8	35.3
South, excluding FL and TX	6.1	6.7	9.1	8.7	14.4
College graduates					
Non-South	86.2	82.1	77.4	76.7	70.0
South	13.8	17.9	22.6	23.3	30.0
South, excluding FL and TX	8.1	10.4	11.5	12.8	15.1

Notes: The statistics are calculated in the sample of working men aged 25 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The "non-south" region is composed of all states outside the South Census region. The newly arrived immigrants arrived in the United States in the five-year period prior to the Census.

Table 11. Migration rates of immigrants who have been in U.S. at least 5 years

	<u>Region</u>	<u>Year</u>			
		<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
In-migration rates:					
All workers	Non-South	1.8%	1.6%	2.1%	1.9%
	South	12.0	14.0	9.2	9.2
	South, excluding FL and TX	12.4	13.5	12.4	14.5
Out-migration rates:					
All workers	Non-South	1.7	3.2	2.8	3.4
	South	12.4	7.0	6.7	5.2
	South, excluding FL and TX	20.8	10.9	9.3	7.3
Net migration rates:					
All workers	Non-South	0.1	-1.6	-0.7	-1.5
	South	-0.3	7.0	2.5	4.0
	South, excluding FL and TX	-8.4	2.6	3.1	7.2
Net migration rates, by education:					
High school dropouts	Non-South	0.3	-1.0	-0.2	-1.6
	South	-1.7	4.5	0.6	3.8
	South, excluding FL and TX	-11.1	3.1	3.6	11.4
High school graduates	Non-South	0.1	-1.3	-1.1	-1.7
	South	-0.5	6.1	3.9	5.0
	South, excluding FL and TX	-13.8	.5	3.2	9.7
Some college	Non-South	-0.6	-1.8	-1.1	-1.7
	South	4.1	8.1	3.7	4.9
	South, excluding FL and TX	-5.0	-.7	1.8	6.5
College graduates	Non-South	0.2	-2.7	-0.9	-0.9
	South	-0.4	10.7	3.0	2.5
	South, excluding FL and TX	-4.5	4.9	3.6	2.3

Notes: The statistics are calculated in the sample of working men aged 25 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The “non-south” region is composed of all states outside the South Census region. The migration rates for the non-South and the South measure the flow across the two regions. The migration rates for the “South, excluding FL and TX” measure the flows from the non-South to this subset of southern states.

**Table 12. Log wage differences among various types of workers
(Relative to native stayers)**

	<u>Native movers</u>	<u>Immigrant stayers</u>	<u>Immigrant movers</u>	<u>Newly arrived immigrants</u>
Non-south				
1970	-.011 (.010)	.015 (.005)	-.020 (.052)	-.245 (.011)
1980	-.059 (.006)	-.047 (.003)	-.006 (.026)	-.365 (.006)
1990	-.082 (.004)	-.098 (.002)	-.114 (.013)	-.437 (.003)
2000	-.026 (.004)	-.182 (.002)	-.066 (.011)	-.348 (.003)
South				
1970	.207 (.011)	.041 (.017)	.227 (.050)	-.127 (.027)
1980	.058 (.005)	-.021 (.007)	.070 (.018)	-.225 (.012)
1990	.064 (.003)	-.121 (.004)	-.007 (.011)	-.350 (.006)
2000	.070 (.003)	-.157 (.003)	-.083 (.008)	-.335 (.004)
South, excluding FL and TX				
1970	.239 (.014)	.341 (.028)	.538 (.084)	.128 (.043)
1980	.084 (.007)	.184 (.013)	.240 (.033)	-.082 (.019)
1990	.101 (.005)	.162 (.006)	.178 (.018)	-.146 (.011)
2000	.080 (.004)	-.003 (.004)	-.046 (.012)	-.272 (.006)

Notes: Standard errors are reported in parentheses. The regressions are estimated in the sample of working men aged 25 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The “non-south” region is composed of all states outside the South Census region. The sample of “native stayers” includes native workers who have lived in the current region of residence throughout the five-year period prior to the Census. The sample of “native movers” includes native workers who migrated to the current region of residence in the five-year period prior to the Census. The sample of “immigrant stayers” includes immigrants who have been in the United States longer than five years and who lived in the current region of residence throughout the past five years. The sample of “immigrant movers” includes immigrants who have been in the United States longer than five years but who migrated to the current region of residence in the past five years. The sample of “newly arrived immigrants” includes immigrants who migrated to the United States in the five-year period prior to the Census.

Appendix Table: Trends in the returns to schooling, by region

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Log wage differential between high school dropouts and college graduates					
Non-South	-.457	-.488	-.400	-.540	-.604
South	-.660	-.635	-.521	-.649	-.668
South, excluding FL and TX	-.679	-.642	-.519	-.645	-.649
Log wage differential between high school graduates and college graduates					
Non-South	-.333	-.354	-.239	-.372	-.448
South	-.347	-.372	-.301	-.440	-.503
South, excluding FL and TX	-.365	-.377	-.291	-.429	-.487

Notes: The regressions are estimated in the sample of working men aged 25 to 64 who are not enrolled in school and who worked in the civilian sector at least one week in the year prior to each decennial Census. The regressors include the worker's age introduced as a fourth-order polynomial. The "non-south" region is composed of all states outside the South Census region.