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# IMMIGRANTS AND THEIR SCHOOLING

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## Introduction

Immigrants often do not come with much, but they do bring their human capital. Since schooling is the most basic index of their skill, how much education migrants had before they arrived, how much they were able to add while in the United States, and how that schooling helped their performances in the American labor market are critical questions in determining their eventual economic success or failure. In part because of this, education may also be crucial in influencing who decides to migrate to the United States.

This influence may be even more direct if migrants come to attend American schools, especially if some of them then stay on as permanent residents. Finally, immigrants are not only members of today's workforce—they are also parents and grandparents of a major part of the American labor market in the future. Thus, the issue of the size of inter-generational transmission of schooling across immigrant generations is a basic determinant in shaping what the country will look like in the decades ahead.

Immigrants are thought to have significantly less schooling than do native-born Americans; a disparity that it is claimed has been growing over time. Some also see a crisis in American colleges with foreign students first displacing American students and subsequently displacing American workers when they stay on as permanent residents. There is also a common belief that the successful economic assimilation across generations that is part of our folklore for European immigrants in particular may be broken for some of our contemporaneously large migrant ethnic groups. In this paper, I will provide evidence that at a minimum these claims are exaggerated.

This paper is divided into five sections. Section 1 documents the most salient comparative patterns in the schooling of the foreign-born population in the United States, while the second section examines how nativity differences in education have changed over time.

Section 3 highlights the considerable education diversity that exists in schooling accomplishments within the immigrant population. This diversity spans time of arrival, ethnic background, legal status, and the reasons for admission to the United States. Section 4 addresses the issue of the impact of foreign students on American schools. The final section focuses on the inter-generational transmission of schooling.

**Section 1. Schooling of Migrants and the Native-born**

Using data obtained from the 2002 Current Population Survey, Table 1 highlights differences in education distributions between three groups—the foreign-born, the native-born, and the recent foreign-born (those who reported arriving within the last five years). Table 2 presents the same three-way division for the principal ethnic origin classifications of people currently living in the US—Asians, Europeans, and Hispanics.[1] Combined, these two tables reveal the principal salient facts about the comparative education attributes of migrants. On average, migrants to the United States have less schooling than the native-born population does—in 2002; for example, the mean difference was 1.3 years of schooling. Far more dramatic, however, are the differences within the lower part of the education distribution. About one-fifth of the foreign-born had only an elementary school education or less, five times the comparable proportion among the native-born. Among recent immigrants in particular, however, the relative ranking actually shifts in the top part of the education distribution where recent migrants are 47% more likely than those born in the US to have completed more than a college degree.

These differences between the native and foreign-born pale next to the heterogeneity within the migrant population. That diversity already revealed itself in the comparatively fat tails of the foreign-born education distribution in Table 1. But the heterogeneity is even starker in

[1]These ethnic classifications are based on country of birth (first generation) and country of parents' birth (second generation). For the third plus generations (neither they or their parents were foreign born), Asians are those who claimed Asian race, Hispanics were defined by Hispanic ethnicity, and Europeans were those who were neither one

Table 2, which offers a comparison among the three principal types of immigrants (Asians, Europeans, and Hispanics) classified by their place of birth.

The differences amongst these three ethnic groups are large. On one end are recent Europeans migrants who are actually more educated than native-born Americans. Very few of them are low skilled and 29% claim some post-baccalaureate schooling (compared to 9% among all native-born Americans). The skill of European migrants is not only high, but it appears to be rising as reflected in the much higher education levels of recent European migrants compared to all the foreign-born from Europe. I shall return to this issue of secular trends below.

Using schooling as the skill index, Asian migrants score even better. On average, they too are relatively high skilled (with recent immigrants the most skilled), albeit with considerable within-group diversity. While 25% of recent Asian migrants have schooling beyond a college degree, 5% have an eighth grade education or less. Both proportions are more than those for native-born Americans. On the other end of the skill index lie Hispanic migrants. On average, Latino migrants are much less skilled than the native-born or than either European or Asian migrants are. To provide a dramatic illustration, among recent migrants Europeans and Asian have almost five years of schooling more than Latino migrants do. The reason is simple—about a third of recent Latino migrants have only eight years of schooling or less.

This simple summary highlights the salient differences in schooling achievements of the native and foreign born. On average, migrants are about a year or so less educated than the typical native-born American is. However, the real differences emerge in the tails. Migrants are simultaneously much more likely to be considerably more educated (have post-baccalaureate schooling) and less educated (without a high school diploma) than are Native-born Americans. A good deal of those differences are differentiated in the three major ethnic groups—compared

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or those and who also were not Black or Native-American using the race variable.

to native-born Americans, Europeans and Asians migrants are far more likely to have training beyond college while Latino migrants are far more likely not to have gone beyond elementary school.

Before examining whether these schooling differences between the native and foreign born can be explained by a few crucial theoretical and/or institutional factors, I next examine a closely related question—what has happened to these educational disparities by nativity over time?

**Section 2. The Changing Education Gap of Immigrants**

A primary concern in the economics literature is the changing labor market quality of foreign immigrants to the United States (see Borjas (1994, 1995) and Jasso, Rosenzweig, and Smith (2000)). Education is the most basic index of skill so it should come as no surprise that this topic has focused both on wages and education gaps of migrants compared to the native born. In this paper, I will only deal with the education dimension of that debate. On both wages and education, the discussion often begins with the rapidly changing ethnic composition of migrants to the US.

Before the Immigration and Nationality Act amendments of 1965 repealed the national-origin quotas, Europe and Canada were the dominant sources of immigrants to the US. Even as late as 1950, 90% of the foreign-born population was of either European or Canadian heritage. But with the passage of the 1965 amendments, the racial and ethnic composition has changed dramatically and rapidly as the number of migrants was rising during the last half-century.

The two principal changes clearly involved the increasing flows of migrants from Asia and Latin America. During the last two decades, more than 75% of new immigrants were either Latinos or Asians. Since 1970, more than eight million legal Hispanic immigrants arrived in the United States while almost seven million Asians were also admitted. Especially for Latinos,

these numbers were augmented by considerable influx of unauthorized migrants. By 1970, the fraction of the foreign-born population from Europe and Canada had been reduced to around two-thirds; this proportion was only a quarter in 1990. In contrast, foreigners from the Caribbean and Latin America were one-in-five of the foreign born in 1970 and 43% by 1990. Finally, Asians went from only 3% of the foreign-born in 1950 to a quarter by 1990.[2]

While the 1965 amendments certainly represented the most substantial change in immigration policy in the last 50 years, other subsequent legislation also had significant impacts on the attributes of migrant flows. While there are many changes, the two most important were the 1986 Immigration Reform and Control Act (IRCA) and a series of laws that encouraged the entry of more skilled immigrants. (For a brief summary of the major legislative changes see chapter 2 in Smith and Edmonston 1997).

Besides attempting to limit future illegal immigration by adding more resources for border control and by establishing employer sanctions, IRCA created a program for legalizing illegal aliens already residing in the US. Almost three million unauthorized migrants were legalized through this program (see Smith and Edmonston 1997). The most important of the recent changes in legal admission policy was the Immigration Act of 1990, which among other things simultaneously reduced the number of visas for unskilled migrants while increasing them for skilled immigrants.

Table 3 attempts to document trends by listing for each of the decennial Censuses between 1940 and 1990 and for the 1996 and 2002 CPS mean education levels of the native and foreign-born populations over age 24. To more closely capture changing flows, means are also presented for the foreign-born population who arrived during the last five years. Separate data are presented for the four principal ethnic groups—Asians, Europeans, Hispanics, and Mexicans.

[2]See Smith and Edmonston (1997), page 37, for details.

Not surprisingly, education levels have moved sharply higher over time for all groups represented in Table 3. Each decade witnessed another increase in schooling accomplishments for our reference group—the US native born. The cumulative change was eventually large—essentially moving the typical adult native-born American from an elementary school graduate in 1940 (8.8 years) to going beyond high school in 2002 (13.3 years). While starting at a lower base (a deficiency of two years in 1940), the foreign-born population has not only moved lockstep with the native-born, but their cumulative change was greater, reducing the education deficit with the native-born to one and a third years by 2002. No doubt reflecting secular improvements in education in the sending countries, recent immigrants tend to have more schooling than the complete resident foreign-born population. However, the gap between them has narrowed so that time series gains in education among the recent foreign-born are smaller than that of all migrants.

Ethnic differences in education are large. Among immigrants in particular, Latino migrants have always lagged behind the others by a substantial margin. Given the better educational opportunities available in the United States compared to many of the sending countries, it is not a surprise that within each of these ethnic groups the native-born tend to have more schooling than their foreign-born counterparts. In fact, the differences among the ethnic groups are far smaller in the native-born population than the foreign-born, an issue to which I return later.

To make trends in disparities with the native-born population more transparent, Figure 1 plots the extent to which the schooling of the native-born population exceeds that of the total and recent foreign-born population. Similarly, using the same reference group, Figure 2 displays the disparity in mean schooling of the different native-born ethnic populations; Figure 3 the differentials for the ethnic specific foreign-born populations, and Figure 4 education gaps for

recent immigrants.

Putting aside for a moment within ethnic trends, two things are particularly striking concerning schooling deficits of the foreign born. First, up to 1980 the schooling disadvantage of the total foreign-born population was declining while it was simultaneously rising for new recent immigrants. These opposing trends are not a contradiction. The stock of migrants is weighted heavily by history toward trends for past European migrants. Moreover, the higher education level of recent younger immigrants increases mean schooling of the total foreign born. But also the steep negative age gradient to mean schooling with a much older immigrant population due to the long stall in migration to the US implies that as some of the older immigrants (with very little schooling) die between the Censuses, the mean education of those who remain will rise. Second, and perhaps more to the point, no matter whether one uses the total or the recent foreign-born population, all this seems much ado about nothing. Over a 60-year period, the full range of change in the foreign born schooling gap was about .7 of a year of schooling and was little over a year when using all recent immigrants.

Figure 2 summarizes trends for various native-born populations. Compared to the overall average, the native-born of European descent have slightly less than a half-year[3] advantage, while those of Asian background hover around with a year of schooling advantage. What is remarkable about both Europeans and Asians is how little trend exists in this ethnic gap of the native-born. For example, for the last 60 years, native-born Asians have had about one year more schooling than the average in the US. There is a more detectable, and perhaps surprising to some, steady decline in the schooling gap of native-born Latinos until it is about half as large now as it was in 1940. I return to that issue below.

Figure 3 plots education gaps for ethnic foreign-born populations. In 1940 and 1950, all

[3]The small differences for Europeans are not surprising since they comprise such a large fraction of the total.

groups start out with a schooling disadvantage— about two years for Europeans and Asians and twice that much for Hispanics. Subsequently, first for Asians and then for Europeans, these schooling deficits narrowed until currently the total adult foreign-born populations of both groups hold a narrow advantage of the US native-born. In comparison, there is very little change between Hispanics and Mexicans where the education gap among the foreign-born at best drifts slightly downward. The overall downward trend in the foreign-born education gap thus results from a narrowing gap between Asians and Europeans, a basically constant gap among Latinos which combined offset any impact of a shift in relative representation toward Hispanics.

Figure 4 presents the same type of data for recent immigrants. Typically, new Asian and European migrants have had more education than the native-born, an advantage that has become slightly bigger for Europeans and smaller for Asians. Between 1970 and 1996, the education gap for new Latino migrants have risen. All groups appear to have experienced a slight closing of the education gap in the late 1990s.

One question that arises is whether these overall trends are the same for male and female immigrants. To examine this issue, Figure 5 presents data for trends in the sex-specific schooling gap for all migrants while Figure 6 plots similar data on education deficits of recent migrants. While the overall levels are different with a larger sex specific schooling disadvantage among female immigrants, the trends depicted in Figure 5 for all migrants are remarkably similar for men and women. The larger schooling deficit for female migrants primarily reflects the lower schooling accomplishments of female migrants. For example, in 1970 the average male migrant had 9.2 years of schooling compared to 7.6 years of schooling for the average female migrant.

Figure 6 depicts trends in schooling deficits by sex among recent migrants. The slowly expanding education deficit with the native born characterizes both men and women, but the

education gap increases at a slower rate among women than among men. This is largely because the typical advantage new male immigrants have had over new female immigrants has been gradually eroding. To illustrate, among recent immigrants in the 1970 Census, men had a year and one third education advantage over women (11.1 years for men compared to 9.8 years among women). In contrast, by 2002 recent female migrants actually had slightly more schooling than did recent male migrants to the United States—12.4 years of schooling for women compared to 12.2 for men.

Since they more directly capture flows, data on recent immigrants in Figures 1, 4, 5, and 6 are more sensitive to period changes in legislative and economic incentives in the propensity to migrate. A comparison of the more stable within-ethnic group trends in Figure 4 compared to the slightly widening gap of recent migrants in Figure 1 suggests that the principal impact of the 1965 legislative change was on the composition of migrants—in particular increasingly the representation of less-schooled Latino migrants. Two largely offsetting forces dominated the recent period. On one hand were the legalization of mainly Hispanic migrants through IRCA and the increased flows of unauthorized (again mainly Hispanic) migrants who have less schooling than the average native-born American. On the other, the increased numbers of European and Asian migrants who have education above that of the typical native-born American. A comparison of the 1996 and 2002 CPS may indicate that the second force is now stronger than the first as the education gap of new migrants and native-born Americans is now declining.

An attempt to highlight trends during the 1990s is provided in Table 4, which lists mean schooling of migrants by year of entry into the United States using the 1996 and 2002 CPS. Among all migrants, there is a u-shaped pattern with higher schooling levels among pre-1980 migrants compared to those who came during the 1980s, and then a rapid rise after the mid-

1990s. Within ethnic groups, the Asian patterns reflect the same overall picture just described, while there is evidence of a more continuous rise among Europeans. There is little evidence of much of a trend at all among Mexican migrants.

Since data are provided in both CPSs for the 1990-1996, 1980-1990, and pre-1980 year of entry cohorts, Table 4 allows one in principle to examine the same entry cohort of immigrants six years apart. In every case, mean schooling is higher in the more recent 2002 CPS, and the differences between the two CPS samples are often not small. For example, consider Asian migrants who arrived between 1990 and 1996. In the 1996 CPS, they report having 12.8 years of schooling; by 2002 this had risen to 13.6, an increment of .8 of a year. While the increases for the other ethnic groups are smaller than this example, they often run about half a year of schooling.

There are several possible reasons for this upward drift in mean schooling within entry cohorts. First, it may simply reflect 'grade' inflation, a well-documented trend in census data even for the native-born. Second, it may be produced by the aging of young, more educated immigrants who were 19-24 years old in 1996 but who now qualify for the 25-year-old age restriction by 2002, and the exit of older immigrants with low schooling levels who died between 1996 and 2002. Third, it could reflect a migration selection effect if less educated migrants are more likely to return even temporarily to the sending countries. Circulatory migration of the less educated would produce this pattern since the less educated would be less likely to remain within any specific time since migration interval in successive CPS surveys. Finally, some part of this upward drift may be the consequence of additional post-migration school attendance, an issue to which I return below.

To obtain some notion of the importance of the second and at least a component of the fourth reason, schooling differences with the native-born were calculated for a sample restricted

to those aged 31-55 in 1996 and 37-61 in 2002. The younger age threshold of older migrants mitigates against any significant mortality effect while the older age cutoff among the young should reduce the impact of school completion among younger migrants. Finally, the upward adjustment in the age cutoff of the young eliminates the impact of the new entry by 2002 of younger migrants who failed to meet the age threshold in 1996. However, the schooling increments within time since immigration intervals were only marginally different in this sample suggesting that these demographic factors of mortality and 'aging in' are not the major part of the story.

The exclusion of those factors leaves grade inflation, post-migration education selectivity, and post-migration education accumulation as the major options. Some insights into the latter are provided by Table 5, which lists the fraction of new legal immigrants who received some type of education during the year after the receipt of their green cards. The second column lists the fraction of respondents who received some form of training during this period, while the next five columns describe the type of training that took place.

The extent of post-green card training and schooling is impressive. Forty-one percent of all new legal immigrants engaged in some type of training during this year, and even one quarter of those between ages 61 and 80 participated in training. Classes in English as a second language were the most popular form of classes, especially among older immigrants, while some younger immigrants signed up for computer classes.

But regular school was also an important chosen option. One in eight new legal immigrants between the ages of 21 and 80 attended an American school in the year after the receipt of their green card. That rate rose to one in five among those new immigrants in their twenties.

Among those 25 and over, about half of new immigrants reported that they wanted to

attain a high degree in the Unites States. A fifth of these hoped-for degrees were college diplomas, while almost 38% were some type of masters, doctorate, or professional degree. Thus, it seems quite likely that some significant part of this rise in schooling between successive surveys is real—new immigrants do add to their schooling after the receipt of their green card.

But this also seems unlikely to offer a complete explanation. The data in Table 4 show that this increase in mean education takes place even among immigrants who arrived before 1980. By this time, one would have thought that the incremental schooling behavior would have run its course.

This suggests mostly by default that differential out-migration (either temporary or permanent) of the less educated may be an important empirical and under appreciated phenomenon. Greater circular migration alone of less-educated migrants (which seems likely to have taken place) would by itself produce across-year increases of schooling of migrants arrayed by their year of migration. If so, this also implies that the use of the analytical procedure of comparing immigrants stratified by reported time since arrival across surveys taken in different calendar years may be a perilous exercise indeed in spite of how widespread this practice is in the literature.

Several things are clear from this analysis. First, cross-sectional patterns associated with time since immigration may be a quite poor way of assembling evidence for either assimilation or immigrant quality. It is well recognized to be inappropriate when assessing the amount of assimilation since they are obviously members of different cohorts. It may also be problematic for assessing cohort quality as there may be significant post-immigration changes in the composition of entry cohorts as well as their schooling.

Second, when examining outcomes for immigrants, laws do matter. Periodic changes in immigration legislation have had important effects on the skill composition of subsequent

immigrant cohorts. The most well documented example concerns the impact of the 1965 National Origin Quota Act, which resulted in a large shift in the ethnic composition of immigrants with fewer Europeans and relatively more Asians and Latinos coming to the United States. During the 1970s and 1980s, this shift toward increasing numbers of Latino immigrants in particular led to an increasing gap between the average education of new immigrants compared to that of the native born.

But the 1965 act was not the end of the story by any means. Subsequent legislative changes, especially a set of revisions during the late 1980s and early 1990s that increased the quotas on skilled employment visas, had the opposite effect of increasing the average skill of new immigrants. The most important of these was 1990 act, which simultaneously increased the total numbers of employment visas (which tend to be more skilled on average) while decreasing the numbers in the unskilled occupations. Consequently, while less well known, these legislative changes resulted in a narrowing of the education gap of migrants and the native-born during the 1990s. These tables and figures indicate that the changing composition of recent immigration alongside the increasing fraction of immigrants within the Hispanic population are two dominant underlying trends.[4]

But laws are not the only thing that matters. First even within the system that admits legal immigrants to the United States there are numerically unlimited categories such as spouses of US citizens that can in some years comprise more than one-third of non-refugee adult admissions. Jasso, Rosenzweig, and Smith (2000) provide a detailed analysis of the factors determining the skill selectivity of such migrants. For example, they show that a higher cost of migration, say through distance, would imply that the average skill of migrants should rise in order to justify the mobility costs. Thus, migrants from Asia should be more highly selected on

[4]See Jasso, Rosensweig, and Smith (2000) for a detailed analysis of these changes and the effect of this set of

their skill (including their education) than migrants who reside in nearby countries such as Mexico and Canada. The empirical estimates in the Jasso et al. study provide strong support for this hypothesis.

Second, many immigrants come to the United States without documents or overstay their visas and therefore reside here illegally. These undocumented migrants tend to be largely but not exclusively Latino and they also have less skill and schooling than those immigrants who come through the legal system. Especially as there relative numbers change, the flows of illegal migrants into the United States can have profound impacts on the overall portrait of the education levels of the native born compared to the foreign born. In the next section, I will discuss this impact in more detail.

**Section 3. The Educational Diversity of Migrants—Legal and Unauthorized Immigrants**

Most of what we know about immigrants are typically based on comparisons using the foreign-born population in household surveys (Smith and Edmonston 1997). The foreign-born population in surveys represents a combination of some very different types of people—legal immigrants, legal nonimmigrants (those with visas that authorize stays for some period of time), and unauthorized or illegal immigrants. These populations are distinct in many ways, including their education. For example, many nonimmigrants come to the United States attracted by its reputation for superior schools, e.g., students on temporary visas attending American colleges and universities. In contrast, illegal immigrants are thought to predominately work in jobs within the bottom tail of the skill distribution, especially in the service and agricultural sectors. Not surprisingly, their schooling is often far below those of most American workers. Finally while legal immigrants come to America for many diverse reasons, especially in recent years some qualify for permanent residence only because they are highly skilled and highly educated.

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legislation.

Data on average education of the foreign-born population may be quite sensitive to the relative proportions of these three groups, and consequently aggregate data may poorly describe each of them.

According to the 2000 census, there were 281 million people living in the United States. Of these, 31 million or one in nine were born in another country. While making distinctions is difficult and measurement is far from perfect, the best current Census estimates indicate that roughly 22 million of the foreign born (or about 69%) were prior legal immigrants to the US.

Who are the rest? In the 2000 decennial Census about a million and one half were legal nonimmigrants (INS 2003) and another 600,000 were people awaiting their formal transition to legal status. The remainder of the foreign born are obviously the most difficult to count, but recent INS estimates indicate that there are 7 million unauthorized residents. Other quite credible estimates produce even higher numbers. For example, Passel, Capps, and Fix (2004) estimate that there were 9.3 million undocumented immigrants in the United States in 2002. Given this uncertainty, these estimates may be better thought of as a range—say anywhere between 8 and 12 million undocumented residents. Moreover, the relative proportions of these groups vary significantly across ethnic groups. For example, recent INS estimates claim that among all foreign-born in the 2000 Census, 23% were unauthorized (INS 2003). The corresponding fraction authorized for the Asian, European, Hispanic, and Mexico-born population was 6%, 4%, 44%, and 52% respectively.

Unfortunately, hard data documenting the distinct education attributes of these different subgroups of the foreign-born are almost nonexistent, especially if we strive for nationally representative statistics. The reason is simple—there has been no attempt to identify in surveys to which of the three groups a foreign-born respondent belongs. Fortunately, some indirect estimates are now possible since at least one of the three main sub-populations can be separately identified. The New Immigrant Pilot Survey (NIS-P) was a stratified random sample of new immigrants admitted to legal permanent residence in the United States, i.e., granted green cards

during the months of July and August 1996 (see Jasso, Massey, Rosenzweig, and Smith (2000) for details). Since the NIS samples legal immigrants only, any discrepancy between the CPS and NIS schooling distributions among recent immigrants would reflect the presence of illegal migrants and legal nonimmigrants in the CPS.

The top panel of Table 6 depicts the distribution of schooling of the entire adult NIS-P cohort, along with corresponding data based on the 1996 CPS for the foreign-born who entered the U.S. between 1992 and 1996 ('recent immigrants'). The 1996 CPS is used because it is the same calendar year as the NIS-P. These data are also presented for three subgroups—Hispanics, Asian, and Europeans.

Compared to the CPS recent foreign-born population, there are far more legal immigrants at the top of the educational hierarchy and far fewer at the bottom. The CPS-based proportion for foreign-born recent entrants with less than five years of schooling is 1.6 times as large as the legal immigrant based proportion (10.4% versus 6.6%) while the CPS-based fraction with 17 or more years of schooling among the recent-entrant foreign-born is eight percentage points smaller than in the legal immigrant population (13.3% versus 21%). The CPS and Census foreign-born population apparently does not reflect the legal immigrant population and its use to assess policy on legal immigration is problematic.

Differences between these population emerge more clearly in Table 7 which lists mean education by place of birth of legal immigrants (in 1996) and for the March 1996 CPS 'recent' foreign-born population. Because roughly half of legal immigrants are adjustees and have been living in the US for several years, the CPS foreign-born population is presented both for those who had arrived in the last three years and for those who had arrived during the last five years. Using recent INS (2003) estimates on legal status of the foreign born population, these differences between the legal immigrant population and the full foreign born population can be used to calculate the implied education level of the nonimmigrant and unauthorized populations combined. These numbers are placed in a parenthesis besides the mean education of the legal

population.[5] Finally, Table 7 also provides estimates of mean education for the entire native-born and foreign-born populations.

On average, legal immigrants have more education than the contemporaneously sampled recent CPS foreign-born population, and by implication much more schooling than other types of foreign-born people living in the US. I estimate that in 1996 mean schooling of the foreign-born who are legal immigrants was almost two years larger than the mean schooling of all 'recent' undocumented immigrants and nonimmigrants combined. For all recent migrants, mean schooling of legal immigrants is only slightly below that of the native-born population (a third of a year), but more than a year higher than that of the foreign-born population.

This comparison varies a good deal across ethnic groups. Among Asians and Europeans the relatively small subset of the foreign-born who are not legal immigrants are actually more educated, presumably reflecting the significant numbers of graduate and professional degree attendees in this group. Much different are Latino immigrants, where undocumented migrants are a large part of the total. The implied mean schooling of non-legal immigrant Hispanics is less than seven years, more than three years less than that of legal Hispanic immigrants.

The diversity amongst the foreign-born population is not limited to differences across these sub-populations. Even within the most numerous group—legal immigrants—there exists great heterogeneity in their prior schooling experiences. Table 8 illustrates this diversity by presenting average education by the type of visa that qualified one for legal immigrant status. Variation by type of visa is enormous with a range of nine years of schooling. The least educated are parents who typically did not complete elementary school, while the best educated are those new immigrants who came on employment visas who on average were college graduates. The influence of positive assortative mating in the marriage market is also evident in the ranking of schooling of those admitted through spousal visas; at the top employment (15.4), followed by spouses of US citizens (13.6), and finally spouses of permanent residents (10.0).

[5]Due to the uncertainty about which is the appropriate comparison group for legal immigrants, the average of the 3 year and 5 year CPS education was used. The percent of the CPS population who were legal immigrants was

This variation by visa type is important because over time legislation has loosened or tightened the numerical limits on different types of visas. The most important of these changes in the last two decades is the increase in numerical limits on employment visas which resulted not only in increased entry of those with employment visas but also in an increase in the average skill of education of legal immigrants (see Jasso, Rosensweig, and Smith (2000)).

Table 8 also indicates at the time of the receipt of a green card that most of the prior schooling of legal immigrants was obtained abroad. Only one in five legal immigrants had previously completed at least one year in an American school. Not surprisingly, this fraction is higher (25%) among those who adjusted their immigrant status while in the US (adjustees), twice the rate among new arrivals (12%). Once again, the highest fraction that had completed some prior American schooling were those who had obtained employment visas (one third) while the lowest occurred among those with parent visas (only 3%). However, if we confine our attention to those who had attended some American schooling, their total years of their attendance is not trivial—about three and a quarter years for the full sample.

**Section 4. Foreign Students at American Schools**

Education plays several roles in influencing who comes to the United States. Education affects earnings opportunities in the host and sending countries and therefore the incentives to want to migrate to the US. In addition, higher education in particular is a product in which it is widely believed the US has a distinct comparative advantage. The worldwide desire to attend American universities represent a strong draw to foreign nationals to live in the US for at least some period of time. Attendance at US colleges and universities is also thought to be a way station to subsequently obtaining legal permanent residence in the US. Foreign students attending schools in the US must obtain temporary visas for their duration of their status as students and are legally classified as nonimmigrants. Other nonimmigrants include temporary

obtained from the INS (2003) cited earlier in the text.

visitors for pleasure (tourists) or business, foreign diplomats and officials and their families, and well as a number of other smaller categories.

Figure 7 plots time series trends in the total number of nonimmigrants admitted to the US along with the total numbers on temporary tourist or business visas and those on student visas. Clearly, globalization has a human dimension, as mirrored in the accelerating numbers of nonimmigrants admitted to the US in recent decades. Since 1960, the numbers of nonimmigrants have grown from about 1.1 million in 1960 to almost 33 million by 2001—a growth of 8.2% per year! Figure 7 also indicates that most of this overall surge is accounted for by a single group, those on temporary visas for tourism or business—which even in 2001 comprised 90% of all nonimmigrants.[6] There was not much of a recent slowdown as the number of nonimmigrants basically doubled during the 1990s—that is until September 11. In the one-year of complete data available since then, the total number of nonimmigrant visas fell by almost 5 million. Obviously, given the unusual nature of this event and its aftermath, it is difficult to project at this point what the permanent impact of the 9/11 terrorist attacks will be.

When placed on the same scale as all nonimmigrants in Figure 7, secular trends for foreign students are barely detectable as they only comprise about 2% of the total. However, when plotted in Figure 8 on a scale more appropriate to their numbers, we see that the same secular expansion took place among foreign student visas. The number of student visas reached three quarters of a million in 2001, more than double the number in 1990 and more than seven times that in 1970.[7] Once again the events of 9/11 had a noticeable impact on these trends, but projecting into the future what the permanent impact will be would be simply guessing.

Another way of gauging the importance of foreign students is to compare them to the size of the total student population. Table 9 does just that by listing the percent of all enrolled students who are foreign nationals for fall semester of 2001. In spite of the rapid growth in

[6]Tourist visas made up 84% of all temporary visas for business or pleasure in 2001.

[7]Student visas in Figure 8 include visas for academic students (F1), vocational students (M1), and the corresponding F2 and M2 visas for their spouses and children. However, in 2001 for example spouses and children make up only 6% of the total.

student visas, the overall numbers and impact remain modest—about 4% of students at American colleges and universities are foreign nationals. This evaluation could be quite different ten years from now if the growth in foreign students continues unabated. Moreover, foreign student representation varies a great deal by level of schooling and field of study. As Table 9 demonstrates, less than 3% of undergraduates are foreign students, while one in seven of those attending American graduate schools are foreign students.

While the overall impact of foreign students may be modest, their influence on doctoral programs in general and particularly in some sub-fields in the hard sciences is anything but. Table 9B lists the fraction of doctorates that were awarded to foreign students in 2002. Foreign students earned 30% of all doctorates, and more than half of all Ph.D.s in math and engineering went to foreign students in that year.

There is a tremendous amount of variance across fields, with much lower foreign representation in the non-science and engineering fields (15.6%). Mathematical ability and language issues appear to play some role in the choice of degree. Foreign students receive almost half of all US doctorates in physics but much less in the biological sciences (28.7%). Even in the social sciences, a third of all Ph.D.s in 2001 were earned by foreign students. Psychology, a very large degree-awarding program in the US and a science with both natural and social science arms, awarded only 7.2% of its degrees to foreign students.[8]

Table 10 provides another perspective by listing the percent of American foreign students by their region and country of birth for the academic years 1980-81 and 1999-2000. The most dramatic trend involved Asian students who increased by almost 200,000 during that time frame, increasing their proportionate representation from 30% to more than half. Two countries in particular stand out above all others—China and India. In 1980, there were fewer than 3,000 Chinese students studying in the US—by 1999 there were more than 50,000. Similarly, the numbers of Indian students increased from 9,000 to 42,000. In the rest of the world, the total

[8]An important issue that has received little rigorous analytical attention is the extent to which these foreign students have displaced American students. Such a question is not answered by just the raw numbers alone. For a

numbers of European students trebled pretty much uniformly throughout Western Europe. The main area of decline was the Middle East and in particular Iran where the number of students fell from 47,000 in 1980 to less than 2,000 in 1999.

The growing numbers of foreign students receiving doctoral degrees from American universities should be viewed in the larger context of a world-wide surge in the demand for degrees beyond the baccalaureate and increasing competition among relatively few but a growing set of countries (the UK, US, France, Germany, Japan, Australia) for these students. The surge in demand for science and engineering degrees reflects the strong economic growth in Asia and Europe, and only a relatively small part of this demand has filled by American institutions. In large part, internal supply in Asia and Europe has responded to meet this demand. For example, in 1999 there were 190,000 doctoral degrees awarded world wide in science and engineering and only 45,000 of them were earned in the United States. Nor is the US unique in the presence of foreign students in its advance degree programs. To cite just one example, 44% of doctoral engineering degrees in the UK were earned by foreign students—the comparable numbers in the US and France were 49% and 30% respectively.

In most science fields, American top universities continue to rank among the world's elite, especially in their basic research function. These elite American universities also produce a disproportionate number of some of the best of the next generation of scientists. Many of these trained scientists are now not Americans and this may prove to be the principal legacy of the penetration of foreign students into American universities. The exact contours of that legacy are not yet clear, but the era of dominance of American-born scholars in research in many fields is most likely coming to an end. It is far less certain what will happen to the dominance of American universities in research. In certain fields at least, the best of the foreign students remain to teach and to do research at American universities in part because universities in their home countries still do not offer the same opportunities for merit based advancement and research.

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thoughtful recent attempt to address this question, see Borjas (2003).

These flow numbers for nonimmigrants contained in Figures 7 and 8 may understate the role of foreign students for two reasons. The first stems from a basic but fundamental stock-flow distinction. Many nonimmigrants on tourist visas have relatively short stays of a few weeks or less, while most students remain for most of the year. If the average tourist stayed in the US for eight and a half days, there would be an equal number of tourists and students living in the US on any given day.

Second, attending school in the US may be a viable route to obtaining a green card and permanent residence in the US. But here too reality may pale next to popular perceptions. Most foreign students return home to stay and most legal immigrants have never attended an American school. At the time they received their green cards, 81% of new legal immigrants in 1996 had not completed a single year in an American school. Going to an American school is a route to legal immigration, but it is by no means among the more important avenues. This route is more important among those with more advanced degrees. In recent decades, about half of the foreign-trained doctoral students planned to stay in the United States after graduation, a fraction that has grown to as high as 72% by 2002.[9]

**Section 5. Immigrant Education and Generational Assimilation**

Economic mobility for yourself and your children is deeply tied to our immigration history. However, the actual documentation of the speed at which different immigrant ethnic groups can secure a better economic lot for their heirs is very sparse. The conventional view is that in terms of generational assimilation the waves of European immigrants who arrived at the end of the 19th century and the beginning of the 20th century were an enormous success. The success of more recent waves is viewed as far more problematic. This concern is particularly strong with Latino immigrants where the existing demographic and economic literature adapts a quite pessimistic tone about the extent of generational progress within the Hispanic population.[10]

It is the alleged inability of successive Hispanic generations to close their schooling gap

[9]See Science and Education Indicators 2003—National Science Foundation.

that led to pessimism about generational assimilation.[11] The first panel in Table 11 lists education levels for three generations of Hispanic men. All data are stratified by age and are obtained from the 1996 CPS. Any other CPS or Census would show similar patterns by generation as those displayed in Table 11 for 1996.

If one considers first these cross-sectional schooling levels by generation for Latino men, it is easy to understand the reasons for pessimism about the alleged inability of successive Hispanic generations to close their schooling gap. Latino male education levels do rise by about three years between the 1st and 2nd generation, but in every age group listed the mean education of the third generation is actually less than that of the second. Across three generations, Latino schooling gains among men were only about two and one half years. Since these generations span at least 50 years, at this pace generation progress could rightly be labeled slow, especially given beliefs about the considerable progress made by the children and grandchildren of the European immigrants. It especially looks like a concern between the second and third generation where Latino education progress appears not only to have stalled, but to have actually gone in reverse. This alleged reversal has produced all sorts of special theories about why Latinos have problems in the arena of generational assimilation that appear with a one generation lag.

Cross-sectional data such as that contained in Table 11 have been repeatedly used to evaluate generational assimilation among Latinos. The evaluation is consistently negative, often with an implicit comparison to the allegedly superior generational gains made by the earlier European immigrants or to the educational accomplishments of Asian immigrants. Of course, as we will see momentarily that data arrayed as in Table 11 are methodologically inappropriate and have little to say about generational assimilation.

These data do not speak to inter-generation assimilation since we should not be comparing 2nd and 3rd generation workers of the same age in the same year. For example, the

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[10]This section is based on Smith (2003).

[11]One problem in studying assimilation is ambiguity in defining generations across Census and CPS files. Here, generations are defined as follows: 1st generation—born outside the US; 2nd generation—at least one parent born outside the US; 3rd generation or more—both parents born in the US. Thus, while reference is made for convenience

1996 40-year-old, 3rd generation Latinos in Table 11 are not sons of 40-year-old, 2nd generation Latino men in the same year, and certainly not the grandsons of the 1970 1st generation immigrants who were 40 years old in 1996. In fact the gradfather immigrants of the 40 year old third generation would not appear at all in Table 11 since most of them are long since dead (their average age would have been 90 in 1996. To correctly evaluate generational assimilation, the data must be realigned to correctly match up the sons and grandsons with the correct birth cohort of Latino immigrants.

Table 12 does just that by listing in the first three columns of numbers for each Latino male immigrant birth cohort the mean education level of the immigrants (the first column), their sons (the second column) and their grandsons (the third column). To track progress across the generations, the data in all three columns in Table 12 are all indexed by the birth cohort of the immigrant generation. With a 25-year lag between generations, education of the 2nd generation then refers to 2nd generation born 25 years after the birth-years indexed for immigrants in the first column. A similar 25-year offset is assumed for the 3rd and 2nd generations. The first three rows of Table 12 list education levels of Latino immigrants and their descendants while the final three rows uses the same structure to measure education deficits of Latino immigrants and their descendants with native-born white men.[12]

To the extent that schooling is an adequate proxy for labor market quality, reading down the second and fifth columns for the first generation informs us about secular changes in the 'quality' of immigrants. The story told is a familiar one. While the education levels of each new birth cohort of Latino immigrants were higher than their predecessors, following the birth cohorts of 1915-1919 there occurred a steady increase in the education deficit of new Latino immigrants compared to native-born white men. Less well known is that this process may have

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to the 3rd generation, it really includes all generations beyond the second.

[12]The data in Table 12 were obtained by computing the education levels by generation and five year age groups from the 1940-1970 decennial Censuses, four special CPS supplements on language and immigration (1979, 1983, 1986, 1988) to cover the 1980s, and four successive March CPS's starting in 1994 to represent the 1990s To obtain a single estimate for each five-year birth cohort cell, means across all Census years since 1940 and groups of CPS years were averaged. For the precise defintions of ethnicity and generation used, see Smith (2003).

reversed among recent birth cohorts as the education deficit of Latino immigrants with native-born white men is now contracting somewhat.

Our primary interest in Table 12, however, concerns monitoring the degree of progress across generations. Latino schooling advances across generations are impressive. Consider Latino immigrants born between 1905-09 with 5.06 years of school. Their American-born sons with 9.59 years doubled their schooling, and their grandsons on average were high school graduates. The average education gain across three generations of Latino men is over seven years, in contrast to the impression of the cross-section.

Schooling deficits of Latino immigrants compared to native-born white men are always much smaller in the 2nd generation than the 1st and are always lower still in the 3rd. The youngest 3rd generation cohorts included in Table 12 (whose immigrant grandfathers were born between 1920-1924) had less than a year schooling gap with white men--half as big as their father's education deficit. Compared to the 1st, schooling gaps of 2nd generation Latinos has quickened its decline implying that the eventual education gap of the grandsons of Hispanic immigrants born in the 1940s would be small indeed.

The conventional view regarding Hispanic immigrants ability to secure a better life for their kids and grand kids was pessimistic. They were seen as not sharing in the successful European experience, perhaps due to a reluctance to assimilate into American culture. These fears are unwarranted. Second and 3rd generation Hispanic men have made great strides in closing their education gaps with native whites.

**Conclusions**

This paper deals with a number of issues about immigrants to the United States and their education. In part reflecting the reasons why they come to America, immigrants are more highly represented in both the lowest and highest rungs of the education ladder. On average immigrants have less schooling than the native born, a schooling deficit that reached 1.3 years in 2002.

Perhaps as important as the average difference between immigrants and the native-born population, there is considerable diversity in the schooling accomplishments among different immigrant sub-groups. The education of new European and Asian immigrants is higher than that of native-born Americans, while the typical Latino immigrant continues to trail the native-born by about four years of schooling on average.

The education gap of new recent immigrants did rise but only modestly over the last 60 years. This increase was higher among men than among women and appears to be entirely accounted for the increasing fraction of immigrants who are illegal. Legal immigrants appear to have about the same amount of schooling as native-born Americans do, and in the top of the schooling hierarchy have a good deal more. Finally, the concern that educational generational progress among Latino immigrants has lagged behind other immigrant groups is largely unfounded.

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Table 1
Schooling Distributions of Native Born and Foreign Populations—2002 CPS

| | All | | |
|---|---|---|---|
| Schooling | Foreign-Born | Native-Born | Recent Foreign-Born |
| Less than 5 years | 6.4 | 0.7 | 7.4 |
| 5-8 years | 14.1 | 3.5 | 12.8 |
| 9-11 years | 7.9 | 7.4 | 6.9 |
| 12 years | 26.9 | 34.4 | 23.9 |
| 13-16 years | 34.9 | 45.2 | 34.9 |
| 17-18 years | 6.4 | 6.3 | 10.0 |
| 19+ years | 3.6 | 2.6 | 4.3 |
| Mean years | 12.00 | 13.31 | 12.31 |

Calculations by author using the 2002 March CPS for all persons 25 and over. The recent foreign-born are those who migrated within the last five years.

Table 2.
Schooling Distributions of Native-Born and Foreign PopulationsC2002 CPS

| | Asian | | | European | | |
|---|---|---|---|---|---|---|
| Schooling | Foreign-Born | Native-Born | Recent Foreign-Born | Foreign-Born | Native-Born | Recent Foreign-Born |
| Less than 5 years | 2.8 | 0.2 | 2.4 | 1.9 | 0.4 | 1.9 |
| 5-8 years | 5.0 | 2.1 | 3.2 | 6.9 | 2.9 | 5.1 |
| 9-11 years | 4.0 | 2.6 | 3.4 | 4.2 | 6.2 | 1.7 |
| 12 years | 22.4 | 23.2 | 16.1 | 29.5 | 33.8 | 22.0 |
| 13-16 years | 48.4 | 59.4 | 50.3 | 41.7 | 46.8 | 41.1 |
| 17-18 years | 11.7 | 6.8 | 18.0 | 10.4 | 7.0 | 19.6 |
| 19+ years | 5.7 | 5.6 | 6.5 | 5.5 | 2.9 | 8.9 |
| Mean years | 13.96 | 14.36 | 14.73 | 13.58 | 13.52 | 14.61 |

| | Hispanics | | |
|---|---|---|---|
| Schooling | Foreign-Born | Native-Born | Recent Foreign-Born |
| Less than 5 years | 11.6 | 3.8 | 13.3 |
| 5-8 years | 24.9 | 8.9 | 23.3 |
| 9-11 years | 12.7 | 12.8 | 11.6 |
| 12 years | 27.5 | 34.5 | 25.4 |
| 13-16 years | 21.4 | 36.1 | 22.7 |
| 17-18 years | 1.3 | 3.0 | 2.4 |
| 19+ years | 1.1 | 0.9 | 1.4 |
| Mean years | 9.81 | 11.93 | 9.84 |

Calculations by author using the 2002 March CPS for all persons 25 and over. The recent foreign-born are those who migrated within the last five years.

Table 3

Years of Schooling Completed, by Nativity

| | 2002 | 1996 | 1990 | 1980 | 1970 | 1960 | 1950 | 1940 |
|---|---|---|---|---|---|---|---|---|
| **All** | | | | | | | | |
| U.S. born | 13.31 | 12.99 | 12.61 | 11.78 | 10.84 | 10.01 | 9.43 | 8.77 |
| Foreign born | 12.00 | 11.51 | 11.31 | 10.59 | 8.97 | 7.74 | 7.46 | 6.68 |
| 1-5 years in U.S. | 12.32 | 11.73 | 11.65 | 11.25 | 10.36 | 9.95 | n.a. | 8.90 |
| **Asian** | | | | | | | | |
| U.S. born | 14.36 | 14.00 | 13.60 | 13.01 | 11.84 | 10.66 | 10.43 | 9.66 |
| Foreign born | 13.96 | 13.28 | 12.94 | 13.17 | 11.32 | 8.37 | 7.24 | 7.76 |
| 1-5 years in U.S. | 14.73 | 13.13 | 12.90 | 12.50 | 13.46 | 12.08 | n.a. | 10.44 |
| **"Europeans"** | | | | | | | | |
| U.S. born | 13.52 | 13.18 | 12.82 | 12.02 | 11.11 | 10.34 | 9.79 | 9.18 |
| Foreign born | 13.58 | 12.89 | 11.94 | 10.29 | 8.99 | 7.83 | 7.39 | 6.74 |
| 1-5 years in U.S. | 14.61 | 14.65 | 13.63 | 12.11 | 10.35 | 10.32 | n.a. | 8.95 |
| **Hispanics** | | | | | | | | |
| U.S. born | 11.93 | 11.52 | 11.58 | 9.80 | 9.47 | 7.39 | 7.22 | 5.79 |
| Foreign born | 9.81 | 9.27 | 9.23 | 8.91 | 7.91 | 5.99 | 5.79 | 4.71 |
| 1-5 years in U.S. | 9.84 | 8.41 | 9.14 | 8.26 | 8.40 | 7.23 | n.a. | 7.25 |
| **Mexican** | | | | | | | | |
| U.S. born | n.a. | n.a. | 11.15 | 9.50 | 8.33 | 6.80 | 5.81 | 4.28 |
| Foreign born | 8.66 | 7.93 | 7.71 | 6.74 | 5.59 | 4.39 | 4.53 | 3.97 |
| 1-5 years in U.S. | 8.53 | 7.52 | 7.83 | 6.33 | 5.93 | 4.58 | n.a. | 6.06 |

Calculations by author from 1940-1990 decennial Censuses, 1996 and 2002 CPS. Sample those 25 and above.

Table 4
Recent Trends in Immigrant Schooling

| Time Since Immigration | All | Asians | Europeans | Hispanics | Mexicans |
|---|---|---|---|---|---|
| | | **2002 CPS** | | | |
| 2000-2002 | 12.51 | 14.70 | 14.77 | 9.87 | 8.37 |
| 1996-2000 | 12.18 | 14.51 | 14.47 | 9.70 | 8.75 |
| 1990-1996 | 11.71 | 13.63 | 14.41 | 9.55 | 8.74 |
| 1980-1990 | 11.79 | 13.60 | 14.11 | 9.88 | 8.73 |
| < 1980 | 12.15 | 14.07 | 13.01 | 9.95 | 8.56 |
| | | **1996 CPS** | | | |
| 1990-1996 | 11.56 | 12.80 | 14.21 | 8.69 | 7.89 |
| 1980-1990 | 11.33 | 13.27 | 13.68 | 9.26 | 7.99 |
| < 1980 | 11.61 | 13.63 | 12.49 | 9.47 | 7.90 |

Source: Calculations by author. Sample those 25 and above.

Table 5
New Legal Immigrants Who Attended School in the United States during the Year of Their Receiving Their Green Cards

| Age | % Attended | Type of Schooling | | | | |
|---|---|---|---|---|---|---|
| | | Regular | Language | GED | Computer | Other |
| 21-30 | .52 | .421 | .276 | .026 | .069 | .207 |
| 31-40 | .41 | .268 | .314 | .027 | .104 | .287 |
| 41-60 | .37 | .194 | .513 | .000 | .015 | .279 |
| 61-80 | .24 | .231 | .692 | .000 | .000 | .077 |
| All | .41 | .304 | .371 | .019 | .063 | .244 |

Source: 1996 New Immigrant Pilot Survey. Attending is defined as any attendance at or between the baseline and the 12-month follow-up. Type of schooling defined by most recent type of schooling.

Table 6
Schooling Distributions of Legal Immigrants and the Recent Foreign Born

| Schooling Characteristic | All | |
|---|---|---|
| | New Legal Foreign-Born | Recent Foreign-Born |
| Less than 5 years | 6.6 | 10.4 |
| 5-8 years | 13.6 | 14.5 |
| 9-11 years | 13.9 | 8.1 |
| 12 years | 12.5 | 22.4 |
| 13-16 years | 32.5 | 31.4 |
| 17-18 years | 11.9 | 8.2 |
| 19+ years | 9.1 | 5.1 |
| Mean years | 12.6 | 11.7 |

| | Asian | | European | |
|---|---|---|---|---|
| Schooling | New Legal Foreign-Born | Recent Foreign-Born | New Legal Foreign-Born | Recent Foreign-Born |
| Less than 5 years | 3.2 | 7.8 | 1.3 | 1.5 |
| 5-8 years | 8.4 | 5.2 | 6.7 | 3.5 |
| 9-11 years | 12.7 | 5.0 | 11.9 | 5.6 |
| 12 years | 15.2 | 23.2 | 7.1 | 18.9 |
| 13-16 years | 36.7 | 42.9 | 42.1 | 43.8 |
| 17-18 years | 12.7 | 10.9 | 22.2 | 15.5 |
| 19+ years | 11.3 | 5.0 | 8.7 | 11.3 |
| Mean years | 13.7 | 13.1 | 14.4 | 14.7 |

| | Hispanics | |
|---|---|---|
| Schooling | New Legal Foreign-Born | Recent Foreign-Born |
| Less than 5 years | 14.0 | 21.3 |
| 5-8 years | 24.9 | 29.9 |
| 9-11 years | 16.5 | 13.0 |
| 12 years | 11.9 | 11.0 |
| 13-16 years | 23.0 | 15.5 |
| 17-18 years | 5.5 | 4.7 |
| 19+ years | 4.3 | 4.6 |
| Mean years | 10.1 | 8.8 |

Note: Recent Immigrants are from the 1996 NIS and the recent foreign-born are from the 1996 CPS. The recent foreign-born entered between 1992-96.

Table 7
Education Levels of Recent Male Immigrants—Legal and All Recent Foreign-Born

| Place of Birth | Foreign Born | | | | | Native Born |
|---|---|---|---|---|---|---|
| | Legal | Not Legal | CPS < 3 years | CPS < 5 years | All FB | |
| | Average Education (Years) | | | | | |
| All | 12.64 | (10.79) | 12.33 | 11.73 | 11.51 | 12.99 |
| Asia | 13.66 | (14.14) | 14.22 | 13.13 | 13.28 | 14.00 |
| Europe | 14.49 | (16.86) | 14.51 | 14.65 | 12.89 | 13.18 |
| All Hispanics | 10.12 | (6.90) | 8.99 | 8.41 | 9.27 | 11.52 |

Note: Recent Legal Immigrants obtained from NIS-P. Recent Foreign Born are obtained from the 1996 CPS. These immigrants came either less than 3 years ago (4th column) or less than 5 years ago (5th column).

Table 8
Years of Schooling Completed Among Immigrants Aged 25 Years and Over at Admission, by Visa Class

| Visa Class | Mean | Years in US | Fraction with some US schooling |
|---|---|---|---|
| Spouse of U.S. citizen | 13.6 | 0.9 | .249 |
| Spouse of Permanent Resident | 10.0 | 0.3 | .125 |
| Parent of (adult) U.S. citizen | 7.4 | 0.1 | .029 |
| Sibling, principal and spouse | 13.5 | 0.1 | .073 |
| Employment, principal | 16.5 | 1.3 | .345 |
| Employment spouse and child | 15.4 | 0.8 | .298 |
| Refugee/asylee, principal and spouse | 12.7 | 0.7 | .221 |
| Diversity, principal and spouse | 14.7 | 0.1 | .048 |
| Adjustees | 13.4 | 0.9 | .285 |
| New Arrivals | 11.8 | 0.2 | .053 |

Note: Figures are for all immigrants in the NIS-P based on weighted data.

Table 9
Enrollment of Foreign Students of International Students

**A. By Level of Degree**

| Academic Level | International Students | % of U.S. Enrollment |
|---|---|---|
| Associate | 67,667 | 1.4 |
| Bachelor's* | 193,412 | 2.8 |
| Graduate** | 264,749 | 13.7 |
| Total | 525,828 | 3.9 |

**B. Percent of Doctorates Awarded to Foreign Students Holding Temporary or Permanent Visas, by Field: 2001**

| | |
|---|---|
| All Science and Engineering | .380 |
| Engineering | .583 |
| Sciences | .322 |
| Mathematics | .510 |
| Physics | .428 |
| Biological Sciences | .287 |
| Psychology | .072 |
| Other Social Sciences | .322 |
| Non-Science and Engineering | .156 |
| All | .301 |

*College Board Annual Survey of Colleges for Fall 2001 enrollment.
**Includes first professional degrees.

Table 10
Foreign Students Enrolled in Institutions of Higher Education in the United States by Region, and Selected Countries of Origin

| | 1980-1981 | | 1999-2000 | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Asia | 94,640 | 30.3 | 280,146 | 54.4 |
| China | 2,770 | 0.9 | 54,466 | 10.6 |
| Taiwan | 19,460 | 6.2 | 29,234 | 5.7 |
| India | 9,250 | 3.0 | 42,337 | 8.2 |
| Europe | 25,330 | 8.1 | 78,485 | 15.2 |
| Africa | 38,180 | 12.2 | 30,292 | 5.9 |
| Latin America | 49,810 | 16.0 | 62,098 | 12.1 |
| Middle East | 84,710 | 27.2 | 34,897 | 6.8 |
| North America | 14,790 | 4.7 | 24,128 | 4.7 |

Source: International Comparisons of Education.

Table 11

Education by Generation

| | Age | | | | |
|---|---|---|---|---|---|
| | 25-30 | 31-40 | 41-50 | 51-60 | All |
| **Hispanic Male Education** | | | | | |
| First | 9.99 | 9.49 | 9.59 | 7.78 | 9.27 |
| Second | 12.98 | 12.60 | 12.97 | 11.99 | 12.14 |
| Third | 12.56 | 12.26 | 11.98 | 11.16 | 11.63 |

Source: 1996 March *Current Population Survey*.

Table 12
HISPANIC EDUCATION BY GENERATION

| | Ed Level | | | Ed Deficit With White Men | | |
|---|---|---|---|---|---|---|
| Yea r of Birth | Hisp. 1st | Hisp. 2nd | Hisp. 3rd | Hisp. 1st | Hisp. 2nd | Hisp. 3rd |
| 1830-1834 | | | 3.17 | | | 4.95 |
| 1835-1839 | | | 4.34 | | | 4.02 |
| 1840-1844 | | | 3.69 | | | 4.86 |
| 1845-1849 | | | 5.30 | | | 3.41 |
| 1850-1854 | | | 5.27 | | | 3.58 |
| 1855-1859 | | 6.34 | 5.97 | | 1.78 | 3.03 |
| 1860-1864 | | 5.19 | 6.62 | | 3.16 | 2.68 |
| 1865-1869 | | 4.46 | 7.33 | | 4.10 | 2.25 |
| 1870-1874 | | 5.26 | 7.97 | | 3.44 | 2.30 |
| 1875-1879 | | 4.77 | 8.40 | | 3.64 | 2.35 |
| 1880-1884 | 3.12 | 5.65 | 9.55 | 5.00 | 3.35 | 2.48 |
| 1885-1889 | 3.62 | 6.22 | 10.05 | 4.74 | 3.07 | 2.34 |
| 1890-1894 | 4.98 | 7.55 | 10.89 | 3.57 | 2.03 | 2.19 |
| 1895-1899 | 4.68 | 8.13 | 11.74 | 4.03 | 2.14 | 1.64 |
| 1900-1904 | 4.55 | 7.75 | 12.08 | 4.30 | 3.01 | 1.16 |
| 1905-1909 | 5.06 | 9.59 | 12.24 | 3.94 | 2.45 | 1.08 |
| 1910-1914 | 6.10 | 10.56 | 12.13 | 3.20 | 1.84 | 1.07 |
| 1915-1919 | 7.41 | 11.17 | 12.47 | 2.17 | 1.91 | 1.03 |
| 1920-1924 | 7.91 | 11.80 | 12.40 | 2.36 | 1.58 | 0.71 |
| 1925-1929 | 8.28 | 12.28 | | 2.48 | 1.44 | |
| 1930-1934 | 8.76 | 12.10 | | 3.27 | 1.22 | |
| 1935-1939 | 8.40 | 12.50 | | 3.99 | 0.70 | |
| 1940-1944 | 9.09 | 12.88 | | 3.99 | 0.62 | |
| 1945-1949 | 9.56 | 12.42 | | 3.82 | 0.70 | |
| 1950-1954 | 9.13 | | | 4.59 | | |
| 1955-1959 | 9.47 | | | 3.85 | | |
| 1960-1964 | 9.79 | | | 3.41 | | |
| 1965-1969 | 9.90 | | | 3.60 | | |
| 1970-1974 | 9.66 | | | 3.46 | | |

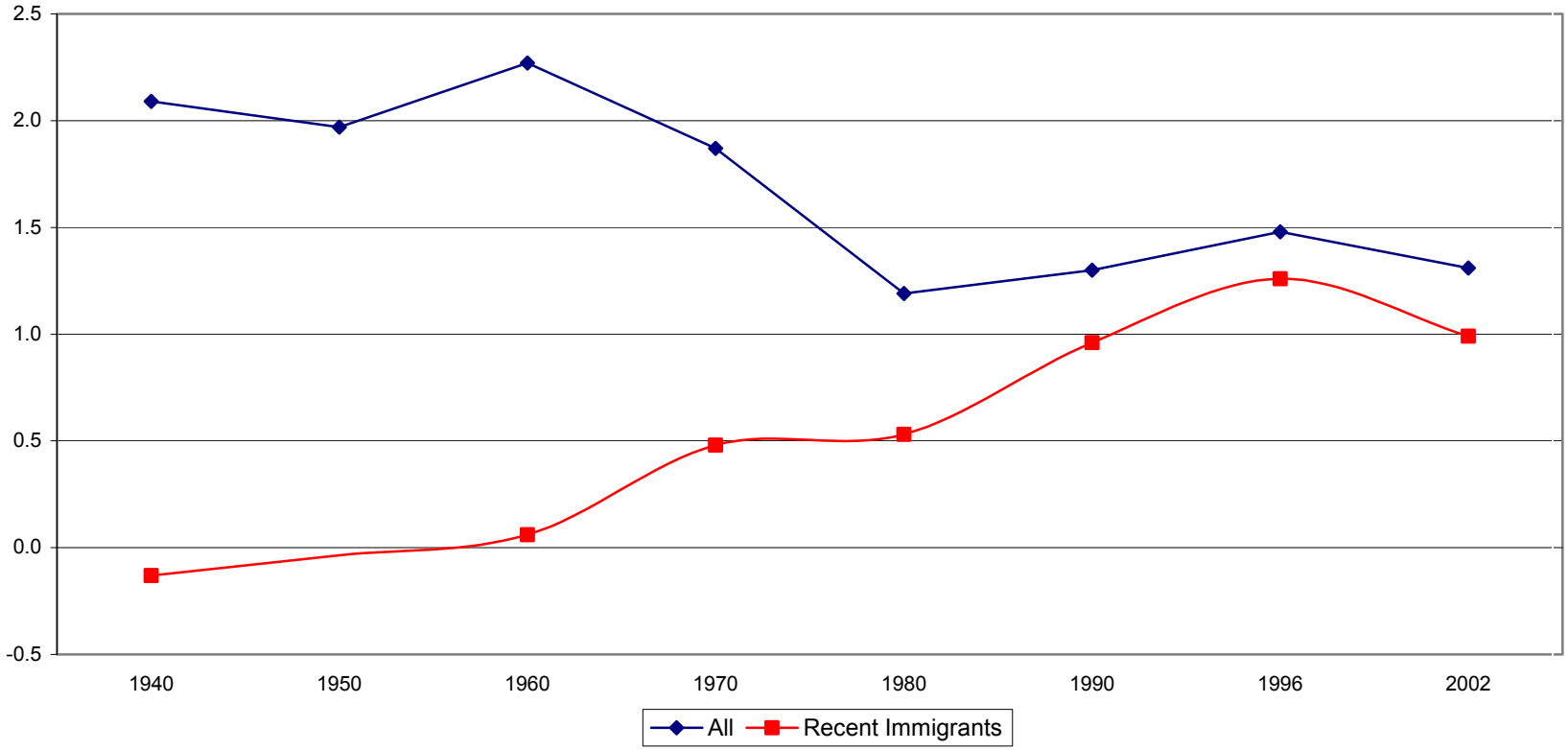



**Fig. 1. Schooling Disparity of All Foreign Born (comparison group: All Native Born)**

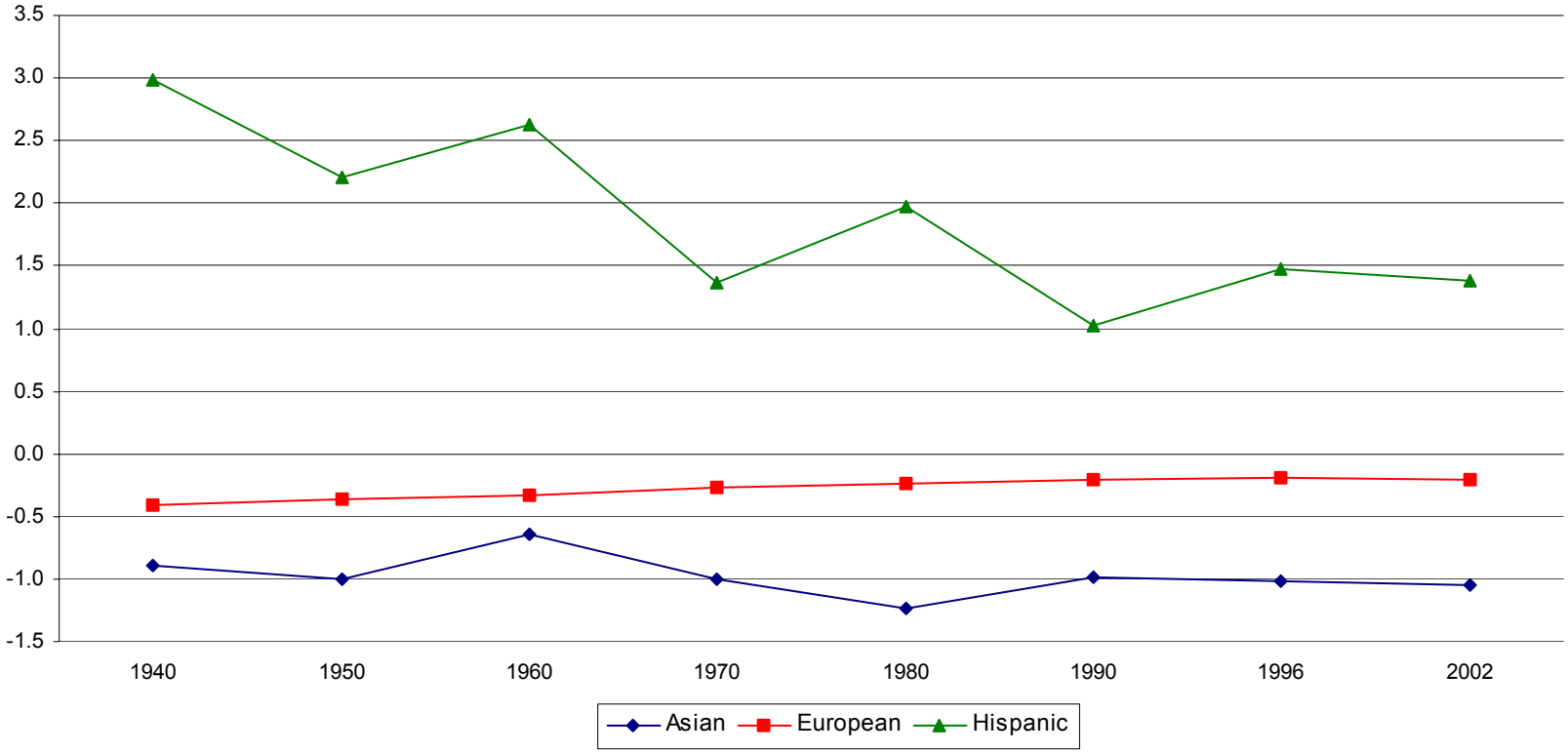



**Fig. 2. Schooling Differences of the Native Born (comparison group: All Native Born)**

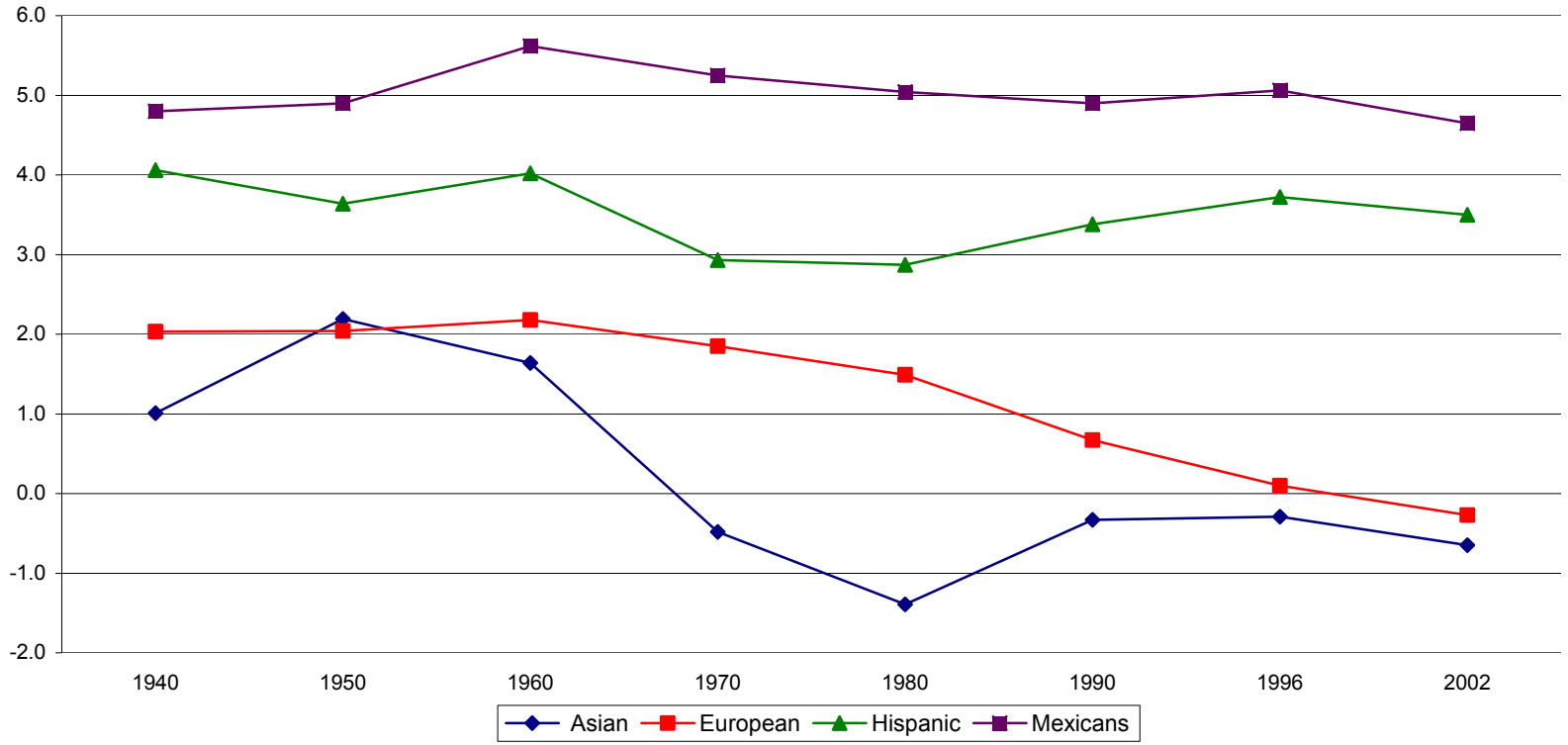



**Fig. 3. Schooling Disparity of All Foreign Born (comparison group: All Native Born)**

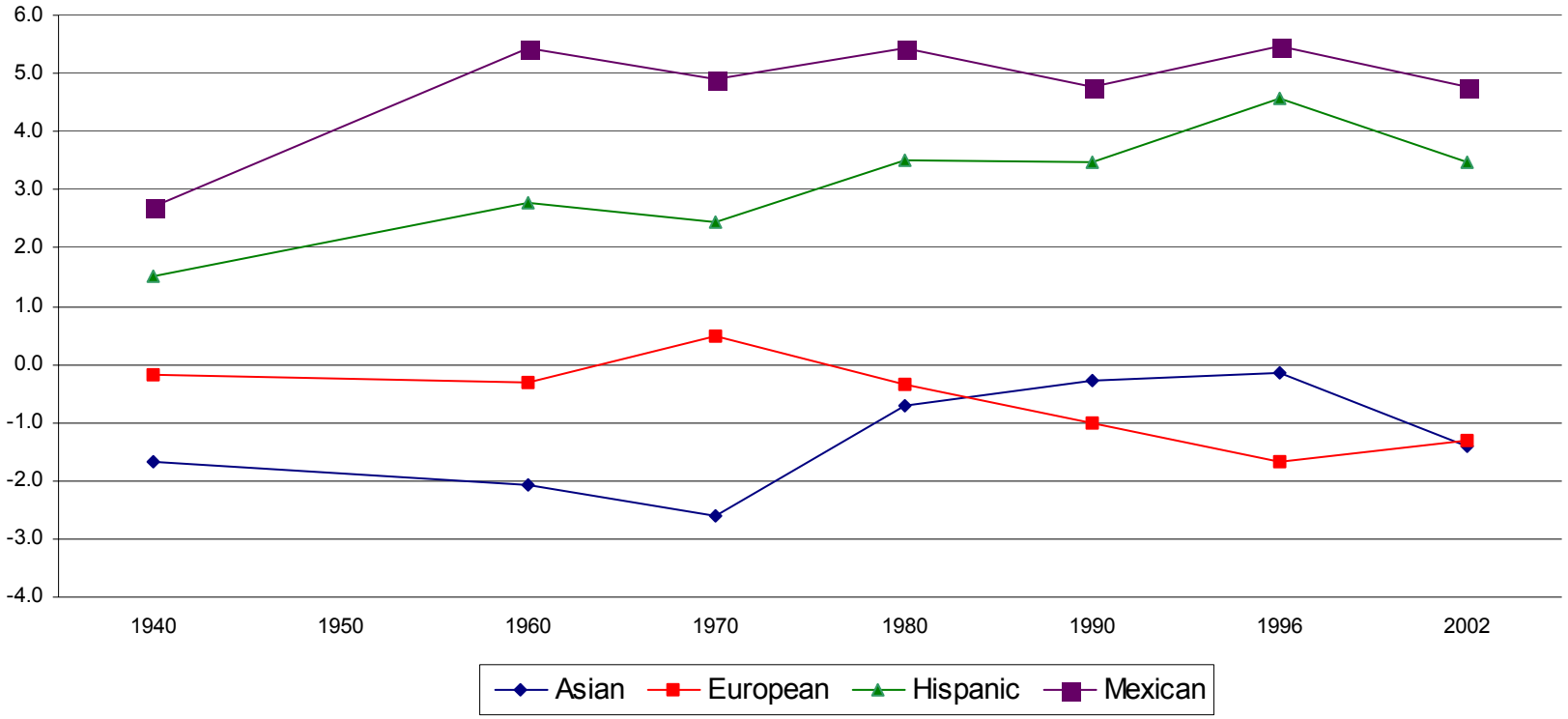



**Fig. 4. Schooling Disparities of Recent Foreign Born (comparison group: All Native Born)**

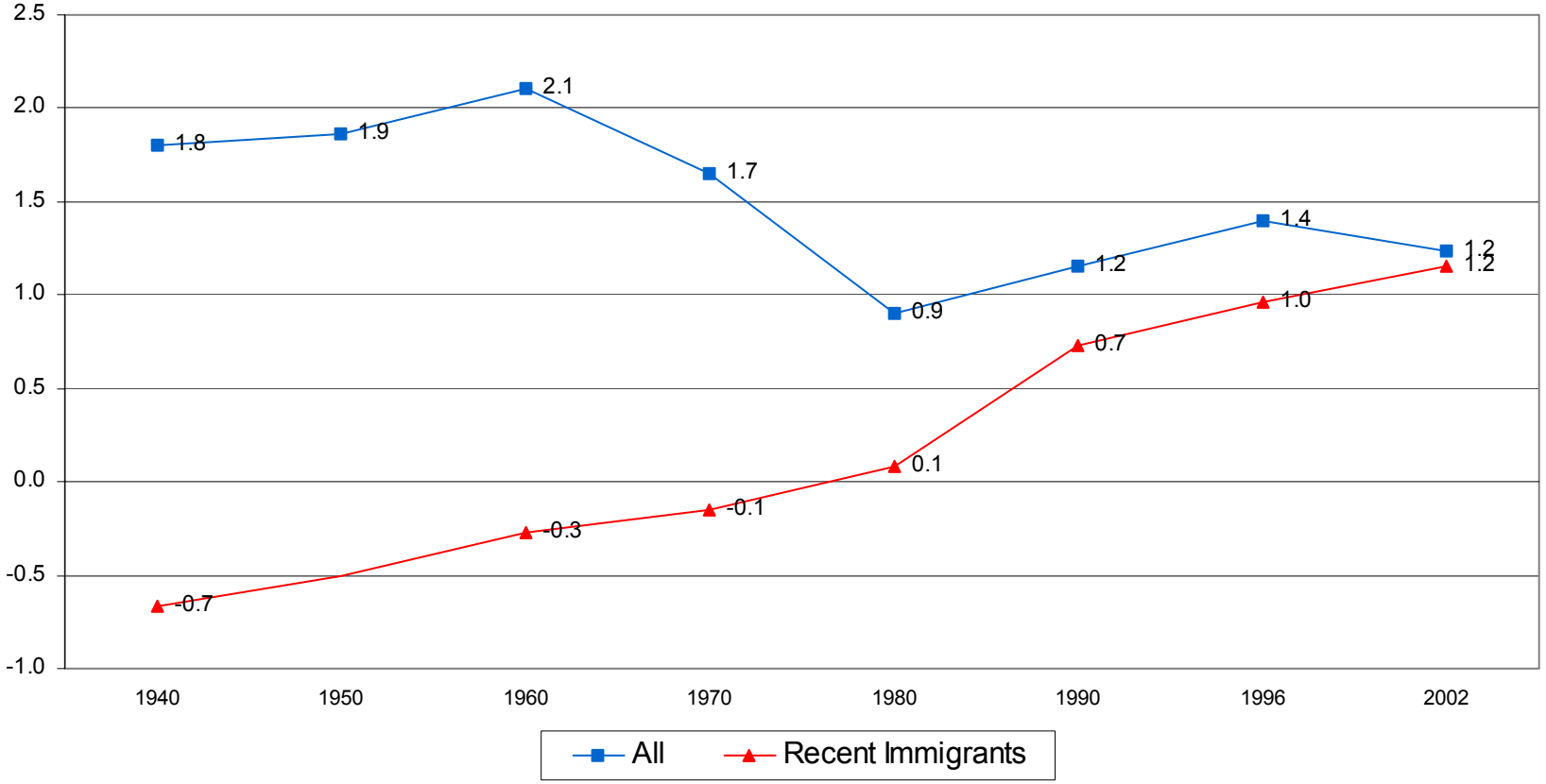



**Fig. 5. Schooling Disparity of Males Ages 25+ (Comparison group: All Male Native Born)**

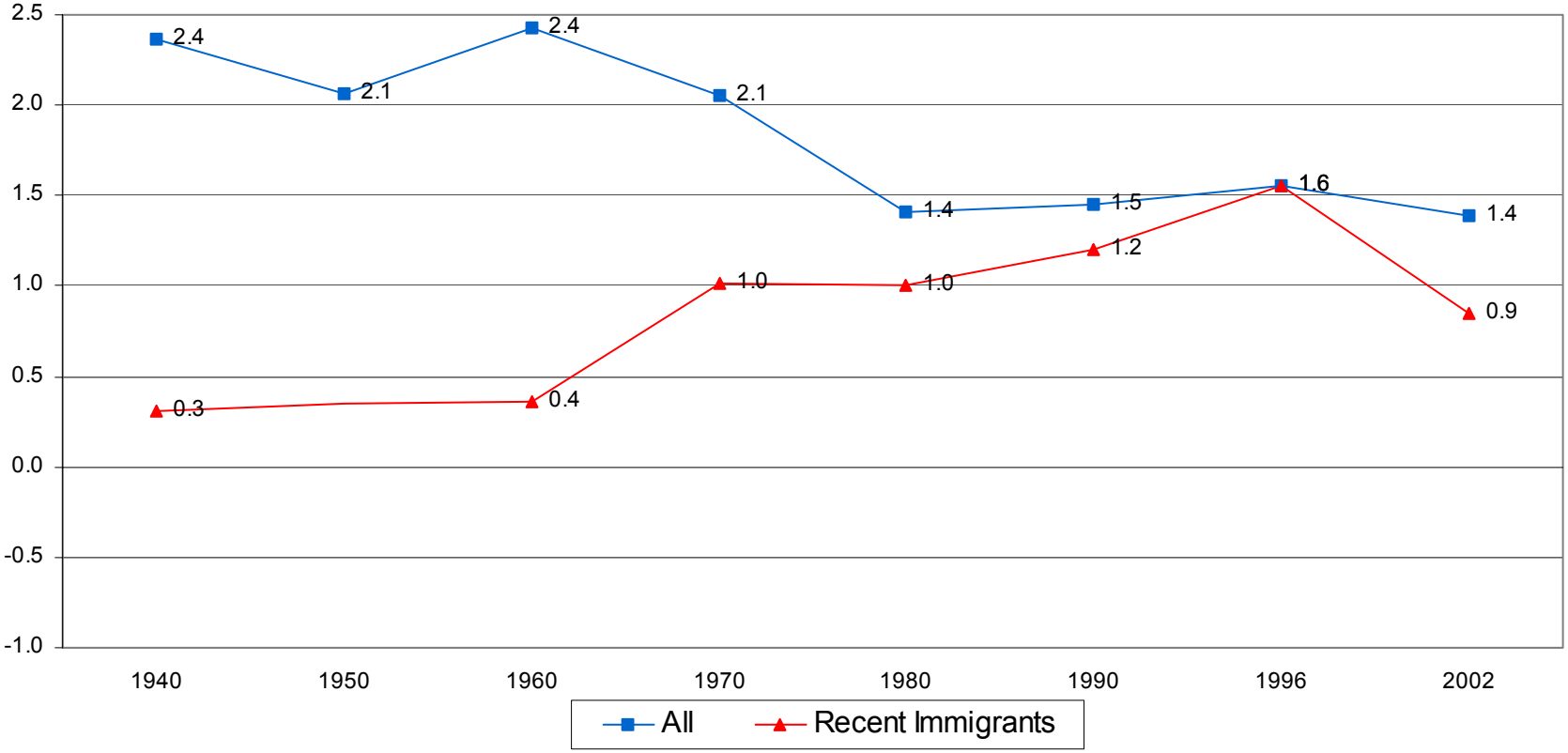
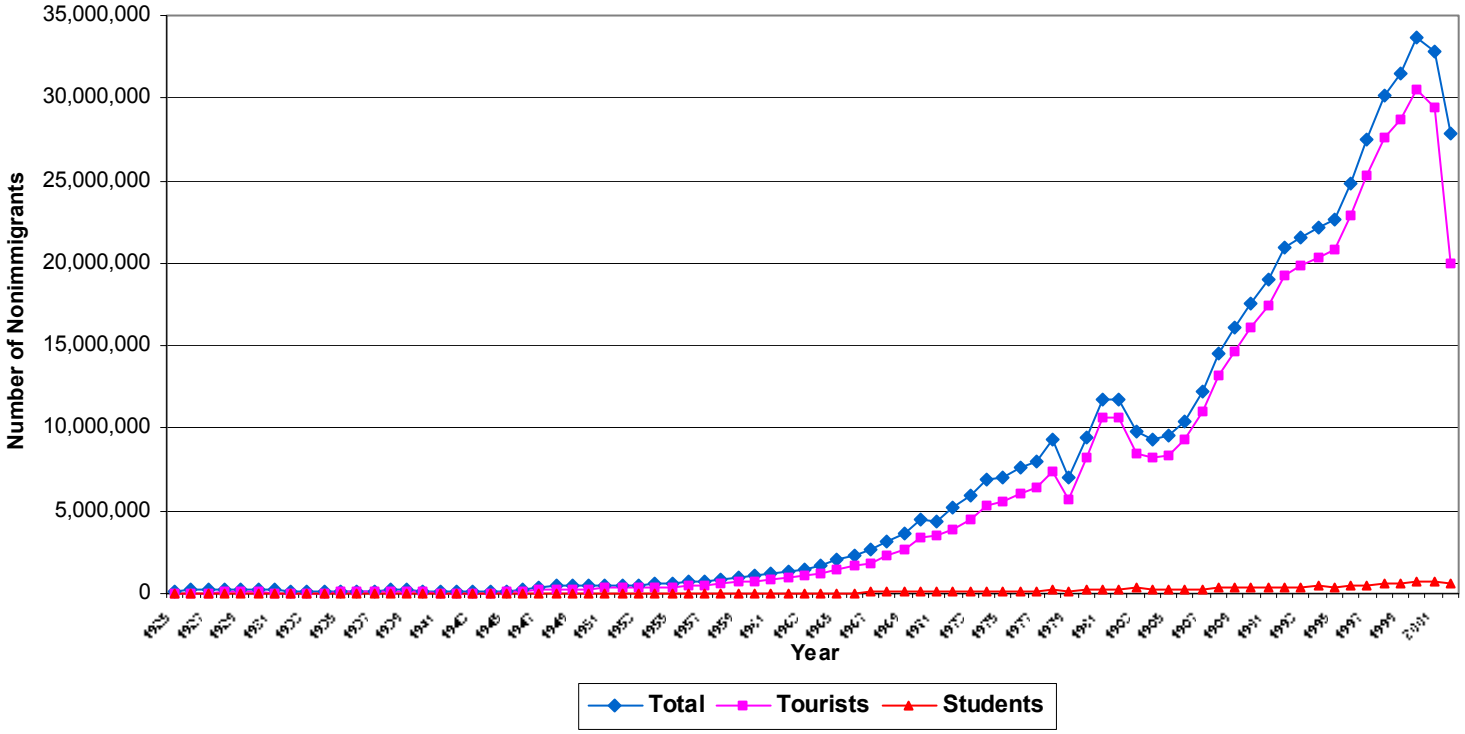
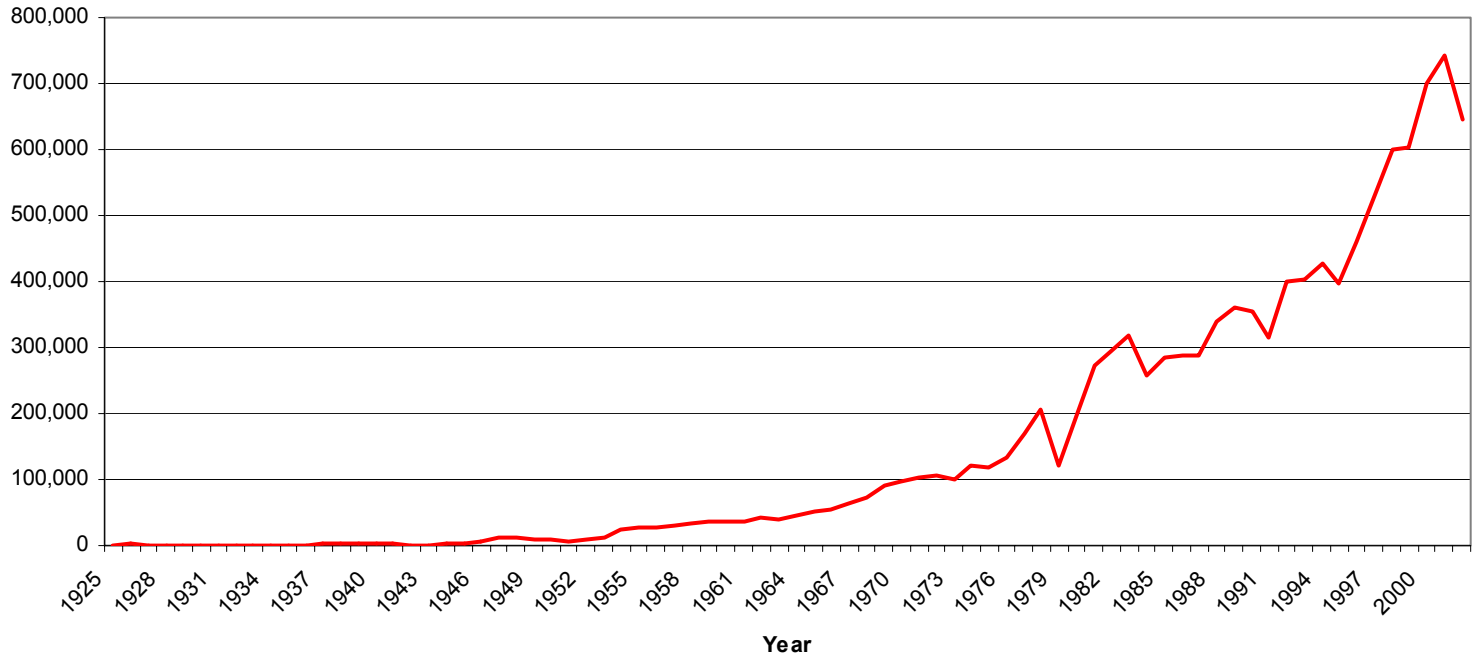



**Fig. 6. Schooling Disparity of Females Ages 25+ (Comparison group: All Female Native Born)**




Source: *Historical Statistics of the United States* , Millennial Edition, R. Bache, S. Carter, and R. Sutch (eds.); and *2001 Statistical Yearbook of the Immigration and Naturalization Service* .

**Fig. 7. Nonimmigrants Admitted, 1925-2001**




Source: Historical Statistics of the United States, Millennial Edition, R. Bache, S. Carter, and R. Sutch (eds.); and 2001 Statistical Yearbook of the Immigration and Naturalization Service.

**Fig. 8. Nonimmigrant Students, 1925-2001**