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## The More Things Change Immigrants and the Children of Immigrants in the 1940s, the 1970s, and the 1990s

David Card, John DiNardo, and Eugena Estes

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### 6.1 Introduction

It is often said that the United States is a country of immigrants. Today, a better description is that the United States is a country of the descendants of immigrants.<sup>1</sup> The upsurge in immigration that began in the mid-1960s is now raising the relative numbers of immigrants and recent descendants of immigrants and shifting the balance back toward the patterns that prevailed earlier in the country's history—especially in the major immigrant-receiving states like California, Texas, and Florida. As was the case with the last big surge of immigration at the turn of the century, recent immigrant inflows have stimulated a wave of research and policy initiatives. Much of the new research focuses on the changing composition of immigrant inflows and on the apparent decline in the relative economic status of immigrants.<sup>2</sup> Perhaps more important from the long-run point of view, however, is the changing economic status of the “second generation”—the offspring of immigrant parents, who now make up 10 percent of all native-born children, and whose own children will constitute a significant fraction of the future population.

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1. For example, only about 7 percent of adult household heads interviewed in the General Social Survey between 1977 and 1996 are immigrants, but 40 percent report having at least one foreign-born grandparent.

2. See, e.g., Borjas (1985, 1987, 1995).

While there is some research on the “new” second generation, a major stumbling block has been the absence (since the 1970 census) of large-scale data sets that identify the native-born children of immigrants.<sup>3</sup> This gap has been filled very recently by the Current Population Survey (CPS), which added questions on parents’ place of birth in 1994. In this paper, we use the recent CPS data together with data from earlier censuses to provide a comparative perspective on the economic performance of immigrants and native-born children of immigrants in 1940, 1970, and today. We also use cohort-level data for different immigrant groups to measure the rate of “intergenerational assimilation” between immigrant fathers and second-generation sons and daughters and to evaluate recent arguments that intergenerational assimilation has slowed down because of changes in the ethnic composition of immigrant inflows and changes in the structure of the U.S. economy.<sup>4</sup>

As our title suggests, our findings reflect a mixture of change and constancy. On the one hand, we find that the well-documented shifts in the origin countries of U.S. immigrants have been associated with a decline in the relative economic status of immigrants as a whole between 1940 and the mid-1990s. We also find some evidence of a decline in the relative status of the second generation, although this is mainly confined to the lower deciles of the wage distribution. At the middle and upper deciles, there is little indication of a shift. On the other hand, we find that the degree of intergenerational assimilation (measured by intergenerational correlations in education or earnings, or by interethnic marriage patterns) has not declined systematically between the cohort of second-generation children raised in the 1940s and 1950s and those raised in the 1960s and 1970s. Moreover, as in the past, second-generation children continue to have higher education and wages than children of comparable U.S.-born parents.

## 6.2 Background

The changing characteristics of the immigrant and second-generation populations in our sample period (1940–95) reflect the dramatic changes in U.S. immigration policy over the twentieth century, as well as other powerful forces, such as world wars, the Great Depression, political and economic upheavals in Europe, and rapid population growth in the Americas.<sup>5</sup> These various influences are revealed in figure 6.1, which plots annual immigrant inflow rates (the number of documented immigrant arrivals divided by the population) from 1900 to 1990. Most of the immigrants

3. See Waldinger and Perlmann (1997) for a review of much of this literature.

4. This argument is advanced in Gans (1992) and Portes and Zhou (1993); also see Waldinger and Perlmann (1997).

5. There are many histories of U.S. immigration; see, for example, Bennett (1963).

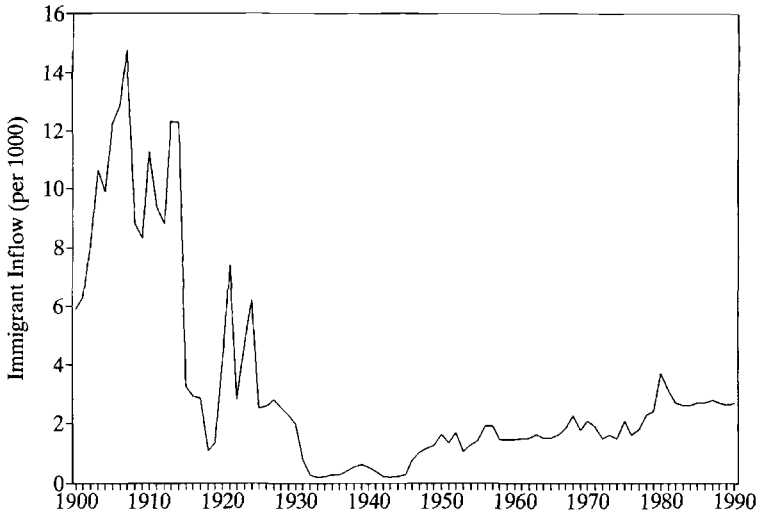


Fig. 6.1 Immigrant inflow rate, 1900–1990

in our 1940 sample had arrived during the massive wave of immigration between 1880 and 1925 and were the “new” immigrants of their time. Many of these were from Russia, Eastern Europe, and Italy and were considered less “desirable” than earlier immigrants from the United Kingdom and Northern Europe.<sup>6</sup> A variety of forces, including populist sentiment against immigration, business opposition stimulated by labor unrest, and the patriotic fervor surrounding the entry of the United States into World War I, led to reductions in immigration during the 1910–20 period. After the war, immigration rates surged, leading to renewed demands for restrictive legislation, which culminated in the Immigrant and Nationality Acts of 1924. These laws capped immigrant inflows and set out the national-origin quotas that were the cornerstone of immigration policy until the 1960s.<sup>7</sup> The effects of the immigrant restrictions are also evident in figure 6.1: Immigrant inflows fell from an average of about 600,000 per year in the early 1920s to about one-half that rate in the late 1920s. With the onset of the Great Depression, immigrant inflows dropped below 50,000 per year by 1932 and remained at similar levels throughout the 1930s.

By contrast, the characteristics of the immigrants in our 1970 census

6. For example, Brigham (1923) developed estimates of the racial composition of immigrants from different source countries. He divided immigrants into four racial categories: “Nordic,” “Alpine,” “Mediterranean,” and “Asian.” His analysis suggested that “Alpine” and “Mediterranean” immigrants had lower “intelligence” than “Nordic” immigrants, and on this basis, he argued for limiting immigration from countries with a high fraction of individuals of Mediterranean descent, like Italy, Greece, Portugal, and Spain.

7. There was little confusion about the intent of the policy. A *Los Angeles Times* headline at the time (13 April 1924) read: “Nordic Victory is seen in Drastic Restrictions.”

sample reflect the results of the post-1924 restrictions, together with post-war economic and political changes. Indeed, apart from the 1952 McCarran-Walter Acts, which extended special preferences to immigrants with skills deemed urgently needed and put further restrictions on those with “mental, physical, and moral defects,” there was comparatively little change in immigration law from 1940 until 1965. Nevertheless, even in this environment the composition of immigrant inflows shifted somewhat, resulting (for example) in a much higher fraction of Mexican immigrants in 1970 than 1940.<sup>8</sup> In addition, refugee arrivals—particularly from Cuba—changed the face of immigration over the period 1925–65.

Finally, the characteristics of our sample of immigrants from the 1990s reflect the influence of the 1965 Immigration Reform Act, which eliminated national-origin quotas and extended special preferences to those with family members already in the United States. This act is widely credited with allowing higher inflow rates and with changing the countries of origin of the “new new” immigrants—away from Europe and toward Asia and South and Central America.

The characteristics of the second-generation populations in our sample period also reflect past immigration policies, albeit with a “generational lag.” Thus, the second generation in our 1940 sample—who were born between 1875 and 1920—are a mixture of the children of the “old” (pre-1890) immigrants and the “new” immigrants of the turn of the century. The second generation in our 1970 sample are largely the children of the immigrants who entered the United States during the period 1890–1925; as such, many are the descendants of families who at least began their lives in the United States in relative deprivation (see Waldinger and Perlmann 1997). Finally, the second generation in the mid-1990s are a mixture of children of pre-1965 immigrants; children of Cuban, Hungarian, and Czech refugees; and children of the initial wave of post-1965 immigrants.

## 6.3 Data Sources and Definitions

### 6.3.1 Sources

The data for our empirical analysis are taken from the 1940 and 1970 censuses and from pooled 1994, 1995, and 1996 March Current Population Surveys. The 1940 census collected information on immigrant status, education, and earnings for all individuals, but it only collected information on parents’ place of birth for one “sample line” person in each household. Thus, most of our analysis for 1940 utilizes the sample-line persons,

8. Some of the Mexican inflow can be traced to other aspects of U.S. immigration policy, including the Bracero program, which ended in 1964.

although we also use the full sample of individual records in analyzing the earnings of immigrant fathers.

The 1970 census collected information on both parents' immigrant status and on one parent's place of birth in one of the two versions of the "long form"—the so-called 15 percent sample form. Thus, most of our analysis for 1970 utilizes the 1-in-100 15 percent state samples, although when analyzing the earnings of immigrant fathers, we also use observations in the 1-in-100 5 percent state sample.

Finally, since 1994, the March Current Population Survey has included questions on the place of birth of each individual and his or her parents. Because of the relatively small number of observations in the CPS (compared to the census), we pool information from the 1994, 1995, and 1996 CPSs.<sup>9</sup> We convert the reported earnings information from these three samples into constant 1995 dollars prior to pooling the data.

### 6.3.2 Definitions

Throughout this paper we distinguish between three mutually exclusive groups: immigrants, individuals born in the U.S. of immigrant parents (the second generation), and others. For simplicity, we refer to the last group as the "third and higher generation," or sometimes as "natives." In the 1970 and 1994–96 samples, we exclude from the immigrant subsample individuals who were born abroad of U.S. parents, and include them instead with the third-and-higher-generation group.<sup>10</sup> We also restrict the definition of the second generation to native-born individuals whose mother *and* father were immigrants. This requirement substantially narrows the second-generation group relative to the alternative of requiring only one immigrant parent. In particular, among adults with at least one immigrant parent, 69 percent had two immigrant parents in the 1940 census, 58 percent had two immigrant parents in the 1970 census, and only 40 percent had two immigrant parents in the 1994–96 CPS.

9. We make no adjustments for the overlapping samples in consecutive March surveys. About 40 percent of individuals in each March survey are resurveyed in the following March, and 40 percent were surveyed in the previous year (the other 20 percent are people who either moved into their house in the past 12 months or will move out in the next 12 months). This feature means that our standard errors using the CPS sample are understated by about 17 percent.

10. In the 1994–96 March CPS files, about 8 percent of individuals age 16–66 who were born abroad reported that they had U.S. parents. This is particularly prevalent for individuals born in a few countries, including France (34 percent), Germany (49 percent), England (19 percent), Japan (34 percent), and Canada (22 percent). The fraction of individuals born abroad who had U.S. parents in the 1970 census is comparable to the fraction in the mid-1990s (9.5 percent). In the 1940 census, we experimented with attempting to exclude individuals born abroad of U.S. parents from the foreign-born pool but found that the resulting sample excluded an unusually high fraction of people from some countries.

## 6.4 Comparisons of Natives, Immigrants, and the Second Generation

### 6.4.1 Descriptive Overview

We begin our empirical analysis with a descriptive overview of the demographic characteristics and labor market outcomes of the three generational groups in 1940, 1970, and 1994–96. Panel A of table 6.1 presents a variety of data for adult men in the three data sets, while panel B presents comparable data for adult women. Examination of the top row of either panel shows the rather large swings in the relative sizes of the three groups that have occurred in the past 50 years. The fraction of immigrants in the adult population of the United States was about 12 percent in 1940, fell to 5 percent in 1970, and has risen back to about 11 percent in the mid-1990s. Following this pattern, but with a generational lag, the second generation's share of the adult population has fallen steadily from 16 percent in 1940 to 8 percent in 1970 and to 3 percent today.

The changing relative sizes of the three groups were accompanied by notable shifts in their age compositions. In 1940, immigrants were relatively old (reflecting the very low immigrant inflows between 1925 and 1940), while the second and third-and-higher generations had similar age structures. In 1970, both immigrants and the second generation were older than natives, with over a 10-year gap in the average age of the second generation relative to natives. The long-lasting effects of the 1925 Immigration Act are revealed by the very small number of second-generation men or women in the 16–30-year age range in 1970. The resumption of substantial immigrant inflows in the 1970s and 1980s is manifested in the 1990s data by a reversal of the relative ages of immigrants and natives, and by the relatively high fraction of the second generation in the youngest age range.

Although not identical, the relative distributions of education for the native-born, immigrants, and the second generation are roughly similar for men and women. In all three years of our sample, education levels are lowest for immigrants and are roughly similar between natives and the second generation. Interestingly, the mean schooling gap between immigrants and the third-and-higher generation has narrowed slightly over the past 50 years: from 1.9 years in 1940 to 1.4 years in 1994–96 for men; and from 2.5 years in 1940 to 1.4 years in 1994–96 for women. Paradoxically, this convergence in means has occurred at the same time that the immigrant-native gap in the fraction of men or women in the lowest education category has actually risen slightly.

The labor market outcomes in the middle rows of table 6.1 show that native, second generation, and immigrant men have fairly similar employment rates. The one exception to this pattern—the low employment rate of second generation men in 1994–96—is largely an artifact of the

**Table 6.1**                      **Characteristics of Natives, Immigrants, and Second-Generation Individuals in 1940, 1970, and 1994-96**

	1940			1970			1994-96		
	Natives	Immigrants	2nd Generation	Natives	Immigrants	2nd Generation	Natives	Immigrants	2nd Generation
<i>A. Men Age 16-66</i>									
Fraction of population	0.71	0.12	0.16	0.87	0.05	0.08	0.86	0.11	0.03
Mean age (years)	35.7	46.7	35.8	36.4	42.8	48.5	38.0	36.9	38.6
Fractions in age range									
16-30 years	0.42	0.10	0.43	0.42	0.26	0.08	0.33	0.36	0.42
31-45 years	0.31	0.32	0.32	0.28	0.28	0.27	0.38	0.39	0.21
46-66 years	0.26	0.57	0.26	0.30	0.46	0.65	0.30	0.25	0.37
Mean years education	8.9	7.0	9.2	11.2	10.5	11.2	13.0	11.6	13.1
Fractions in education range									
<12 years education	0.73	0.85	0.74	0.44	0.50	0.47	0.17	0.35	0.19
12 years education	0.16	0.09	0.16	0.31	0.22	0.29	0.34	0.24	0.27
13-15 years education	0.06	0.03	0.05	0.14	0.12	0.11	0.27	0.17	0.29
16+ years education	0.05	0.04	0.05	0.12	0.16	0.14	0.23	0.23	0.25
Fraction worked last year	0.84	0.85	0.82	0.89	0.89	0.92	0.85	0.84	0.75
Mean annual earnings (1995\$)	8,774	11,134	11,910	24,683	27,442	33,582	24,629	20,284	21,779
Mean weekly wage (1995\$)	266.0	314.6	303.6	635.1	691.2	800.1	621.4	520.4	638.3
Coefficient of variation of weekly wage	0.74	0.58	0.64	0.63	0.60	0.53	0.73	0.82	0.79
Fraction of workers in overall wage quartiles									
Quartile 1	0.29	0.12	0.17	0.27	0.21	0.11	0.24	0.34	0.28
Quartile 2	0.25	0.25	0.26	0.26	0.27	0.22	0.24	0.30	0.22

*(continued)*



**Table 6.1** (continued)

	1940			1970			1994–96		
	Natives	Immigrants	2nd Generation	Natives	Immigrants	2nd Generation	Natives	Immigrants	2nd Generation
Quartile 3	0.22	0.33	0.29	0.24	0.24	0.30	0.27	0.19	0.23
Quartile 4	0.23	0.30	0.28	0.24	0.28	0.37	0.25	0.17	0.28
Marital status and spouse characteristics									
Fraction married	0.59	0.70	0.53	0.65	0.72	0.81	0.55	0.56	0.47
Nativity of spouse of married individuals									
Native <sup>a</sup>	0.98	0.36	0.91	0.93	0.27	0.54	0.94	0.16	0.67
Immigrant	0.02	0.64	0.09	0.02	0.57	0.08	0.04	0.81	0.17
Second generation	—	—	—	0.05	0.16	0.38	0.02	0.03	0.16
Second generation with matching father's country of birth	—	—	—	—	0.09	0.22	—	0.02	0.11
Sample size	100,674	19,139	23,928	519,644	29,812	46,349	112,125	16,394	4,443
<i>B. Women Age 16–66</i>									
Fraction of population	0.73	0.11	0.16	0.86	0.06	0.08	0.86	0.11	0.03
Mean age (years)	35.5	45.5	35.7	36.9	42.4	48.9	38.3	38.3	39.3
Fractions in age range									
16–30 years	0.43	0.13	0.43	0.41	0.26	0.07	0.32	0.31	0.41
31–45 years	0.31	0.35	0.31	0.28	0.30	0.26	0.37	0.39	0.20
46–66 years	0.25	0.53	0.26	0.31	0.43	0.67	0.31	0.29	0.39
Mean years education	9.3	6.8	9.2	11.2	10.0	10.8	12.9	11.5	12.8
Fractions in education range									
<12 years education	0.67	0.86	0.72	0.41	0.52	0.47	0.15	0.33	0.19

12 years education	0.21	0.10	0.21	0.38	0.29	0.38	0.36	0.27	0.31
13–15 years education	0.07	0.02	0.05	0.13	0.11	0.09	0.29	0.20	0.30
16+ years education	0.04	0.02	0.03	0.08	0.08	0.06	0.20	0.20	0.20
Fraction worked last year	0.31	0.23	0.34	0.56	0.51	0.53	0.74	0.59	0.64
Mean annual earnings (1995\$)	2,287	2,529	4,004	7,480	7,754	9,038	13,330	9,912	12,156
Mean weekly wage (1995\$)	172.5	186.4	190.5	375.6	402.3	427.0	405.1	383.6	431.8
Coefficient of variation of weekly wage	0.79	0.65	0.68	0.73	0.71	0.67	0.77	0.82	0.81
Fraction of workers in overall wage quartiles									
Quartile 1	0.29	0.16	0.17	0.26	0.20	0.18	0.25	0.26	0.25
Quartile 2	0.25	0.27	0.27	0.25	0.26	0.23	0.25	0.30	0.23
Quartile 3	0.23	0.34	0.32	0.26	0.29	0.28	0.25	0.22	0.22
Quartile 4	0.23	0.23	0.25	0.23	0.25	0.30	0.25	0.21	0.30
Marital status and spouse characteristics									
Fraction married	0.61	0.70	0.56	0.64	0.69	0.72	0.55	0.62	0.47
Nativity of spouse of married individuals									
Native <sup>a</sup>	0.97	0.24	0.81	0.92	0.32	0.45	0.95	0.20	0.61
Immigrant	0.03	0.76	0.19	0.02	0.56	0.12	0.03	0.76	0.17
Second generation	—	—	—	0.06	0.12	0.43	0.02	0.04	0.22
Second generation with matching father's country of birth	—	—	—	—	0.06	0.24	—	0.02	0.14
Sample size	102,173	15,699	22,826	551,501	35,769	49,234	121,208	17,814	4,769

<sup>a</sup>In 1940 sample, native spouses include second generation. In later samples, native spouses exclude second generation.

U-shaped age distribution of this group.<sup>11</sup> Among women the differences are more pronounced: Immigrant women, in particular, have lower employment rates than either second- or third-and-higher-generation women.<sup>12</sup>

A variety of earnings information is presented in table 6.1, including mean annual earnings (for both workers and nonworkers), average weekly earnings (for workers only), and the fractions of each generational group in different aggregate wage quartiles.<sup>13</sup> Looking first at men, the 1940 data show roughly 25 percent higher annual earnings and 15 percent higher weekly wages for immigrants and the second generation than for natives. The second generation-native gap is particularly noteworthy because the two groups have similar age distributions, whereas some of the higher wages of immigrants are presumably attributable to their older age. The 1970 data again show higher earnings for immigrants and the second generation than for natives, although these comparisons must be interpreted carefully given the different age distributions of the three groups. By comparison, immigrants have the lowest annual or weekly earnings of the three generational groups in the 1994–96 data. Indeed, over one-third of immigrant men have weekly wages in the bottom quartile of the overall wage distribution. The same general patterns hold for women, although the percentage wage differentials between the generational groups are typically smaller than those for men. Moreover, immigrant women are far less concentrated at the bottom of the overall wage distribution in the mid-1990s than their male counterparts.

The final rows of table 6.1 present information on an alternative dimension of “success” in the United States: the rate at which members of different generational groups marry outside their own group. Not surprisingly, spouses of third-and-higher-generation men and women are very likely to also be third-and-higher generation. Likewise, the spouses of immigrants are most likely to be immigrants, although the fraction of immigrants married to natives varies over our sample period. In particular, the larger cohorts of immigrants in 1940 and the 1990s are more likely to have immigrant spouses—64 percent and 81 percent, respectively, for men, and 76 percent in both 1940 and 1994–96 for women. The marriage patterns of the second generation are perhaps the most interesting. Second-generation men and women in 1970 and 1994–96 were typically married to natives (i.e., third-and-higher generation), but sizable fractions are married to immigrants and to members of the second generation of the same “ethnic”

11. Age-adjusted employment rates for men in the three generational groups are very similar over the sample period.

12. This appears to be inconsistent with evidence from Canada. See Baker and Benjamin (1997).

13. The wage quartiles are calculated using the pooled sample of working natives, immigrants, and second generation (by gender).

group.<sup>14</sup> Interestingly, second-generation men have a slightly higher likelihood of marrying a native than second-generation women.

#### 6.4.2 Relative Wages of Immigrants and Second Generation over Time

As we have noted, comparisons between the relative earnings of natives, immigrants, and the second generation are complicated by changes in the relative age distributions of the three groups. A second confounding factor is the changing geographic distribution of immigrants versus natives. In 1940, immigrants and the second generation were highly concentrated in the northeastern states: 54 percent of immigrants and 45 percent of second-generation adults lived in the Northeast, versus 21 percent of natives. By the mid-1990s immigrants were still slightly more likely to live in the Northeast than natives (23 percent of immigrants versus 19 percent of natives), but the Pacific region had become a more important immigrant focus: 38 percent of immigrants and 28 percent of the second generation lived in the Pacific states compared to only 13 percent of adult natives. Since wages vary systematically across regions, shifts in the geographic distribution of immigrants or second-generation individuals relative to natives would be expected to shift relative wages.

In an effort to parse out the effects of the changing age and geographic distributions among the three generational groups, we performed the simple exercise summarized in table 6.2. We first calculated the joint distributions of age and region for each of the three generational groups in 1940, 1970, and 1994–96 (using five 10-year age intervals and three geographic areas). We then developed a set of weights for the immigrant and second-generation samples in each year that would “reweight” these samples to have the same joint distribution as natives. Finally, we calculated the distributions of log weekly wages for the reweighted samples and constructed the differences relative to natives presented in the right-hand columns of the table.<sup>15</sup>

The effects of the adjustment procedure on the wage distributions of immigrant men are illustrated in figure 6.2. For reference, panel A of the figure presents the densities of log weekly wages of third-and-higher-generation men in 1940, 1970, and 1994–96. The other three panels show the densities of log wages for immigrant men, before and after reweighting the samples to have the same age and regional distributions as native men. As expected, the adjustments are most significant in 1940, when immigrants were older and more heavily concentrated in high-wage regions

14. In the 1970 census we can only determine the place of birth of fathers. We therefore classify all second-generation men and women by the country of origin of their fathers.

15. This procedure can be interpreted as a generalization of the traditional Oaxaca-style regression adjustment method. DiNardo, Fortin, and Lemieux (1996) develop more general reweighting methods that can be applied with continuous covariates.

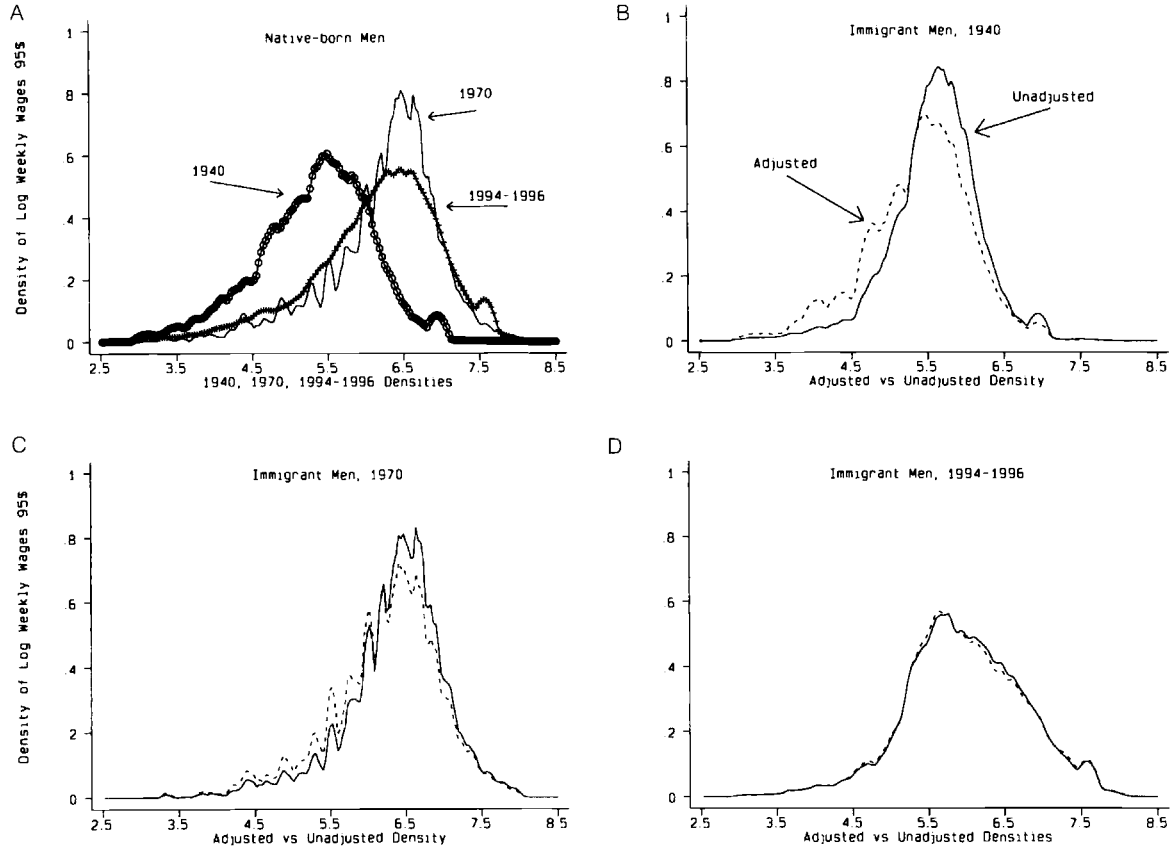
Table 6.2 Characteristics of Adjusted Log Wage Distributions

	Adjusted Distributions of			Differences Relative to 3rd+ Generation	
	3rd+ Generation	Immigrants	2nd Generation	Immigrants	2nd Generation
<i>A. Men</i>					
1940					
1st quartile	4.87	4.97	5.01	0.10	0.14
Median	5.40	5.46	5.49	0.06	0.09
3rd quartile	5.85	5.85	5.92	0.00	0.07
Std. deviation	0.75	0.69	0.74	-0.06	-0.01
1970					
1st quartile	5.89	5.82	5.98	-0.07	0.09
Median	6.38	6.31	6.44	-0.07	0.06
3rd quartile	6.70	6.70	6.77	0.00	0.07
Std. deviation	0.74	0.73	0.74	-0.01	0.00
1994-96					
1st quartile	5.69	5.46	5.69	-0.23	0.00
Median	6.25	5.92	6.31	-0.33	0.06
3rd quartile	6.74	6.51	6.77	-0.23	0.03
Std. deviation	0.85	0.78	0.83	-0.07	-0.02
<i>B. Women</i>					
1940					
1st quartile	4.48	4.65	4.48	0.17	0.20
Median	5.01	5.04	5.07	0.03	0.06
3rd quartile	5.40	5.33	5.40	-0.07	0.00
Std. deviation	0.75	0.62	0.73	-0.13	-0.07
1970					
1st quartile	5.30	5.36	5.36	0.06	0.06
Median	5.79	5.82	5.82	0.03	0.03
3rd quartile	6.18	6.15	6.21	-0.03	0.03
Std. deviation	0.74	0.70	0.73	-0.04	-0.01
1994-96					
1st quartile	5.20	5.15	5.33	-0.05	0.13
Median	5.82	5.63	5.95	-0.19	0.13
3rd quartile	6.28	6.18	6.44	-0.10	0.16
Std. deviation	0.83	0.81	0.83	-0.02	0.00

Notes: All data pertain to average weekly wages in 1995 dollars. The wage distributions of immigrants and second generation have been reweighted (by age and region cell) using relative weights that give the immigrant and second generation samples the same joint distribution of age and region as the third-and-higher-generation group. See text.

than natives. The effect of reweighting works in a similar direction in 1970 but is of a much smaller magnitude, whereas in the 1994-96 sample, the adjustments are trivial.

The results in table 6.2 point to two main conclusions. First, controlling for age and region, the relative wages of immigrants declined substantially between 1940 and the mid-1990s. For men, the difference in median wages



**Fig. 6.2** Estimated densities of native wages in 1940, 1970, and 1994-96 (A), and comparisons of adjusted and unadjusted densities of immigrant wages (B-D)

between immigrants and natives declined by 13 percentage points between 1940 and 1970, and by another 26 percentage points between 1970 and 1994–96. The immigrant-native wage gap at the 25th and 75th percentiles also declined. For women, the difference in median wages between immigrants and natives was stable between 1940 and 1970 but then declined by 24 percentage points between 1970 and 1994–96. Second, in contrast to the pattern for immigrants, any significant decline in the relative wages of the second generation was confined to the lower deciles of the wage distribution. At the median, second-generation men earned 9 percent higher wages than native men in 1940, 6 percent higher wages in 1970, and 6 percent higher wages in 1994–96. At the 25th percentile, however, the second generation's relative wage advantage fell from 14 percent in 1940 to 9 percent in 1970 to 0 in 1994–96. The pattern of wage gaps for women is generally similar, although at the 75th percentile, second-generation women seem to have gained relative to native women (gaps of 0 in 1940, 3 percent in 1970, and 16 percent in 1994–96).

#### 6.4.3 Country-of-Origin Effects

Many previous researchers have noted the decline in the relative earnings of immigrants portrayed in table 6.2 (see, e.g., Borjas 1994). A leading explanation for this change is the shift in the source countries of U.S. immigrants, associated in part with the Immigration Reform Act of 1965. Table 6.3 illustrates the changing composition of the immigrant stocks in 1940, 1970, and 1994–96, along with the corresponding changes in the composition of the second-generation pool. Because of data limitations in the 1970 census, we identify second-generation men and women in this table and throughout the remainder of the paper with the country of origin of their father.

In 1940, most U.S. immigrants were from Europe, the United Kingdom, Ireland, or Canada. The largest group were from Eastern Europe (34 percent), while northern and southern Europe and the U.K.-affiliated countries (the United Kingdom, Ireland, Canada, Australia, and New Zealand) each contributed about one-fifth of the total. By 1970, the fraction of immigrants from Europe (particularly Eastern Europe) had declined substantially, while the fractions from Mexico, South and Central America, and Asia had risen. These trends were amplified over the next 25 years, so that by the mid-1990s nearly 30 percent of immigrants were from Mexico, 25 percent were from Central and South America, and 23 percent were from Asia. Immigrants from the United Kingdom, Ireland, Canada, Australia, and New Zealand—who had made up more than 20 percent of the immigration populations in 1940 and 1970—represent only 6 percent of the 1994–96 sample.

Changes in the composition of the second generation represent a lagged version of the changes for the immigrant population, albeit with addi-

**Table 6.3 Country of Origin of Immigrants and Fathers of Second Generation**

	1940		1970		1994–96	
	Immigrants	2nd Generation	Immigrants	2nd Generation	Immigrants	2nd Generation
1. Europe, U.K., etc.						
U.K., Ireland, etc.	22.3	15.2	19.9	12.2	5.5	10.6
Northwest Europe	18.8	23.4	14.8	13.4	3.1	18.2
Southwest Europe	17.3	13.3	11.9	22.7	3.2	3.4
Eastern Europe	33.8	27.2	16.3	39.1	4.9	12.2
Subtotal	92.3	79.1	62.9	87.4	16.5	44.5
2. Mexico, Central/South America						
Mexico	3.4	1.4	9.6	5.0	29.1	23.7
Americas	0.5	0.0	4.4	0.2	12.4	4.4
Subtotal	3.8	1.4	13.9	5.2	41.5	28.1
3. Asia						
West Asia	1.4	0.5	2.9	1.3	5.7	2.1
East Asia	1.3	0.3	7.8	2.2	17.6	8.0
Subtotal	2.7	0.9	10.8	3.4	23.4	10.1
4. Caribbean Islands, Africa, other						
Subtotal	1.3	18.6 <sup>a</sup>	12.4	4.0	18.7	17.4

*Notes:* Column entries represent the percentage of immigrants from each country or percentage of second-generation fathers from each country. Based on samples of men and women age 16–66 (see table 6.1 for sample sizes).

<sup>a</sup>In the 1940 census, a large fraction of second-generation individuals have their father's nativity coded as "other."



tional “noise” introduced by differential fertility and intermarriage patterns. For example, Eastern Europeans are the largest second-generation group in 1970, reflecting their importance in the immigrant population a generation earlier. By the mid-1990s, individuals of European or U.K.-related descent are no longer a majority of the second-generation population, and natives with Mexican-born parents represent close to a quarter of the group.

The potential importance of these compositional changes is explored in table 6.4, where we compare the education, wages, and marriage patterns of immigrant and second-generation men and women in four major “country groups.” For reference, we also report the outcomes for natives (i.e., the third-and-higher generation). Examination of this table reveals substantial heterogeneity in the outcomes of immigrant and second-generation men and women from different country groups. For example, immigrants from Europe and the U.K.-related countries have consistently higher education and wages than immigrants from Mexico and South and Central America. The sons and daughters of European immigrants likewise have higher education and earnings than the sons and daughters of Mexican and South and Central American immigrants. The changing gaps in education and wages between natives and immigrants are also notable. In 1940, native men and women were better educated than immigrants from any of the four country groups. In 1970, immigrants from Asia were better educated than natives, while in 1994–96, immigrants from the United Kingdom and Europe and from Asia were more highly educated than natives. Thus, the persistent gap in education between immigrants and natives documented in table 6.1 is largely a result of the changing composition of immigrant source countries.

To further illustrate the potential effects of changing immigrant source countries on the wages of immigrants and second-generation individuals relative to natives, table 6.5 presents the mean wages from table 6.4 for each source country expressed as a fraction of the corresponding mean for natives. The most prominent feature of the table is the low level of relative wages for immigrants (and second-generation individuals) from Mexico and South and Central America. This feature suggests that the rise in the fraction of immigrants from Mexico and South and Central America over the past half-century would be expected to generate a decline in the relative economic status of immigrants as a whole. A second interesting aspect of table 6.5 is the time pattern of relative wages for immigrant and second-generation men and women from Mexico and South and Central America. Relative wages of these groups rose from 1940 to 1970 and then fell between 1970 and 1994–96. This inverted-U trend parallels the trend in overall wage inequality for natives (see fig. 6.2 and table 6.1). One explanation for this parallelism is the fact that the relative wages of low-wage groups will tend to rise as overall wage inequality falls (as it

**Table 6.4 Comparisons of Education, Earnings, and Marriage Patterns of Natives, Immigrants, and Second-Generation Men and Women**

	Men			Women		
	Education	Weekly Wage	Married to Immigrant	Education	Weekly Wage	Married to Immigrant
<i>A. Immigrants versus Natives</i>						
1940						
Europe, U.K., etc.	7.1	324	64.1	6.9	188	74.5
Mexico, Central/South America	5.2	195	61.6	4.9	144	75.0
Asia	7.3	248	74.7	7.3	208	87.5
Caribbean, Africa, other	7.9	254	58.5	6.8	157	78.9
Natives	8.9	266	2.0	9.3	173	3.0
1970						
Europe, U.K., etc.	10.7	762	52.1	10.3	410	51.0
Mexico, Central/South America	8.2	526	60.7	7.9	349	63.5
Asia	12.5	650	69.3	11.4	438	61.7
Caribbean, Africa, other	10.5	581	74.2	9.7	393	74.8
Natives	11.2	635	2.0	11.2	376	2.0
1994–96						
Europe, U.K., etc.	13.4	759	62.3	13.0	455	51.8
Mexico, Central/South America	9.4	366	84.3	9.6	278	85.1
Asia	13.9	646	91.7	13.1	465	81.3
Caribbean, Africa, other	12.8	587	77.1	12.2	399	78.8
Natives	13.0	621	4.0	12.9	405	3.0

*(continued)*

**Table 6.4** (continued)

	Men			Women		
	Education	Weekly Wage	Married to Immigrant	Education	Weekly Wage	Married to Immigrant
<i>B. Second Generation versus Natives</i>						
1940						
Europe, U.K., etc.	9.4	310	10.6	9.3	194	22.0
Mexico, Central/South America	5.7	138	24.5	5.4	93	42.4
Asia	10.7	258	12.4	10.7	185	48.5
Caribbean, Africa, other	8.7	290	4.4	9.0	178	7.3
Natives	8.9	266	2.0	9.3	173	3.0
1970						
Europe, U.K., etc.	11.3	818	6.9	10.9	430	11.5
Mexico, Central/South America	8.7	571	18.1	8.3	353	22.1
Asia	12.3	782	15.8	11.6	458	17.2
Caribbean, Africa, other	10.9	742	7.9	10.7	427	11.4
Natives	11.2	635	2.0	11.2	376	2.0
1994–96						
Europe, U.K., etc.	13.8	773	9.1	13.3	498	7.6
Mexico, Central/South America	11.7	434	30.7	11.6	316	34.2
Asia	13.5	594	34.2	13.5	473	26.8
Caribbean, Africa, other	13.2	621	19.9	13.2	428	20.0
Natives	13.0	621	4.0	12.9	405	3.0

*Notes:* Columns show mean education, mean average weekly wage, and percentage of group married to immigrants (among those married). Samples consist of immigrants and second-generation men and women age 16–66.

Table 6.5 Mean Weekly Wages Relative to Natives by Origin Group

	Immigrants			Second Generation		
	1940	1970	1994–96	1940	1970	1994–96
<i>A. Men</i>						
Europe, U.K., etc.	1.22	1.20	1.22	1.17	1.29	1.24
Mexico, Central/South America	0.73	0.83	0.59	0.52	0.90	0.70
Asia	0.93	1.02	1.04	0.97	1.23	0.96
Caribbean and other	0.95	0.91	0.95	1.09	1.17	1.00
<i>B. Women</i>						
Europe, U.K., etc.	1.09	1.09	1.12	1.12	1.14	1.23
Mexico, Central/South America	0.83	0.93	0.69	0.54	0.94	0.78
Asia	1.20	1.16	1.15	1.07	1.22	1.17
Caribbean and other	0.91	1.05	0.99	1.03	1.14	1.06

Notes: Entries represent ratio of mean weekly wages of origin group to mean weekly wages of natives. Origin groups of second generation are based on father's country of birth.

did between 1940 and 1970) and fall as overall inequality rises (as it did between 1970 and the mid-1990s). Whatever the explanation, examination of table 6.5 suggests that some of the decline in wages of immigrants as a whole between 1970 and 1994–96 may be attributable to a deterioration of the relative earnings of Mexican and South and Central American immigrants.

We can employ the same reweighting techniques used in table 6.2 to more formally evaluate the effects of changing source country composition on the changing relative earnings of immigrants and second-generation individuals. To fix ideas, consider the change in the median log wage of immigrants relative to natives between 1940 and 1970. Let  $m(\text{Imm}, 70)$  denote the median wage of immigrants in 1970, and let  $m(\text{Native}, 70)$  denote the median wage of natives. Using this notation, the change in the immigrant-native wage gap between 1940 and 1970 is

$$D = m(\text{Imm}, 70) - m(\text{Native}, 70) - [m(\text{Imm}, 40) - m(\text{Native}, 40)].$$

The wage distributions of natives and immigrants may change for a variety of reasons, including changes in the age and geographic distribution of the two populations, and changes in the relative fractions of specific immigrant-origin groups. Let  $m(\text{Imm}, 40|70)$  denote the median log wage of immigrants when the sample of 1940 immigrants is reweighted to have the same joint distribution of age, region, and immigrant source countries as in 1970, and let  $m(\text{Native}, 40|70)$  denote the median log wage of natives when the sample of 1940 natives is reweighted to have the same joint distribution of age and region as in 1970. The relative change  $D$  can be decomposed as

$$D = D_1 + D_2,$$

where

$$D_1 = m(\text{Imm}, 70) - m(\text{Native}, 70) \\ - [m(\text{Imm}, 40|70) - m(\text{Native}, 40|70)]$$

and

$$D_2 = m(\text{Imm}, 40|70) - m(\text{Native}, 40|70) \\ - [m(\text{Imm}, 40) - m(\text{Native}, 40)].$$

The first of these components represents the change in relative wages that would have occurred if there had been no change in the age or geographic distributions of natives or immigrants and no change in the origin composition of immigrants. The second component represents the difference between the “counterfactual” immigrant-native wage gap in 1940 (constructed to have the 1970 joint distribution of age, region, and immigrant composition) and the actual immigrant-native wage gap in that year.

The elements of  $D_1$  are displayed in table 6.6. In this table, the wage distributions for natives, immigrants, and second-generation individuals have all been calculated using weights that standardize the joint distributions of age (across five age intervals), region (across three regions) and country-of-origin group (across four country groups) back to their 1970 values. (Thus, the 1970 medians, quartiles, and standard deviations are simply the “raw” statistics for the respective generational groups.) The wage gaps relative to natives in the two right-hand columns of the table represent the differences that would have been observed under the assumption of a 1970 distribution for the covariates. Comparing these adjusted wage gaps over time shows the changes in the relative wage gap *holding constant age, region, and origin composition*.

Inspection of the adjusted wage gaps for immigrants in table 6.6 reveals a remarkable degree of stability over time, especially compared to the downward trend in table 6.2. The adjusted median immigrant-native wage gap for men falls from 10 percent in 1940 to 6 percent in 1970 and then rises slightly to 8 percent in 1994–96. The corresponding median gap for women rises from 5 to 7 percent between 1940 and 1994–96. Thus, almost all of the measured decline in the wage gap between immigrants and natives between 1940 and the mid-1990s is attributable to the effects of changing characteristics of immigrants—in particular, the changing fraction of immigrants from different groups of source countries.

The story for the second generation is somewhat different. As is evident from the last column of table 6.6, the second generation–native wage differential (after adjusting for age, region, and origin composition) is always large and quite substantial. At the three points in the distribution reported in the table, the adjusted differentials range from 17 to 57 percent for men and from 9 to 39 percent for women. The existence of a positive

**Table 6.6** Adjusted Log Wage Distributions, Accounting for Changes in Composition of Immigrant and Second-Generation Populations

	Adjusted Distributions of			Differences Relative to	
	3rd+ Generation	Immigrants	2nd Generation	3rd+ Generation Immigrants	2nd Generation
<i>A. Men</i>					
1940					
1st quartile	4.88	5.10	5.29	0.22	0.41
Median	5.39	5.49	5.72	0.10	0.33
3rd quartile	5.83	5.82	6.08	-0.01	0.25
Std. deviation	0.75	0.60	0.65	-0.15	-0.10
1970					
1st quartile	5.89	6.00	6.33	0.11	0.44
Median	6.38	6.44	6.58	0.06	0.20
3rd quartile	6.70	6.76	6.87	0.06	0.17
Std. deviation	0.74	0.68	0.58	-0.06	-0.16
1994-96					
1st quartile	5.55	5.69	6.12	0.14	0.57
Median	6.19	6.27	6.65	0.08	0.46
3rd quartile	6.67	6.77	6.96	0.10	0.29
Std. deviation	0.88	0.82	0.75	-0.06	-0.13
<i>B. Women</i>					
1940					
1st quartile	4.47	4.70	4.74	0.23	0.27
Median	4.99	5.04	5.19	0.05	0.20
3rd quartile	5.39	5.37	5.61	-0.02	0.22
Std. deviation	0.75	0.61	0.70	-0.14	-0.05
1970					
1st quartile	5.30	5.47	5.50	0.17	0.20
Median	5.79	5.85	5.94	0.06	0.15
3rd quartile	6.18	6.19	6.27	0.01	0.09
Std. deviation	0.74	0.67	0.66	-0.07	-0.08
1994-96					
1st quartile	5.09	5.24	5.48	0.15	0.39
Median	5.72	5.79	6.10	0.07	0.38
3rd quartile	6.22	6.28	6.57	0.06	0.35
Std. deviation	0.85	0.83	0.82	-0.02	-0.03

*Notes:* All data pertain to average weekly wages in 1995 dollars. The samples of immigrants and second-generation persons in 1940 and 1994-96 have been reweighted to give these samples the same joint distribution of age, region, and origin composition as in 1970. The samples of natives in 1940 and 1994-96 have been reweighted to give these samples the same joint distribution of age and region as in 1970.

adjusted wage gap between second-generation individuals and natives is consistent with another feature that we will demonstrate below: Conditional on parental background, second-generation men and women have higher education and wages than natives.

Reweighting the second generation in 1940 and 1995 to have the same

joint distribution of age, region, and origin as the 1970 second generation has two important impacts on the comparison, both of which substantially raise the second generation–native wage differential relative to the more modest values reported in table 6.2.

First, relative to the native born, the 1970 second generation are considerably older. From table 6.1 it is evident that the mean age differential—which is less than one year in both 1940 and 1994–96—is 12.1 years in 1970. Second, as is evident from table 6.3, the 1970 second-generation sample includes relatively more children of immigrants from Europe and the United Kingdom—who typically fare well in the U.S. labor market—and relatively few children of Mexican or South or Central American immigrants—who typically fare poorly. The net effect of “upweighting” older second-generation people of European descent and “downweighting” younger second-generation people of Mexican and South and Central American descent is particularly striking in 1994–96. At the lowest wage quartile, second-generation men in the reweighted sample earn 57 percent more than native men, while second-generation women earn 39 percent more than natives.

Another notable aspect of the adjusted second generation–native wage gaps in table 6.6 is their evolution over time. Over the period 1940–70, the second generation–native gaps show a general decline. Among women, the declines are relatively modest at all points in the distribution. Among men, the direction and size of the movement is sensitive to the point in the distribution at which the comparison is made, although, on average, the movements are quite modest. (Although we do not report this in table 6.6, the fall in the mean adjusted wage is only 3 percent.)

More interesting is the movement in the adjusted wage gap between 1970 and 1994–96. Unlike the adjusted immigrant–native wage gaps, which were fairly stable over this period, the adjusted second generation–native wage gaps for men and women rose substantially: by 12–26 percent for men, depending on the specific quartile of the wage distribution, and by 19–26 percent for women. Because the weighting adjustments “upweight” older second-generation men and women of European descent—people who would tend to earn above-average wages—some of this rise may be attributable to the rise in overall wage inequality between 1970 and 1994–96 rather than to any shift in the relative position of second-generation workers in the overall wage distribution. As a mechanical matter, a rise in overall inequality will tend to increase the measured wage gaps between the percentiles of the native wage distribution and the percentiles of a sample of relatively high-wage second-generation workers.

An important conclusion that emerges from table 6.6 is that the stability of the wage gaps for second-generation workers that we documented in table 6.2 should be seen as rather surprising, given the changing age and ethnic composition of the second-generation sample between 1970 and the

mid-1990s and the trend toward widening wage inequality in the economy as a whole. Despite the rising fractions of second-generation men and women of non-European heritage, and the falling relative age of second-generation workers, they have more or less maintained their relative wage advantage.

## 6.5 Intergenerational Assimilation

### 6.5.1 Conceptual Issues

While some immigrants are quite similar to natives, others differ from native-born people in important ways, such as native tongue and level and type of schooling. These differences may be transmitted to the second generation through a variety of mechanisms, including passive channels (such as the home environment) and active channels (such as decisions about schooling).<sup>16</sup> In fact, simple comparisons of second-generation men and women from different backgrounds, such as those in tables 6.4 and 6.5, suggest that the native-born children of immigrants with higher levels of education and earnings tend to have significantly higher levels of education and earnings. This should not be surprising, since even within the native population there is a relatively high “intergenerational correlation” between the education and earnings levels of parents and their children (see Solon [1999] for a recent review).

The strength of the connection between the economic performance of immigrant parents and the outcomes of their native-born children is usefully summarized by a simple descriptive model of the form:

$$(1) \quad y_i = a + bx_i + e_i,$$

where  $y_i$  is the level of education or wages of child  $i$  (adjusted for factors such as age), and  $x_i$  is the level of education or wages of his or her father (similarly adjusted). In principle, the outcomes of both the mother and father could be included in this equation. For simplicity, however, and in recognition of the constraints imposed by our data, we focus on the connection between child and father.

In this setup, the “intergenerational assimilation rate” is given by  $1 - b$ . To see this, note that if  $b = 1$ , then there is no intergenerational assimilation, since any difference in outcomes between a father and the underlying population is reproduced by his offspring. On the other hand, if  $b = 0$ , then there is complete intergenerational assimilation, since regardless of the outcomes of the father, his offspring will have the mean characteristics of the overall population. More generally, if  $0 < b < 1$ , then a fraction

16. Mechanisms of intergenerational transmission are studied by Becker and Tomes (1986).



$1 - b$  of the difference between the father's outcome and the population mean for the father's generation is closed in the next generation.

We lack data on the education or earnings of the parents of second-generation children. Instead, following Borjas (1993), we rely on a grouping estimation strategy to estimate equation (1). This method proceeds as follows. First, we estimate mean education or earnings levels (adjusted for age, etc.) for immigrant men in 1940 or 1970 by country of origin. Second, we estimate mean education or earnings levels (adjusted for age, etc.) for second-generation men or women in 1970 or 1994–96 by their father's country of origin. Third, we regress the mean outcomes for the second generation in a specific origin group on the outcomes of the immigrant men in the same group from the preceding census sample. There is clearly some slippage in this method because (for example) not all immigrant men in 1940 had children who appear in our sample in 1970, nor do all children have fathers who were potentially sampled in 1940. The method can be refined to reduce this slippage by restricting the immigrant men to those married to immigrants and having children between the ages of 0 and 15, and restricting the second generation samples to individuals of the "right" age to match with these children. Ignoring slippage in the definitions of the father's and children's cohorts, however, this grouping method will yield consistent estimates of the coefficient  $b$ .

It is interesting to ask how the degree of intergenerational correlation between immigrant fathers and their native-born children might differ from the degree of correlation between native fathers and their children. A natural assumption is that the intergenerational correlation is the same; that is, the rate of intergenerational assimilation between immigrants and the second generation is merely a particular manifestation of a more general process of intergenerational transmission. Solon (1992) and Zimmerman (1992), using the Panel Study of Income Dynamics and the National Longitudinal Study of Youth, respectively, for example, estimate several different variants of equation (1) using samples of mainly native-born men. Both papers report estimates of the parameter  $b$  between 0.4 and 0.5, suggesting an intergenerational assimilation rate of between 0.5 and 0.6.

There are at least two reasons why one might expect estimates of  $b$  based on the children of immigrants to be different from this. First, there may be a stronger or weaker connection between the observed characteristics of an immigrant father and the true underlying characteristics of the family. For example, suppose that the true model generating children's outcomes includes both the father's and mother's education (or wages):

$$y_i = a + bx_i + cz_i + e_i,$$

where  $z_i$  is the mother's outcome. In this case, a regression of the child's outcomes on the father's will yield a coefficient with probability limit

$$b + c \frac{\text{Cov}(x_i, z_i)}{\text{Var}(x_i)}.$$

Thus, if immigrant parents are more likely to have similar economic outcomes or levels of education than native-born parents, our estimates of  $b$  will be higher than those calculated from a similar regression on the general population.

A second reason is the possibility of “ethnic human capital” that has been raised by Borjas (1992), among others. The ethnic human capital model specifies that the outcome of a child may be affected by the education or economic well-being of other parents from the same country of origin, perhaps because of “neighborhood effects.” To formalize this model, we distinguish between individuals (indexed by  $i$ ) and origin groups (indexed by  $j$ ). A model with ethnic human capital specifies that

$$(2) \quad y_{i,j} = a + bx_{i,j} + dx_j + e_{i,j},$$

where  $y_{i,j}$  is the outcome for child  $i$  in group  $j$ ;  $x_{i,j}$  is the outcome of his or her father; and  $x_j$  is the mean outcome of origin group  $j$ . A standard microlevel regression of  $y_{i,j}$  on  $x_{i,j}$  will yield a coefficient with probability limit

$$b + d \frac{\text{Cov}(x_{i,j}, x_j)}{\text{Var}(x_{i,j})} = b + d \frac{\text{Var}(x_j)}{\text{Var}(x_{i,j})},$$

and will be upward biased for  $b$  if  $d > 0$ . If ethnic human capital effects are larger for the children of immigrants than for other children (because immigrants are more likely to live in enclaves, or because immigrant’s children are more strongly affected by their parents’ peer group), then the upward bias will be *bigger* for second-generation children than for the general population, leading to a higher intergenerational correlation.

Moreover, the use of grouped estimation strategy will exacerbate this bias. To see this, note that equation (2) implies that the probability limit of the coefficient from a regression of  $y_j$  on  $x_j$  is  $b + d$ , which is greater than  $b + d [\text{Var}(x_j)]/[\text{Var}(x_{i,j})]$ , since  $\text{Var}(x_j) < \text{Var}(x_{i,j})$ . A similar argument suggests that the bias induced by any unobserved error component in the residual  $e_{i,j}$  that happens to be correlated with  $x_j$  will be accentuated in the grouped regression relative to a microlevel regression.

A final aspect of the grouped estimation strategy is that it “solves” the attenuation problem that arises in the corresponding microlevel regression if parental outcomes are reported with error, or if income is measured in only one year but a father’s permanent income is the conceptually appropriate determinant of his children’s success.<sup>17</sup> To see this, note that any

17. This point is emphasized by Solon (1992, 1999) and Zimmerman (1992).

individual-specific transitory income fluctuations or measurement errors are “averaged out” of the mean for the origin group. Thus, intergenerational correlations of income obtained from a grouped estimation method are most comparable to the estimates obtained from microlevel regressions that use instrumental variables methods or multiple years of data to isolate the correlation between children’s outcomes and their father’s permanent income.

### 6.5.2 Estimation Results

We applied the grouped estimation method described above to estimate intergenerational correlations between immigrant fathers in 1940 and 1970 and second-generation sons and daughters in 1970 and 1994–96. We focus on two outcomes for fathers—mean education and mean log weekly wages—and three outcomes for children—mean education, mean log weekly wages, and a measure of marriage assimilation described below. Given the sample sizes available in our data sets, we aggregated some countries into groups and arrived at a total of 34 countries (or country groups) between 1940 and 1970, and 33 countries (or country groups) between 1970 and 1994–96. The countries are listed in table 6A.1, along with the outcome measures we use.

For the immigrant fathers, we constructed age- and region-adjusted education and earnings outcomes for each country of origin by regressing education or log weekly earnings on origin dummies, region dummies, and origin dummies interacted with age and age-squared.<sup>18</sup> We then used the estimated age profiles to obtain predicted education or earnings levels for each origin group at age 40. As described in the data section, we use all available observations in the 1940 census (not just the sample-line individuals) and two 1 percent samples of the 1970 census to obtain more reliable estimates of the outcomes of immigrant fathers. For the second-generation sons and daughters we constructed age- and region-adjusted education and earnings outcomes by regressing education or log weekly earnings on origin dummies, region dummies, and a quadratic age function.<sup>19</sup> We then predicted education or earnings levels for each origin group at age 40.

Our estimates of the intergenerational correlations in wages and education are presented in table 6.7, while figures 6.3 and 6.4 plot the adjusted wages of second-generation sons and daughters against the adjusted wages of immigrant men. Inspection of the estimation results and figures suggests that there are strong links between the education and earnings of immigrant fathers and the outcomes of their native-born children. Countries with higher immigrant earnings (such as Germany and the United

18. We restricted our attention to men age 24–66 in order to help stabilize the estimates.

19. As with the immigrant fathers, we restricted our attention to men and women age 24–66.

**Table 6.7** Relationship between Education and Earnings of Immigrant Fathers and Education and Earnings of Second-Generation Sons and Daughters

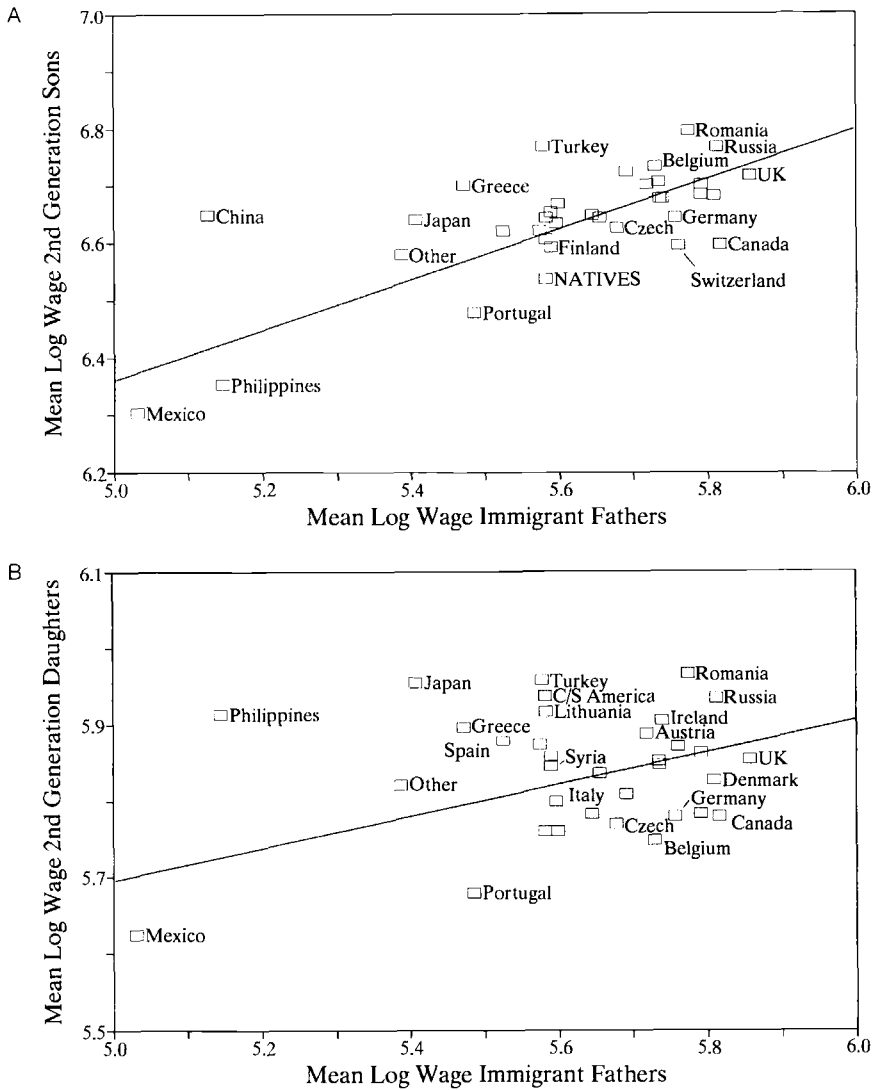
	Second-Generation Sons				Second-Generation Daughters			
	Education		Log Wage		Education		Log Wage	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>A. 1940-70</i>								
Mean education of fathers	0.41 (0.10)	—	0.03 (.01)	—	0.47 (0.08)	—	0.02 (0.01)	—
Mean log wage of fathers	—	4.74 (0.68)	—	0.44 (0.05)	—	4.78 (0.56)	—	0.21 (0.06)
$R^2$	0.35	0.60	0.24	0.72	0.51	0.69	0.12	0.25
<i>B. 1970-95</i>								
Mean education of fathers	0.43 (0.05)	—	0.06 (0.01)	—	0.42 (0.04)	—	0.05 (0.01)	—
Mean log wage of fathers	—	4.50 (0.72)	—	0.62 (0.12)	—	4.05 (0.67)	—	0.50 (0.13)
$R^2$	0.68	0.56	0.51	0.45	0.76	0.54	0.54	0.33

*Notes:* Estimated on immigrant group-level means using weighted least squares. Groups are identified by father's country of origin. Education and wage outcomes are adjusted for age (see text). There are 34 country of origin groups in the 1940-70 analysis and 33 in the 1970-95 analysis. Group weight is the sum of the number of sons and daughters (age 24-66) observed for the group. Standard errors are in parentheses.

Kingdom) have higher second-generation earnings, while countries with lower immigrant earnings (notably Mexico) have lower second-generation earnings. Using education as the outcome measure for fathers and children, the estimates of the intergenerational coefficient  $b$  in equation (1) are very stable, with a range from 0.41 to 0.47. Using wages as the outcome measure the estimates of  $b$  are more variable, ranging from 0.21 to 0.62. The relatively low coefficient for second-generation daughters in 1970 may reflect the fact that many women in this cohort had limited attachment to the labor market.<sup>20</sup> By comparison, the coefficient for the later sample of daughters is much larger and closer to the estimate for sons.

Table 6.7 also reports regressions of the second generation's education (or earnings) on the father's earnings (or education). The coefficients linking father's wages to children's education are large and relatively stable over time. The coefficients linking father's education to children's earnings are more variable, although for both sons and daughters the coefficient seems to have risen between 1970 and 1994-96. This is consistent with the relatively stable intergenerational correlations of education shown in table

20. In addition, unlike the other estimates we report, the results for the wages of second-generation daughters in 1970 are very sensitive to whether or not weights are used in estimation.

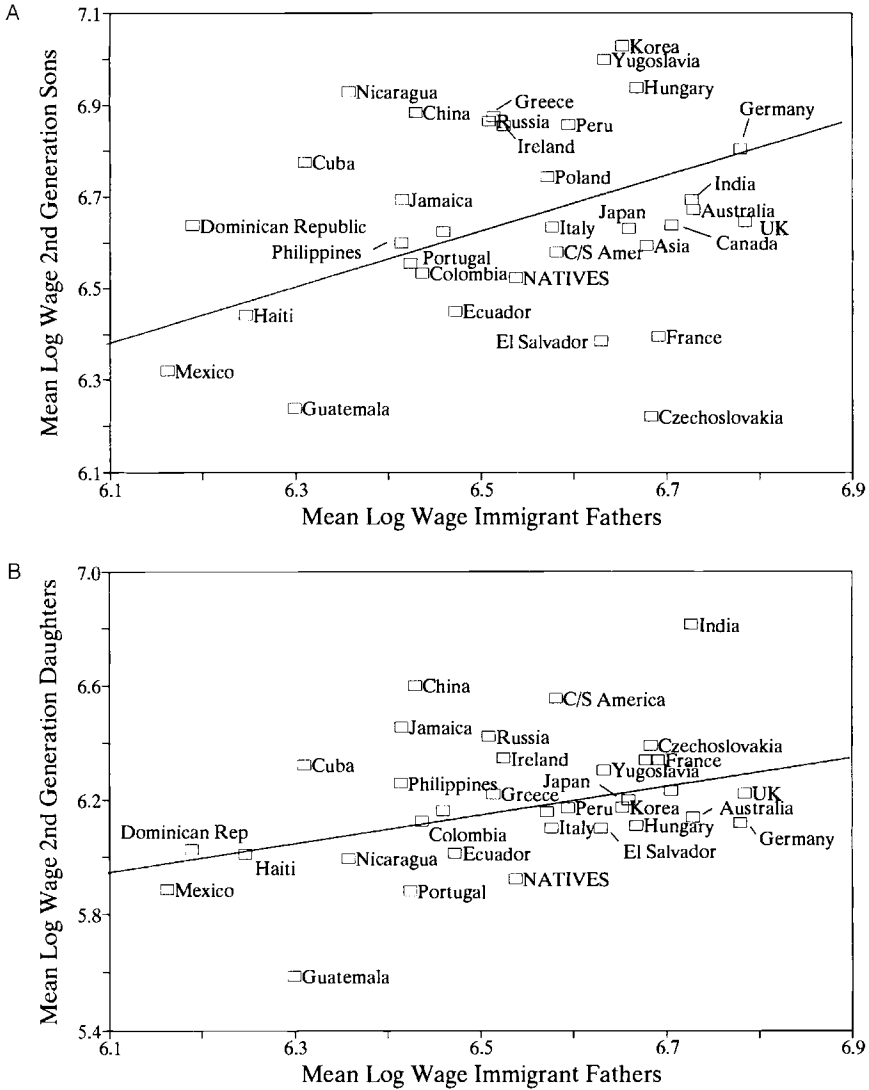


**Fig. 6.3 Intergenerational correlations between the wages of immigrant fathers in 1940 and the wages of second-generation sons (A) and daughters (B) in 1970**

Note: A, weighted OLS regression line shown, slope = 0.44; B, weighted OLS regression line shown, slope = 0.21.

6.7, along with the well-known rise in the economic payoff to education over the past 25 years.

Although they are not used in the estimation, we have added the data for native fathers and their children to figures 6.3 and 6.4. An interesting feature of all four graphs is that native children earn 15–20 percent less



**Fig. 6.4 Intergenerational correlations between the wages of immigrant fathers in 1970 and the wages of second-generation sons (A) and daughters (B) in 1994–96**

Note: A, weighted OLS regression line shown, slope = 0.62; B, weighted OLS regression line shown, slope = 0.50.

than one would expect, given their fathers' earnings and the patterns for second-generation children. A similar feature is evident for education: Native men and women have 0.8 to 1.4 fewer years of education than would be predicted from their fathers' education level and the pattern of second-generation education outcomes. An implication of this gap is that even if

**Table 6.8** Further Evidence on the Relation between Immigrant Fathers and Outcomes of Second-Generation Sons and Daughters

	Second-Generation Sons		Second-Generation Daughters	
	Education (1)	Log Wage (2)	Education (3)	Log Wage (4)
<i>A. 1940–70</i>				
Mean education of fathers	0.12 (0.10)	-0.00 (0.01)	0.21 (0.07)	0.00 (0.01)
Mean log wage of fathers	4.08 (0.86)	0.46 (0.06)	3.65 (0.65)	0.20 (0.08)
R <sup>2</sup>	0.62	0.72	0.75	0.26
<i>B. 1970–95</i>				
Mean education of fathers	0.36 (0.10)	0.04 (0.02)	0.43 (0.08)	0.07 (0.02)
Mean log wage of fathers	0.94 (1.19)	0.20 (0.22)	-0.18 (0.94)	-0.16 (0.20)
R <sup>2</sup>	0.69	0.53	0.76	0.55

*Notes:* Estimated on immigrant group-level means using weighted least squares. Groups are identified by father's country of origin. Education and outcomes are adjusted for age (see text). There are 34 country of origin groups in the 1940–70 analysis and 33 in the 1970–95 analysis. Group weight is the sum of the number of sons and daughters (age 24–66) observed for the group. Standard errors are in parentheses.

immigrants have somewhat lower education or earnings than natives, their children will surpass the children of natives.<sup>21</sup>

A question raised by the estimated models in table 6.7 is whether the education and earnings of second-generation children are more strongly affected by the education or earnings of their fathers. To answer this question, we fit the models in table 6.8, which include both outcome measures for the fathers. For the 1940–70 generation, the data suggest that a father's earnings are more important than his education, although both variables are significant in the model for second-generation daughters' education. In contrast, the data for the 1970–95 generation suggest that a father's education is the key determinant of the second generation's success. Holding constant education, differences in father's earnings exert no significant effect on the second generation's education or earnings outcomes. We are unsure whether this difference between the 1940–70 cohort and the

21. We have checked this implication using micro data from the pooled 1977–96 General Social Survey, which contains information on father's education and nativity for about 15,300 men and women. A regression of education on father's education, age controls, and dummies for immigrants and second-generation individuals yields a coefficient of 0.31 on father's education and 0.79 (standard error 0.12) on the second generation dummy. We suspect that the father's education coefficient is biased down by about 20 percent by measurement error. If we force the coefficient on father's education to equal 0.40, the estimated second generation dummy rises to 0.90 years (standard error 0.12).

1970–95 cohort reflects changes in behavior, changes in the economic importance of education, or changes in the relative reliability of measured education and earnings differences across different immigrant groups in the 1940 and 1970 censuses.

Another question raised by the findings in table 6.7 is whether all of the effect of father's education or earnings is subsumed in the educational attainment of the second generation, or whether father's outcomes exert an independent effect on the wages of the second generation, controlling for the second generation's education. To answer this question, we fit a series of models for the wages of the second generation that included the education of the second generation and outcomes of the fathers. The results are summarized in table 6.9. Columns (1) and (5) of the table show simple models that include only the second generation's education. These estimates tend to be only slightly higher than corresponding microlevel estimates fit to the same samples of second-generation men and women in 1970 and 1994–96.<sup>22</sup> The models in the other columns add father's wages and education, alone and together, to this basic specification. For the 1940–70 cohort, there is some indication that even controlling for the second generation's education, father's wages and education matter. However, the signs of the effects differ between second-generation sons and daughters. For the 1970–95 cohort, on the other hand, the father outcome variables are individually (and jointly) insignificant determinants of wages, controlling for the education of the second generation.

Taken in combination with the findings in table 6.8, the results for the most recent cohort in table 6.9 point to a very simple model of the intergenerational transmission mechanism. According to the estimates in table 6.8, only father's education matters in the education or wage outcomes of the 1970–95 second generation cohort. Moreover, fathers' outcomes only directly affect the education of the second generation in this cohort. For this cohort, at least, the strong intergenerational linkages between immigrant fathers and their native-born children work only through education.

### 6.5.3 Marriage Assimilation

A different perspective on intergenerational assimilation is provided by the marriage patterns of second-generation sons and daughters. A child of immigrants can either marry a native, another child of immigrants, or an immigrant. A simple index of "marriage assimilation" is the fraction of second-generation men or women who marry natives, minus the fraction who marry immigrants. This index treats marriage to natives as a "positive" outcome and marriage to immigrants as a "negative" outcome.

22. The corresponding microlevel returns to education (controlling for a cubic in experience) for the second-generation samples are 0.064 (men, 1970); 0.065 (women, 1970); 0.121 (men, 1994–96); and 0.102 (women, 1994–96).



**Table 6.9**      **Effects of Own Education and Father's Wages and Education on Average Weekly Earnings of Second-Generation Sons and Daughters**

	Second-Generation Sons				Second-Generation Daughters			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				<i>A. 1940–70</i>				
Mean education of group	0.080 (0.005)	0.061 (0.007)	0.085 (0.006)	0.065 (0.006)	0.057 (0.008)	0.087 (0.013)	0.080 (0.010)	0.106 (0.013)
Mean log wage of fathers	—	0.154 (0.043)	—	0.198 (0.039)	—	–0.207 (0.074)	—	–0.192 (0.065)
Mean education of fathers	—	—	–0.006 (0.004)	–0.012 (0.003)	—	—	–0.021 (0.007)	–0.019 (0.006)
$R^2$	0.88	0.92	0.89	0.94	0.62	0.70	0.71	0.78
				<i>B. 1970–95</i>				
Mean education of group	0.132 (0.014)	0.125 (0.021)	0.130 (0.025)	0.128 (0.025)	0.135 (0.014)	0.150 (0.201)	0.146 (0.030)	0.144 (0.030)
Mean log wage of fathers	—	0.059 (0.128)	—	0.080 (0.168)	—	–0.109 (0.118)	—	–0.133 (0.155)
Mean education of fathers	—	—	0.002 (0.031)	–0.003 (0.017)	—	—	–0.006 (0.014)	0.005 (0.019)
$R^2$	0.74	0.74	0.74	0.74	0.74	0.75	0.74	0.75

*Notes:* See notes to table 6.7. Dependent variable is mean log weekly earnings of second-generation sons or daughters (age 24–66). Standard errors are in parentheses.

We used information on the nativity of the spouses of married second-generation individuals in each of the origin groups analyzed in tables 6.7–6.9 to construct the marriage assimilation index. We then plotted the index for each origin group against the levels of education and wages of immigrant fathers, and fit the regression models shown in table 6.10.

Despite its ad hoc nature, the marriage index is very highly correlated with other measures of second generation success. As shown in figure 6.5, the sons and daughters of better-educated immigrant fathers have higher marriage assimilation indexes. Closer inspection of the data for individual countries revealed an exception to this general pattern for the children of immigrants from Asian countries. For example, second-generation Japanese children had very low marriage assimilation rates in 1970, despite the relatively high level of their father's education (see fig. 6.5). This impression is confirmed by the regression models in table 6.10, which show a substantial improvement in fit once an indicator for Asian origin groups is added.

As with the education and earnings outcomes of the second generation, there are some differences in the effects of father's education and wages for different cohorts of second-generation children. The effects of father's education on marriage assimilation rates are similar between men and women and are fairly stable over time (see cols. [2] and [6]). By comparison, the effects of father's earnings increase substantially between the 1940–70 cohort and the 1970–95 cohort. Moreover, in the earlier cohort, father's education seems to matter more than father's earnings, while in the later cohort, the reverse is true. Nevertheless, the marriage patterns of second-generation men and women generally confirm the existence of a strong linkage between the economic well-being of immigrant fathers and the degree of assimilation achieved by their children.

#### 6.5.4 Comparison with Previous Estimates

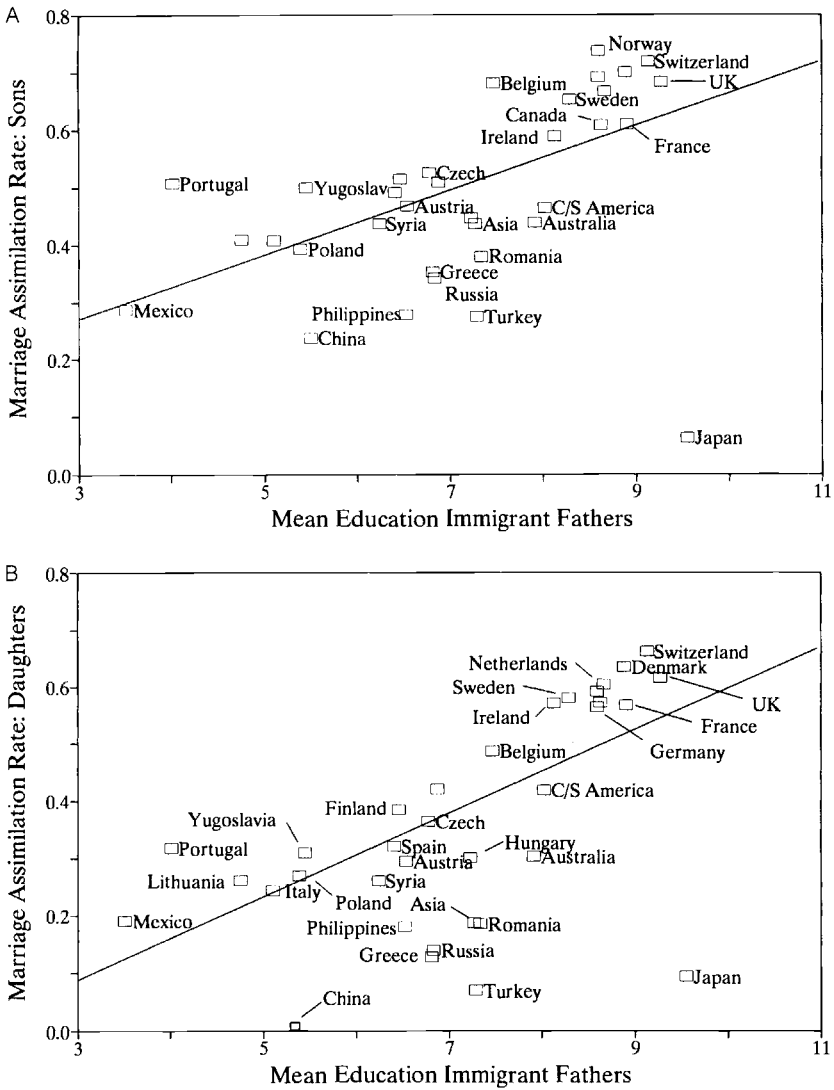
How do our estimates of the degree of intergenerational correlation between immigrant fathers and their native-born children compare with other estimates? Our most easily compared estimates are those based on the log wages of the two generations. Like Borjas (1993), who analyzed the intergenerational correlation between immigrant fathers in 1940 and second-generation sons in 1970, we find fairly high correlations between the earnings of immigrants fathers and their children: in the range of 0.4 to 0.6. These are on the high side of estimates in the intergenerational correlation literature, potentially for the reasons discussed earlier.

The intergenerational correlations of education are lower and more stable (in the range of 0.40 to 0.45). A reasonable benchmark for comparison with these estimates is obtainable from the General Social Survey (GSS), which collects a yearly sample of data on adult household heads, including information on their father's education. Using the 1972–96 samples for

**Table 6.10 Relationship between Education and Earnings of Immigrant Fathers and Marriage Assimilation of Second-Generation Sons and Daughters**

	Second-Generation Sons				Second-Generation Daughters			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>A. 1940–70</i>							
Mean education of fathers	0.055 (0.011)	0.062 (0.009)	—	0.068 (0.012)	0.074 (0.012)	0.081 (0.011)	—	0.100 (0.014)
Mean log wage of fathers	—	—	0.34 (0.11)	−0.08 (0.11)	—	—	0.37 (0.15)	−0.24 (0.13)
Indicator for Asian country	—	−0.39 (0.09)	−0.20 (0.13)	−0.42 (0.10)	—	−0.40 (0.11)	−0.16 (0.16)	−0.49 (0.11)
$R^2$	0.43	0.64	0.31	0.65	0.52	0.67	0.22	0.70
	<i>B. 1970–95</i>							
Mean education of fathers	0.045 (0.018)	0.065 (0.015)	—	−0.024 (0.026)	0.053 (0.017)	0.070 (0.015)	—	−0.019 (0.026)
Mean log wage of fathers	—	—	0.89 (0.14)	1.13 (0.29)	—	—	0.94 (0.14)	1.13 (0.28)
Indicator for Asian country	—	−0.59 (0.14)	−0.48 (0.11)	−0.41 (0.12)	—	−0.48 (0.12)	−0.35 (0.11)	−0.31 (0.12)
$R^2$	0.16	0.48	0.65	0.66	0.24	0.46	0.65	0.65

*Notes:* Dependent variable is the fraction of married second-generation sons or daughters whose spouse is third or higher generation, minus the fraction whose spouse is an immigrant. Estimated on immigrant group-level means using weighted least squares. Groups are identified by father's country of origin. There are 34 country of origin groups in the 1940–70 analysis and 33 in the 1970–95 analysis. Group weight is the sum of the number of sons and daughters (age 24–66) observed for the group. Standard errors are in parentheses.



**Fig. 6.5** Father's education in 1940 and marriage assimilation rates of second-generation sons (A) and daughters (B) in 1970

men and women who reported their father's education (a total sample of 19,520 observations), we regressed each person's education on their father's education, dummies for gender and sample year, and a cubic function of age. The estimated coefficient is 0.318 (standard error 0.005); the model explains about 25 percent of the variance in education. While this estimate is lower than the ones in table 6.7, it is important to account for

the potential effects of measurement error. Ashenfelter and Rouse (1998) study the correlation in twins' reports of their parents' education, and estimate that the reliability of father's education is about 0.80. Combining this estimate with the GSS estimate, a microlevel regression for the effect of father's education on his son's or daughter's education implies an effect of 0.40 (= 0.318/0.80). This estimate is remarkably close to our estimates based on the correlation between the education of second-generation men and women of different ancestries and the education of immigrant men in the same origin groups 25 or 30 years earlier.

### 6.5.5 Assessment

What do the intergenerational models in tables 6.7–6.10 imply about changes in the rate of intergenerational assimilation over time? On the one hand, our estimates of the intergenerational transmission of educational attainment (cols. [1], [2], [5], and [6] in table 6.7) show remarkable stability between 1940–70 and 1970–95. Based on these patterns, one might conclude that rates of intergenerational assimilation have not changed much. On the other hand, the implied estimates of the intergenerational *assimilation* coefficient for wages are uniformly *lower* in 1970–95 than in 1940–70. Thus, the intergenerational patterns of wages suggest that children of the immigrants born in the early part of this century assimilated faster than the children of the immigrants born in the later part of this century. Indeed, the magnitude of the estimates of the effect of the father's wage in 1970 on the wages of his son or daughter in 1995 is more than twice as large as the effect of the father's wage in 1940 on the wages of his son or daughter in 1970.

Any comparison of rates of intergenerational assimilation based on patterns of wages must be interpreted very carefully, however, in light of the recurring “theme” throughout this paper that the status of specific groups may be affected by overall shifts in wage inequality over time. If the dispersion in overall wages is changing over time, then the measured rate of intergenerational assimilation may change even if there are no changes in the relative ranking of second-generation workers in the overall wage distribution.

This point is illustrated in the following simple model. Let  $w_{i1}$  and  $w_{i2}$  represent the mean wages of first- and second-generation workers from family or ethnic group  $i$ , and assume that

$$(3) \quad w_{i1} = \gamma_1 z_{i1},$$

$$(4) \quad w_{i2} = \gamma_2 z_{i2},$$

$$(5) \quad z_{i2} = \rho z_{i1},$$

where  $z_{i1}$  and  $z_{i2}$  refer to some latent index of “human capital” of the two groups, and  $\gamma_1$  and  $\gamma_2$  refer to the rates of transformation between human capital and observed wages for the first and second generation (or, loosely, the “prices” of human capital faced by members of the first and second generation). A larger value for  $\gamma$  implies that for a given distribution of  $z$ , the observed distribution of wages is more unequal.

In this one-factor model, one minus the intergenerational assimilation coefficient (the simple regression coefficient from a regression of child’s wage on parent’s wage) is equal to

$$\frac{\text{Cov}(w_{i1}, w_{i2})}{\text{Var}(w_{i1})} = \frac{\gamma_{i1} \gamma_{i2} \text{Cov}(z_{i1}, z_{i2})}{(\gamma_{i1})^2 \text{Var}(z_{i1})} = \frac{\gamma_{i2}}{\gamma_{i1}} \rho.$$

It is therefore apparent that the magnitude of the measured intergenerational assimilation rate will vary as the variance of wages conditional on the single factor varies. In particular, if the distribution of wages is more unequal for parents than for children—the case for 1940 parents and their offspring in 1970—the rate of assimilation will be faster than when the distribution of wages is more unequal for the children than the parents—the case for 1970 immigrants and their offspring in 1995.

Moreover, under the assumption that the variance of the latent variable  $z$  has been constant across time, we can test the hypothesis that the intergenerational transmission process has remained unchanged over the period 1940–96. Given the simple one-factor model described above, a test for constancy involves a comparison of the simple correlation coefficient  $r$  across time, where

$$r \equiv \frac{\text{Cov}(w_{i1}, w_{i2})}{\sqrt{\text{Var}(w_{i1})\text{Var}(w_{i2})}} = \rho,$$

which does not depend on the values taken by  $\gamma$ .

For men, the value of  $\rho$  is 0.847 in 1970–40 and 0.853 in 1995–70. The comparable values for women are 0.503 and 0.575, respectively. At any conventional level of significance, the equality of  $\rho$  in the two time periods cannot be rejected for either men or women.<sup>23</sup> Given the substantial social, political, and economic changes over the last half-century, the relative stability of the intergenerational correlation in wages is noteworthy. We conclude that the fundamental determinants of the rate of assimilation of immigrant children have not changed much, although the measured par-

23. We performed the test by using Fisher’s transformation:  $z = .5 \log [(1 + \rho)/(1 - \rho)]$ , which under suitable conditions is distributed normally with variance approximately equal to  $1/(n - 3)$ .

tial correlations between the wages of immigrant children and their second-generation children have been affected by changes in overall wage inequality.

## 6.6 Conclusions

We have used data from the 1940 and 1970 censuses and the 1994–96 Current Population Surveys to construct an economic history of the labor market status of immigrants and their children. Our main findings are easy to summarize: Despite changes in the legal environment for immigration and major changes in the origin countries of immigrants, the relative status of immigrant children has been remarkably constant. Indeed, we find that the rate of intergenerational “assimilation” in educational attainment has remained stable over the last 50 years and that the rate of intergenerational “assimilation” in earnings has also remained constant, apart from an effect of widening overall wage inequality.

A related finding is that the children of immigrants tend to have noticeably higher education and wages than the children of natives, controlling for parental background. This gap accounts for the relatively high labor market status of the second generation today, even though an increasing fraction of today’s second generation are the children of immigrants from the lowest-paid immigrant groups. Other things equal, being a child of immigrants is associated with greater socioeconomic success in the United States.

## Appendix

**Table 6A.1 Earnings, Education, and Marriage Patterns of Immigrant Men in 1940 and Second-Generation Men and Women in 1970**

	Immigrant Men Age 24–66, 1940				Second-Generation Men Age 24–66, 1970					Second Generation Women Age 24–66, 1970				
	Mean Log Wage	Years School	Fraction Married to		Mean Log Wage	Years School	Fraction Married to			Mean Log Wage	Years School	Fraction Married to		
			Same Immigrants	Natives			Same Immigrants	Same 2nd Generation	Natives			Same Immigrants	Same 2nd Generation	3rd+ Generation
Asia nec	5.57	7.3	0.36	0.29	6.62	12.6	0.06	0.18	0.55	5.87	11.9	0.10	0.23	0.35
Austria	5.72	6.5	0.53	0.31	6.70	12.3	0.01	0.12	0.53	5.89	11.6	0.02	0.15	0.40
Belgium	5.73	7.5	0.57	0.31	6.73	11.4	0.01	0.07	0.72	5.75	11.2	0.07	0.09	0.58
Canada	5.82	8.6	0.31	0.63	6.60	11.4	0.07	0.10	0.70	5.78	11.4	0.05	0.13	0.65
Central/South America nec	5.58	8.0	0.08	0.60	6.61	10.3	0.13	0.00	0.66	5.94	10.5	0.05	0.00	0.55
China	5.13	5.5	0.78	0.18	6.65	12.8	0.09	0.28	0.44	6.19	12.4	0.33	0.27	0.32
Czechoslovakia	5.68	6.8	0.67	0.28	6.62	11.6	0.02	0.16	0.57	5.77	11.0	0.05	0.19	0.45
Denmark	5.81	8.9	0.41	0.46	6.68	12.5	0.00	0.04	0.75	5.83	12.5	0.01	0.06	0.71
Europe nec	5.69	7.9	0.29	0.45	6.72	12.3	0.00	0.16	0.51	5.81	11.6	0.03	0.18	0.41
Finland	5.59	6.5	0.63	0.31	6.59	11.7	0.03	0.24	0.56	5.86	11.9	0.05	0.25	0.50
France	5.73	8.9	0.31	0.53	6.71	12.1	0.02	0.03	0.69	5.85	12.1	0.01	0.02	0.67
Germany	5.76	8.6	0.48	0.43	6.64	11.8	0.02	0.05	0.75	5.78	11.6	0.04	0.08	0.66
Greece	5.47	6.8	0.58	0.37	6.70	12.9	0.07	0.25	0.48	5.90	12.0	0.18	0.30	0.34
Hungary	5.74	7.2	0.66	0.24	6.68	11.8	0.02	0.14	0.51	5.85	11.3	0.05	0.15	0.42
Ireland	5.74	8.1	0.60	0.31	6.68	12.7	0.03	0.11	0.67	5.91	12.3	0.03	0.12	0.64
Italy	5.60	5.1	0.68	0.29	6.63	11.2	0.04	0.34	0.48	5.80	10.8	0.11	0.39	0.38
Japan	5.41	9.5	0.88	0.10	6.64	12.6	0.14	0.56	0.23	5.96	11.7	0.09	0.63	0.21
Lithuania	5.58	4.7	0.70	0.16	6.64	12.4	0.01	0.17	0.45	5.92	11.6	0.03	0.20	0.36
Mexico	5.03	3.5	0.64	0.34	6.30	8.2	0.16	0.33	0.47	5.63	7.7	0.20	0.35	0.41

(continued)



**Table 6A.1** (continued)

	Immigrant Men Age 24–66, 1940				Second-Generation Men Age 24–66, 1970					Second Generation Women Age 24–66, 1970				
	Mean Log Wage	Years School	Fraction Married to		Mean Log Wage	Years School	Fraction Married to			Mean Log Wage	Years School	Fraction Married to		
			Same Immigrants	Natives			Same Immigrants	Same 2nd Generation	Natives			Same Immigrants	Same 2nd Generation	3rd+
Netherlands	5.65	8.7	0.41	0.51	6.65	11.5	0.01	0.13	0.72	5.78	11.3	0.05	0.15	0.68
Norway	5.79	8.6	0.48	0.43	6.68	12.3	0.01	0.05	0.79	5.78	12.4	0.03	0.08	0.67
Caribbean/ Africa/other	5.39	6.9	0.51	0.41	6.58	11.3	0.03	0.13	0.59	5.82	11.0	0.04	0.12	0.53
Philippines	5.15	6.5	0.08	0.89	6.35	10.5	0.14	0.22	0.51	5.91	10.5	0.26	0.18	0.47
Poland	5.65	5.4	0.68	0.23	6.64	11.5	0.02	0.28	0.45	5.84	10.9	0.04	0.30	0.36
Portugal	5.49	4.0	0.56	0.36	6.48	9.6	0.05	0.22	0.59	5.68	9.7	0.12	0.23	0.46
Romania	5.77	7.3	0.52	0.24	6.80	13.3	0.02	0.05	0.46	5.97	12.4	0.02	0.06	0.35
Russia	5.81	6.8	0.59	0.27	6.77	13.5	0.02	0.31	0.42	5.94	12.5	0.06	0.34	0.29
Spain	5.52	6.4	0.49	0.36	6.62	11.4	0.04	0.10	0.61	5.88	11.1	0.08	0.09	0.51
Sweden	5.79	8.3	0.44	0.47	6.70	12.6	0.01	0.07	0.71	5.86	12.7	0.03	0.10	0.67
Switzerland	5.76	9.1	0.33	0.39	6.59	12.0	0.02	0.03	0.75	5.87	12.5	0.03	0.04	0.75
Syria	5.59	6.2	0.69	0.29	6.65	12.4	0.02	0.20	0.54	5.85	11.3	0.07	0.22	0.41
Turkey	5.58	7.3	0.63	0.22	6.77	13.1	0.04	0.23	0.39	5.96	12.5	0.11	0.22	0.27
United Kingdom	5.86	9.3	0.40	0.49	6.72	12.6	0.02	0.04	0.75	5.85	12.3	0.03	0.05	0.70
Yugoslavia	5.60	5.4	0.65	0.27	6.67	11.7	0.02	0.17	0.56	5.76	11.2	0.06	0.19	0.42

*Notes:* For immigrant men, fraction married to “same immigrants” is the fraction of married men whose spouse is an immigrant from the same country; and fraction married to natives is the fraction of married men whose spouse is native born. For second-generation men and women, fraction married to “same immigrants” is the fraction of married people whose spouse is an immigrant from the same country as their father; fraction married to same 2nd generation is the fraction of married people whose spouse is second generation and whose father-in-law was born in the same country as their father; and fraction married to 3rd+ generation is the fraction of married people whose spouse is native born with native-born parents.

Asia nec are Asian countries other than those listed separately. Central/South America nec are countries in Central or South America not listed separately. Europe nec are European countries not listed separately, plus Australia and New Zealand. Caribbean/Africa/other includes countries in the Caribbean and Africa not listed separately, plus all other countries not included in other categories.

Table 6A.2

## Earnings, Education, and Marriage Patterns of Immigrant Men in 1970 and Second-Generation Men and Women in 1994–96

	Immigrant Men Age 24–66, 1970				Second Generation Men Age 24–66, 1994–96					Second Generation Women Age 24–66, 1994–96				
	Mean Log Wage	Years School	Fraction Married to		Mean Log Wage	Years School	Fraction Married to			Mean Log Wage	Years School	Fraction Married to		
			Same Immigrants	Natives			Same	Same 2nd Generation	Natives			Same	Same 2nd Generation	3rd+ Generation
Asia nec	6.68	13.4	0.42	0.27	6.59	15.2	0.16	0.13	0.56	6.34	14.8	0.12	0.11	0.38
Canada	6.70	11.7	0.33	0.48	6.64	14.2	0.01	0.07	0.75	6.23	13.5	0.00	0.09	0.81
Central/South America nec	6.58	11.7	0.51	0.24	6.58	13.3	0.33	0.00	0.44	6.56	14.0	0.03	0.00	0.85
China	6.43	10.9	0.69	0.13	6.88	15.3	0.02	0.09	0.42	6.60	14.6	0.00	0.17	0.65
Colombia	6.44	12.6	0.68	0.20	6.53	13.8	0.00	0.00	0.87	6.13	13.6	0.29	0.00	0.71
Cuba	6.31	11.0	0.84	0.08	6.78	13.8	0.25	0.37	0.31	6.32	14.3	0.15	0.24	0.45
Czechoslovakia Dominican Republic	6.68	12.1	0.25	0.27	6.22	14.6	0.00	0.00	0.85	6.39	14.1	0.00	0.00	0.89
Ecuador	6.19	8.8	0.78	0.14	6.64	13.2	0.10	0.12	0.66	6.03	12.7	0.15	0.14	0.42
El Salvador	6.47	11.9	0.52	0.26	6.45	13.3	0.44	0.17	0.39	6.01	13.3	0.00	0.11	0.63
Europe nec	6.63	11.5	0.78	0.19	6.39	13.5	0.32	0.00	0.61	6.10	12.4	0.06	0.00	0.87
France	6.73	12.2	0.33	0.30	6.67	15.0	0.01	0.01	0.84	6.14	14.5	0.01	0.05	0.69
Germany	6.69	11.9	0.31	0.38	6.39	14.5	0.00	0.04	0.71	6.34	14.2	0.00	0.06	0.75
Greece	6.78	12.4	0.45	0.29	6.80	14.8	0.02	0.10	0.74	6.12	14.0	0.01	0.14	0.78
Guatemala	6.51	10.2	0.51	0.21	6.88	15.7	0.04	0.11	0.72	6.22	14.0	0.16	0.35	0.35
Haiti	6.30	13.3	0.36	0.33	6.24	14.2	0.00	0.00	0.46	5.59	10.7	0.00	0.00	0.00
Hungary	6.25	11.5	0.82	0.10	6.44	11.9	0.00	0.29	0.71	6.01	14.0	0.26	0.30	0.44
India	6.67	11.9	0.37	0.26	6.94	14.9	0.00	0.00	0.88	6.11	13.9	0.00	0.00	0.66
	6.73	15.2	0.60	0.21	6.69	15.9	0.00	0.23	0.37	6.81	15.2	0.11	0.13	0.43

(continued)

**Table 6A.2** (continued)

	Immigrant Men Age 24–66, 1970				Second Generation Men Age 24–66, 1994–96					Second Generation Women Age 24–66, 1994–96				
	Mean Log Wage	Years School	Fraction Married to		Mean Log Wage	Years School	Fraction Married to			Mean Log Wage	Years School	Fraction Married to		
			Same Immigrants	Natives			Same Immigrants	Same 2nd Generation	Natives			Same Immigrants	Same 2nd Generation	3rd+ Generation
Ireland	6.52	10.9	0.51	0.27	6.86	14.7	0.09	0.05	0.75	6.35	14.5	0.06	0.04	0.69
Italy	6.57	9.0	0.42	0.22	6.63	13.7	0.02	0.13	0.77	6.11	13.3	0.05	0.21	0.63
Jamaica	6.41	10.9	0.57	0.27	6.69	14.3	0.73	0.00	0.27	6.46	13.0	0.29	0.00	0.71
Japan	6.66	13.8	0.56	0.16	6.63	15.0	0.24	0.19	0.57	6.20	14.8	0.09	0.53	0.38
Korea	6.65	17.3	0.76	0.13	7.03	16.1	0.72	0.00	0.28	6.18	16.6	0.00	0.00	0.00
Mexico	6.16	6.0	0.54	0.25	6.32	11.9	0.25	0.21	0.50	5.89	11.6	0.28	0.20	0.48
Nicaragua	6.36	10.3	0.71	0.07	6.93	13.9	0.27	0.00	0.51	5.99	12.9	0.00	0.00	0.48
Caribbean/ Africa/other	6.46	10.5	0.30	0.33	6.62	14.4	0.04	0.10	0.76	6.16	13.9	0.07	0.11	0.74
Peru	6.59	12.4	0.46	0.41	6.86	15.9	0.37	0.00	0.36	6.17	13.0	0.00	0.00	0.83
Philippines	6.41	10.9	0.59	0.25	6.60	14.3	0.27	0.26	0.43	6.26	14.0	0.18	0.23	0.50
Poland	6.57	10.3	0.41	0.14	6.74	15.1	0.00	0.10	0.77	6.16	14.2	0.02	0.16	0.61
Portugal	6.42	7.1	0.63	0.16	6.55	13.4	0.05	0.32	0.55	5.88	12.0	0.05	0.36	0.56
Russia	6.51	10.8	0.31	0.15	6.86	16.1	0.01	0.10	0.72	6.42	15.3	0.00	0.21	0.61
United Kingdom	6.78	12.8	0.34	0.42	6.65	13.5	0.01	0.00	0.84	6.22	14.1	0.02	0.00	0.88
Yugoslavia	6.63	9.9	0.51	0.20	7.00	14.6	0.00	0.00	0.74	6.31	14.3	0.00	0.07	0.66

*Notes:* For immigrant men, fraction married to “same immigrants” is the fraction of married men whose spouse is an immigrant from the same country; and fraction married to natives is the fraction of married men whose spouse is native born. For second-generation men and women, fraction married to “same immigrants” is the fraction of married people whose spouse is an immigrant from the same country as their father; fraction married to same 2nd generation is the fraction of married people whose spouse is second generation and whose father-in-law was born in the same country as their father; and fraction married to 3rd+ generation is the fraction of married people whose spouse is native born with native-born parents.

Asia nec are Asian countries other than those listed separately. Central/South America nec are countries in Central or South America not listed separately. Europe nec are European countries not listed separately, plus Australia and New Zealand. Caribbean/Africa/other includes countries in the Caribbean and Africa not listed separately, plus all other countries not included in other categories.

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