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Hispanic Americans in the Labor Market: Patterns over Time and across Generations

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ABSTRACT

Hispanic Americans in the Labor Market: Patterns over Time and across Generations*

This article reviews evidence on the labor market performance of Hispanics in the United States, with a particular focus on the US-born segment of this population. After discussing critical issues that arise in the US data sources commonly used to study Hispanics, we document how Hispanics currently compare with other Americans in terms of education, earnings, and labor supply, and then we discuss long-term trends in these outcomes. Relative to non-Hispanic Whites, US-born Hispanics from most national origin groups possess sizeable deficits in earnings, which in large part reflect corresponding educational deficits. Over time, rates of high school completion by US-born Hispanics have almost converged to those of non-Hispanic Whites, but the large Hispanic deficits in college completion have instead widened. Finally, from the perspective of immigrant generations, Hispanics experience substantial improvements in education and earnings between first-generation immigrants and the second-generation consisting of the US-born children of immigrants. Continued progress beyond the second generation is obscured by measurement issues arising from high rates of Hispanic intermarriage and the fact that later-generation descendants of Hispanic immigrants often do not self-identify as Hispanic when they come from families with mixed ethnic origins.

JEL Classification: J15, J31, I24

Keywords: Hispanic, immigrant, assimilation, earnings, education

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The 2020 US Census counted 62.1 million Hispanics, representing nearly 19 percent of the US population, and almost triple the 6.5 percent share in 1980 (Jones *et al.* 2021; Flores, Lopez, and Radford 2017). It is now more than two decades since Hispanics overtook Blacks to become the largest racial-ethnic minority group in the United States (Humes, Jones, and Ramirez 2011).

The rapid growth of the Hispanic population has received a substantial amount of research attention from economists and other social scientists. To a large extent, this research focuses on the integration, experiences, and impacts of *foreign-born* Hispanics. However, two-thirds of today's Hispanics were born in the United States, and over the past two decades, Hispanic population growth has come primarily from US births rather than from immigration (Krogstad, Passel, and Noe-Bustamante 2022). We believe that US-born Hispanics have been understudied to date and that this population is ripe for future research on a wide range of topics. The ultimate impacts of Hispanic immigration on the United States depend crucially on how the US-born children, grandchildren, and later descendants of the initial arrivals fare in this country. Consider, for example, the net fiscal impacts of US immigration: how do immigrant and native-born families compare in calculations of the taxes that they pay minus the government benefits and services that they receive? In short-term analyses, immigrants appear to be relatively costly, but their fiscal bottom line improves dramatically in longer-term, intergenerational analyses that incorporate the future contributions made by their US-born descendants (Smith and Edmonston 1997; Blau and Mackie 2017). These specific studies included immigrants from all countries of origin, but the point is especially applicable for Hispanics, who experience unusually large advances in education and earnings between the immigrant generation and the US-born

generations that follow (Cadena, Duncan, and Trejo 2015).

In this article, we offer a broad overview of the labor market performance of Hispanics, focusing primarily on men and women born in the United States. Two central questions frame our discussion. In terms of labor market skills and outcomes, what disparities persist between the descendants of Hispanic immigrants and other Americans? What are the sources of incomplete labor market integration for US-born Hispanics?

We start by highlighting critical issues that arise in the US data sources commonly used to study Hispanics; in particular, the survey responses that social science researchers use to identify Hispanics do not always match how the population describes itself. We then document how Hispanics currently compare with other Americans in terms of education, earnings, and labor supply. Next, we summarize long-term trends in the relative labor market status of Hispanics over the past half century. Finally, we consider evidence on the patterns of Hispanic progress across immigrant generations. Throughout, we emphasize important distinctions by national origin within the overall Hispanic population, draw attention to questions that are especially promising for further study, and note how future research could benefit from improvements in data collection to better understand this diverse group of people.

Identifying Hispanics in US Data Sources

The pan-ethnic label “Hispanic” refers to individuals who trace their origin or descent to Spain or to the 19 primarily Spanish-speaking countries of North, Central, and South America, along with the Caribbean.¹ Studies of labor market outcomes for US racial-ethnic groups

¹ Typically, the following 20 countries are considered as the origins of US Hispanics: Spain; the North American and Caribbean countries Mexico, Puerto Rico, Cuba, and the Dominican Republic; the Central American countries El Salvador, Guatemala,

commonly employ the large, nationally-representative microdata samples available from decennial US Censuses through the year 2000 and annual American Community Surveys (ACS) after 2000. Researchers can identify Hispanic immigrants using the information about each respondent's country of birth that has been collected starting with the 1850 Census (Humes and Hogan 2009).

However, it is much less straightforward to identify US-born individuals of Hispanic *ancestry* consistently and comprehensively through time. For Censuses before 1970, various pieces of available information (for example, countries of birth of the respondent and the respondent's parents, mother tongue, and having a Spanish surname) can imperfectly identify subsets of the Hispanic population (Gratton and Gutmann 2000). Imputed measures of Hispanic origin, based on methods developed by Gratton and Gutmann (2000), are available through the Integrated Public Use Microdata Series (IPUMS, Ruggles *et al.* 2022). While imperfect, these measures have facilitated research on the Hispanic population in earlier waves of the US Census (for example, Antman and Cortes, forthcoming).

The 1970 Census introduced the first question that allowed respondents to self-identify as Hispanic. Because this question was added at the last minute in response to political pressure and could not be pre-tested, it suffered from data quality problems that might have been avoided. For example, the wording of the Hispanic origin question led many non-Hispanic respondents living in the central and southern regions of the United States to mistakenly report that they were members of the Hispanic category "Central or South American" (Siegel and Passel 1979; Humes

Honduras, Nicaragua, Panama, and Costa Rica; and the South American countries Colombia, Ecuador, Peru, Argentina, Venezuela, Chile, Bolivia, Uruguay, and Paraguay (Gratton and Gutman 2000; Rumbaut 2006). The term "Latino" is most often used as a synonym for Hispanic, although sometimes Latino is short for "Latin American," which can also include individuals with origins in relevant countries without strong ties to the Spanish language, such as Brazil. As we will discuss, in many cases the "Hispanic" or "Latino" label does not reflect how these individuals describe their own ethnic identities (Gonzalez-Barrera 2020).

and Hogan 2009).

Starting with the 1980 Census, the Hispanic origin question adopted the improved format that it has maintained, with relatively minor changes, through later years. The 2019 American Community Survey, for example, first asks whether the respondent is “of Hispanic, Latino, or Spanish origin.” If the answer is yes, then a box is checked to indicate whether the specific Hispanic national origin group is Mexican or Mexican American, Puerto Rican, Cuban, or “another Hispanic, Latino, or Spanish origin.” People who check this last box are instructed to “print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.” Space is provided for this write-in response. Many other surveys and most contemporary empirical analyses of US-born Hispanics make use of this particular Hispanic origin question, or something very similar, to identify persons of Hispanic ancestry.

Hispanic Origin Versus Race

It is important to emphasize that this question about Hispanic origin is separate from the Census question about race that is typically used to identify other minority groups, such as Blacks, Asians, and American Indians. The Hispanic origin question and the race question collect independent information about racial/ethnic identity in the Census, American Community Survey, and many other surveys. In the Census and ACS, respondents are explicitly instructed to answer “BOTH” the question about Hispanic origin and the question about race, and they are told that “for this survey, Hispanic origins are not races.” According to federal standards for the collection of data on race and ethnicity, the Hispanic origin question provides information regarding ethnicity, which these standards consider to be a distinct concept from race (Humes, Jones, and Ramirez 2011). In line with this view, the detailed ACS instructions to respondents

state that Hispanics “may be of any race.”

However, many individuals see race and ethnicity as inextricably linked, and Hispanic respondents in particular may not see themselves reflected in the official response options available for the race question, which include White, Black or African American, American Indian or Alaska Native, several Asian categories, and “some other race” (where individuals can write in their own response) (US Census Bureau 2020). For example, the definition of the American Indian race category currently includes “original peoples of North and South America (including Central America),” but also suggests that individuals selecting that category maintain “tribal affiliation or community attachment” (Office of Management and Budget 1997; see Antman and Duncan 2021 for further discussion). Complicating matters further, the race and Hispanic origin questions are distinct from a separate question about ancestry. Antman (2022) provides further discussion of the complexities of racial and ethnic self-identification for the Hispanic population and the implications for research and policy.

In the 2010 Census, for example, 53 percent of Hispanics reported a race of “White,” but another 37 percent chose a race response deemed invalid by the Census Bureau. Typically, these individuals wrote in a Hispanic national origin group (like Mexican or Dominican) or a pan-ethnic Hispanic label (like Hispanic or Latino). In editing the data, the Census Bureau classifies such individuals as “some other race;” as a result, Hispanics made up 97 percent of the “some other race” population in the 2010 Census (Humes, Jones, and Ramirez 2011). Similar analysis of the 2020 Census indicates that “some other race” (again largely consisting of Hispanic individuals) is now the second-largest US racial group after White, raising calls for the race question to be modified (Wang 2021; Bahrampour 2021).

There are other consequential differences between the race and Hispanic origin questions

in the Census and the American Community Survey. For example, the race question has been asked since the first decennial Census in 1790, and therefore data for Blacks can be tracked for more than two centuries. In contrast, as noted above, the Hispanic origin question is barely 50 years old. In addition, beginning with the 2000 Census, the race question permits multiple responses; respondents are instructed to “mark one or more races” (Humes and Hogan 2009). The Hispanic origin question, however, continues to solicit and report only a single response for Hispanic national origins: for example, respondents cannot identify as having both Puerto Rican and Cuban ancestry.

Identifying Immigrant Generation

Because many US-born Hispanics are only a generation or two removed from their ancestors who first moved to this country, it is useful for researchers to distinguish Hispanics by their immigrant generation, where the first generation consists of the foreign-born immigrants themselves, the second generation consists of US-born individuals with at least one foreign-born parent, the third generation are US-born individuals with US-born parents and at least one foreign-born grandparent, and so on. To begin to make these distinctions requires information, at the very least, on the countries of birth of respondents and their parents. Such information is available in Census data from 1880-1970, but starting in 1980 the Census stopped asking about the countries of birth of respondents’ parents. As a result, in contemporary data from the decennial Census or the annual American Community Survey, adults can be distinguished by nativity—that is, foreign-born versus US-born—but it is not possible to make further distinctions with respect to immigrant generation among US-born adults.

In 1994, the Current Population Survey (CPS) began collecting information on the

countries of birth of respondents and their parents. As a result, this survey currently provides the best large-scale, nationally representative US data for investigating how outcomes vary by immigrant generation. In contemporary data from the CPS, Hispanic adults can be assigned to the first, second, and “third-plus” (that is, third and higher) generations. First-generation Hispanics were born in a Hispanic country. Second-generation Hispanics are US-born individuals with a parent born in a Hispanic country. Third-plus generation Hispanics are those who were born in the United States, have two US-born parents, and self-identify as Hispanic in response to the Hispanic origin question. Notice that first- and second-generation Hispanics are identified by a relatively objective question about birthplaces, whereas third-plus-generation Hispanics must subjectively identify as being Hispanic. We return to this point below when discussing how to interpret observed patterns across immigrant generations in these data.

Current Educational Attainment and Labor Market Status of Hispanics

We use data from the 2019 American Community Survey to describe the relative labor market status of Hispanics just prior to the onset of the COVID-19 pandemic.² We begin with educational attainment, because schooling is a fundamental determinant of economic success, social status, health, family stability, and life opportunities (Oreopoulos and Salvanes 2011; Hout 2012). In addition, information on education is available for all adults, whereas earnings data are available only for those currently working.

² All of the Census and American Community Survey microdata used in this article are from IPUMS-USA (Ruggles *et al.* 2022). The Current Population Survey microdata used later in the paper are from IPUMS-CPS (Flood *et al.* 2022).

Education

Among individuals ages 25-59 (including those residing in group quarters), Table 1 reports differentials, relative to US-born non-Hispanic Whites, in average years of schooling for selected groups defined by race-ethnicity and nativity.³ These calculations pool together men and women, but patterns are similar when the data are disaggregated by sex. The reported differentials are estimated by a least squares regression that controls for age and employs sampling weights. Among the US-born, Hispanics skew younger than other groups, with an average age in our sample of 38.0 compared with 42.4 for non-Hispanic Whites and 40.7 for non-Hispanic Blacks. Controlling for age in the schooling regression accounts for general trends in educational attainment across birth cohorts, and in particular it adjusts for the fact that older individuals grew up when people typically acquired less schooling than they have in recent years. Sampling weights help improve the precision and national representativeness of the estimates.

Hispanics as a group possess relatively low levels of educational attainment. Compared to US-born non-Hispanic Whites, Hispanic immigrants have a schooling deficit of over three years, and the corresponding deficit for US-born Hispanics is more than a year. Even among the US-born, average years of schooling of Hispanics trails that of Blacks by a quarter of a year. These aggregate statistics for Hispanics, however, conceal enormous diversity across national origin groups, particularly for the foreign-born. Mexican and Central American immigrants have schooling deficits exceeding four years, more than quadruple the corresponding gaps for foreign-

³ Hispanics and Hispanic national origin groups are identified from the Hispanic origin question in the American Community Survey, and non-Hispanic Blacks and non-Hispanic Whites are identified from the race question. Foreign-born individuals are those born outside of the United States. Here, we include as foreign-born those born in Puerto Rico and other US territories and outlying areas. The Hispanic national origin groups listed separately in Table 1 are those with the largest US populations; the residual category “Other Hispanic” captures only 5 percent of Hispanics.

born Cubans and South Americans. Among the US-born, Cubans and South Americans attain educational parity with non-Hispanic Whites, whereas other Hispanic national origin groups exhibit deficits clustered around one year. For schooling as well as for other outcomes, it is important to keep in mind that, because Mexican-origin individuals constitute half of Hispanic immigrants and two-thirds of US-born Hispanics (in the samples in Table 1), overall patterns for Hispanics will largely reflect those of this dominant national origin group.

Earnings

Table 2 presents analogous differentials in annual earnings, separately for men and women, where annual earnings include wage and salary income and (non-negative) self-employment income received over the previous twelve months. Here, the samples are restricted to individuals with positive earnings. The regressions that estimate these differentials use the natural logarithm of earnings as the dependent variable and include control variables for state of residence as well as for age. Hispanics are clustered geographically, with three-fifths of this population located in just four states in 2019: California (25.7 percent), Texas (19.2 percent), Florida (9.4 percent), and New York (6.2 percent) (Krogstad 2020). Controlling for state of residence in the earnings regressions helps to account for geographic variation in the cost-of-living and local economic conditions.

Earnings differentials potentially provide a more complete measure of labor market disparities than do educational differences, because earnings represent the market's valuation of a worker's entire package of abilities and attributes, including those for which data are often lacking (like family background or the quality of schooling). In addition, earnings differentials may capture discrimination and the unequal treatment of particular groups in the labor market.

At the annual level, earnings differentials also reflect differences between groups in the average number of hours worked per year.

Because the regressions estimating earning differentials employ the log of earnings as the dependent variable, the estimated differentials represent log point differences, which closely approximate percentage differences for differences on the order of 20 log points or less in absolute value. For larger differences, the implied percentage difference can be calculated as $[e^{(.01)x} - 1] \times 100$, where x is the log point difference. Foreign-born Hispanic men, for example, have an earnings deficit of 50 log points (39 percent) relative to US-born non-Hispanic White men, which is similar to the corresponding deficit of 52 log points (41 percent) for foreign-born Hispanic women relative to non-Hispanic White women. These earnings deficits are considerably smaller but still substantial for US-born Hispanics: 30 log points (26 percent) for men and 19 log points (17 percent) for women. By comparison, the earnings deficit for US-born Black men is 47 log points (37 percent). Among US-born men, therefore, Hispanics earn on average about one-fourth less than non-Hispanic Whites of the same age who live in the same state—a sizeable earnings disadvantage, but markedly smaller than the comparable deficit of 37 percent for Black men. Among US-born women, by contrast, earnings gaps relative to non-Hispanic Whites are similar for Hispanics (19 log points) and Blacks (17 log points).

Employed Hispanic men and women work about the same number of hours per year as their non-Hispanic White counterparts, so differentials in average weekly or hourly earnings are similar to those reported in Table 2 for annual earnings. The same is true for Black women, but for employed Black men, relatively fewer hours of work account for over a quarter of their annual earnings deficit.

A fundamental source of the earnings deficits shown in Table 2 are the education gaps

reported in Table 1. Among the US-born Mexican Americans, for example, controlling for years of schooling shrinks these annual earnings differentials by 57 percent (see Panel B of Figure 1 below). Education also plays a key role in explaining lower earnings for Blacks, but for Black men in particular this role is notably smaller, with their schooling gap accounting for only about a fifth of their earnings deficit. Several studies have noted the critical importance of shortfalls in education and other observable measures of skill in explaining the earnings disadvantage of Hispanics in general (Smith 2001; Duncan, Hotz, and Trejo 2006) and Mexican Americans in particular (Trejo 1997; Antecol and Bedard 2002).

Lessons for Research on Hispanics

Together, Tables 1 and 2 highlight several essential points about the current labor market standing of Hispanics. An obvious point, but one often neglected in media reports and sometimes even in academic analyses, is the crucial distinction between foreign-born and US-born Hispanics. Many Hispanic immigrants arrive in the United States with rudimentary levels of schooling and little or no knowledge of the English language, so it is not surprising that they usually earn substantially less than other Americans. Nonetheless, despite their low skills, Hispanic immigrants maintain high rates of paid employment (Cadena, Duncan, and Trejo 2015). Compared to their immigrant ancestors, US-born Hispanics experience large improvements in educational attainment and earnings. Analyses that pool together foreign-born and US-born Hispanics create misleading portraits of Hispanic labor market status.

Another important point is the advisability, whenever possible, of disaggregating Hispanics by national origin. While Hispanic national origin groups share the same ancestral language and perhaps some cultural traditions, they differ widely in terms of the source country

environments they left behind, their migration histories and context of arrival (e.g., as political refugees, undocumented immigrants, or legal admissions), where they concentrate geographically within the United States, skin color and racial identity, and myriad other factors (Rumbaut 2006). In light of these fundamental differences, the diversity of educational and earnings outcomes across national origin groups reported in Tables 1 and 2 is perhaps unsurprising.

Finally, Tables 1 and 2 remind us of the substantial labor market disparities faced by Hispanics today, even among those who were born and raised in the United States.⁴ Substantial educational deficits exist for US-born Hispanics in most national origin groups, and these educational deficits account for much of the corresponding earnings gaps. Consequently, there could be large benefits from research that improves our understanding of why schooling remains persistently low for US-born Hispanics and what interventions could raise their educational attainment. It would also be valuable to increase our understanding of other sources of Hispanic earnings gaps besides schooling deficits. Although one of the earliest audit studies of hiring discrimination focused on young Hispanic men (Kenney and Wissoker 1994), there has been relatively little work since then using research designs that can credibly distinguish discrimination from other potential sources of labor market disparities for Hispanics. An influential study by Bertrand and Mullainathan (2004) estimates hiring discrimination against African Americans by responding to help-wanted ads with fictitious resumes, where the names on the resumes have been randomly assigned to signal the race of the applicant. This approach could be adapted to learn more about hiring discrimination against Hispanics.

⁴ More recent data tracking labor market outcomes during the COVID-19 pandemic suggest that these disparities were exacerbated by the pandemic and associated lockdowns which hit Hispanic households especially hard due to a variety of factors including their occupations and industries of employment, as well as their preexisting socioeconomic vulnerabilities (Gould, Perez, and Wilson 2020).

Trends over the Past Half Century

Numerous studies have tracked long-term labor market trends for African Americans going back to before World War II (for example, Smith and Welch 1989; Collins and Margo 2006; Neal 2006; Bayer and Charles 2018), but—with the notable exception of Smith (2003, 2006)—there is a dearth of comparable empirical research for Hispanics. In part, this may reflect data limitations discussed earlier: the Hispanic origin question that can identify US-born Hispanics was not introduced until the 1970 Census and did not become widely used until the 1980 Census. In this section, we summarize trends in the relative educational attainment and earnings of Hispanics over the past 50 years.

We will focus on US-born Mexican Americans, rather than on Hispanics more broadly defined. Given the sizeable differences in education and earnings across national origin groups that were documented in the previous section, overall trends for Hispanics confound shifts over time in the national origin composition of this population with the changes taking place within specific national origin groups. Restricting the sample to Mexican Americans, the largest Hispanic national origin group, avoids this difficulty. Also, the ambiguities discussed earlier with the Hispanic origin question in the 1970 Census are less problematic for Mexican Americans. Nonetheless, the basic trends for all Hispanics turn out to be similar to those reported here for Mexican Americans.

Education Trends

For US-born men ages 25-59, Figure 1 reports schooling differentials (Panel A) and log

annual earnings differentials (Panel B) for Mexican Americans and Blacks (relative to non-Hispanic Whites) at decade intervals from 1970 through 2019. The schooling differentials control for age and the earnings differentials also control for state of residence and sometimes for years of education. To minimize potential biases in the earnings differentials arising from selective labor force participation, this figure only reports calculations for men. The education and earnings trends for Mexican-American women, however, are similar to those shown for Mexican-American men.

The top panel of Figure 1 documents large educational gains for US-born Mexican-American and Black men during the past half century. Over this period, Mexican Americans closed their schooling gap relative to non-Hispanic White men by 2.1 years, while the corresponding gain for Blacks was 1.6 years. For each group, these gains erase more than 60 percent of their initial educational deficit. For each group, about 80 percent of the total gains were realized within the initial 20-year period from 1970-1990, with a much slower rate of educational convergence evident over the most recent 30 years.

These educational gains for Mexican Americans and Blacks are driven by relative improvements in their rates of high school completion. In 1970, the age-adjusted rate of high school completion for Mexican-American men was 34 percentage points below that of non-Hispanic White men, but this deficit shrank steadily across decades down to 10 percentage points in 2019. For Black men, the corresponding disparity in high school completion declined from 29 percentage points in 1970 to 6 percentage points in 2019. Examining data by birth cohort and not counting GED recipients as high school graduates, Murnane (2013) also reports evidence of relative improvement in high school graduation for Hispanics and Blacks.

At the upper end of the educational distribution, however, college completion rates have

diverged rather than converged. All racial-ethnic groups have experienced rapid growth over the past 50 years in the share of adults completing a bachelor's degree, but this growth has been more rapid for non-Hispanic Whites than for Mexican Americans and Blacks. Among US-born men, for example, the Mexican-American deficit in college completion (relative to non-Hispanic Whites) widened from 15 percentage points in 1970 to 20 percentage points in 2019. For Black men, this deficit increased from 13 to 18 percentage points over the same five decades. Finding a way to reverse these patterns is essential if Hispanic and Blacks are to continue closing their educational gaps relative to other Americans. Bleemer (2022) provides evidence that, prior to their elimination in 1998, affirmative action policies at the University of California system benefited Hispanic students by increasing their access to better-quality colleges and thereby raising graduation rates and boosting future earnings. The future of affirmative action policies in college admissions, currently being debated before the US Supreme Court, is thus highly relevant to the evolution of these disparities. These issues have become more urgent due to the COVID-19 pandemic, which has reduced college enrollment rates for all racial and demographic groups (Sedmak 2021), but perhaps especially so for Hispanic students (Ahn and Dominguez-Villegas 2022).

For Blacks, a substantial research literature has described their long-term educational progress and the sources of this progress (Collins and Margo 2006; Neal 2006). This work has documented gains in both the quantity and quality of schooling received by Blacks (Smith and Welch 1989; Card and Krueger 1992), and it has also assessed the impacts of specific interventions such as court-ordered school desegregation (Guryan 2004; Reber 2010; Lutz 2011) and philanthropic efforts to improve school access and resources (Aaronson and Mazumder 2011). In contrast, relatively little research explores these issues for Hispanics.

Again, this lack of research may stem in part from data challenges which make it difficult to identify the Hispanic population in pre-1970 Censuses. In addition, there is a lack of official documentation surrounding the educational treatment of Hispanic children in US schools. Historical accounts document systemic discrimination and segregation of Hispanic children throughout many counties in the US Southwest in the early 20th century (Rangel and Alcala 1972; Wollenberg 1976), but official records are notably absent. Despite these challenges, Antman and Cortes (forthcoming) estimate the long-run impacts on Hispanic educational attainment of the court-ordered end to *de jure* segregation of Hispanic school children in California which came about with the 1947 *Mendez v. Westminster* (161 F.2d 774 [9th Cir. 1947]) decision. Antman and Cortes find that desegregation resulted in about 0.9 additional years of schooling—an almost 9 percent increase relative to educational attainment for Hispanic cohorts who started school in the segregated era in counties where segregation was most likely to have occurred. The parallels with the 1954 *Brown v. Board of Education of Topeka* (347 U.S. 483 [1954]) decision applying to African American school segregation are significant, although there is a relative abundance of official records documenting segregation for Blacks in the US South which facilitates research on this particular group. Much remains to be learned about the factors underlying Hispanic educational progress.

Earnings Trends

Panel B of Figure 1 presents log annual earnings differentials for US-born Mexican-American and Black men (relative to non-Hispanic White men) over the past five decades. Two varieties of earnings differentials are displayed. The solid plot lines show earnings differentials that condition on age and state of residence, whereas the dashed plot lines show earnings

differentials that also control for years of education.

First consider the earnings differentials that do not condition on education. In 1970, the earnings of Mexican-American workers trailed the earnings of non-Hispanic White workers by 44 log points, but this gap had closed to 36 log points by 1980. There was little change in the earnings deficit over the next two decades (1980-2000) and then a gradual, modest decline from 36 to 33 log points during the most recent period (2000-2019). At each point in time, the earnings deficits for Black men exceeded those for Mexican-American men by at least nine log points. After benefitting from sizeable reductions in their earnings deficits between 1970 and 1980, both groups experienced little or no earnings convergence with non-Hispanic White men over the subsequent 40 years.

In Figure 1, why did the educational convergence shown in Panel A fail to produce more earnings convergence in Panel B? The US wage structure has changed dramatically since 1980, with large increases in overall earnings inequality and sharply rising returns to labor market skills, including education (Autor, Katz, and Kearney 2008). As Mexican-American and Black men were reducing their educational deficits relative to non-Hispanic White men, the labor market penalty associated with a given deficit was increasing, and these offsetting forces combined to produce little net change in the corresponding earnings deficits. In effect, Mexican-American and Black workers have been swimming upstream against these ongoing changes in the US economy. Bayer and Charles (2018) provide a detailed analysis of how these and other forces have affected the relative earnings of Black men since 1940. Comparable analyses for Mexican Americans or other Hispanic groups have yet to be done.

Let us now turn to the earnings differentials in Panel B of Figure 1 that condition on years of education—the dashed plot lines. Over the past 50 years, these schooling-adjusted

earnings deficits (relative to non-Hispanic Whites) have hovered within a relatively narrow range for both Mexican Americans (14-18 log points) and Blacks (34-40 log points), resulting in deficits that are always less than half as large for Mexican-American men as for Black men. In addition, comparing the dashed lines that condition on schooling with the solid lines that do not, we see that controlling for education reduces earnings deficits to a much greater extent for Mexican Americans than for Blacks, as was mentioned earlier. In summary, for both Mexican-American and Black men, earnings disparities relative to non-Hispanic White men have persisted with only modest declines over the past five decades. These earnings deficits are substantially smaller for Mexican Americans than for Blacks, even more so after accounting for the corresponding schooling deficits. Nonetheless, the persistence of sizeable, unexplained earnings deficits for Mexican Americans and other Hispanic national origin groups deserves further attention.

Another question that merits further study is the increasing labor force activity of US-born Mexican-American women. Among all native-born women ages 25-59, for example, in 1980 the percent of Mexican Americans who had worked in the previous year was 8 percentage points lower than that of non-Hispanic Whites, after controlling for age and state of residence. This differential shrank to 3 percentage points by 2019, with most of the decline occurring after 2000. Moreover, within the sample of women who worked in the previous year, similar calculations reveal that in 1980 Mexican Americans averaged 5 percent fewer annual hours of work than non-Hispanic Whites, but by 2019 they averaged 2 percent *more* annual hours of work than non-Hispanic Whites. Over this period, Mexican-American women experienced even larger employment and work hours gains relative to Black women. Therefore, among US-born women, Mexican Americans have increased their labor force activity on both the extensive and intensive

margins, and remaining differences in employment and work hours across racial-ethnic groups are small compared to 30 or 40 years ago. More generally, distinctions within the Hispanic population are again critical for research in this area, because labor supply varies considerably between US- and foreign-born Hispanics, as well as between documented and undocumented immigrants. For example, Borjas (2017) finds higher labor force participation rates for undocumented immigrant men and lower labor force participation rates for undocumented immigrant women, relative to the non-Hispanic White population.

California and Texas

For Mexican Americans, California and Texas are important regional focal points, with over two-thirds of the US-born population originating in just these two states. Figure 2 highlights historical differences in educational attainment between Mexican Americans born in California and those born in Texas. For these calculations, we pool together microdata from the American Community Survey for 2006-2019, as well as from the decennial Censuses of 1970-2000, and we estimate how average completed years of schooling has evolved across cohorts defined by birth year.

Panel A of Figure 2 displays the resulting estimates for men, and Panel B shows the estimates for women. For most of the twentieth century, schooling levels were much lower for Mexican Americans born in Texas than for those born in California. Among Mexican Americans born in the early 1920s, Californians average three more years of schooling than do Texans. This enormous initial gap steadily narrows over time, however, until it disappears for those born in the mid-1970s and later. Historically, schooling levels for non-Mexicans were also somewhat lower for those born in Texas; nonetheless, even when comparing Mexican Americans

to others within the same state of birth, the resulting educational deficits of Mexican Americans relative to non-Hispanic Whites (or relative to Blacks) were much larger for Texans than for Californians. Kosack and Ward (2020) report a similar finding with respect to occupational standing in 1940. Relative to non-Mexican Whites, Mexican Americans were particularly disadvantaged in Texas compared with California.

What were the sources of the large initial educational disadvantage for Mexican Americans born in Texas, and why did this disadvantage fade? These questions are ripe for further study, perhaps by taking advantage of the full-count data that have become available for the 1940 and earlier US Censuses (Ruggles et al. 2021). As noted earlier, unlike contemporary Census data that only report country of birth for the respondent, Censuses up through 1970 also report the countries of birth of each respondent's parents. This information enables identification of second-generation Mexican-American adults (US-born individuals with a parent born in Mexico). Merging the information of parents and their children residing in the same household enables identification of third-generation Mexican-American children (US-born individuals with US-born parents and a grandparent born in Mexico).

Previous research has noted the historical schooling disadvantage of Texas-born Mexican Americans (Grebler, Moore, and Guzman 1970; Bean, Brown, and Bachmeier 2015), and historians have documented that, until the implementation of Civil Rights reforms, Mexican Americans in Texas often attended schools that were more segregated and given fewer resources than schools that Mexican Americans attended in other states (Rangel and Alcala 1972; Montejano 1987). Preliminary analyses with 1930 and 1940 Census data suggest a related factor that might be important. School enrollment rates were much lower for Mexican-American children born in Texas than for those born in California, and enrollment rates were especially

low for Texas-born Mexican Americans residing on farms. Historical accounts highlight the particularly severe obstacles to schooling faced by Mexican-American children in Texas farm areas (Montejano 1987). In 1940, about a quarter of Texas-born Mexican-American children lived on farms, compared with only 10 percent of their California-born counterparts. Therefore, the movement away from farms (and farm schools) that accelerated after World War II may have produced especially large educational gains for Texas-born Mexican Americans. More generally, disproportionately large shares of Mexican Americans—US-born individuals as well as immigrants—worked in agriculture and lived in farm communities during the first half of the 1900s (Gratton and Merchant 2015). As a result, the dramatic decline in agricultural employment and the transformation of rural communities that took place throughout the century potentially impacted Mexican Americans in a variety of significant ways. These topics deserve further study.

Generational Progress

Most Hispanics are no more than a generation or two removed from their family's migration to the United States. For example, based on data from the Current Population Survey described in more detail below, over half of Hispanics ages 18-59 are first generation (that is, foreign-born immigrants) and another 23 percent are second generation (that is, the US-born child of an immigrant). Only 23 percent of Hispanics are third generation or higher (that is, US-born individuals with US-born parents, so that the initial family member immigrating to the United States was a grandparent or earlier ancestor). By contrast, 91 percent of non-Hispanic Whites are third generation or higher. As discussed earlier, US-born Hispanics exhibit

substantial improvements in schooling and earnings relative to Hispanic immigrants, but large socioeconomic disparities remain between US-born Hispanics and non-Hispanic Whites. Given the magnitude of the initial human capital deficits possessed by most Hispanic immigrants, it may take their U-S-born descendants more than one generation to catch up. Does continued progress across immigrant generations become evident when US-born Hispanics are distinguished by how many generations their family has lived in this country?

Education and Immigrant Generation

To shed light on this question, we turn to monthly data from the Current Population Survey from 2003-2019.⁵ As mentioned previously, a key feature of this data source is that, starting in 1994, it includes information about parental countries of birth that is currently missing from the Census and the American Community Survey. As a result, adult respondents in CPS data can be assigned to three categories of immigrant generation: first, second, and third-plus generation (that is, third or higher generation). These generation categories can be further disaggregated by ethnicity and race, with Hispanics and Hispanic national origin groups identified using the Hispanic origin question, and non-Hispanic Blacks and non-Hispanic Whites identified from the race question.

Table 3 shows how average years of schooling varies with immigrant generation for Hispanics overall and also for the Mexican national origin group. For comparison purposes,

⁵ Specifically, we use outgoing rotation group microdata from the Current Population Survey. We start the sample in 2003 to coincide with the introduction of a revised CPS questionnaire that improved the quality of the data collected on Hispanic origin (see the appendix in Duncan and Trejo 2016). To avoid duplicate observations on a given individual, we use only data from the first time a household appears in the outgoing rotation group samples (that is, only data from the fourth month that a household appears in the CPS sample). The sampling universe for the CPS is the civilian noninstitutionalized population of the United States, which can create biases for groups with relatively high rates of incarceration, such as young Black males (Pettit 2012). The data from the Census and American Community Survey used in previous sections include people living in group quarters such as prisons, and therefore these data mitigate such biases.

Table 3 also reports average schooling for non-Hispanic White and non-Hispanic Blacks in the third-plus generation. Panel A presents these statistics separately for men and women ages 25-59. Because the national origin composition of the Hispanic population differs significantly across generations, we focus on the results for the Mexican national origin group. In general, however, the patterns are similar for Hispanics overall.

For both men and women, Panel A of Table 3 indicates that educational attainment is more than three years higher for second-generation Mexican Americans than for their first-generation counterparts. Progress seems to stall after the second generation, however, with no further improvement for the third-plus generation. Third-plus-generation Mexican Americans have schooling deficits relative to non-Hispanic Whites of more than a year, and they also maintain significant deficits relative to Blacks (of more than a quarter of a year for men and almost half a year for women). Analyses of how earnings vary with immigrant generation for Hispanics overall, and for Mexicans in particular, reveal a pattern similar to what Panel A of Table 3 shows for education: much higher earnings for the second generation compared with the first, but minimal additional gains beyond the second generation, resulting in substantial earnings deficits for third-plus-generation Hispanics and Mexican Americans relative to non-Hispanic Whites (Duncan and Trejo 2018).

Empirical patterns such as these have prompted lively debates among social scientists about Mexican Americans' prospects for upward socioeconomic mobility (for example, Alba, Kasinitz, and Waters 2011; Alba, Jimenez, and Marrow 2014; Haller, Portes, and Lynch 2011a, 2011b; Park, Myers, and Jimenez 2014; Bean, Brown, and Bachmeier 2015; Ortiz and Telles 2017). Huntington (2004) voices an especially pessimistic view on this issue. He argues that several factors retard the pace of integration by Hispanic immigrants and their descendants today

as compared with the European immigrants who arrived in the past. In particular, Huntington cites the size and persistence of immigration flows from Mexico and other Spanish-speaking countries, the geographic concentration of where Hispanics settle within the United States, and the ease of return and repeat migration afforded by Mexico's close proximity. According to Huntington, these unique features of Hispanic immigration discourage assimilation and instead foster the growth of Spanish-speaking enclaves where immigrants and their descendants can live and work without being forced to learn English or to Americanize in other important ways. Contrary to Huntington's thesis, however, is evidence of pervasive linguistic assimilation for Hispanics by the third generation. For example, among third-generation Mexican Americans living in Southern California, 96 percent of such individuals prefer to speak English rather than Spanish at home, and only 17 percent retain the ability to speak fluent Spanish (Rumbaut, Massey, and Bean 2006).

Moreover, the evidence of educational stagnation for Mexican Americans after the second generation, as displayed in Panel A of Table 3, suffers from at least two serious shortcomings. First, cross-sectional comparisons of immigrant generations can be misleading because they do a poor job of matching cohorts of parents and grandparents in earlier generations with their descendants in later generations (Smith 2003, 2006). To address this issue, Panel B of Table 3 reports separate calculations for two specific age groups: 25-34 and 50-59. Because these age groups are 25 years apart, the older age group from a particular immigrant generation potentially represents the parental cohort for the younger age group in the next generation. For example, the cohort of immigrant men ages 50-59 includes fathers of the second-generation cohort of sons ages 25-34. Under the assumption that educational attainment does not change much after age 25, comparisons between the relevant age/generation groups approximate

intergenerational changes between cohorts of parents and children. In Panel B of Table 3, such comparisons are made by moving northeast between the connected cells with similar shading. It is important to note that comparisons of this type between the first and second generations will more closely approximate changes between cohorts of parents and children than do the corresponding comparisons between the second and third-plus generations, because the third-plus-generation group includes some individuals who are fourth generation or higher and therefore not the child of a second-generation parent.

In Panel B of Table 3, we begin to see signs of educational progress for Mexican Americans after the second generation. For men, these gains are about a quarter of a year: that is, average years of schooling of 12.71 years for the younger cohort of third-plus-generation Mexican Americans compared with 12.45 years for the older cohort of second-generation Mexican Americans. For women, the analogous gains are considerably larger at four-fifths of a year. For both men and women, the corresponding educational improvement between first- and second-generation Mexican Americans now exceeds four years, larger than the cross-sectional improvement of slightly more than three years shown in Panel A of Table 3. Still, despite these generational advances, young third-plus-generation Mexican Americans continue to trail the average schooling of their non-Hispanic White peers by more than a year. Research on educational achievement deficits for Hispanics by immigrant generation is consistent with this pattern (Schneider *et al.* 2006). More research is needed to understand the underlying causes of this phenomenon, which may require greater availability of detailed educational data across generations.

Ethnic Attrition

A second important limitation of the evidence suggesting generational stagnation among Mexican Americans arises from the difficulty of identifying later-generation individuals. As noted previously, the first- and second- generations can be identified in the Current Population Survey using only information about the countries of birth of the respondent and his parents (for example, second-generation Mexican Americans are US-born individuals with a parent born in Mexico). Similar to virtually all large-scale, nationally-representative US surveys, however, the CPS does not collect information about the countries of birth of the respondent's grandparents or earlier ancestors. Therefore, in order for a third-plus-generation individual to be identified as Mexican American, the individual must answer the Hispanic origin question in the following way: they must first affirm that they are "of Hispanic, Latino, or Spanish origin," and then they must indicate that the specific Hispanic group they "most closely identify with" is "Mexican" (or "Mexican American" or "Chicano").

In fact, many US-born descendants of Hispanic immigrants fail to identify as Hispanic in response to a question about Hispanic origin of the type asked in the Census and other surveys. The Pew Research Center administered surveys designed to measure such "ethnic attrition" among Hispanics (Lopez, Gonzalez-Barrera, and Lopez 2017). The findings reveal sizeable ethnic attrition among later-generation Hispanics. The percentage of individuals with Hispanic ancestry who fail to identify as Hispanic rises sharply across immigrant generations from just 3 percent for the first generation and 8 percent for the second generation to 23 percent for the third generation and 50 percent for those who are fourth generation or higher. Analyzing 2003-2013 data from the Current Population Survey, Duncan and Trejo (2017) report similar rates of Hispanic ethnic attrition for first- and second-generation adults and third-generation children.

For children living with both parents, these data can identify the third generation objectively from information about own, parental, and grandparental countries of birth that can be obtained by linking records between each child and his parents.

Not only is there substantial ethnic attrition among later-generation Hispanics, but this attrition is strongly selective on socioeconomic attainment (Duncan and Trejo 2007, 2011, 2017) and health (Antman, Duncan, and Trejo 2016, 2020). Both direct and indirect evidence indicate that the later-generation descendants of Hispanic immigrants who continue to self-identify as Hispanic come from less advantaged family backgrounds and have much lower levels of attainment than their counterparts who no longer self-identify as Hispanic. This pattern of substantial and selective ethnic attrition prevails for Hispanics overall, and also for Mexican Americans and other Hispanic national origin groups. As a result, analyses that rely on the Hispanic origin question or similar measures of subjective self-identification to detect third-plus-generation Hispanics will understate the socioeconomic achievement of this population. Table 3 suffers from this bias and so do almost all previous empirical studies of generational progress for Hispanics overall and for specific Hispanic national origin groups. Although available evidence makes clear the direction of this bias, data limitations have made it difficult to assess the magnitude of the bias. Nevertheless, findings from both historical (Kosack and Ward 2020; Duncan and Trejo 2022) and contemporary data (Duncan and Trejo 2011; Duncan, Grogger, Leon, and Trejo 2020) suggest that ethnic attrition produces sizeable downward bias in standard measures of attainment for Hispanics in the third generation and beyond.⁶

⁶ Apart from self-identification in response to the Hispanic origin question, other potential indicators for individuals with Hispanic ancestry include having a Spanish surname, growing up in a Spanish-speaking household, and being able to speak Spanish. Within the Hispanic-origin population, however, these alternative indicators are strongly and inversely related to measures of assimilation such as intermarriage and English language ability. As a result, these indicators identify a relatively disadvantaged subset of Hispanics and generate downward-biased estimates of attainment, much in the same way as we have described for when Hispanic self-identification is used for this purpose.

Intermarriage

For Hispanics and other racial-ethnic groups, intermarriage is a fundamental source of ethnic attrition. Individuals with Hispanic ancestry on both mother's and father's side almost always self-identify as Hispanic, regardless of generation (Duncan and Trejo 2007, 2011, 2017). The overwhelming majority of ethnic attrition is among individuals with mixed racial-ethnic origins. Rates of intermarriage between Hispanics and other groups rise sharply with immigrant generation, and so do rates of ethnic attrition, in part because children produced by Hispanic intermarriages have mixed racial-ethnic origins and are therefore less likely to self-identify as Hispanic. Moreover, because intermarried Hispanics and their spouses possess large advantages in education, English proficiency, and earnings relative to their counterparts in endogamous Hispanic marriages, this positive selectivity of Hispanic intermarriage drives the positive socioeconomic selectivity of Hispanic ethnic attrition, ultimately creating downward bias in standard measures of attainment for later-generation Hispanics (Duncan and Trejo 2007, 2011, 2017).

Figure 3 shows how intermarriage rates vary with immigrant generation for Hispanics, and for comparison, Asians and third-plus-generation Blacks. These calculations employ the 2003-2019 data from the Current Population Survey previously used in Table 3. Panel A of Figure 3 displays intermarriage rates for married men ages 25-59 whose wives are at least age 18 and who live in the same household as their husband. Panel B of Figure 3 reports intermarriage rates for married women with the analogous sample restrictions. The intermarriage rates shown here represent the percent of currently married individuals whose major racial-ethnic category differs from that of their spouse. For example, a Hispanic husband with a non-Hispanic wife is

defined to be intermarried, regardless of the immigrant generations of the husband and wife. The samples for Figure 3 exclude individuals with same-sex spouses.

For Hispanic men, intermarriage rates increase dramatically across immigrant generations, from 7 percent for the first generation to 28 percent for the second generation and 38 percent for the third-plus generation. Within each generation, intermarriage rates for Hispanic women are similar to those for men. In part, the very low rates of intermarriage for Hispanic immigrants in Figure 3 arise because many of these individuals married before coming to the United States (Passel, Wang, and Taylor 2010).

Compared to Hispanics, intermarriage patterns differ for Asians in two ways. First, among Asians, intermarriage rates in every generation are about ten percentage points higher for women than for men. In addition, Asian intermarriage rates rise sharply between the first and second generations but show little further increase between the second and third-plus generations. Despite these differences, intermarriage rates in the third-plus generation are of comparable magnitude for Hispanics (38 percent for both men and women) and Asians (32 percent for men and 42 percent for women). Notably, intermarriage is much more common for US-born Hispanics and Asians than it is for third-plus-generation Blacks (16 percent for men and 7 percent for women). Passel, Wang, and Taylor (2010) and Livingston and Brown (2017) provide further discussion of these and related intermarriage patterns.

Frequent intermarriage by US-born Hispanics has significant implications. Social scientists have long regarded intermarriage as a key indicator of social integration by minority racial-ethnic groups, particularly for groups with recent immigrant origins (Gordon 1964; Alba and Nee 2003), and so the relatively high rates of intermarriage by third-plus-generation Hispanics provide important evidence of such integration. In addition, by creating multiple and

often weakened ethnic attachments for future generations (Hout and Goldstein 1994, Perlmann and Waters 2007), intermarriage increases ethnic attrition and the resulting biases in measuring socioeconomic progress across immigrant generations (Duncan and Trejo 2017).

Further calculations from these same data illustrate the strong positive selectivity of Hispanic intermarriage with respect to educational attainment that has been found in previous research (Duncan and Trejo 2007, 2011, 2017). For example, among married men and women who are third-plus-generation Hispanics, average schooling is more than a year greater for those with non-Hispanic spouses than for those with Hispanic spouses. Moreover, this educational gap is even larger between the corresponding spouses—that is, between the non-Hispanic spouses of intermarried Hispanics and the Hispanic spouses of endogamously-married Hispanics. Having better-educated parents creates educational and other advantages for the children produced by Hispanic intermarriages, and these children also are more prone to ethnic attrition than are children from endogamous Hispanic marriages. In this way, the positive educational selectivity of Hispanic intermarriage generates the corresponding positive selectivity observed for Hispanic ethnic attrition.

Recent advances in linking parents and children (and sometimes also grandparents) across historical Censuses (Kosack and Ward 2020; Ward 2020; Abramitzky et al. 2021b) and in creating similar links using more recent Census or American Community Survey data and tax records (Chetty et al. 2020; Abramitzky et al. 2021b; Lowrey et al. 2021) are very promising developments for studying progress across immigrant generations. By providing information on the countries of birth of grandparents and possibly earlier ancestors, such linkages enable estimates of intergenerational mobility for Hispanics and other immigrant groups that mitigate problems associated with selective ethnic identification. However, these data remain subject to

limitations. For example, with historical Census data, cross-generation linkage rates are typically low, linked samples are not representative, and surname changes upon marriage make it difficult to link women (Bailey et al. 2020; Abramitzky et al. 2021a). Modern linkages between Census data and tax records omit undocumented immigrants and their descendants (Chetty et al. 2020; Abramitzky et al. 2021b), a particularly unfortunate omission for studying Hispanics. Despite such caveats, it is interesting to note that, using contemporary data, Chetty et al. (2020) estimate rates of intergenerational mobility (between parents and children) for Hispanics that are close to those for non-Hispanic Whites, and as a result the relative income disadvantage of Hispanics narrows across generations. In contrast, estimated rates of intergenerational mobility are much lower for Blacks and American Indians, creating income disparities for these groups that persist across generations.

Conclusion

Hispanics now comprise nearly one-fifth of the US population. One-third of Hispanics are foreign-born immigrants, and this group has attracted a large amount of attention from both researchers and policymakers, not just because of the size and rapid growth of this population, but also because most Hispanic immigrants arrive in the United States with relatively low skills and as a result earn substantially less than other Americans. On the bright side, Hispanic immigrant men have high rates of employment, and the lower earnings received by Hispanic immigrant workers seems largely to reflect their low levels of human capital (Duncan, Hotz, and Trejo 2006). Promising work in this area has uncovered other sources of earnings deficits for Hispanic immigrants. For example, recent research suggests that immigration enforcement

policies have deleterious impacts on labor market outcomes for undocumented Hispanic immigrant workers (Amuedo-Dorantes and Antman 2022; East et al. forthcoming). Still, further research is needed in this area to better understand what drives earnings differentials, and the extent to which they may reflect bias and discrimination.

This article has focused on the other two-thirds of Hispanics: those who were born in the United States and are the children, grandchildren, and later descendants of previous Hispanic immigrants. In some ways, their situation is not unlike that faced by descendants of the unskilled Italian and Irish immigrants who arrived here in large numbers a century or more ago. Confirming the findings of earlier work, recent studies using better data have documented large generational advances in education and earnings for the descendants of European immigrants that arrived in the late 1800s and early 1900s (Abramitzky et al. 2021b; Lowrey et al. 2021). Are the US-born descendants of Hispanic immigrants experiencing this same kind of upward mobility? The US-born children of Hispanic immigrants manage to erase large portions of the enormous schooling and earnings deficits that their foreign-born parents experienced relative to other Americans, but substantial disparities remain for second-generation Hispanics. Because of the size of the initial deficits faced by Hispanic immigrants, it is understandable that complete convergence does not take place in the second generation.

Do third-generation Hispanics make further progress? The answer remains murky. Few data sets allow for direct identification of the grandchildren of Hispanic immigrants, so empirical work on this issue typically must settle for using a “third-plus” generation consisting of US-born individuals who have two US-born parents and who also self-identify as Hispanic. Defined in this way, third-plus-generation Hispanics exhibit only modest gains over the second generation, and large gaps in education and earnings persist between third-plus-generation Hispanics and

other Americans. However, this way of defining third-plus-generation Hispanics misses a sizeable and selective portion of the target population, because many later-generation descendants of Hispanic immigrants fail to self-identify as Hispanic. Moreover, Hispanic “ethnic attrition” disproportionately occurs among individuals with higher socioeconomic attainment. The bottom line is that later-generation Hispanics are likely doing better than previous research suggests, but how much better is hard to say at this point.

Future research would benefit from better data documenting generational status, language, race, and other differences among the large and diverse population of Hispanics. For example, skin color may affect Hispanic self-identification and be correlated with socially perceived race as well as with individuals’ experiences of discrimination (Noe-Bustamante *et al.* 2021; Antman 2022). A very promising development, however, is that recent progress in creating data sets that link family members across generations has the potential to provide much improved estimates of the socioeconomic attainment of later-generation Hispanics.

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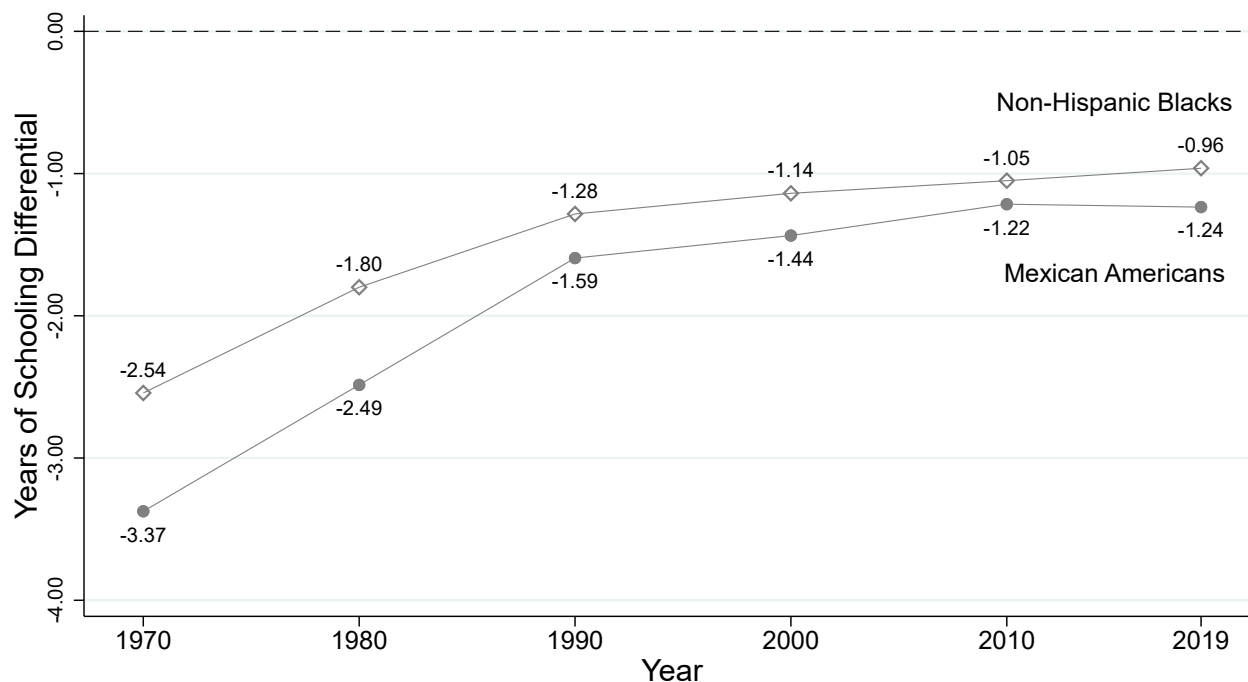
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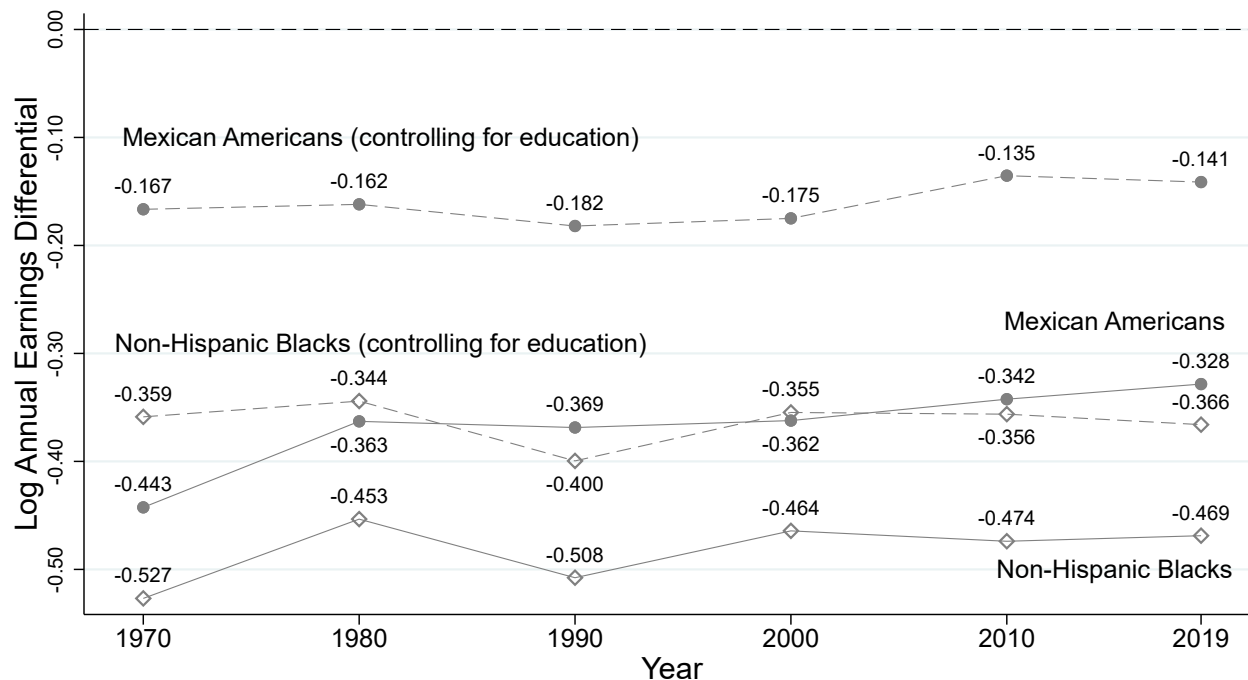
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Figure 1: Schooling and Earnings Differentials (Relative to US-Born Non-Hispanic Whites) for US-Born Mexican-American and Black Men, 1970-2019

A. Schooling Differentials



B. Earnings Differentials



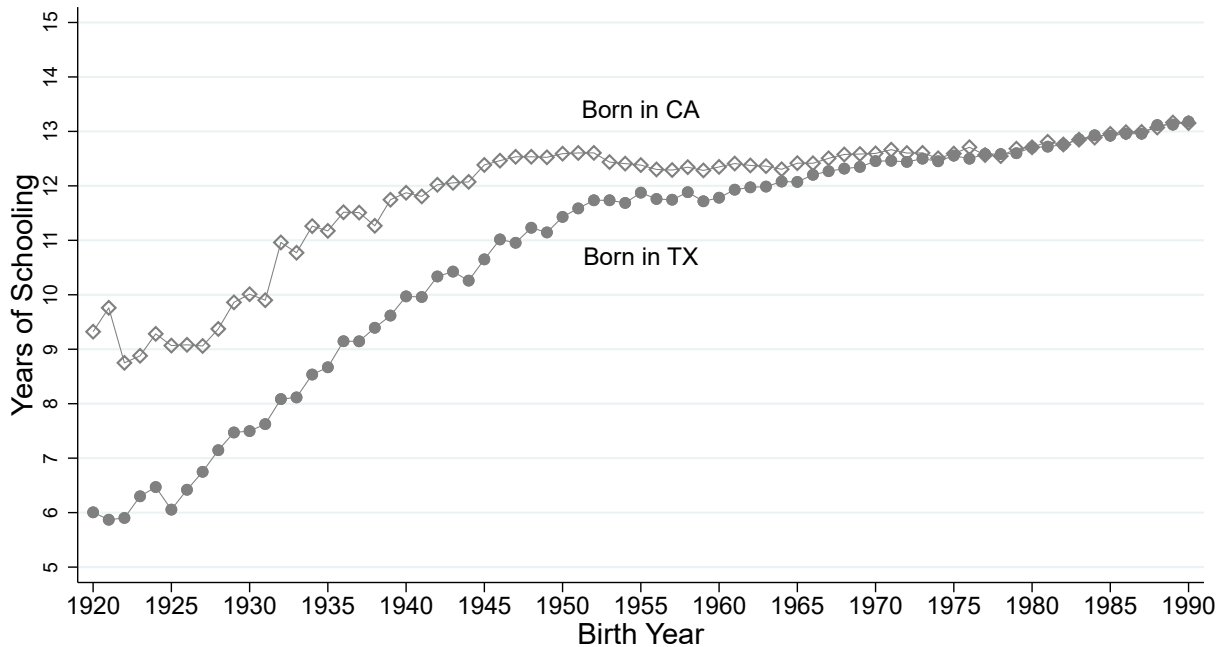
Source: 1970-2000 Census and 2010 and 2019 American Community Survey microdata from IPUMS USA.

Note: For US-born men who are Mexican American or non-Hispanic Black, this figure shows differentials (relative to US-born non-Hispanic Whites) in average years of schooling (Panel A) and the natural logarithm of average annual earnings (Panel B). The differentials are estimated coefficients on indicators for the relevant racial-ethnic groups from least squares schooling (Panel A) or log earnings (Panel B) regressions, run separately for each survey year. These regressions include fixed effects for age (in both panels) and state of residence (in Panel B). The dashed plot lines in Panel B are from earnings regressions that also control for years of education. Sampling weights are employed. The samples for the schooling regressions include US-born men ages 25-59 who are

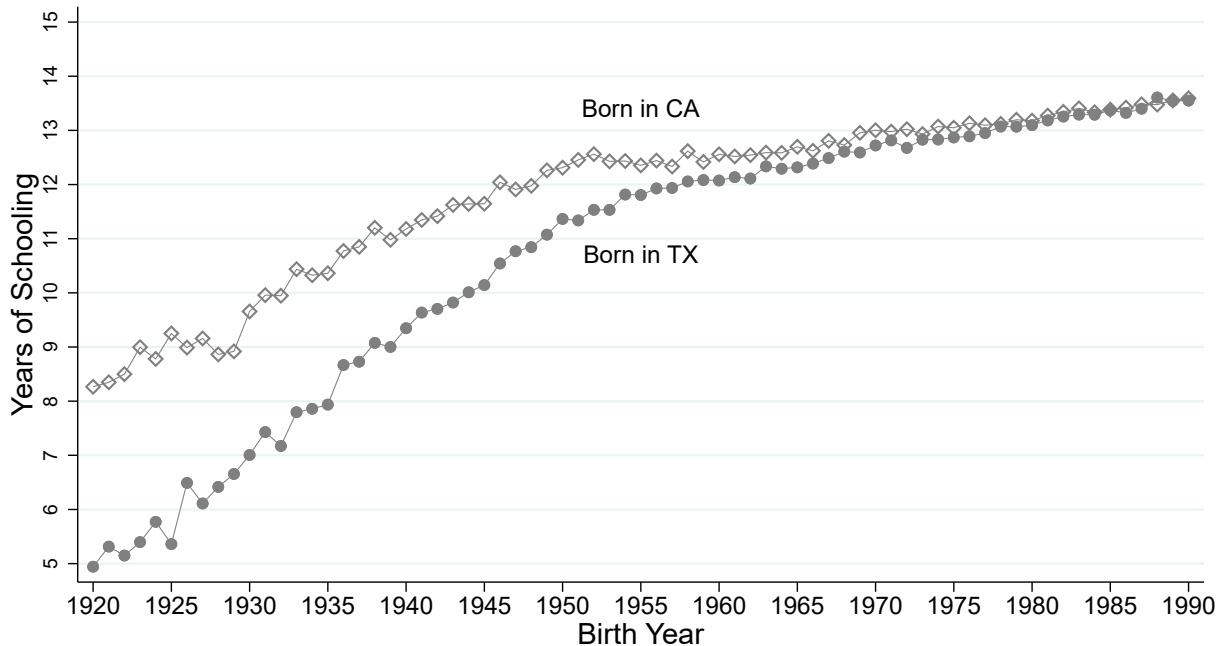
members of one of the following racial-ethnic groups: Mexican Americans, non-Hispanic Blacks, and non-Hispanic Whites. The samples for the earnings regressions are further restricted to individuals with positive earnings.

Figure 2: Average Years of Schooling of US-Born Mexican Americans, by Birth Year, Sex, and Birth State

A. Mexican-American Men



B. Mexican-American Women



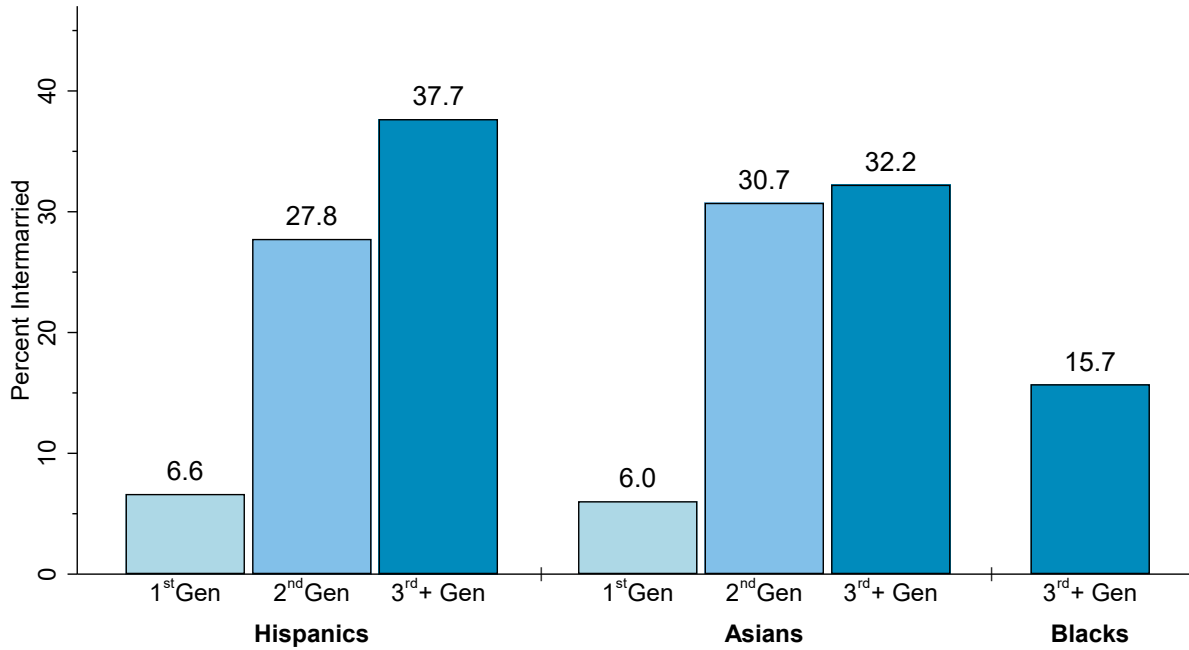
Source: 1970-2000 Census and 2006-2019 American Community Survey microdata from IPUMS USA.

Note: For Mexican Americans born in California and in Texas, this figure shows predicted average years of schooling at age 35 for each birth year, separately for men and women. In each survey, we limit our analysis sample to US-born individuals between the ages of 25-59, including those residing in group quarters. Because we know each respondent's current age but not their birthday, we approximate the birth year of each individual as Birth Year = Survey Year - Age - 1. We limit this analysis to individuals with birth years between 1920 and 1990, which are the birth years we observe in at least two different survey years. For any given birth cohort, average educational attainment tends to rise with the age at which the cohort is observed. To standardize for age effects, we report

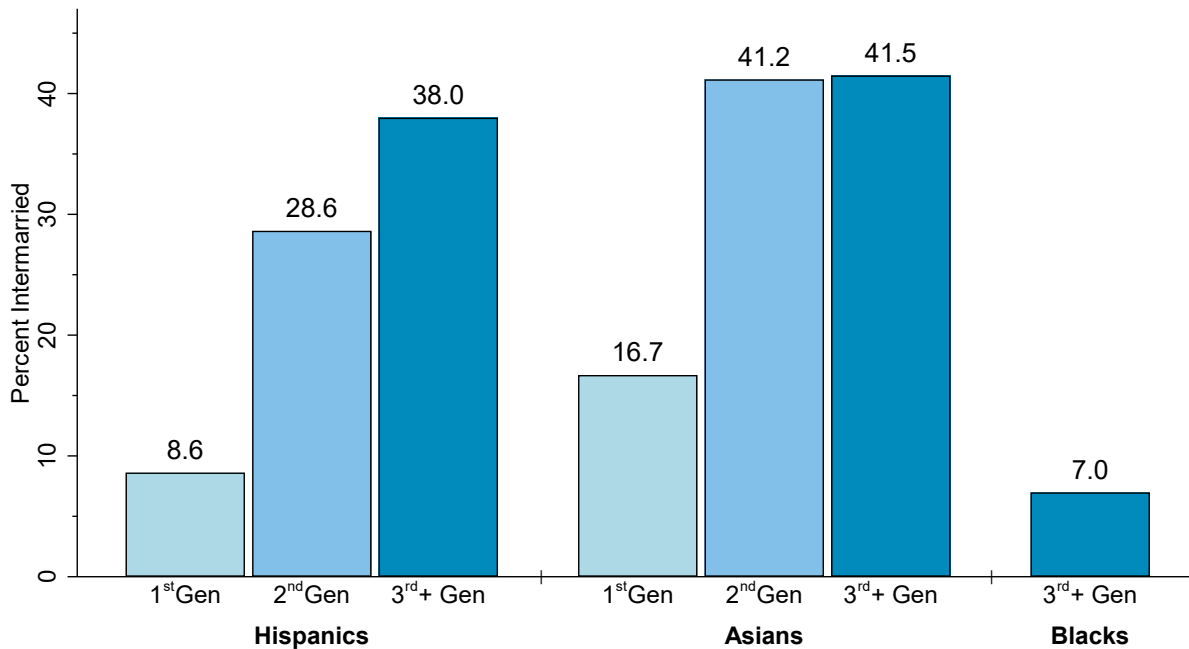
predicted years of schooling at age 35 for each birth year. These predictions derive from least squares regressions of schooling on a quartic in age and dummy variables identifying the relevant cells defined by sex, state of birth, and year of birth.

Figure 3: Intermarriage Rates, by Sex, Race-Ethnicity, and Immigrant Generation

A. Married Men



B. Married Women



Source: 2003-2019 Current Population Survey basic monthly microdata from IPUMS CPS.

Note: The intermarriage rates shown here represent the percent of currently married individuals whose major racial-ethnic category differs from that of their spouse. For example, a Hispanic husband with a non-Hispanic wife is defined to be intermarried, regardless of the immigrant generations of the husband and wife. In Panel A, the samples include married men ages 25-59 whose wives are at least age 18 and live in the same household as their husband. In Panel B, the samples include married women ages 25-59 whose husbands are at least age 18 and live in the same household as their wife. Both panels exclude individuals with same-sex spouses. Sampling weights are employed.

**Table 1: Years of Schooling Differentials (Relative to US-Born Non-Hispanic Whites),
by Race-Ethnicity and Nativity, 2019**

Race-Ethnicity	Nativity	
	Foreign-Born	U.S.-Born
Non-Hispanic Blacks		-0.85 (0.01)
All Hispanics	-3.16 (0.02)	-1.11 (0.01)
Hispanics by National Origin:		
Mexican	-4.02 (0.02)	-1.28 (0.01)
Puerto Rican	-1.33 (0.04)	-1.09 (0.03)
Cuban	-0.98 (0.05)	0.06 (0.06)
Central American	-4.23 (0.05)	-0.89 (0.06)
South American	-0.29 (0.04)	0.25 (0.06)
Dominican	-1.91 (0.06)	-0.61 (0.08)
Other Hispanic	-1.89 (0.11)	-1.00 (0.04)

Source: 2019 American Community Survey microdata from IPUMS USA.

Note: For selected racial-ethnic/nativity groups, this table reports differentials (relative to US-born non-Hispanic Whites) in average years of schooling. Standard errors are shown in parentheses. The differentials are estimated coefficients on indicators for the relevant racial-ethnic/nativity groups from a least squares schooling regression that also includes age fixed effects. Sampling weights are employed. The regression sample includes men and women ages 25-59 who are members of one of the following racial-ethnic/nativity groups: Hispanics (foreign-born and US-born), US-born non-Hispanic Blacks, and US-born non-Hispanic Whites.

**Table 2: Log Annual Earnings Differentials (Relative to US-Born Non-Hispanic Whites),
by Race-Ethnicity, Nativity, and Sex, 2019**

Race-Ethnicity	Men, by Nativity		Women, by Nativity	
	Foreign-Born	U.S.-Born	Foreign-Born	U.S.-Born
Non-Hispanic Blacks		-0.471 (0.007)		-0.171 (0.006)
All Hispanics	-0.495 (0.005)	-0.296 (0.006)	-0.520 (0.007)	-0.189 (0.007)
Hispanics by National Origin:				
Mexican	-0.539 (0.007)	-0.325 (0.008)	-0.594 (0.010)	-0.229 (0.009)
Puerto Rican	-0.394 (0.025)	-0.319 (0.017)	-0.359 (0.026)	-0.204 (0.018)
Cuban	-0.357 (0.021)	-0.053 (0.042)	-0.303 (0.024)	0.119 (0.029)
Central American	-0.566 (0.011)	-0.249 (0.025)	-0.610 (0.017)	-0.126 (0.027)
South American	-0.278 (0.016)	-0.062 (0.029)	-0.327 (0.017)	0.047 (0.029)
Dominican	-0.504 (0.026)	-0.356 (0.044)	-0.555 (0.027)	-0.208 (0.043)
Other Hispanic	-0.453 (0.042)	-0.287 (0.023)	-0.375 (0.048)	-0.176 (0.026)

Source: 2019 American Community Survey microdata from IPUMS USA.

Note: For selected racial-ethnic/nativity groups, this table reports differentials (relative to US-born non-Hispanic Whites) in the natural logarithm of average annual earnings, separately for men and women. Standard errors are shown in parentheses. The differentials are estimated coefficients on indicators for the relevant racial-ethnic/nativity groups from least squares log earnings regressions, run separately by sex, that also include fixed effects for age and state of residence. Sampling weights are employed. The regression samples include individuals ages 25-59 with positive earnings who are members of one of the following racial-ethnic/nativity groups: Hispanics (foreign-born and US-born), US-born non-Hispanic Blacks, and US-born non-Hispanic Whites.

Table 3: Average Years of Schooling, by Race-Ethnicity, Age, Sex, and Immigrant Generation

Race-Ethnicity and Age	Men, by Immigrant Generation			Women, by Immigrant Generation		
	First	Second	Third+	First	Second	Third+
A. Ages 25-59						
Hispanic	10.38 (0.02)	13.00 (0.02)	12.85 (0.02)	10.78 (0.02)	13.26 (0.02)	13.03 (0.01)
Mexican	9.61 (0.02)	12.73 (0.02)	12.71 (0.02)	9.80 (0.02)	12.92 (0.02)	12.87 (0.02)
Non-Hispanic White			13.84 (0.003)			14.08 (0.003)
Non-Hispanic Black			13.00 (0.009)			13.36 (0.008)
B. By Age Cohort						
Hispanic						
Ages 25-34	10.48 (0.03)	12.97 (0.03)	12.85 (0.02)	11.03 (0.03)	13.33 (0.02)	13.18 (0.02)
Ages 50-59	10.17 (0.04)	12.82 (0.06)	12.74 (0.04)	10.37 (0.04)	12.79 (0.06)	12.68 (0.03)
Mexican						
Ages 25-34	10.05 (0.03)	12.76 (0.03)	12.71 (0.03)	10.36 (0.03)	13.08 (0.03)	13.04 (0.03)
Ages 50-59	8.73 (0.05)	12.45 (0.08)	12.55 (0.05)	8.84 (0.05)	12.23 (0.08)	12.46 (0.04)
Non-Hispanic White						
Ages 25-34			13.86 (0.006)			14.28 (0.006)
Ages 50-59			13.81 (0.006)			13.86 (0.006)
Non-Hispanic Black						
Ages 25-34			13.01 (0.02)			13.33 (0.01)
Ages 50-59			12.84 (0.02)			13.23 (0.02)

Source: 2003–2019 Current Population Survey outgoing rotation group microdata from IPUMS USA.

Note: Standard errors are reported in parentheses. The “first generation” consists of foreign-born individuals. The “second generation” consists of US-born individuals who have at least one foreign-born parent. Remaining persons are members of the “third+ generation” (that is, the third and all higher generations), which consists of US-born individuals who have two US-born parents. Hispanics and Mexicans are identified from the Hispanic origin question in the CPS, and, non-Hispanic Blacks and non-Hispanic Whites are identified from the race question. Sampling weights are employed.