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The Hispanic–white wage gap has remained wide and relatively steady

Examining Hispanic—white gaps in wages, unemployment, labor force participation, and education by gender, immigrant status, and other subpopulations

Report • By Marie T. Mora and Alberto Dávila • July 2, 2018

Summary

Hispanics now represent 18.1 percent of the U.S. population, making their labor market outcomes an important economic policy issue. A central question for researchers and policymakers is whether the labor market conditions of Hispanics have improved, stayed the same, or deteriorated in recent decades. To help answer this question, this report looks at changes in a number of key indicators of labor market health. First we track changes in the unemployment and labor force participation rates for the Hispanic population overall and then by gender and by Hispanic national origin (specifically Mexican American, Puerto Rican, and Cuban American), comparing these rates with overall U.S. unemployment and labor force participation rates by gender to see if there are significant gaps in these labor market measures. We also measure gaps in educational attainment.

Then, in the bulk of the report, we look at earnings gaps (specifically, hourly wage gaps) between Hispanic workers and non-Hispanic white men ("white men").² We track these gaps by gender overall, by the subpopulations cited above, and by education level, immigrant status (U.S.-born vs. foreign-born), and immigrant generation (first-, second-, or third-generation and beyond). Our discussions of pay gaps begin with unadjusted pay gaps but focus on adjusted or "unexplained" earnings gaps—gaps that remain after controlling for education and experience and other factors known to affect pay levels. Looking at adjusted pay gaps helps identify whether changes in the pay differentials experienced by Hispanic men and women relative to white men could be traced to differences in a particular observed characteristic, other than ethnicity or gender.

Our examination generally begins in 1979 because that marks the start of the ongoing trend of growing wage inequality and ends in 2016 or 2017 (the last data year available). However, to accommodate data availability and generate large enough sample sizes, some discussions begin in 1980, 1988, or 1994.

Unless otherwise noted, our analyses in this report are based on the Current Population Survey. For all data, the

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Hispanic population includes individuals of any race who identify as Hispanic in the Hispanic ethnicity question (for example, white Hispanics and black Hispanics).

Using the interactive figures and tables to access the data in this report

Numerous tables and figures throughout the report provide multiple breakdowns of these labor market indicators of interest to researchers, policymakers, and the public. With the interactive figures in this report, readers can obtain specific data points by hovering a cursor over a line or bar, view the entire figure as a data table, and copy figure data into Excel. Readers can also customize the data shown by clicking on the legends in the figures to temporarily remove or add the selected data series.

Following are just a few of the key findings in this report:

- While Hispanic men and women have seen their unemployment rates drop since the Great Recession (perhaps because of expansionary fiscal and monetary policies that have lowered the unemployment rate for the American workforce in general), only Hispanic men (at 4.7 percent unemployment in 2017) have nearly closed the gap with all men (4.4 percent unemployment in 2017). At 5.7 percent, the unemployment rate for Hispanic women is much higher than the unemployment rate for all women (4.3 percent).
- While the share of Hispanic women with a bachelor's degree or more education has risen steadily over the last four decades (reaching 25.9 percent in 2017), the Hispanic—white "college attainment gap" for Hispanic women has stayed relatively stable over this period, so Hispanic women have not closed the college attainment gap with white women (48.9 percent of whom have a bachelor's degree or more education) or white men (40.9 percent of whom have a bachelor's degree or more education). For Hispanic men, the college attainment gap has widened: in 2017, only 16.4 percent of Hispanic men had a bachelor's degree or more education.
- Controlling for education and a range of other factors known to affect pay (a process that produces the "adjusted" or "unexplained" pay gap) significantly narrows the hourly wage gap between Hispanic men and white men. This suggests that for Hispanic men, much of the earnings gap seems to be explained by a host of factors such as education, experience, immigrant status, and regional differences in cost of living. However, controlling for these same factors does not narrow the hourly wage gap between Hispanic women and white men nearly as much: for Hispanic women, both the adjusted and unadjusted wage gaps have remained fairly steady and large since 1979. This suggests that for Hispanic women, ethnic and gender discrimination, and other forms of discrimination, appear to be at play.³
- The adjusted earnings gap between Hispanics and white men has remained relatively steady since 2000 for Hispanic men and women overall and for most of the largest subgroups by national origin. In 2017, Hispanic men made 14.9 percent less in hourly wages than comparable white men (an improvement from 17.8 percent in 2000), while

Hispanic women made 33.1 percent less than comparable white men (a small improvement from 35.1 percent in 2000). In 2016, men of Mexican, Puerto Rican, and Cuban origins made 14.1 percent, 11.0 percent, and 16.9 percent less in hourly wages than comparable white men, respectively (in 2000, these pay penalties were 18.7 percent, 10.3 percent, and 16.4 percent, respectively). In 2016, women of Mexican origin made 33.5 percent less than comparable white men, a slight improvement from 36.2 percent in 2000. But women of Puerto Rican and Cuban origins experienced large drops in their pay disadvantage relative to white men, from 32.4 percent in 2000 to 24.7 percent in 2016 for Puerto Rican women, and from 39.1 percent in 2000 to 24.1 percent in 2016 for Cuban American women.

- Attaining a college education has not closed the average Hispanic—white wage gap. In 2016, Hispanic women with a college education (as indicated by a bachelor's degree or more education) made 36.4 percent less than white men with a college education, which is a just slightly narrower pay gap than in 1980 (37.7 percent) and is essentially the same as the pay gap between Hispanic women and white men with less than a high school education (those who have not obtained a high school diploma or equivalent) in 2016 (36.3 percent). Hispanic men with a college education had a much narrower pay gap with white college-educated men in 2016 (20.1 percent), but that is considerably wider than in 1980 (12.3 percent) and wider than the pay gap between Hispanic men with less than a high school diploma and similarly educated white men in 2016 (14.9 percent). A 2016 EPI report similarly found that black—white wage gaps did not shrink (and in fact expanded) for most college graduates (Wilson and Rodgers 2016).
- Wage gaps between second-generation Hispanic immigrants (those born in the U.S. to at least one foreign-born parent) and second-generation white immigrants were narrower than wage gaps between first-generation Hispanic and white immigrants (those born outside the U.S.), consistent with the notion that as successive generations of immigrants assimilate, their labor market outcomes improve (i.e., immigrants experience labor market advantages with "intergenerational assimilation"). However, the data do not reveal a significant narrowing of the wage gap between the second and third generation or beyond (people born in the U.S. to U.S.-born parents).
- One major Hispanic subgroup to track in the near to intermediate future is the Puerto Rican workforce in the mainland United States. Puerto Rican workers are an increasingly important part of the mainland American workforce given the massive outmigration from Puerto Rico to the mainland United States during "La Crisis Boricua," the name we, in previous research with Havidán Rodríguez, gave to the critically acute economic crisis that got underway in Puerto Rico in 2006 and is still ongoing. The massive net exodus from the island has continued in the wake of Hurricane Maria. One of many interesting stories about this group is how Puerto Rican women's wages continued to gain ground relative to white men after 2000, thus narrowing the adjusted wage gap between Puerto Rican women and white men from 32.4 percent in 2000 to 24.7 percent in 2016.
- Puerto Ricans have almost consistently had higher unemployment rates than Mexican
 Americans and Cuban Americans and, for Puerto Rican men, almost consistently

lower labor force participation rates than Mexican American and Cuban American men—although Puerto Rican men have had narrower adjusted wage gaps with white men.

Introduction

Addressed in this report is the central question of whether the labor market conditions of the nation's 58.9 million Hispanics (who constitute 18.1 percent of the U.S. population) have improved, stayed the same, or deteriorated over recent times. Such a question, however, has several moving parts. For one, the Hispanic population in the United States is composed of numerous subpopulations based on national origin, the largest being Hispanics of Mexican descent (who constitute approximately two-thirds of all Hispanics), followed by those who are Puerto Rican (who—not counting those living in Puerto Rico—make up approximately 10 percent of all Hispanics), Hispanics of Cuban descent (nearly 4 percent), Hispanics of Salvadoran descent (also nearly 4 percent), and then smaller groups (Mora, Dávila, and Rodríguez 2017a). Within these subpopulations, there are also considerations pertaining to place of birth and geography. For example, what are the labor market outcomes of U.S.-born Mexican Americans (many of whom have roots in the Southwest dating back several generations before the region was part of the United States) versus Mexican immigrants in the U.S.? And what are the labor market outcomes of island-born Puerto Ricans (who are U.S. citizens by birthright) versus mainland-born Puerto Ricans?⁵

From a methodological perspective, the advances, or lack thereof, in labor market outcomes for the Hispanic population and its subgroups must also be explored through the prisms of gender, education, and generational status. Indeed, what might be perceived as changes in the labor market status of a subgroup might be traced to changes in a particular demographic of that population rather than a change in their underlying labor market conditions.

In this report, we provide statistics using data from the Bureau of Labor Statistics (BLS), including the Current Population Survey (CPS), to analyze labor market outcomes, such as earnings differentials, between Hispanic and non-Hispanic white Americans (specifically white men) since 1979. Similar to other studies (including the recent EPI report by Wilson and Rogers [2016]), since economic advantage is distributed by race/ethnicity and gender, using white men as the comparison group for our wage gap analysis allows us to capture the dual penalties (gender and ethnicity) imposed on Hispanic women. We first focus on employment outcomes, specifically unemployment and labor force participation rates, for Hispanics in general and for the major Hispanic subgroups. We then provide a more detailed analysis of earnings of full-time workers (in the form of hourly wages) to inform on the potential changes in the demographics of these populations. With these demographic analyses in mind, we further make adjustments to control for education, experience, geography, and immigrant status in measuring "unexplained" earnings differentials ("gaps") between fully employed Hispanic populations and white men. In the following sections of the report we present our findings and introduce some of the future research

Employment outcomes

To get a sense of how Hispanics in general, and the major Hispanic subgroups, are faring in the U.S. economy, we first look at changes in unemployment and labor force participation rates from 1980 to 2017. To discuss these employment outcomes at the macroeconomic level, we use CPS data obtained from the BLS and covering civilians ages 16 and older.

Unemployment rates

Figure A presents the unemployment rates for Hispanic men and women as well as for all men and women in the United States. As the figure shows, unemployment rates for both Hispanic men and women have consistently been higher than the national average for their gender over the past 37 years, but they have tended to move with the national average for their gender. Starting in the mid-1990s, the gaps between Hispanic and overall unemployment rates began narrowing. By 2006, the unemployment rate of Hispanic men almost reached parity with that of the overall male workforce, falling to 4.9 percent, and the unemployment rate of Hispanic women dropped to 5.9 percent. For both Hispanic men and women, unemployment rose after 2006 and would not fall below its 2006 low again until 2017. For women and men in general, national unemployment reached its lowest point in 2000.

Figure A further illustrates that relative to the average worker, Hispanic workers were particularly exposed to rising unemployment during the Great Recession. Unemployment rates for Hispanic men and women escalated after 2006, reaching double digits by 2009 and peaking in 2010 (when Hispanic unemployment rates were at their highest rates since 1983). Among men and women overall, the national unemployment rate also escalated, but it did not climb as high as the unemployment rates of Hispanic men and women.

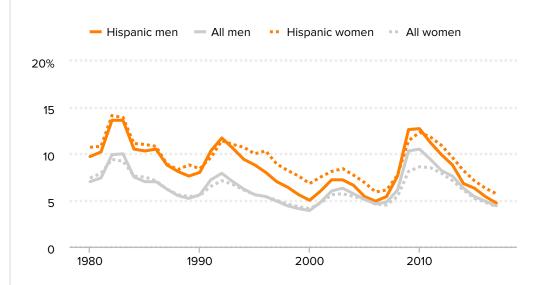
After 2010, annual unemployment rates fell for Hispanics and nationally each consecutive year, reaching their lowest points in 2017, even below levels attained before the Great Recession. Despite this decline, 4.7 percent of Hispanic men and 5.7 percent of Hispanic women were unemployed in 2017—rates above the national averages for male and female workers (4.4 percent and 4.3 percent, respectively). Moreover, the gap between their unemployment rate and the national average for their gender remained wider for Hispanic women (1.4 percentage points) than for Hispanic men (0.3 percentage points).

A similar analysis for the three largest Hispanic subgroups in the United States reveals the same general results. Figures B and C present unemployment rates for U.S. Hispanics of Mexican, Puerto Rican, and Cuban descent (both men and women) since 1988—the year in which specific Hispanic ethnicity was first identified in the Current Population Survey. As with Hispanics overall, the unemployment rates of these groups have tended to mirror changes in the macro labor market. It is not surprising that Mexican American

Figure A

Hispanic unemployment rates consistently exceed U.S. national averages

Unemployment rates by Hispanic ethnicity and gender, 1980–2017



Note: Population is the civilian labor force ages 16 and older.

Source: EPI analysis of Bureau of Labor Statistics Current Population Survey public data series

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unemployment rates were more closely aligned with those of Hispanics in general, given they represent two-thirds of the Hispanic population in the United States (Mora, Dávila, and Rodríguez 2017a).

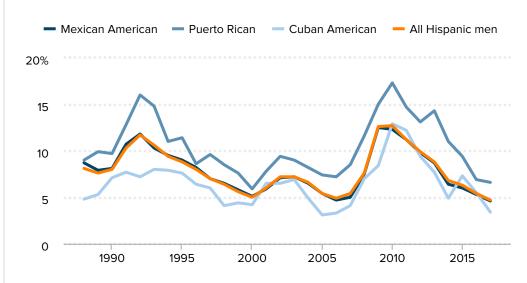
For Puerto Rican men and women living stateside, the volatility was greater, and unemployment was higher, particularly among men. In most of the years shown, the unemployment rates among Puerto Ricans were higher than for Mexican Americans and Cuban Americans; this was especially the case as the Great Recession got underway. In 2006, Puerto Rican men and women had similar unemployment rates (7.2 percent and 7.3 percent, respectively), their lowest rates since 2000 among both groups. For Puerto Rican men, unemployment peaked in 2010 at 17.3 percent, 2.4 times as high as the male Puerto Rican unemployment rate just four years earlier. For Puerto Rican women, unemployment peaked at 13.5 percent in 2011. In other words, more than one out of six Puerto Rican men and nearly one out of seven Puerto Rican women were unemployed on the mainland during their period of peak unemployment.

Part of the severity of Puerto Rican unemployment can be tied to the critically acute economic crisis that got underway in Puerto Rico in 2006; this ongoing crisis, which we (along with our colleague Havidán Rodríguez) refer to as "La Crisis Boricua," led to the net outmigration of over 600,000 people from the island between 2006 and 2016 (Mora, Dávila, and Rodríguez 2017a), many of whom settled in Florida—a state hit harder than many other states during the Great Recession. Nevertheless, even at their peak unemployment rate, Puerto Rican workers on the mainland enjoyed lower unemployment

Figure B

Puerto Rican men face higher unemployment than other Hispanic men in the U.S.

Unemployment rates of Hispanic men, by national origin, 1988–2017



Note: Population is the civilian labor force ages 16 and older.

Source: EPI analysis of Bureau of Labor Statistics Current Population Survey public data series

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rates than did Puerto Rican workers on the island (Mora, Dávila, and Rodríguez 2017a, 2017b). By 2017, the unemployment rates of stateside Puerto Ricans had fallen below their pre-recession rates (to 6.6 percent among men, and 5.3 percent among women). Despite these improvements, the unemployment rate of Puerto Rican men was 1.9 percentage points above the average unemployment rate for Hispanic men and 2.2 percentage points above the national average for all men.

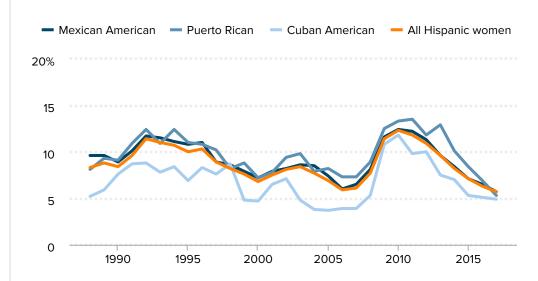
Hispanics of Cuban national origin also experienced a sharp increase in their unemployment rates during the Great Recession; unemployment tripled among both Cuban American men (from 4.1 percent in 2007 to 12.9 percent in 2010) and Cuban American women (from 3.9 percent in 2007 to 11.8 percent in 2010). As with Puerto Rican workers, the magnitude of these increases likely also relates to the geographic concentration of Cuban Americans in recession-battered Florida. Yet while Cuban American men and women experienced an upsurge in unemployment, their unemployment rates have tended to be the lowest among the three major Hispanic groups and thus closer to the national average and below the national averages for Hispanic men and women overall. For Cuban American men, moreover, the 3.4-percent unemployment rate they experienced in 2017 was their second lowest since 1988, and a full percentage point below the national average for all men.

Following the Great Recession, Hispanic unemployment has decreased slightly more than overall unemployment, narrowing the gap between the Hispanic unemployment rate and the national unemployment rate. Given these findings, we conclude that Hispanic workers

Figure C

Cuban American women enjoy lower unemployment than other Hispanic women in the U.S.

Unemployment rates of Hispanic women, by national origin, 1988–2017



Note: Population is the civilian labor force ages 16 and older.

Source: EPI analysis of Bureau of Labor Statistics Current Population Survey public data series

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overall, and those of Mexican American, Puerto Rican, and Cuban American descent, appear to be sharing in the economic recovery of the nation, at least with respect to declining unemployment rates.

Labor force participation rates

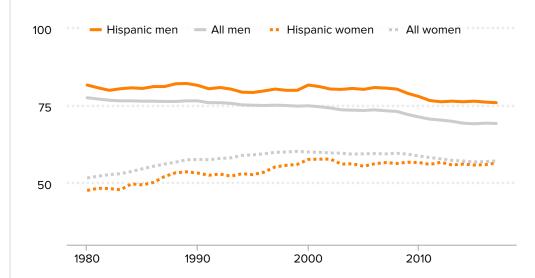
In a healthy labor market, a large percentage of the people who are able to work either have a job or are actively looking for one. That is why the labor force participation rate (LFPR) represents a key measure of economic health. The labor force participation rate looks at the population of working-age civilians who are not institutionalized (imprisoned, in mental facilities, or in nursing homes) and measures the share who either are employed or are unemployed but sought work within the past four weeks of the survey. By looking at the labor force participation rate, we can also get a sense of whether reductions in the unemployment rate have occurred for the "wrong" reason—i.e., that the reductions in part reflect people getting discouraged and dropping out of the search for employment rather than finding jobs. (When declines in unemployment are accompanied by a falling labor force participation rate, it suggests that some discouraged workers are exiting the job search.)

In **Figure D**, we plot the LFPR of Hispanic men and women against the overall LFPR by gender. Figure D shows that the LFPR of Hispanic men has been consistently well above the national average for all men since 1980. This is likely because, relative to men ages 16

Figure D

Hispanic men are still more likely to be working or looking for work than other men and women in the U.S.

Labor force participation rates, by Hispanic ethnicity and gender, 1980–2017



Note: The labor force participation rate is the share of civilians ages 16 and older who are employed or are looking for a job.

Source: EPI analysis of Bureau of Labor Statistics Current Population Survey public data series

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and older in the United States overall, the population of Hispanic men ages 16 and older is younger and includes a higher percentage of immigrants (see **Appendix Table 1**) who come to the country to work. Since the late 1990s, moreover, the gap between the Hispanic male LFPR and the overall male LFPR has grown due to a more consistent decline in the LFPR of men in general—a decline that seemed to become more pronounced during the Great Recession and only now seems to be tapering off (hovering just over 69 percent since 2014). Hispanic men also experienced falling LFPRs after 2007, and have hovered around 76 percent since the Great Recession ended.

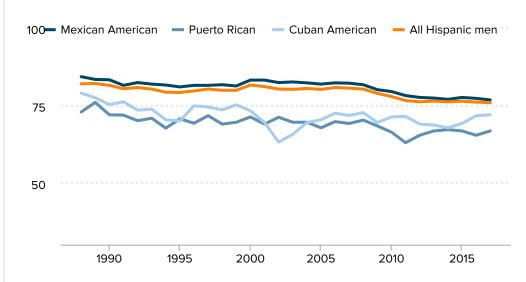
For women, the story the labor force participation rate tells is quite different from that told for men. The LFPRs of Hispanic women and of women overall increased for much of the post-1980 period, although among women in general, the rates declined during and after the Great Recession. Moreover, despite having the lowest LFPRs of the four groups shown in Figure D, Hispanic women increased their labor force participation more than the other groups did from 1980 to 2017. Because of their increase in labor force participation, Hispanic women now make up a greater share than they did in the 1980s in both the Hispanic workforce and the female workforce (Mora 2015). Even with the onset of the Great Recession, the LFPRs of Hispanic women showed considerable resiliency, hovering around 56 percent, which has been near parity with the overall female LFPR.

With regard to the labor force participation rates of the three largest Hispanic subgroups in

Figure E

Mexican American men are more attached to the labor force (working or looking for work) than other Hispanic men in the U.S.

Labor force participation rates of Hispanic men, by national origin, 1988–2017



Note: The labor force participation rate is the share of civilians ages 16 and older who are employed or looking for a job.

Source: EPI analysis of Bureau of Labor Statistics Current Population Survey public data series

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the United States (Mexican Americans, Puerto Ricans in mainland U.S., and Cuban Americans), four points are worth noting. First, as seen in **Figure E**, Mexican American men have had higher LFPRs than Puerto Rican and Cuban American men since 1988, but all three groups of men have experienced general declines in their LFPRs since 1988.

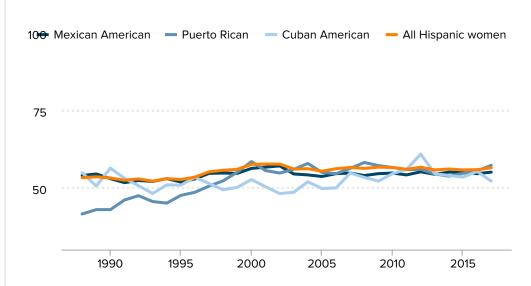
Second, Puerto Rican men had their lowest LFPR (62.9 percent) in 2011. This means that as high as unemployment was for Puerto Rican men during and shortly after the Great Recession, they would likely have suffered even higher unemployment rates had their LFPR remained at pre-recession rates. (On the other hand, Mexican American men had relatively stable LFPRs ranging between 82 percent and 83 percent for most of the 1990s and 2000s, but since 2008, have experienced a consistent drop in their LFPRs. Since 2010, LFPRs of Mexican American men have remained below 80 percent, and they fell to a three-decade low of 76.7 percent in 2017.)

Third, Puerto Rican women have experienced the largest general increase in the labor force participation rate among the groups of women analyzed since 1988. **Figure F** indicates that the LFPR of Puerto Rican women rose steadily from 41.5 percent in 1988 to 55.0 percent in 1990 and fluctuated but never fell below 54 percent in the years since. In contrast, Mexican American women's LFPR remained fairly steady, at between 52 percent and 57 percent while Cuban American women's LFPR fluctuated from between 48 percent to 61 percent throughout this period. The increase for Puerto Rican women over this

Figure F

Mexican American, Puerto Rican, and Cuban American women now have similar rates of working or looking for work; Puerto Rican women have seen the most change

Labor force participation rates of Hispanic women, by national origin, 1988–2017



Note: The labor force participation rate is the share of civilians ages 16 and older who are employed or looking for a job.

Source: EPI analysis of Bureau of Labor Statistics Current Population Survey public data series

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period could reflect changes in their geographic settlement patterns, as they became increasingly dispersed during this time, including in nontraditional receiving areas with greater employment opportunities (Mora, Dávila, and Rodríguez 2017a, 2017b). Despite the different trajectories, however, the LFPRs of Mexican American, Puerto Rican, and Cuban American women converged by 2013 at about 54–55 percent, and have remained fairly in sync (ranging from 52 percent to 57 percent) since then.

Fourth, while all the groups in question experienced a decline in unemployment rates since the end of the Great Recession, for Hispanic men overall—and Mexican American men in particular—these declines occurred when labor force participation rates were also steadily falling, suggesting that some of the decline in unemployment was because discouraged workers were dropping out of the labor force. However, the "discouraged worker effect" does not seem to have played a role in declining unemployment among some of the subgroups, particularly among any subgroup of Hispanic women and amongPuerto Rican men.

Earnings and education

Employment statistics capture only some of the many facets of Hispanic labor market outcomes. Data on changes in earnings—and earning gaps relative to white workers' earnings—also provide critical insights into how Hispanics in general, and the major Hispanic subgroups, are faring in the economy. When assessing these changes in relative earnings over time, it is important to account for changes in the socioeconomic and demographic characteristics—including education—that are known to affect earnings. For this analysis, we turn to public-use microdata from the Current Population Survey Outgoing Rotation Groups (U.S. Census Bureau CPS-ORG). As in an earlier EPI report on black—white wage gaps (Wilson and Rodgers 2016), we focus on working-age adults (ages 18 to 64) who reported wage and salary income (whether paid weekly or by the hour) and who worked full time. We look at hourly wages, excluding other forms of compensation (benefits, for example). However, unlike Wilson and Rodgers, we compare hourly wages of all Hispanic workers as well as those of the three largest Hispanic subgroups—for both men and women—with non-Hispanic white men's hourly wages.

We focus on full-time workers because they have a more clearly defined attachment to the labor force than do part-time workers. Therefore, the results of this analysis may not be generalizable to part-time workers, i.e., they are not necessarily applicable to the entire workforce, especially to the large percentage of white and Hispanic women who work part time.

Figure G presents the average hourly wage gaps between Hispanic workers (by gender) and white men. In all the wage gap figures in this section of the report, the gap is expressed as a percent disadvantage. So this figure shows how much less, in percentage terms, the average working-age Hispanic man (or woman) working full time makes than the average working-age white man (non-Hispanic) working full time. The gap is also sometimes referred to as an "earnings penalty." (Note that each of these gaps could also be expressed as a wage ratio—Hispanic workers' share of white male workers' wages—by subtracting the gap from 100 percent.)

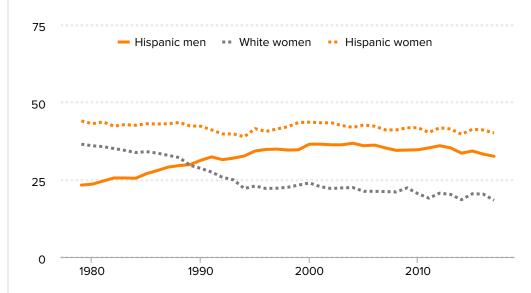
Figure G presents these gaps unadjusted for education level or other factors known to influence earnings. For comparison, the figure also presents the gap between white women and white men. This figure highlights several important findings. First, the earnings differentials between Hispanic and white men widened during most of the 1980s and 1990s. In contrast, wage differentials between Hispanic women and white men narrowed in the mid-1990s but returned to essentially the same level by 2000 as in 1979. In contrast, the earnings gap between white women and white men fell by roughly a third in the 1980s and 1990s.

Second, the wage gaps between Hispanic and white men peaked in the 2000s and remained stable for about a decade and then slowly shrank after 2012 as the U.S. labor market recovery was fully underway. However, by 2017, Hispanic men were still making 32.5 percent less than white men, having only slightly lowered the gap from what it was in

Figure G

The Hispanic-white wage gap has remained above 30 percent for men and at or above 40 percent for women for decades

Unadjusted wage gaps for Hispanic women, Hispanic men, and white women in the U.S. relative to non-Hispanic white men, 1979–2017



Note: The wage gap is how much less, in percent terms, the average member of each identified subgroup makes than the average non-Hispanic white man (unadjusted for education level and other characteristics known to affect pay). The wages compared are average hourly wages and the population is full-time workers ages 18–64.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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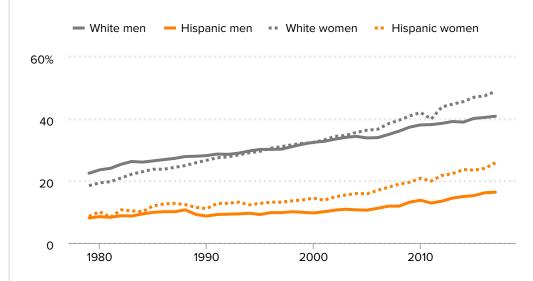
2000 (36.4 percent) and 2012 (35.9 percent). For Hispanic women, the widest post-1990s wage differential with white men occurred in 2000, and it generally shrank over the next 17 years. In 2017, Hispanic women were making 40.0 percent less than white men —a gap slightly above the smallest gap of 38.8 percent in 1994 but narrower than in most of the years shown before or since then. In contrast, the pay gap between white women and white men dropped sharply between 1979 and 1994, but then fell more slowly (albeit with some fluctuation) through 2017.

To explore whether these relative gains can be explained by changes in one key observable characteristic (education level), we present, in **Figure H**, the share of full-time workers with a college degree or more education by Hispanic ethnicity and gender, for the same time period. Over time, the education levels tended to increase for all four groups depicted, although more slowly in relative terms among Hispanic workers than among white workers. To illustrate, in 1979, 8.1 percent of Hispanic working men were college educated, as were 8.6 percent of Hispanic working women, compared with 22.5 percent of white working men and 18.5 percent of white working women. By 2017, these levels had risen to 16.4 percent, 25.9 percent, 40.9 percent, and 48.9 percent, respectively.

Figure H

Hispanic men and women have raised their education levels but have been unable to close the education gap with white men and women

Shares of U.S. workers with a bachelor's degree or more education, by Hispanic ethnicity and gender, 1979–2017



Note: The population is full-time workers ages 18–64.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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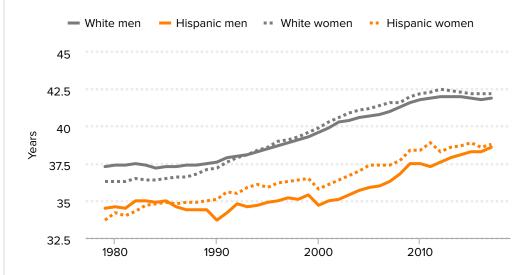
It follows that the widening of the education gap between Hispanic and white full-time working men likely relates to the expansion of their wage gap since 1979. On the other hand, the education gap between Hispanic working women and white working men also was essentially unchanged in this period but the pay gap shrank. In **Figure I** we explore whether a narrowing gap between the potential experience levels of Hispanic women and white men since 1995 could be contributing to a shrinking pay gap.

Figure I charts the ages of full-time workers by race/ethnicity and gender as an approximation of potential experience because age is the main driver of years of experience (the standard research approximation of experience—age minus years of schooling minus 5 for the preschool years—is used in the regression analysis in the next section). Figure I shows that the age gap between Hispanic women and white men narrows between 1979 and 1994, and though it begins to widen in 1995, by 2017 it is still smaller than it was in 1979. The faster growth in age of Hispanic female workers relative to white male workers narrows the experience gap between the two groups in a way that is consistent with the shrinking wage gap between Hispanic women and white men since 1979.

Figure I

The average Hispanic worker is consistently younger, having less work experience, than the average white worker

Average ages of full-time workers in the U.S. by Hispanic ethnicity and gender, 1979-2017



Note: The population is full-time workers ages 18-64.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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Regression-adjusted wage gaps

The prior section explored some of the factors that could explain the wage gaps between Hispanic and white workers. For a more thorough investigation of Hispanic—white wage gaps, we adjust the data to account for the differences in education and potential experience described above, as well as for region of residence (and immigrant status where the data permit). The wage differentials that remain after making these adjustments are the "unexplained" wage differentials, meaning that factors outside of the characteristics of the workers themselves (discrimination, for example) are playing a role.

Education is measured according to the highest level of attainment out of four levels: less than a high school diploma, a high school diploma or equivalent, some college, and a bachelor's degree or more education. 12 As noted earlier, potential experience is measured here using the convention of age - education - 5, i.e., a worker's age minus years of schooling minus five years to cover the preschool years. 13 We also control for region of residence to account for regional differences in cost of living, specifically the nine geographic Census divisions: New England, East North Central, West North Central, East South Central, West South Central, Middle Atlantic, South Atlantic, Mountain, and Pacific. 14

Ideally, we would have also included a control for English-language fluency, but the

Current Population Survey does not include such information. Moreover, birthplace was not reported in the CPS until 1994, which is why we do not control for nativity in this part of the analysis. Later in this report, we provide results for 1994 onward when available data on birthplace allow us to partition the sample into first, second, and third (or later) generations of immigrants. Appendix Table 1 presents means of the variables included in the regression analyses by race/ethnicity, national origin, and gender.

Figure J reports the adjusted wage differentials (represented by the solid lines) alongside the average, or unadjusted wage differentials (represented by the dashed lines) for full-time workers. Specifically, the adjusted wage gap lines show how much less on average working Hispanic men, Hispanic women, and white women make (in hourly wages) than working white men with the same level of education and experience and living in the same region. Because the adjusted data series represents the wage gap that remains unexplained by differences in education, experience, or region of residence (reflecting regional differences in cost of living), we can compare the adjusted and unadjusted gaps for each group to see how much of the overall differences in pay relative to non-Hispanic white men can be attributed to the aforementioned variables. Specifically, the difference between the dotted (unadjusted) and solid (adjusted) lines for each group represents how much of the total pay gap can be explained by differences in education, experience, and regional cost of living.

The most striking common finding from Figure J is the relative stability of these adjusted wage gaps across the populations analyzed since the mid-1990s. To the extent that these unexplained wage gaps represent labor market discrimination, it would appear that this matter, or variants thereof, has remained over a significant period of time. For example, the results in Figure J show that, as of 2017, Hispanic men make 14.9 percent less in hourly wages than white men of the same education and experience level in the same geographic region. This adjusted wage gap in 2017 is only slightly lower than the 16.5 percent gap in 1979. While it fluctuated slightly over the 38-year period, the gap peaked at 19.7 percent in 1996, and then it stabilized at between 16 percent and 18 percent from the late 1990s through 2012 before declining to its current low.

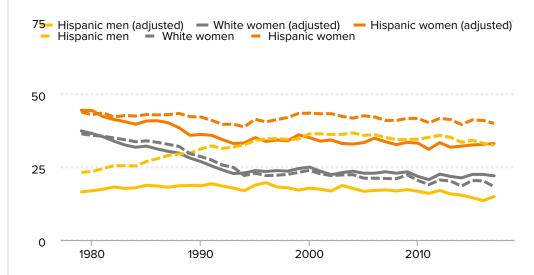
For Hispanic women, the adjusted wage gap with white men narrowed significantly between 1979 and the mid-1990s, but as with Hispanic men, these gaps began to roughly stabilize in the late 1990s, mostly hovering around 33 percent to 34 percent over the next couple of decades (unlike Hispanic men, Hispanic women did not see much of a narrowing in the wage gap after 2012). White women also significantly narrowed their average hourly wage gap with white men with the same education and experience and in the same region of the country (particularly in the 1980s through the mid-1990s), but like their Hispanic counterparts, have made relatively little progress since then.

Since the wage gaps for Hispanic women and white women are both measured relative to white men, the difference between these wage gaps (in Figure J) reflects the wage gap between Hispanic women and white women. It follows that as progress in narrowing the gender wage gap for white workers has slowed, the adjusted ethnic pay gap between Hispanic women and white women has remained consistent at 10-11 percent. This is in contrast to the trends in the black—white wage gaps identified by Wilson and Rodgers

Figure J

Wage gaps with white men persist for Hispanics and white women even after controlling for education and other factors known to affect pay

Adjusted versus unadjusted wage gaps for Hispanic women and men and for white women in the U.S. relative to non-Hispanic white men. 1979–2017



Note: The wage gap is how much less, in percent terms, the average member of each identified subgroup makes than the average non-Hispanic white man (and is either adjusted, or not adjusted, for education level, experience, and region of residence). The wages compared are average hourly wages and the population is full-time workers ages 18–64.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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(2016), specifically in regard to their finding that black women's wages stopped gaining ground relative to white men's wages in the mid-1990s and began falling further behind white women's wages between 1993 and 2015.

As we noted in the introduction of this report, a more in-depth analysis is required to better understand how this adjusted earnings differential varies across different subgroups of Hispanic workers by national origin, education, immigration, and generational status. We start, however, with a discussion of the important gender and Hispanic national origin analyses.

Adjusted wage gaps by gender and Hispanic national origin

The fact that women make less than their otherwise similar male counterparts (i.e., men with similar education and experience) is well discussed in the literature and remains an important policy issue. Figure J shows that the adjusted and unadjusted gender pay gaps for white workers are so close that differences in education, experience, and region of

residence do not explain why white women make less than white men. Also apparent from this figure, worker characteristics explain more of the pay gap between Hispanic men and white men than between Hispanic women and white men. In particular, in almost every year since 2000, differences in education, experience, and region explain more than half of the earnings penalty for Hispanic men. For Hispanic women, however, the fact that they have consistently made between 32 percent and 35 percent less than comparable white men since 2000 (an adjusted earnings penalty which has been consistently about twice the size of the Hispanic male earnings penalty in this period) warrants more policy attention, especially in light of their increased labor force participation and growing representation in the workforce since the 1980s.

The purpose of this report is not to rehash the labor market theories for why women earn less than men that appear in the conventional literature. These theories posit that gender bias—based discrimination, statistical discrimination, monopsonistic labor market structures, stratification issues, and other factors could be behind the gender pay gap (see, e.g., Ehrenberg and Smith 2018; Darity et al. 2017). What our findings provide is insight into the little progress that Hispanic women working full time have seemingly made in terms of earnings gains relative to both non-Hispanic white men and Hispanic men (as measured by the difference between the adjusted wage gaps of Hispanic men and Hispanic women in Figure J) over the past two decades.

Similarly, and as we noted earlier, the United States has culturally distinct and geographically dispersed Hispanic subgroups based on national origin whose experiences should be analyzed separately to provide a more thorough understanding of Hispanic—white wage gaps. For this purpose, we turn our attention to Mexican American, Puerto Rican, and Cuban American workers. The adjusted wage gaps for full-time workers in each of these groups relative to non-Hispanic white men are presented in **Figure K** for men and **Figure L** for women.

Not surprisingly, the adjusted-wage-gap patterns for Mexican American men and women shown in these figures are fairly similar to those found for all Hispanic men and women in Figure J, given that Mexican Americans represent the vast majority of Hispanics in the country, as previously noted. As with Hispanic men overall, the wage gap for Mexican American men was more stable than for the other groups of Hispanic men, although it did register a slow decline—Mexican American working men made 18.5 percent less than white working men in 1980 but 14.1 percent less than white working men in 2016.

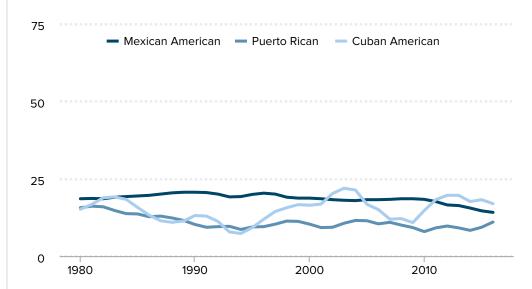
As with Hispanic women overall, Mexican American women experienced a sharp decline in the wage gap with white men through the 1980s and part of the 1990s. However, while the wage gap for Hispanic women leveled out in the mid-1990s, for Mexican American women, the wage gap continued to decline into the early 2000s and only began leveling out since the mid-2000s.

The trends in wage gaps for Puerto Rican and Cuban American workers, however, have not tracked as closely to wage gap trends of Hispanics in general. Perhaps related to smaller sample sizes, the changes in the wage gaps are more erratic for Puerto Rican and particularly for Cuban American workers than for Mexican American workers. In order to

Figure K

Mexican American men have generally had the widest and most unchanging wage gap with white men

Adjusted wage gaps between Hispanic men (by national origin) and non-Hispanic white men in the U.S., 1980–2016



Note: The wage gap is how much less, in percent terms, the average member of each identified subgroup makes than the average non-Hispanic white man (adjusted for education level, experience, and region of residence). The wages compared are average hourly wages and the population is full-time workers age 18–64. Wage gaps reflect a three-year moving average, with 1979 included in the average for 1980, and 2017 included in the average for 2016.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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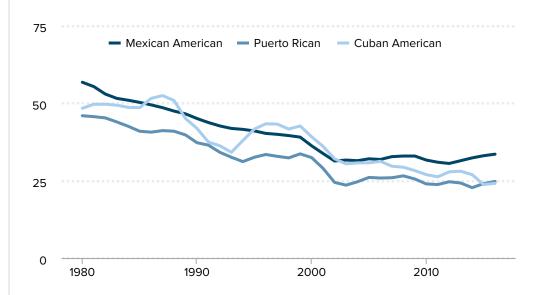
minimize some of this volatility, Figures K and L depict the wage gaps for each of the subgroups as three-year moving averages. Relative to Mexican Americans, Puerto Rican men and women have smaller wage gaps vis-à-vis non-Hispanic white men. The wage gap between Puerto Rican male workers and white men narrowed during the 1980s and early 1990s (during a period when the wage gap for Mexican American men grew), but then grew during the late 1990s. Over the last two decades, Puerto Rican men have made little progress in further narrowing the gap. However, Puerto Rican women's wages have continually gained ground relative to non-Hispanic white men since 1980 and thus the wage gap between Puerto Rican women and white men fell from 45.9 percent in 1980 to 32.4 percent in 2000 to 24.7 percent in 2016, although it remained sizable.

For both Cuban American men and women, the earnings gaps with white men have been highly volatile (much more so than for Puerto Rican workers) from 1980 to 2016, again raising questions about how much of the observed volatility relates to their relatively small sample size in the CPS-ORG data. That said, the wage gap between Cuban Americans and non-Hispanic white men tends to fluctuate between the results for Mexican Americans and Puerto Ricans.

Figure L

Mexican American, Puerto Rican, and Cuban American women have all narrowed the wage gap with white men since 1980

Adjusted wage gaps between Hispanic women (by national origin) and non-Hispanic white men in U.S., 1980–2016



Note: The wage gap is how much less, in percent terms, the average member of each identified subgroup makes than the average non-Hispanic white man (adjusted for education level, experience, and region of residence). The wages compared are average hourly wages and the population is full-time workers ages 18–64. Wage gaps reflect a three-year moving average, with 1979 included in the average for 1980 and 2017 included in the average for 2016.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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Hispanic-white wage gaps by education

Another way to partition the adjusted earnings gaps of Hispanic workers is by education. We consider four categories, those with (1) a college education, as indicated by a bachelor's degree or more education; (2) some college education, but less than a bachelor's degree; (3) a high school education (attaining a high school diploma or equivalent); and (4) less than a high school education. From a conceptual perspective, we consider these as segmented labor markets that operate under different political, cultural, and potential labor-market discrimination realms.

We have already discussed the growing college education gap between Hispanic and non-Hispanic white working men shown in Figure H. **Table 1** provides a more detailed comparison of educational attainment by race, ethnicity, nativity, origin, and gender. While educational attainment of Hispanic workers overall is increasing, there are still some large differences in educational outcomes between Hispanic subgroups based on nativity and origin. One of the largest differences highlighted in Table 1 is between the shares of foreign-born Hispanic workers and U.S.-born Hispanic workers with less than a high school

diploma. Based on the average for the years 2000–2017, 46.2 percent of foreign-born Hispanic workers have less than a high school education—that means they are 3.6 times as likely as U.S.-born Hispanic workers, and 11 times as likely as white workers, to have less than a high school education.

Another major difference is high school completion by Hispanic subgroup. Relative to Puerto Rican and Cuban American workers, Mexican American workers are 2.7 to 3.9 times as likely to have less than a high school diploma.

Table 1 also shows that the educational profile of Cuban Americans is more similar to the corresponding profile of white workers than to that of the average U.S.-born Hispanic worker. Nearly one-third (32.6 percent) of Cuban American workers and nearly 40 percent (38.2 percent) of white workers have at least a bachelor's degree, compared with just under one-fifth (19.8 percent) of U.S.-born Hispanic workers.

Although the analyses in this report compare the average hourly wages of all full-time Hispanic workers with full-time white male workers at the same education level, the information in Table 1 provides useful context about which subgroups of Hispanic workers are represented within each of the educational categories.

We control for education directly in the wage-gap figures that follow. For ease of visual interpretation, we present the adjusted wage gaps for Hispanic men by education level in **Figure M**, and the adjusted wage gaps for Hispanic women by education level in **Figure N**. Given the relatively smaller sample sizes that result from separating workers into categories of educational attainment, three-year moving averages of the adjusted wage gaps are presented in Figures M and N. In both figures, the gaps shown are the difference between the average hourly wage of Hispanic full-time workers with a given level of education and the average hourly wage of white men of the same education level (adjusted for experience and region of residence).

Wage gaps for college-educated workers

As shown in Figure M, the wage gap for college-educated Hispanic working men is more volatile than wage gaps for Hispanic men who have lower levels of educational attainment, with especially marked volatility throughout the 1980s and 1990s. However, this volatility is likely related to a small sample size. As shown earlier in Figure H, throughout most of those two decades, less than 10 percent of Hispanic men working full time had a college degree; even as late as 2017, only 16.4 percent had a college degree.

The Hispanic—white wage gap among college-educated full-time working men was wider than the gap among men with some college education and men with a high school diploma for most of the years observed in this analysis and, by 2000, exceeded the gaps for men in all other education categories. For these college-educated Hispanic men, the "pay penalty" for being Hispanic exceeded 20 percent from 2001 to 2008, declined through 2015 (down to 18.0 percent), and then ticked back up to 20.1 percent in 2016.

The educational attainment trends of Hispanic full-time working women differ from those

Table 1

Educational attainment of non-Hispanic white women and men (1979–1999 and 2000–2017) and of Hispanic women and men by nativity and national origin (1994–1999 and 2000–2017)

Average percent shares at each education level and percentage-point changes in shares across time periods

	All				Men			Women		
	Average share (1979–1999)	Average share (2000–2017)	Change (ppt.)	Average share (1979–1999)	Average share (2000–2017)	Change (ppt.)	Average share (1979–1999)	Average share (2000–2017)	Change (ppt.)	
White, non-	Hispanic									
Less than high school	10.2%	4.2%	-6.0	11.6%	5.1%	-6.5	8.0%	3.1%	-5.0	
High school	37.3	28.4	-8.9	36.0	30.3	-5.7	39.3	25.9	-13.4	
Some college	25.6	29.2	3.6	24.7	28.0	3.4	26.9	30.7	3.8	
Bachelor's degree or higher	27.0	38.2	11.3	27.7	36.6	8.8	25.8	40.3	14.5	
All Hispanio	:									
Less than high school	39.6	30.8	-8.8	44.4	35.7	-8.6	31.2	22.6	-8.6	
High school	30.8	31.5	0.7	28.8	32.0	3.2	34.3	30.7	-3.6	
Some college	19.4	22.5	3.2	17.5	19.6	2.1	22.7	27.5	4.8	
Bachelor's degree or higher	10.3	15.2	4.9	9.4	12.7	3.3	11.8	19.3	7.4	
	Average share (1994–1999)	Average share (2000–2017)	Change (ppt.)	Average share (1994–1999)	Average share (2000–2017)	Change (ppt.)	Average share (1994–1999)	Average share (2000–2017)	Change (ppt.)	
All I liamania										
All Hispanion Less than high school	19.4%	12.9%	-6.5	22.4%	15.0%	-7.3	15.4%	10.2%	-5.1	
High school	36.6	34.7	-1.8	36.2	37.0	0.8	37.1	31.9	-5.2	
Some college	30.3	32.6	2.3	28.7	30.5	1.8	32.5	35.2	2.7	
Bachelor's degree or higher	13.7	19.8	6.1	12.8	17.5	4.7	15.1	22.7	7.7	
All Hispanio	c, foreign-bori	n								
Less than high school	52.7	46.2	-6.5	56.3	50.2	-6.1	44.7	37.5	-7.2	
High school	24.7	28.9	4.2	24.0	28.6	4.7	26.3	29.4	3.2	
Some college	14.2	13.9	-0.3	12.4	11.9	-0.4	18.2	18.1	-0.1	
Bachelor's degree or	8.5	11.1	2.6	7.4	9.3	1.8	10.8	15.0	4.2	

Table 1 (cont.)

		All			Men			Women	
higher									
Mexican Ame	erican								
Less than high school	43.7	36.1	-7.6	48.6	41.1	-7.5	34.0	26.8	-7.2
High school	29.3	32.1	2.7	27.9	32.2	4.3	32.2	31.9	-0.4
Some college	19.4	20.9	1.5	17.0	17.8	0.8	24.2	26.8	2.6
Bachelor's degree or higher	7.5	10.9	3.4	6.5	8.9	2.4	9.5	14.5	4.9
Puerto Rican									
Less than high school	22.1	13.4	-8.7	25.8	16.3	-9.5	17.0	10.1	-7.0
High school	35.4	34.1	-1.3	36.0	36.5	0.5	34.6	31.2	-3.3
Some college	28.5	30.8	2.2	25.2	28.3	3.0	33.1	33.7	0.6
Bachelor's degree or higher	13.9	21.7	7.8	12.9	18.9	6.0	15.3	25.0	9.7
Cuban Ameri	can								
Less than high school	14.8	9.3	-5.5	17.2	11.3	-5.9	11.3	6.7	-4.6
High school	29.0	32.9	3.8	28.4	34.6	6.3	29.8	30.6	0.7
Some college	28.1	25.2	-2.9	27.8	24.1	-3.7	28.5	26.7	-1.8
Bachelor's degree or higher	28.1	32.6	4.5	26.6	29.9	3.3	30.3	36.0	5.7

Note: The population is U.S. full-time workers ages 18-64.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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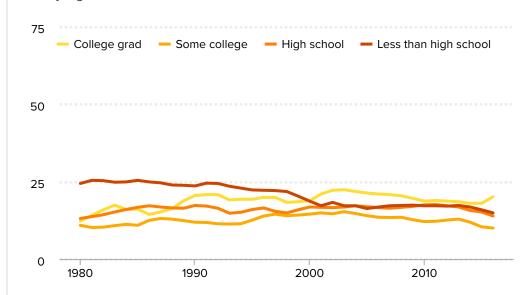
of Hispanic men, as shown earlier in Figure H. Although Hispanic women and men had similar rates of college completion during the 1980s, by the 1990s, the share of Hispanic women with a college degree began increasing faster than the share of Hispanic men with a college degree. By 2017, 25.9 percent of Hispanic women had a bachelor's degree or more education compared with 16.4 percent of Hispanic men.

Likewise, the wage gap between college-educated Hispanic full-time working women and college-educated white men also followed a different trajectory than the Hispanic—white wage gap for Hispanic men. In 1980, college-educated Hispanic women earned 37.7 percent less than white male college graduates with the same years of experience and living in the same region of the country. That gap narrowed to a low of 28.4 percent in 1996 and then expanded to levels closer to those typical of the 1980s. As a result, college-educated Hispanic women working full time no longer enjoy smaller pay gaps with white men than Hispanic women at lower levels of educational attainment; the pay differential for college-educated Hispanic women was 36.4 percent in 2016, similar in magnitude to

Figure M

College-educated Hispanic men now face wider wage gaps than Hispanic men with less education

Adjusted wage gaps between Hispanic men and non-Hispanic white men in the U.S., by highest level of education attained, 1980–2016



Note: The wage gap is how much less, in percent terms, the average member of each identified subgroup makes than the average non-Hispanic white man with the same education level (adjusted for experience and region of residence). The wages compared are average hourly wages and the population is full-time workers ages 18–64. Wage gaps reflect a three-year moving average, with 1979 included in the average for 1980 and 2017 included in the average for 2016.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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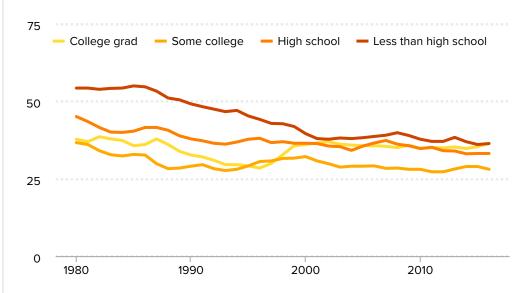
the differentials for Hispanic women with a high school diploma (33.1 percent) or less (36.3 percent), and much wider than for Hispanic women with some college (28.0 percent) who worked full time.

The results for college-educated Hispanic full-time workers seem counterintuitive; we would expect that college-educated workers would face less discrimination and that they would have a broader array of potentially better-paying employers to choose from than other workers with lower education levels, which would positively affect their wages. However, as noted, college-educated Hispanic full-time workers face relatively large wage differentials. In fact, the differentials are consistent with the relatively large wage differentials between black and white college graduates reported by Wilson and Rodgers (2016), making this pay penalty for college-educated full-time workers of color more the norm than the exception. We venture a potential explanation based on our recent research with James Boudreau (Mora, Dávila, and Boudreau 2016). The basic premise of this research is that white workers have more established social networks than black and Hispanic workers do, and that these social networks help them procure employment more easily in part because employers believe these networks are more reliable in the recruitment process. These favored social networks provide college-educated white

Figure N

A college education does not reduce the wage gap for Hispanic women

Adjusted wage gaps between Hispanic women and non-Hispanic white men in the U.S., by highest level of education attained, 1980–2016



Note: The wage gap is how much less, in percent terms, the average member of each identified subgroup makes than the average non-Hispanic white man with the same education level (adjusted for experience and region of residence). The wages compared are average hourly wages and the population is full-time workers ages 18–64. Wage gaps reflect a three-year moving average, with 1979 included in the average for 1980 and 2017 included in the average for 2016.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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workers with greater job mobility than college-educated minority workers, and thus provide an advantage in securing higher pay.

Wage gaps for workers with some college education

Figures M and N show that Hispanic full-time workers with some postsecondary education who did not complete a four-year college degree outperformed—in a relative sense—their same-gender peers at every other level of education. Their wage gaps with white workers are consistently among the lowest for the entire period observed in this analysis. While measuring the differences in the adjusted earnings gaps between college-educated Hispanic workers and Hispanic workers with some college education requires extensive conceptual and empirical investigations, we venture to suggest one potential reason for the differences. Relative to college-educated workers, workers with just some college education might have more of the "jack of all trades" characteristics discussed in some recent studies on entrepreneurship (e.g., Lazear 2005) that might make this group relatively mobile, not only geographically, but between the employer-paid and self-

employment sectors. This mobility might blunt potential monopsonisitic penalties (pay penalties workers face when their pool of potential employers is small) for this group vis-à-vis those penalties experienced by more specifically trained college-educated workers.

Wage gaps for workers with a high school education or less

The wage gaps for full-time working Hispanic men and women with a high school diploma but no college experience are most consistent in size with the average experience of Hispanic men and women working full-time in general. Before 2000, the adjusted earnings differentials between Hispanic workers and white male workers are larger among full-time workers lacking a high school diploma than for any other educational categories reported here—and this is true for both men and women. The average unexplained earnings gap for Hispanic men without a high school diploma fell slightly from a range of 24 percent to 25 percent during the 1980s to as low as 20.3 percent by 1999, and the gap for Hispanic women with less than a high school diploma dropped from a range of 50 percent to 55 percent in the 1980s down to 41.8 percent in 1999.

However, beginning in 2000, the wage gaps between Hispanic men and women and white men with less than a high school diploma began to level off and fairly closely tracked the Hispanic—white pay differentials for workers with a high school diploma. As of 2016, Hispanic men without a high school diploma were making 14.9 percent less in hourly wages than white men without a high school diploma, while Hispanic women without a high school diploma were making 36.3 percent less than white men at the same education level. While we could reason for a "jack of all trades" explanation for the relatively "small" unexplained earnings gap for Hispanic men, the large unexplained earnings differential for Hispanic women in this education bracket might be an issue of policy concern since it suggests that Hispanic women who do not complete high school face a much larger wage penalty than Hispanic men without a high school diploma.

Hispanic immigrants

Another demographic feature that adds to the heterogeneity of "the Hispanic population" is the fact that immigrants make up a significant segment of this group. For example, in our 2017 CPS-ORG sample, full-time workers who were born outside of the 50 states plus the District of Columbia and the U.S. territories (i.e., foreign-born) represented about half (48.7 percent) of Hispanic workers, but only 4.3 percent of non-Hispanic white workers. Even among Hispanic workers, the share of immigrants varies widely across the Hispanic subgroups. Immigrants accounted for less than one percent of stateside Puerto Rican workers (0.3 percent) in 2017, but about half of Mexican American workers (47.5 percent) and 61.9 percent of Cuban American workers that year.

We therefore examine how immigrant status affects Hispanic—white wage gaps among full-time workers. Specifically, we re-estimate the adjusted wage gaps for Hispanic men and women relative to non-Hispanic white men, adding binary variables to control for

whether they are foreign-born (including naturalized citizens) or U.S.-born. We also distinguish between recent immigrants (those who arrived within the past four to five years, depending on the survey year [hence, the questionnaire responses]) and immigrants who have lived in the U.S. for longer than five years, to account for adjustment factors immigrants often encounter when settling into a new country. Because the CPS did not include birthplace until 1994, our analysis of Hispanic—white wage gaps with controls for immigrant status begins in 1994 instead of 1979.

Figure O presents the adjusted earnings gaps, with and without controls for immigrant status, for full-time working Hispanic men and women. The percentage-point decrease we see in the adjusted-earnings gaps lines after we add a control for immigrant status reflects the "immigrant penalty"—the additional explanatory factor behind the Hispanic—white earnings gap Hispanics face if they are immigrants. These findings reveal that for most of the years analyzed, the immigrant penalty is larger for Hispanic men than it is for Hispanic women, but the effect of immigrant status on Hispanic—white wage gaps has diminished for both men and women since 1994. In 1994, controlling for immigrant status reduced the adjusted Hispanic—white wage gap among men by 7.2 percentage points (from 16.9 percent to 9.7 percent), compared with a difference of 5.5 percentage points among women (from 33.3 percent to 27.8 percent). By 2017, the difference was 2.6 percentage points for both men and women.

While the immigrant-status-adjusted wage gaps among men were somewhat volatile during the 1990s, they remained fairly flat between 2000 and 2017. Among Hispanic men, the Hispanic—white wage gap adjusted for immigrant status generally ranged from 10 percent to 12 percent from 1994 to 2017 (except for a spike up to 14 percent in the mid-1990s), compared with 28 percent to 31 percent among Hispanic women during the same period.

Figure P shows the Hispanic—white wage gap for Mexican American men and women with and without controls for immigrant status. Similar to the results for all Hispanic workers, the immigrant penalty among Mexican American workers declined between 1994 and 2017, although much more abruptly for women than for men. For example, with the exception of a couple years, controlling for immigrant status consistently reduced the Mexican American—white wage gap among men by between 5 and 7 percentage points on average, in each year until 2012; from 2013 to 2017 controlling for immigrant status reduced the gap by between 3 and 4 percentage points. For women, the reduction quickly falls from over 6 percentage points before 2001 to a range of 1 to 5 percentage points in 2001 and later. As a result, relative to Mexican American men, immigrant status accounted for a larger share of the wage gap between Mexican American women and white men from 1994 to 2000, but a smaller share from 2001 to 2017.

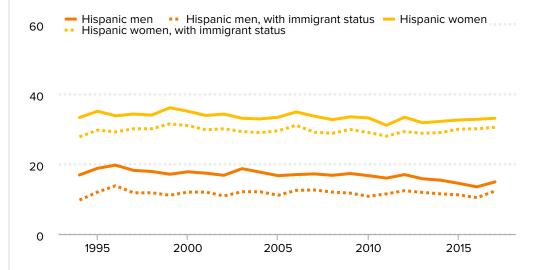
Wage gaps by immigrant generation

Another point to emphasize when analyzing Hispanic—white wage gaps is that there are potential intergenerational differences that may affect wage gaps. Duncan and Trejo (2011) note that for Mexican Americans, economic progress seems to stall after the second

Figure O

The Hispanic-white wage gap is inflated by the large share of Hispanic immigrants

Adjusted wage gaps between Hispanic men and non-Hispanic white men in the U.S., by gender, with and without controls for immigrant status, 1994–2017



Note: The wage gap is how much less, in percent terms, the average member of each identified subgroup makes than the average non-Hispanic white man. The wages compared are average hourly wages of full-time workers ages 18–64. The dotted "with immigrant status" lines show the wage gap adjusted for education, experience, region of residence, and immigrant status, while the solid lines show the wage gap adjusted for education, experience, and region of residence. We control for immigrant status by including binary variables indicating whether the respondent is foreign-born or a naturalized citizen (versus a U.S.-born citizen) and whether the person had lived in the U.S. for less than five years at the time of the survey.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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immigrant generation, and that this dynamic should be a source of policy concern. In particular, Duncan and Trejo provide evidence that the economically successful workers in this ethnic group may stop self-identifying themselves as Mexican American.

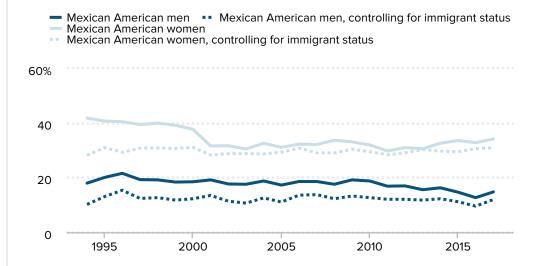
To explore whether intergenerational differences affect wage gaps for Mexican American and other Hispanic workers, we first partition the sample of Hispanic workers into three subgroups: first-generation immigrants (those born outside the U.S. and its territories), second-generation immigrants (those born in the U.S. or its territories to at least one foreign-born parent), and "third-plus" generation immigrants (those born in the U.S. to U.S.-born parents).

As shown in **Figures Q** and **R**, the majority of Hispanic full-time workers between the ages of 18 and 64 identify as first-generation immigrants. Figure Q shows that the share of Hispanic men full-time workers who are first-generation immigrants grew from 56.7 percent in 1994 to a peak of 63.4 percent in 2007. Since then, the percentage has steadily declined to a low of 53.2 percent in 2017. The decline likely relates to the slowdown and subsequent reversal in immigration in recent years as discussed by Renee Stepler and

Figure P

The immigrant wage penalty among Mexican Americans declined more for women between 1994 and 2017

Adjusted wage gaps between Mexican Americans and non-Hispanic white men in the U.S., by gender, with and without controls for immigration status, 1994–2017



Note: The wage gap is how much less, in percent terms, the average member of each identified subgroup makes than the average non-Hispanic white man. The wages compared are average hourly wages of full-time workers ages 18–64. The dotted "with immigrant status" lines show the wage gap adjusted for education, experience, region of residence, and immigrant status, while the solid lines show the wage gap adjusted only for education, experience, and region of residence. We control for immigrant status by including binary variables indicating whether the respondent is foreign-born or a naturalized citizen (versus a U.S.-born citizen) and whether the person had lived in the U.S. for less than five years at the time of the survey.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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Mark Hugo López in a 2016 Pew Research Center report (Stepler and López 2016).

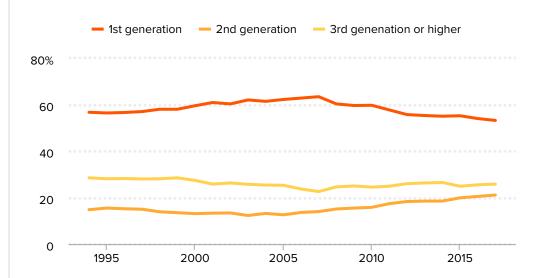
As seen in Figure R, the share of Hispanic women working full time who identified as first-generation immigrants was smaller than the share of Hispanic men who did so. However, like men, the percentage started increasing during the latter half of the 1990s and peaked just before the Great Recession (rising from 43.5 percent in 1994 to 48.2 percent in 2006), and then declined to a low of 41.8 percent.

The second largest group among Hispanic full-time workers consists of those who were born in the U.S. to U.S.-born parents (third generation or higher). In 2017, a quarter (25.8 percent) of Hispanic men and a third (33.7 percent) of Hispanic women fell into this group. Second-generation Hispanic immigrants—those born in the U.S. to at least one foreign-born parent—represent the smallest group of Hispanic full-time workers, but they have grown as a share of this group as the share of first-generation Hispanic full-time workers

Figure Q

Most Hispanic working men in the U.S. are first-generation immigrants

Shares of Hispanic men ages 18–64 working full time who identify as first-, second-, and third-generation immigrants, 1994–2017



Notes: First generation includes those born outside the United States and its territories (foreign-born). Second generation includes those born inside the United States or one of its territories to at least one foreign-born parent. Third generation or higher includes those born inside the United States or one of its territories to U.S.-born parents.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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has declined and as more children of foreign-born parents reach working age and enter the labor force.

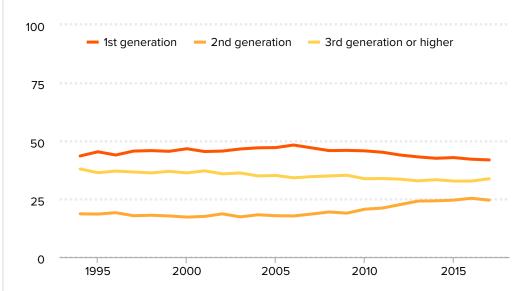
Figures S and **T** report the adjusted earnings differentials between Hispanic full-time workers (men and women, respectively) and non-Hispanic white working men of the same immigrant generation. Because of the volatility that results from partitioning the sample into smaller groups, we present these estimates as three-year moving averages.

For first-generation Hispanic immigrant men (Figure S), the pay gap with first-generation white immigrant men with similar levels of education and experience working full time was 22.0 percent in 1995 (wider than the gap for Hispanic men in general, as noted above), but had fallen to 17.9 percent by 2016. In contrast, the pay gap between first-generation Hispanic immigrant working women and first-generation white immigrant working men (Figure T) shrank very little over this period and, as was the case for Hispanic working women overall, was substantial (ranging between 35 and 40 percent). The fact that foreign-born Hispanic working women have been unable to substantially close the large pay gap with foreign-born white working men during the 23 years observed in this analysis supports the assertion that the labor market outcomes of Hispanic working women, including foreign-born Hispanic working women, deserve specific policy attention.

Figure R

First-generation immigrants account for the largest share of Hispanic working women in the U.S.

Shares of Hispanic women ages 18–64 working full time who identify as first, second-, and third-generation immigrants, 1994–2017



Notes: First generation includes those born outside the United States and its territories (foreign-born). Second generation includes those born inside the United States or one of its territories to at least one foreign-born parent. Third generation or higher includes those born inside the United States or one of its territories to U.S.-born parents.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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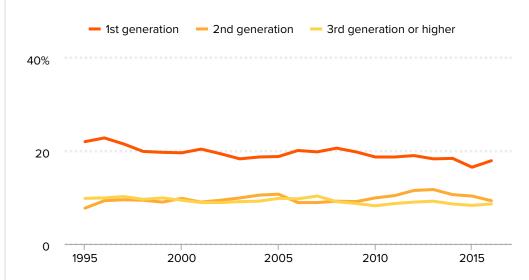
The noted progress in narrowing the pay gap for Hispanic immigrant men working full-time is revealing from a conceptual perspective. First, it supports the theory that the men in this group have enjoyed increased labor market mobility (perhaps because of a "jack of all trades" effect over the 2000s) since the mid-1990s, reducing the pay penalties that come when job seekers have too few potential employers to choose from ("monopsonistic penalties"). Interestingly, some research has suggested that monopsonistic penalties are a factor behind the relatively low wages of a subset of foreign-born Hispanic working men (those with an accent) who might be misidentified as undocumented workers (Dávila, Bohara, and Sáenz 1993). Second, the progress that Hispanic immigrant men have made in narrowing the full-time pay gap challenges the notion that Hispanic immigrants might be negatively selected from their native populations as suggested by Borjas (1987), a premise that was subsequently challenged by Chiquiar and Hanson (2005) and others.

For Hispanic workers who are second-generation immigrants, the adjusted full-time wage gap with their non-Hispanic white counterparts is substantially narrower than for first-generation Hispanic immigrants, indicating labor market advantages with intergenerational assimilation, as would be expected. The wage gaps among the second-generation immigrant group also tended to be fairly stable—between 8 and 12 percent for men, and between 26 and 29 percent for women.

Figure S

The wage gap for first-generation Hispanic men in the U.S. has shrunk since the mid-1990s; all intergenerational gains are between the first and second generations

Adjusted wage gaps between Hispanic men and non-Hispanic white men, by immigrant generation, 1995–2016



Note: The wage gap is how much less, in percent terms, the Hispanic man makes than the average non-Hispanic white man of the same immigrant generation, adjusted for education, experience, and region of residence. The wages compared are average hourly wages of full-time workers ages 18–64. Wage gaps reflect a three-year moving average, with 1994 included in the average for 1995, and 2017 included in the average for 2016.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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The results for third-plus generation Hispanics working full-time have also been stable for men (Figure S) and fairly stable for women (Figure T). On average, the unexplained earnings gaps for second- and third-generation Hispanic immigrants are fairly similar, albeit wider (a higher line in the graph) among the third-plus generation women for many of the years shown.¹⁷

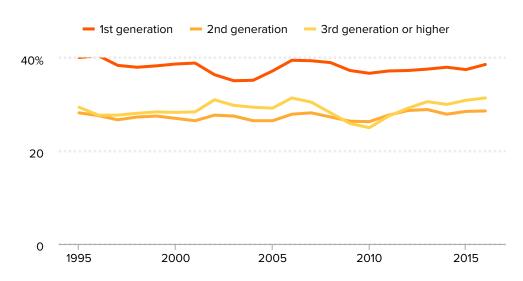
Overall, these results are mixed as they pertain to the Duncan and Trejo hypothesis on an intergenerational "loss" of self-reported Hispanic status. We would have expected a stagnation between the second and third-plus generations over the entire time frame had a disproportionate share of the most successful Mexican Americans consistently stopped identifying themselves as Mexican American.

Although the smaller share of workers identifying as being of Cuban descent in our sample does not allow us to explicitly test the Duncan and Trejo hypothesis for this group, there are a few clues suggesting a "loss" of self-reported Hispanic status among Cuban Americans. Specifically, as shown in Appendix Table 1, averaged over all years available,

Figure T

The wide wage gap for first-generation Hispanic women in the U.S. has barely changed since the mid-1990s; all intergenerational gains are between the first and second generations

Adjusted wage gaps between Hispanic women and non-Hispanic white men, by immigrant generation, 1995–2016



Note: The wage gap is how much less, in percent terms, the average Hispanic woman makes than the average non-Hispanic white man of the same immigrant generation, adjusted for education, experience, and region of residence. The wages compared are average hourly wages of full-time workers ages 18–64. Wage gaps reflect a three-year moving average, with 1994 included in the average for 1995, and 2017 included in the average for 2016.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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69.3 percent of Cuban American full-time workers were first generation immigrants, but only 5.7 percent were third generation or higher. Despite the long history of Cuban immigration to America (the first major wave of which started in 1959 with the rise of Fidel Castro in Cuba), the small share of the third-generation group presumably reflects the fact that Cuban immigrants who arrived in the U.S. since 1980 represent a larger share of Cuban Americans in the U.S. than those who arrived in earlier years (see, for example, Pew Hispanic Center 2006; Krogstad 2017).

Stateside Puerto Ricans and La Crisis Boricua

As noted earlier, Puerto Rico has been struck by a severe economic crisis—a combination of factors that contributed to a "perfect storm" that started in 2006 and is still ongoing, leading to massive net outmigration on a scale not seen for 60 years. Indeed, as we

discuss in our book co-authored with Havidán Rodríguez, La Crisis Boricua turned into a humanitarian crisis for the island even before the onslaught of Hurricane Maria in September 2017, resulting in a shrinking and rapidly aging population; a significant loss in public- and private-sector jobs; a deteriorating infrastructure; higher sales taxes than in any of the states; and \$74 billion in public debt (Mora, Dávila, and Rodríguez 2017a). These interrelated factors occurred on top of the already weak labor markets and high poverty rates prevalent on the island for decades.

We estimate that Puerto Rico lost over 600,000 people due to net outmigration between 2006 and 2016, equivalent to 16.5 percent of the island's 2006 population (Mora, Dávila, and Rodríguez 2017a). We also estimate that approximately one-third of Puerto Rican migrants who moved to the U.S. mainland during this time went to Florida. This movement was coupled with a net influx of Puerto Ricans from other states. In 2016 Florida was home to 1.1 million Puerto Ricans, a population essentially the same size of the Puerto Rican population in New York. It follows that the labor market outcomes of Puerto Ricans have become (and will continue to be, in light of Hurricane Maria's impact on net outmigration) increasingly important to the economic direction of their mainland destination areas, including Florida.

The net outmigration from Puerto Rico started escalating as the U.S., and Florida in particular, were entering the Great Recession. While the mainland recovered, the island's economy continued deteriorating, such that the exodus continued. As such, Puerto Ricans leaving the island at the beginning stages of La Crisis Boricua were not moving into robust mainland labor markets. For sake of completeness of this report, we therefore replicate the wage gap analysis for Puerto Ricans while distinguishing between island-born and mainland-born Puerto Ricans working full-time stateside, as seen in **Figure U** for men and **Figure V** for women.¹⁸

The trends for both groups of Puerto Rican men were rather erratic. The adjusted earnings penalties for both island-born and mainland-born Puerto Rican men, relative to white men working full time stateside, converged significantly during the latter half of the 1990s and first part of the 2000s. Since around 2003, regardless of birthplace, the wage gaps between Puerto Rican men and white men working stateside have tended to very loosely hover around the 8- to 10-percent range typical of all third-generation or higher Hispanic men. Still, 10.0 percent was an upper bound for mainland-born Puerto Rican men but was a lower bound for island-born Puerto Rican men (whose wage gaps crested at roughly 14 percent twice in this period before hitting a post-2003 high of 16.0 percent in 2016).

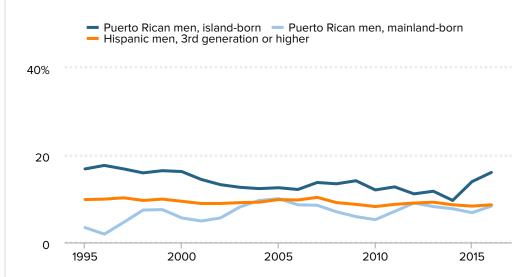
At the same time, mainland-born Puerto Rican women working full time had smaller adjusted wage gaps with white men than their island-born counterparts, ranging between 21 percent and 35 percent from 1995 to 2016, compared with a range of between 29 percent and 39 percent for island-born women working in the states. Indeed, in most years, mainland-born Puerto Rican women had smaller unexplained wage gaps with white men (at least among full-time workers) than Hispanic third-plus generation women overall.

It follows that the unexplained earnings penalties reported for all Puerto Ricans, regardless of birthplace, mask important differences related to birthplace among Puerto Rican men

Figure U

Wage gaps are wider for island-born versus mainland-born Puerto Rican men

Adjusted wage gaps between Puerto Rican men and non-Hispanic white men and between third-generation Hispanic men and non-Hispanic white men, 1995–2016



Note: The wage gap is how much less, in percent terms, the average Puerto Rican (island-born or mainland-born) man makes than the average non-Hispanic white man in general and how much less the average third-generation Hispanic man makes than the average third-generation non-Hispanic white man, with all wage gaps adjusted for education, experience, and region of residence. The wages compared are average hourly wages of full-time workers ages 18–64. Wage gaps reflect a three-year moving average, with 1994 included in the average for 1995, and 2017 included in the average for 2016.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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and women on the mainland. Given that Hurricane Maria has escalated the already high net outmigration from Puerto Rico, ¹⁹ understanding the socioeconomic progress of incoming migrants in their new communities has taken on new urgency.

Concluding remarks

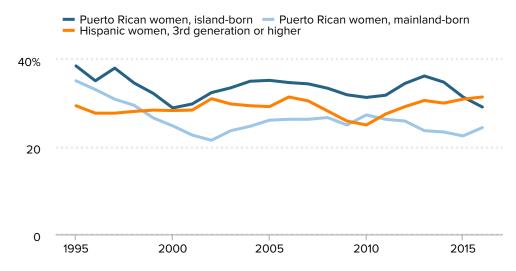
Between 2000 and 2017, the number of Hispanics in the U.S. rose by 66.9 percent, from 35.3 million to 58.9 million, outstripping the percentage increase in the size of the non-Hispanic white population (U.S. Census Bureau 2018). During the same period, the Hispanic share of the U.S. population increased from one out of every eight people to one out of every six. These demographic changes have brought heightened attention to the challenges this ethnic group faces in the labor market and elsewhere.

In this report, we provide an update and a longer-scope view of the labor market outcomes of Hispanics overall and for various Hispanic subpopulations, while considering how gender, education level, birthplace, immigrant status, and generational status affect

Figure V

Mainland-born Puerto Rican women have substantially smaller wage gaps with non-Hispanic white men than their island-born counterparts

Adjusted wage gaps between Puerto Rican women and non-Hispanic white men and between third-generation Hispanic women and third-generation non-Hispanic white men, 1995–2016



Note: The wage gap is how much less, in percent terms, the average Puerto Rican (island-born or mainland-born) woman makes than the average non-Hispanic white man in general and how much less the average third-generation Hispanic woman makes than the average third-generation non-Hispanic white man, with all wage gaps adjusted for education, experience, and region of residence. The wages compared are average hourly wages of full-time workers ages 18–64. Wage gaps reflect a three-year moving average, with 1994 included in the average for 1995, and 2017 included in the average for 2016.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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our main measure of interest: the Hispanic–white pay gap among full-time workers.²⁰

In general, we find that the adjusted wage gaps between Hispanic full-time workers and non-Hispanic white working men have not narrowed since the early- to mid-2000s—with a few significant exceptions. In particular, when it comes to the Hispanic—white wage gap, Hispanic women (particularly among Hispanic immigrants and island-born Puerto Ricans) suffer from a much wider wage gap than Hispanic men and have not been able to narrow the gap with white men in more than a decade and a half since 2000. This lack of progress should be a point of concern for policymakers, especially in light of the relatively large growth in the labor force participation rate of Hispanic women—a growth rate that has exceeded their overall population growth.

Our examination of some of the factors known to be related to pay also provides causes for both concern and optimism.

We know that Hispanics as a group are relatively young; Hispanic men tend to have a

comparatively strong attachment to the labor force, as measured by their labor force participation rate (particularly Mexican American men); and, in light of their population growth, Hispanics are continuing to grow as an economic force in the United States. This report points nonetheless to this potential being hindered by Hispanics workers' relatively low education levels compared with those of whites. At the same time, we identify some progress made in recent years (at least among full-time workers) in increased educational attainment.

Our findings can be combined with other studies of Hispanic outcomes in the American education and labor markets to provide a clearer picture of progress made, challenges remaining, and potential policy responses. For example, research conducted by Mark Hugo Lopez at the Pew Research Center (Lopez 2013) hints of optimism on the education front, as Hispanics appeared to be gaining some ground with respect to their educational attainment and other socioeconomic outcomes in the first decade of the 2000s. Moreover, according to Lopez, despite low education levels, Hispanics seem to place a large value on education. Nevertheless, his study, which is based on a survey of Hispanic attitudes toward education, further indicates that while Hispanics value education and might wish to attain higher levels of this important human capital factor, many are constrained by economic and family obligations. Still, the survey reveals other positive trends. For example, the survey reveals that Hispanic youth are optimistic and envision for themselves a brighter financial future than that attained by their parents.

Another positive trend appears in the research of Arturo Gonzalez, who points out that the English-language literacy gap between Hispanics and whites is declining from one generation to the next (Gonzalez 2013). This illustrates that we can design policies to promote the human capital base of the growing Hispanic population. In particular, Gonzalez suggests that through investments in reducing English-language illiteracy rates among Hispanics, the educational and intellectual achievements of parents and their children would increase, which, in turn, would advance this group's college enrollment and graduation rates. Gonzalez notes, "While failure to implement such policies is unlikely to stunt further gains in literacy for Hispanics in both absolute and relative terms, implementing such policies may speed up the assimilation process with respect to English-language literacy" (Gonzalez 2013, 44).

Another factor to explore when looking at ways to reduce the education gaps that likely contribute to pay gaps is the whether the quality of education provided to Hispanic students is lower than that provided to white students. Even with equal schooling levels, Hispanic workers would likely still earn less than non-Hispanic whites if Hispanics have less access to quality schools and other forms of human capital. We conclude by emphasizing the urgency in finding answers to these types of questions if we want to improve the relatively stagnant labor market outcomes of Hispanic workers in America, particularly of Hispanic women in the United States.

About the authors

Marie T. Mora is professor of economics and an administrator in Faculty Affairs & Diversity

at the University of Texas Rio Grande Valley. She is also the director and principal investigator of the NSF-funded American Economic Association's mentoring program. A labor economist, Mora is nationally recognized for her research on Hispanic/Latino socioeconomic outcomes, and has been invited to share her expertise with a variety of agencies and organizations across the country, including the White House and the Board of Governors of the Federal Reserve System. She is currently serving on the Board of Directors of the Federal Reserve Bank of Dallas San Antonio Branch, and has served on the Data Users Advisory Committee of the Bureau of Labor Statistics and on the board (including as president) of the American Society of Hispanic Economists. Mora's publications include over 45 refereed journal articles and book chapters; two books, Population, Migration, and Socioeconomic Outcomes of Island and Mainland Puerto Ricans: La Crisis Boricua (Lexington Books, 2017, with Alberto Dávila and Havidán Rodríguez) and the award-winning Hispanic Entrepreneurs in the 2000s: An Economic Profile and Policy Implications (Stanford University Press, 2013, with Alberto Dávila); and three co-edited volumes. Mora earned her Ph.D. in economics from Texas A&M University, and B.A. and M.A. degrees from the University of New Mexico in her hometown of Albuquerque.

Alberto Dávila is professor of economics and dean of the Harrison College of Business & Computing at Southeast Missouri State University. He is currently a board member and past president of the American Society of Hispanic Economists. Dávila's research interests include the economics of the U.S.—Mexico border, the economics of immigration, and Hispanic labor markets. Dávila has published extensively on these issues since 1982, first appearing in the Federal Reserve Bank of Dallas' Economic Review. Moreover, he has coauthored two books: Population, Migration, and Socioeconomic Outcomes of Island and Mainland Puerto Ricans: La Crisis Boricua (Lexington Books, 2017, with Marie T. Mora and Havidán Rodríguez) and the award-winning Hispanic Entrepreneurs in the 2000s (Stanford University Press, 2013, with Marie Mora); and co-edited two volumes. Dávila earned his Ph.D. and M.S. degrees in economics from Iowa State University, and a B.A. degree in economics from Pan American University.

Endnotes

- 1. Latest estimates for July 1, 2017 (U.S. Census Bureau 2018). These estimates don't include the 3.3 million people who live in Puerto Rico.
- 2. While Hispanics can be of any race (including "white"), in this report "white" refers to non-Hispanic white.
- 3. The forms of discrimination potentially affecting the wage gap for Hispanic women include "bias discrimination," which is discrimination associated directly with racism or sexism (i.e., discrimination based on biases or prejudices against an entire group of people) and "statistical discrimination," which occurs when distinctions between demographic groups are made on the basis of real or imagined statistical differences between the groups (for example, women may be offered lower wages than men because they are perceived by employers to be less productive). Stratification issues also potentially affect the wage gap. Stratification refers to where people are located in the social and/or economic hierarchy based on class, race, gender, etc.

- 4. Latest estimates as of July 1, 2017 (U.S. Census Bureau 2018). These estimates here, and our analyses throughout the report, don't include the 3.3 million people who live in Puerto Rico or the inhabitants of other U.S. territories.
- 5. More scholars have been raising awareness about the heterogeneity of the Hispanic population, as is evident in recent volumes devoted to analyzing socioeconomic and demographic differences across the subgroups of this population (e.g., Verdugo 2013; Mora and Dávila 2013; Leal and Trejo 2011; and Rodríguez, Sáenz, and Menjívar 2008).
- 6. The Great Recession, which technically ran from December 2007 to June 2009, was the worst economic recession in the U.S. since the Great Depression. Even after it ended, labor market conditions continued to deteriorate. We discuss Hispanic quarterly unemployment rates during the Great Recession in the 2017 Hispanic Economic Outlook report of the American Society of Hispanic Economists (Mora and Dávila 2017).
- The BLS data did not separately report unemployment statistics for Hispanics from El Salvador until 2014.
- See Mora, Dávila, and Rodríguez 2017a for a more detailed discussion on Puerto Rican unemployment rates when adjusted for changes in the labor force participation rates of Puerto Ricans.
- We use the convention of taking the natural logarithm of earnings to account for the skewed nature of earnings distributions.
- 10. We estimate average schooling by taking the midpoints where possible in the different education categories. It should be noted the categorical responses changed over time, such that these averages are not based on identical coding throughout the entire 36-year period.
- 11. We also estimate Hispanic—white wage gaps using the wage decomposition methodology of Oaxaca (1973) on annual data from the Current Population Survey Annual Social and Economic Supplement (U.S. Census Bureau CPS-ASEC various years). Comparing the regression-adjusted Hispanic—white wage gap estimates in this report with estimates of the unexplained portion of the wage gap from the Oaxaca decomposition, we find similar wage gap estimates and trends, although the trend from the smaller CPS-ASEC sample was more volatile. A comparison of the two sets of estimates is available from the authors upon request.
- 12. Our methodology uses a set of binary variables indicating which of the four levels of education is the highest completed or attained. In the wage equation, high school education is the base (the omitted education category).
- 13. We specify potential experience as a linear, squared, and cubic term to account for nonlinearities in how experience relates to labor market earnings (e.g., Murphy and Welch 1992).
- 14. We include a set of binary variables identifying the nine geographic Census divisions.
- 15. As explained in note 3 attached to the summary section at the beginning of the report, "bias discrimination" is discrimination associated directly with racism or sexism (i.e., discrimination based on biases or prejudices against an entire group of people). "Statistical discrimination" occurs when distinctions between demographic groups are made on the basis of real or imagined statistical differences between the groups (for example, women may be offered lower wages than men because they are perceived to be less productive). Stratification refers to where people are located in the social or economic hierarchy based on class, race, gender, etc. "Monopsonistic labor market structures" are labor market features that give employers power because workers

have a limited number of employers to seek employment with.

- 16. The adjusted wage gaps for Mexican immigrant men and women working full time (not included in the graphs) tended to move together with those of Hispanic immigrants in general. Until 2012, they were only slightly larger in magnitude for Mexican immigrant men than for Hispanic immigrant men in general.
- 17. Similar patterns apply to second- and third-generation Mexican immigrants.
- 18. Elsewhere, we provide a more detailed and an extensive analysis of the socioeconomic outcomes of island-born and mainland-born Puerto Ricans during this historic time (Mora, Dávila, and Rodríguez 2017a), but we do not focus exclusively on full-time workers.
- 19. Preliminary estimates by Edwin Meléndez and Jennifer Hinojosa (2017) predict that Puerto Rico will lose over 470,000 residents (equivalent to 14 percent of the island's population) due to outmigration from Hurricane Maria between 2017 and 2019. This outmigration would be on top of the massive net outmigration already observed since 2006.
- In 2008, EPI published a report on economic outcomes for Hispanic workers in the 2000s. See Austin and Mora 2008.

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Appendix Table 1 Age and demographic characteristics of non-Hispanic white workers and Hispanic workers 1979—2017 and of Hispanic worker subgroups by national origin, 1994—2017

ΑII

		All			
			(Availab	le 1994–20)17 only)
	White, non-Hispanic	Hispanic	Mexican American	Puerto Rican	Cuban American
Age	39.4	35.9	36.0	37.9	40.5
Educational distribution (full-time workers at each level*)					
Less than high school	7.4%	35.5%	38.0%	15.6%	10.7%
High school	33.2	31.1	31.4	34.4	31.9
Some college	27.3	20.8	20.5	30.2	25.9
Bachelor's degree	20.7	8.7	7.5	13.8	21.7
Advanced degree	11.4	3.8	2.5	5.9	9.8
Regional distribution (sho workers in each Census r					
New England	6.2%	2.0%	0.3%	10.4%	1.2%
Middle Atlantic	14.6	12.6	2.4	42.9	9.1
East North Central	18.7	6.8	8.2	8.3	2.6
West North Central	8.7	1.7	2.4	0.9	0.6
South Atlantic	17.6	12.9	5.8	25.8	75.1
East South Central	6.4	0.8	1.1	0.9	1.0
West South Central	9.5	21.4	28.7	3.5	3.1
Mountain	6.2	9.6	12.2	1.9	2.2
Pacific	12.0	32.3	39.0	5.4	5.0
(Available 1994–2017 only):					
Immigrant status distribu full-time workers in each					
U.Sborn	96.1%	46.6%	47.2%	98.6%	30.7%
Foreign-born, naturalized	2.0	14.7	11.8	0.9	35.3
Foreign-born, noncitizen	1.9	38.7	41.0	0.5	34.0

Appendix Table 1 (cont.)

Generational distribution full-time workers in each	•				
First generation	3.9%	53.4%	52.8%	1.4%	69.3%
Second generation	4.8	17.2	19.5	7.0	25.0
Third generation or higher	91.3	29.4	27.7	91.6	5.7
Percent of Hispanic population	n.a.	100.0%	63.7%	8.5%	4.1%
		Men			
			(Availab	le 1994–20	17 only)
	White, non-Hispanic	Hispanic	Mexican American	Puerto Rican	Cuban Americar
Age	39.4	35.7	35.7	38.0	40.6
Educational distribution (full-time workers at each level*)					
Less than high school	8.6%	40.4%	43.0%	18.7%	12.8%
High school	33.4	30.3	31.2	36.4	33.1
Some college	26.2	18.5	17.6	27.5	25.0
Bachelor's degree	20.5	7.5	6.2	12.2	19.9
Advanced degree	11.4	3.4	2.1	5.2	9.2
Regional distribution (sha workers in each Census r					
New England	6.2%	1.8%	0.3%	9.6%	1.1%
Middle Atlantic	14.7	12.0	2.8	42.1	8.7
East North Central	19.1	7.0	8.4	8.8	2.6
West North Central	8.6	1.7	2.4	1.1	0.7
South Atlantic	17.2	12.4	6.5	25.8	74.5
East South Central	6.3	0.9	1.3	0.9	1.2
West South Central	9.4	21.5	27.6	3.9	3.2
Mountain	6.3	9.6	12.0	2.0	2.4
Pacific	12.1	33.0	38.6	5.8	5.6
(Available 1994–2017 only):					
Immigrant status distribu full-time workers in each					
U.Sborn	95.9%	41.6%	41.0%	98.7%	29.5%

Appendix Table 1 (cont.)

Foreign-born, naturalized	2.0	14.0	11.7	0.8	33.7		
Foreign-born, noncitizen	2.1	44.4	47.3	0.5	36.8		
	Generational distribution (share of full-time workers in each category)						
First generation	4.1%	58.4%	59.0%	1.3%	70.5%		
Second generation	4.8	15.6	17.3	6.9	24.1		
Third generation or higher	91.1	26.1	23.8	91.7	5.4		
Percent of Hispanic population	n.a.	100.0%	66.4%	7.5%	3.7%		

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			(Availab	lable 1994–2017 only)	
	White, non-Hispanic	Hispanic	Mexican American	Puerto Rican	Cuban American
Age	39.4	36.4	36.7	37.9	40.3
Educational distribution (full-time workers at each level*)					
Less than high school	5.7%	27.2%	28.6%	11.8%	7.8%
High school	33.1	32.6	31.9	32.1	30.4
Some college	28.7	24.9	26.2	33.5	27.1
Bachelor's degree	21.0	10.8	9.9	15.9	24.0
Advanced degree	11.5	4.5	3.4	6.7	10.6
Regional distribution (sho workers in each Census I					
New England	6.3%	2.4%	0.2%	11.3%	1.2%
Middle Atlantic	14.4	13.7	1.6	43.8	9.4
East North Central	18.2	6.4	7.8	7.8	2.7
West North Central	8.9	1.6	2.3	0.8	0.5
South Atlantic	18.1	13.7	4.3	25.8	76.1
East South Central	6.4	0.6	0.8	0.8	0.8
West South Central	9.6	21.1	30.8	3.1	3.0
Mountain	6.1	9.5	12.6	1.7	2.0
Pacific	11.9	30.9	39.7	4.9	4.3

(Available 1994–2017 only):

Appendix Table 1 (cont.)

Immigrant status distribut full-time workers in each o					
U.Sborn	96.3%	54.9%	59.1%	98.6%	32.3%
Foreign-born, naturalized	2.0	16.1	12.0	1.0	37.6
Foreign-born, noncitizen	1.7	29.0	28.9	0.4	30.1
Generational distribution full-time workers in each					
First generation	3.7%	45.1%	40.9%	1.4%	67.7%
Second generation	4.8	19.9	23.8	7.1	26.2
Third generation or higher	91.5	35.0	35.3	91.5	6.1
Percent of Hispanic population	n.a.	100.0%	59.0%	10.3%	4.7%

^{*}Highest level of education attained

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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