



Then and Now: Key Trends and Transformations in the 21st Century Labor Market

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Introduction

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The US labor market has experienced significant changes since the turn of the century. Some of the most profound changes were driven by technology, others shaped by business, policy, and shifting social norms. Two enormous economic shocks, the Great Recession of 2007–2009 and the pandemic recession of 2020, also drove change in the economy and labor market. At the time of this writing, the Federal Reserve has been working to bring down inflation rates that last year reached a 40-year high. These major developments have transformed the nature of work and opportunities for American workers. For some workers with advanced education and technological skills, these changes brought enhanced opportunity and increased ability to weather economic disruptions. For some workers with less formal education and skills training, their ability to obtain stable, family-sustaining jobs became more challenging.

In this three-part series, we bring together labor market, workforce, occupational, and educational trends since 2000 to tell a story of American workers through data. This is primarily a decennial retrospective, but in some sections we include additional years to shape a complete story. We explore these data broadly and granularly with a demographic lens, recognizing that general trends are not experienced universally across groups. We identify where opportunities for some workers have improved and where there may be a need for additional efforts to increase opportunities for enhanced economic mobility.

This is a story told primarily through charts and tables that serve as a visual depiction of how workers, on average, are experiencing the labor market. We bring together two decades of data and hope this informs workforce practitioners, policymakers, business leaders, and others as they double down in areas where the trends show positive signs of improvement and continue as change agents in areas where the trends are stagnant or regressive.

The three parts of this series are:

Part 1: Key Trends and Transformations in the 21st Century Labor Market

- Earnings
- Labor Force Participation
- Unemployment
- Educational Attainment

Part 2: The Evolution of Key Worker Support Systems in the 21st Century

- Unemployment Insurance
- Unemployment Spells
- Health Insurance Coverage
- Retirement Benefits

Part 3: The Changing Landscape of Education Outcomes and Funding in the 21st Century

- Earnings by Educational Attainment
- College/University Tuition
- Higher Education Grants and Loans
- Funding at historically Black colleges and universities (HBCUs) and tribal colleges and universities (TCUs)

Part one looks at big labor market trends. We explore how median earnings have changed over time and whether they have kept up with inflation. We illustrate labor force participation and unemployment trends. We also explore whether society's push for higher education benefited all workers. We explore these trends in the aggregate to understand the country's direction as a whole, but with a demographic lens to identify where action can be taken to support different groups of workers, ultimately to better support an economy that works for all.

Note: Throughout this report when we refer to a class of worker by race, ethnicity, or gender, we imply that these are workers who have identified as such in a broad scale survey. Race, ethnicity, and gender are often complex constructs that do not always conform to categories on those surveys. The survey results also include respondents who may have accidentally misclassified their race, ethnicity, or gender when responding to the survey.

Manual recalculation of percentages may not be identical due to rounding.

Readers are invited to use these charts and insights for their presentations and work in creating a more inclusive labor market. We suggest the following citation: Nyerere Hodge, Stuart Andreason, and Carl E. Van Horn. "Then and Now: Key Trends and Transformations in the 21st Century Labor Market." *Workforce Currents*. [Center for Workforce and Economic Opportunity](#) at the Federal Reserve Bank of Atlanta in partnership with the [Burning Glass Institute](#) and [Heldrich Center for Workforce Development](#) at Rutgers University, 2023.

This series builds on a report by Carl E. Van Horn and Nicole Corre, [The Labor Market, Then and Now: Changing Realities in the 21st Century](#) (Heldrich Center for Workforce Development at Rutgers University, 2010) that examined the first decade of the 21st century.

Key Trends and Transformations in the 21st Century Labor Market: Modest Earnings Growth for Most, No Progress for Others

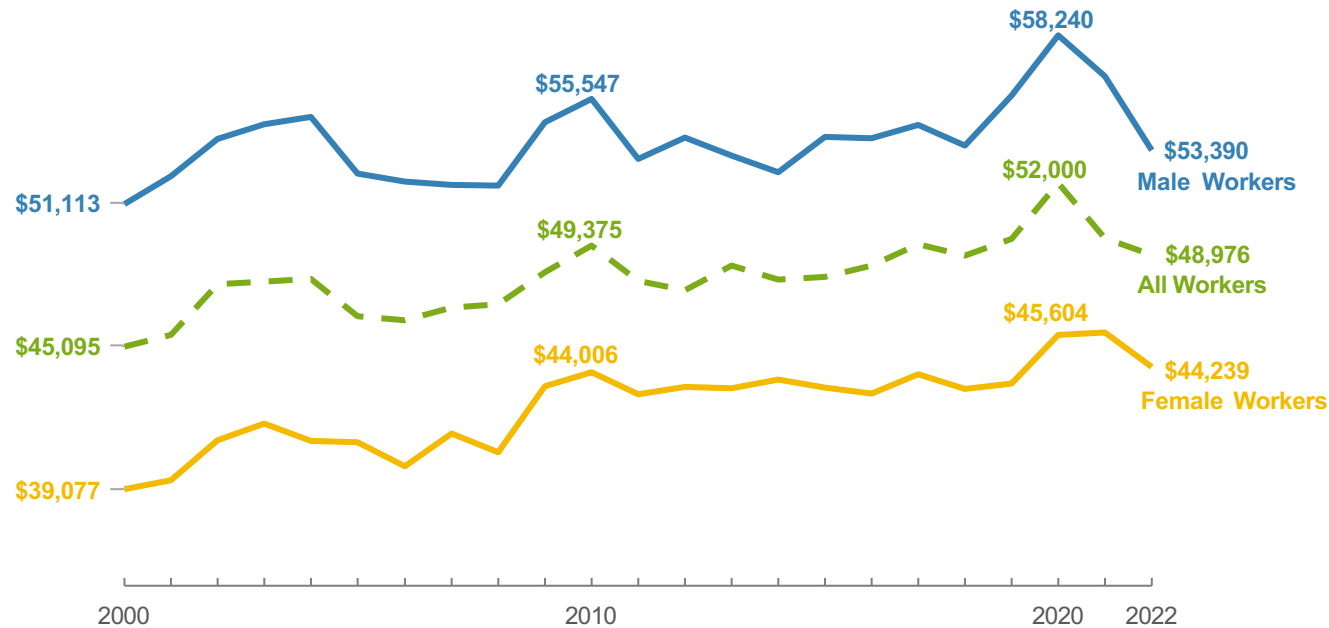
Inflation-adjusted median earnings of full-time, year-round workers, aged 18 and over in America have fluctuated over the last two decades. Chart 1 illustrates, decennially, how wages have increased over the long run but have fluctuated year to year. The 21st century started with median earnings for all workers (gray dashed line) at \$45,095, which increased to \$49,375 by 2010. Median earnings reached a century high in 2020 at \$52,000.

We pulled in additional years of data to capture any effects the precarious post-2020 economic environment might have had on median earnings. As illustrated in chart 1, after 2020, median earnings declined, falling to \$48,976 in 2022. Inflation-adjusted median earnings increased 15 percent from 2000 to 2020 (table 1), then decreased 6 percent from 2020 to 2022. Inflation, at least partly, can be blamed for the decrease.¹ Inflation rose past the Federal Reserve target of 2 percent during the first half of 2021, and, according to the Bureau of Labor Statistics, reached a four-decade high in June 2022 at 9.1 percent.² Due to the decrease from 2020 to 2022, median earnings increased only 9 percent from 2000 to 2022 (table 1).

Chart 1

Median Earnings for All Workers and by Sex from 2000 to 2022

Decennial, US dollar, Inflation adjusted to 2020 USD





























































































Note: Earnings are for full-time, year-round workers aged 18 and over. Based on author's calculations from weekly earnings and adjusted for inflation using CPI-U. Sources: Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) retrieved from ipums.org. US Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in US City Average [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/CPIAUCSL>.

Table 1

Percent Change of Median Earnings for All Workers and by Race, Ethnicity, and Sex from 2000 to 2022

Decennial, Percent

	2000 to 2010	2010 to 2020	2020 to 2022	2000 to 2020	2000 to 2022
All Workers	 9%	 5%	 -6%	 15%	 9%
Asian and Pacific Islander	 12%	 19%	 -1%	 33%	 32%
Black/African American	 2%	 5%	 -4%	 6%	 2%
Hispanic	 14%	 4%	 -3%	 19%	 15%
Native American	 -8%	 3%	 -1%	 -5%	 -5%
White	 11%	 3%	 -4%	 14%	 10%
Female Workers	 13%	 4%	 -3%	 17%	 13%
Asian and Pacific Islander	 20%	 10%	 11%	 31%	 45%
Black/African American	 5%	 3%	 -1%	 8%	 8%
Hispanic	 11%	 4%	 -4%	 15%	 11%
Native American	 -6%	 2%	 -12%	 -4%	 -15%
White	 14%	 7%	 -3%	 22%	 18%
Male Workers	 9%	 5%	 -8%	 14%	 4%
Asian and Pacific Islander	 13%	 21%	 -5%	 37%	 30%
Black/African American	 -8%	 20%	 -20%	 11%	 -12%
Hispanic	 8%	 11%	 -1%	 21%	 20%
Native American	 -17%	 9%	 7%	 -9%	 -3%
White	 7%	 5%	 -6%	 13%	 6%

Note: Earnings are for full-time, year-round workers aged 18 and over. Based on author's calculations from weekly earnings and adjusted for inflation using CPI-U.

Hispanic ethnicity only is included in the 'Hispanic Workers' category.

Sources: Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) retrieved from ipums.org. US Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in US City Average [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/CPIAUCSL>.

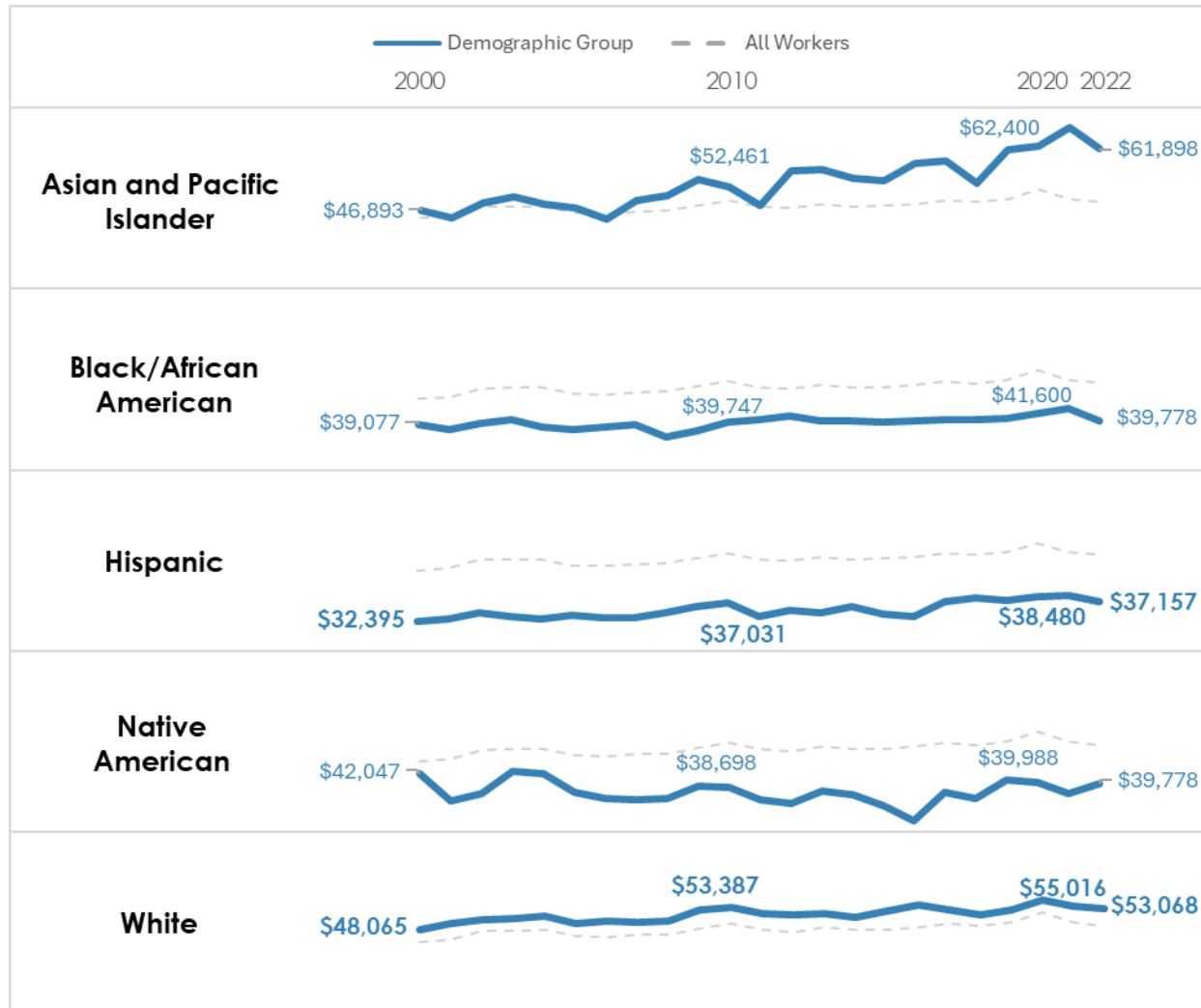
The yellow line in chart 1 shows inflation-adjusted median earnings of workers who identified as female increased from \$39,077 to \$44,239 from 2000 to 2022, a 13 percent increase (table 1). It increased 4 percent for workers who identified as male, from \$51,113 to \$53,390 (blue line in chart 1). From 2020 to 2022, inflation contributed to a 3 percent decline in median earnings for female workers and an 8 percent decline for male workers (table 1).

When considering race, ethnicity, and sex, inflation-adjusted median earnings for workers changed at different rates across the period. Workers at the median who identified as Asian and Pacific Islander saw the highest earnings increases.³ Median earnings for this overall group increased from \$46,893 to \$61,898 (chart 2), a 32 percent increase (table 1) from 2000 to 2022, making this group the highest earning. Asian and Pacific Islander females saw the highest percentage increase at 45 percent (table 1), with earnings increasing from \$39,702 to \$57,483 (chart 3) across the full period. By 2022, this group exceeded median earnings for all workers, male workers, and female workers (chart 3). According to one study, this boost can be attributed to an increase in the number of Asian Americans and Asian immigrants with a college degree working in STEM fields.

Chart 2

Median Earnings by Race and Ethnicity from 2000 to 2022

Decennial, US dollar, Inflation adjusted to 2020 USD



Note: Earnings are for full-time, year-round workers aged 18 and over. Based on author's calculations from weekly earnings and adjusted for inflation using CPI-U.

Hispanic ethnicity only is included in the 'Hispanic Workers' category.

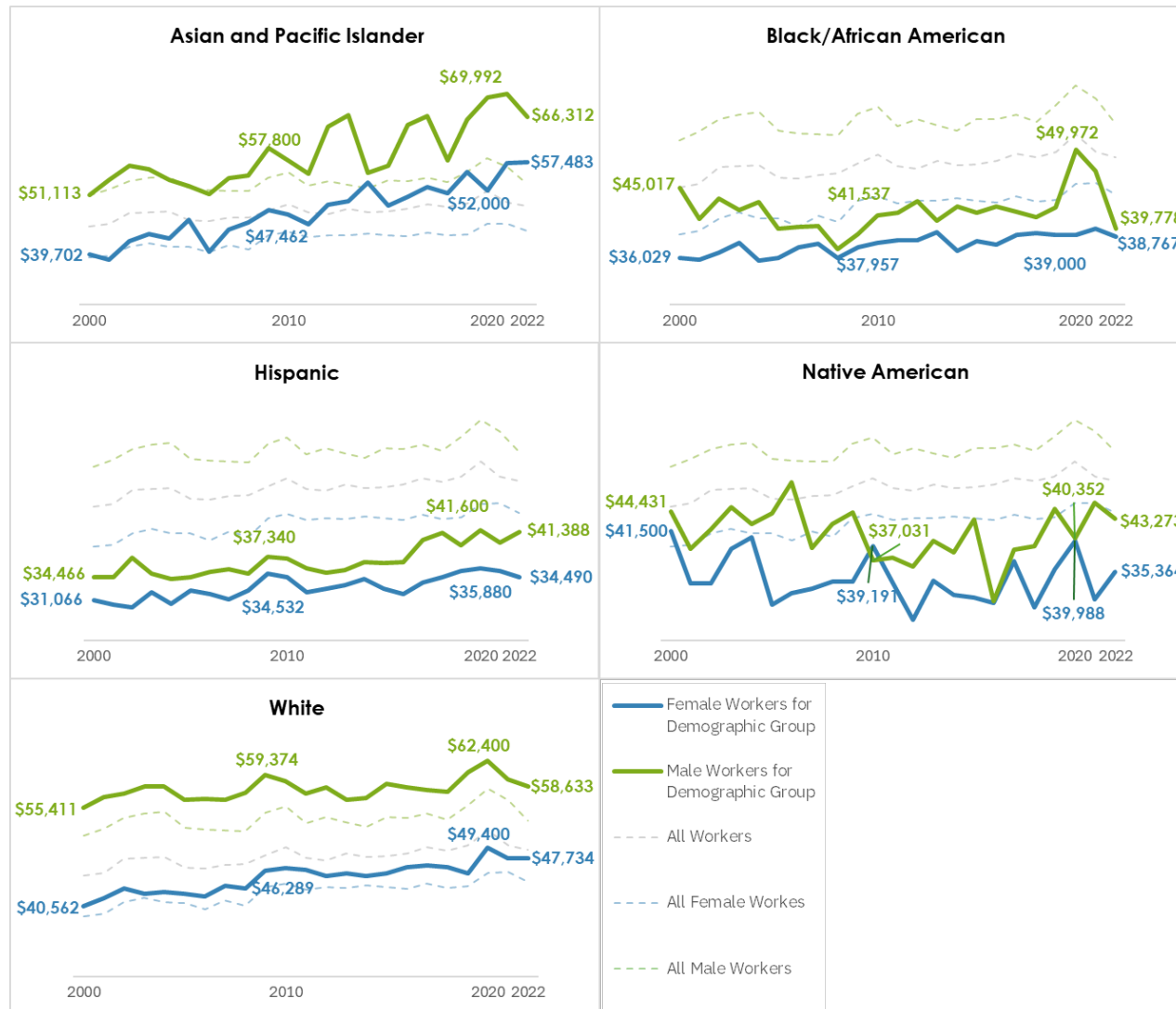
Sources: Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) retrieved from ipums.org. US Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in US City Average [CPIAUCSL] retrieved from FRED, Federal Reserve Bank of St. Louis.

<https://fred.stlouisfed.org/series/CPIAUCSL>.

Chart 3

Median Earnings by Race, Ethnicity, and Sex from 2000 to 2022

Decennial, US dollar, Inflation adjusted to 2020 USD



Note: Earnings are for full-time, year-round workers aged 18 and over. Based on author's calculations from weekly earnings and adjusted for inflation using CPI-U. Hispanic ethnicity only is included in the 'Hispanic Workers' category. Sources: Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) retrieved from ipums.org. US Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in US City Average [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/CPIAUCSL>.

Table 1 shows that Hispanic male (20 percent) and female workers (11 percent) also saw earnings increase at the median by double digits from 2000 to 2022. Median earnings for White female workers increased by 18 percent over the same period. Native American workers of any sex experienced earnings decreases at the median from 2000 to 2022. Median earnings for female Native American workers declined 15 percent, while male Native American workers saw a 3 percent decline. Black male workers also saw a double-digit decline of 12 percent over the full period. Inflation-adjusted median earnings for Black, Hispanic, Native American, and White female workers remained below the median for all workers by 2022 (charts 2 and 3).

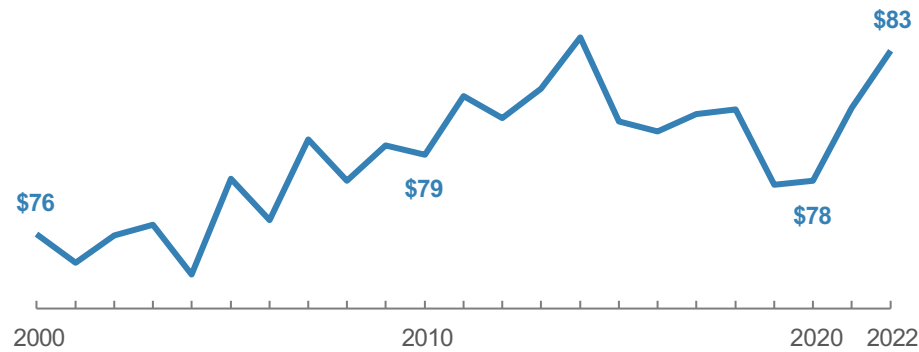
From 2020 to 2022, inflation has contributed to the decline in earnings for all groups except for Asian and Pacific Islander female and Native American male workers (table 1). Median earnings increased 11 percent for the former group and 7 percent for the latter. Median earnings fell the most for Black males, who had a 20 percent decrease. The second highest decline was among Native American females, who had a 12 percent decrease.

Chart 4 shows that the median earnings gap between female and male workers is declining. In 2000, female workers earned \$76 for every \$100 males earned. In 2022, the gap narrowed to \$83 for every \$100.

Chart 4

Median Earnings Pay Gap Comparison between Female and Male Workers from 2000 to 2022

US dollar, Inflation adjusted to 2020 USD



The median wage gap between female and male workers is declining. In **2000**, female workers earned **\$76 for every \$100** males earned. In **2022**, it decreased to **\$83 for every \$100**.

Note: Earnings are for full-time, year-round workers aged 18 and over. Based on author's calculations from weekly earnings and adjusted for inflation using CPI-U.

Sources: Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) retrieved from ipums.org. US Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in US City Average [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/CPIAUCSL>.

Table 2

Median Earnings, Pay Gap Comparison between Demographic Groups to All Workers and White Male Workers from 2000 to 2022

US dollar, Inflation adjusted to 2020 USD

	Ratio to All Workers			Ratio to White Male Workers		
	2000	2022	Difference	2000	2022	Difference
All Workers	—	—	—	\$81	\$84	\$2
Asian and Pacific Islander	\$104	\$126	\$22	\$85	\$106	\$21
Black/African American	\$87	\$81	-\$5	\$71	\$68	-\$3
Hispanic	\$72	\$76	\$4	\$58	\$63	\$5
Native American	\$93	\$81	-\$12	\$76	\$68	-\$8
White	\$107	\$108	\$2	\$87	\$91	\$4
Female Workers	\$87	\$90	\$4	\$71	\$75	\$5
Asian and Pacific Islander	\$88	\$117	\$29	\$72	\$98	\$26
Black/African American	\$80	\$79	-\$1	\$65	\$66	\$1
Hispanic	\$69	\$70	\$2	\$56	\$59	\$3
Native American	\$92	\$72	-\$20	\$75	\$60	-\$15
White	\$90	\$97	\$8	\$73	\$81	\$8
Male Workers	\$113	\$109	-\$4	\$92	\$91	-\$1
Asian and Pacific Islander	\$113	\$135	\$22	\$92	\$113	\$21
Black/African American	\$100	\$81	-\$19	\$81	\$68	-\$13
Hispanic	\$76	\$85	\$8	\$62	\$71	\$8
Native American	\$99	\$88	-\$10	\$80	\$74	-\$6
White	\$123	\$120	-\$3	—	—	—

Note: Earnings are for full-time, year-round, workers aged 18 and over. Based on author's calculations from weekly earnings and adjusted for inflation using CPI-U. Hispanic ethnicity only included in 'Hispanic Workers' category. Sources: Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) retrieved from ipums.org. U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in U.S. City Average [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/CPIAUCSL>.

Table 2 shows the median earnings gap between Asian and Pacific Islander female workers and all workers advanced from \$88 per \$100 to \$117 per \$100. The right side of the table shows the gap between this group and White male workers is near parity—narrowing from \$72 per \$100 in 2000 to \$98 per \$100 in 2022. Meanwhile, by the same year, inflation-adjusted median earnings for workers who identified as male and Asian and Pacific Islander exceeded that of White male workers, with the former earning \$113 for every \$100 the latter group earned.

Table 2 also shows that, relative to other groups, the median earnings gap has increased significantly for Native American workers of both sexes as well as for Black male workers. Native American female workers at the median experienced the largest increase in the earnings gaps. In 2000, Black and Native American male workers at the median were at parity with all workers, but by 2022 both groups fell behind.

A Labor Force in Decline

Labor force participation (LFP) for all workers aged 18 and older has declined since the beginning of the century. There was a 2.2 percentage point decline over the first decade of the century, from 68.4 percent to 66.2 percent, followed by a 2.8-point decline over the second decade, from 66.2 percent to 63.4 percent, and a 4.8 percentage point decline from 68.4 percent to 63.6 percent over the full period 2000–2022 (Chart 5: all workers, dashed gray line). A year after the start of the 2020 pandemic, labor force participation dropped a full percentage point, from 63.4 percent to 62.4 percent in 2021, but quickly rebounded in 2022. Researchers have attributed the overall declines to a number of factors, including an aging workforce, outsized number of retirements, increased rates of substance abuse, and difficulty with securing childcare to name a few.^{4, 5, 6, 7, 8, 9}

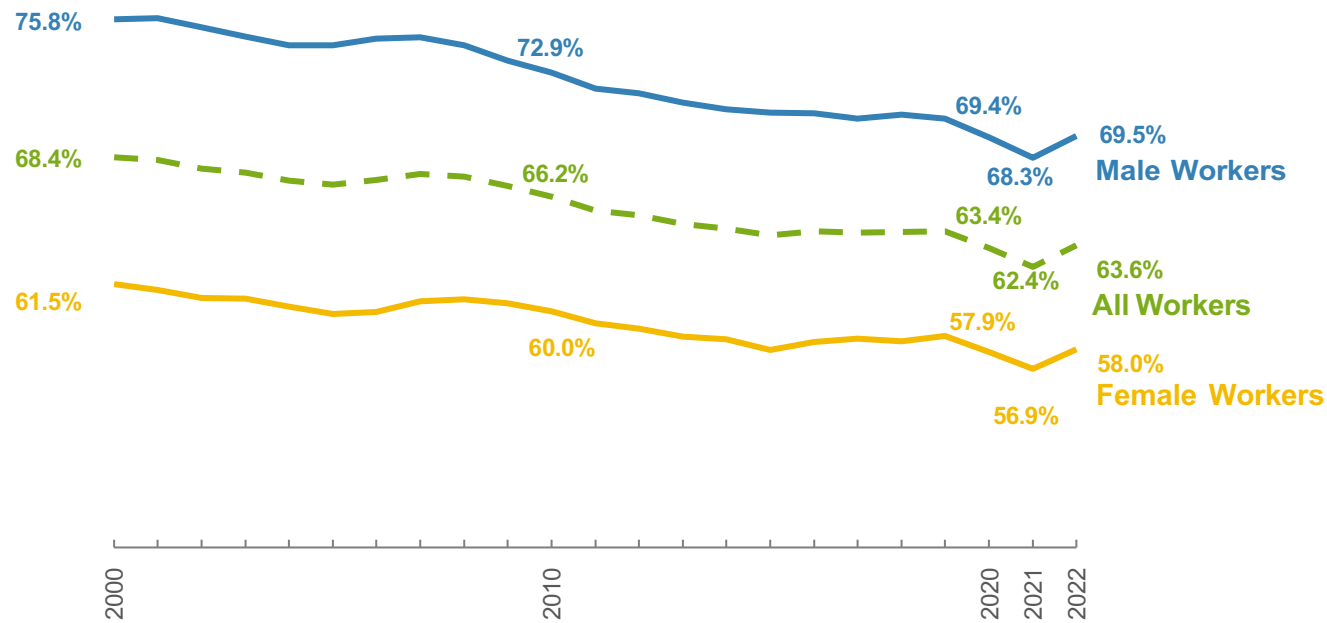
Chart 5 illustrates LFP declined for both female and male workers from 2000 to 2022. Female workers left at a slower pace, with a 3.5-point decrease from 61.5 percent to 58 percent, while LFP for males declined 6.3 points, from 75.8 percent to 69.5 percent. The BLS suggests female participation is down, in part, due to fallout from the Great Recession, retirements over the last decade, and overrepresentation in sectors hardest hit by the pandemic, to name a few factors.¹⁰ Both the BLS and the Federal Reserve Bank of Atlanta found that women with young children and married women are less likely to have remained in the labor force following the pandemic.^{11,12} The Federal Reserve Bank of Richmond cites aging, declining male educational attainment, the rise of substance abuse, and heavy use of video games as some of the factors contributing to the declining LFP for male workers.¹³

Chart 6 shows LFP is down for workers across all races and ethnicities. Participation is down 8 percentage points for Native American workers, 6.3 points for White workers, 5.1 points for Black workers, 2.5 points for Asian and Pacific Islander workers, and 0.6 points for Hispanic workers.

Chart 5

Labor Force Participation Rate for All Workers and by Sex from 2000 to 2022

Decennial, Percent



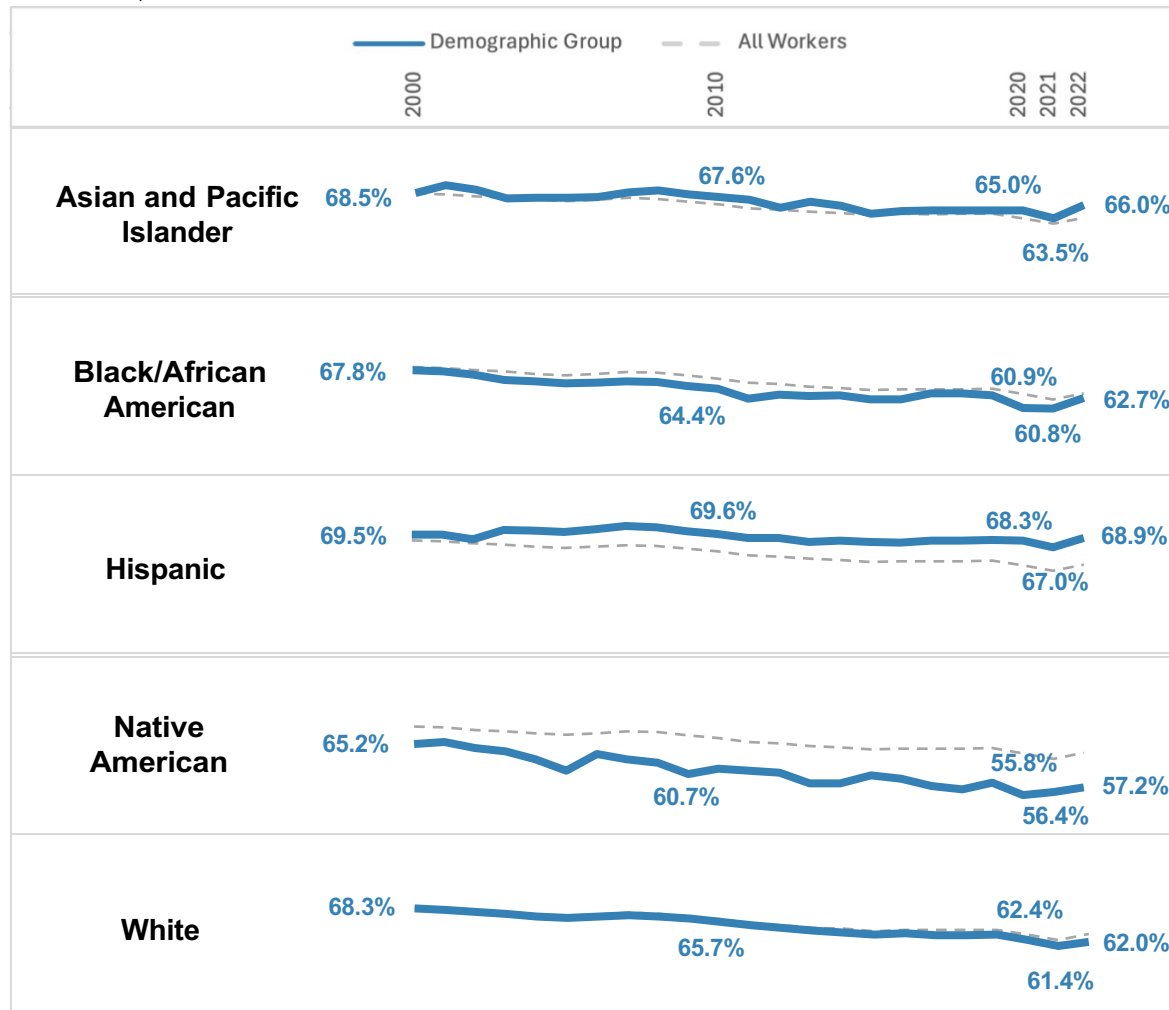
Note: Based on author's calculations of labor force participation for workers aged 18 and up from source's dataset. Estimates are as reported by the U.S. Census Bureau and is not adjusted for population control adjustments made in the Current Population Survey. See <https://www.atlantafed.org/blogs/macroblog/2022/03/01/assessing-recent-labor-market-improvement> for more details.

Source: Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) retrieved from ipums.org.

Chart 6

Labor Force Participation Rate by Race and Ethnicity from 2000 to 2022

Decennial, Percent



Note: Based on author's calculations of labor force participation for workers aged 18 and up from source's dataset. Hispanic ethnicity only included in 'Hispanic Workers' category. Estimates are as reported by the US Census Bureau and is not adjusted for population control adjustments made in the Current Population Survey.

For more details, see <https://www.atlantafed.org/blogs/macroblog/2022/03/01/assessing-recent-labor-market-improvement>.

Source: Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) retrieved from ipums.org.

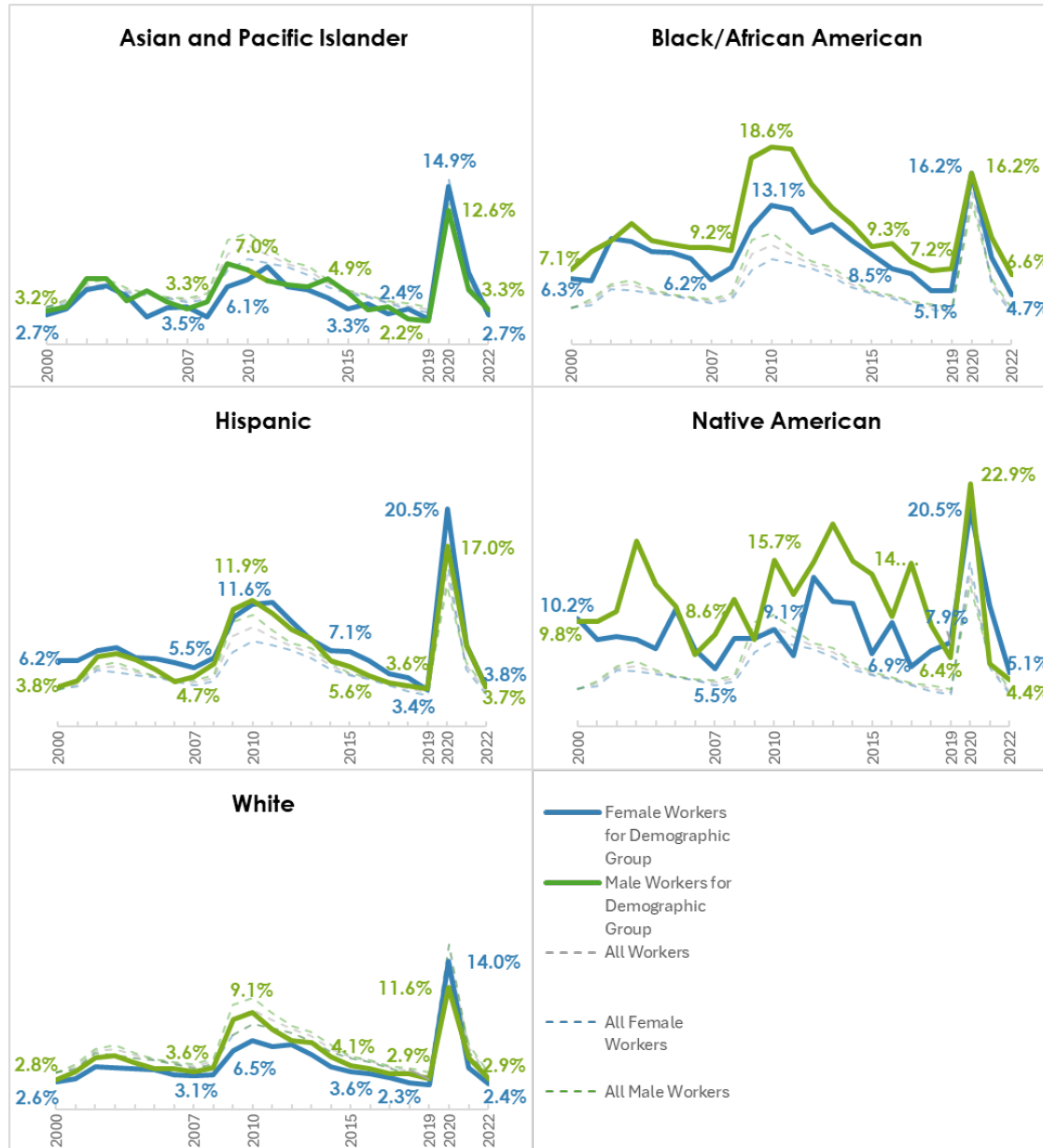
Chart 7 shows over the last two decades, workers who identified as male and Asian and Pacific Islander, female and Black, and male and Hispanic have participated in the labor market at rates above the average for their sex. Over the full period 2000–22, workers who identified as female and Hispanic were the only group whose participation in the labor market increased: 1.5 percentage points, from 57.8 percent to 59.3 percent. Workers who identified as female and Asian and Pacific Islander, and male and Hispanic had the smallest decline, at 0.9 percent and 3 percent, respectively. Native American workers of both sexes and White males had the highest rates of decline from 2000 to 2022, while the participation of Native American males declined 10.1 points, Native American females declined 6.5 points, and White males declined 8 percentage points.

Since 2000, LFP has declined the slowest for workers without a high school diploma and workers with college degrees (chart 8). That former group's participation declined 1.8 percent from 2000 to 2022. The latter group's participation declined 7 percent. The biggest declines were among workers with high school diplomas and those with some college credits or an associate degree. The former declined 8.3 percentage points and the latter decline 10.6 points. Research dissecting the relationship between educational attainment and labor force participation is scant. However, research that does exist suggests that while retirements are putting downward pressure on LFP overall, college-educated workers tend to stay in the workforce longer due to higher pay, enticing fringe benefits, and work that tends to be less strenuous.^{14, 15}

Chart 7

Labor Force Participation Rate by Sex, Race, and Ethnicity from 2000 to 2022

Decennial, Percent

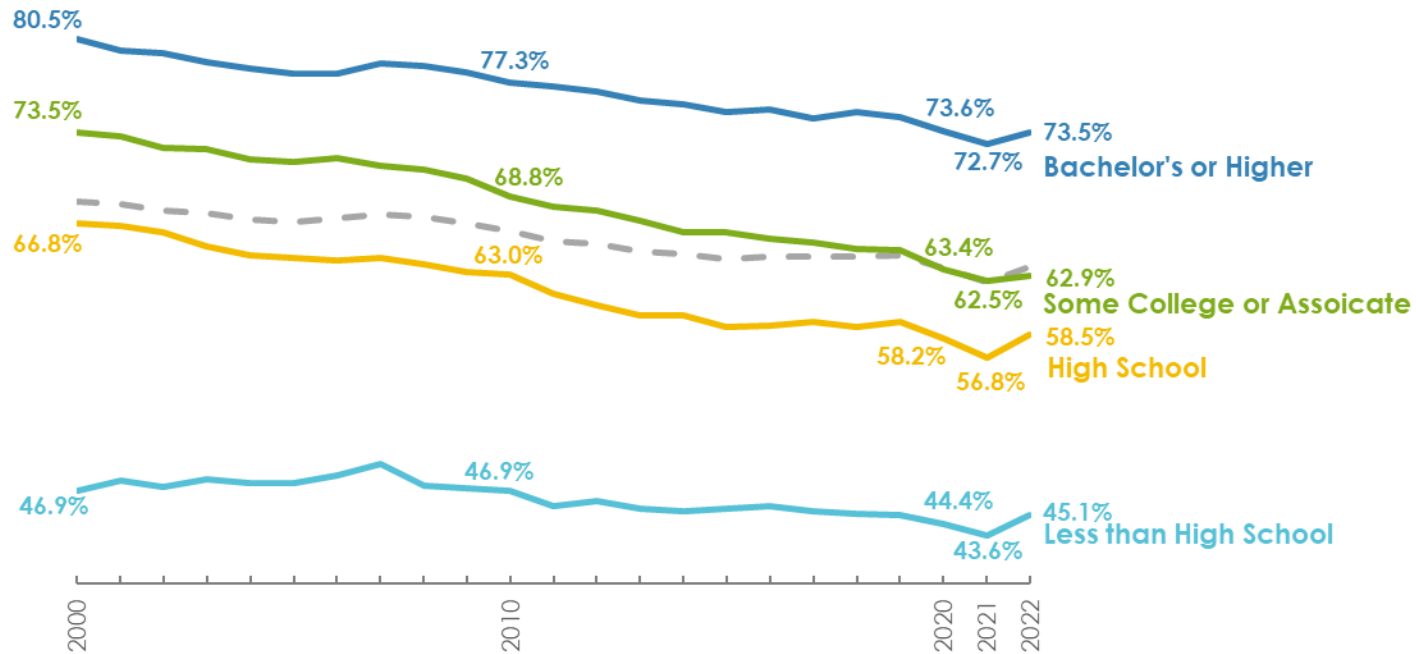


Note: Based on author's calculations of labor force participation for workers aged 18 and up from source's dataset. Hispanic ethnicity only included in 'Hispanic Workers' category. Estimates are as reported by the US Census Bureau and is not adjusted for population control adjustments made in the Current Population Survey. See <https://www.atlantafed.org/blogs/macroblog/2022/03/01/assessing-recent-labor-market-improvement> for more details. Source: Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) retrieved from ipums.org.

Chart 8

Labor Force Participation Rate by Educational Attainment from 2000 to 2022

Decennial, Percent



Note: Based on author's calculations of labor force participation for workers aged 18 and up from source's dataset. Estimates are as reported by the US Census Bureau and is not adjusted for population control adjustments made in the Current Population Survey. See <https://www.atlantafed.org/blogs/macroblog/2022/03/01/assessing-recent-labor-market-improvement> for more details. Source: Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) retrieved from ipums.org.

Unemployment Shocks and Workers Bearing the Brunt

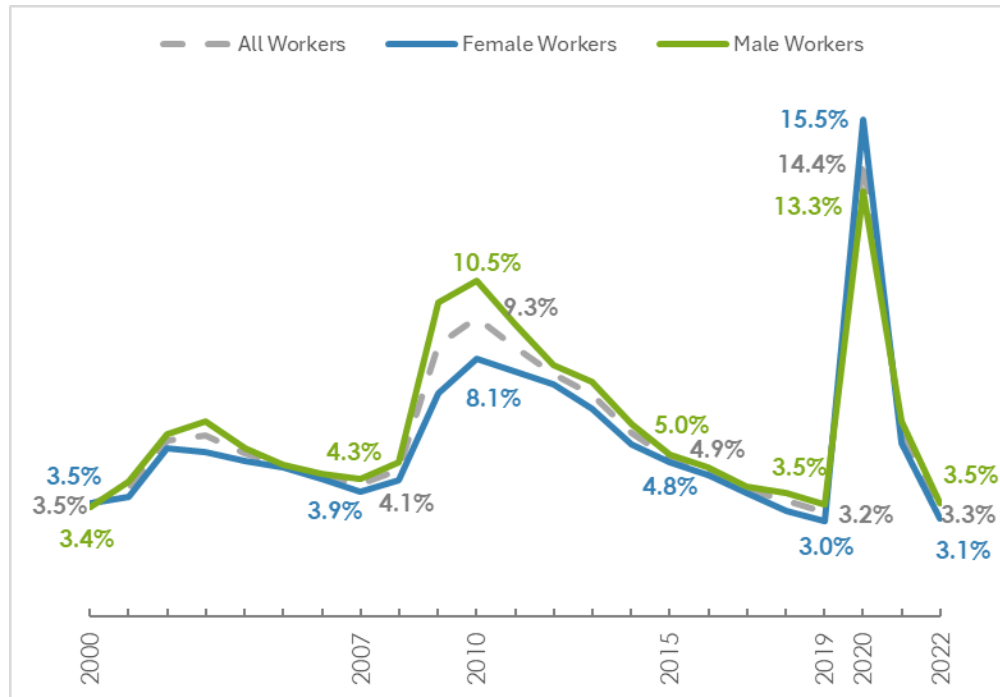
The first two decades of the 21st century are marked by two great economic shocks: the Great Recession and the recession caused by the COVID-19 pandemic. Both led to unprecedented levels of unemployment for the modern era. In the years immediately preceding the Great Recession, unemployment hovered around 4 to 5 percent for all workers. The recession caused unemployment to spike around 9 and 10 percent by 2009 and 2010. It took several years for unemployment to recover. It did not return to 5 percent until 2015.

The economic fallout from the pandemic was markedly different from what happened after the Great Recession. It led to the highest level of unemployment since the Great Depression (25 percent in 1933), peaking at 14.4 percent in April 2020 for all workers aged 18 and older who were working full-time (chart 9). However, the rebound was quick. Most workers were only on temporary layoff and employers recalled them as pandemic lockdown orders lifted, sparking a swift rebound just a year later. Chart 9 also shows that the pandemic recession led female workers to experience higher levels of unemployment than males did for the first time since the turn of the century. Pandemic lockdown orders left schools and childcare and eldercare facilities closed, with the brunt of caretaking responsibilities falling on females—a likely contributing factor.

Chart 9

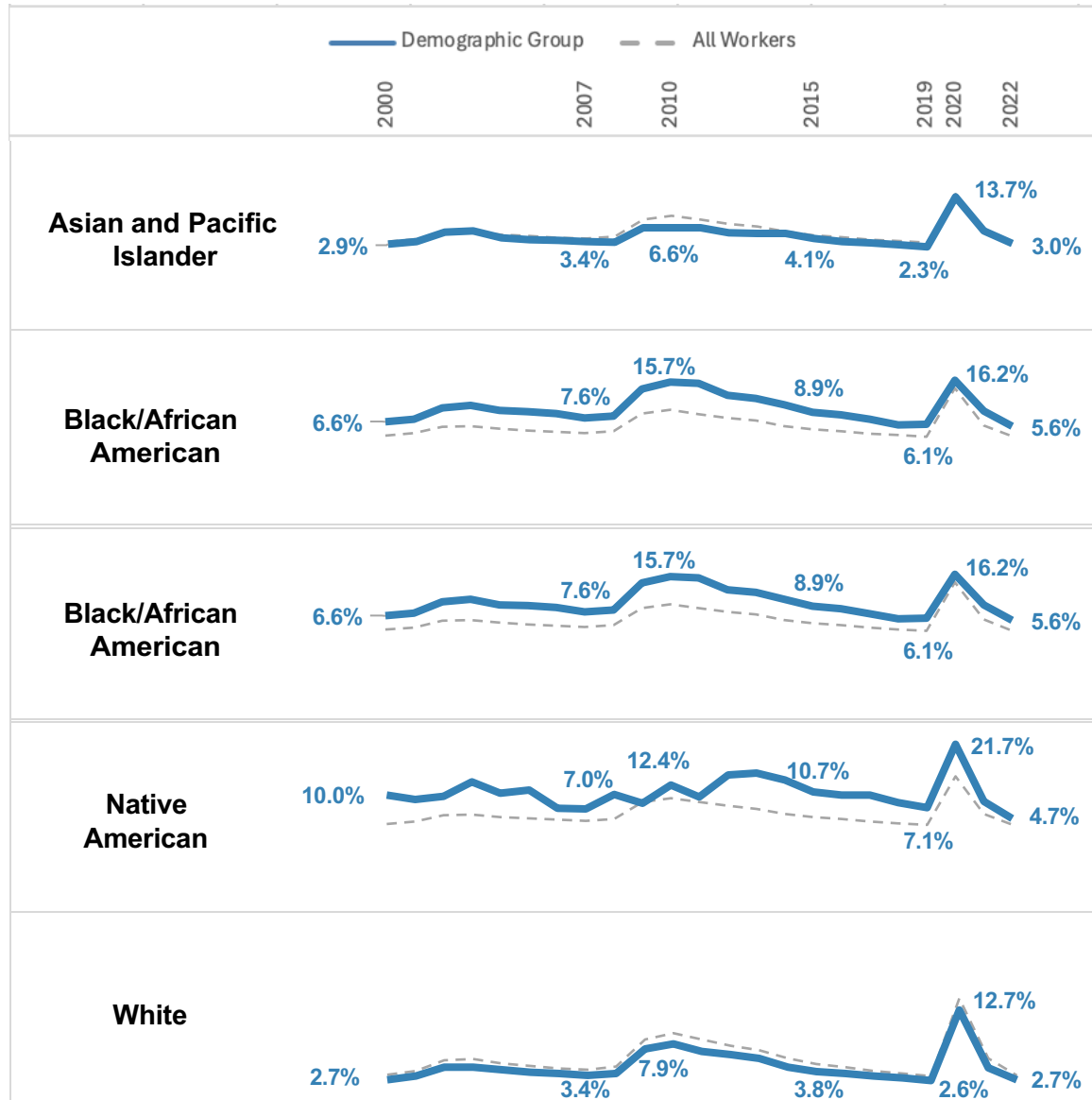
Unemployment Rate for All Workers and by Sex from 2000 to 2022

April, Decennial, Percent



Note: Based on author's calculations of unemployment rates for full-times workers aged 18 and up in April of each year from source's dataset.
Source: Current Population Survey (CPS), retrieved from ipums.org.

Chart 10
Unemployment Rate for All Workers and by
Race and Ethnicity from 2000 to 2022
 April, Decennial, Percent



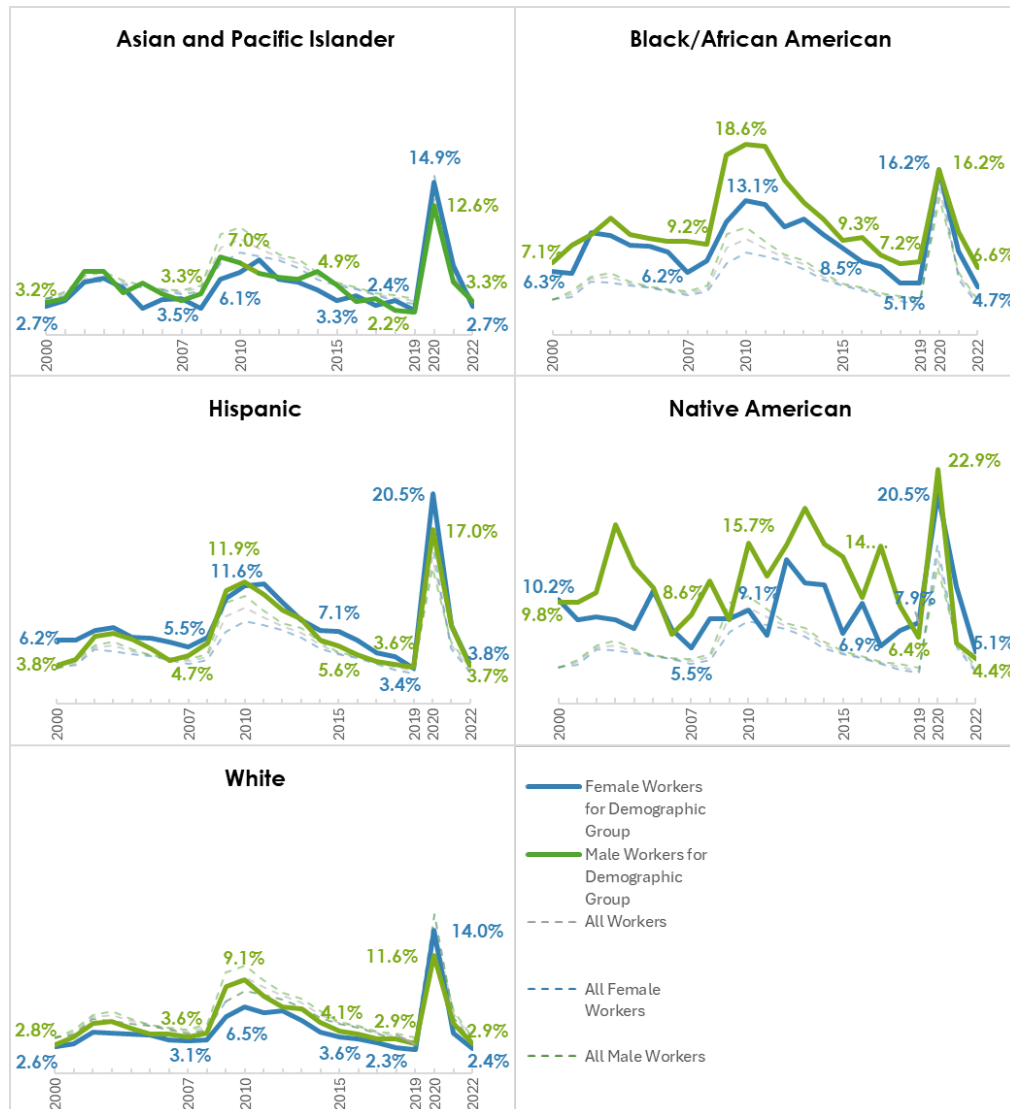
Note: Based on author's calculations of unemployment rates for workers aged 18 and up in April of each year from source's data set. Hispanic ethnicity only included in 'Hispanic Workers' category.
 Source: Current Population Survey (CPS) retrieved from ipums.org.

Since 2000, there was no significant reduction in disparities in unemployment by race and ethnicity (chart 10). Charts 10 and 11 show that Black and Native American workers persistently faced levels of unemployment that were well above the average—and sometimes double the average. Hispanic workers faced double-digit unemployment levels during periods of shocks but recovered to levels closer to the overall average when unemployment was low. Asian and Pacific Islander and White workers generally had below average levels of unemployment.

Chart 11

Unemployment Rate by Race, Ethnicity, and Sex from 2000 to 2022

April, Decennial, Percent



Note: Based on author's calculations of unemployment rates for workers aged 18 and up in April of each year from source's dataset. Hispanic ethnicity only included in 'Hispanic Workers' category.

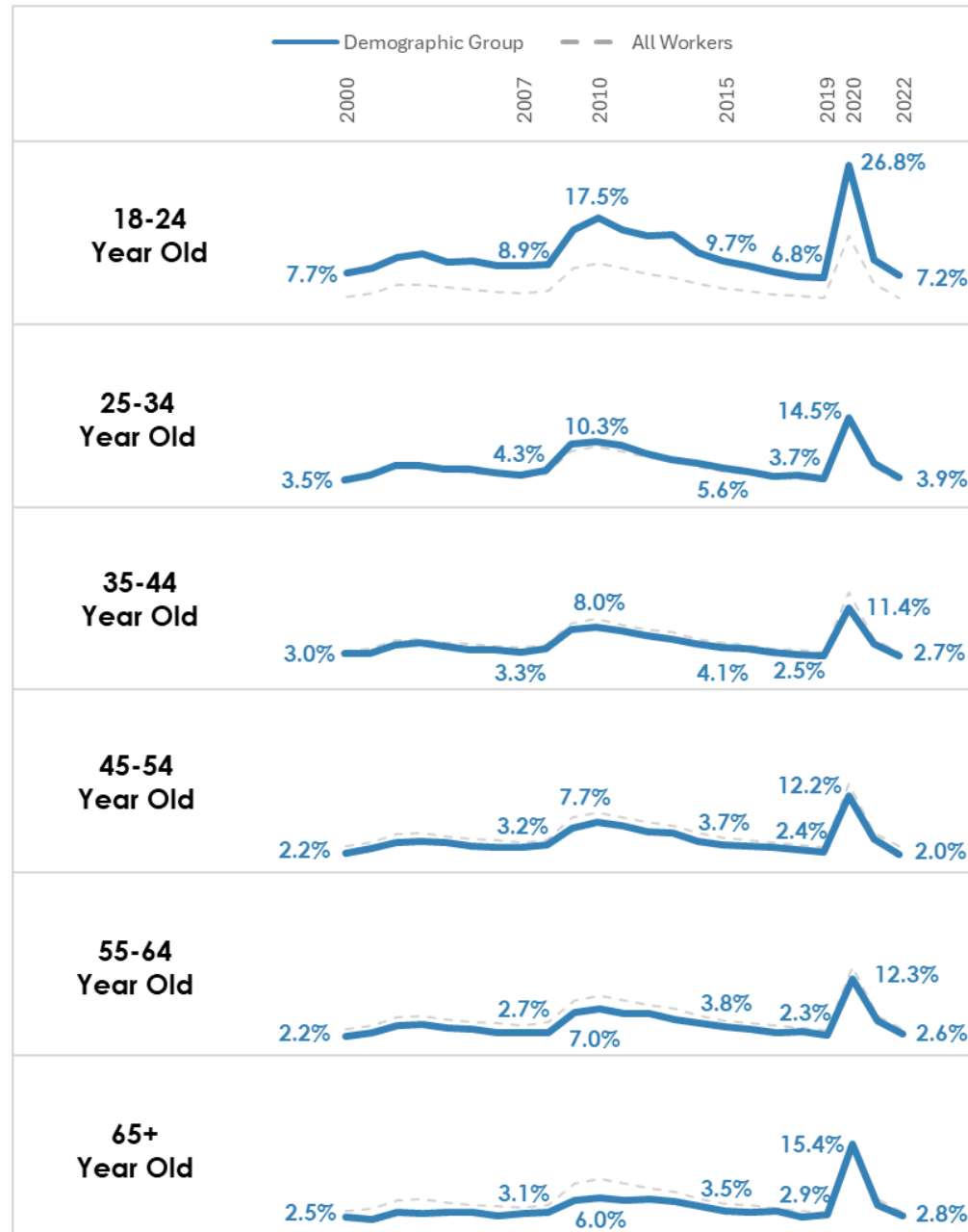
Source: Current Population Survey (CPS) retrieved from ipums.org.

When we break unemployment rate out by race/ethnicity and sex, we see volatility in the rates for Native American workers (chart 11).^{16, 17} Generally, the unemployment gaps between Black males and females and Native American males and females are wider than the gaps between sexes of any other group. Barring economic shocks, males and females of all other groups have relatively similar levels of unemployment. During the height of pandemic unemployment, Black workers were the only group with both sexes experiencing the same rate of unemployment. Among males, Native American males were the only males to have a higher unemployment rate than their female counterparts at the highest point of pandemic unemployment.

Chart 12

Unemployment Rate by Age Group from 2000 to 2022

April, Decennial, Percent



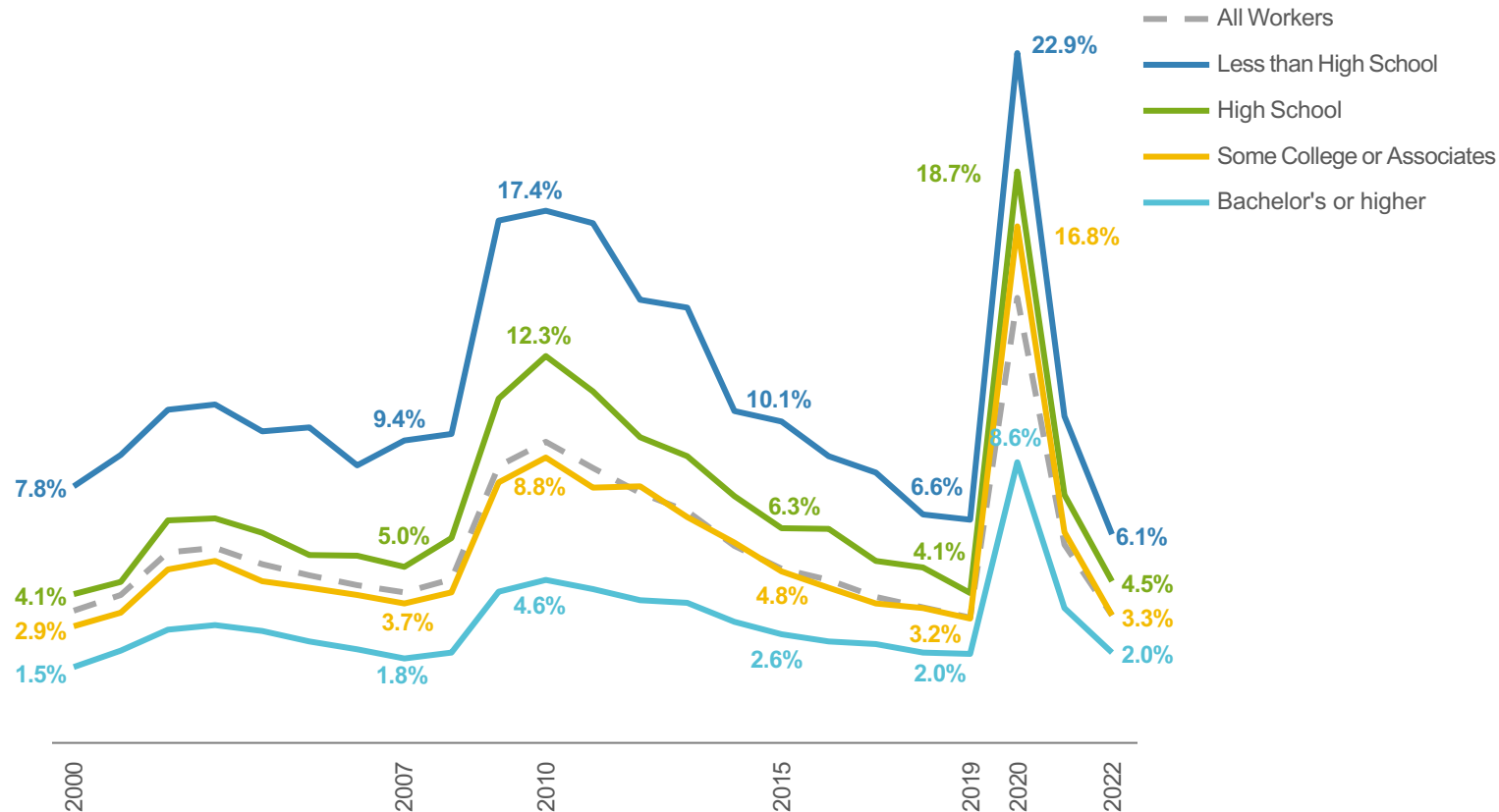
Note: Based on author's calculations of unemployment rates for workers aged 18 and up in April of each year from source's dataset.
 Source: Current Population Survey (CPS) retrieved from ipums.org.

Unemployment shocks also affect workers differently depending on their age group (chart 12). Younger workers are often more likely to experience unemployment during hard economic times. This was no different over the last two decades. During both economic shocks of this century, workers aged 18–24 experienced unemployment rates that nearly doubled the average. Unemployment for prime-age workers nearly mirrored the average. Older groups generally stayed below the average. Interestingly, in 2010, levels of unemployment from highest to lowest flowed from youngest to oldest. However, in 2020, workers 65 and older experienced the second highest levels, which was likely due to the age-related health risks the COVID-19 pandemic posed.

Chart 13

Unemployment Rate by Educational Attainment from 2000 to 2022

April, Decennial, Percent



Note: Based on author's calculations of unemployment rates for workers aged 18 and up in April of each year from source's dataset.
Source: Current Population Survey (CPS) retrieved from ipums.org.

Workers with only and without a high school diploma were the only groups to experience double-digit unemployment rates during both the Great Recession and the pandemic recession. The unemployment rate for workers with some college credits or an associate degree tends to stay relatively close to the average for all workers. Workers with a college degree tend to experience unemployment rates that are about half the average for all workers. Chart 13 illustrates how, as workers increase their levels of education, they're less likely to experience unemployment.

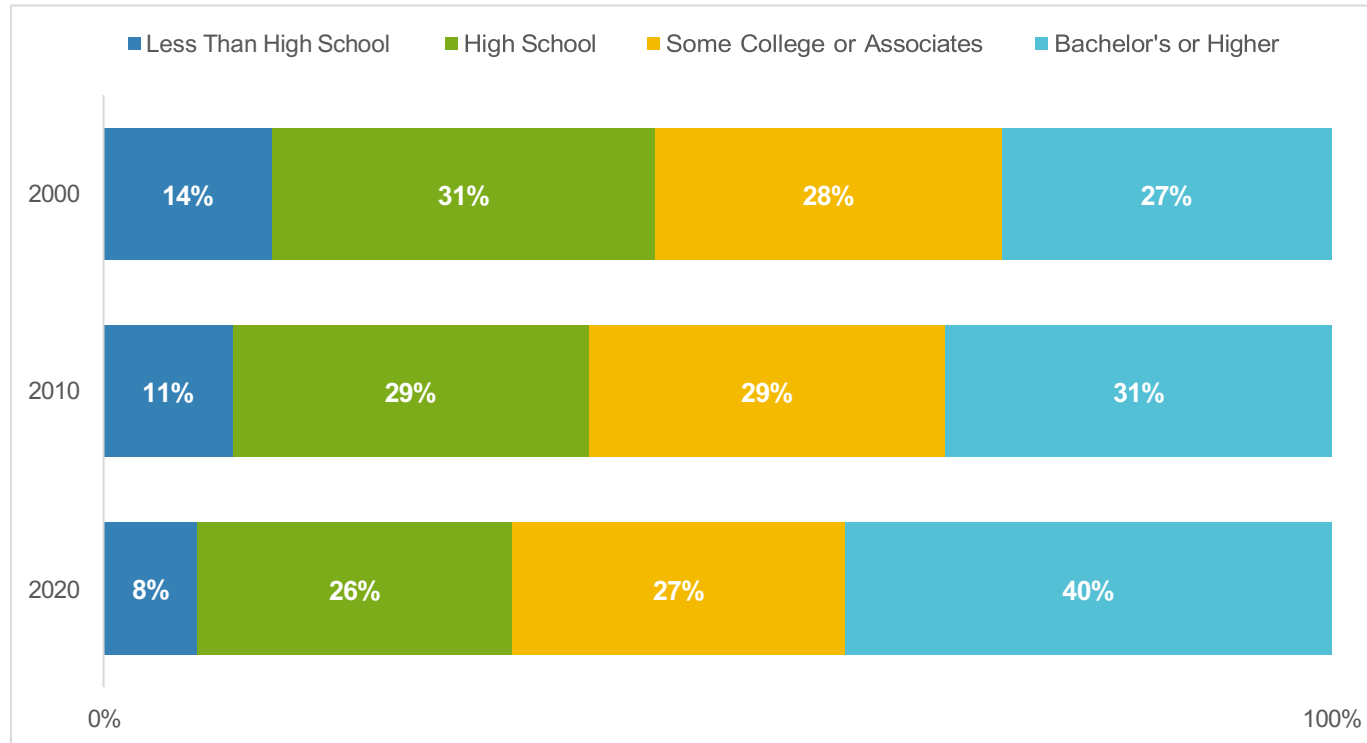
Four in 10 Workers Have a Bachelor's Degree

The importance of obtaining postsecondary credentials as a means of achieving economic mobility and a decent wage has been stressed for decades. Today, a larger percentage of Americans in the labor force have a higher education degree than at any other time in US history (chart 14). The proportion of workers with at least a bachelor's degree had increased from 27 percent in 2000 to 40 percent by 2020. Two decades ago, 45 percent of workers had no college credits. Today, that number has shrunk to just over a third, or 34 percent.

Chart 14

Educational Attainment of Workers in the Labor Force from 2000 to 2020

Decennial, Percent



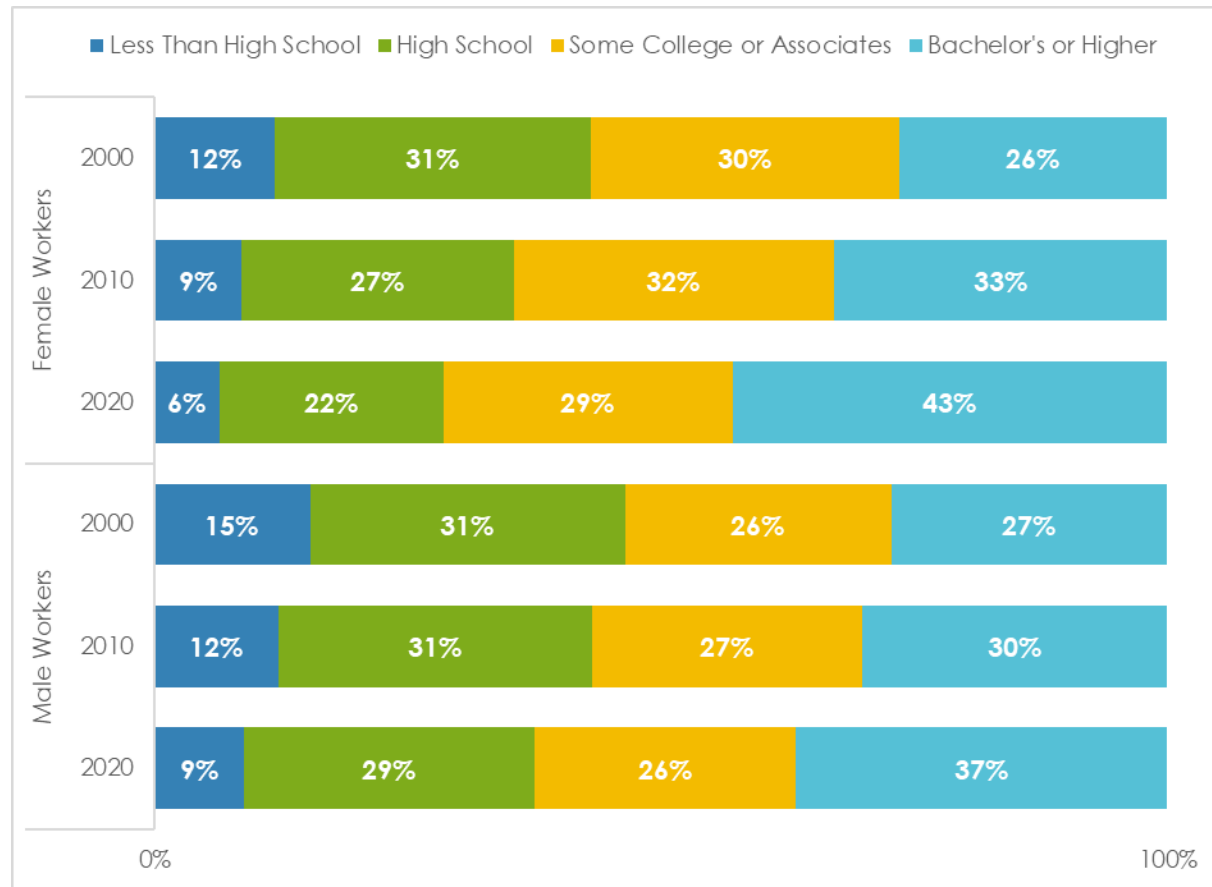
Note: Based on author's calculations from source's data set.

Source: Current Population Survey (CPS) retrieved from ipums.org.

Chart 15

Educational Attainment of Workers in the Labor Force by Sex from 2000 to 2020

Decennial, Percent



Note: Based on author's calculations from source's dataset.

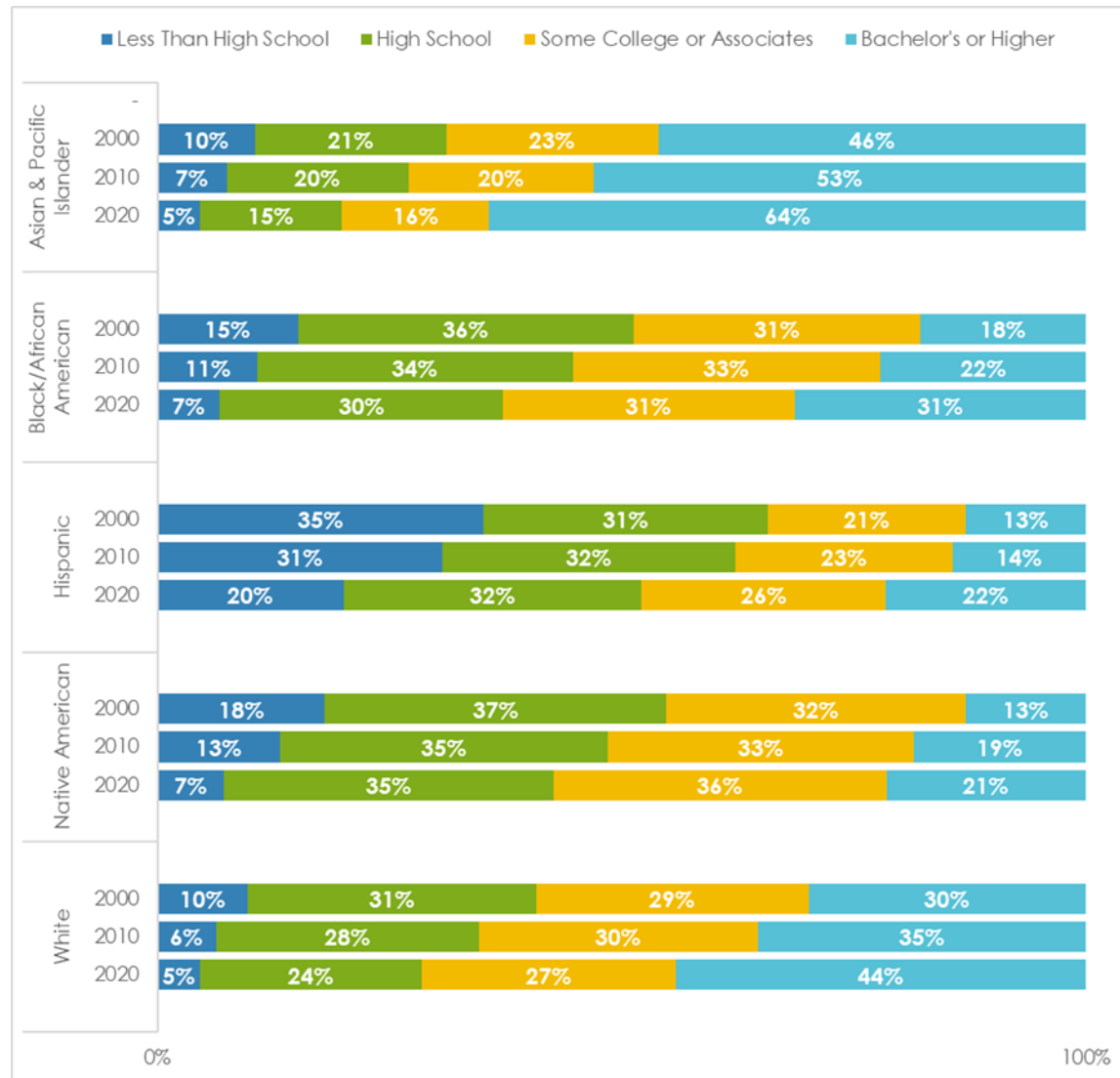
Source: Current Population Survey (CPS) retrieved from ipums.org.

Females are increasingly using higher education to achieve economic mobility.¹⁸ In 2000, 27 percent of males and 26 percent of females in the labor market had at least a bachelor's degree. Those numbers diverged by 2020, when 43 percent of females had a bachelor's degree or higher, compared to 37 percent of males. Similarly, in 2000, 43 percent of females had no college experience compared to 46 percent of males. By 2020, those numbers had shrunk to 28 percent of females and 38 percent of males (chart 15).

Chart 16

Educational Attainment of Workers in the Labor Force by Race and Ethnicity from 2000 to 2020

Decennial, Percent



Note: Hispanic ethnicity only included in 'Hispanic Workers' category.

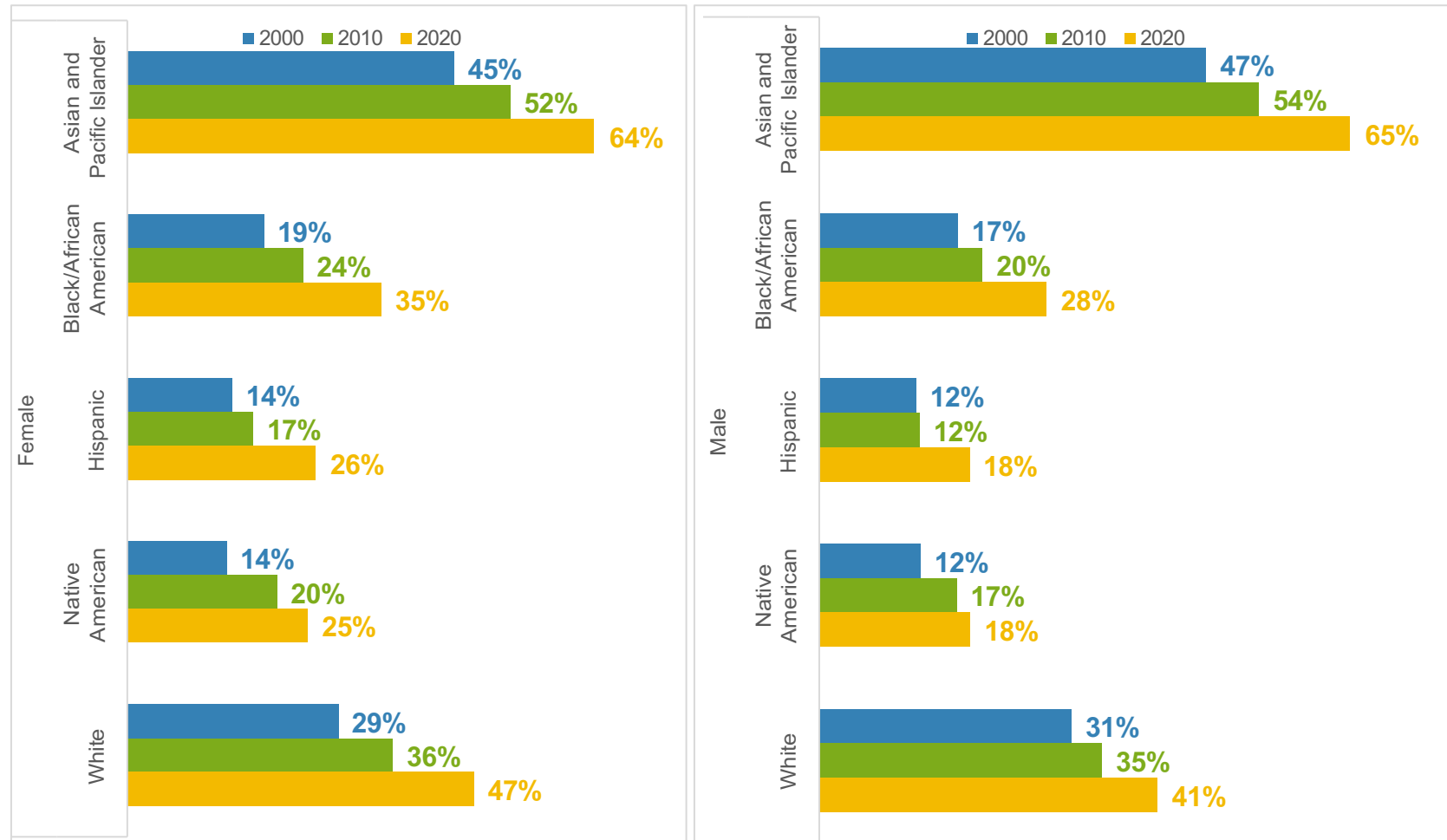
Source: Current Population Survey, US Bureau of Labor Statistics, and Census Bureau retrieved from ipums.org.

Chart 16 illustrates that, nominally, Asian and Pacific Islander and White workers have made exceptional gains in educational attainment since 2000. By 2020, 64 percent of Asian and Pacific Islander workers were college graduates, up from 46 percent. Of White workers, 44 percent had also attained college degrees, up from 30 percent. However, Black, Hispanic, and Native Americans had the fastest growth of workers in the labor force with a college degree. From 2000 to 2020, Black workers with a bachelor's degree increased 76 percent, Hispanic workers with a bachelor's degree increased 67 percent, and Native American workers with a bachelor's degree increased 66 percent, compared to White (48 percent) and Asian and Pacific Islander (40 percent) workers. Nominally, though, Black, Hispanic, and Native American workers trail significantly behind Asian and Pacific Islander and White workers in college degree attainment (chart 16).

Chart 17

Attainment of Bachelor's Degree or Higher for Workers in the Labor Force by Race, Ethnicity, and Sex from 2000 to 2020

Decennial, Percent



Note: Only includes bachelor's degree or higher. Hispanic ethnicity only included in 'Hispanic Workers' category.

Source: Current Population Survey, US Bureau of Labor Statistics and Census Bureau retrieved from ipums.org

We saw in chart 15 that female attainment of college degrees surpassed that of males. Chart 17 breaks this out further by race, ethnicity, and sex, revealing that Asian and Pacific Islander males are the only group of males that have not fallen behind their female counterparts. Across all other groups, females are outpacing males in acquiring college degrees.

Conclusion

Part one of this three-part series illuminates the incongruence between aggregated and disaggregated measures of the labor market. Aggregated and on the upside, we see inflation-adjusted median earnings rising 15 percent, from \$45,095 to \$52,000, in the period from 2000 to 2020. Further, four in 10 Americans now hold a higher education degree, up from fewer than three in 10. However, when disaggregated, we see median earnings gaps have closed for only two groups since 2000—the gap between Asian and Pacific Islander female workers and all workers and the gap between Asian and Pacific Islander males and White male workers. In general, despite earnings and educational gains across historically disenfranchised groups, their outcomes still remain chronically below average as we move into the third decade of the century.

At the aggregate, we see a resilient labor market, one in which median earnings ebb and flow, but trends upward in the long run. Chart 1 perhaps provides solace that despite the current decline in real earnings, earnings over the long run are likely to recover to new highs. We see economic shocks that drive unemployment to double-digit highs but an eventual return to normal. Disaggregated though, we see Black, Hispanic, and Native American workers bearing an outsized brunt of economic shocks and with longer roads to economic recovery. We also saw a labor force in decline across every group except for Asian and Pacific Islander females and Hispanic females. The long-term effects of the factors driving this decline remain to be seen.

In part two of the series, we examine federal government actions that strengthened unemployment insurance coverage during the pandemic compared to previous economic shocks. We also track changes in health care coverage before and after the Patient Protection and Affordable Care Act, and how retirement savings changed after the implementation of the Pension Protection Act.

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² “12-month percentage change, Consumer Price Index, selected categories,” US Bureau of Labor Statistics, accessed July 18, 2023, <https://www.bls.gov/charts/consumer-price-index/consumer-price-index-by-category-line-chart.htm>.

³ “Examining Educational, Workforce, and Earning Divides in the Asian American and Pacific Islander Community,” New American Economy Research Fund, May 13, 2021, <https://research.newamericaneconomy.org/report/aapi-examine-educational-workforce-earningdivides/#:~:text=Income%20Inequality&text=The%20median%20income%20for%20college,skilled%20Black%20and%20Hispanic%20workers>.

⁴ Daniel H. Cooper, Christopher L. Foote, María J. Luengo-Prado, and Giovanni P. Olivei, “Population Aging and the US Labor Force Participation Rate,” Federal Reserve Bank of Boston, December 20, 2021, <https://www.bostonfed.org/publications/current-policy-perspectives/2021/population-aging-and-the-us-laborforce-participation-rate.aspx>.

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- ⁶ Jeremy Greenwood, Nezih Guner, and Karen Kopecky, “Did Substance Abuse during the Pandemic Reduce Labor Force Participation?”, Federal Reserve Bank of Atlanta, May 2022, <https://www.atlantafed.org/-/media/documents/research/publications/policy-hub/2022/05/09/05--did-substance-abuse-duringpandemic-reduce-labor-force-participation.pdf>.
 - ⁷ “Women in the labor force: a databook,” BLS Reports, March 2022, <https://www.bls.gov/opub/reports/womens-databook/2021/home.htm>
 - ⁸ Melinda Pitts, “Where Are They Now? Workers with Young Children during COVID-19,” Federal Reserve Bank of Atlanta, September 2021, <https://www.atlantafed.org/-/media/documents/research/publications/policy-hub/2021/09/01/10--where-are-they-now--workers-with-young-childrenduring-covid-19.pdf>.
 - ⁹ Laura Ullrich, “Male Labor Force Participation: Patterns and Trends,” Federal Reserve Bank of Richmond, 2021, https://www.richmondfed.org//media/RichmondFedOrg/publications/research/econ_focus/2021/q1/district_digest.pdf.
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 - ¹¹ “Women in the labor force: a databook,” BLS Reports, March 2022, <https://www.bls.gov/opub/reports/womens-databook/2021/home.htm>.
 - ¹² Melinda Pitts, “Where Are They Now? Workers with Young Children during COVID-19,” Federal Reserve Bank of Atlanta, September 2021, <https://www.atlantafed.org/-/media/documents/research/publications/policy-hub/2021/09/01/10--where-are-they-now--workers-with-young-childrenduring-covid-19.pdf>.
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