

The Impact of the Trump Labor Market on Historically Disadvantaged Americans

The Council of Economic Advisers
December 2019



Executive Summary

The U.S. labor market is the strongest it has been in the last half century, as shown by economic data across various metrics. This is partly attributable to President Trump's pro-growth economic policies, the results of which are disproportionately benefiting Americans who were previously left behind. The Administration's policies are boosting labor demand and lowering structural barriers to entering the labor market. This report provides evidence that this labor market has contributed to reduced inequality through an economic boom that is greatly benefiting historically disadvantaged groups. These groups are becoming more and more self-reliant through their economic activity, rather than remaining inactive in the labor market to qualify for means-tested government programs.

The Trump Administration's pro-growth policies have led to a surge in labor demand, and thus, for the first time on record, there are more job openings than unemployed people. In 2019, the U.S. unemployment rate has reached 3.5 percent, the lowest rate in five decades. Falling unemployment has reduced the share of the population on unemployment insurance to the lowest level since recording started in 1967. Importantly, the unemployment rate for many historically disadvantaged groups has also reached historic lows. The African American unemployment rate has hit the lowest level on record, and series lows have also been achieved for Asians, Hispanics, American Indians or Alaskan Natives, veterans, those without a high school degree, and persons with disabilities, among others.

Since the 2016 election, the economy has added more than 7 million jobs, far exceeding the 1.9 million predicted by the Congressional Budget Office in its final preelection forecast, which relied on trends from the previous phase of the current economic expansion. These gains have brought people from the sidelines into employment. In parts of 2019, nearly three quarters of people entering employment came from out of the labor force—the highest rate on record. And the prime-age labor force is growing, reversing losses under the prior administration's expansion period. This evidence suggests that the labor market's revival over the past three years is not a continuation of past trends but instead is the result of President Trump's pro-growth policies.

The Trump Administration's policies are not only leading to more jobs but also to higher pay, as a rise in demand in any market puts upward pressure on both quantity and price. Annual nominal wage growth reached 3 percent in 2019 for the first time since the Great Recession, and nominal wage growth has been at or above 3 percent for 16 straight months. Importantly, wage growth for many historically disadvantaged groups is now higher than wage growth for more advantaged groups, as is the case for lower-income workers compared with higher-income ones, for workers compared with managers, and for African Americans compared with whites. These income gains mark a fundamental change relative to those opposite trends observed over the expansion before President Trump's inauguration, contributing to

reduced income inequality. When measured as the share of income held by the top 20 percent, income inequality fell in 2018 by the largest amount in over a decade. The Gini coefficient, an overall measure of inequality in the population, also fell in 2018.

Employment and earnings gains continue pulling people out of poverty and means-tested welfare programs, increasing their self-reliance through economic activity while decreasing their reliance on government programs that incentivize people to limit their hours or stop working to qualify. The number of people living in poverty decreased by 1.4 million from 2017 to 2018, and the poverty rates for blacks and Hispanics reached record lows. Food insecurity has fallen, and, as of August 2019, there are nearly 7 million fewer people participating in the Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp Program) than at the time of the 2016 election. The caseload for Temporary Assistance for Needy Families (TANF) has fallen by almost 700,000 individuals, and the number of individuals on Social Security Disability Insurance has fallen by almost 380,000 since the 2016 election. Similarly, Medicaid rolls are decreasing, even as the U.S. population increases. Our analysis shows that this decrease is predominantly due to a reduction in the number of Medicaid-eligible individuals because of income growth, not eligibility restrictions.

Another Administration priority is the Opportunity Zones provision created by the 2017 tax-reform. Opportunity Zones are supply-side tax cuts designed to spur investment and drive up labor demand, directly helping historically disadvantaged people through increased economic activity. These zones therefore aim to reduce poverty by enhancing self-sufficiency rather than by growing government dependency through demand-side programs.

In addition to having encouraged these unprecedented gains for historically disadvantaged groups, the Trump Administration is launching several new initiatives to increase economic opportunity by removing barriers to work. Modernizing worker training will ensure that workers have the skills needed to find jobs and build careers. Reforming occupational licensing will make it easier for workers to enter certain professions where regulations go beyond what is necessary to protect consumers. Occupational licensing also makes it more difficult to move to a different State, and reform will allow more workers to move to where there are available jobs.

Additionally, those leaving incarceration or struggling with opioid addiction face barriers to finding work, which stops them from filling open jobs. And many parents would like to enter the labor force or work more hours but face high costs for child care. Updating regulations that unnecessarily increase the cost of child care, combating the opioid crisis, and promoting job opportunities for those leaving incarceration will allow more historically disadvantaged individuals to enter the labor market and realize the full benefits of the strong economy.

Today's strong labor market helps all Americans, but the largest benefits are going to people who were previously left behind during the economic recovery. Additional deregulatory actions targeted at remaining barriers in the labor market will allow the economy to add to its record-length expansion and lead to further employment and income gains, particularly for these historically disadvantaged groups.

Introduction

The U.S. labor market is the strongest it has been in the last half century, as shown by economic data across various metrics. President Trump's pro-growth economic policies are contributing to this strength. While the economic gains realized over the past 3 years are widespread, this report shows that they are disproportionately benefiting Americans who were previously left behind during the recovery. The Administration's policies increase labor demand and decrease structural barriers to entering labor markets. This approach has contributed to reduced inequality through an economic boom that is greatly benefiting historically disadvantaged groups. These groups are becoming more and more self-reliant through economic activity rather than by remaining economically inactive to qualify for means-tested government programs.

Today's tighter labor market and the resulting wage growth are predictable outcomes of the Administration's historic tax cuts and deregulatory actions, which have delivered continued economic expansion. Eliminating unnecessary regulatory burdens and lowering taxes spur labor demand and incentivize firms to make productivity-enhancing investments. As a result, worker productivity, wages, and employment all increase.

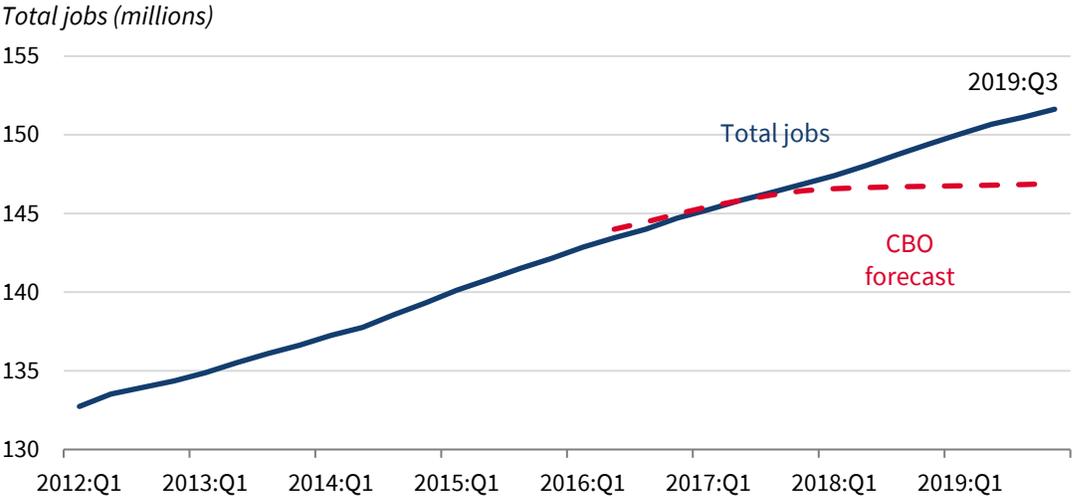
Ultimately, these policies help boost the job market's continued expansion, as increased demand with unchanged supply raises quantity (employment) and prices (wages) in labor markets.¹ The United States has experienced 110 consecutive months of positive job growth, continuing the longest positive job growth streak on record. The civilian unemployment rate, which in November 2019 re-achieved its 50-year low of 3.5 percent, has been at or below 4 percent for 21 consecutive months. Today's historically low level of unemployment makes rapid job creation more difficult as it becomes harder for companies to find available workers. Since the Bureau of Labor Statistics (BLS) started collecting data on job openings in 2000, the number of unemployed people exceeded the number of recorded available jobs until March 2018. Since then, there have been more job openings than unemployed people for a remarkable 19 consecutive months.

In total, since the 2016 election, the economy has added 7 million jobs, more than the population of Massachusetts. These job gains are impressive, given that the economic recovery since the Great Recession became the longest in United States history during the summer of 2019. Figure 1 shows the total number of jobs by quarter. Before the 2016 election,

¹ Tax cuts also increase the supply of labor, as after-tax wages increase for a given pretax wage. Because supply and demand both increase, quantity will increase and the effect on price (wage) will depend on the relative magnitude of the increases.

the Congressional Budget Office (CBO) expected job growth to slow and the total number of jobs to level off, as workers who were out of the labor force were largely expected to remain on the sidelines (CBO 2016). Instead, job growth under President Trump has far exceeded the 1.9 million predicted by this point in the recovery by the CBO in its final preelection forecast. Americans coming from the sidelines to get jobs have led to employment growth at a similar rate as before the election, even as the unemployment rate has fallen to historic lows. Similarly, before the election, the CBO and the Federal Reserve forecasted that the unemployment rate, which had been declining steadily for many years, would level off at about 4.5 percent, as seen in figure 2 (FOMC 2016).

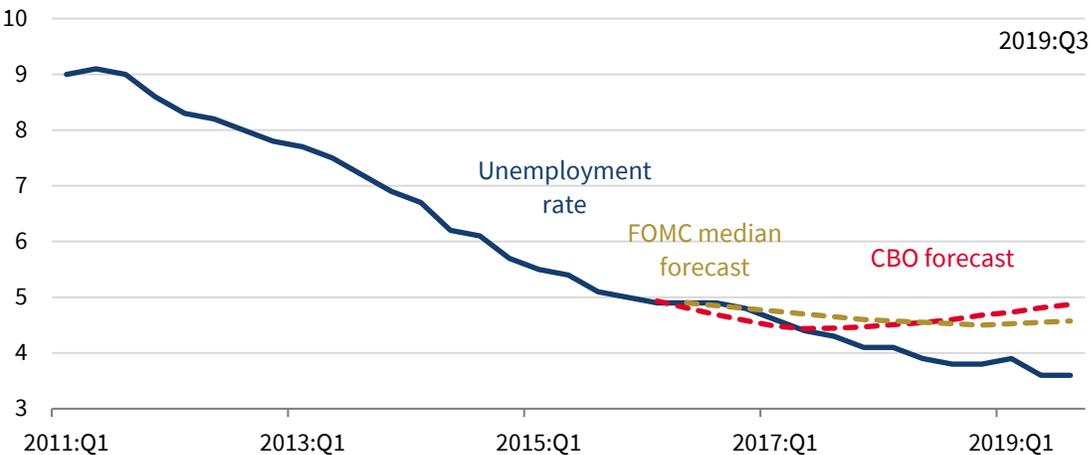
Figure 1. Total Jobs versus Preelection CBO Forecast, 2012–19



Sources: Congressional Budget Office; Bureau of Labor Statistics; CEA calculations.
 Note: CBO = Congressional Budget Office. CBO forecast is from August 2016.

Figure 2. Unemployment Rate versus Preelection Forecasts, 2011–19

Unemployment rate (percent)



Sources: Congressional Budget Office; Bureau of Labor Statistics; Federal Reserve.

Note: CBO = Congressional Budget Office; FOMC = Federal Open Market Committee; CBO forecast is from August 2016; FOMC forecast is from September 2016.

As it becomes more difficult for employers to find available workers, employers will offer higher pay or expand the pool of workers whom they consider. Annual nominal wage growth reached 3 percent in 2019 for the first time since the Great Recession, and nominal wage growth has been at or above 3 percent for 16 straight months. Importantly, wage growth for many disadvantaged groups is now higher than wage growth for more advantaged groups. And the lowest wage earners have seen the fastest nominal wage growth (10.6 percent) of any income group since the Tax Cuts and Jobs Act was signed into law. Beyond this pay increase for low-income workers, from the start of the current expansion to December 2016, average wage growth for workers lagged that for managers, and that for African Americans lagged that for white Americans. Since President Trump took office, each of these trends has been reversed, contributing to reduced income inequality. When measured as the share of income held by the top 20 percent, income inequality fell in 2018 by the largest amount in over a decade. The Gini coefficient, an overall measure of inequality in the population, also fell in 2018 (U.S. Census 2019).

These employment and income gains have brought people from the sidelines into employment. In the third quarter of 2019, 73.7 percent of workers entering employment came from out of the labor force rather than from unemployment, which is the highest share since the series began in 1990.² Additionally, the prime-age labor force is growing, reversing losses

² CEA calculation from labor force transition data reported by the BLS.

under the prior administration's expansion period. Under the prior administration's expansion period, the prime-age labor force shrank by roughly 1.5 million; in contrast, under the current Administration it has expanded by 2.1 million people so far. Importantly, a strong market for jobs creates work opportunities for those with less education or training, prior criminal convictions, or a disability.

This movement from the sidelines into the labor market also pulls people out of poverty and means-tested welfare programs, increasing their self-reliance through economic activity while decreasing their reliance on government programs that incentivize people to limit their hours or stop working to qualify. The number of people living in poverty decreased by 1.4 million from 2017 to 2018, and the poverty rates for blacks and Hispanics reached record lows. Furthermore, the number of working-age adults without health insurance who are below the Federal poverty line fell by 359,000 between 2016 and 2018. Because of the strong job market and sustained wage gains, food insecurity has fallen and, as of August 2019, there are nearly 7 million fewer people participating in the Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp Program) than at the time of the 2016 election. The caseload for Temporary Assistance for Needy Families (TANF) has fallen by almost 700,000 individuals, and the number of individuals on Social Security Disability Insurance has fallen by almost 380,000 since the 2016 election. Similarly, Medicaid rolls are decreasing even as the U.S. population increases. Our analysis shows that this decrease is predominantly due to a reduction in the number of Medicaid-eligible individuals because of income growth, not eligibility restrictions.

In addition to having encouraged these unprecedented gains for disadvantaged groups, the Trump Administration is launching several new initiatives to increase economic opportunity by removing barriers to work. One of the most significant barriers is that available workers do not always have the skills and training required to fill available jobs. Additionally, available workers may not be located near available jobs. The increase in prevalence in occupational licensing has made it more difficult for individuals to find and take jobs in different States. Individuals' labor market participation can also be limited by a struggling local economy, child care responsibilities, opioid addiction, and prior criminal convictions. The Administration is addressing these barriers with initiatives like the National Council for the American Worker, the Pledge to America's Workers, the Initiative to Stop Opioid Abuse, and the Second Chance Hiring Initiative.

The Trump Administration continues its relentless focus on reducing poverty by expanding self-sufficiency. The CEA (2019a) accounted for the value of government subsidies for goods (in-kind transfers) like healthcare, food, and housing, and we found that—contrary to claims from the policy community and the media—poverty has decreased dramatically since the War

on Poverty began in the 1960s. However, the war was largely “won” through increasing government dependency (demand side) rather than through promoting self-sufficiency (supply side), meaning that there is still more progress to be made. This is where Opportunity Zones come in.

Opportunity Zones, which were created by the 2017 Tax Cuts and Jobs Act, are best understood as supply-side economic policies. These zones entail tax cuts, analogous to the corporate tax cut, designed to spur investment and drive up labor demand, and thus directly help the disadvantaged achieve self-sufficiency through increased economic activity. Supply-side tax cuts are the opposite of the traditional, failed approach to fighting poverty, which entails higher taxes to fund demand-side subsidies for healthcare, food, and other goods or services that incentivize people to limit their hours or stop working to qualify.

While the economic benefits of the Trump Administration’s policies are widespread, this report’s main finding is that a stronger U.S. economy over the past three years has especially helped racial and ethnic minorities, less-educated individuals, people living in poverty, and those who had been out of the labor force. As the Administration continues to implement a pro-growth agenda, the benefits to these historically disadvantaged groups are likely to persist and intensify.

This paper is organized in two main sections. In the first, we outline how today’s strong labor market is benefiting lower-income individuals and individuals in historically disadvantaged groups. In the second section, we discuss barriers that continue keeping some individuals from benefiting from a strong national economy, along with the actions the Administration is taking to address these barriers and add to historically disadvantaged groups’ employment and income gains.³

Shared Prosperity from Strong Economic Growth

The Trump Administration’s tax and deregulatory policies increase labor demand by firms. The continued economic expansion enabled by these policies has been accompanied by a very strong labor market. As additional workers became more difficult to find, firms started considering a broader pool of potential workers. Low unemployment and strong wage growth have also drawn workers into the labor force from the sidelines, increasing the quantity of labor supplied.

³ Parts of this report are taken from “Government Employment and Training Programs: Assessing the Evidence on their Performance” CEA (2019d).

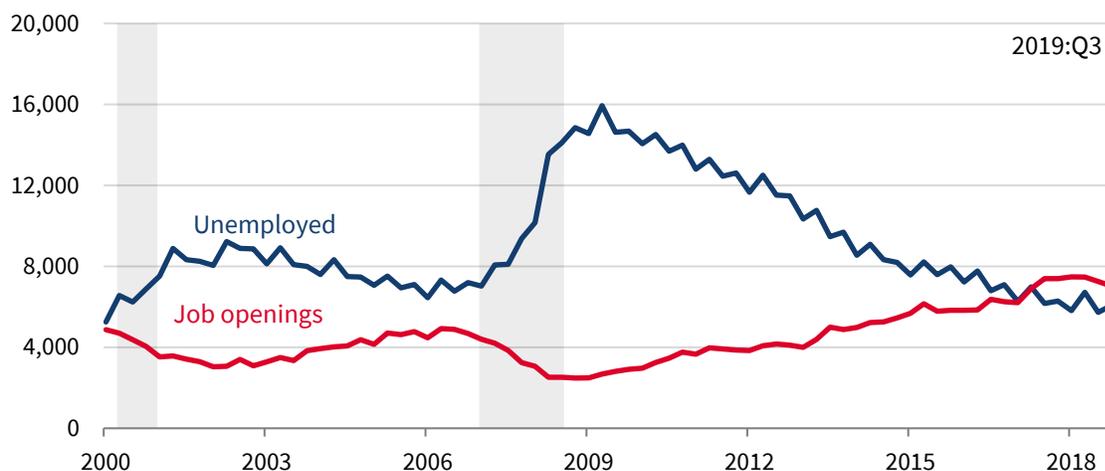
The Current State of the Labor Market

In November 2019, the national unemployment rate was 3.5 percent—matching the lowest rate in 50 years.⁴ The unemployment rate has been at or below 4 percent for 21 consecutive months. This consistently low unemployment rate is an indication of a relatively tight labor market.

Just as a low unemployment rate signals a strong labor market, a high number of job openings—as measured by the BLS’s Job Opening and Labor Turnover Survey (JOLTS)—indicates strong labor demand. Compared with the time of the 2016 election, there were nearly 1.2 million more job openings in September 2019. In total, there were 7.0 million job openings in September—nearly 1.3 million more than the number of unemployed persons. September was the 19th consecutive month in which there were more job openings than unemployed. Figure 3 shows the number of unemployed workers per job opening over time. Since the JOLTS data began being collected by the BLS in 2000, the current period beginning under the Trump Administration is the first time when there have been more job openings than unemployed people.

Figure 3. Number of Unemployed versus Number of Job Openings, 2000-2019

Thousands

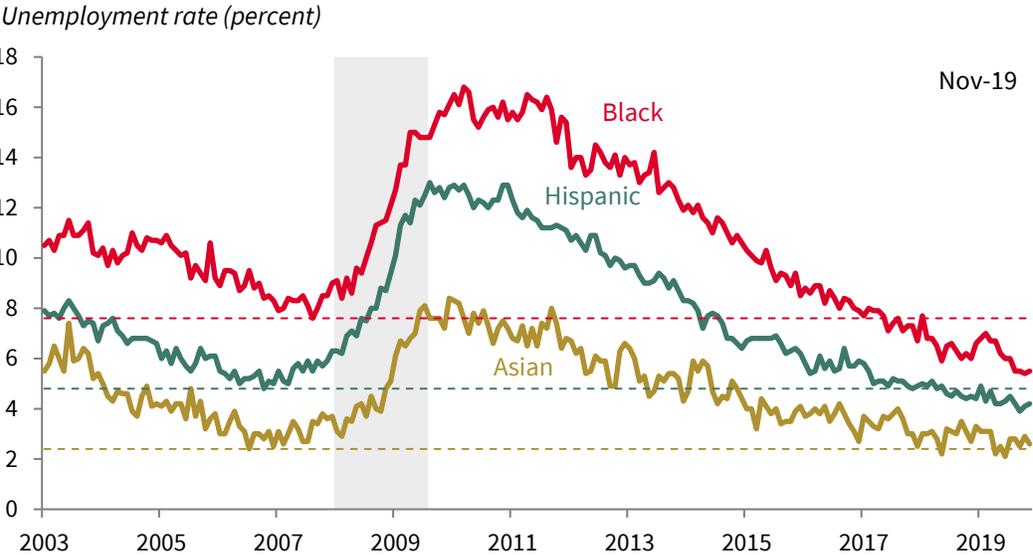


Source: Bureau of Labor Statistics.
Note: Shading denotes a recession.

⁴ Unemployment statistics are produced by the BLS and are calculated from data collected in the monthly Current Population Survey (CPS). Unless otherwise stated, the data are seasonally adjusted.

As a result of a more robust U.S. economy, many groups that historically have had a tougher time getting ahead are now gaining ground. Under the Trump Administration, many of these groups have reached notable lows in their unemployment rates (see table 1). In October 2019, the unemployment rate for African Americans fell to 5.4 percent—the lowest rate on record since the series began in 1972. Meanwhile, the unemployment rate for African American women also reached its series low in August 2019. For Hispanics, the September 2019 unemployment rate achieved its series low of 3.9 percent (the series began in 1973). In 2018 the unemployment rate for American Indians or Alaska Natives fell to 6.6 percent—the lowest rate since the series began in 2000. Figure 4 shows the unemployment rates for different racial and ethnic groups compared with their prerecession lows. The decline in unemployment after the recession and before the start of the Trump Administration was largely the result of a recovery from the losses during the recession. During the last two years, the black and Hispanic unemployment rates have fallen below their prerecession lows and Asian unemployment has fallen to its prerecession low.

Figure 4. Unemployment Rate by Race, 2003–19



Sources: Bureau of Labor Statistics; CEA calculations.
 Note: Dotted lines denote the lowest rate from December 2001 to November 2007 for blacks and Hispanics and the lowest rate from January 2003 to November 2007 for Asians. Shading denotes a recession.

Table 1. Unemployment Rates by Demographic Group

Group	October 2019 (percent)	Series low (percent)	Low of the Trump Administration (date)	The Trump low is lowest since
<i>Education</i>				
Less than high school	5.6	4.8 (Sept. 2019)	4.8 (Sept. 2019)	Series began (Jan. 1992)
High school diploma	3.7	3.2 (Nov. 1999)	3.5 (May 2019)	July 2000
Some college	2.9	2.4 (Oct. 2000)	2.8 (May 2019)	Mar. 2001
Bachelor's or higher	2.1	1.5 (Dec. 2000)	2.0 (Sept. 2019)	April 2007
<i>Race and ethnicity</i>				
African American	5.4	5.4 (Oct. 2019)	5.4 (Oct. 2019)	Series began (Jan. 1972)
Hispanic	4.1	3.9 (Sept. 2019)	3.9 (Sept. 2019)	Series began (Mar. 1973)
White	3.2	3.0 (May 1969)	3.1 (April 2019)	May 1969
Asian	2.9	2.1 (June 2019)	2.1 (June 2019)	Series began (Jan. 2003)
<i>Age and gender</i>				
Adult women (age 20+)	3.2	2.4 (May 1953)	3.1 (Sept. 2019)	Aug. 1953
Adult men (age 20+)	3.2	1.9 (Mar. 1969)	3.2 (Oct. 2019)	April 2000
Teenagers (age 16–19)	12.3	6.4 (May 1953)	12.0 (Nov. 2018)	Dec. 1969

Sources: Bureau of Labor Statistics, Current Population Survey; CEA calculations.

Note: The series for “high school diploma,” “some college,” and “bachelor’s or higher” began in 1992. The series for “white” began in 1954. The series for “adult women,” “adult men,” and “teenagers” began in 1948.

Among various levels of educational attainment, those with less education typically face tougher labor market prospects. The Administration’s tax and regulatory policies, however, are stimulating labor demand and are helping to provide labor market opportunities for those with less education and training. In September 2019, the unemployment rate for individuals without a high school degree fell to 4.8 percent, achieving a series low (the series began in 1992). Since the President’s election, the unemployment rate for those without a high school degree has fallen at a faster rate than the rate for those with a bachelor’s degree or higher. The gap between the two rates is now at a series low. For people with a high school degree but not a college education, the unemployment rate fell to 3.5 percent in May 2019, the lowest it has been in 18 years. And for individuals with some college experience but no bachelor’s degree, the rate fell to 2.8 percent in May 2019, the lowest since 2001.

Persons with disabilities can have a harder time finding work, as can veterans. However, President Trump’s policies are translating into economic gains for these populations as well. In September 2019, the unemployment rate for persons with a disability dropped to 6.1 percent, the lowest it has been since the series began in 2008.⁵ In April 2019, the

⁵ The unemployment rate by disability status is not seasonally adjusted.

unemployment rate for American veterans fell to 2.3 percent, matching the series low previously achieved in 2000.⁶

Demographic Change and Labor Force Statistics

In this subsection, we construct labor force participation rates that control for changing demographics over time. The demographically adjusted participation rates are near prerecession levels for Hispanics and have exceeded prerecession levels for blacks. The adjusted participation rates show that due to the strong labor market in recent years, many workers are coming from the sidelines and are reentering the labor force.

Although job growth remains robust and the unemployment rate is near a record low, the labor force participation rate has not recovered to its prerecession level. Before the recession, in December 2007, the participation rate was 66.0 percent. The participation rate fell during the recession and continued to fall during the recovery, reaching a low of 62.4 percent in September 2015, before rebounding slightly to its current level of 63.3 percent (in October 2019). In past recoveries, workers reentering the labor force due to the stronger economy caused the participation rate to increase. However, comparing participation rates over time can be complicated by demographic changes. To get a clearer picture of the labor market, we construct demographically adjusted participation rates by race and ethnicity, using 2007 as the reference period.⁷

The demographically adjusted labor force participation rates are necessary because participation varies predictably over a person's lifetime. The overall participation rate will depend on participation at each age and on the share of people in each age group. For example, as the overall population ages, a larger share of people are in the older age groups, where participation is lower due to retirement. The aging of the population therefore will likely cause a decrease in the participation rate, even if participation at each age is unchanged. The baby boom generation, which is currently leaving the labor force through retirement, is a relatively large generation. Even though workers are coming from the sidelines and reentering the labor force due to the strong labor market, the positive effect on the participation rate is largely offset by retiring baby boomers, even as some boomers are working longer.

⁶ The unemployment rate for veterans is not seasonally adjusted.

⁷ The choice of reference year is arbitrary; 2007 is chosen to facilitate comparison between current rates and precrisis rates.

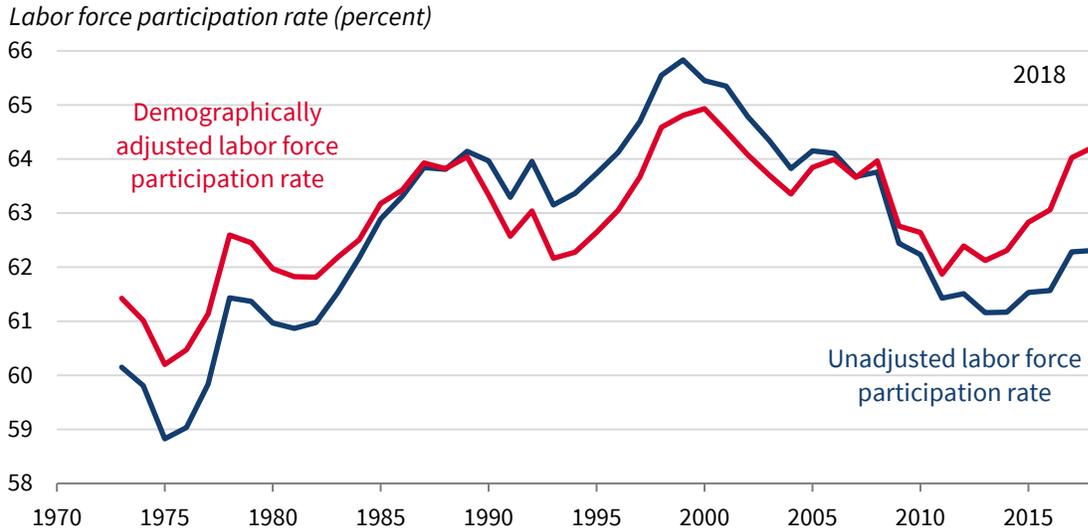
One way to mitigate the effects of demographic changes on labor market measures across time is to look at labor force participation among prime-age individuals (i.e., those age 25–54 years). But this is only a partial solution, because there is still heterogeneity among groups of prime-age individuals, so prime-age participation is still subject to demographic shifts among the different age groups within the larger prime-age category. There can also be important participation trends among both older and younger workers that will affect the overall participation rate. Demographically adjusted participation rates are a single measure of participation that separates changes in participation from changes in demographics by holding demographics constant (Szafran 2002). To find this adjusted rate, the age and sex distribution of the population is first held fixed at a given reference period. The demographically adjusted participation rate for each period is constructed by using that period’s age- and gender-specific participation rates and the population of the reference period.⁸

Figure 5 presents the demographically adjusted labor force participation rate for blacks. The data are aggregated to the annual level due to the relatively small sample size at the level of race by gender by age group.⁹ The overall participation rate for blacks has fallen since the global financial crisis of 2007–8, although the decline during the recession was the continuation of a longer-term, downward trend starting in the late 1990s. The adjusted participation rate shows that much of this decline can be explained by demographic changes. The participation rate for blacks was higher in 2018 than it was before the Great Recession, and it is slightly below the peak in 2000 once the effects of an aging population are removed. For comparison, the adjusted participation rate for the entire population age 16 and above fell from 66 percent in 2007 to a low of 64.5 percent in 2015, before recovering to 65.5 percent in 2018.

⁸ We use the following age groups: 16–19, 20–24, 25–34, 35–44, 45–54, 55–64, and 65 and over.

⁹ The BLS does not produce seasonally adjusted monthly or quarterly labor force participation data by race for the finer-grained age groups needed to produce the demographically adjusted participation rate.

Figure 5. Demographically Adjusted Labor Force Participation Rate for African Americans, 1973–2018

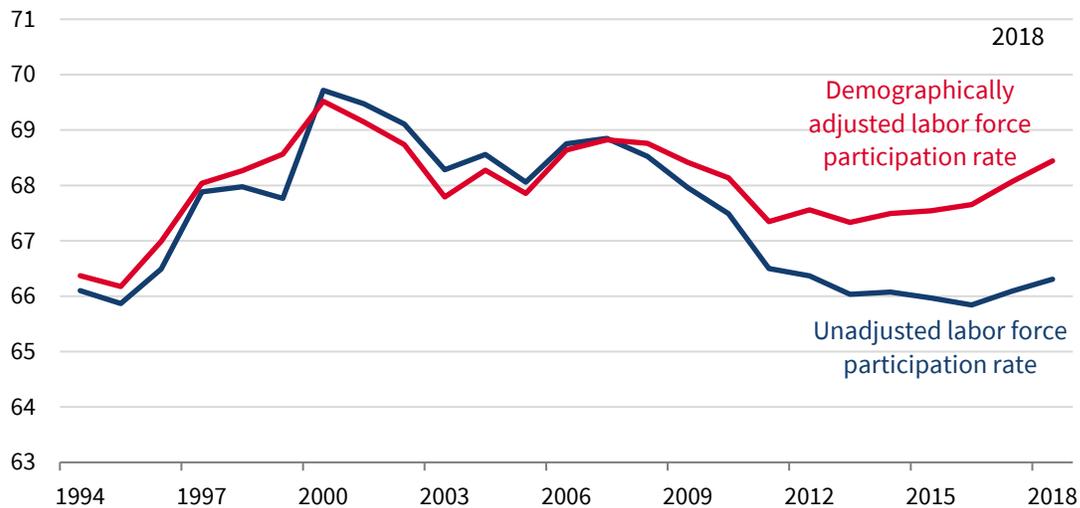


Sources: Bureau of Labor Statistics; CEA calculations.

Figure 6 shows the demographically adjusted labor force participation rate for Hispanics. From 1994 to the start of the Great Recession, demographic changes had a minimal effect on the overall participation rate for this group, as there tends to be little difference between the adjusted and nonadjusted rates. However, the adjusted and nonadjusted participation rates have diverged since the Great Recession. The nonadjusted rate initially fell by a relatively large amount and has only increased slightly during the recovery. The demographically adjusted rate shows that much of the decrease and lack of recovery are due to changing demographics.

Figure 6. Demographically Adjusted Labor Force Participation Rate for Hispanics, 1994–2018

Labor force participation rate (percent)



Sources: Bureau of Labor Statistics; CEA calculations.

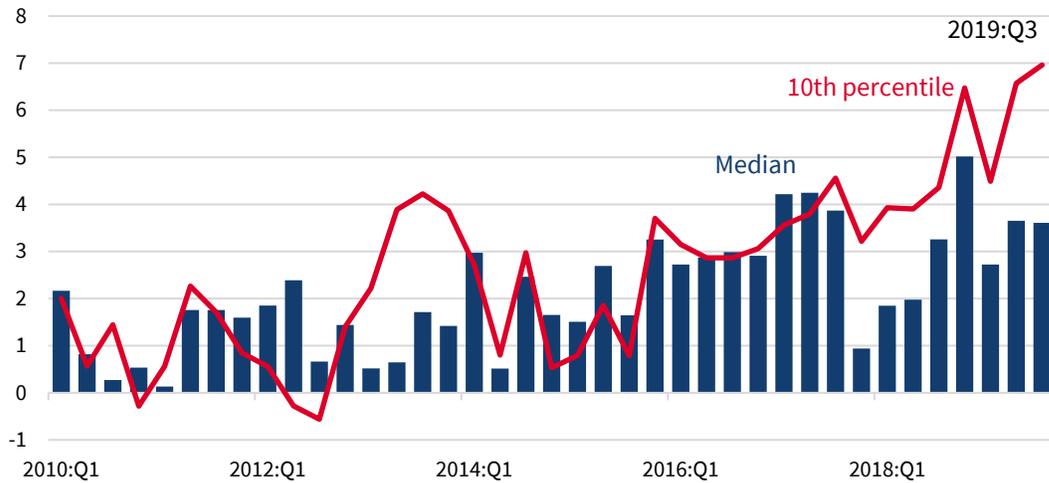
Wage and Income Growth

Over the past three years, the higher demand for labor and the tighter job market have been leading to larger wage gains, especially for the lowest-income workers. In the third quarter of 2019, the 12-month change in nominal weekly wages for the 10th percentile of full-time workers was up 7.0 percent (see figure 7).¹⁰ This is higher than the year-over-year change in the nominal weekly wage for the median worker (3.6 percent), and well above inflation. Furthermore, in 2019:Q3, median weekly wages for full-time workers without a high school degree were up 9.0 percent over the year.

¹⁰ Weekly earnings data are released by the BLS and are from the CPS.

Figure 7. Nominal Weekly Wage Growth among All Adult Full-Time Wage and Salary Workers, 2010–19

Year-over-year change (percent)



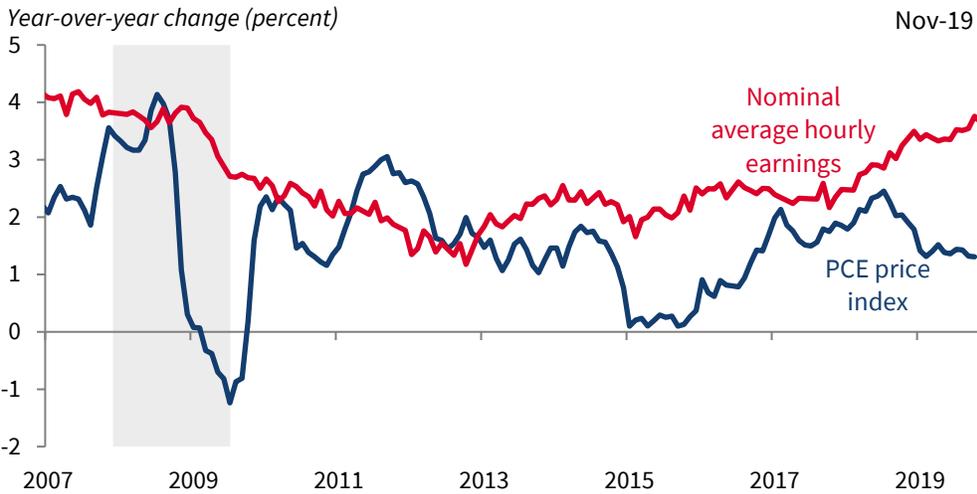
Sources: Bureau of Labor Statistics; Current Population Survey; CEA calculations.
Note: Data are non-seasonally adjusted.

Figure 8 shows that, as of October 2019, nominal average hourly earnings of production and nonsupervisory workers grew at the fastest rate during the current recovery, at 3.8 percent year over year.¹¹ Inflation, as measured by the Personal Consumption Expenditures (PCE) Price Index, remains modest, at 1.3 percent year over year in October.¹² Therefore, the real wages of private sector production and nonsupervisory workers increased by 2.5 percent during the year ending in October 2019.

¹¹ Average hourly earnings are measured by the BLS in the Current Employment Statistics.

¹² November inflation data are not yet available.

Figure 8. Average Hourly Earnings for Production and Nonsupervisory Workers and the Personal Consumption Expenditures Price Index, 2007–19



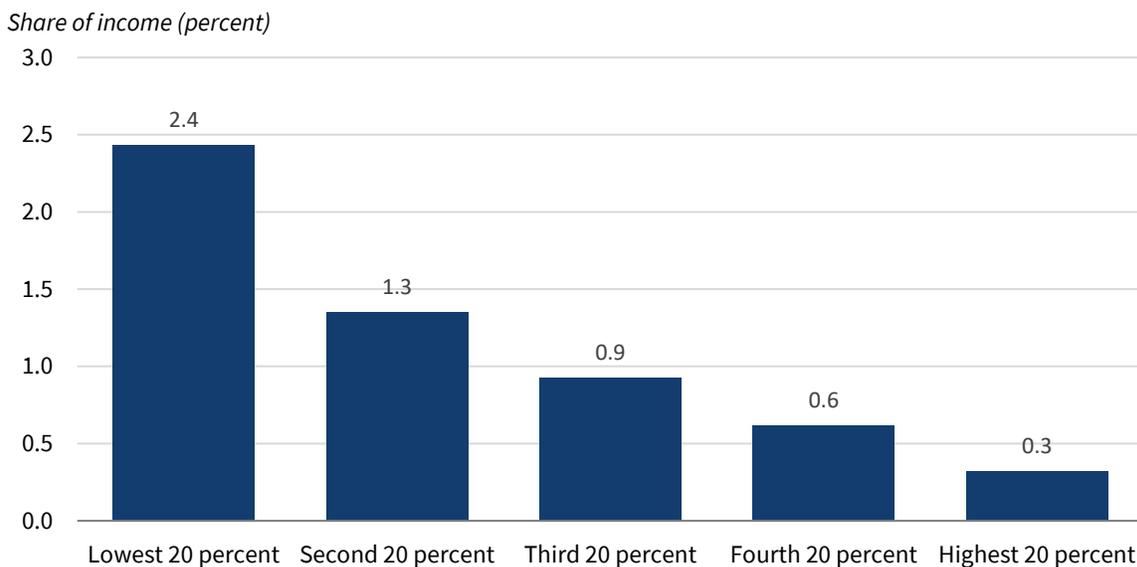
Sources: Bureau of Labor Statistics; Bureau of Economic Analysis.
 Note: PCE = Personal Consumption Expenditures; shading denotes a recession.

Minorities are experiencing some of the fastest increases in pay. In 2019:Q3, African Americans saw their weekly earnings grow by 6.0 percent over the year, while Hispanics' weekly earnings grew by 4.2 percent. For comparison, the 12-month change in weekly earnings for all Americans rose by 3.6 percent. In addition to faster earnings growth, lower-income households are seeing the largest benefits from deregulatory actions that lower the costs of goods and services. Box 1 shows an example of the beneficial impact of the Administration's deregulatory agenda on lower-income households.

Box 1. Who Bears the Burden of Regulatory Costs?

Well-designed regulations promote important social purposes, but at a cost. The question of who bears the burden of regulatory costs is like the question of who bears the burden of the taxes needed to fund government spending programs. The Federal income tax has a progressive structure; thus, compared with lower-income households, higher-income households bear a greater share of the burden of taxation. Unfortunately, however, lower-income households can bear a disproportionate share of the burden of regulatory costs. We estimate that the cost savings from deregulatory actions in two sectors—Internet access and prescription drugs (see figure i)—especially helped lower-income households. These are two of the regulations whose benefits were estimated by the CEA (2019d). The lower burden of regulatory costs reinforces the gains in employment and wages from today’s strong labor market.

Figure i. Estimated Annual Consumer Savings on Prescription Drugs and Internet Access by Household Income Quintile



Sources: Bureau of Labor Statistics; Bureau of Economic Analysis; CEA calculations.

Costly regulations hurt lower-income households because they spend a larger share of their budgets on goods and services produced by regulated sectors of the economy. For example, in data from the 2018 Consumer Expenditure Survey, the poorest fifth of households spend 2.7 percent of their incomes out-of-pocket on prescription drugs, while the richest fifth of households spend only 0.3 percent. The poorest fifth of households also spend a higher percentage of their incomes on Internet access. As a result, the costs savings from deregulatory actions in these two sectors represent 2.4 percent of the income for the poorest fifth of households, compared with 0.3 percent for the richest fifth.

Many regulations also hurt lower-income households because they impose standards that tend to increase the price of those goods that are disproportionately purchased by lower-income households. For example, after controlling for other differences, Levinson (2019) finds that higher-income households purchase more fuel-efficient cars. As a result, he estimates that the corporate average fuel economy (CAFE) standards are regressive and disproportionately burden lower-income households. The CAFE standards matter less to higher-income households because they prefer to purchase more fuel-efficient cars anyway. The 20 notable actions analyzed by the CEA (2019d) include other deregulations of standards that restricted the ability of lower-income households to choose the products that best suited their preferences and budgets.

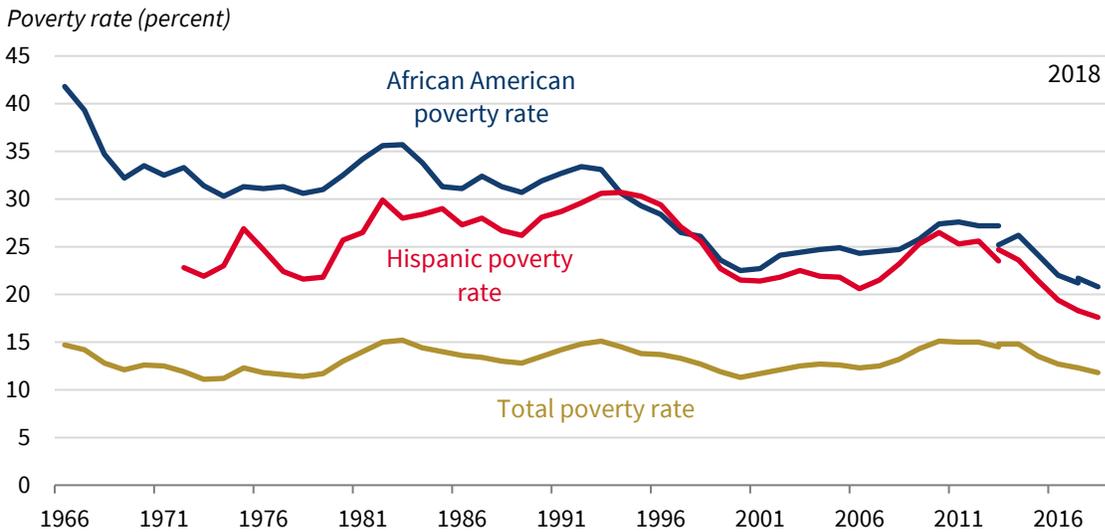
Poverty and Inequality

The gains in employment and wages for those who had previously been left behind are lifting many out of poverty. In September 2019, the Census Bureau released its official measures of the economic well-being of Americans for 2018 using data from the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS). While Americans across the board generally saw improvements, the data show that there were larger gains among historically disadvantaged groups.

In 2018, the official poverty rate fell by 0.5 percentage point, to 11.8 percent, the lowest level since 2001, lifting 1.4 million Americans out of poverty. This decline follows a decline of 0.4 percentage point in 2017, meaning that the U.S. poverty rate fell almost a full point over the first two years of the Trump Administration. In the CPS-ASEC, income is defined as money income before taxes. It includes cash assistance but not the value of in-kind benefits for government assistance programs or refundable tax credits targeted at low-income working families. Including the value of these benefits raises the total resources available to households at the bottom of the income distribution. We conduct an analysis later in this paper that examines the effect of using after-tax and after-transfer income (including the value of in-kind transfers) on the changes in poverty during the Administration.

Disadvantaged groups experienced the largest poverty reductions in 2018. The poverty rate fell by 0.9 percentage point for black Americans and by 0.8 percentage point for Hispanic Americans, with both groups reaching historic lows (see figure 9). The poverty rates for black and Hispanic Americans in 2018 were never closer to the overall poverty rate in the United States. Children fared especially well in 2018, with a decrease in poverty of 1.2 percentage points for those under 18. Poverty among single mothers with children fell by 2.5 percentage points.

Figure 9. Poverty Rates by Race and Ethnicity, 1966–2018



Source: Current Population Survey Annual Social and Economic Supplement.

Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions. The data for 2017 and beyond reflect the implementation of an updated CPS-ASEC processing system.

Although real income at the bottom of the income distribution increased and the percentage of people in poverty fell, it can also be informative to examine how these gains compare with gains elsewhere in the income distribution, which will be reflected in the changes in various measures of income inequality. Inequality fell in 2018, as the share of income held by the top 20 percent fell by the largest amount in over a decade, as did the Gini index (an overall measure of inequality in the population). In fact, households between the 20th and 40th percentiles of the distribution experienced the largest increase in average household income among all quintiles in 2018, with a gain of 2.5 percent.¹³

Low unemployment, rising incomes, and declining poverty mean that more Americans are becoming self-sufficient. The caseload for Temporary Assistance for Needy Families (TANF) is on the decline, falling by almost 700,000 individuals since the election, as of March 2019. Meanwhile, the number of individuals on Social Security Disability Insurance (SSDI) has fallen by almost 380,000 since the 2016 election. The decline in the official poverty rate mirrors a decline of 0.7 percentage point in food insecurity in 2018.¹⁴ Since the 2016 election, nearly 7 million Americans have moved off the SNAP rolls. These substantial declines in enrollment

¹³ Data from the American Community Survey (ACS), which is a separate data source also released by the Census Bureau, showed that inequality increased from 2017 to 2018. The ACS has a much larger sample size than the CPS-ASEC, but it measures income less accurately. For this reason, the Census recommends using the CPS-ASEC for national income statistics, like inequality.

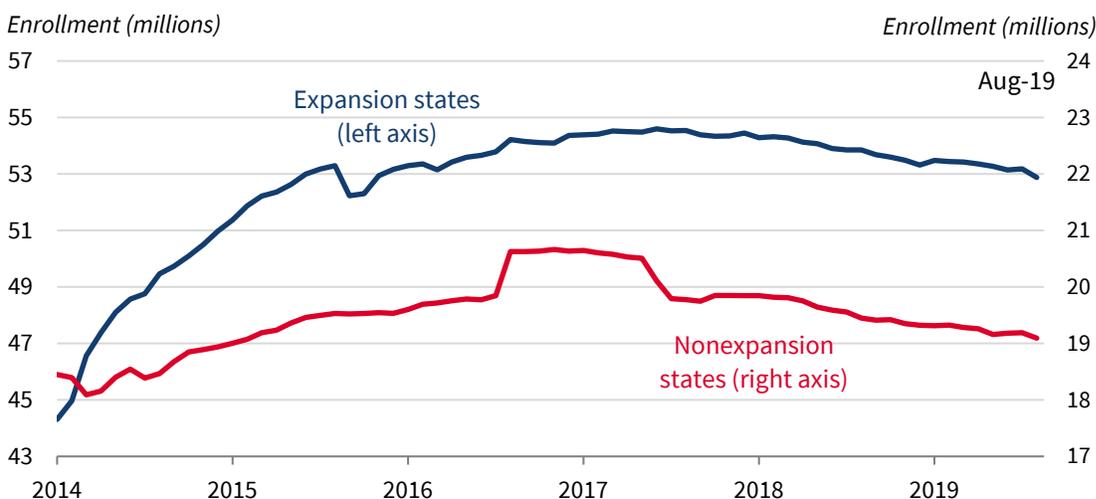
¹⁴ U.S. Department of Agriculture, Economic Research Service, using data from the December 2018 Current Population Survey Food Security Supplement (<https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx>).

suggest that a growing economy may lead to positive outcomes in moving families toward self-sufficiency. While some of the enrollment decline in welfare programs could be due to administrative or policy changes designed to prevent ineligible individuals from receiving benefits, it is possible that some otherwise-eligible individuals would be affected.¹⁵ However, the decline in food insecurity combined with the decline in poverty suggests that the net effect of any administrative changes and the strong economy has been to reduce hardship, in turn reducing reliance on public benefits.

Health Insurance and Medicaid

Strong job growth is the key to expanding and improving access to health insurance. Employer-sponsored health insurance is by far the largest source of health insurance coverage in the United States. The employment and earnings gains that are reducing poverty are also driving a decrease in the number of people on Medicaid. Medicaid rolls are decreasing in both expansion and nonexpansion States, even though the U.S. population is increasing (see figure 10). Our analysis of the data indicates that the reduction in the number of people on Medicaid is due predominantly to a reduction in the number of Medicaid-eligible individuals because of income growth as opposed to eligibility restrictions.

Figure 10. Number of Medicaid and CHIP Enrollees by Month in Expansion and Nonexpansion States, 2014–19



Sources: Centers for Medicare & Medicaid Services; Kaiser Family Foundation; CEA calculations.
 Note: "Expansion" refers to states that have expanded Medicaid coverage following the Affordable Care Act.

¹⁵ Administrative costs of program participation can prevent eligible individuals from enrolling in public programs (Aizer 2007). Administrative changes that increase the nonmonetary cost of enrollment could lead to an increase in the number of eligible individuals choosing not to enroll.

The Census Bureau asks about health insurance coverage during the previous year in an annual supplement to the CPS-ASEC. Individuals are classified as being uninsured if they lack coverage for the entire year. For each of the insurance types, individuals are asked if they were covered by that type of insurance at any point during the year. Comparisons of insurance coverage in recent years have been complicated by changes in the CPS-ASEC data. In 2014, the CPS Annual Social and Economic supplement revised its questionnaire to better measure health insurance coverage. Starting with the release of the 2019 data, the Census Bureau implemented improvements in data processing to fully take advantage of the revised questionnaire. Data for 2017 and 2018 have been released with the updated data processing, so consistent comparisons can be made for health insurance in 2016, 2017, and 2018 using CPS-ASEC data.¹⁶

Table 2 shows the change from 2016 to 2018 in the number of people between age 18 and 64 with different types of health insurance coverage at different levels of income in the CPS-ASEC. For all individuals, the number of uninsured increased by about 2 million and the number covered by employer provided coverage increased by about 1.4 million. Directly purchased individual coverage fell by 2.35 million people and Medicaid fell by 1.6 million people. The distribution of income relative to the Federal poverty line for the overall population of those age 18–64 shows that income relative to the poverty level increased, and the number of people living below the Federal poverty line fell by 1.6 million. Of the 2 million increase in the number of uninsured, 1.35 million have a family income 300 percent or more of the Federal poverty line. The number of people without insurance who are below the Federal poverty line fell by 359,000 between 2016 and 2018. These results indicate that from 2016 to 2018, the income gains for working age adults led to reduced participation in Medicaid.

¹⁶ The updated files are the 2018 ASEC bridge files and the 2017 ASEC research files. Note that the updated data processing will cause the health insurance estimates for these years to differ from the results using the production files that were published by the Census Bureau in the works by Barnett and Berchick (2017) and Berchick, Hood, and Barnett (2018).

Table 2. Change in the Number of People Age 18–64 Years with Different Types of Insurance by Family Income Level, 2016–18

Income level	Population (thousands)	Uninsured (thousands)	Employer provided (thousands)	Direct purchase (thousands)	Medicaid (thousands)
All	736	1,961	1,369	-2,347	-1,613
Below FPL	-1,576	-359	-283	-182	-1,042
100–199 percent of FPL	12	608	-121	-494	-507
200–299 percent of FPL	-608	362	-460	-667	26
300 percent of FPL and over	2,066	1,350	2,233	-1,004	-91

Sources: Current Population Survey, Annual Social and Economic Supplement; CEA calculations.

Note: FPL = federal poverty line.

A particularly vulnerable population is children living in poverty. Table 3 presents the change in the number of people under the age of 18 years with different types of insurance by family income level. The number of uninsured children increased by 340,000 between 2016 and 2018, even as the total number of children fell. Almost half the increase in the number of uninsured children is due to children in families that earn at least 300 percent of the Federal poverty line. The number of children on Medicaid (includes the Children's Health Insurance Program, CHIP) fell by 1.45 million, which is largely due to a decline in the number of children living in poverty. Some have argued that the decrease in the number of children enrolled in Medicaid and the increase in the number of uninsured is due to administrative changes that exclude eligible children and discourage otherwise-eligible children from being enrolled.¹⁷ The small increase in the number of children below the poverty line who are uninsured suggests that administrative changes may be playing a small role. However, the data indicate that income gains and the reduction in the number of children living in poverty are primarily responsible for the large decline in the number of children on Medicaid.

Table 3. Change in the Number of Children with Different Types of Insurance by Family Income Level, 2016–18

Income level	Population (thousands)	Uninsured (thousands)	Employer provided (thousands)	Direct purchase (thousands)	Medicaid
All	-423	340	231	-389	-1,445
Below FPL	-1,351	25	-270	-131	-1,223
100–199 percent of FPL	231	68	73	-113	-28
200–299 percent of FPL	202	85	120	-53	-154
300 percent of FPL and over	495	162	309	-94	-40

Sources: Current Population Survey, Annual Social and Economic Supplement; CEA calculations.

Note: FPL = federal poverty line.

¹⁷ For example, see Goodnough and Sanger-Katz (2019).

The number of people without health insurance can increase for a number of reasons. Two factors behind the increase in the number of uninsured over the past couple of years are the elimination of the Affordable Care Act's (ACA) individual mandate penalty and a decline in the number of people who qualify for Medicaid and ACA exchange subsidies. One consequence of higher household incomes is that households will lose eligibility for public assistance programs. Because households have a choice to remain eligible by working less, revealed preference shows that the higher income more than offsets the loss of Medicaid or ACA subsidies in terms of their overall level of utility. The other reason why a lack of insurance is increasing is that some individuals thought the elimination of the mandate penalty applied to 2018, while the Tax Cuts and Jobs Act set the mandate penalty to \$0 starting in 2019. The CBO estimates that about 1 million people opted out of insurance coverage in 2018 due to the mistaken belief about the timing of the elimination of the mandate penalty (CBO 2019). For individuals who were only buying insurance to avoid the mandate penalty, the elimination of the penalty makes them better off (CEA 2018b).

Full-Income Measures of Poverty

Income at the bottom of the distribution is rising, and poverty, based on the Official Poverty Measure (OPM), is falling. As people move out of poverty, their benefits under various public assistance programs are phased out. The potential to lose government benefits acts as a disincentive to participate at all in the labor market for those who are out of the labor market or to increase participation for those who are in the labor market, as the loss of benefits acts as a tax on increasing engagement with the labor market. Because of the level of wages and the available jobs, the labor market gains that are pulling people out of poverty on average more than offset the loss in government benefits in terms of total available resources.

The OPM, which is based on pretax money income, has many limitations as a measure of the total resources available to a family, which leads it to understate resources for low-income families. The Full-Income Poverty Measure (FPM) overcomes these limitations by considering a broader resource-sharing unit—the household instead of the family—and by including a comprehensive set of income sources.

The FPM estimates the share of people living in poverty using a posttax, posttransfer definition of income. It subtracts Federal income and payroll taxes and adds tax credits (e.g., the Earned Income Tax Credit and Child Tax Credit) and cash transfers. It also includes the market value of SNAP, subsidized school lunches, rental housing assistance, employer-provided health insurance, and public health insurance (Medicare and Medicaid).¹⁸ It is

¹⁸ We calculate the market value of public health insurance based on the cost of its provision, and it is adjusted for risk based on age, disability status, and State of residence (for additional details, see Elwell, Corinth, and Burkhauser 2019). The market value of employer-provided health insurance is included as well, and is imputed

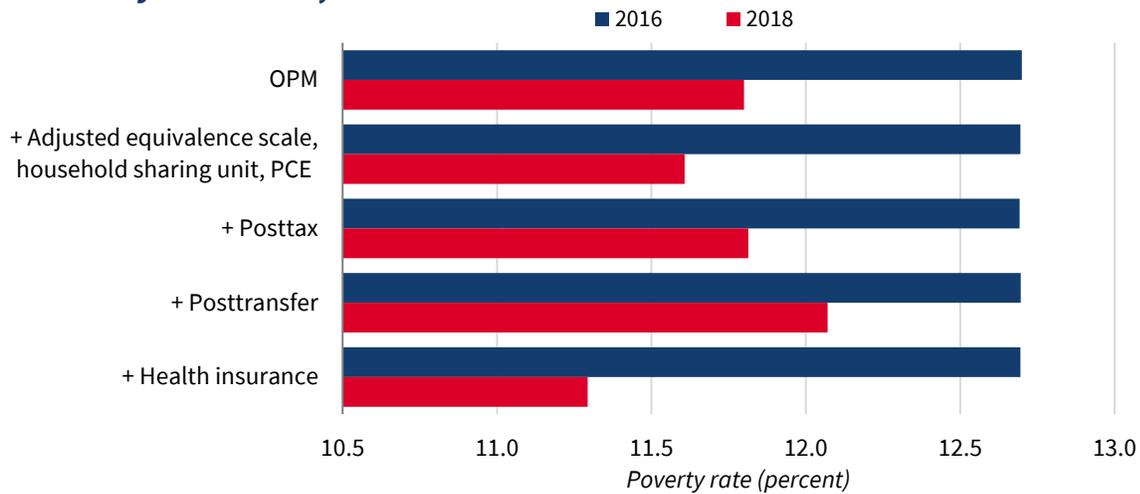
important to note, however, that despite using a comprehensive set of income sources, the FPM may still understate income due to the underreporting of income sources and especially transfers in survey data (Meyer, Mok, and Sullivan 2015). For more details on the FPM, see Burkhauser and others (2019) and chapter 9 of the CEA's 2019 *Economic Report of the President*.

The OPM and FPM differ in how they define the unit that shares resources. Because there are economies of scale in consumption, the cost per person of achieving a given standard of living falls as the number of people in the unit increases. The FPM treats the household as the resource-sharing unit and adjusts the thresholds proportionally based on the square root of the number of people in the household. In contrast, the OPM restricts the sharing unit to those in the same household who have family ties. By using the household as the resource-sharing unit (which is standard in studies of income distribution), the FPM reflects the increasing rates of cohabitation among non-family members in the United States.

Figure 11 shows the change in the poverty rate under the OPM from 2016 to 2018 compared with poverty measures that incorporate progressively broader measures of income. All measures are anchored to equal the official poverty rate in 2016 of 12.7 percent. The official poverty rate fell by 0.9 percentage point from 2016 to 2018. Using the adjusted equivalence scale, making the sharing unit the household, and using the PCE as the preferred measure of inflation instead of the Consumer Price Index for All Urban Consumers (called the CPI-U) caused the poverty rate to fall by 1.1 percent from 2016 to 2018. Moving to posttax and posttransfer income causes the reduction in poverty to be smaller. This reflects the fact that as individuals gain labor income (which is included in the OPM poverty measure), they receive less in tax credits and transfer income (including the value of in-kind transfers). The effective tax rate of individuals on public assistance can be very high, which can be a disincentive to increasing labor market participation. Given that the posttax and posttransfer poverty rate still fell by 0.6 percentage point, we can conclude that, overall, the increase in labor income more than offset the decrease in tax credits and transfers. Finally, including the value of employer-provided and publicly provided health insurance leads to an even larger decline in poverty, of 1.4 percentage points. This occurred even as enrollment in Medicaid fell, because the individuals losing coverage tended to be living above the poverty threshold. The decline is partially due to the value of public health insurance increasing over this period, which raised the full incomes of those who remain enrolled.

for 2018 because employer contributions are no longer reported in the CPS-ASEC. The CBO has used a similar method for valuing health insurance since 2013 in its reports on the distribution of income.

Figure 11. Change in the Official Poverty Measure versus Other Poverty Measures, 2016 and 2018



Sources: Current Population Survey, Annual Social and Economic Supplement; Burkhauser et al. (2019); CEA calculations.

Note: OPM = Official Poverty Measure. PCE = Personal Consumption Expenditures.

The choice of income measure also affects the measurement of income inequality. When taxes and transfers are progressive, using pretax income will tend to overstate the level of inequality. The United Nations’ handbook on income statistics notes that the preferred measure of income is posttax and posttransfer (including in-kind transfers), as that allows for an evaluation of the effectiveness of redistributive policies as well as for meaningful comparisons between countries with different degrees of redistribution (Canberra Group 2011). Elwell, Corinth, and Burkhauser (2019) calculate income growth by decile from 1959 to 2016. Using a posttax and posttransfer measure of income that includes government health insurance and the value of employer-sponsored health insurance, they calculate that the Gini coefficient was 0.341 in 2016, but it was 0.502 for the same year using pretax and pretransfer market income adjusted for household size.¹⁹ Furthermore, the posttax and posttransfer income Gini coefficient was lower in 2016 than it was in 1959.

Addressing the Remaining Barriers

The strong U.S. labor market has led to historic labor market successes, including higher incomes, lower poverty, and a reduced reliance on government programs for many groups of people who had been previously left behind during the economic recovery. In this section, we discuss some of the remaining barriers that are preventing people from fully benefiting from the strong labor market. The skills of the available workers may not match those needed by

¹⁹ The Gini coefficient measures inequality on a scale from 0 to 1, where values closer to 0 indicate greater equality.

employers. There can also be a geographic mismatch between workers and jobs. Child care costs, a criminal record, or drug addiction can also prevent certain individuals from fully participating in the labor market. Continuing the current rate of job growth, with the unemployment rate at a historically low level, will likely require drawing even more workers from the sidelines. This will require targeted policies, which the Trump Administration is pursuing, to address the barriers that have prevented these individuals from entering the labor force despite a very strong labor market.

Making Sure That Workers Have the Skills to Succeed

In a previous report, “Addressing America’s Reskilling Challenge” (CEA 2018a), we outlined the emerging issue of the skills gap in the ever-changing U.S. economy. The skills gap refers to the situation whereby the skills of available workers are not matching the skills needed by employers. Even in a booming economy, the lack of necessary skills can prevent some individuals from enjoying the benefits of a robust labor market. Our previous report highlighted the importance of addressing this issue, as well as the challenges facing workers and firms that seek to do so.

The CEA also examined the existing infrastructure of Federal worker training programs and reviewed the evidence regarding their effectiveness (CEA 2019c). Overall, we found mixed evidence that these programs improve labor market outcomes. The programs may have small positive effects overall, but they may be more effective for particular groups of people and at certain times in the business cycle. The large number of these programs and their heterogeneity make it difficult to reach a single, general conclusion, but rather suggest that some programs are effective whereas others are failing to live up to their hoped-for potential.

To help close the skills gap, the Trump Administration has taken action to address the limitations of these existing Federal worker training/reskilling programs. The United States needs innovative solutions for worker training given the mixed effectiveness of the existing Federal programs. Addressing this problem is necessary in response to employers’ struggles to find skilled workers and to enable more people on the sidelines to benefit from the booming economy.

In this context, to develop a national strategy for workforce development, the Administration has created the National Council for the American Worker (NCAW). The NCAW is addressing issues related to improving skills-training programs, focusing on private-sector-led approaches and promoting multiple education and training pathways for individuals to enable them to achieve family-sustaining careers. The NCAW is also focusing on enhancing transparency in the outcomes of Federal and State workforce programs to allow job seekers, policymakers, and program administrators to better understand which programs are effective. Additionally, with better data, there are opportunities to learn from the successes and failures

across public programs and to shift resources to the types of programs that show the greatest returns.

In a previous CEA (2019c) report, we did not determine an optimal level of government spending on employment and training programs, but we did argue that Federal efforts should shift their spending, depending on what the evidence says is the most effective. Among the current Federal worker training programs, Registered Apprenticeships have shown strong improvements in labor market outcomes, and the Administration has already increased spending on these types of “learn while you earn” models. Additionally, job search assistance provided through the Workforce Innovation and Opportunity Act is more effective in improving job outcomes than is access to training funded by this act. Job search assistance aims to reduce the time an individual is unemployed and helps individuals assess their skill sets and address other barriers that may be preventing them from entering the workforce.

Along with existing dedicated Federal programs, industry-led and nonprofit-led sectoral training programs have shown significant promise in randomized studies. Sectoral training programs are industry-specific programs that seek to provide training for skilled, entry-level positions within a given industry. Currently, these programs tend to be small, focusing on a particular industry in a particular city, and are run by nonprofit groups in cooperation with State and local governments. A randomized study of three sectoral training programs found that they were effective at increasing participants’ earnings (Maguire et al. 2010). A follow-up study of one of these programs found that the gains persisted and may have grown over time (Roder and Elliot 2019). Other randomized studies of sectoral training programs have also shown evidence of effectiveness (Hendra et al. 2016; Fein and Hamadyk 2018).

The sector-based approach guides the Administration’s proposed Industry Recognized Apprenticeship Program, which seeks to expand the apprenticeship model into sectors that have not traditionally used it. The private sector has taken note of the success of the sector-based approach and has launched similar programs to address industry-level worker shortages (see box 2). One option is to further scale up these existing industry-led sectoral training programs through Federal support.

Finally, it could be beneficial to incentivize the private sector to invest in training. Private firms generally have a disincentive to provide training in general human capital because trained workers can be poached by other firms before the firm has recovered the cost of training. Yet even with this risk of employee poaching, firms will provide training in general skills when the labor market is tight and new workers are difficult to find. Firms also provide general training as a fringe benefit in order to improve employee retention. Financial incentives, in the form of subsidies for private sector training, are less likely to be effective if they end up subsidizing training that the firms would have provided even in the absence of the subsidy. The difficulty

is to design incentives to encourage more private sector training without subsidizing training that would otherwise occur in any case.

The Administration is working to better highlight the efforts of the private sector and to show the return on those investments to a company's bottom line as well as to a worker's increased wages and career opportunities. Through the Administration's Pledge to America's Workers, companies commit to provide a given number of training or reskilling opportunities for their current and future workforces over a five-year period. To date, more than 350 companies have pledged to provide over 14 million new opportunities for American students and workers. Another related initiative that has produced positive results is the Federation for Advanced Manufacturing Education (see box 2).

Box 2. The Federation of Advanced Manufacturing Education

Industry collaboration is one solution to the shortage of skilled workers in a given area. An example of a program built on this model is the Federation for Advanced Manufacturing Education (FAME), which is a cooperative organization of employers that seeks to build advanced manufacturing career pathways. Businesses form partnerships with local community colleges to provide a specialized degree program whereby students can work at the businesses while completing their associate degrees. FAME began as a successful partnership between Toyota and Bluegrass Community and Technical College in Lexington, Kentucky. A company sponsors a student in the Advanced Manufacturing Technician (AMT) program. The student goes to classes two days a week, and works at the sponsoring company three days a week. Once the student completes the associate degree, they have the option to continue full time at the company or to continue on to pursue a four-year engineering degree.

The first class completed the AMT program in 2010, and FAME has expanded rapidly to additional sites. There are currently FAME operations in eight States, with multiple operations in the original state, Kentucky, where FAME now coordinates directly with and receives support from the State government.

Geographic Frictions in the Labor Market

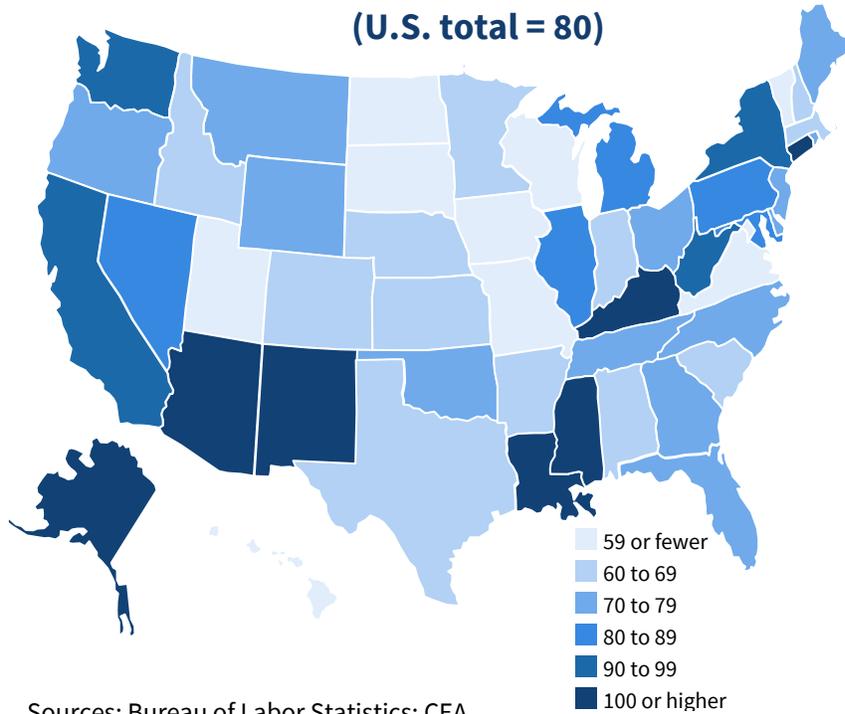
Although labor market data are often presented for the Nation as a whole, the national labor market is a collection of local labor markets. Available jobs and available workers do not always match geographically. Economic theory predicts that wages will rise in areas with worker shortages and fall in areas with surpluses of workers, causing workers to move to the areas with worker shortages. Yet moving itself can be very costly, which limits the degree to

which migration can alleviate local labor market imbalances; but government policies and regulations can impose additional barriers and costs to moving to a different labor market.

For over a year, monthly JOLTS data have illustrated the strong job market for people looking for work. The JOLTS data show that at a national level, there are more job openings than unemployed workers. For the first time, the BLS is producing experimental State JOLTS estimates that also allow for an analysis of job openings at the State level. These new data demonstrate that not only are there more job openings than unemployed workers nationwide, but this is true in most States as well (see figure 12). Comparing the number of unemployed people in each state from BLS data on State-level employment and unemployment to the number of job openings shows that, as of the second quarter of 2019, there were more job openings than people looking for work in 43 States and the District of Columbia.²⁰ Although State-level labor markets appear to generally be strong, some are in greater need of additional workers than others. The very best States in which to be looking for work, where there were fewer than 60 unemployed workers per 100 job openings, include many States in the Midwest and the Great Plains. The States where there are as many or more unemployed workers as job openings are Alaska, Arizona, Connecticut, Kentucky, Louisiana, Mississippi, and New Mexico.

²⁰ The experimental JOLTS data are monthly. However, due to the limited sample size, they are calculated as three-month moving averages. The analysis here uses the June 2019 experimental State JOLTS data, which correspond to the average of the months in the second quarter.

Figure 12. Number of Unemployed Workers per 100 Job Openings, Second Quarter of 2019

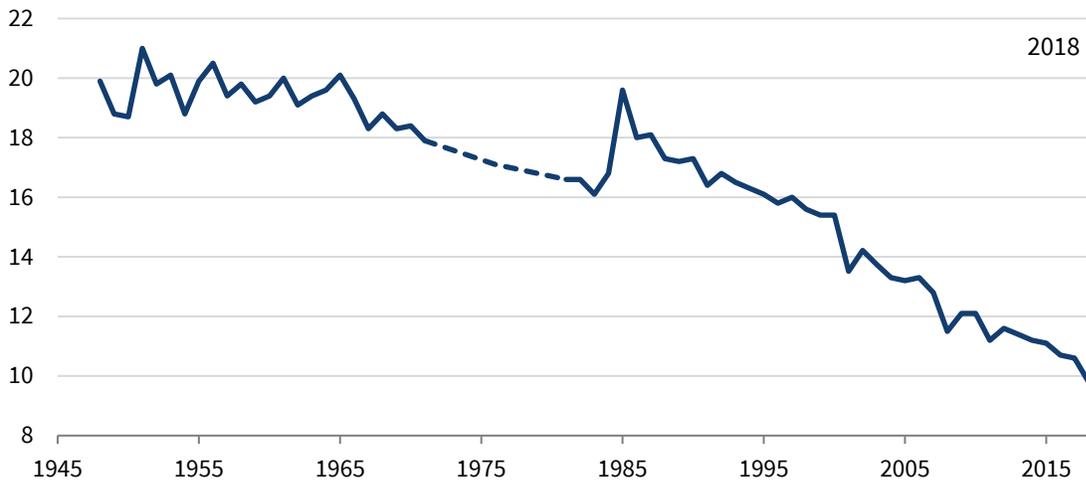


Sources: Bureau of Labor Statistics; CEA calculations.

In addition to booming job markets in many States, geographic mobility has reached the lowest rate in at least 70 years, declining by 0.8 percentage point over the year, to 9.8 percent in 2018 (see figure 13). This decline in mobility, which could be exacerbated by government policies that limit worker mobility, is one reason for the persistence of geographic disparities in the labor market. Although not discussed in this report, unnecessary regulations that drive up housing costs can also limit mobility into certain metropolitan areas with strong labor markets.

Figure 13. Share of U.S. Residents Who Moved, 1948–2018

Share of U.S. residents who moved (percent)



Source: Current Population Survey.

Note: The one-year geographic mobility question was not asked between 1972 and 1975 or between 1977 and 1980, so the value is interpolated, as shown by the dotted line.

Occupational Licensing

Occupational licensing requirements impose an additional cost on entering a given occupation. There is a wide range of licensed occupations, including plumbers, electricians, florists, and barbers (Meyer 2017). Some occupational licensing restrictions can be justified to protect the public, but the existing requirements for many occupations in many States include jobs that pose no physical or financial risk to the public. Instead, licensing is being used as a barrier to entry into a profession to artificially inflate wages for those already in the profession. A 2018 report from the Federal Trade Commission found that the share of American workers holding an occupational license has increased fivefold, from less than 5 percent in the 1950s to 25–30 percent in 2018 (FTC 2018).

Obtaining the needed license and paying the necessary fees is a barrier that can be particularly prohibitive for those with low incomes, negatively affecting these workers by preventing them from entering professions where they would earn more even if they have the skill set to do the job and. A 2015 report from the Obama Administration supports this claim, finding that the licensing landscape in the United States generates substantial costs for workers (White House 2015).

One such cost is how licensing adversely affects worker mobility. Workers in licensed occupations see the largest reductions in interstate migration rates (Johnson and Kleiner 2017). Absent State agreements to recognize outside licenses, State-by-State occupational licensing laws prevent workers from being able to provide their services across State lines, or move to another State to work in a licensed profession.

Johnson and Kleiner (2017) find that the relative interstate migration rate of workers in occupations with State-specific licensing requirements is 36 percent lower than that of workers in other occupations. There are substantial differences in relative interstate migration rates across occupations, particularly for jobs frequently held by middle- to low-income people. Teachers have one of the lowest relative interstate migration rates (about –39 percent). Electricians have a reduced relative interstate migration rate of –13 percent, while barbers and cosmetologists have such a rate of –7.5 percent. Occupational licensing can also serve as a barrier to upward economic mobility for low- to middle-income workers because it is associated with hefty administrative charges, test fees, tuition payments, and education and time requirements.

Occupational licensing also effects the employment of military spouses. Military spouses had an unemployment rate of 18 percent in 2015, more than four times greater than the U.S. overall employment rate at that time (Meyer 2017). This is partially because military spouses regularly move across State lines, and those in licensed occupations are required to renew or reissue their licenses after moving to a new State. Additionally, military spouses are more likely to be licensed than the civilian population, and they are 10 times more likely to move across State lines in a given year. (For more details, see chapter 3 of the 2018 *Economic Report to the President*.) Overall, the evidence indicates that occupational licensing limits workers' ability to enter professions or move to new areas with greater opportunity.

The regulation of occupational licenses is primarily at the State level, so there are limited options at the Federal level to reform occupational licensing, other than recognizing and supporting best practices at the State level. The Administration is currently evaluating these options. States can enter reciprocal agreements to recognize out-of-State licenses, work to standardize the licensing requirements for a given occupation across States, and expedite license applications for military spouses and others who hold an out-of-State license (FTC 2018).

Opportunity Zones: Matching People, Communities, and Capital

Historically, areas with less income grew faster than areas with more income, leading to convergence in income per capita. Since the late 20th century, however, this convergence has stopped or has possibly been reversed (Nunn, Parsons, and Shambaugh 2016). There are many explanations for this change, such as a slowdown in individuals with lower incomes moving to higher-income areas for better-paying jobs or businesses moving to lower-wage regions that have lower input costs (Ganong and Shoag 2017).

The Opportunity Zone provision of the 2017 Tax Cuts and Jobs Act seeks to counter the solidification of geographic economic inequality by bringing capital to low-income communities through tax cuts on capital gains. It contrasts with antipoverty policies that

increase taxes to fund transfers to low-income households, giving them income but not necessarily spurring opportunity in their communities. Under the Opportunity Zone provision, an investor who realizes a capital gain can defer and lower taxes on the gain if he or she invests it in an Opportunity Zone Fund. The fund, in turn, invests in businesses or properties in census tracts that have been selected as Opportunity Zones. If the investor keeps his or her money in the fund for at least 10 years, they receive the additional benefit of paying no taxes on the gains earned while invested in the fund. In doing so, the provision acts like a means-tested reduction in the cost of capital, where the cost reduction only occurs in selected communities that meet the provision's eligibility requirements.

The design of the Opportunity Zone provision improves upon that of the Federal New Markets Tax Credit (New Markets), which has arguably been the most significant Federal place-based incentive in recent years. Investors must complete an extensive application to the Department of the Treasury for approval before receiving these tax credits. In the 2018 allocation round, only 34 percent of applicants received credits (CRS 2019). This highlights another limitation of New Markets—it has a cap. In 2018, the Treasury only awarded \$3.5 billion in credits. In addition, recipients of credits must adhere to substantial compliance and reporting requirements (CDFI Fund 2017, 2019). The complexity of participating in New Markets and the limit on total allocations have led some to conclude that New Markets is unable to induce large-scale investment that can revitalize entire communities (Bernstein and Hassett 2015).

The Opportunity Zone incentive, in contrast, has no application process or limitation on scale (CRS 2019). Within broad guidelines, the incentive lets investors act upon their insights about where to invest, in what to invest, and how much to invest. The Opportunity Zone statute also carves out roles for State and local governments and communities. States nominated tracts to become Opportunity Zones, and the Department of the Treasury made the final designation and ensured that the tracts met the income or poverty criteria in the statute. Many areas have incorporated the incentive into their broader development initiatives. Alabama, for example, adopted a new law to align its development incentives with the Opportunity Zone incentive.

Today, there are 8,764 Opportunity Zones across all 50 States, the District of Columbia, and five U.S. possessions (CDFI Fund 2018). The zones are home to nearly 35 million Americans, and on average they have a poverty rate nearly twice as high as the average census tract.

Opportunity Zones: Evidence of Investor Interest and Activity

Early evidence indicates considerable investor interest in Opportunity Zones. The National Council of State Housing Agencies maintains an Opportunity Zone Fund Directory. As of July 2019, the directory listed 163 funds seeking to raise a total of \$43 billion (NCSHA 2019). The funds are diverse, with two-thirds having a regional focus and the rest a national focus. Most

funds plan to invest in commercial development, such as multifamily residential or in hospitality, but more than half also plan to invest in economic or small business development.

Evidence from real estate markets also suggests that the Opportunity Zone incentive is getting attention from investors. Data from Real Capital Analytics, which tracks commercial real estate properties and portfolios valued at \$2.5 million or more, show that year-over-year growth in development site acquisitions in zones surged by more than 25 percent late in 2018 after the Department of the Treasury had designated the zones, greatly exceeding growth in the rest of the United States. Similarly, Sage, Langen, and Van de Minne (2019), using the same data, find that a zone designation led to a 14 percent increase in the price of redevelopment properties and a 20 percent increase in the price of vacant development sites.

Sage, Langen, and Van de Minne (2019) only find appreciation effects for particular property types, and they conclude that the Opportunity Zone incentive is having limited economic spillovers in communities. Their data, however, only include very particular types of properties—commercial properties valued at less than \$2.5 million. An analysis by Zillow, which uses many more properties and transactions, suggests that the zone incentive is bringing a broader economic stimulus. The year-over-year change in the average sales price for properties in zones reached over 20 percent in late 2018, compared with about 10 percent in tracts that met the zone eligibility criteria but that were not selected (Casey 2019). The greater appreciation in zones suggests that buyers expect zone tracts to become more economically-vibrant in years to come.

Expanding Opportunities for Ex-Offenders

Another barrier to employment is a prior criminal conviction, and not only because incarceration lowers the available labor force. Having a job can help someone just released from prison reenter society, and it reduces the likelihood of recidivism. There is evidence that strong job growth, particularly in manufacturing and construction, can reduce recidivism (Schnepel 2016). Guo, Seshadri, and Taber (2019) estimate that an increase of 0.01 percent in county-level construction employment decreases the county's working age population's recidivism rate by 1 percent.

In December 2018, President Trump signed into law the historic First Step Act, which is aimed at establishing a fairer justice system for all, reducing recidivism, and making communities across America safer. Since this reform was signed into law, 90 percent of the individuals who have had their sentences reduced have been African American.

Also since then, the Trump Administration has taken steps to provide individuals leaving prison with the opportunities and resources needed to obtain employment. This Second Chance hiring initiative is an effort coordinated across the Federal government, States, the

private sector, and the nonprofit sector. Nonprofits serve a crucial role in assisting former prisoners to obtain transitional housing, counseling, and education. Across the Federal government, the Department of Justice and Bureau of Prisons have launched the Ready to Work Initiative, which links employers to former prisoners; the Department of Education is expanding an initiative that will help people in prison receive Pell Grants; the Department of Labor has issued grants to support comprehensive reentry programs that promote work as well as grants to expand fidelity bonds to employers to assist formerly incarcerated individuals with job placement; and the Office of Personnel Management has made the Federal government’s job posting website accessible to people serving in and released from Federal prisons.

Americans are reaping the benefits of the First Step Act. Data in this area are scarce, but a number of positive anecdotes have been reported in the news. For instance, Troy Powell, a former prisoner and guest at the White House, had served 16 years in prison. When he was released in February 2019 under the First Step Act, he found a job at a lumber company in less than 10 days. A Cleveland native, Andre Badley, was released from a Federal prison in February 2019, and within three months was hired as a driver for Amazon. The number of such success stories will continue to grow as more inmates who have served their time and pose no danger to society are released and as more is done to prepare them for employment and a second chance.

The Administration’s initiatives in this area, like the First Step Act and Second Chance hiring, can help assist former prisoners seeking to reenter society as productive members of the community, meet the needs of businesses that may be struggling to find workers, and reduce crime across American communities.

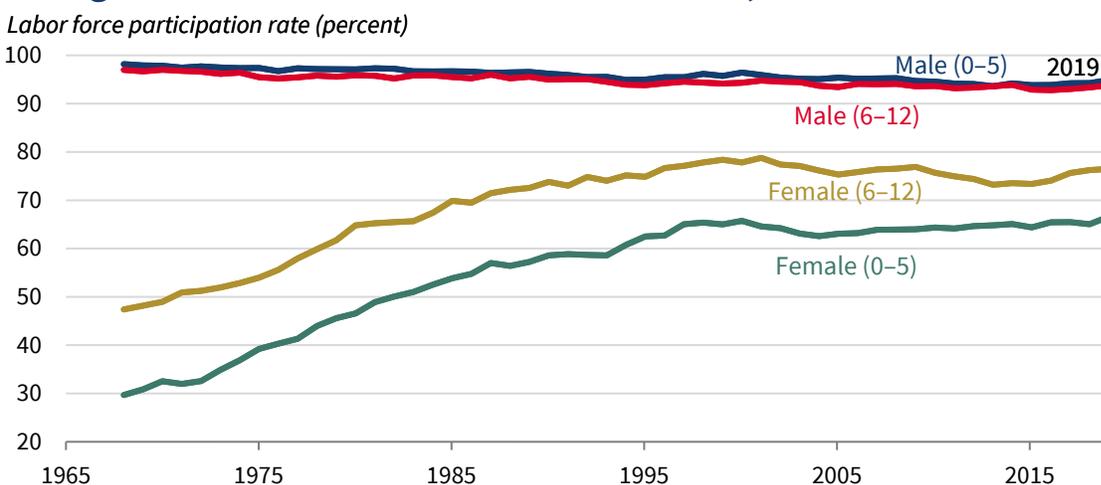
Working Families

Since the start of the Trump Administration, supporting working families has been a top priority. In December 2017, the President signed into law the Tax Cuts and Jobs Act, which increased the reward for working by doubling the Child Tax Credit and increasing its refundability. The President signed into law the largest-ever increase in funding for the Child Care and Development Block Grants—expanding access to high-quality child care for nearly 800,000 families across the country. In addition, President Trump was the first president to include nationwide paid parental leave in his annual budget.

The President has continued to support pro-growth, pro-family policies, including those that address obstacles that mothers of young children may face in entering the labor force. Figure 14 shows the labor force participation rate of mothers and fathers with young children. For fathers with a youngest child age 5 or under, the participation rate fell from 98 percent in 1968 to 94 percent in 2018. A similar decline occurred among fathers of older children. While participation rates have fallen, the vast majority of fathers continue to either work or look for

work. This high level of participation contrasts with participation among mothers with young children. For mothers with a child under age 6, participation increased from 30 percent to 66 percent between 1968 and 2000. This increase was driven largely by shifting cultural norms, as well as welfare reforms that rewarded and required work for those receiving welfare benefits and tax credits. However, participation rates stopped growing in 2000. Today, the participation rate of mothers with a child under 6 is 67 percent—just 1 percentage point higher than their rate 19 years earlier. Moreover, the gender gap in participation rates stands at 29 percentage points for parents of children under age 6 and at 17 percentage points for parents of children age 6 to 12.

Figure 14. Labor Force Participation Rate among Parents by Age of Youngest Child in Household and Sex of Adult, 1968–2019



Sources: Current Population Survey, Annual Social and Economic Supplement, 1968–2019; CEA calculations.
 Note: The age of the youngest child is shown in parenthesis. Only biological children, adopted children, or stepchildren living in the same household as the adult are counted. Only adults between the age of 18 and 64 are included.

Some parents opt out of the labor force on the basis of personal preference. For others—especially mothers with young children—the inefficiently high cost of child care may play a role in their decision to remain out of the labor force. Thus, addressing this barrier to work by reducing inefficiently high child care costs could potentially bring more parents into the formal labor force and increase economic efficiency.

Unnecessary regulations increase child care costs, and these inefficiently high costs can weaken incentives to work. For the average State, as of 2017, the average hourly price of center-based child care for a child age 4 represented 24 percent of the hourly median wage. Evidence on the responsiveness of work status and hours to child care costs suggests that some of these parents would enter the labor force or increase their work hours in response to a reduction in the cost of child care. The Administration is focused on ensuring that more

parents have safe options for their children while simultaneously giving parents more opportunities to work.

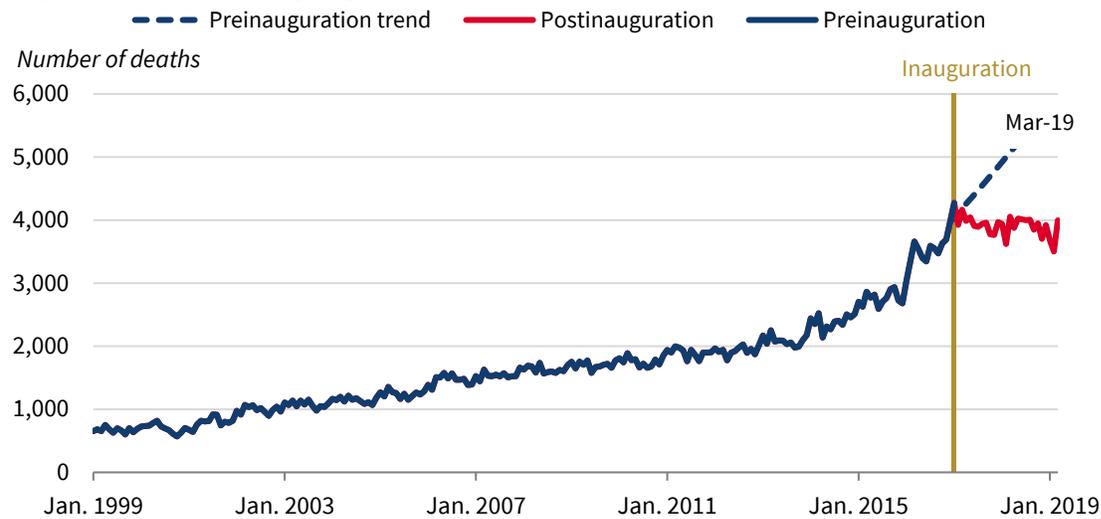
Opioid Deaths

Another barrier to labor market success for many are the high rates of drug addiction and overdoses. Beyond deaths from opioids, research suggest that the abuse of prescription opioids decreases labor force participation (Krueger 2017). The CEA estimates that the full cost of the opioid crisis was \$2.5 trillion over the four-year period from 2015 to 2018 (CEA 2019b). This cost estimate includes the value of lives lost and also higher criminal justice costs, lost labor productivity, and higher healthcare and treatment costs.

In the years before the start of the Trump Administration, the number of opioid deaths per month had been rising steadily for many years (see figure 15). The number of overdose deaths per month has finally stabilized and perhaps has even begun to fall based on provisional data. In total, 30,000 fewer lives were lost from January 2017 through March 2019 compared with the pre-2017 trend.²¹ However, the number of opioid deaths remains at a high level, and the crisis is far from over. Last year, Congress passed and President Trump signed the SUPPORT Act. The Administration secured \$6 billion in new funding in fiscal years 2018 and 2019 to fight opioid abuse and to expand access to medication-assisted treatment. Improved border enforcement may also be reducing the supply of fentanyl; fentanyl seizures by Customs and Border Protection are up 265 percent over the last three fiscal years.

²¹ Additional research is needed to determine how much of the trend break is due to Administration policy versus how much is attributable to factors that would have occurred regardless.

Figure 15. Monthly Opioid-Involved Overdose Deaths, 1999–2019



Sources: Centers for Disease Control and Prevention; CEA calculations.

Note: Data from before January 2018 are compiled from the CDC WONDER database, and monthly data beginning in January 2018 are calculated using the provisional reported number of deaths from the CDC. Preinauguration trend is calculated for the compound annual growth rate on a sample period from January 1999 through January 2017, with forecasted levels reconstructed from projected rates.

Conclusion

The U.S. labor market is strong, even as the economy continues its record expansion. The Trump Administration’s agenda of tax cuts and deregulation has contributed to a strong demand for labor and an increasing labor supply. We would expect to find the largest increases in labor demand in the industries that benefit the most from deregulatory actions, but further research is required to confirm this. As unemployment falls to record low rates, groups that were previously left behind in the economy’s recovery are beginning to see substantial benefits in job opportunities and income growth. The increase in labor market earnings is pulling millions of families out of poverty and off public assistance, showing how economic growth likely benefits historically disadvantaged Americans more than expanded government programs.

However, there are still barriers that prevent lower-income workers from realizing the full benefits of the strong labor market—such as skills mismatches, geographic mismatches, occupational licensing, distressed communities, prior criminal convictions, child care affordability, and drug addiction. These barriers prevent many from finding jobs. The Administration is seeking to reduce these barriers to both labor demand and supply by focusing on improving worker training, reforming occupational licensing, incentivizing private investment in disadvantaged areas, facilitating the successful reentry of ex-offenders, assisting working families with access to high-quality and affordable childcare, and reducing

the impact of the opioid crisis. Successful reforms in these areas will help to grow the economy by increasing the number and productivity of workers. The Administration's current and future economic agenda will focus on ensuring that all American households can benefit from strong, sustained economic growth.

References

- Aizer, A. 2007. "Public Health Insurance, Program Take-Up, and Child Health." *Review of Economics and Statistics* 89, no. 3: 400–415.
- Barnett, J., and E. Berchick. 2017. "Health Insurance Coverage in the United States: 2016." U.S. Census Bureau. <https://www.census.gov/library/publications/2017/demo/p60-260.html>.
- Berchick, E., E. Hood, and J. Barnett. 2018. "Health Insurance Coverage in the United States: 2017." U.S. Census Bureau. <https://www.census.gov/library/publications/2018/demo/p60-264.html>.
- Bernstein, J., and K. Hassett. 2015. *Unlocking Private Capital to Facilitate Economic Growth in Distressed Areas*. Washington: Economic Innovation Group.
- Canberra Group. 2011. *Handbook on Household on Household Income Statistics*, 2nd ed. Geneva: United Nations Economic Commission for Europe.
- Burkhauser, R., K. Corinth, J. Elwell, and J. Larrimore. 2019. "Evaluating the Success of President Johnson's War on Poverty: Revisiting the Historical Record Using a Full-Income Poverty Measure." Working paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3353906.
- Casey, A. 2019. "Sale Prices Surge in Neighborhoods with New Tax Break." Zillow. <https://www.zillow.com/research/prices-surge-opportunity-zones-23393/>.
- CDFI Fund (U.S. Department of the Treasury, Community Development Financial Institutions Fund). 2017. "Compliance Review of New Markets Tax Credit Program." <https://www.cdfifund.gov/Documents/Summit%20-%20Compliance%20Review%20of%20New%20Markets%20Tax%20Credit%20Program%20-%20August%20Date%20-%20201508%20Compliant.pdf>.
- . 2018. "Opportunity Zones Resources." <https://www.cdfifund.gov/Pages/Opportunity-Zones.aspx>.
- . 2019. "New Markets Tax Credit Program Compliance Monitoring: Frequently Asked Questions." <https://www.cdfifund.gov/programs-training/Programs/new-markets-tax-credit/Pages/compliance-step.aspx#step5>.
- CEA (Council of Economic Advisers). 2018a. "Addressing America's Reskilling Challenge." <https://www.whitehouse.gov/wp-content/uploads/2018/07/Addressing-Americas-Reskilling-Challenge.pdf>.

- . 2018b. “Deregulating Health Insurance Markets: Value to Market Participants.” <https://www.whitehouse.gov/wp-content/uploads/2019/02/Deregulating-Health-Insurance-Markets-FINAL.pdf>.
- . 2018c. *Economic Report of the President*. Washington: U.S. Government Publishing Office.
- . 2019a. *Economic Report of the President*. Washington, U.S. Government Publishing Office.
- . 2019b. “The Full Cost of the Opioid Crisis: \$2.5 Trillion Over Four Years.” <https://www.whitehouse.gov/articles/full-cost-opioid-crisis-2-5-trillion-four-years/>.
- . 2019c. Government Employment and Training Programs: Assessing the Evidence on their Performance. <https://www.whitehouse.gov/wp-content/uploads/2019/06/Government-Employment-and-Training-Programs.pdf>.
- . 2019d. Economic Effects of Deregulation <https://www.whitehouse.gov/wp-content/uploads/2019/06/The-Economic-Effects-of-Federal-Deregulation-Interim-Report.pdf>.
- . 2019e. “President Trump’s Policies Continue to Benefit All Americans, Especially the Disadvantaged.” <https://www.whitehouse.gov/articles/president-trumps-policies-continue-benefit-americans-especially-disadvantaged/>.
- CBO (U.S. Congressional Budget Office). 2016. *An Update to the Budget and Economic Outlook: 2016 to 2026*. <https://www.cbo.gov/sites/default/files/recurringdata/51135-2016-08-economicprojections-2.xlsx>.
- . 2019. “Federal Subsidies for Health Insurance Coverage for People Under Age 65: 2019 to 2029.” https://www.cbo.gov/system/files/2019-05/55085-HealthCoverageSubsidies_0.pdf.
- CRS (Congressional Research Service). 2019. “New Market Tax Credit: An Introduction.” <https://fas.org/sgp/crs/misc/RL34402.pdf>.
- Dev Bhardwaj, R. 1992. “China’s Economic Reform: The Role and Significance of SEZs.” *Indian Journal of Political Science* 53, no. 3: 332–73.
- Elwell, J., K. Corinth, and R. Burkhauser. 2019. *Income Growth and Its Distribution from Eisenhower to Obama: The Growing Importance of In-Kind Transfers (1959–2016)*. NBER Working Paper 26439. Cambridge, MA: National Bureau of Economic Research.

- FOMC (Federal Open Market Committee). 2016. "Chair FOMC's Press Conference Projections Materials, September 21, 2016." Press release, September 21.
<https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20160921.pdf>.
- Fein, D., and J. Hamadyk. 2018. *Bridging the Opportunity Divide for Low-Income Youth: Implementation and Early Impacts of the Year Up Program*. OPRE Report 2018-65. Washington: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
<https://www.yearup.org/wp-content/uploads/2018/06/Year-Up-PACE-Full-Report-2018.pdf>.
- Food and Nutrition Service. 2019. "Food Security in the U.S.: Key Statistics & Graphics." U.S. Department of Agriculture. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics/>.
- . 2019. "SNAP Data Tables." U.S. Department of Agriculture.
<https://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap>.
- Fry, R. 2018. "Millennials Projected to Overtake Baby Boomers as America's Largest Generation." Pew Research Service. <https://www.pewresearch.org/fact-tank/2018/03/01/millennials-overtake-baby-boomers/>.
- FTC (Federal Trade Commission). 2018. "Policy Perspectives: Options to Enhance Occupational License Portability." <https://www.ftc.gov/reports/options-enhance-occupational-license-portability>
- Ganong, Peter, and D. Shoag. 2017. "Why Has Regional Income Convergence in the U.S. Declined?" *Journal of Urban Economics* 102: 76–90.
<https://scholar.harvard.edu/shoag/publications/why-has-regional-income-convergence-usdeclined>.
- Goodnough, A., and M. Sanger-Katz. 2019. "Medicaid Covers a Million Fewer Children. Baby Elijah Was One of Them." *New York Times*, Upshot Blog, October 22.
<https://www.nytimes.com/2019/10/22/upshot/medicaid-uninsured-children.html>.
- Guo, J., A. Seshadri, and C. Taber. 2019. *Jobs, Skills, and the Prison-to-Work Transition*. Madison: Center for Research on the Wisconsin Economy.
- Hendra, R., D. Greenberg, G. Hamilton, A. Oppenheim, A. Pennington, K. Schaberg, and B. Tessler. 2016. "Encouraging Evidence on a Sector-Focused Advancement Strategy." MDRC. https://www.mdrc.org/sites/default/files/2016_Workadvance_Final_Web.pdf.
- Johnson, J., and M. Kleiner. 2017. *Is Occupational Licensing a Barrier to Interstate Migration?* NBER Working Paper 24107. Cambridge, MA: National Bureau of Economic Research.

- Krueger, A. 2017. "Where Have All the Workers Gone? An Inquiry into the Decline of the U.S. Labor Force Participation Rate." Washington: Brookings Institution.
https://www.brookings.edu/wp-content/uploads/2017/09/1_krueger.pdf
- Levinson, A. 2019. "Energy Efficiency Standards Are More Regressive Than Energy Taxes: Theory and Evidence." *Journal of the Association of Environmental and Resource Economists* 6, no. S1: S7–S36.
- Maguire S., J. Freely, C. Clymer, M. Conway, and D. Schwartz. 2010. "Tuning In to Local Labor Markets: Findings from the Sectoral Employment Impact Study." Public/Private Ventures.
- Meyer, B., W. Mok, and J. Sullivan. 2015. "Household Surveys in Crisis." *Journal of Economic Perspectives* 29, no. 4: 199–226.
- Meyer, J. 2017. *How Occupational Licensing Inhibits Economic Opportunity*. Naples, FL: Foundation for Government Accountability. <https://thefga.org/wp-content/uploads/2017/10/How-Occupational-Licensing-Inhibits-Economic-Opportunity-10-23-17.pdf>.
- NCSHA (National Council of State Housing Agencies). 2019. "Opportunity Zone Target Investment Surges to Nearly \$43 Billion Nationwide."
<https://www.cdfifund.gov/Documents/Summit%20-%20Compliance%20Review%20of%20New%20Markets%20Tax%20Credit%20Program%20-%20August%20Date%20-%200508%20Compliant.pdf>.
- Nunn, R., J. Parsons, and J. Shambaugh. 2018. "The Geography of Prosperity." In *Place-Based Policies for Shared Economic Growth*, edited by J. Shambaugh and R. Nunn. Washington: Brookings Institution.
- Office of Family Assistance. 2019. "TANF Caseload Data 2018." U.S. Department of Health and Human Services. <https://www.acf.hhs.gov/ofa/resource/tanf-caseload-data-2018>.
- Real Capital Analytics. "U.S. Opportunity Zones: A Baseline."
<https://www.rcanalytics.com/opportunity-zones-baseline/>
- Roder, A., and M. Elliot. 2019. "Nine Year Gains: Project QUEST's Continuing Impact." Economic Mobility Corporation. https://economicmobilitycorp.org/wp-content/uploads/2019/04/NineYearGains_web.pdf.
- Sage, A., M. Langen., and A. Van de Minne. 2019. *Where Is the Opportunity in Opportunity Zones? Early Indicators of the Opportunity Zone Program's Impact on Commercial Property Prices?* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3385502.
- Schnepel, Kevin. 2016. "Good Jobs and Recidivism." *Economic Journal* 128: 447–69.

Szafran, R. 2002. "Age-Adjusted Labor Force Participation Rates, 1960–2045." *Monthly Labor Review* 125: 25–38.

U.S. Census Bureau. 2019. "Income and Poverty in the United States: 2018."
<https://www.census.gov/library/publications/2019/demo/p60-266.html>.

White House. 2015. *Occupational Licensing: A Framework for Policymakers*.
https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf.



ABOUT THE COUNCIL OF ECONOMIC ADVISERS

The Council of Economic Advisers, an agency within the Executive Office of the President, is charged with offering the President objective economic advice on the formulation of both domestic and international economic policy. The Council bases its recommendations and analysis on economic research and empirical evidence, using the best data available to support the President in setting our nation's economic policy.

www.whitehouse.gov/cea

December 2019