

#### CHAPTER 3

# PROGRESS REDUCING INEQUALITY

In 2013, President Obama declared inequality "the defining challenge of our time." According to the Congressional Budget Office (CBO), in that year—the most recent year for which complete data are available—the 20 percent of households with the lowest incomes had an average pre-tax income of \$25,000, while the 1 percent of households with the highest incomes had an average income of \$1.6 million (CBO 2016b). Roughly 15 percent of Americans lived in poverty, even as mean household income reached \$75,000 (Proctor, Semega, and Kollar 2016). Moreover, these disparities persist across generations due to low levels of intergenerational mobility. Only 8 percent of children from the bottom 20 percent of the income distribution make it to the top 20 percent as adults, while 37 percent of children from the top 20 percent stay there (Chetty et al. 2014).

Inequality extends well beyond the distribution of income. Median wealth for non-Hispanic White families in 2013 was \$142,000, compared with only \$18,000 for all other families (Bricker et al. 2014). A 40-year-old man at the 95<sup>th</sup> percentile of the income distribution has a life expectancy 10 years longer than a man at the 5<sup>th</sup> percentile (Chetty et al. 2016). Students from families in the bottom 25 percent of the income distribution drop out of high school at a rate four times higher than students from families in the top 25 percent (NCES 2015).

Perhaps most troubling is the fact that rising inequality, in conjunction with slower productivity growth, has led to slow growth in inflation-adjusted incomes for the typical household for more than three decades. In previous work, the Council of Economic Advisers (CEA) found that if inequality had

<sup>&</sup>lt;sup>1</sup> The Census Bureau and the Congressional Budget Office use different definitions of income in their estimates of the income distribution. CBO's definition is generally more comprehensive than that used by the Census Bureau. Mean income in 2013 per the Census Bureau was \$75,000 while mean before-tax income in 2013 per CBO was \$100,000.

not increased from 1973 to 2013, income for the typical household in 2013 would have been about 18 percent, or \$9,000, higher (CEA 2015).

From his first days in office, President Obama has taken important steps to reduce inequality and make the economy work for all Americans. The policy response to the Great Recession directly reduced inequality in after-tax incomes through progressive tax and spending policies, such as temporary tax cuts for working and middle-class families and extensions of unemployment insurance; and indirectly, the response reduced earnings inequality by boosting employment. This policy response—including the American Recovery and Reinvestment Act (Recovery Act) and subsequent fiscal measures, bank stress tests, and other financial policy measures, support for the automobile industry, and the actions of the Federal Reserve kept the unemployment rate 6 percentage points lower than it otherwise would have been between 2010 and 2012. By reducing the unemployment rate, these policies offset roughly half of the increase in earnings inequality that would have occurred as even more workers lost their jobs and saw their earnings fall to zero.

The Affordable Care Act (ACA), enacted in March 2010, provided Federal support to states to expand their Medicaid programs and financial assistance for families purchasing coverage through the Health Insurance Marketplace, leading to the largest reduction in the uninsured rate since the creation of Medicare and Medicaid and a substantial reduction in inequality in after-tax incomes. The ACA has resulted in 20 million additional American adults gaining health insurance coverage as of early 2016 and helped reduce the uninsured rate to 8.9 percent in the first half of 2016, the lowest level on record. The ACA reduced inequality in health insurance coverage by age, race, and income, with larger reductions in uninsured rates for groups with lower levels of coverage, including young adults, racial minorities, and low-income families. A growing body of research documents that expanded coverage under the ACA is greatly improving families' well-being by increasing their access to care, financial security, and health. Viewed as additions to income, expanded Medicaid eligibility and financial assistance for families purchasing health insurance through the Marketplace have dramatically reduced inequality in after-tax incomes.

Over the course of this Administration, the President has signed into law a series of progressive changes in tax policy that have increased tax rates for the highest-income Americans and increased the generosity of tax credits for working families, thereby reducing inequality in after-tax incomes. Changes in tax policy other than ACA coverage provisions will boost aftertax incomes in the bottom quintile by 2 percent in 2017 and reduce after-tax incomes for the top 0.1 percent by 9 percent relative to what incomes would have been under 2008 policies.<sup>2,3</sup> (The policy impacts discussed in this chapter generally compare after-tax incomes in 2017 under current policy with counterfactual after-tax incomes in 2017 under 2008 policies. After-tax incomes include the value of government transfers such as Medicare and Medicaid.)

Together, changes in tax policy and the ACA coverage provisions will increase the share of after-tax income received by the bottom quintile in 2017 by 0.6 percentage point, or 18 percent, and the share received by the second quintile by 0.5 percentage point, or 6 percent. They will reduce the share received by the top 1 percent by 1.2 percentage points, or 7 percent. Moreover, they will boost incomes in the bottom quintile by 18 percent, equivalent to more than a decade of average income gains. And they will increase average tax rates for the top 0.1 percent of families, a group projected to have average pre-tax incomes over \$8 million, by nearly 7 percentage points.

The legislation President Obama has signed into law represents a historic achievement in reducing inequality. Tax changes enacted since 2009 have boosted the share of after-tax income received by the bottom 99 percent of families by more than the tax changes of any previous administration since at least 1960. The President has also overseen the largest increase in Federal investment to reduce inequality since the Great Society programs of the Johnson Administration, an increase that largely reflects the coverage provisions of the ACA and expanded tax credits for working families.

However, while these accomplishments are historically large, much more work remains to be done to reverse the decades-long increase in inequality. From the business cycle peak in 1979 to the business cycle peak in 2007, the after-tax income share of the top 1 percent more than doubled. Changes in tax policy and the coverage provisions of the ACA have rolled back one-third of the decline in the share of after-tax income accruing to the bottom quintile of households over this period and one-tenth of the increase in the share accruing to the top 1 percent of households.

As the discussion above highlights, addressing the many manifestations of inequality requires a comprehensive set of policies. Inequality is a product of economic institutions, standards, and norms; technological

<sup>&</sup>lt;sup>2</sup> Each quintile contains 20 percent of families, ranked by their incomes (adjusted for family size). For example, the bottom quintile contains the 20 percent of families with the lowest incomes, and the second quintile contains the 20 percent of families with the next lowest incomes. However, in this analysis, families with negative incomes are excluded from the bottom quintile as these families are typically quite different from other low-income families. <sup>3</sup> As used in this report, the ACA coverage provisions include expanded Medicaid eligibility, the Premium Tax Credit, cost-sharing reductions, small employer tax credits, the individual shared responsibility payment, and the employer shared responsibility payment.

developments; individual behavior; and a multitude of other factors. Some policies—such as ensuring that everyone pays their fair share in taxes, expanding access to health insurance and to high-quality child care, raising the minimum wage, and expanding tax credits for working families—address inequality directly and in the near term, in addition to their longer-run benefits. Other policies—such as improving education, reforming intellectual property laws, and reforming land use and zoning regulations—work to reduce inequality primarily over the long term. Still others address the temporary inequality that accompanies economic downturns by providing appropriate countercyclical fiscal support to reduce economic slack and unemployment.

The President's policy proposals would further reduce inequality in both pre-tax and after-tax incomes. Increasing the minimum wage, as the President has called on Congress and State and local governments to do, would immediately boost incomes for millions of low-wage workers and reduce income inequality. Expanding access to high-quality child care and early education and ending family homelessness, as the President has proposed, would reduce inequality today while also increasing mobility and improving economic outcomes in the longer term. The tax reforms proposed in the Fiscal Year 2017 Budget would increase average tax rates on the top 0.1 percent by an additional 9 percentage points and would roll back an additional 13 percent of the increase in the after-tax income share of the top 1 percent of households between 1979 and 2007. Expanding the Earned Income Tax Credit (EITC) for workers without dependent children would provide 13 million low-income workers with a tax cut averaging nearly \$500 for each worker, increasing the returns to work and supporting labor force participation.

This chapter focuses on three specific areas where the Administration has achieved its most substantial and immediate success in reducing inequality: restoring economic growth, expanding health insurance coverage, and enacting a fairer tax code (Table 3-1). However, the Administration also has undertaken a much broader set of initiatives designed to address inequality and promote opportunity. Some of these efforts, such as investments in early childhood education and job training, are designed to have longer-term impacts. (See Box 3-4 for an overview of additional policies that will reduce inequality by raising wages and expanding educational opportunity, but are not examined in detail in this chapter. Also see Chapter 5 for additional discussion of the Administration's record on education policy.)

The chapter first examines each of the three major policy areas listed above. It then places the Administration's record in historical context, comparing the reductions in income inequality first with previous Federal

Table 3-1 Timeline of Select Recovery, Health, and Tax Legislation, 2009-2015

Legislation	Date of Enactment	Key Inequality-Related Provisions			
American Recovery and Reinvestment Act of 2009 (Recovery Act)	02/17/2009	Provided countercyclical fiscal support for the economy. The Recovery Act:  Created the Making Work Pay credit, a refundable tax credit of up to \$400 for individuals and \$800 for married couples, for 2009 and 2010;			
		Expanded the Earned Income Tax Credit (EITC) and Child Tax Credit (CTC), refundable tax credits for working families, for 2009 and 2010;     Created the American Opportunity Tax Credit (AOTC), a refundable tax credit to help pay for higher education			
		for 2009 and 2010;  Temporarily extended and enhanced unemployment insurance benefits, temporarily increased Supplemental Nutrition Assistance Program benefits expanded Pell Grants, and provided other aid to individuals; and  Provided temporary fiscal relief to States through additional Medicaid			
Patient Protection and	03/23/2010	payments and education grants to spur innovation and prevent layoffs of education workers.  Reformed the American health care system			
Affordable Care Act (Affordable Care Act)		to expand health insurance coverage, reduci health care costs, and improve health care quality, financed with reforms to health and tax policy. The ACA:			
		Provided Federal support to States tha expand their Medicaid programs to cover individuals up to 138 percent of the poverty level; Created the Premium Tax Credit and cost-sharing reductions to help low, moderate, and middle-income Americans afford coverage; introduced insurance reforms and an individual surance reforms and an individual suranc			
		<ul> <li>individual responsibility requirement;</li> <li>Increased the Medicare payroll tax rat by 0.9 percentage point for high- income families and extended the tax to the investment income of high- income families.</li> </ul>			
Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010	12/17/2010	Extended the 2001/2003 income tax cuts through 2012. Reinstated the estate tax with a \$5 million exemption and 35% rate. Cut the payroll rate by 2 percentage points for 2011. Extended the Recovery Act EITC and CT improvements and the AOTC through 20			
Middle Class Tax Relief and Job Creation Act of 2012	02/22/2012	Extended the 2 percentage point reduction in the payroll tax rate through 2012.			
American Taxpayer Relief Act of 2012	01/02/2013	Repealed the 2001/2003 income tax cuts for high-income families and permanently extended them for all others.  Increased the estate tax rate to 40 percent. Extended the Recovery Act EITC and CTC improvements and the AOTC through 2017.			
Protecting Americans from Tax Hikes Act of 2015	12/18/2015	Permanently extended the Recovery Act EITC and CTC improvements and the AOTC.			

Note: For simplicity, this chapter does not distinguish between the Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, enacted on March 30, 2010.

action affecting income inequality since the 1960s and then with the growth in income inequality since the late 1970s. The chapter finishes by highlighting several of the President's proposals that would further reduce inequality.

### THE RECOVERY ACT: RESTORING GROWTH

When the President took office in January 2009, the country was experiencing the worst economic and financial crisis since the Great Depression. In the previous year, private employers shed 3.6 million jobs, household wealth dropped 16 percent, and the unemployment rate jumped from 5 percent to 7 percent on its way to a peak of 10 percent. One important aspect of combatting inequality is limiting macroeconomic downturns, during which unemployment rises and earnings inequality rises along with it. By taking timely, aggressive action to combat the financial crisis and economic downturn, the Administration limited the extent to which inequality rose during the Great Recession and its aftermath.

In February 2009, the President signed into law the American Recovery and Reinvestment Act (Recovery Act) to provide countercyclical fiscal support to the economy and to help boost employment, output, and wages. The Recovery Act included a mix of aid to affected individuals, support for State and local governments, public investments, and individual and business tax cuts. More than a dozen subsequent fiscal measures extended certain Recovery Act provisions and introduced additional countercyclical policies, such as the temporary payroll tax cut in effect during 2011 and 2012. In total, discretionary fiscal stimulus from 2009 through 2012 totaled \$1.4 trillion and averaged around 2 percent of GDP (Furman 2015). The Recovery Act, subsequent fiscal measures, financial policy measures, support for the automobile industry, and the Federal Reserve's independent actions combined to substantially reduce the harm of the Great Recession, in part by moderating the increase in unemployment that would otherwise

### Box 3-1: Trends in Inequality

Income, wealth, and consumption inequality have increased sharply in the United States in recent decades (Table 3-I). However, while overall inequality of income and wealth has increased, some other measures of financial inequality have decreased. For example, the gender pay gap has narrowed in recent decades, even as it remains too large (CEA 2016b). Similarly, while inequality in life expectancy at middle age has also increased, some other aspects of health inequality show signs of improvement.

Table 3-I Measures of Inequality, 1980 and Most Recent Available

	1980	Most Recent Available
Income		
Top 1% Income Share (CBO)		
Market Income (Income Before Government Transfers)	10%	18%
Pre-Tax (Income Including Government Transfers)	9%	15%
After-Tax (Pre-Tax Income Less Federal Taxes)	8%	12%
Bottom 90% Income Share (CBO)		
Market Income (Income Before Government Transfers)	67%	57%
Pre-Tax (Income Including Government Transfers)	70%	62%
After-Tax (Pre-Tax Income Less Federal Taxes)	72%	66%
90-10 Ratio <sup>1</sup> (Census)	9.4	12.1
50-10 Ratio <sup>1</sup> (Census)	3.9	4.2
Gini Index (CBO)		
Market Income (Income Before Government Transfers)	0.48	0.60
Pre-Tax Income (Income Including Government Transfers)	0.40	0.48
After-Tax Income (Pre-Tax Income Less Federal Taxes)	0.36	0.44
Ratio of CEO Compensation to Worker Compensation (EPI)	34	276
Wealth		
Top 1% Wealth Share		
Survey of Consumer Finances <sup>2</sup>	30%	36%
Bricker et al. (2016) <sup>2</sup>	27%	33%
Saez-Zucman (2016)	24%	42%
Top 10% Wealth Share2 (CBO)	68%	76%
Consumption		
Ratio of Top/Bottom Income Quintiles <sup>3</sup>	2.46	2.25
(Aguiar and Bils 2015)	2.46	3.35
Gini Index (Attanasio and Pistaferri 2014)	0.22	0.26
Wages		
Gender Pay Gap <sup>4</sup> (Census)	0.40	0.20
Racial Pay Gap <sup>4,5</sup> (Census)		
Black-White	0.25	0.20
Hispanic-White	0.24	0.30
Health		
Percentage Point Gap Between Top and Bottom Income		
Quintiles at Age 50 in Probability of Reaching Age 85		
(National Academies 2015)		
Men	18	40
Women	14	45
Ratio of Age 0-4 Mortality Rates Between Richest		
and Poorest Counties6 (Currie and Schwandt 2016)		
Men	1.9	1.6
Women	1.9	1.6

<sup>&</sup>lt;sup>1</sup>Adjusted for 1994 CPS redesign, most recent data values for 2013 (pre-2014 redesign); <sup>2</sup>Values for 1989 (earliest available); <sup>3</sup>Values for 1980-82 (closest available); <sup>4</sup>Pay gaps for Values for 1989 (earniest available), Values for 1980-82 (closest available), Fag gaps for full time workers (50-52 weeks) at least 15 years of age, 1980 value for civilian workers only, higher value represents larger gap; <sup>5</sup>Values for white alone, black alone, and Hispanic (any race); <sup>6</sup>Ratio of mortality rates for 95<sup>th</sup> and 5<sup>th</sup> percentile counties as ranked by poverty rate, value for 1990 (earliest available).

have occurred. In doing so, these policies partially offset the cyclical increase in earnings inequality associated with economic downturns. In addition, the progressive fiscal policies included in the Recovery Act and subsequent legislation, including tax cuts for working and middle-class families and extended unemployment insurance, further reduced inequality and helped families struggling to handle job loss, reduced working hours, and other consequences of the downturn.

### Reducing Unemployment and Earnings Inequality

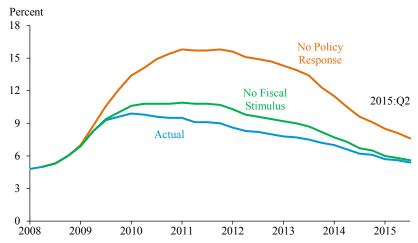
The economic suffering caused by recessions is distributed in a highly unequal manner. The unemployed, particularly the long-term unemployed, bear a disproportionate share of the burden. Countercyclical policy is thus not only essential to ensure that our economy operates at its potential, but also plays an important role in reducing inequality (Bivens 2015; Coibion et al. 2016).

The Recovery Act and other elements of the fiscal policy response to the Great Recession boosted employment and output and reduced the unemployment rate relative to what they would have been absent the policy response. According to Blinder and Zandi (2015), the fiscal policy response boosted employment by roughly 2.5 million jobs and reduced the unemployment rate by 1.5 percentage points on average each year between 2010 and 2012 (Figure 3-1). The broader policy response, including not only fiscal policy but also financial measures pursued by the Administration, independent actions by the Federal Reserve, and support for the automobile industry, boosted employment by about 9 million jobs and reduced the unemployment rate by 6 percentage points on average each year from 2010 through 2012. These estimates may even understate the impact of the policy response because they do not incorporate a role for negative long-term effects of recessions. If unemployment reduces the economy's potential going forward, the true impact of the policy response may exceed the impact shown here.

One particularly stark illustration of the unequal burden created by economic downturns is the disparity in unemployment rates by race and other demographic characteristics. The unemployment rate for the population as a whole increased 5 percentage points, from 5 to 10 percent, during the Great Recession and its immediate aftermath. However, the unemployment rate for African American workers rose 8 percentage points to nearly

<sup>&</sup>lt;sup>4</sup> In previous work, CEA estimated that the Recovery Act and subsequent fiscal measures increased employment by about 9 million job-years through the end of 2012, broadly consistent with the estimates of the impact of the fiscal policy response by Blinder and Zandi (CEA 2014a). (A job year is the equivalent of a full-time job held for one year.)

Figure 3-1 **Unemployment Rate by Policy Scenario, 2007–2015** 



Note: The no policy reponse scenario assumes no fiscal policy response, no financial policy by the Administration or by the Federal Reserve (e.g. TARP, QE), and no support for the auto industry. The no policy response scenario assumes the Fed does conduct traditional monetary policy via management of short-term interest rates.

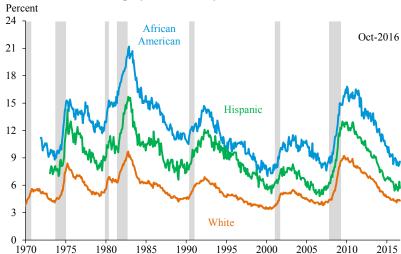
Source: Blinder and Zandi (2015).

17 percent, and for Hispanic workers it rose 7 percentage points to 13 percent (Figure 3-2). As the overall unemployment rate has fallen during the recovery, the unemployment rates for African American and Hispanic workers have fallen by even more, though they continue to exceed the rates of unemployment for the overall population.

Through increases in the unemployment rate, economic downturns drive increases in earnings inequality. As measured by the Gini index, changes in inequality in weekly earnings for the population ages 18-64 including those not currently employed—closely track changes in the unemployment rate over time (Figure 3-3). (The Gini index is a summary measure of inequality that ranges from 0 to 1, with higher values indicating greater inequality.) During and immediately after recessions, earnings inequality increases sharply along with the unemployment rate. As the unemployment rate recovers, earnings inequality decreases. The correlation between unemployment and the Gini index reflects both the mechanical effect of higher unemployment as well as any changes in the distribution of earnings.

While earnings inequality increases during recessions, other measures of inequality can decrease. A decrease in inequality would be expected for measures of income inequality that rely on more comprehensive definitions of income, that are more sensitive to changes in average incomes for the highest-income families, or that measure incomes over longer periods of

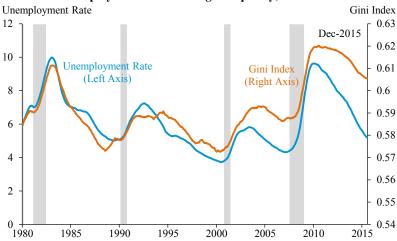
Figure 3-2 Unemployment Rate by Race, 1970-2016



Note: Shading denotes recession.

Source: BLS.

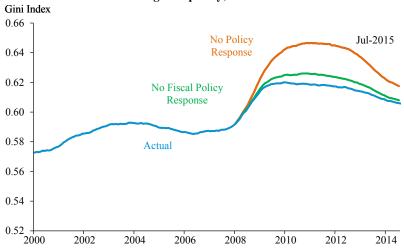
Figure 3-3 Unemployment and Earnings Inequality, 1980-2015



Note: Twelve-month moving average of not seasonally adjusted data. Gini index for the population ages 18-64, including those not currently employed. Unemployment rate for labor force participants ages 18-64. Shading denotes recession.

Source: BLS; CEA calculations.

Figure 3-4 Earnings Inequality, 2000–2015



Note: Twelve-month moving average of not seasonally adjusted data. Gini index for the population ages 18-64, including those not currently employed.

Source: BLS; Blinder and Zandi (2015); CEA calculations.

time. Investment income is concentrated among high-income families and generally falls sharply during recessions, which reduces the income share of these families when using broader measures of income or measures of inequality that are particularly sensitive to high incomes. Similarly, safetynet policies provide partial protection against income losses that result from unemployment even though earnings fall to zero, thus reducing the recessionary increase in inequality in broader measures of income. The different behavior of these inequality measures provides important insights into how different parts of the economy vary with the business cycle. Earnings inequality reflects individuals' experiences in the labor market, while inequality in more comprehensive measures of income tracks the financial resources families have available. (Another important issue in evaluating inequality is distinguishing short-term cyclical developments from longerterm trends. See Box 3-2 at the end of this section for a discussion of this issue as it relates to the evolution of the income share of the top 1 percent of households since 2000.)

To quantify the impact of the policy response to the Great Recession on inequality, Figure 3-4 shows the actual Gini index for earnings since 2000 and the Gini index for two simulations reflecting what might have occurred

without the policy response.<sup>5</sup> These calculations suggest that the policy response to the Great Recession reduced the increase in the Gini index for earnings by roughly half compared with what would have occurred absent the policy response.

### Supporting Struggling Families

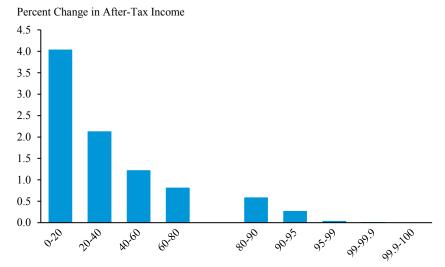
In addition to their effects on unemployment and earnings, the Recovery Act and subsequent fiscal measures also had a direct impact on inequality in after-tax incomes through the progressive fiscal policies that they incorporated to support struggling families.

A large portion of the fiscal policy response consisted of tax cuts for working and middle-class families. The Recovery Act created the Making Work Pay credit and expanded the Earned Income Tax Credit (EITC) and Child Tax Credit (CTC) for 2009 and 2010, among other provisions. The Making Work Pay credit provided a tax cut for 95 percent of workers of up to \$400 for individuals and \$800 for couples. In 2009, the Making Work Pay credit and the EITC and CTC expansions boosted after-tax incomes for families in the lowest quintile of the income distribution by 4 percent and boosted incomes in the second quintile by 2 percent (Figure 3-5). In dollar terms, these provisions provided average tax cuts of \$400 and \$500, respectively, for families in the first two quintiles. In 2011, the Making Work Pay credit was replaced by a 2 percentage-point reduction in the payroll tax rate, sometimes referred to as the payroll tax holiday, which was subsequently extended through 2012. All told, for a family of four making \$50,000 a year, the Making Work Pay credit and payroll tax holiday provided a cumulative tax cut of \$3,600 over the first four years of the Administration.

A second key plank of the fiscal policy response was enhancements to the unemployment insurance (UI) system. Both the pre-existing UI system and the enhancements enacted during the Great Recession provided essential support for hard-working American families struggling with the loss of a job during the downturn. The U.S. Census Bureau estimates that unemployment insurance kept more than 11 million people out of poverty

<sup>&</sup>lt;sup>5</sup> Using data from the Current Population Survey, the simulation randomly re-assigns employed individuals to unemployment (and thus zero earnings) within 64 demographic cells in numbers calibrated to match the aggregate trends as estimated by Blinder and Zandi (2015), assuming proportional increases in unemployment across all cells. Two important sources of uncertainty in the estimate are the (unknown) distribution of earnings for those who would have lost their jobs absent the policy response and the earnings impacts for those who remain employed. This estimate assumes the earnings distribution for those who would have lost their jobs absent the policy response is identical to the overall earnings distribution within demographic cells and assumes no change in earnings for those who remain employed. A sensitivity exercise suggests that the conclusion is not substantially affected unless the workers who would have lost their jobs absent the policy response were selected primarily from the tails of the earnings distribution.

Figure 3-5 Percent Change in After-Tax Income by Income Percentile: MWP and Recovery Act EITC and CTC Expansion, 2009



Source: Urban-Brookings Tax Policy Center; CEA calculations.

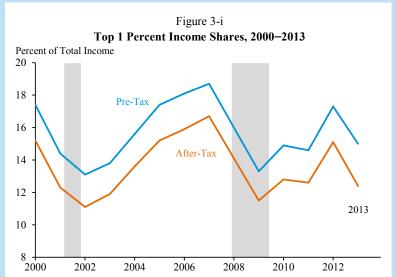
cumulatively between 2008 and 2012, according to the Supplemental Poverty Measure (CEA and DOL 2013). (This is not a causal estimate because it does not account for any changes in recipients' behavior that might occur in the absence of UI.) In 2012 alone, UI kept 2.5 million people out of poverty. Between 2008 and 2013, more than 24 million workers received extended benefits through either the Emergency Unemployment Compensation program or Extended Benefits program. Including workers' families, more than 70 million people—including 17 million children—were supported by extended UI benefits over this period (CEA and DOL 2013).

The Recovery Act also temporarily expanded benefits in the Supplemental Nutrition Assistance Program, provided emergency benefits through the Temporary Assistance for Needy Families program, and ended or prevented homelessness for over 1.3 million families through the Homelessness Prevention and Rapid Rehousing Program (CEA 2014a). It provided temporary support for States to sustain Medicaid coverage and made investments in health centers, workforce programs, prevention, and electronic health records.

In total, the pre-existing social insurance system, combined with the expansions in the Recovery Act and subsequent extensions, offset nearly 90 percent of the increase in poverty that would otherwise have occurred, even without accounting for impacts in moderating the recession itself (CEA

### Box 3-2: Income Inequality and the Business Cycle

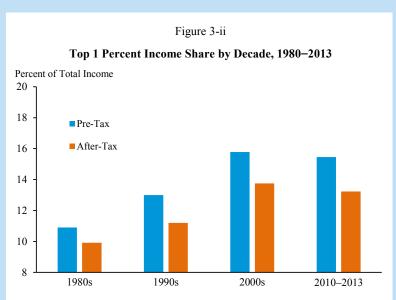
Income inequality is highly sensitive to economic conditions, and short-term trends can easily differ from longer-term developments (see Box 3-1 for a description of developments over the last 30 years). As a result, interpreting year-to-year changes in measures of income inequality, such as the share of income accruing to the highest-income 1 percent of households, must be done with attention to the business cycle. The most recent business-cycle peak in 2007 saw the pre-tax income share of the top 1 percent reach a record high of 19 percent, only to fall to 13 percent two years later in the depths of the Great Recession (Figure 3-i). Both its sharp drop between 2007 and 2009 and subsequent rebound are likely primarily cyclical developments.



Note: Households ranked by pre-tax income for both pre-tax and after-tax income shares. Shading denotes recession.

Source: CBO (2016b); CEA calculations.

Notwithstanding this short-term cyclical variation, income inequality has increased sharply in recent decades. This longer-term trend of rising income inequality culminated in the record-high income share of the top 1 percent in 2007. The top 1 percent income share in 2013, the most recent year for which comprehensive CBO estimates are available, was below this record level but still high by historical standards. Averaged across years, the income share of the top 1 percent has increased through each complete decade from the 1980s to the present (see Figure 3-ii).



Note: Households ranked by pre-tax income for both pre-tax and after-tax income shares. Source: CBO (2016b); CEA calculations.

Notably, however, the growth rate of inequality may have slowed or paused in recent years according to this measure. Since 2000, the income share of the top 1 percent has been highly cyclical, but relatively littlechanged on net. At the same time, other measures of inequality, such as the Gini index for market incomes, have continued to increase. These data raise the possibility that the rapid increase in income inequality that the United States has experienced over recent decades may be entering a new phase. However, even if the growth in inequality has slowed, the elevated level of inequality will remain a pressing concern.

2014a). Although the economy was dealt its most severe blow since the Great Depression, the poverty rate measured to include the effects of antipoverty policy measures rose just half a percentage point. Excluding these measures, the poverty rate would have risen 4.5 percentage points—9 times greater than the actual increase.

# THE AFFORDABLE CARE ACT: PROVIDING Affordable, Accessible Health Insurance

In 2008, 44 million Americans lacked health insurance. Individuals with pre-existing conditions were often locked out of health insurance,

unable to obtain insurance at any price. For many others, health insurance was available but unaffordable. Many workers faced strong financial incentives to remain in low-quality jobs, or jobs for which they were poorly matched, because they needed the health insurance those jobs provided, even when a better job was available or they saw an opportunity to go back to school or to start a business.

The Affordable Care Act (ACA) introduced comprehensive reforms to address these and other problems in the health care system. It requires insurers to offer health insurance on the same terms to all applicants regardless of their health status. Families can use the Health Insurance Marketplace to compare and purchase policies with the certainty that they will not be denied coverage, and the law provides financial assistance to ensure that coverage is affordable. The law also supported an expansion of Medicaid for the lowest-income Americans. In total, the ACA has resulted in an additional 20 million American adults gaining health insurance coverage; reduced disparities in coverage by age, race, and income; and reduced poverty and inequality. (See Chapter 4 for further discussion of the Obama Administration's record on health care policy.)

### Reducing Disparities in Health Coverage and Health Status

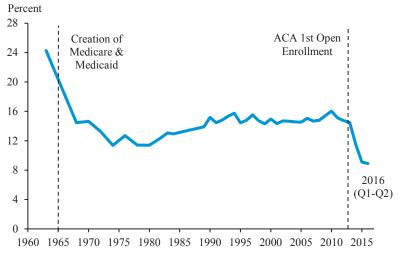
The ACA has substantially reduced inequality in access to health care. It has increased the number of American adults with health insurance by 20 million as of early 2016 and contributed to the largest drop in the share of the population without health insurance since the creation of Medicare and Medicaid in the 1960s (Furman and Fiedler 2014e; Uberoi, Finegold, and Gee 2016). From 2010—the year of the law's enactment—through the first half of 2016, the share of the population without health insurance (the uninsured rate) has fallen from 16.0 percent to 8.9 percent (Figure 3-6).

Uninsured rates varied markedly across different population groups in 2010 (Figures 3-7A, 3-7B, and 3-7C). Uninsured rates for African Americans, Hispanics, and Native Americans were substantially higher than those for Whites. And while nearly every American over age 65 had health coverage thanks to Medicare, more than 30 percent of those between the ages of 19 and 26 lacked health insurance. Families with incomes below 150 percent of the Federal poverty line lacked health insurance at a rate 9 times that for families with incomes above 400 percent of the poverty line.

Improvements in health insurance coverage have reduced inequality in access to health insurance along numerous dimensions, as demonstrated by the particularly large coverage gains for groups with elevated uninsured rates prior to reform. Between 2010 and 2015, coverage rates increased by 25 percentage points for Native Americans, 11 percentage points for Hispanics,

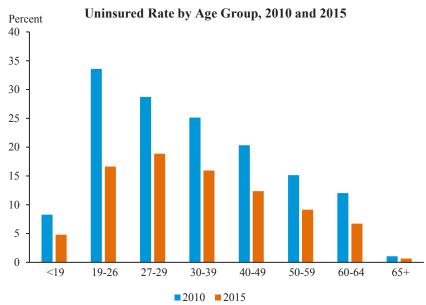
Figure 3-6





Note: For 2016, data reflect the first two quarters only. For years 1989 and later, data are annual. For prior years, data are generally but not always biannual. Source: CEA analysis of NHIS and supplemental sources described in Furman and Fiedler (2014).

Figure 3-7A



Source: NHIS; CEA calculations.

Figure 3-7B

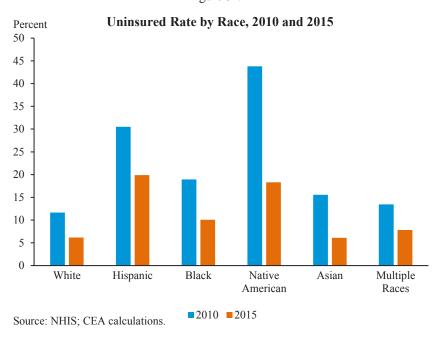
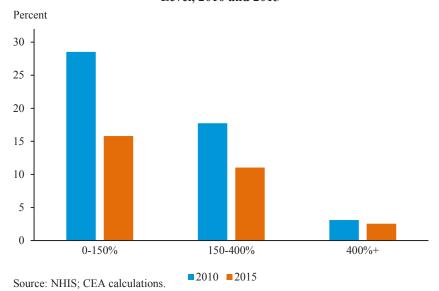


Figure 3-7C
Uninsured Rate by Family Income as Percent of Federal Poverty
Level, 2010 and 2015



and 9 percentage points for African Americans, compared with 7 percentage points overall. Coverage increased by 17 percentage points among those ages 19 to 26, with this age group no longer exhibiting the lowest rates of coverage, and coverage increased by 13 percentage points for families with incomes below 150 percent of the poverty line.

A growing body of research finds that the coverage expansions resulting from the ACA are generating important improvements in families' wellbeing. Perhaps the most visible goal of expanding health insurance coverage is improving access to care. Examining data through March 2015, Shartzer, Long, and Anderson (2015) find that the share of non-elderly adults with a usual source of care and the share who received a routine checkup in the last 12 months has risen with expanded insurance coverage, while the share reporting problems accessing care or forgoing care due to cost has fallen. Examining a similar time period, Sommers et al. (2015) report similar improvements in access to care, including reductions in the share of non-elderly adults reporting problems affording care or lacking a personal physician. The pattern of gains in these studies is consistent with the gains having been caused by the ACA. Both studies report notably larger gains in Medicaid expansion states, and Shartzer, Long, and Anderson (2015) find that the largest gains in access were realized by low- and moderate-income adults, a population that saw the largest gains in insurance coverage as a result of the ACA's coverage provisions.

This research also provides early evidence that gains in access to care are translating into better health. Sommers et al. (2015), for example, find reductions in the share of non-elderly adults reporting that they are in fair or poor health, as well as reductions in the percentage of days that respondents report having their activities limited by health problems. There is also evidence that these gains are larger in states that have expanded their Medicaid programs (Sommers et al. 2016). Further research will be required to examine the effects of the law on a broader array of health outcomes, though it is notable that studies of prior coverage expansions targeting populations similar to those targeted by the ACA's coverage provisions concluded that those expansions reduced mortality among those gaining coverage (Sommers, Baicker, and Epstein 2012; Sommers, Long, and Baicker 2014).

The coverage expansions resulting from the ACA also appear to be achieving one of the other key goals of health insurance coverage: protecting the sick from financial hardship. Survey data show substantial reductions in the share of families reporting problems paying medical bills, with particularly large reductions for low- and moderate-income adults as the law's coverage provisions have taken effect (Shartzer, Long, and Anderson 2015). Studies using data from consumer credit reports to compare states that have and have not expanded Medicaid found similar improvements in financial security, with one study estimating that Medicaid expansion reduced the amount of debt sent to collection by \$600 to \$1,000 per person gaining coverage (Dussault, Pinkovskiy, and Zafar 2016; Hu et al. 2016).

### Reducing Poverty and Income Inequality

To facilitate this dramatic expansion in health insurance coverage, the ACA combined Federal support for states that expand their Medicaid programs with financial assistance for people purchasing coverage in the individual market so as to make health insurance more affordable for all Americans. These policies have directly reduced poverty and income inequality.

The value of the Medicaid benefits and Marketplace financial assistance made available by the ACA is substantial. Average medical expenses covered by Medicaid for adults newly eligible in 2017 as a result of the ACA will be an estimated \$5,400 (CMS 2015). CBO has estimated that individuals receiving subsidized coverage through the Health Insurance Marketplaces in 2017 will receive benefits of around \$4,500 (CBO 2016a). For working families struggling to make ends meet, these forms of assistance can be the difference between health insurance coverage and medical bankruptcy or going without necessary care.

Analysis from the Treasury Department highlights the powerful inequality-reducing effects of the ACA coverage provisions. Treasury estimates that the ACA coverage provisions will boost incomes in the lowest decile by 25 percent and for the bottom quintile as a whole by 16 percent in 2017. They will also boost incomes for families in the second quintile by 5 percent. The average benefit for families in the first quintile from the ACA coverage provisions will be about \$1,900 and for families in the second quintile about \$1,400.7

<sup>&</sup>lt;sup>6</sup> Different analysts compute the value of health insurance to households in different ways when measuring the income distribution. CBO (2016a) values Medicare and Medicaid at the average cost to the government of providing those benefits and the analysis here follows the same approach in valuing expanded Medicaid programs in the ACA at the cost to the government. Other approaches are also possible. For example, one recent study has argued for valuing Medicaid at less than cost because some of the care provided by Medicaid was previously being received from other sources for free (Finkelstein, Hendren, and Luttmer 2015). In this case, some of the value of the coverage expansions will accrue to whatever entities bear the cost of providing the care that goes uncompensated, a combination of medical providers themselves; privately insured individuals; and local, State, and Federal governments.

 $<sup>^7</sup>$  After-tax incomes include the value of the Premium Tax Credit and cost-sharing reductions even if the assistance is realized as a reduction in premiums or out-of-pocket expenses rather than a direct payment.

### ENACTING A FAIRER TAX CODE

In 2008, average tax rates on high-income families had fallen to their lowest levels in many years. Since then, President Obama has signed into law new tax cuts for working and middle-class families, restored Clintonera tax rates for high-income Americans, created new tax credits to make health insurance affordable for all Americans, and fully paid for the coverage expansions of the ACA with responsible tax increases for high-income families.

These tax policies have served many purposes: restoring growth and boosting employment, expanding access to health care, helping working families get ahead, and reducing the deficit. In addition to their other purposes, the combined effect of these policies has been to reduce inequality substantially. Changes in tax policy, other than the ACA coverage provisions, will boost after-tax incomes in the bottom quintile by 2 percent in 2017 and reduce after-tax incomes for the top 0.1 percent by 9 percent relative to what incomes would have been under 2008 policies.

# Cutting Taxes to Support Work, Reduce Poverty, and Strengthen **Opportunity**

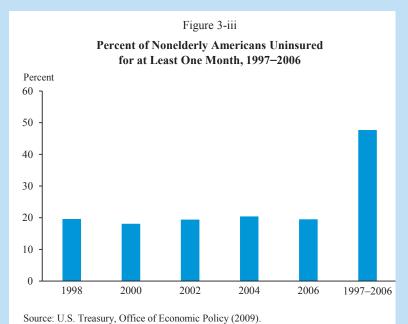
During his first term in office, the President signed into law legislation that cut taxes for a family of four making \$50,000 a year by a cumulative total of \$3,600 between 2009 and 2012. As part of the Recovery Act, the President and Congress enacted the Making Work Pay credit, which provided 95 percent of workers with a tax cut of up to \$400 (\$800 for couples) in 2009 and 2010. In 2011 and 2012, the Making Work Pay credit was replaced with a 2 percentage-point reduction in the payroll tax rate. These policies were progressive in their own right, and also reduced inequality through their contribution to the economic recovery, as discussed earlier in this chapter. In addition, the Recovery Act expanded the Earned Income Tax Credit (EITC) and Child Tax Credit (CTC), helping 16 million working families make ends meet each year. These expansions now directly lift 1.8 million Americans out of poverty as measured by the Supplemental Poverty Measure, and reduce the severity of poverty for an additional 15 million Americans (Figure 3-8).

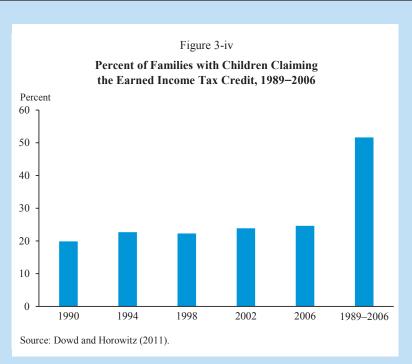
Research finds that refundable tax credits for working families lead to better short- and long-run outcomes for children. For example, one study finds each additional \$1,000 increase in the EITC reduces the incidence of low birth weight by 2 to 3 percent, in part due to increased pre-natal care (Hoynes, Miller, and Simon 2015). Other research suggests that the EITC and refundable CTC increase test scores and college enrollment (Chetty,

#### Box 3-3: Safety Net Policies as Insurance

Distributional analysis can be conducted on either an annual or a lifetime basis. Annual estimates, like those presented in this chapter, provide a snapshot of the impact of policies in a particular year. Although they generally require richer data and stronger assumptions, lifetime estimates quantify the impact of policies over an entire lifecycle. This lifecycle perspective captures an important additional aspect of safetynet and anti-inequality policies that can be lost in annual analysis: their role as periodic supports in times of economic distress. For example, a two-earner family that is not eligible for the Earned Income Tax Credit (EITC) in most years may become eligible when one earner experiences an extended period of unemployment that depresses the family's annual income. Most individuals, in fact, experience such temporary shocks over a lifetime: a recent study indicated that more than 60 percent of Americans fall into the bottom 20 percent of incomes for at least one year between ages 25 and 60 (Rank and Hirschl 2015).

For this reason, the share of Americans that benefit from safety-net and anti-inequality policies over a longer horizon substantially exceeds the share that benefit in a single year. The ACA, for example, provides financial support to states that expand their Medicaid programs and to individuals for purchasing health insurance through the Marketplaces—

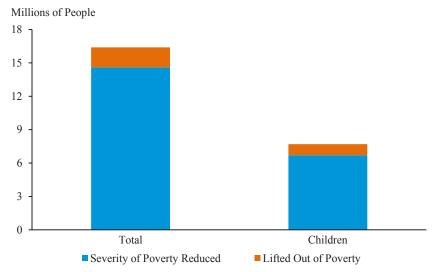




provisions that provide greatest value to those who would otherwise be uninsured. In the decade prior to the enactment of the ACA, roughly 20 percent of the population was uninsured for at least one month in any particular year and thus stood to benefit from the law's coverage provisions during that year (see Figure 3-iii). However, over the course of the decade as a whole, more than twice as many people—roughly half the population—were uninsured for at least one month and thus would have had the opportunity to benefit from the law's coverage expansion. Similarly, about 25 percent of families with children claim the EITC in any given year, but 50 percent claim the EITC at some point during a 20-year period (Figure 3-iv).

In this way, the inequality-reducing tax and health care policies that the President has signed into law will ultimately benefit a much larger fraction of working and middle-class Americans than they do in a single year, as do existing policies like unemployment insurance and the Supplemental Nutrition Assistance Program.

Figure 3-8
Impact of Recovery Act EITC and CTC Improvements on Number of People in Poverty, 2018



Source: Marr, Dasilva, and Sherman (2015).

Friedman, and Rockoff 2011; Dahl and Lochner 2012; Manoli and Turner 2016).8

The Recovery Act also created the American Opportunity Tax Credit (AOTC), which provides up to \$10,000 over four years to help pay for college. The AOTC is the first education tax credit to be at least partially refundable. The partial refundability of the AOTC is critical because it allows low-income families with no income tax liability to claim the credit, and students who do not attend college come disproportionately from families with lower incomes. In addition, the Administration has expanded the maximum Pell Grant for low- and moderate-income college students by more than \$1,000 and, for the first time, tied aid to inflation to maintain its value—an important policy that is not included in the estimates in this section, which focus solely on the tax system. (See Chapter 5 for additional discussion of changes in education policy during this Administration.)

# Restoring Tax Rates to Their Level in the 1990s and Increasing Progressivity

Additional tax reforms enacted since 2009 have increased the progressivity of the tax code, helped pay for the ACA, and contributed to responsible

<sup>&</sup>lt;sup>8</sup> For further discussion of the long-run benefits of refundable tax credits see CEA (2016a).

deficit reduction. At the beginning of 2013, the President signed into law a permanent extension of expiring tax cuts for middle-class families while also restoring Clinton-era tax rates for the highest-income families. Restoring Clinton-era tax rates for these families, along with other components of this legislation, will reduce the deficit by more than \$800 billion over the next 10 years. In addition, the ACA extended Medicare taxes to cover the investment income of high-income families and modestly increased the Medicare tax rate for these same families. In combination, these reforms have restored effective tax rates on high-income Americans to the level that prevailed in the mid-1990s (Figure 3-9).

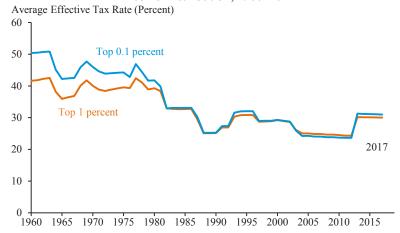
### Reducing Poverty and Income Inequality

The tax policies the President has signed into law since 2009 have boosted incomes for working families, increased taxes on the highestincome families, and reduced income inequality (Figure 3-10). These policies, primarily the expansion of the CTC for low-income working families and expansion of the EITC for families with three or more children, will boost incomes in the first quintile by 2 percent in 2017 compared with what they would have been under the continuation of 2008 policies. These estimates do not take into account the additional, temporary income boosts these families saw from the temporary tax cuts enacted earlier in the Administration, including the Making Work Pay credit and the payroll tax holiday that have now expired.

The tax increases enacted by the Administration have been concentrated among the highest-income families. Families in the top 0.1 percent of the distribution, who are projected to have average pre-tax incomes of more than \$8 million in 2017, will experience a tax increase of more than \$500,000 on average and a reduction in after-tax incomes of 9 percent in that year. Families in the top 1 percent, but not the top 0.1 percent, will experience a tax increase of \$30,000 on average and a reduction in after-tax incomes of 5 percent. In addition to their contribution to deficit reduction and to help finance the expansion of health insurance coverage made possible by the ACA, these high-income tax increases have directly reduced inequality in after-tax incomes.

The impact of these changes in tax policy are measured relative to a policy counterfactual in which 2008 tax policy remains in place. This policy counterfactual assumes the extension of the major individual and estate tax cuts scheduled to expire at the end of 2010; a set of individual, business, and energy tax provisions that have been regularly extended by Congress in the past (referred to as "extenders"); a set of provisions limiting the scope of the

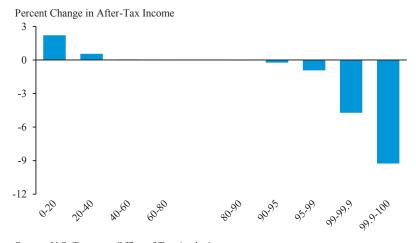
Figure 3-9 Effective Tax Rates for a Fixed Pre-Tax Income Distribution, 1960-2017



Note: Average effective Federal (individual income plus payroll) tax rates for a 2006 sample of taxpayers augmented with non-filers constructed from the CPS. Pre-tax incomes adjusted in proportion to changes in the National Average Wage Index.

Source: IRS, Statistics of Income Public Use File; Bureau of Labor Statics, Current Population Survey; National Bureau of Economic Research. TAXSIM: CEA calculations.

Figure 3-10 Percent Change in After-Tax Income by Income Percentile: Changes in Tax **Policy Since 2009 Excluding ACA Coverage Provisions, 2017** 



Source: U.S. Treasury, Office of Tax Analysis.

individual Alternative Minimum Tax; and the Federal Unemployment Tax Act surtax.

# THE OBAMA ADMINISTRATION'S RECORD IN HISTORICAL CONTEXT

President Obama has overseen the largest increase in Federal investment to reduce inequality since the Great Society programs of the Johnson Administration, largely reflecting the coverage provisions of the ACA and expansions of tax credits for working families. However, despite the historic nature of the Obama Administration's accomplishments, inequality remains much higher today than it was a few decades ago, and substantial work remains to continue reducing inequality and expanding economic opportunities for all Americans (Figure 3-11).

# The Combined Impact of Changes in Tax Policy and the ACA Coverage Provisions

Earlier sections of this chapter separately examine the impact of the coverage provisions of the ACA and changes in tax policy on the distribution of income. This section examines their combined impact. Changes in tax policy since 2009 and the coverage provisions of the ACA will boost 2017

Gini Index 0.70 2013 Gini (Market Income) 0.60 0.50 0.40 Gini (After-Tax Income) Gini (Pre-Tax Income) 0.30 0.20 Reduction in Gini due to transfers and taxes 0.10 0.00 1990 1995 2000 2005 1980 1985

Source: CBO (2016b).

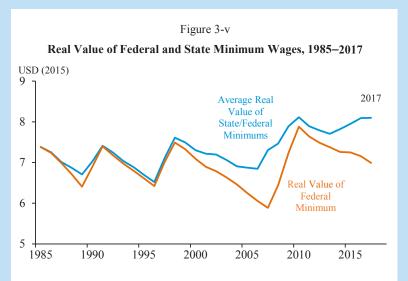
Figure 3-11
Inequality in Market Income, Pre-Tax Income, and After-Tax Income, 1979–2013

Progress Reducing Inequality

### Box 3-4: Additional Actions to Make the **Economy Work for All American**

This chapter focuses on the Administration's accomplishments in restoring growth, guaranteeing access to health insurance, and enacting a fairer tax code. However, the Administration has taken many other critical steps to reduce inequality, including both actions with more immediate effects, such as spurring State action to raise minimum wages, and actions with primarily longer-term effects, such as improving our educational system. This box describes the Administration's actions on wages and education.

Raising Wages: In his 2013 State of the Union address, the President called for an increase in the Federal minimum wage. While Congress has not acted, 18 states and the District of Columbia have enacted legislation raising their minimum wages since that time. In part due to these increases, the decline in the value of the effective minimum wage (the higher of the Federal and State minimum wage in each state weighted by worker hours) has been reversed, and the effective minimum wage has now reached roughly the same inflation-adjusted value it had in 2009 when the Federal minimum last increased (Figure 3-v). However, despite this progress, too many Americans continue to work



Note: Average State and Federal minimums are weighted by statewide weekly worker hours as recorded in the CPS and described further in Autor, Manning, and Smith (2016). For the combined trendline, the Federal minimum is recorded in place of State minimums where the former binds. Source: Autor, Manning, and Smith (2016); BLS; CBO; CEA calculations.

for a minimum wage that is too low, and the President continues to call for a higher minimum wage.

The President has also worked to improve working conditions and wages by strengthening worker protections. As part of this effort, the Department of Labor completed an update to Federal overtime regulations in early 2016, extending overtime protections to more than 4 million additional workers. Unions also play an important role in supporting working conditions and wages, and the President has worked to ensure that the National Labor Relations Board is able to fulfill its role in enforcing workplace protections and upholding the rights of workers. In addition, the Administration has sought to support new approaches to enabling worker voice.

Promoting Educational Opportunity: In contrast to higher minimum wages and changes in tax and transfer policy, which generate immediate reductions in inequality, educational investments pay off over a longer time horizon. Educational investments are critical to ensure equal opportunity for children today and to reduce inequality over the long term. During the recession, the Department of Education provided over \$60 billion in funding to states to support education budgets, and these resources helped prevent layoffs of education workers at a time when State and local spending was being cut. As part of the Recovery Act, the Administration encouraged states to raise educational standards, turn around the lowest-performing schools, develop effective support for teachers and leaders, and create uniform data systems to enhance instruction through the Administration's Race-to-the-Top initiative. Today, as a result of this initiative, nearly every state has adopted college and career-ready standards.

The bipartisan Every Student Succeeds Act, which the President signed into law in December 2015, codifies the requirement that every state set academic standards that prepare students for college and careers, and that the state intervene to improve both their lowest-performing 5 percent of schools as well as schools where too many students do not graduate on time—principles that were central to the funding provided under the Recovery Act. In 2014, the Administration invested \$750 million in new resources to expand access to high quality early education programs, through Early Head Start-Child Care Partnership grants for infants and toddlers and Preschool Development Grants to states. Today, all but 4 States are investing in preschool, with more than 40 percent of four-year olds in the United States enrolled in publicly funded preschool. In addition, the Administration announced the availability of \$135 million in competitively awarded grants to expand Early Head Start and create new Early Head Start-Child Care Partnerships in 2016, building on

\$294 million in newly appropriated funds for fiscal year 2016 to ensure that more Head Start children will receive services for a full school day and full school year. The Administration has also provided new funds to support the implementation of new requirements in the reauthorized Child Care and Development Block Grant Act of 2014.

The Administration has also made progress in promoting college opportunity, affordability, and completion by expanding Pell Grants and tax credits; making student loans more affordable by cutting interest rates and allowing borrowers to cap student loan payments at 10 percent of income; making access to financial aid and college information simpler and faster; and promoting innovation and competition to bring down costs and improve college quality. Today, more students are graduating college than ever, and student loan defaults and delinquencies are trending downward.

Lastly, the Administration has worked to increase training and skills for workers during their careers. In 2015, the President signed into law the first-ever annual funding for apprenticeship grants, totaling \$90 million. These investments follow earlier investments through the American Apprenticeship Grants to promote and expand jobdriven apprenticeship programs in the United States. In addition, the Administration has launched a series of initiatives, partnerships, and grants to facilitate training for the American workforce. In April 2015, the White House hosted an Upskill Summit at which the President called on companies to expand education benefits and training opportunities, and employers have responded to this call—the Aspen Institute's Upskill America Initiative reports that participating companies have enhanced the skills of tens of thousands of frontline workers. The Department of Labor has also awarded a wide variety of competitive training grants. These grants have ranged from TechHire grants, which are supporting public-private partnerships to help train tomorrow's workforce in rapidgrowth sectors, to America's Promise Job-Driven Training grants, which are creating and expanding innovative regional and sector partnerships between community colleges and the workforce system to create more tuition-free education and training programs for in-demand middle and high-skilled jobs across the country.

incomes in the bottom quintile by 18 percent, or \$2,200, and in the second quintile by about 6 percent, or \$1,500, relative to what they would have been under the continuation of 2008 policies (Figure 3-12).9 These policies will also boost incomes in the middle quintile by 0.7 percent, or \$300. In contrast, these policies will reduce the after-tax incomes of very high-income families, particularly those in the top 1 percent. Targeted tax increases will reduce after-tax incomes by 5 percent for the 99th through 99.9th percentiles and reduce after-tax incomes by 10 percent for the families in the top 0.1 percent, a group projected to have average incomes over \$8 million in 2017.

Average tax rates provide an alternative perspective on the impact of these polices. Changes in tax policy since 2009 and tax-related coverage provisions of the ACA will increase the average tax rate for the top 0.1 percent by 7 percentage points in 2017, from 31 percent to 38 percent. For families in the top 1 percent but not the top 0.1 percent, these changes will increase average tax rates by 4 percentage points.

These changes in tax policy and the coverage provisions of the ACA have led to commensurate changes in the distribution of income. As a result of these policies, the share of income received by the top 1 percent will decrease by 1.2 percentage points in 2017, or 7 percent, from 16.6 percent to 15.4 percent (Figure 3-13). The share of income accruing to the bottom 99 percent of Americans will increase by a corresponding 1.2 percentage points. Income shares in the first quintile will rise by 0.6 percentage point, or 18 percent; in the second quintile by 0.5 percentage point, or 6 percent; and in the third quintile by 0.1 percentage point, or 1 percent.

The robust reduction in inequality resulting from these policies is apparent across a wide range of inequality measures (Figure 3-14). The impact of fiscal policies enacted during the Obama Administration on inequality varies by measure, ranging from a 3-percent reduction in the Gini index to a more than 20-percent reduction in the ratio of average incomes in the top 1 percent to the bottom 20 percent, but all measures show a meaningful reduction in inequality. Changes in tax policy and the coverage provisions of the ACA have had their largest effects on very high-income families, where the restoration of Clinton-era tax rates and responsible tax increases to finance the ACA are most important, and in the bottom third of the distribution, where the ACA's expansion of health insurance coverage to 20 million more Americans has had its largest impact. Thus, not surprisingly,

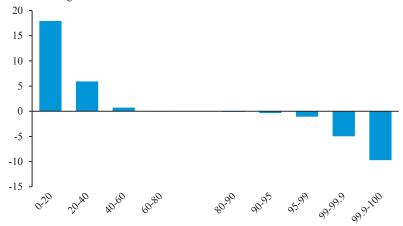
<sup>9</sup> The ACA coverage provisions and tax changes enacted since 2009 have offsetting effects on the 2017 deficit judged relative to a 2008 current-policy baseline, with the coverage provisions increasing the deficit and the tax changes decreasing it. Allocating an additional fiscal adjustment proportional to income to achieve zero net effect on the deficit would not substantially affect the results. Such an adjustment can be critical in assessing the ultimate distributional impact of deficit-financed policy changes.

Figure 3-12

### Percent Change in After-Tax Income by Income Percentile: Changes in Tax Policy Since 2009

and ACA Coverage Provisions, 2017

Percent Change in After-Tax Income

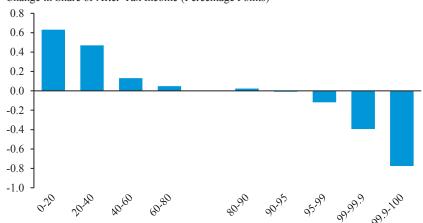


Source: U.S. Treasury, Office of Tax Analysis.

Figure 3-13

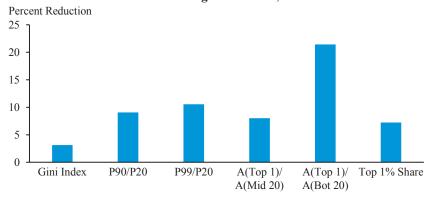
Change in Share of After-Tax Income by Income Percentile: Changes in
Tax Policy Since 2009
and ACA Coverage Provisions, 2017

Change in Share of After-Tax Income (Percentage Points)



Source: U.S. Treasury, Office of Tax Analysis.

Figure 3-14 Percent Reduction in Income Inequality Due to Changes in Tax Policy and ACA Coverage Provisions, 2017



Note: P90/P20 is the ratio of the after-tax income at the 90th percentile of the distribution to the aftertax income at the 20th percentile. P99/P20 is defined similarly. A(Top 1)/A(Mid 20) is the ratio of the average after-tax income in the top 1 percent to the average after-tax income in the middle 20 percent. A(Top 1)/A(Bot 20) is defined similarly. Incomes are adjusted for family size in computing the Gini Index and percentile ratios and for purposes of ranking families in computing ratios of average incomes and income shares.

Source: U.S. Treasury, Office of Tax Analysis.

measures that are most sensitive to these points in the distribution, such as the ratio of average incomes for families in the top 1 percent to those in the bottom quintile, show the largest effects.

# Ohama Administration Achievements Relative to Other Federal Action in Recent Decades

The decrease in income inequality resulting from changes in tax policy since 2009 and the coverage provisions of the ACA is large not only in absolute terms but also relative to previous Federal action to reduce inequality.

There are important limitations and uncertainties in any effort to assign policy changes to particular Presidential administrations. Policies enacted in one administration may phase in through the next administration. Broader economic and demographic changes in one administration will interact with the entire history of policy changes leading up to that point. Polices may be repeatedly extended on a temporary basis and automatic adjustments may be introduced in ways that make it difficult to consistently interpret action and inaction (for instance, the introduction of automatic inflation adjustments for income tax brackets and other parameters of the tax code in the 1980s). Notwithstanding these difficulties, this section compares the anti-inequality accomplishments of the Obama

Administration with those of previous administrations, first with respect to tax policy and then with respect to spending.

Figure 3-15 shows the change in the share of after-tax income accruing to the bottom 99 percent of families attributable to changes in tax policy for Presidential administrations since 1960. The analysis holds the income distribution constant as it existed in 2006 and adjusts income levels for growth in the National Average Wage Index, thus isolating the impact of changes in policy from other sources of variation in tax rates. It focuses on individual income and payroll tax liabilities. The change for each administration is defined as the difference between the share of income received by the bottom 99 percent in the last complete calendar year of that administration and the share in the last complete calendar year of the prior administration.<sup>10</sup> Implicitly, tax liabilities in the final year of the previous administration provide the baseline used to assess changes in tax policy across administrations.

The tax changes enacted during the Obama Administration have had historically large effects on the distribution of income, increasing the share of income accruing to the bottom 99 percent of Americans by about 1 percentage point, an inequality-reducing shift in the tax burden more than twice as large as that achieved during the Clinton Administration, which ranks second by this measure.11

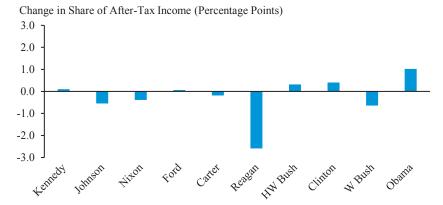
While the Administration's accomplishments are large by almost any measure, different measures of inequality focus on different points in the income distribution and thus can rank administrations in different ways. Under some measures, the Ford Administration, during which the Earned Income Tax Credit was created, ranks first; under others, the Clinton Administration, which substantially expanded the Earned Income Tax Credit and increased top income tax rates, ranks first.

In addition to inequality-reducing changes in tax policy, the President has also signed into law a historic investment in Federal anti-inequality programs. Figure 3-16 shows the change in Federal spending on these programs

<sup>&</sup>lt;sup>10</sup> For purposes of these comparisons, 1963 is treated as the last complete year of the Kennedy Administration. The change for the Kennedy Administration is measured relative to 1960 because the NBER TAXSIM model (on which this analysis relies heavily) can only generate tax liabilities back to 1960.

<sup>&</sup>lt;sup>11</sup> This estimate differs from other estimates presented in this chapter for four reasons. First, this estimate excludes the Medicaid expansion but includes all other ACA coverage and tax provisions, a combination of policies not reflected in other estimates. Second, Treasury estimates incorporate a more complete set of taxes, including corporate, excise, and estate taxes, which is not possible with the NBER Internet TAXSIM model. Third, the Treasury estimates apply to calendar year 2017, while these estimates are based on the distribution of income in 2006 held constant over time. And fourth, the NBER Internet TAXSIM model and CEA imputations underlying Figure 3-15 necessarily differ from Treasury's tax models on a variety of technical dimensions.

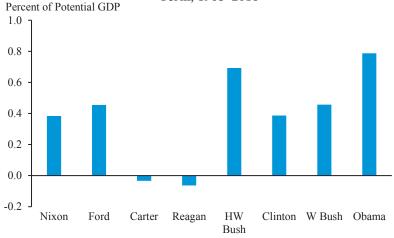
Figure 3-15 Change in Bottom 99% Share of After-Tax Income for a Fixed Pre-Tax Income Distribution, 1960–2016



Note: Share of income received by the bottom 99% of families after Federal income and payroll taxes in the last complete year of each Administration relative to the last year of the prior Administration for a 2006 sample of taxpayers augmented with non-filers constructed from the CPS. Pre-tax incomes adjusted in proportion to changes in the National Average Wage Index.

Source: IRS, Statistics of Income Public Use File; Bureau of Labor Statics, Current Population Survey; National Bureau of Economic Research, TAXSIM; CEA calculations.

Figure 3-16 Change in Spending on Major Anti-Inequality Programs by Term, 1968-2016



Note: Major anti-inequality programs defined as Medicaid/CHIP, SNAP, the refundable portion of the EITC and CTC, SSI, TANF and other family support, educational assistance, Pell grants, housing assistance, the refundable portion of the Premium Tax Credit, and cost-sharing reductions. Source: OMB; CBO; CEA calculations.

as a share of potential GDP by Presidential administrations since 1968. For purposes of these comparisons, the major anti-inequality programs are defined as Medicaid and the Children's Health Insurance Program, the Supplemental Nutrition Assistance Program, the refundable portion of the Earned Income Tax Credit and Child Tax Credit, Supplemental Security Income, Temporary Assistance for Needy Families and other family support, educational assistance, Pell grants, housing assistance, and the ACA's Marketplace financial assistance. Social Security and Medicare are excluded due to their universal nature and because, in the case of Social Security, benefit increases in the last 50 years have often been accompanied by payroll tax increases. In addition, most of the change in Medicare spending over this period reflects changes in demographics, health care costs, and other factors, not changes in policy. Unemployment insurance is also excluded as most variation reflects cyclical factors, not changes in underlying policy.

Under President Obama, the Federal investment in reducing inequality has increased by about 0.8 percent of potential GDP, more than any previous President since the Great Society. Much of this increase reflects the coverage provisions of the ACA and expanded tax credits for working families first enacted as part of the Recovery Act. Federal support for states expanding their Medicaid programs, financial assistance for families purchasing health insurance through the Marketplace, and the Recovery Act's EITC and CTC expansions comprise a more than \$100 billion annual investment in reducing health and income inequality in 2016, amounting to roughly 0.5 percent of potential GDP.

Earlier expansions of the safety net are also apparent in Figure 3-16, including the expansion of the Supplemental Nutrition Assistance Program (then the Food Stamp Program) during the Nixon Administration, the phase in of Supplemental Security Income through the Ford Administration, and the creation of the Children's Health Insurance Program in the Clinton Administration.

A simple comparison of spending over time combines changes in policy with broader economic and demographic changes that affect spending for existing programs. Thus, an increase in Medicaid spending may reflect the introduction of a new and expensive treatment, an eligibility expansion, or other economic changes. For example, spending on inequality-reducing policies, largely Medicaid, rose sharply during the first Bush Administration. However, research finds that most of the increase in Medicaid spending over this period reflects changes in health care prices, the early 90s recession, and other factors, not contemporaneous policy changes (Holahan et al. 1993).

An alternative comparison of each administration's policy accomplishments would focus only on those increases or decreases attributable

to policy changes enacted during each administration, but the length of the historical period, the substantial changes in demographics and the economy, and the number and complexity of policy changes involved make such a comparison infeasible.

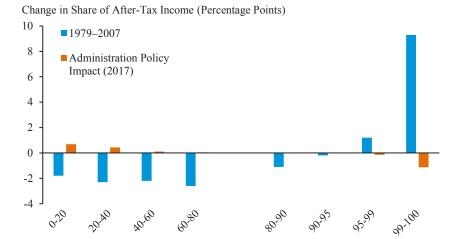
A comparison along these lines, however, would not change the conclusion that the Obama Administration's investments in reducing inequality have been historic, and it would be unlikely to change the relative ranking of the Obama Administration and previous administrations in an important way. As noted above, the increase during the Obama Administration largely reflects new programmatic investments in the form of the coverage provisions of the ACA and expanded tax credits for working families. Much of the increase in the investment in anti-inequality programs during the first Bush Administration, which ranks second by the simple change in spending over time, is attributable to factors other than changes in policy, as discussed above. And the increase in the investment in anti-inequality programs occurring during all other administrations since the Great Society is much more modest than the increase during the Obama Administration.

# A Partial Reversal of Increasing Inequality

The historic investments in reducing inequality made during the Obama Administration have achieved a partial reversal of the increase in income inequality in recent decades. However much more work remains due to the sheer size of the increase in inequality between 1979 and 2007. According to CBO, the share of after-tax income received by the bottom quintile of households fell from 7.4 percent at the business cycle peak in 1979 to 5.6 percent at the business cycle peak in 2007, and the share accruing to the top 1 percent increased from 7.4 percent in 1979 to 16.7 percent in 2007 (CBO 2016b). While CBO's estimates of the income distribution and the Treasury estimates of the distribution of changes in tax policy and the ACA coverage provisions are not precisely comparable due to different methodological choices, they are sufficiently similar to make broad comparisons informative.12

<sup>&</sup>lt;sup>12</sup> The comparisons presented in this chapter implement one adjustment to the Treasury analysis before comparing to CBO. Treasury percentiles are defined to contain an equal number of tax families while CBO defines percentiles to contain an equal number of people. An approximate adjustment is applied to the Treasury figures to put them on a similar equal-people basis that assumes families shifted between percentiles have the average family size of the percentile range into which they are shifted, incomes equal to the boundary between the income classes, and a tax rate equal to the simple average of the tax rate in the classes on either side of the boundary. This adjustment is applied only in determining the fraction of the increase in inequality reversed and the equivalent growth rate; the changes in shares and changes in after-tax income reported in this section are unchanged from the prior section for consistency.

Figure 3-17 Changes in the Distribution of After-Tax Income



Source: CBO (2016b); U.S. Treasury, Office of Tax Analysis; CEA calculations.

The share of after-tax income received by the bottom quintile increased by roughly 0.6 percentage point as a result of laws enacted during this Administration, equivalent to a roll back of roughly a third of the deterioration in the income share for this population between 1979 and 2007 (Figure 3-17). At the top, the policy changes signed into law have reversed roughly a 10th of the increase in the share of after-tax income accruing to the top 1 percent over the last three decades.

Another way of contextualizing the impact of the policies enacted by this Administration is to compare them with the growth rate in incomes. As noted above, the laws enacted during the Obama Administration have boosted incomes in the bottom quintile by about 18 percent. Between 1979 and 2007, immediately prior to the onset of the Great Recession, cumulative growth in after-tax incomes for the bottom quintile amounted to about 45 percent. Thus, these policies provided the equivalent of more than a decade of average income growth for these families.

# NEXT STEPS TO FURTHER BOOST INCOMES, EXPAND OPPORTUNITY, AND REDUCE INEQUALITY

During his eight years in office, President Obama signed into law legislation achieving a historic reduction in inequality through changes in

tax policy and the coverage provisions of the ACA. However, as the preceding section makes clear, even with these accomplishments, much more work remains to be done. In the FY 2017 Federal Budget and elsewhere, the President has proposed an array of policies that would further boost incomes, expand opportunity, and reduce inequality.

# Making Work Pay

Well-paying jobs are essential to reducing poverty and inequality, but too many Americans continue to work for a wage that is too low. Increasing the Federal minimum wage would be an important step in addressing the insufficient rate of wage growth in recent decades. For this reason, the President called for a minimum wage increase in his State of the Union address in February 2013. Since then, 18 states and the District of Columbia have passed increases in their minimum wages, but much more progress needs to be made.

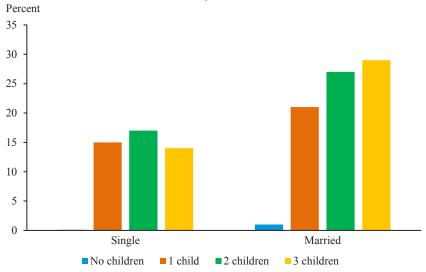
Expanding the EITC—one of the largest and most effective antipoverty programs—also helps make work pay. The FY 2017 budget proposes an expansion of the EITC for workers without dependent children, whose eligibility for only a very small tax credit limits the power of the EITC to reduce poverty for this population (Figure 3-18). Currently, workers without dependent children are the only group of workers taxed into poverty by the current tax code (Marr and Dasilva 2016). Expanding the EITC for workers without dependent children would provide 13 million low-income workers with a tax cut averaging nearly \$500 for each worker, while also providing an additional incentive to work. This expansion would build on the success of the EITC expansions for families with three or more children and for married couples enacted as part of the Recovery Act.

# Investing in Children and Families

Not only is inequality in living standards for children an immediate concern, but recent research highlights the importance of investments in children and families for future outcomes as well (CEA 2014b; CEA 2014c; Furman and Ruffini 2015). The FY 2017 budget proposes a number of inequality-reducing investments in children and families, including in child care, early education, and ending family homelessness.

First, the President has proposed a historic investment in child care to ensure that all working families from low- and moderate-income backgrounds can access safe, affordable, and high-quality care for infants and toddlers. Research finds that quality, affordable child care can promote parental employment and earnings as well as healthy child development, in addition to helping families make ends meet (CEA 2014b).

Figure 3-18 Share of Otherwise-Poor Families Lifted Out of Poverty by the EITC **Based on Family Structure, 2012** 



Source: Crandall-Hollick (2016).

Second, the budget proposes to further expand high-quality early education through the President's Preschool for All Initiative. This initiative would provide all four-year-old children from low- and moderate-income families with access to high-quality preschool through a new Federal-State partnership, while encouraging states to expand those programs to reach additional children from middle-class families. The President would also continue investments in high-quality learning before preschool through expansions of the Early Head Start-Child Care partnership, as well as expansions of home visitation programs for new and expecting parents. A large body of research has found that quality early education programs have high returns for both the participants and for society as a whole (CEA 2016a; CEA 2014b).

Third, the budget puts forward a package of proposals that would strengthen the Temporary Assistance for Needy Families program so it does more to help poor families get back on their feet and work toward selfsufficiency. For example, recognizing that 20 years of frozen funding has eroded the inflation-adjusted value of the block grant, the budget proposes to increase funding for TANF; the additional funds would be coupled with an increased focus on helping families prepare for and find jobs, along with new financial and programmatic accountability standards for states. The budget also includes a TANF Economic Response Fund that would provide budgetary flexibility for additional assistance when economic conditions deteriorate, so as to increase the efficacy of TANF during downturns.

Outside of TANF, the budget proposes to invest \$12 billion to ensure adequate food for low-income children during the summer months, as many low-income children receive food at little or no cost during the school year but lose this support when school is not in session.

Finally, the budget proposes an \$11 billion investment to prevent and end family homelessness by 2020. Reducing homelessness directly improves inequality today, and recent research suggests that moving children and their families to better neighborhoods can generate substantial earnings gains when those children become adults (Chetty and Hendren 2015; Chetty, Hendren, and Katz 2016).

In addition, an expansion of paid leave would also help reduce inequalities in childhood investment, employment, and incomes. While current law allows many workers to take time off without pay to care for a new baby or a sick family member, millions of families cannot afford to do so. Employers are not required to offer paid leave in most states even though research shows that the availability of paid maternity leave increases the likelihood that mothers return to their jobs following the birth of a child, which leads to better outcomes for infants (CEA 2014c).

As documented throughout this report, the ACA has already resulted in an additional 20 million American adults with health insurance and, in doing so, has substantially reduced income inequality. Writing in the Journal of the American Medical Association, the President outlined a number of suggestions as to how the country can continue making progress in expanding health insurance coverage, improving the quality of care, and reducing health care costs (Obama 2016). These suggestions include the adoption of a Medicaid expansion by all 50 states, increasing the financial assistance available to families purchasing Marketplace coverage, and considering a public option to promote additional competition in the exchanges. In addition, as the ACA covers the full cost of State Medicaid expansions only through 2016 before gradually reducing the level of Federal support to 90 percent, the budget proposes to cover the full cost of Medicaid expansion for the first three years after a state expands, regardless of when this expansion occurs, to better support states taking action to expand Medicaid.

# Reforming the Tax System

The budget also proposes responsible tax increases on the most fortunate Americans to finance inequality-reducing investments in working and middle-class families and to drive down future deficits. The budget proposes to reform the taxation of capital income by increasing the top tax rate on capital gains and dividends to 28 percent and by closing a loophole that allows wealthy families to avoid ever paying tax on their capital gains if they hold assets until death. The budget would also reform tax expenditures to limit their value for high-income families and would close loopholes that allow some wealthy business owners to avoid paying Medicare taxes by classifying certain income as neither employment nor investment income. It would also increase the tax paid by the very largest estates. All told, the tax reforms in the budget would reduce the share of income received by the top 1 percent of families by 1.3 percentage points, rolling back an additional 13 percent of the increase in the after-tax income share of the top 1 percent between 1979 and 2007.

### Conclusion

During his eight years in office, President Obama has overseen the largest increase in Federal investment to reduce inequality since the Great Society. The policy response to the Great Recession reduced the unemployment rate relative to what it otherwise would have been by 6 percentage points on average each year between 2010 and 2012 and offset roughly half of the increase in earnings inequality that would otherwise have occurred. The Affordable Care Act and changes in tax policy will boost incomes in the bottom quintile of families by 18 percent in 2017 and increase average tax rates for the highest-income 0.1 percent of families by nearly 7 percentage points. Together, these policies will increase the share of after-tax income received by the bottom 99 percent by 1.2 percentage points in 2017 with a corresponding reduction in the income share of the top 1 percent.

Despite this progress, income inequality remains much higher today than it was a few decades ago, and the President's Fiscal Year 2017 Budget proposes spending and tax reforms that would further reduce inequality. These steps include, among others, reforms to tax benefits for high-income Americans; an expansion of the Earned Income Tax Credit for workers without dependent children; and a landmark commitment to ensuring all low- and moderate-income families have access to quality, affordable child care that allows parents to work or pursue education and training. Taken together, the policies proposed in the budget would build on the progress made in reducing income inequality since 2009, helping to ensure that all Americans have the opportunity to succeed.

# Appendix: Distribution of Changes in Tax Policy SINCE 2009 AND ACA COVERAGE PROVISIONS

Table A1 Distribution of Changes in Tax Policy Since 2009 and ACA Coverage Provisions<sup>1</sup> (2017 Income Levels under 2017 Current Law)

Adjusted Cash Income Percentile <sup>2</sup>	Number of Families	Distribution of Cash Income	Average Federal Tax Rate <sup>3</sup>		Average Transfer and Tax Change	Change in After- Tax	Distribution of After-Tax Income	
			2008 Policy	Current Policy	from 2008 Policy to Current Policy <sup>4</sup>	Income from 2008 Policy to Current Policy <sup>4</sup>	2008 Policy	Current Policy
	(millions)	(%)	(%)	(%)	(\$)	(%)	(%)	(%)
0 to 10 <sup>5</sup> 10 to 20 20 to 30 30 to 40 40 to 50 50 to 60 60 to 70 70 to 80	16.4 17.2 17.2 17.2 17.2 17.2 17.2 17.2	1.0 2.1 2.8 3.7 5.0 6.6 8.5	-0.6 0.7 4.7 7.4 10.0 12.7 14.9	-10.3 -4.5 1.4 5.5 9.2 12.3 14.9 17.6	-2,080 -2,289 -2,079 -1,005 -410 -243 -7	27.1 13.9 9.4 3.4 1.1 0.5 0.0	1.1 2.4 3.2 4.3 5.7 7.3 9.2 11.6	1.4 2.7 3.5 4.5 5.7 7.3 9.2 11.6
80 to 90	17.2	15.5	20.7	20.8	135	-0.1	15.5	15.5
90 to 100	17.2	45.1	26.4	28.9	9,710	-3.4	41.8	40.5
Total <sup>5</sup>	172.1	100.0	20.2	20.9	189	-0.3	100.0	100.0
90 to 95	8.6	11.2	22.9	23.2	541	-0.4	10.8	10.8
95 to 99	6.9	15.2	24.6	25.4	2,706	-1.1	14.4	14.3
99 to 99.9	1.5	9.4	29.0	32.6	31,863	-5.0	8.4	8.0
Top .1	0.2	9.4	31.0	37.7	548,941	-9.7	8.2	7.4

#### Notes

<sup>1</sup> Both current policy and 2008 policy include a list of individual, business and energy tax provisions that are scheduled to expire at the end of 2016 but have been regularly extended by Congress (provisions referred to as "extenders"). Current policy is current law with the extenders. 2008 policy eliminates from current law a number of key provisions enacted during the Obama administration, including: the higher tax rate or tobacco enacted in CHIPRA; the AOTC and the expansions of the child tax credit and EITC enacted in ARRA; provisions in the Affordable Care Act, including expanded Medicaid eligibility, the premium tax credit, cost-sharing reductions, the additional Medicare tax, the net investment income tax, the individual shared responsibility payment, the employer shared responsibility payment, the small business tax credit, the higher floor for itemized deductions for medical expenses, the excise tax on indoor tanning services, fees on branded prescription drug manufacturers and importers, and fees on insured and self-insured plans; and the higher top ordinary and capital gains and dividend tax rates, and the reinstatement of the personal exemption phaseout (PEP) and phaseout of itemized deductions (Pease) enacted in ATRA. 2008 policy also replaces the AMT parameters enacted in ATRA with a more generous AMT "patch." In addition, 2008 policy replaces the estate tax adopted in ATRA with the carryover basis provisions provided for under EGTRRA. Finally, 2008 policy restores the 0.2% FUTA surtax that expired in 2011.

<sup>2</sup>Cash Income consists of wages and salaries, net income from a business or farm, taxable and tax-exempt interest, dividends, rental income, realized capital gains, cash and near-cash transfers from the government, retirement benefits, and employer-provided health insurance (and other employer benefits). Employer contributions for payroll taxes and the federal corporate income tax are added to place cash on a pre-tax basis. Families are placed into deciles based on cash income adjusted for family size, by dividing income by the square root of family size. Percentiles begin at family size-adjusted cash income of: \$10,902 for 10 to 20; \$16,165 for 20 to 30; \$21,713 for 30 to 40; \$28,753 for 40 to 50; \$37,516 for 50 to 60; \$48,381 for 60 to 70; \$61,100 for 70 to 80; \$80,449 for 80 to 90; \$117,224 for 90 to 95; \$165,373 for 95 to 99; \$379,371 for 99 to 99.9 and \$1,734,164 for Top .1.

3 The taxes included are individual and corporate income, payroll (Social Security, Medicare and unemployment), excises, customs duties, and estate and gift taxes. Individual income taxes are assumed to be borne by payers, payroll taxes (employer and employee shares) by labor (wages and self-employment income), excises on purchases by individuals in proportion to relative consumption of the taxed good and proportionately by labor and capital income, excises on purchases by businesses and customs duties proportionately by labor and capital income, and estate and gift taxes by decedents. The share of the corporate income tax that represents cash flow is assumed to have no burden in the long run; the share of the corporate income tax that represents a tax on supernormal returns is assumed to be borne by supernormal corporate capital income as held by shareholders; and the remainder of the corporate income tax, the normal return, is assumed to be borne equally by labor and positive normal capital income. The denominator for the

tax rates is eash income under 2017 current law, including ACA Medicaid expansion.

<sup>4</sup> Transfers (e.g. Medicaid) are treated as negative taxes for calculating total changes. The ACA coverage provisions are expanded Medicaid eligibility, the premium tax credit, cost-sharing reductions, the individual shared responsibility payment, the employer shared responsibility payment, and the small business tax credit. Pre-ACA, after-tax income under 2008 policy is the denominator used for calculating the percentage changes in after-tax income due to the transfer and tax changes.

Families with negative incomes are excluded from the lowest income decile but included in the total line. Source: Department of the Treasury, Office of Tax Analysis.