

115th CONGRESS
1st Session

} HOUSE OF REPRESENTATIVES {

REPORT
115-22

THE 2017 JOINT ECONOMIC REPORT

R E P O R T

OF THE

**JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES**

ON THE

**2017 ECONOMIC REPORT
OF THE PRESIDENT**

**TOGETHER WITH
MINORITY VIEWS**



FEBRUARY 28, 2017. — Committed to the Committee of the Whole House on the state of the Union and ordered to be printed

U.S. GOVERNMENT PUBLISHING OFFICE
WASHINGTON: 2017

II

JOINT ECONOMIC COMMITTEE

[Created pursuant to Sec. 5 (a) of Public Law 304, 79th Congress]

HOUSE OF REPRESENTATIVES

Patrick J. Tiberi, Ohio, Chairman
Erik Paulsen, Minnesota
David Schweikert, Arizona
Barbara Comstock, Virginia
Darin LaHood, Illinois
Francis Rooney, Florida
Carolyn B. Maloney, New York
John Delaney, Maryland
Alma S. Adams, Ph.D., North Carolina
Donald S. Beyer, Jr., Virginia

SENATE

Mike Lee, Utah, Vice Chairman
Tom Cotton, Arkansas
Ben Sasse, Nebraska
Rob Portman, Ohio
Ted Cruz, Texas
Bill Cassidy, M.D., Louisiana
Martin Heinrich, New Mexico, Ranking
Amy Klobuchar, Minnesota
Gary C. Peters, Michigan
Margaret Wood Hassan, New Hampshire

WHITNEY K. DAFFNER, *Executive Director*

ABE RAKOV, *Democratic Staff Director*

LETTER OF TRANSMITTAL

February 28, 2017

HON. PAUL RYAN
Speaker, U.S. House of Representatives
Washington, DC

DEAR MR. SPEAKER:

Pursuant to the requirements of the *Employment Act of 1946*, as amended, I hereby transmit the 2017 Joint Economic Report. The analyses and conclusions of this Report are to assist the several Committees of the Congress and its Members as they deal with economic issues and legislation pertaining thereto.

Sincerely,

Patrick J. Tiberi
Chairman

CONTENTS

Chairman’s Views	1
<i>No Resurgence from the Recession</i>	<i>2</i>
<i>Constrained Potential</i>	<i>5</i>
<i>The Obama Administration’s Perspective.....</i>	<i>6</i>
<i>What Ails the Economy?</i>	<i>7</i>
<i>Raising our Economic Potential</i>	<i>8</i>
<i>Long-term Productivity and Long-term Growth</i>	<i>8</i>
<i>Untapped Export Potential.....</i>	<i>9</i>
Conclusion.....	10
Chapter 1: Assessing the Economic Recovery	11
A Lackluster, Uneven, and Slow Recovery	11
<i>Slow Recovery</i>	<i>12</i>
<i>Uneven Recovery.....</i>	<i>15</i>
Four Continued Structural Challenges: Productivity, Inequality, Participation, and Sustainability	20
<i>Fiscal Sustainability.....</i>	<i>20</i>
<i>Labor Force Participation</i>	<i>22</i>
<i>Inequality.....</i>	<i>23</i>
<i>Productivity</i>	<i>26</i>
Conclusion.....	27
<i>Recommendations</i>	<i>29</i>
Chapter 2: Macroeconomic Outlook	31
Near-Term Outlook	31
<i>Potential GDP</i>	<i>32</i>
<i>The Labor Market</i>	<i>33</i>
<i>Investment</i>	<i>36</i>
<i>Productivity.....</i>	<i>38</i>
<i>Output.....</i>	<i>40</i>
<i>Monetary Policy</i>	<i>42</i>
Long-Term Outlook	44
<i>Federal Borrowing and Mandatory Spending</i>	<i>44</i>
<i>A Distressing Legacy.....</i>	<i>48</i>
<i>A Sustainable Way Forward</i>	<i>49</i>
Conclusion.....	50
<i>Recommendations</i>	<i>51</i>
Chapter 3: Addressing Inequality in the Context of Mobility	52
Mobility Matters More	52

<i>Focus on Moving Americans Out of Poverty</i>	53
<i>Returning to Opportunity in Reward of Work</i>	54
<i>The Importance of Two-Parent Households</i>	57
<i>Redistribution and Taxes</i>	59
<i>Health Insurance Coverage and Work Incentives</i>	64
<i>ARRA and Economic Growth</i>	66
<i>The Obama Administration’s Record on Inequality and Mobility</i>	67
Conclusion	70
Chapter 4: Confronting Health Care Challenges	71
The Flawed Legacy of the Affordable Care Act	71
<i>A Failed Rollout and New Federal Command to Purchase Insurance</i>	71
<i>Subdued Enrollment and Missing Millennials</i>	73
<i>Insurers Leaving the Marketplace</i>	77
<i>The Obamacare CO-OP Implosion</i>	78
<i>Rising Rates</i>	80
<i>“If You Like Your Insurance...”</i>	83
<i>Employer-Sponsored Insurance under the ACA</i>	83
<i>“I will not raise taxes on the middle class...”</i>	85
<i>Addressing the Costs of Health Care</i>	87
Solutions for Consumer-Driven Health Care	89
<i>A Better Way</i>	90
<i>Consumer-Directed Health Care</i>	90
<i>Price Transparency in Health Care</i>	91
<i>Health Insurance Portability</i>	91
<i>Purchasing Coverage across State Lines</i>	92
<i>Expanding Opportunities for Pooling</i>	93
<i>Protecting Employee Wellness Programs</i>	93
<i>Protecting Flexibility for Employers to Self-Insure</i>	94
<i>Medical Liability Reform</i>	94
<i>Pre-Existing Condition Coverage and Other Reforms</i>	95
<i>Continuous Coverage Protections</i>	95
<i>One-Time Open Enrollment</i>	96
<i>Fixing Age Rating Bands</i>	96
<i>Grants for State Innovation</i>	96
<i>Robust High-Risk Pools</i>	97
<i>The Need for Medicaid Reform</i>	97
<i>Fixing Obamacare’s Medicaid Trap</i>	98
<i>More Medicaid Choices for States</i>	99
<i>Promoting Innovation in Health Care</i>	100
<i>Preserving and Protecting Medicare</i>	100
<i>Repeal IPAB</i>	101

VII

The Status Quo is Unsustainable101
Strengthening Medicare Advantage101
Merging Medicare Parts A and B and Other Reforms102
Protect Flexibility in Doctor-Patient Relationships102
Information Sharing in Medicare: Medicare Compare103
Greater Choice and Competition through a Premium Support Option.....103
Conclusion.....103
Recommendations104

Chapter 5: Addressing Higher Education.....105

Policy Lessons on Higher Education.....105
America’s College Promise106
Financial Markets and Student Loans107
Rising Tuition109
Flexible Repayment111
The President’s Recovery.....113
Challenges for those from Disadvantaged Backgrounds114
Income Inequality and the Incentives116
Moving Forward117
Improving PreK-12 Education119
Conclusion.....120
Recommendations120

Chapter 6: Strengthening the Financial and Regulatory System.....122

Introduction122
Too Big to Fail123
The Financial Stability Oversight Council.....125
The Consumer Financial Protection Bureau126
The Securities and Exchange Commission.....127
Unintended Consequences: Small and Community Banks127
Financial Innovation130
General Regulatory Oversight133
Conclusion.....136
Recommendations136

Chapter 7: Addressing Climate Change.....138

Introduction138
Efficient Global Resource Allocation.....139
Opportunities for U.S. Industry.....141
“All-of-the-Above” Strategy142
Economies and Diseconomies of Scale143
Adaptation144

VIII

U.S. Leadership145
Conclusion.....147
Recommendations147

Chapter 8: The Missing Chapter on Tax Reform.....149

The Connection between Tax Reform and Economic Growth.....149
A Lost Opportunity for Pro-Growth Reform150
The Highest Corporate Tax Rate in the Developed World151
International Tax Systems153
Passthrough Businesses and the Individual Tax Rate155
Double Taxation of Savings and Investment157
Cost Recovery and Investment161
Should Death Be a Taxable Event?163
The Cost of Unnecessary Complexity.....165
Conclusion.....167
Recommendations167

Endnotes.....169

Minority Views of Ranking Member Martin Heinrich.....200

Introduction: Progress Made Under the Obama Economy and the
Challenges Ahead.....206

The Challenge of and Imperative for Reducing Inequality210
Inequality is an Impediment to Overall Economic Prosperity ..210
*The Scale and Causes of Rising Inequality in the United States*212
*Progress Tackling Runaway Inequality under the Obama
Administration*215
*Why President Trump’s and Congressional Republicans’ Policies
Will Escalate Inequality*216
TAX REFORM.....216
DEREGULATION.....218
WORKER PROTECTIONS.....219
THE AFFORDABLE CARE ACT220
Conclusion.....221

The Road Ahead for Americans’ Health Care System.....222
Before the 2010 Affordable Care Act222
Tabulating the Benefits from Health Reform224
INDIVIDUAL MARKETPLACE.....224
PRIVATE INSURANCE REFORMS225
EXPANDED MEDICAID COVERAGE225
MEDICARE COST SAVINGS FOR SENIORS AND TAXPAYERS ..226

IX

EMPLOYER-BASED COVERAGE.....227
TAMING HEALTH CARE COSTS227
Republicans' Plan to Reverse Progress228

Issues in Higher Education Quality, Affordability, and
Accessibility231
Labor Market Benefits of Education234
Macroeconomic Benefits235
The Public Role in Higher Education236
*What is Needed to Improve Student Access and Benefits from
Higher Education*238
 AFFORDABILITY238
 ACCOUNTABILITY.241

CONNECTING TO ELEMENTARY AND SECONDARY
EDUCATION.242
Conclusion.....243

Economic Risks of and Opportunities of Climate Change244
*Hidden and Explicit Pollution Subsidies Distort Business and
Consumer Choices*245
Risks of Reversing Progress248
Missing Opportunities to Lead a New Energy Revolution252
Conclusion.....254

Endnotes.....255

115th CONGRESS
1st Session

}

HOUSE OF REPRESENTATIVES {

REPORT
115-22

THE 2017 JOINT ECONOMIC REPORT

FEBRUARY 28, 2017. – Committed to the Committee of the Whole House on the
state of the Union and ordered to be printed

MR. TIBERI, from the Joint Economic Committee,
submitted the following

R E P O R T
together with
MINORITY VIEWS

**Report of the Joint Economic Committee on the 2017 Economic Report of the
President**

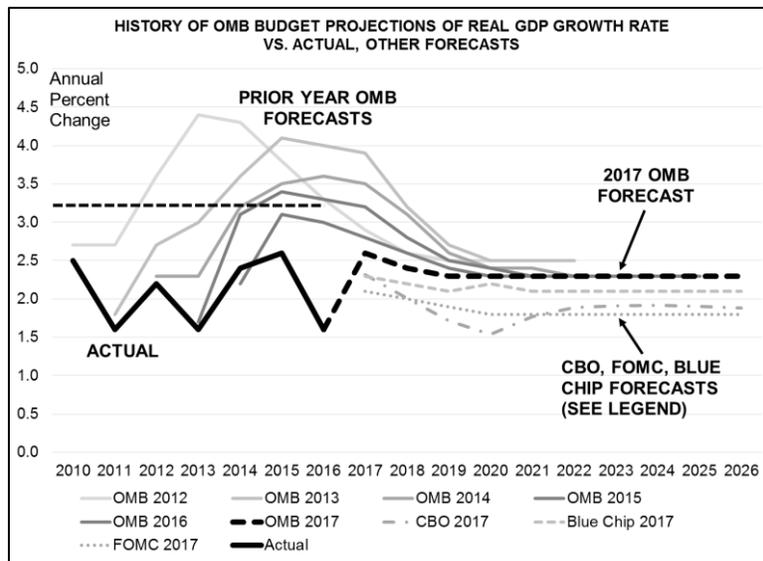
CHAIRMAN’S VIEWS

The Obama Administration’s final *Economic Report of the President and the Annual Report of the Council of Economic Advisers (Report)* continues the pattern of previous reports that have misdiagnosed the reasons for our slow economic recovery and advocated misguided policies as a response. These policies have led to a steady decline in America’s economic potential. The Joint Economic Committee (JEC) Majority offers a different vision that will unleash our economy’s capacity to grow, produce, create jobs, boost wages, and compete in the 21st century.

No Resurgence from the Recession

The economy never surged back from the last recession despite the Obama Administration's repeated promises. Since the beginning, the Administration predicted again and again that its policies would accelerate economic and job growth. As each year passed without a growth surge, it postponed the projected timing and tempered its outlook but did not give up on predicting a surge until its final forecast in 2016. That forecast projected virtually flat annual growth of real Gross Domestic Product (GDP) for the next ten years, far below the postwar average of 3.2 percent (the straight dotted line on the left side of Figure 1).

Figure 1

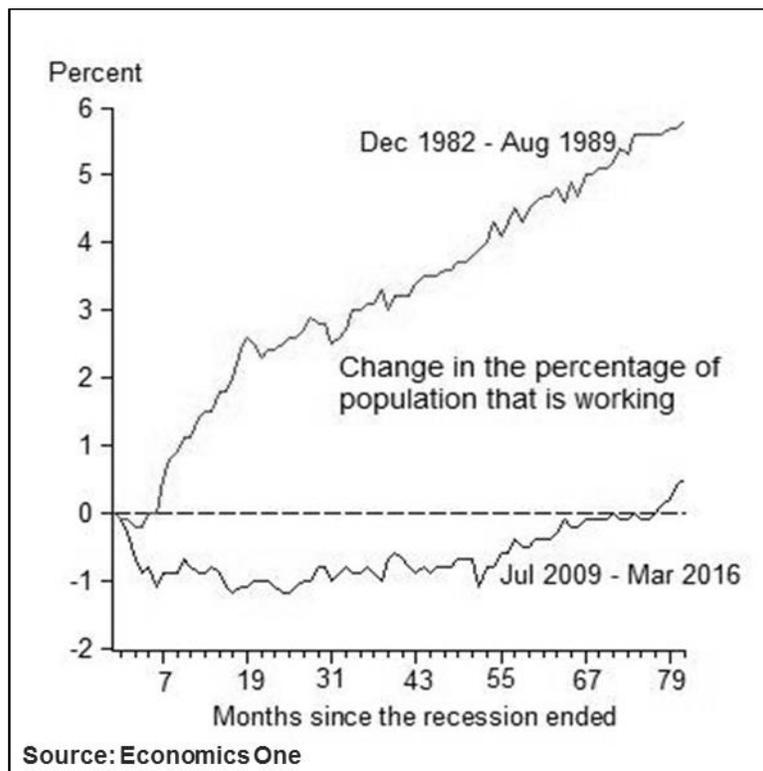


A low unemployment rate does not mean that if more jobs were available there would not be workers to fill them, nor does a long string of job gains by itself imply anything about potential employment or hours worked. The lower line of Figure 2, representing employment gains in proportion to population size since the end of the last recession captures how weak the jobs recovery is that the Trump Administration is inheriting from the Obama Administration and that many people who could work do

not have a job (see Chapter 2 for a detailed discussion). In contrast, the upper line in Figure 2 shows the proportional employment gains during the Reagan recovery from the country's previous severe recession.

Figure 2

EMPLOYMENT-TO-POPULATION RATIOS

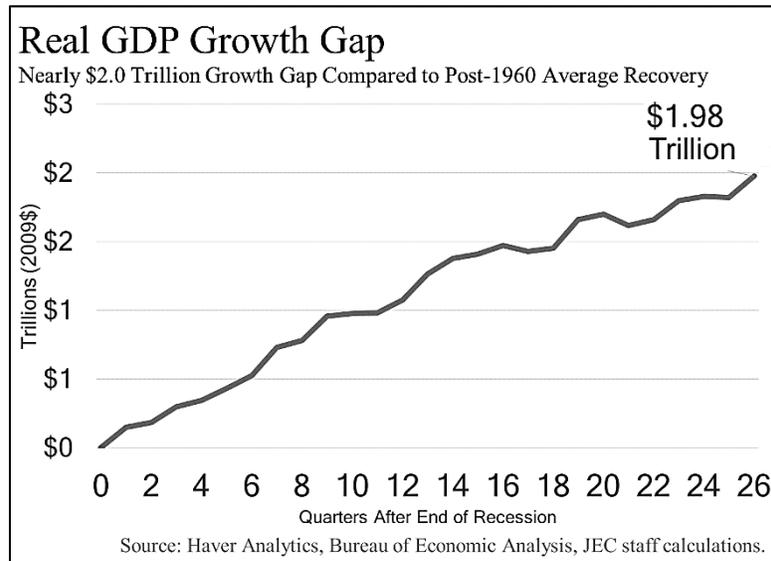


Source: "Economics One," a blog by John B. Taylor, "Economic Exasperation," April 8, 2016.

The Committee Majority has documented the large shortfall in jobs and GDP through the recovery, most comprehensively in its *JEC Response* to the Obama Administration's 2014 *Report*. The GDP gap relative to the average of other postwar recoveries was \$1.5 trillion at the time. The *JEC Response* of 2016 reported a gap of \$1.98 trillion in 2009 dollars (see Figure 3),¹ but this recovery has taken so long that ongoing comparisons to the past lose some

meaning because prior recoveries had growth surges that ebbed as the economy returned to potential.

Figure 3



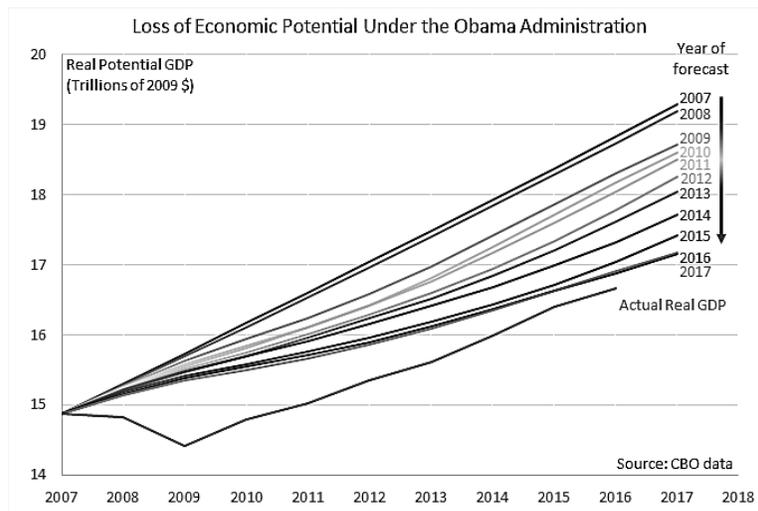
With each disappointing year of the Obama Administration, its excuses continued: the recession was worse than expected, its financial origins held back the recovery, other countries were recovering too slowly, the population is aging, and secular stagnation has set in. But the excuses did not raise anything new or unforeseen. For example, in January 2009, the incoming Administration released its first projection of a vigorous rebound resulting from its stimulus package when the unemployment rate was 7.8 percent and rising rapidly, and it was obvious at the time that a severe financial crisis had just occurred.² The impending retirement of baby boomers also was no surprise. Additionally, economic recoveries usually are slower in other major countries than in the United States, and “secular stagnation” is merely a label applied to speculative theories of why an economy may fail to grow.³

From the outset, the Obama Administration overestimated and oversold its policies and never admitted it.⁴

Constrained Potential

The failure to surge back has left the economy below its potential output. CBO has repeatedly delayed the projected return of the economy to potential even as it has repeatedly lowered its estimate of what that potential output could be (see Figure 4).⁵

Figure 4
POTENTIAL GDP



Slack in the economy is also the reason why seven-and-a-half years after the recession ended the Federal Reserve (Fed) is still holding the Federal funds rate close to zero and maintains an enormous balance sheet nearly four times the pre-crisis size. This extraordinary monetary policy risks asset bubbles among other distorting effects, and several Federal Open Market Committee (FOMC) members have wanted to retreat from it for a long time. The Fed vice chair had signaled four rate increases in 2016, but due to economic weakness, there was only one 0.25 percentage point increase implemented at the end of the year.⁶

The lackluster recovery and the diminished economic potential have real consequences. Only 5.5 million more people are gainfully employed compared with the pre-recession peak in November 2007, while the U.S. working age population has increased by 21 million since then. The ranks of the long-term unemployed swelled, millions of working age people no longer even bother to look for work, and many people are working part-time because they cannot find full-time jobs.

Among the long-term consequences are slow wage growth and heightened fiscal pressures from accumulating public debt. Large and expanding debt is driven by growing mandatory spending programs and Federal revenues that are lower than they could be due to slow economic growth.

The Obama Administration's Perspective

The *Report* recognizes the importance of economic growth for employment and income when it credits the *American Recovery and Reinvestment Act* with mitigating the recession's job loss (p. 152), but post-recession it praises expanded government benefits and increased taxes on high earners for reducing inequality (pp. 152-3).

First, the problem is not inequality, but persistent poverty that government handouts cannot solve. Artificially raising the income of struggling Americans with government transfers does not lead them to self-sufficient, middle-income status, and *lowering* the income of top earners does not help low-income families. For the *Report* to represent the latter as an accomplishment is peculiar to say the least. In fact, since most of the top earners are small business owners, reducing the income they could use to create and expand jobs or pay higher wages destroys opportunities for low-income Americans to earn a better living.

The number of people below the poverty line rose steeply during the recession and only declined somewhat in the last two years. It

remains above 40 million people, a higher level than in more than half a century. Throughout the weak recovery, unemployment rates among minorities have been much higher than the average rate, particularly among African Americans. The *Report* claims the Administration's policies raised average household incomes and lessened inequality but does not mention the dire conditions faced by many who cannot find employment. Faster economic growth and job creation are critical to the welfare of those in greatest need and are far more important for their long-term prospects than any government program. (See Chapter 3 for initiatives to help move Americans out of poverty.)

Second, government transfers should not be central to the economy and the society; they should provide a safety net and have a structure that does not interfere with private incentives to create and make the most of economic opportunities.

To increase Americans' standard of living, the most urgent need is to accelerate economic growth and raise it back to its full potential.

What Ails the Economy?

The U.S. economic growth potential has been repeatedly downgraded because the government has continually tightened and added policy constraints on the private sector. With every new regulatory burden on production or permit delay to break ground on a new project, every increase in cost from a government-mandated benefit, and every tax increase (or failure to address international tax disadvantages), business is forced to curtail how much it invests, produces, hires, and raises wages, leading to fewer jobs and a smaller supply of U.S. goods and services. Similarly, with every government transfer payment or benefit, the supply of labor shifts to the left as well. These constraints have ratcheted output ever further below potential. This is what explains Figure 4.

Raising our Economic Potential

Our most pressing problem from a macroeconomic perspective is slow economic growth and a growing Federal debt burden. The solution to slow growth is lifting the artificial constraints and disincentives imposed by government on the private market economy—this can be done through tax and regulatory reform. The solution to the Federal debt problem is faster economic growth and holding Federal spending to a lower, relatively stable, share of the economy, which requires containing mandatory spending programs that are on an unsustainable path. If we take steps to limit mandatory spending growth and grow the economy, we can head off market worries that the debt will hamstring the government and crowd out private sector spending.

Borrowing should not be a way to avoid making necessary choices. Every administration has its priorities. Those of the Obama Administration were different from those of the one before it and those of the Trump Administration again are different. But a policy debate must take place within the limits of a budget.

The previous Administration has left much less fiscal space as publicly held debt has more than doubled in size relative to the economy. Cutting waste is one important part of managing spending and deficits but another crucial part is to make credible progress on deescalating future spending commitments that cast a shadow over current spending requirements and future U.S. creditworthiness. That will help to keep financial markets calm and create room to deal with any national emergencies that may arise. (See Chapter 2 for analysis and some specific recommendations.)

Long-term Productivity and Long-term Growth

Of course, we must position our financial, tax, health care, and educational systems for long-term stability, and with the right incentives to increase productivity and serve our citizens well. (Chapters 4, 5, 6 and 8 offer technical discussions.) The United

States has attained success, at times even excellence, in some aspects of all these areas, and provided positive examples that other countries emulated. The U.S. model that achieved good results always relied on the private market economy and the resourcefulness of the American people before involving the government too heavily. We must return to that approach to be successful again.

This also applies to being good stewards of the environment and the global climate. We must explore ways to make the biggest possible difference in preserving the earth while playing to our economic and technological strengths. Many areas around the world live in poor economic and environmental conditions and some are giving rise to increasing greenhouse gas emissions. Economic development and technological advancement can be the answer to all three problems, and the United States can help through expanded trade and investment.

Untapped Export Potential

The last Administration executed its environmental policy with mandates and constraints on the domestic economy and turned away from various resources and technologies. It made no concerted effort to direct American commercial know-how to major sources of pollution and greenhouse emissions outside our borders. Trade and foreign investment can bring home earnings to the United States and create good manufacturing jobs, while producing equipment and American fuels for export, if the investment is focused and conditioned appropriately. We should explore opportunities for increasing U.S. exports of domestic resources and technical equipment to locations where they could do much to raise incomes and living standards, improve environmental conditions, and reduce greenhouse gas emissions by commercially beneficial deals. (Chapter 7 provides further detail.)

CONCLUSION

The last Administration has left a legacy of severe economic challenges in multiple areas that we now must address after losing nearly a decade to meet them. Chapter 1 provides an overview of these challenges. Notwithstanding the degree of difficulty and the shortness of time, we should be optimistic that the American economy can rise to the occasion once the government gets out of the way and allows it to reach its full potential.

The following chapters respond to corresponding chapters in the *Economic Report of the President*; they conclude with specific policy recommendations. The final *Response* chapter addresses tax reform, a subject the 2017 *Economic Report of the President* failed to discuss in a meaningful way.

¹ Report of the Joint Economic Committee of the United States on the 2016 Economic Report of the President, March 1, 2016, p. 35.

² “The Job Impact of the American Recovery and Reinvestment Plan,” by Christina Romer and Jared Bernstein, released January 10, 2009. Dr. Romer was President Obama’s first CEA chair and Dr. Bernstein was Vice President Biden’s first chief economist and economic advisor.

³ Former National Economic Council Director Larry Summers has invoked the concept after leaving the Obama White House. Conceived initially in the Great Depression, the postwar economic boom proved it wrong.

⁴ President Obama did finally admit that there were fewer “shovel ready” infrastructure projects than anticipated.

⁵ Interestingly, Larry Summers, the Obama Administration’s former National Economic Council’s director has drawn attention to the CBO’s progressive downgrading of the economy’s potential.

⁶ Federal Reserve Vice Chairman Stanley Fischer Speaks with CNBC’s Steve Liesman on “Squawk Box,” CNBC, January 6, 2016; <http://www.cnbc.com/2016/01/06/cnbc-exclusive-cnbc-transcript-federal-reserve-vice-chairman-stanley-fischer-speaks-with-cnbc-steve-liesman-on-squawk-box-today.html>.

CHAPTER 1: ASSESSING THE ECONOMIC RECOVERY

- The *2017 Economic Report of the President* claims “great strides that the Nation has made in building a stronger foundation for future prosperity.”¹
- However, after a slow, still incomplete economic recovery after seven-and-one-half years, the Obama Administration’s own growth projections fall short of historical standards.
- The *Report* fails to acknowledge
 - Any problems with Obama Administration policies;
 - The severity of challenges left behind to reconstitute economic growth potential, contain escalating mandatory spending, and manage an enormous Federal debt.
- A radical change in economic policy is required to return liberty and bountiful opportunity to America.

A LACKLUSTER, UNEVEN, AND SLOW RECOVERY

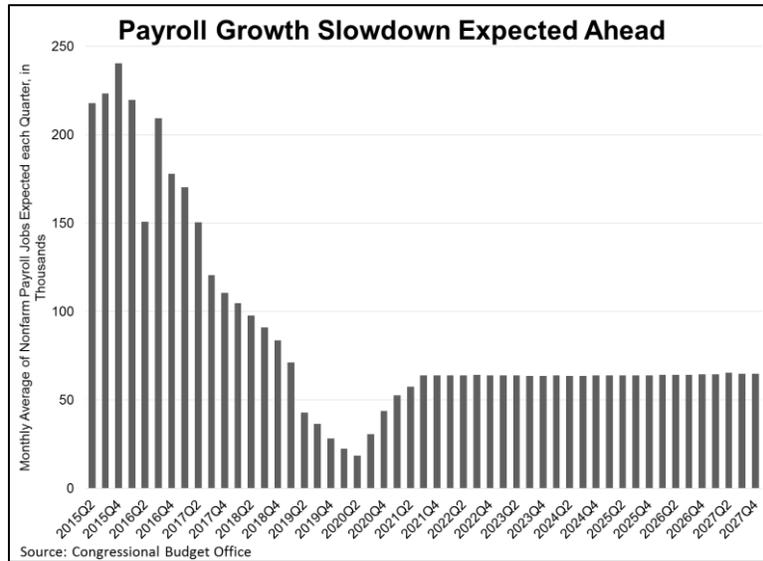
Over the last eight years, the United States experienced a lackluster economic recovery from a severe recession. For all of the emphasis that the *2017 Economic Report of the President and the Annual Report of the Council of Economic Advisers* (CEA) (ERP, or *Report*) places upon the Obama Administration’s efforts to combat the effects of the recession, much less economic progress occurred than the *Report* claims.

Slow Recovery

The *Report* notes that, as of the third quarter of 2016, “the U.S. economy was 11.5 percent larger than at its peak before the crisis,”² however, that represents only a meager average annual growth of 1.25 percent, less than half the 3.4 percent average annual real GDP growth during the prior 50 years.³ While recovery periods have lengthened over the last half century, the last recovery—still not complete after more than seven years—is so long that the Committee Majority views the cumulative Federal fiscal and regulatory policies of the Obama Administration as the main cause. As discussed in the following chapters of this *Response*, there are strong indications the economy could grow faster.

In its January 2017 *Budget and Economic Outlook*, CBO projected that nonfarm payroll growth will continue to slow over the 2022-2027 period, adding only 65,000 jobs per month on average (see Figure 1-1),⁴ which is down significantly from CBO’s January 2016 projection of approximately 75,000 jobs added per month over the 2021-2026 period.

Figure 1-1



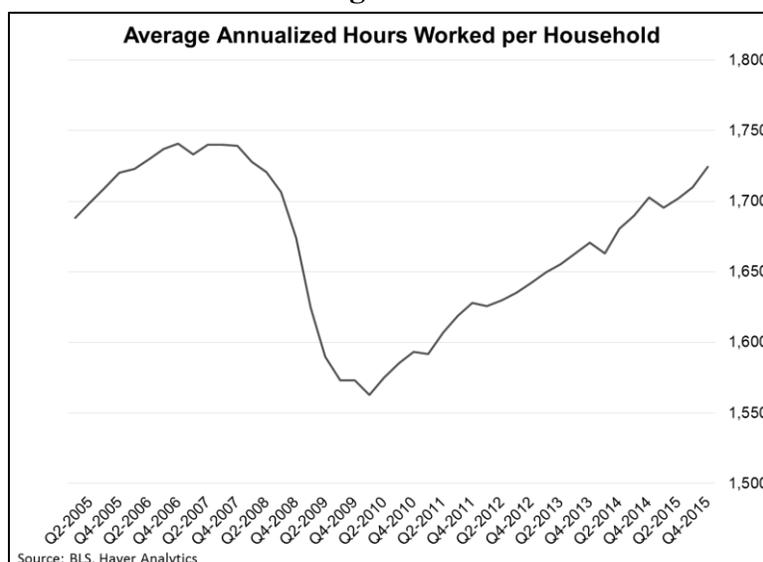
While related to slower population growth, the United States actually has a relatively more favorable population trajectory than other developed economies due in part to anticipated growth in immigration.⁵ While population increases and the labor force participation rate have been slowing, growth-oriented policies can still brighten the economic outlook for the United States.

Since the beginning of the recovery, real after-tax income per person grew only 1.4 percent annually on average, and real median household income only began growing again in 2015 after years of decline and stagnation following its previous 2007 peak. It still remains below the 2007 level and the previous record peak in 1999.⁶ A 2016 study from Pew Charitable Trusts found that the overall U.S. growth rate in inflation-adjusted personal income from the final quarter of 2007 through the final quarter of 2015 is 1.6 percent, with rather uneven growth when looking at each state. Growth ranged from 5.1 percent in North Dakota and 3.0 percent in Texas to 0.2 percent in Nevada and 0.6 percent in Illinois.⁷

The *Report* prefers to highlight hourly wage growth over previous recoveries in its Figure 1-3 to demonstrate the relatively strong growth in hourly wages over the current recovery. Real wage growth picked up in pace, including real median household income growth setting a record pace from 2014 to 2015.⁸ However, the quicker pace late in the recovery obscures an unusually sluggish growth period in the aftermath of the 2007-09 recession. As discussed in detail in Chapter 2 of this *Response*, average income growth in this recovery is about half the rate of other post-1960 recoveries.

Moreover, focusing on growth in hourly wages can obscure other factors that affect household income, including reduced weekly hours worked or involuntary part-time employment. As shown in Figure 1-2 below, as a rudimentary measure of total hours worked adjusted for growth in the number of households, the average household is working less hours on an annual basis than before the recession.

Figure 1-2



As discussed in greater length in Chapter 2 of this *Response*, other measures show sluggish, and at times, divergent negative trends compared to the data that the *Report* prefers to highlight, particularly when compared with previous recovery periods. The *Report* even acknowledges that the U-6 alternative unemployment measure, which comprises a broader definition of unemployment, remains elevated, nearly eight years after the recession.⁹

Uneven Recovery

The *Report* glosses over the relative unevenness of the recovery, whether geographically or generationally measured. In geographic measures, a 2016 study from the Economic Innovation Group found that over 50.4 million Americans live in “distressed communities,” which are zip codes where, on average, over 55 percent of the population is not working and more than a quarter are in poverty.¹⁰

From a generational perspective, recent evidence shows that the recovery has been uneven between millennials and baby boomers as well. While millennials age 16-to-24 years old and 25-to-34 years old have not seen their employment as a share of their population rise very much since its recent nadir shortly after the recession, baby boomers age 55-to-64 years old have seen their employment-to-population ratio rise close to their previous record peak of 62.8 percent in March 2008, which occurred in the middle of the recession.¹¹ Part of these trends can be explained by millennials attaining more education and launching their careers later, as well as by baby boomers delaying retirement in favor of work or because they are unable to retire comfortably in today’s current low interest rate environment. Beneath the national aggregate numbers other factors that impede employment expansion and reentry into the workforce at the local level may also contribute to these trends.

Why the Recovery was Slow and Uneven

The Committee Majority's view is that Obama Administration policies failed to engage effectively with the market economy. The prevailing philosophy was that markets often fail and that the government must actively correct market failures once they occur and impose market controls to prevent new ones from occurring. The policies built on this philosophy ignore decades of countervailing economic research prompted by the strong belief in government's ability to correct market imperfections in the years after World War II. Dismal productivity increases and stagflation in the 1970s resulted from the economic regulation of individual industries and efforts to "fine tune" the macroeconomy. The Carter Administration was actually the first to deregulate several industries. The Reagan Administration subsequently relieved more of the economy of government controls leading to a long period of strong economic performance and muted business cycles called the "Great Moderation."

The CEA shows no introspection in this regard. There is no "lessons learned" section in the *Report* that could be useful to policymakers. Instead, the *Report* repeats claims of success for major policies designed by the last Administration and the Democratic Congress early in President Obama's first term without acknowledging how controversial their impacts have been: The *American Recovery and Reinvestment Act (ARRA)*; the *Affordable Care Act (ACA, or Obamacare)*; the Administration-supported *Wall Street Reform and Consumer Protection Act (Dodd-Frank)*, climate and environmental policy that had a false start with the failed *American Clean Energy and Security Act of 2009 (ACES, or Waxman-Markey)* bill but was advanced by regulatory fiat, and student loan policy.

While no one expects the CEA to be critical of the Administration that employs it, *Economic Reports of the President* issued by the Obama Administration have tended toward the genre of infomercials—full of praise for Administration policies without comparative evaluation of alternative policy approaches or consideration of costs.

For example, the *Report* repeats the claims that ARRA “saved or created 6 million job-years through 2012 and raised the level of GDP by between 2 and 2.5 percent in FY 2010 and part of FY 2011,”¹² even though one cannot know whether a given job would have been “saved” or “created” without ARRA. The same models used to predict ARRA’s beneficial effects were later used to support estimates of what would have been forgone without it. This point had been made long ago, including by the JEC at ARRA’s five-year anniversary in 2014:

It is important to remember that the CBO’s estimates of jobs saved or created are exactly that—estimates, not actual data. Accurately measuring jobs saved as a result of ARRA, let alone created, is quite difficult if not impossible. So the same general mathematical models with spending multipliers are applied to ARRA spending to date in order to estimate ARRA’s effects on output and employment for the quarterly reports to determine the estimates.¹³

ARRA failed to deliver the reductions in unemployment promised initially and obviously did not stimulate a vigorous recovery, but it did add substantially to the Federal debt.

Similarly, the ACA has been covered in controversy and undeniably produced results much different from what the Obama Administration promised, as enumerated in Chapter 4 of the

Response. But plain facts and widespread dissatisfaction notwithstanding, the *Report* concedes nothing. It devotes a more than 100-page chapter to praising Obama Administration health care policy.

The *Report* discusses at length the 2008 financial crisis and measures taken to mitigate it, but fails to address the Federal Government's large role in the financial sector and in setting monetary conditions. Before the crisis, the Federal Government already oversaw the financial industry in myriad ways through multiple agencies, and it is heavily involved in housing finance. Yet there is no discussion of how oversight agencies missed problems and why they would not miss them again, of government policy that promotes homeownership and bank lending to lower income groups, or of the government-sponsored enterprises Fannie Mae and Freddie Mac. Neither is there any discussion of the exceedingly low interest rates kept in place by the Federal Reserve for a long time prior to the crisis. It is as though the CEA wrote the *Report* in a bubble insulated from the debates that have been raging for years over these issues.

The *Response* makes the case that instead of ending "too big to fail," Dodd-Frank imposed greater regulations on the U.S. financial system without regard for constitutionality or analysis of the law's regulatory impact on the economy. This regulatory burden has fallen heavily on smaller financial institutions, while leaving government-sponsored enterprises virtually untouched.

The *Report's* treatment of higher education finance is similarly detached from the problems on many people's mind. How does easy credit from the government affect college tuitions, how are students going to pay off large debts, and does the sheer size of student debt in the aggregate, which is approaching \$2 trillion, threaten the stability of the financial system? What is the risk of a

public debt crisis if the Federal Government resorts to largescale bailouts again?

On the subject of climate change the CEA's *Reports* for years have ventured far into the subject of climate science, as does the 2017 *Report*, even though that is neither the CEA's mission nor its expertise, while the costs of the last Administration's chosen policies and the relative merits of different approaches to climate change received next to no attention. Economics is all about tradeoffs and choosing the best ones. Here is another intensely debated subject with major implications for the economy that the CEA treated as though only its preferred perspective were relevant. The related subject of energy sources received similar treatment. In the current *Report* nuclear energy is not discussed at all even though it accounts for 20 percent of power generation in the United States and emits no greenhouse gases whatsoever. If the last Administration disfavored nuclear energy, the CEA should at least have explained why if it was going to take up the subject of energy supply in the *Report*.

Taxes should collect enough revenue to fund core government functions with the least disruption to taxpayers and the economy. In reality, the government also uses taxes to redistribute income as well and the debate over whether and to what extent it should use the tax system for this purpose likely will continue indefinitely. A good focus for the CEA would have been to identify aspects of the tax structure that could be reformed to reduce or eliminate the most disruptive effects on the economy with the smallest loss of revenue to the government in the near term (faster economic growth will increase revenue in the long term) and the least effect on the last Administration's redistributive objectives. Instead, the CEA touts Obama Administration efforts to mitigate income inequality and goes as far as to suggest that raising taxes on high-income earners is desirable in itself.

In its 2014 *Report*, the CEA included a chapter entitled “Evaluation as a Tool for Improving Federal Programs.”¹⁴ If the CEA had abided by the principles laid out in that chapter, its *Reports* would have been far more useful. Ironically, it even failed to do so for its discussion of the ACA in the very same 2014 *Report*.¹⁵

FOUR CONTINUED STRUCTURAL CHALLENGES: PRODUCTIVITY, INEQUALITY, PARTICIPATION, AND SUSTAINABILITY

Chapter 1 of the *Report* has a separate section with the above title¹⁶ and discusses each challenge in the order shown. The *Response* will briefly address these challenges but in a different order.

Fiscal Sustainability

The *Report* discusses the importance of “economic sustainability” in the context of shoring up automatic stabilizers like unemployment insurance, and also in terms of climate change.¹⁷ But an important component of economic sustainability is fiscal sustainability for which the Obama Administration showed little concern. For eight years the White House put forth little effort to reduce the rising level of Federal debt. Apart from tables listed in the appendices, the term “Federal debt” is only mentioned twice in the *Report*, and only within the context of the statutory limit and student debt, rather than with a focus on fiscal sustainability.

The *Report* argues, “it is possible to combine short-run fiscal expansion with medium- and long-run fiscal consolidation to maintain fiscal discipline” as demonstrated by the Obama Administration.¹⁸ Given the enormous growth in debt over the last eight years, this is a rather remarkable claim.

As in previous years, the *Report* points out that, as a share of GDP, the Federal budget deficit fell by two-thirds since 2009, and that in fiscal year 2016, the Federal budget deficit matched its average

of the last four decades.¹⁹ However, this ignores the fact that gross Federal debt roughly doubled over the course of the Obama Administration, from \$10.6 trillion to nearly \$20 trillion,²⁰ in part due to the Federal Government's response to the recession. In 2009, deficits rose as high as 9.8 percent of GDP, or \$1.4 trillion, before falling to an estimated 3.3 percent in 2016.²¹ Furthermore, in leaving the Federal Government's massive spending trajectory unaddressed, CBO—in the wake of the Obama Administration's departure—has projected debt held by the public will rise above 91 percent of GDP just outside of the ten-year budget window and surpass the World War II-era record of 106 percent by 2035. Gross Federal debt, which includes intragovernmental transfers, is projected to remain elevated at 106 percent of GDP over most of the 2017-2027 budget window. CBO remarks in its Long-Term Budget Outlook that the timing of policy changes to maintain the current level of publicly held debt as a share of GDP, or to reduce it to its 50-year average, significantly affects the size of policy changes necessary to achieve fiscal sustainability:

In deciding how quickly to implement policies to put Federal debt on a sustainable path—regardless of the chosen goal for Federal debt—lawmakers face trade-offs. Reducing the deficit sooner would have several benefits—less accumulated debt, smaller policy changes required to achieve long-term outcomes, and less uncertainty about what policies lawmakers would adopt. ...waiting several years to reduce Federal spending or increase taxes would mean more accumulated debt over the long run, which would slow long-term growth in output and income.²²

Some economists have argued over the past year that the United States is facing a secular stagnation problem,²³ in which excessive

savings acts as a drag on demand, and that overcoming it requires fiscal stimulus akin to the kind initially levied against the worst effects of the recession. However, as CBO noted in its analysis of ARRA, the law's long-term costs are projected to reduce GDP by 0.2 percent after 2016 as a result of increased government debt, as each dollar of additional debt crowds out approximately one-third of a dollar in private domestic capital.²⁴ When questioned on the ability to strike a balance between economic growth initiatives and deficit spending in the context of the longer-term fiscal outlook, Federal Reserve Chair Janet Yellen noted in her testimony before the Committee:

*The CBO's assessment, as you know, is that there are longer term fiscal challenges, that the debt-to-GDP ratio at this point looks likely to rise as the Baby Boomers retire and population aging occurs. And that longer run deficit problem needs to be kept in mind. In addition, with the debt-to-GDP ratio at around 77 percent, there is not a lot of fiscal space should a shock to the economy occur, an adverse shock that did require fiscal stimulus.*²⁵

Labor Force Participation

The *Report* discusses labor force participation only briefly. The CEA recommends strengthening the “connective tissue” in U.S. labor markets, suggesting improvements in unemployment insurance, tax credits for low-income workers, workplace flexibility, and raising the minimum wage (of all things).²⁶

The decades-long low in U.S. labor force participation is a major problem holding back economic growth and it relates to weak post-recession business investment, which actually declined in 2016. Chapter 2 of the *Response* provides an analysis of the untapped growth potential that could be realized if policy

constraints on the use of capital and labor were lifted. Unfortunately, pro-growth tax and regulatory reforms were no more a focus of the *Report* than controlling mandatory spending programs and containing the Federal debt.

Inequality

Much in line with last year's *Report*, the 2017 *Report* argues that the United States has the highest levels of income inequality, and has seen the fastest increase in that metric among the G-7 economies. However, as stated in the *Response* last year, this omits the effect of allowing passthrough businesses to file under the individual income tax code:

The reason, known perfectly well by the Administration, is largely due to the Tax Reform Act of 1986 which, among other changes, lowered the top individual tax rate from 50 percent to 28 percent. This created an incentive for small businesses to file under the individual tax code since the top marginal corporate income tax rate was much higher. In fact, the data show a growing share of U.S. business income has been taxed on a passthrough basis... meaning that a firm's business income is attributed to the owner(s) and taxed as individual income, which has further complicated the process of teasing out income inequality from existing data.²⁷

This is discussed in further detail in Chapter 3 of this *Response*.

Further, the *Report* suggests that a “more progressive fiscal system” which redistributes to low- and moderate-income households and particularly children, can improve future earning and education outcomes.²⁸ However, the United States has one of

the most progressive tax systems in the world, suggesting that at least on the tax side of the fiscal system, the United States is highly progressive compared to other systems.²⁹ Yet does that redistribution lead to better education and earnings outcomes for lower income households? It appears unlikely based on 2006 data, which was analyzed by CBO in 2013. On the spending side of the U.S. fiscal system, in yet another revelation of the heavy emphasis in Federal spending placed on mandatory retirement and health care programs, elderly childless homes received 57 percent of transfer payments despite making up only 15 percent of the U.S. population.³⁰ Rather than focus on the real problem—“growth in spending for programs focused on the elderly population (such as Social Security and Medicare), in which benefits are not limited to low-income households”³¹—the *Report* wants to further burden already overburdened American taxpayers with policies that will further decrease productivity.

Given the ongoing, unaddressed trajectories of these mandatory programs since the 2013 CBO analysis, even if one were to accept the Obama Administration’s suspect premise that Federal redistribution to low-income households leads to better earnings and education outcomes, it is unlikely that the Obama Administration achieved virtually any gains along those lines through fiscal progressivity, simply because lower income households are largely not the focus of redistribution. Furthermore, some redistributive efforts, like minimum wage increases, are often poorly targeted as well, as most minimum wage earners are not among the working poor.³² Redistributive programs in the United States intended to alleviate poverty and broader inequality, are increasingly poorly targeted, expensive relative to the intended outcome, and can often create ceilings as well as floors for recipients looking to improve their well-being.

While it can be argued that redistributive spending programs do indeed ameliorate some of the hardships of living in poverty or near-poverty, the connection to better education and earnings outcomes is less clear and dependent upon the program. The research cited in the *Report* focuses on early childhood education, Earned Income Tax Credit (EITC), food stamp programs, Moving to Opportunity programs, Medicaid, and Temporary Assistance for Needy Families (TANF); but despite claiming “[t]hese six examples show that programs have large and real long-term benefits,”³³ not all redistributive spending programs can boast success.³⁴ Chapter 3 of this *Response* shows there is plenty of room for reform of these kinds of programs to align program and beneficiary incentives, correctly measure the desired outcomes of moving families sustainably off these programs, and target programs only to the most vulnerable populations.

Generally, there is another element in inequality discussions and redistributive efforts that would lead the casual reader to believe that, absent a government mandate, most Americans do not share their hard-earned resources with one another. As Jeffrey Miron noted in his discussion of rethinking redistribution:

Moreover, anti-poverty programs lend credence to the claim that most people will not share their resources unless government compels them to. The evidence of daily life in America, however, shows that assumption to be false. Private efforts to alleviate poverty are enormous: Religious institutions operate soup kitchens; the Boy Scouts organize food drives; the Salvation Army raises money for the poor; Habitat for Humanity builds homes; and doctors' associations provide free health care. In 2009, Americans gave more than \$300 billion to charity, a figure made all the more

*striking by the deep recession. More than 60 million people volunteered, donating some 8 billion hours of work — much of it in efforts aimed at helping the poor.*³⁵

According to the Bureau of Labor Statistics (BLS), from September 2014 to September 2015 (the latest data available), nearly one-quarter of the civilian noninstitutional population age 16 and older, or about 62.6 million people, volunteered through or for an organization, and spent a median 52 hours on volunteering.³⁶ As noted in the JEC Majority staff analysis, “The Reward of Work, Incentives, and Upward Mobility”:

*Ultimately, the capabilities of the government, at the Federal level and to certain extents at the state and local levels, are relatively rigid, immobile, and uniform in the handling of every case. While that consistency proves useful in many government functions, it fails to provide the best and most effective means to move individuals out of poverty and into opportunity to improve economic well-being for their families.*³⁷

Productivity

The *Report* mixes productivity factors, including skill-biased technological change, a slowdown in higher educational attainment, and globalization, with greater inequality. It also claims that “economic rents” (profits resulting from limited market competition) can exacerbate inequality if they are increasingly captured by capital or high earners.³⁸ The previous 2016 *Report* argued that policymakers should reduce the ability of people or corporations to seek rents through the influence of regulatory lobbying. However, Nobel laureate economist Milton Friedman described the problem as an “iron triangle” connecting

interest groups, bureaucracies, and politicians that is by no means one directional and virtually always fails consumers. Ultimately, any reform to reduce rent-seeking behavior must limit the entity with the power to confer rents, namely the government. Last year's *Response* discussed this subject in greater depth.³⁹

The factors identified here certainly are relevant to economic productivity overall and of different groups which affects their relative earnings power and thus income inequality among them. But a much clearer way of approaching the subject of productivity is, first, to focus on private investment particularly in equipment as that affects workers' ability to produce more directly. The U.S. economy is not receiving enough of this kind of investment. Next, the question is how to accelerate technological progress to combine labor and capital in ways that are more productive. That takes longer and is a less pressing matter, though ultimately more important. One should approach the question of increasing technology capabilities as well from the perspective of relative returns on alternative investments. The *Report* neither focuses on the immediate challenge of encouraging more capital investment nor of what makes for the most important ways of raising long-term productivity.

CONCLUSION

The *Report* claims, "promoting inclusive, sustainable growth will remain the key objective in the years ahead...by acting decisively and by choosing the right policies."⁴⁰ However, rather than being an agent of change, the decisive actions taken by the Obama Administration were firmly in the well-worn, status quo direction of government expansion. The policies chosen more often proved to be the wrong ones, based on the presumption that government knows best, be it in providing health care, in redistributing hard-earned resources, in attempting to protect consumers from

businesses, and in picking winners and losers. Furthermore, over the last eight years, divisiveness often thwarted even the policies that most policymakers could agree upon, and exacerbated tensions in times of severe disagreement. The Obama Administration departed amidst rising polarization across geographical and political lines among the American people. Today, the stakes for America, and the promise it holds for its citizens to achieve their own versions of the American Dream, could not be higher. The Obama Administration depicted a hopeful, inclusive, strong and sustainable future. However, that appears to be a vast departure from the experience of the past eight years, which were fraught with expanding government initiatives and post-crisis reactionary policies that reduce bold innovation and entrepreneurial risk-taking in the name of safety and stability at all costs.

Many Americans still feel that they have not witnessed improvement in their material well-being. Now, many are beginning to wonder if their children will surpass their own parents' standard of living, as previous generations have. Nearly eight years since the beginning of one of the most lackluster recoveries in modern history, the median American family has foregone tens of thousands of dollars of income relative to the average post-1960 recovery because of slow growth.⁴¹ Millions of prime-age Americans are out of the workforce or underemployed. Broader unemployment measures remain elevated compared to historical levels, reflecting the remaining scars from the recession. Healthcare premiums have risen steeply this year.⁴² Effective tax rates remain among the most burdensome in the developed world, and regulations have grown at a record pace.⁴³ The Obama Administration tied for second place for record debt-to-GDP increases on an annual basis with the FDR and Truman

Administrations during the World War II period, behind only the Lincoln Administration due to expenditures on the Civil War.⁴⁴

The massive stimulus spending programs that the Administration ushered in since 2008 have largely failed to deliver the boost that was once promised. Instead, we have been left with a larger base of Federal spending obligations in a slow-growth economic environment. The growth of the Federal Government in size and scope, accumulating over previous decades as well as over the course of the current recovery, with a crushing upward debt trajectory in the coming decades, is oppressing private enterprise and innovation with an ever broadening scope of government functions, misaligned incentives, and burdensome and byzantine regulations. Without long-term fiscal sustainability and a Federal Government tasked only with functions exclusive and appropriate for its purview, the slow growth economic environment would likely persist.⁴⁵

Recommendations

The Committee Majority hopes that in the 115th Congress it will have a willing partner in the Trump Administration to bring about the changes necessary to ensure America remains a place of unquestionable liberty and bountiful opportunity:

- Provide comprehensive tax reform with a streamlined, pro-growth tax code;
- Cut unnecessary regulatory costs imposed on businesses and entrepreneurs;
- Improve patient-centered and affordable health care efforts by repealing and replacing Obamacare;
- Support free trade and enforce trade laws in a timely, transparent way; and

- Return power to the states by reducing Federal intrusions in higher education and state-specific infrastructure projects.

CHAPTER 2: MACROECONOMIC OUTLOOK

- The *Report* estimates moderate output growth and a strengthening labor market in the near-term.
- However, CBO's current estimate of real potential GDP for 2017 is \$2.1 trillion lower than its estimate from ten years ago.
- Growth-inhibiting policies imposed during the Obama era have constrained the economy's potential.
- The Obama Administration failed to address the unsustainable mandatory spending trajectory that crowds out other spending and pushes the debt-to-GDP ratio ever higher.
- Pro-growth tax, spending, deficit, and regulatory reform can help restore fiscal sustainability and accelerate growth.

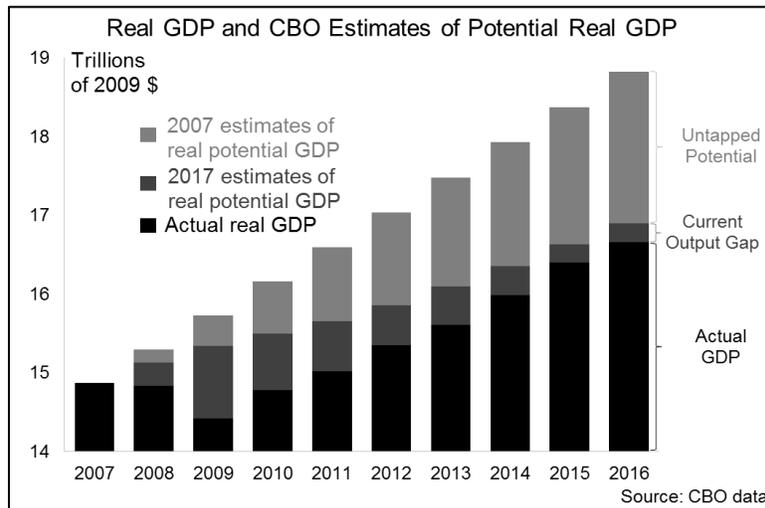
NEAR-TERM OUTLOOK

The *Report* broadly estimates that the economy is closing the output gap—the difference between what the economy could produce and what it is actually producing. However, key determinants of long-run economic growth—labor, investment, and productivity—indicate the presence of a growing untapped potential, which the Committee Majority believes results from policy constraints. Certainly, appropriate fiscal and regulatory reforms would allow the economy to grow faster in both the short and long run.

Potential GDP

CBO defines potential GDP as “the maximum sustainable amount of real (inflation-adjusted) output that the economy can produce.”⁴⁶ Since 2007, CBO has consistently revised estimates of potential GDP downward. The most recent CBO estimate⁴⁷ of real potential GDP in 2017 is 11 percent lower, or \$2.1 trillion (in 2009 dollars) lower, than its 2007 projection for 2017.

Figure 2-1



The *Report* focuses on how the output gap is shrinking. However, earlier expectations of potential GDP were much higher than estimates that are more recent. Figure 2-1 summarizes the difference between the *Report* and CBO’s 2007 estimates of potential real GDP.⁴⁸ In the Committee Majority’s view, the reason is Obama Administration policies have restrained economic growth and left untapped an increasing production potential. The *Response* uses CBO’s 2007 estimates of potential real GDP as a reference for what the economy’s full potential could be.

The Committee Majority regards CBO's progressive downward revisions of its potential GDP estimates each year for the last ten years as reflecting the progressive growth-inhibiting policy constraints imposed on the economy by the last Administration. Potential GDP is a stable, long-term concept and would not change from year to year, absent a major unforeseen event, such as a new war, unless the government changes how the economy is permitted to function.

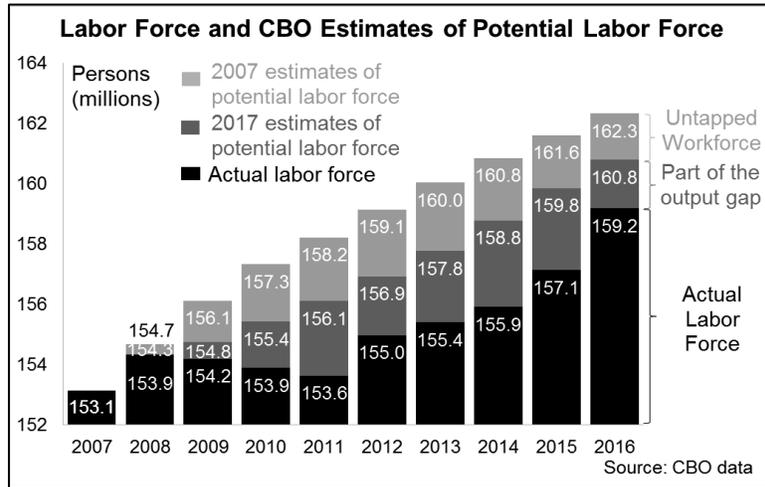
In February 2014, CBO released a report⁴⁹ analyzing the differences between its 2007 and 2014 estimates of 2017 real potential GDP.⁵⁰ Between 2007 and 2014, this estimate had been revised downward by 7.3 percent. In other words, the economy's estimated ability to produce goods and services in 2017 had been revised down by \$1.4 trillion in constant dollar terms.⁵¹

CBO's estimates of potential real GDP depend primarily on projections of labor force growth, capital accumulation, and productivity growth. The report attributes 40 percent of the downward revision of potential GDP to lower workforce growth, 33 percent to reduced capital intensity, and 19 percent to productivity.⁵² The next three sections analyze these three key determinants of economic growth and provide evidence of untapped potential.

The Labor Market

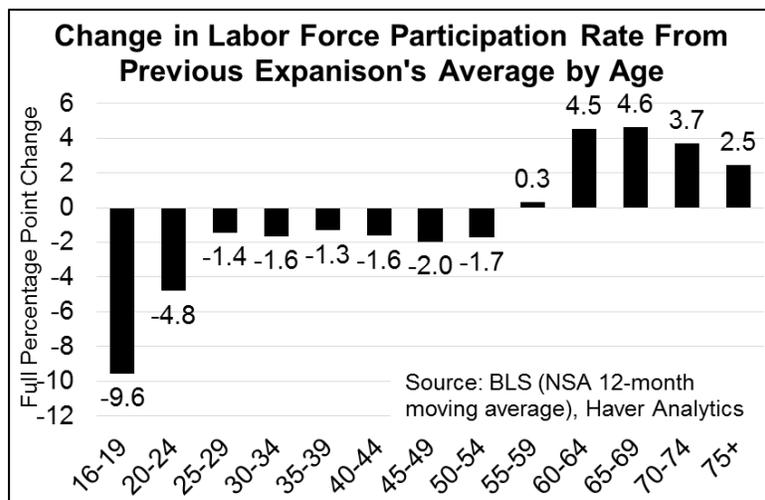
CBO's estimates of labor force size in a fully recovered economy have fallen by 1.5 million since 2007, from 162.3 million to 160.8 million, as shown in Figure 2-2. The drop in CBO's labor force estimate of 1.5 million accounts for 40 percent of the untapped potential in Figure 2-1.

Figure 2-2



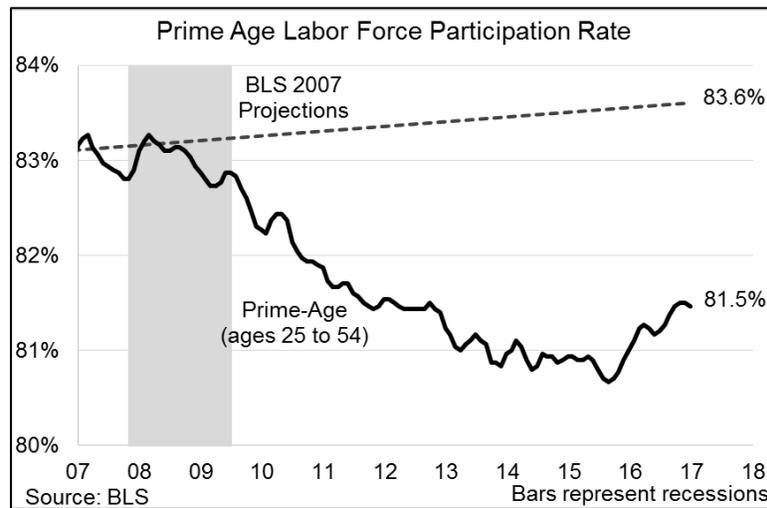
It is conceivable that an aging population is retiring from the workforce faster than initially anticipated; however, labor force participation rates across age groups indicate that only workers under the age of fifty-five have lower labor force participation rates than the averages of the prior expansion (Figure 2-3).

Figure 2-3



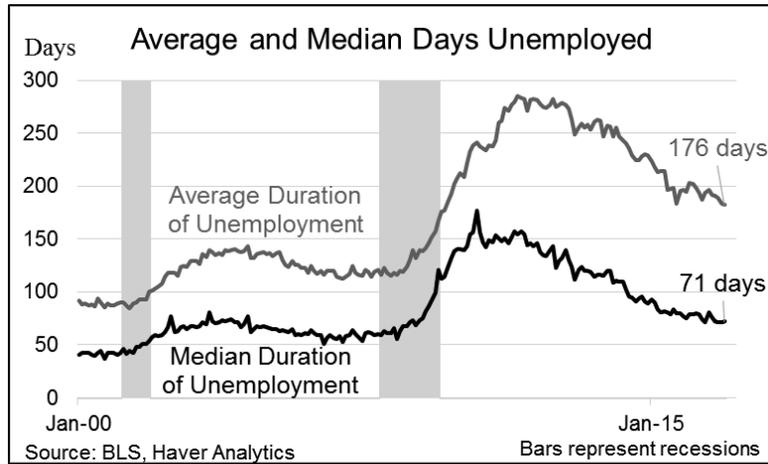
Comparing the 2007 BLS forecast of the prime-age labor force participation rate for 2016 of 83.6 percent with the current rate of 81.5 percent (see Figure 2-4) implies that over 2.6 million potential workers between the ages of 25 and 54 remain on the economy’s sidelines (more than the 1.5 million derived from CBO data). Neither the baby boomer generation reaching retirement age, nor increased numbers of young people going to school or college full time—who are mostly 16-to-24 years old—can account for this decline.

Figure 2-4



The duration of unemployment remains elevated (Figure 2-5). During the previous expansion,⁵³ the mean and median duration of unemployment averaged 125 and 64 days, respectively, whereas at this point in the expansion, the mean and median duration were 176 and 71 days, respectively.⁵⁴ The higher mean unemployment duration implies that a large number of workers remains on the margins of the workforce, which means that there is room for the economy to grow more if these workers find employment.

Figure 2-5

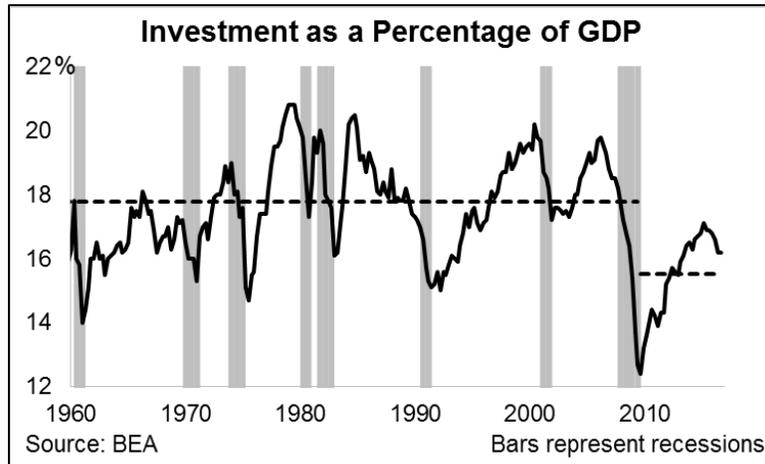


The *Report* states the “labor market continued to improve in 2016, with many measures of labor-market performance having recovered to, or near to, their pre-recession levels,”⁵⁵ and notes that the improvement “was apparent in the continued decline in the unemployment rate.”⁵⁶ The unemployment rate approaching full employment used to imply that the output gap was closing and actual GDP was returning to potential. However, the reliability of the unemployment rate as an indicator of economic performance has greatly diminished. The headline unemployment rate⁵⁷ only accounts for individuals who have actively sought work in the last four weeks. It does not measure how many individuals are potentially available to work.⁵⁸

Investment

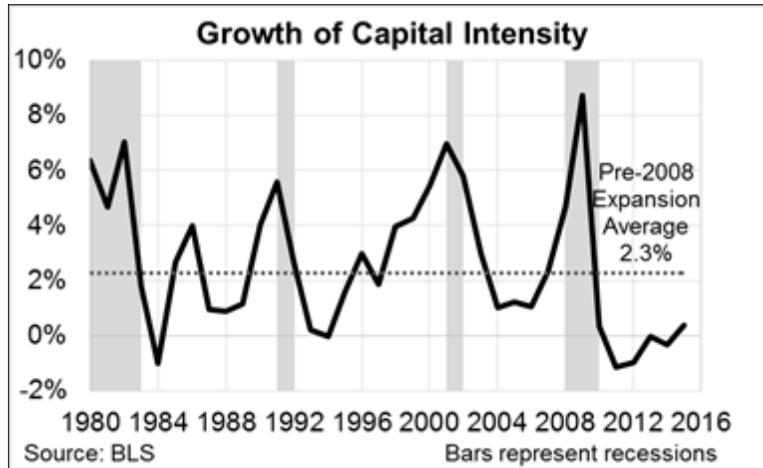
The average share of private investment-to-GDP during the post-1960 expansion period was 17.8 percent. During the current expansion, it has averaged only 15.5 percent (see Figure 2-6).

Figure 2-6



Investment drives capital accumulation, which in turn helps drive output and income growth. The data presented in Figure 2-7 shows capital intensity from 1980 to 2015. Capital intensity measures the ratio of capital—machines, tools, and equipment used to produce goods and services—relative to the number of hours worked by individuals. During the previous expansion, it averaged 2.4 percent growth per year—that is to say, investment in new capital was increasing relative to the workforce. In the current expansion, this measure has averaged -0.3 percent. There is not enough investment in new capital to offset the growth of the workforce.

Figure 2-7

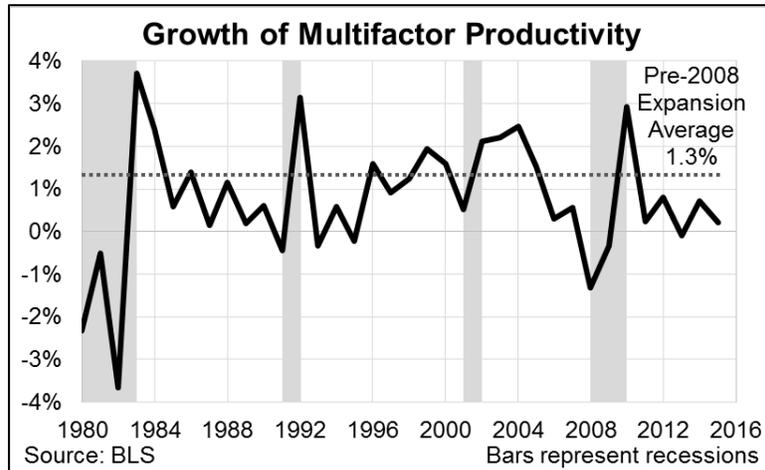


According to CBO estimates, lackluster business investment accounts for 33 percent of America’s untapped potential.⁵⁹

Productivity

Workforce growth and capital accumulation can help produce economic growth, but eventually, diminishing returns set in. Even if both factors are increased and total output continues to grow, per capita output cannot increase unless people discover ways to use capital and labor more productively. Each year, BLS produces its statistics of multifactor productivity. This measures what economists often call the stock of technological knowledge. The *Report’s* general focus is on labor productivity, which measures the ratio of output to labor input. The Committee Majority prefers multifactor productivity because it measures how well we are learning new ways of producing goods and services with a similar amount of inputs.

Figure 2-8

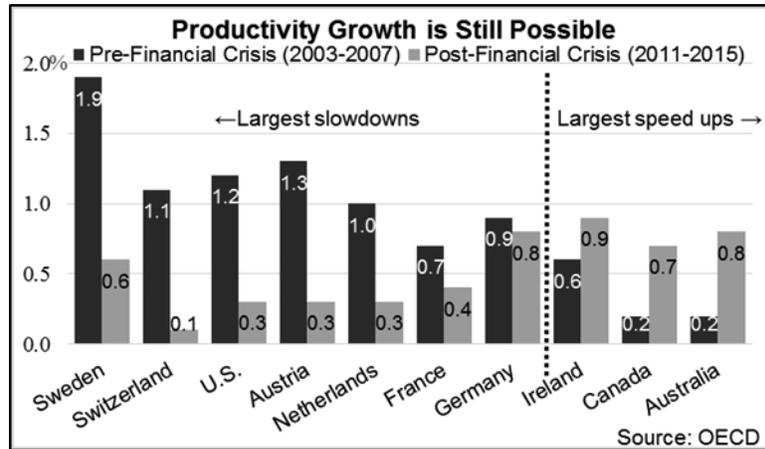


In its most recent annual report, BLS reported that multifactor productivity for the private nonfarm business sector grew 0.2 percent in 2015.⁶⁰ Between 1996 and 2005, multifactor productivity increased at an average of 1.6 percent per year. However, in the last decade for which data is available (2006-2015), multifactor productivity has grown by only 0.4 percent on average per year.

During expansion periods between 1980 and 2007, multifactor productivity growth averaged 1.3 percent annually as seen in Figure 2-8. From 2010 to 2015 it averaged only 0.8 percent per year. The year 2010 is an outlier; if excluded, the average from 2011 to 2015 is only 0.4 percent per year.

The Organization for Economic Cooperation and Development (OECD) data for multifactor productivity in the ten wealthiest member nations indicate that some developed nations are doing at least as well, if not better, in this respect than before the 2007-2009 recession.

Figure 2-9

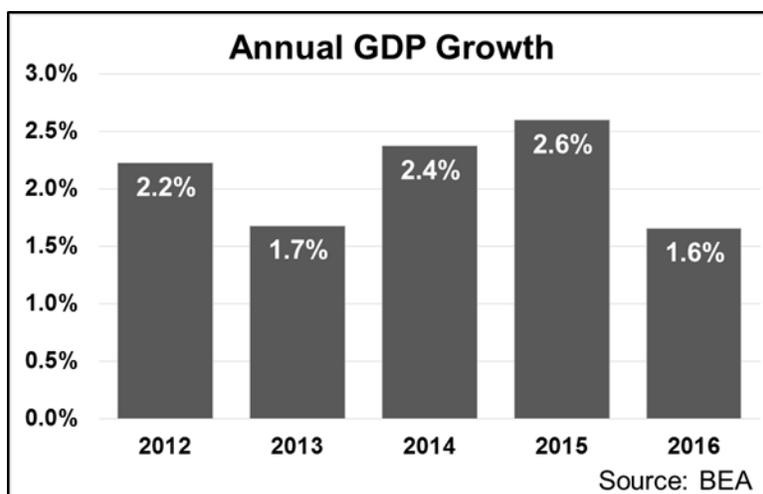


In Figure 2-9, the left-side bar for each nation shows the average multifactor productivity growth during the four years preceding the financial crisis, while the right-side bar shows the average multifactor productivity in the most recent four years. The nations are ordered from left to right based on which nation had the largest absolute decrease in multifactor productivity growth in the aftermath of the most recent recession. The United States experienced the third largest drop. By comparison, Germany experienced only a slight decrease. Notably, Ireland, Canada, and Australia saw increases in their multifactor productivity growth. Therefore, the Committee Majority believes that it is possible to get productivity growth going again, and based on CBO estimates, regain as much as 19 percent⁶¹ of America's untapped potential.

Output

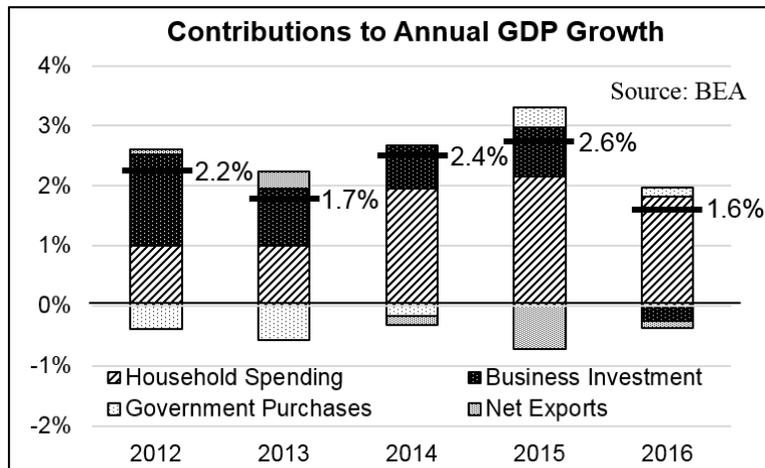
As shown in Figure 2-10, in 2016, economic activity decelerated as measured by real gross domestic product (real GDP)—the inflation-adjusted value of all final goods and services produced within the United States in a given year.

Figure 2-10



In 2014 and 2015, real GDP increased 2.4 and 2.6 percent, respectively, and then slowed 1.6 percent in 2016,⁶² falling well short of projections. In early 2016, the Office of Management and Budget (OMB) forecast real GDP growth of 2.6 percent for calendar year 2016,⁶³ and CBO and the *Wall Street Journal's* December 2015 Economic Survey⁶⁴ each anticipated 2.5 percent growth for the calendar year of 2016.⁶⁵

Figure 2-11



In 2016, for the first time during the recovery, lower investment was a drag on economic growth, as shown in Figure 2-11. Business investment in equipment used in the production of other goods and services as well as business investment in inventories were the largest drags on GDP growth in 2016.

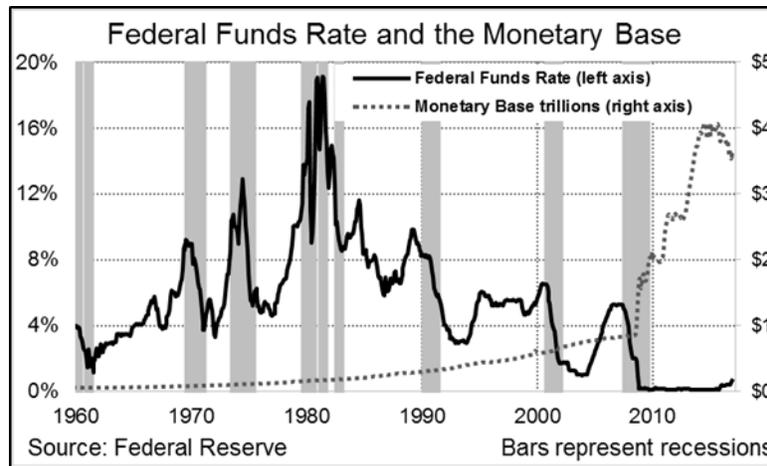
Monetary Policy

Since the Federal Reserve is an independent agency, the CEA does not discuss monetary policy at length but confines itself essentially to giving a status report. The most pertinent observation is that the central bank kept the Federal funds rate near zero through 2016 despite having signaled four increases at the beginning of the year. Only in December did it raise the Federal funds rate and only by a quarter point. In the seventh year since the recession had ended, the economic recovery remained so fragile that the Federal Reserve refrained from moving toward normalizing interest rates.

To mitigate recessions, the Federal Reserve lowers the interest cost of borrowing for consumers and businesses with the aim of supporting spending and investment, which in turn support the

demand for workers. As the economy recovers and closes the output gap, the Federal Reserve must gradually withdraw monetary accommodation to avoid inflation and asset price bubbles.

Figure 2-12



Traditionally, the unemployment rate was a more reliable indicator of the output gap and more help in guiding monetary policy.⁶⁶ However, that was when the labor force participation rate was not shrinking. Now the Federal Reserve calibrates its policies based on what it believes potential employment and potential output might be, and that introduces it into doing more than merely mitigating a cyclical downturn or supporting an ensuing cyclical recovery. It is now drawn into a grey area of also offsetting other forces and hindrances acting on the market economy, for which monetary policy tools are not ideally suited, if at all. Monetary policy cannot remove constraints on market function and boost the economy's potential. That requires appropriate fiscal and regulatory reforms that motivate investment, hiring, work, and innovation.

Since the Obama Administration is not directly responsible for monetary policy and the *Report* discusses the topic only briefly, this *Response* also will not go into greater depth. Suffice it to say that the extremely low interest rate policy, to which the Federal Reserve has adhered to for so long, is not a sign of good economic health.

The CEA invokes long-term trends ostensibly outside the Obama Administration's control to excuse the slowness of the recovery. But the most plausible, straightforward explanation for the weak recovery is that from the beginning, many of the Obama Administration's policies have stood in the way of normalization. Significant amounts of capital and labor have been sitting on the sidelines that could expand the economy if they were put to use. Removing the obstacles to these sources of economic growth will allow the economy to grow faster.

LONG-TERM OUTLOOK

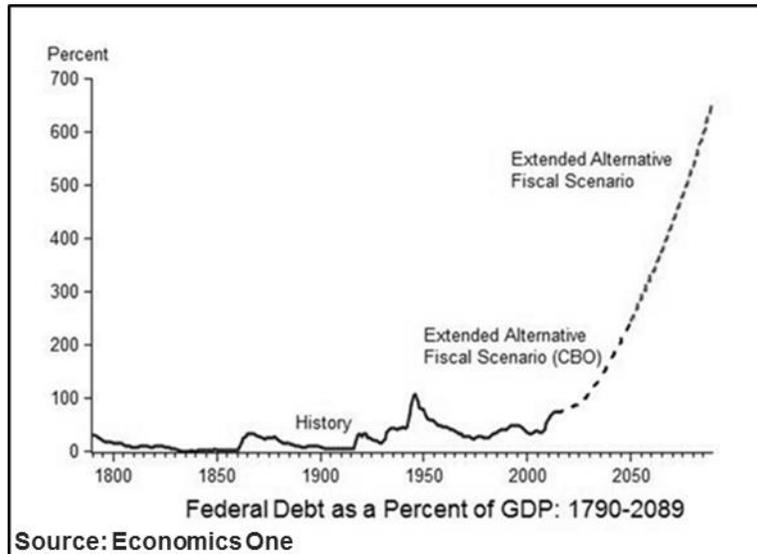
Federal Borrowing and Mandatory Spending

The United States has an extraordinary capacity to borrow,⁶⁷ because it is the largest free market economy in the world, which traditionally has offered ample opportunities for entrepreneurship, innovation, investment, and employment, leading to faster growth than other advanced economies. Further, the U.S. dollar is the world's primary reserve currency.

But the United States has been borrowing at a voracious pace; policy constraints have hemmed in the market economy; and U.S. economic growth has slowed to a crawl. Last year, business investment declined. Millions of individuals age 16 and above remain outside the labor market, and the percentage of that population employed has not been below 60 percent in decades.

On top of that, the Federal Government currently faces obligations to pay retirement income (Social Security) and for health care services (Medicare, Medicaid, and ACA premium subsidies) under parameters that become fiscally and indeed economically unworkable (see Figure 2-13). The economy cannot support them. Investors who lend the government money know this, but expect the government will fix the programs.

Figure 2-13



The programs are fixable. The beneficiaries are American nationals, not foreign nationals. The Federal Government can change program parameters in ways that continue to assist Americans in their retirement and help them with medical expenses, while adjusting these programs in ways that make their costs manageable. There is bipartisan agreement that Social Security can be reformed relatively easily. At a JEC hearing in the 114th Congress on the Federal debt, Alice M. Rivlin, a former CBO director, and witness for the Committee Minority stated:

Personally, I think we need to do everything, but if I had to do one thing up front and get it out of the way, it would be Social Security. It's not hard. It's not conceptually difficult. Tip O'Neill and Ronald Reagan did it. We can do it. It's a bipartisan conversation about known quantities.⁶⁸

It is important to recognize that the current leading Social Security reform proposals would affect individuals who still have time to adapt to changing program parameters while exempting those already in or near retirement. However, the more that time passes, the greater the challenge to keep program changes modest.

Reforming the health care sector proves more difficult, and Chapter 4 of this *Response* discusses the subject at greater length. The highly inefficient institutional settings created by government for health insurance and health care markets lead, in part, to escalating health care costs. What the government creates within our borders, the government can correct and one must expect that the political process will make course corrections that avert moving further up the curve in Figure 2-13.

However, while the Federal Government's creditors have been patient with respect to the mandatory spending problem, it is unclear when unease will rise at seeing no progress toward a resolution. Where are they to look for reassurance? Certainly not at the *current* rate of U.S. economic growth. Increasing the GDP growth rate is important; it will help allay concern over the size of existing Federal debt. However, any realistic acceleration of growth can only buy some time. A glance at the Figure 2-13 makes clear that GDP growth alone cannot solve the entire problem. Even if the government puts the money to productive uses, borrowing more money, even when interest rates are low,

cannot grow the economy enough to contain the rise of the debt-to-GDP ratio.

For the United States to maintain its extraordinary borrowing capacity, there must be visible progress toward containing its mandatory spending obligations.

Rising interest on the debt compounds the urgency of spending containment. Net interest expense is a growing share of the Federal budget, and in CBO's baseline scenario, overtakes nondefense spending in 2025 and defense spending in 2027 (see Figure 2-14).⁶⁹ If nothing changes, the United States would spend \$768 billion on annual net interest by 2027.⁷⁰

Figure 2-14

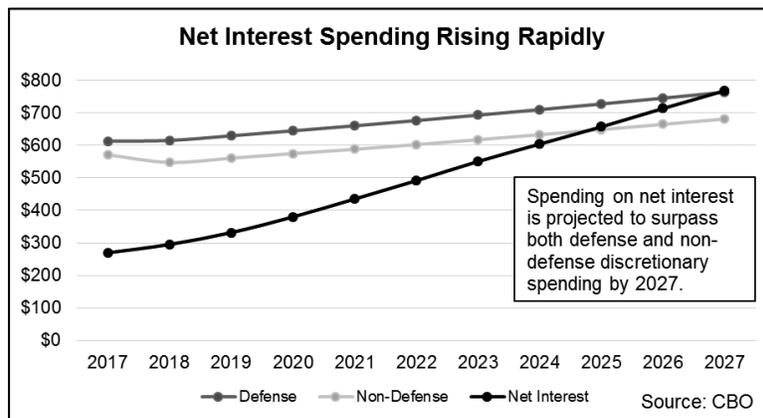
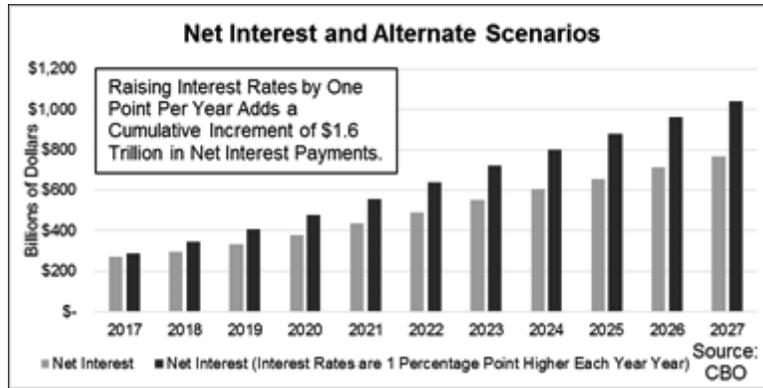


Figure 2-15 shows by how much Federal interest expense would increase if the interest rates CBO assumes for its forecast were one percentage point higher. If future interest rates were to shift up by one percentage point from what CBO assumes, the Treasury would owe in excess of \$1.6 trillion more in net interest expense over the next ten years. Much Treasury debt is issued for relatively short terms and must be rolled over continuously, which exposes it to interest rate risk.

Figure 2-15



The looming obligations from mandatory spending and interest expense have been pressuring ongoing Federal spending priorities already, even those that are well-established and important right now, such as national defense. *The Coalition for Fiscal and National Security*⁷¹ has warned that the long-term debt is the single greatest threat to our national security, explaining that:

*This debt burden would slow economic growth, reduce income levels, and harm our national security posture ...It would inevitably constrain funding for a strong military and effective diplomacy, and draw resources away from the investments that are essential for our economic strength and leading role among nations.*⁷²

The warning resonates particularly in the context of another possible crisis, economic or military, that would put further stress on the Federal budget.

A Distressing Legacy

During past Federal debt ceiling debates, the Obama Administration seemed to presume that the country's economic

strength supports boundless Federal borrowing and argued that U.S. creditors show no sign of concern over America's economic ability to repay them. Warnings that the debt-to-GDP ratio approached levels that marked economic slowdowns in other countries were contested, but the Obama Administration offered no "caution zone" of its own for the debt ratio. The need to raise the debt ceiling was the only lever available to the opposition at the time to slow deficit spending, and the resulting budget sequestration in 2013 represented some progress. However, the Obama Administration took no steps to address the skyrocketing future mandatory spending expenditures that will force the government to borrow ever more (Figure 2-13). Both the mandatory spending problem and the larger debt are significant parts of the Obama Administration's economic legacy, with which the nation must now contend.

A Sustainable Way Forward

Releasing the economy from the artificial policy constraints that the Obama Administration imposed on the potential rate of output would allow an acceleration of the GDP growth rate in short order, as discussed earlier in this chapter, in addition to taking steps that push out and bend down the mandatory spending curve. The more progress that is made in both of these respects, the less the current debt-to-GDP ratio may concern investors and creditors because, if they see progress, the U.S. economy's inherent strengths will continue to reassure them. While current long-term interest rates remain relatively low, there also may be an opportunity to lessen future interest rate risk somewhat by rolling some maturing debt over to longer terms.

Managing the two challenges that require immediate attention—the artificial constraints on the economy's potential and the burning fuse to a spending-driven debt explosion—should not

distract from planting the seeds for higher long-term economic potential, increased workforce participation, and increased real GDP growth. Normalized monetary policy; financial reform; greater emphasis on education and training as an investment over consumption; inner city and rural area economic rejuvenation; more effective and efficient health care; climate and environment policy that draws on, rather than chokes, our economic strengths; and much more should be on the agenda. There is much to do.

CONCLUSION

Much of the current commentary on the economic policies of the new Administration and Congress uses the fact that the unemployment rate is below five percent (taken to mean close to full employment) to suggest that the economy has recovered. The implication would be that production and output cannot increase very much, unless there is a leap in total factor productivity. The CEA also suggests this and advocates policies that further its preferred technologies or are mixed with social objectives it favors,⁷³ to raise the otherwise supposedly inevitable “new normal” of meager growth rates resulting from demographic and other forces outside the Obama Administration’s responsibility and control.

But low unemployment only means a small excess labor supply at current wage rates. The low employment-to-population ratio of less than 60 percent reveals that many more people could be working. We also know that the rate of business investment is not back to normal and could be much higher. Finally, we know that CBO lowered its estimate of potential GDP each year since the recession. Hence, we know that labor and capital are available, and if policy takes the right course to attract them back into the market economy, workers can increase output.

Recommendations

- With pro-growth tax and regulatory reforms:
 - Accelerate near-term private investment;
 - Raise the economy's output potential back up;
- Contain, if not reduce, Federal debt;
- Start mandatory spending reform (particularly Social Security).

CHAPTER 3: ADDRESSING INEQUALITY IN THE CONTEXT OF MOBILITY

- In Chapter 3 of the *Report*, the Obama Administration conflates reductions in income inequality with equal opportunity to succeed, begging the question as to whether its use as a sole measure of a policy's success is correct at all.
- The *Report's* approach to the subject of income inequality excludes alternate measures of it and, critically, the subject of economic mobility, which limits the discussion of how to improve economic well-being.
- While the Federal Government has an important role in assisting individuals and families in need, real long-term progress must start with strategies that foster individual empowerment and attainment of self-sufficiency.

MOBILITY MATTERS MORE

The *Report* reminds us that President Obama named inequality as the “defining challenge of our time.”⁷⁴ However, it conflates reductions in income inequality with ensuring “that all Americans have the opportunity to succeed.”⁷⁵ By arguing this throughout the chapter, the Obama Administration revealed a belief that it's possible to essentially compress the top and bottom of the income distribution without considering incentives and risk-taking behaviors, stages of life and the economic mobility that attends it, geographic differences, and many other important factors that might lead naturally to income inequality. Meanwhile, the *Report* ignores the need to lift people out of long-term poverty.

Focus on Moving Americans Out of Poverty

An alternate approach to move people out of poverty is found in Chairman Pat Tiberi's *Investing in Opportunity Act*, which would encourage investors to help revitalize economically distressed communities that lack investment and business growth. State governors would designate these areas as "Opportunity Zones."⁷⁶

Another example is former Congressman—now Senator—Todd Young's *Social Impact Partnerships to Pay for Results Act*, which passed the House in the 114th Congress. The Chairman is sponsoring this measure in the 115th Congress. This legislation would request proposals from state and local governments for social impact partnerships that produce measurable social benefits, including high school graduation and employment for younger labor market entrants.

Also, Vice Chairman Mike Lee's *Welfare Reform and Upward Mobility Act* would support 1996-style modifications to Supplemental Nutrition Assistance Program (SNAP) and TANF, as well as housing programs to engage states with disadvantaged Americans and help them rejoin the workforce. Generally, states should play a much larger role in creating a smarter system. They are in a better position than the Federal Government to assess their residents' needs, and should therefore be afforded greater flexibility and responsibility in funding and administering welfare and job training programs.

Speaker Paul Ryan's "Better Way" (*Better Way*) Poverty, Opportunity, and Upward Mobility Task Force notes that the measure of success for most aid programs has customarily relied on the amount of government money spent and the number of people receiving those funds.⁷⁷ Metrics for these programs rarely delve further to determine how long individuals are on the programs, how frequently they use the programs, or generally any

other indication that individuals leaving the programs become successfully self-sufficient. The misuse of metrics is apparent in the *Report* as well. For example, though 15 percent of Americans live in poverty, as the *Report* explains,⁷⁸ the metric itself fails to include alternative forms of income and non-cash benefits that exist to alleviate poverty. To that end, Vice Chairman Mike Lee introduced *The Poverty Measurement Improvement Act* in the 114th Congress—a bill that would authorize the Census Bureau to conduct a new survey of income and Federal means-tested benefits in an effort to measure the extent and success of Federal benefits in reducing poverty and improving material well-being.

The Obama Administration’s laser-like focus on income inequality begets the question as to whether its use as a sole measure of a policy’s success is correct at all. As mentioned in last year’s response, the 1990s was a period of high and rising income inequality, when income was increasingly concentrated within the top one percent;⁷⁹ however, the 1990s boasted much stronger economic growth, and all incomes were rising relatively quickly across the distribution scale, albeit at different rates.⁸⁰

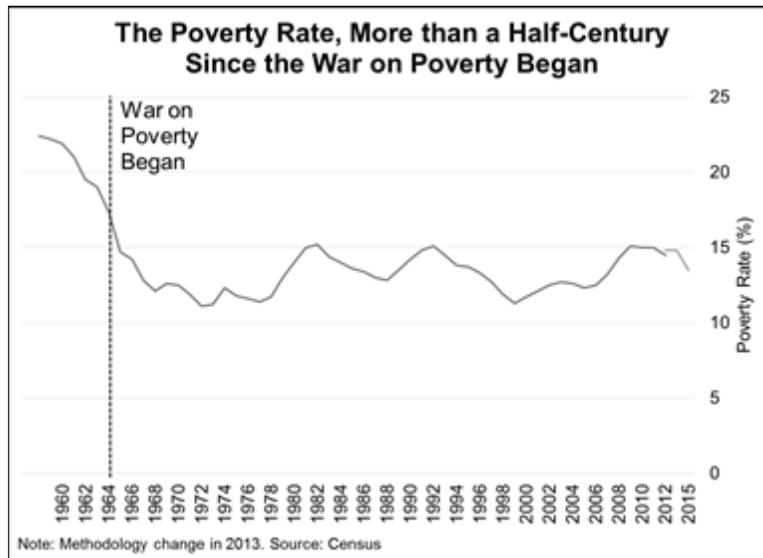
Returning to Opportunity in Reward of Work

As mentioned in last year’s *Response*, “it remains more important than ever to remove barriers to opportunity and continue every effort to improve economic mobility.”⁸¹ In JEC Majority analyses, discussions of equality of opportunity for upward mobility do not focus on the “equal likelihood” that a person from the bottom quintile has equal chance to reach the top, as economists and scholars often use the term. Rather, JEC Majority analysis matches closely what Foundation for Research and Equal Opportunity scholar Scott Winship has termed “equal access” to achieve upward mobility.⁸² Last year’s *Response* noted:

*While unequal opportunities are indeed concerning and a precursor for economic immobility, they are not solely to blame for unequal outcomes. The pursuit of policies that aim for “equality of outcomes” not only fails to account for the myriad underlying reasons why one American would pursue one “outcome” over another, but it also implies that all Americans share the same “American Dream.”*⁸³

As noted in the JEC Majority staff analysis, “The Reward of Work, Incentives, and Upward Mobility,” an unfortunate confluence of policies cumulatively chip away at work incentives, or the monetary rewards that one receives for work.⁸⁴ Over the last half century, many programs created with the intent to improve the well-being of the most vulnerable populations often effectively hinder upward economic mobility by diminishing work incentives. These policy developments have occurred in the tax code, spending provisions, and through regulations. This combination of unintended negative policy effects cumulatively erode what University of Chicago professor of economics Casey Mulligan terms the financial “reward of work.”⁸⁵ It is important to aim for reforms that would reduce labor market distortions that have accumulated not only since the “War on Poverty,” but since the most recent recession as well. As shown in Figure 3-1 below, the once-declining poverty rate has remained relatively stable since the War on Poverty began.

Figure 3-1



For those below the poverty threshold, a number of government policies undermine virtually any incremental work effort. This is known as the “poverty trap,” the interaction between taxes and the phase-outs of social welfare benefits as income rises, imposing a high effective marginal tax on additional earnings. As noted in the JEC Majority analysis on the reward of work, “Americans struggling with economic immobility are not liabilities, but government programs often inadvertently treat them as such by making it less advantageous for people to find and keep employment.”⁸⁶ The analysis further notes that the consequences of remaining trapped have large costs as well—the longer an individual is out of work, the greater the difficulty to obtain employment.

For those living above the poverty line, many policies effectively punish working additional hours or days, or working near certain income thresholds with steep eligibility changes, such as the ACA

exchange subsidies. Discouraging additional work could prevent better opportunities to advance one's income, benefits, skills, experiences, and career—and move out of poverty, reducing income inequality. Altogether, government regulations, taxes, and spending policies can cumulatively reduce the reward of work and work opportunities, eroding many Americans' relationship with the workforce. Per the JEC Majority analysis:

American men in their prime working years with relatively less formal education in particular suffered the greatest declines among demographic groups. Despite the considerable downward revisions to the trajectories of the economy and labor force growth going forward, we can't be entirely certain how much demographic forces will come into play going forward. The confluence of government policies has regrettably created a path toward a vicious cycle of involuntary dependence on growing Federal spending obligations. Given this, in light of the dire fiscal circumstances the United States faces in the not-too-distant future, policymakers should turn to every structural policy reform at their disposal to unshackle the greater potential in the U.S. economy.⁸⁷

The Importance of Two-Parent Households

As noted in earlier research from economist Raj Chetty and his coauthors, economic mobility is higher in locations with greater concentrations of two-parent households, better elementary schools and high schools, and more civic activity and community membership.⁸⁸ However, family structure has changed over time, and remains an important social factor in children's opportunities for upward mobility.⁸⁹ In fact, the Brookings Institution's Isabel

Sawhill notes that gaps in family structure and parenting styles are creating “very unequal starts” for American children, affecting income inequality and potentially slowing economic mobility for those on the low end of the economic ladder.⁹⁰ Sawhill goes on to say that “family formation is a new fault line in the American class structure.”⁹¹ Though a number of factors have led to the current trends in family structures and the rise of single-parent households, marriage penalties in the tax code present a clear opportunity for Federal policy reform. Marriage penalties affect mostly two-earner couples, and furthermore, the penalties are regressive, comprising a larger share of income among the lowest income earners. Additionally, data suggest that neutral treatment of marriage in the tax code could promote marriage among low-income taxpayers.⁹²

In light of the substantial and growing evidence demonstrating the positive impact stable and healthy marriage has on children, particularly from low-income families, at a minimum it is important that public policy not discourage marriage. Yet, many public policies beyond the tax code can create a financial disincentive for low-income, single parents to marry. Research has found that the structure of Federal welfare programs includes a marriage penalty where “many low-income couples with children face substantial penalties for marrying that can amount to almost one-third of their total household income.”⁹³ Urban Institute fellow Eugene Steuerle noted in an earlier analysis, “In aggregate, couples today face hundreds of billions of dollars in increased taxes or reduced benefits if they marry. Cohabiting or not getting married has become the tax shelter of the poor.”⁹⁴ This can occur on the tax side and the spending side of fiscal policy—in the former, affecting the value of and eligibility for the Earned Income Tax Credit and increased tax liability from moving from

single to filing jointly, while affecting benefits received in the latter.

Redistribution and Taxes

The Administration boldly states that tax changes enacted since 2009 have boosted after-tax income received by the bottom 99 percent of families by more than tax changes of any previous Administration since 1960.⁹⁵ Figure 3-15 of the *Report* attempts to show “the change in the share of after-tax income accruing to the bottom 99 percent of families that is attributable to changes in tax policy for Presidential Administrations since 1960.” However, as the *Report* points out, CEA holds the income distribution constant from a 2006 sample of taxpayers and non-filers.

While the *Report* argues that this isolates “the impact of changes in policy from other sources of variation in tax rates,” it ultimately fails to show actual tax policy effects from prior Administrations and their respective populations occupying the bottom 99 percent because it is essentially holding taxpayer behavior and demography constant over time regardless of tax structure and economic environment. This is particularly egregious in the post-1986 tax reform world, in which a significant amount of pass-through business income accrues in the top 1 percent because the reform reduced the top individual rate below the top corporate rate and created additional incentives to switch from a C corporation form of organization (see Box 3-1).⁹⁶

Box 3-1: If Taxpayers Had a Time Machine...

Figure 3-15 of the *Report* shows essentially what would have occurred if the taxpayers and non-filers of 2006 were magically transported back in time to a period coinciding with each previous Administration, and how these 2006 filers' and non-filers' after-tax incomes would have changed in each scenario, rather than actually extrapolating the tax effects on the income shares of the bottom 99 percent of Administrations past.

Using a “fixed income distribution” for analyzing past tax policy changes (“backcasting”) is misleading. It parallels an issue associated with the 2013 *Report* on Figure 3-1, which purported to show that average tax rates for the top 1 percent and top 0.1 percent in 1960 were between 40 percent and over 50 percent, compared with a 2013 average tax rate of roughly 30 percent. The apparent intention was to show how relatively low tax rates were in 2013 compared to the past. However, the figure did not actually show tax rates for taxpayers in 1960, but what rates would have been if taxpayers in 2005 were also transported back in time to 1960. The 2013 *Report* used 2005 income levels and deflated them back to 1960. However, this holds taxpayer behavior and demography constant, even though evidence shows that individuals will not earn and report as much income at marginal rates that high.⁹⁷ According to JEC Majority staff calculations, using actual income reported by taxpayers in 1960, the average tax rate at the top 1 percent and top 0.1 percent in 1960 were 21 percent and 25 percent, respectively, or roughly half of what the Obama Administration was claiming in its 2013 *Report*.

As the Tax Foundation reports of their own “Taxes and Growth” model used to analyze the effects of past tax policy changes, though its equations and methodologies may be the

Box 3-1 (Continued): If Taxpayers Had a Time Machine...

same used for current proposals, the Tax Foundation is careful to avoid the same pitfalls that the Obama Administration has fallen prey to:

...we ran the model using economic and taxpayer data from the year in which each bill was enacted, to account for the different economic and demographic climates in which each tax change occurred. For instance, the economy in the 1960s had fewer pass-through businesses and more married households than today's economy.⁹⁸

It would be worthwhile to remember that policy changes do not occur in a vacuum, and isolating effects of a particular policy remains quite difficult, even with the best models at one's disposal.

The *Report* implies that reducing the income of the top 1 percent to redistribute to the bottom 99 percent was a lauded goal of the Obama Administration: “Changes in tax policy... 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.”⁹⁹ The text suggests that the income in America is a fixed pie, from which the slices may be redistributed, but the *Report's* own argument in Chapter 5 for the pursuit of higher education to improve well-being runs counter to this representation. Investing time and money in post-secondary education enables one to rise higher in the income distribution and presumably increases the pie. Without government forcibly redistributing income from one group of Americans to another, policies that encourage and reward self-

motivation and employment bring about upward mobility and rising income levels.

In last year's *Response* the JEC stated:

Ultimately, it is economic mobility that matters more than income inequality—the fact is that people in the lower-, middle-, and upper-income groups are always changing over time. Improving economic mobility, not income inequality, remains a challenge to the 21st-century economy. ...economic mobility in America is not laggard compared to international peers, and mobility in America has remained largely unchanged over the last 20 years.¹⁰⁰

The current U.S. individual income tax system is complex and harms households and small businesses. Though the top statutory individual income tax rate is 39.6 percent, as noted in Chapters 4 and 8 of the *Response*, in combination with taxes in the ACA, the top rate paid by small businesses that file under the individual income tax is now 44.6 percent, including the surtax on investment income and additional tax penalties. This does not include state income taxes that are as high as 13.3 percent (California).¹⁰¹ While Americans rely on small businesses to provide a large share of new jobs, high marginal tax rates reduce resources that could be used to create jobs. Furthermore, the U.S. corporate tax rate is the highest in the developed world, making it difficult for American businesses to compete on a global scale, create American jobs, or increase worker pay.

Elsewhere in Box 3-4 of Chapter 3, the *Report* discusses alternative actions to “Make the Economy Work for All American [sic]” including the President’s proposal to raise the minimum wage.¹⁰² However, CBO previously projected that a proposed

Federal minimum wage increase to \$10.10 per hour could amount to an employment reduction of as many as one million workers compared to projected employment without the increase.¹⁰³ Yet, as mentioned in the JEC Majority analysis on the reward of work, increasing the minimum wage has another unintentional effect:

...as the minimum wage increases, many workers may actually prefer to work fewer hours in order to prevent the loss of Federal benefits by going over a “benefits cliff” as their incomes rise. Sometimes even a minor increase in income can be enough to make one marginal financial step forward feel like two significant and costly steps back. As an example, the Indiana Institute for Working Families points out that for a working parent in Indianapolis with a preschooler and a school-age child, simply moving from \$15 per hour to \$15.50 per hour would result in a benefit loss of nearly \$9,000 in annual childcare subsidies.¹⁰⁴

As economist Casey Mulligan testified at a JEC hearing on the employment effects of the ACA and explained in previous writing, when it comes to the sacrifice of work, many of the programs intended to help people get back on their feet have inadvertently made work more costly as Americans strive to improve the livelihoods of themselves and their families. He noted: “Another way of putting it is that taking away benefits has the same effect as a direct tax, so lower-income workers are discouraged from climbing the income ladder by working harder, logging extra hours, taking a promotion or investing in their future earnings through job training or education.”¹⁰⁵ As highlighted in the JEC analysis on reward of work, it is a mistake to assume that individuals do not consider the combined effects of taxes and benefits. Mulligan points to anecdotal evidence of potential

workers estimating the change in their net benefits based on taking a job, and ultimately choosing not to work. Mulligan estimates that these effects were responsible for roughly half the drop in work hours since 2007, and possibly more.¹⁰⁶

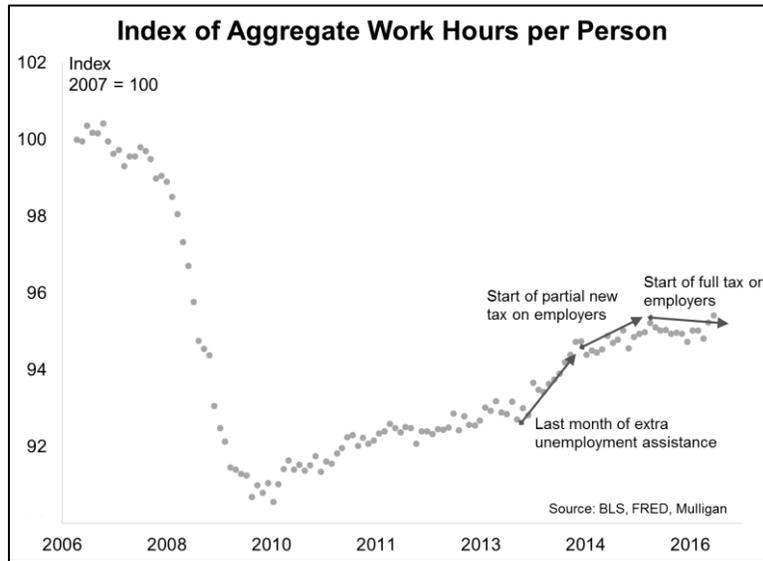
Health Insurance Coverage and Work Incentives

The *Report* further argues that the ACA improved families' well-being because it purportedly "increased access to care, financial security, and health."¹⁰⁷ The *Report* reiterates that, in addition to the expansion of Medicaid, families benefit from reduced inequality through access to coverage from the ACA on the health insurance marketplace.¹⁰⁸ However, these claims should be considered in the larger context of the ACA's negative effects upon employment and hours worked, which could mitigate much of the purported improvements to well-being.

The ACA imposes new taxes on individual income that reduce the incentives to work, save, and invest, thereby reducing employment. Wages and self-employment income over \$200,000 (single) or \$250,000 (married) are now subject to an additional 0.9 percent Medicare payroll tax. Investment income, such as rent, interest, dividends, and capital gains, for this same group of earners is subject to an additional 3.8 percent tax. As of 2013, this threshold for additional taxes captures not just the top 1 percent, but a share of earners in the top quintile that are part of the bottom 99 percent as well.¹⁰⁹ In a 2014 study, economist Casey Mulligan estimated that in response to the law, labor markets would reduce weekly employment per person by roughly 3 percent, the equivalent 4 million full-time workers.¹¹⁰ In recent data on aggregate work hours per person, Mulligan shows that work hours per person increased significantly at the end of Emergency Unemployment Assistance but then slowed significantly as the new tax on employers was partly phased in and turned slightly

negative once the full tax on employers was in effect (see Figure 3-2).¹¹¹

Figure 3-2



As noted in the *2016 Response*, on the employer side, compliance with the ACA means that many businesses will have fewer resources to expand and offer employment opportunities. Small- and medium-sized employers with 50 or more full-time equivalent employees are mandated to offer health insurance coverage or face a substantial tax, prorated monthly, per each full-time employee over the first 30 employees. The tax is indexed each calendar year to the growth in insurance premiums, and in 2016 the annual tax rose to \$2,160 per full-time employee beyond the first 30. The employer mandate creates an incentive for employers to hire fewer full-time employees and shift some existing full-time employees to part-time employment.¹¹²

ARRA and Economic Growth

The *Report* devotes the bulk of its income inequality analysis to three areas: economic growth, health insurance coverage, and the tax code. The Obama Administration argues that the policy response to the 2007-09 recession directly reduced income inequality via progressive tax and spending policies in the form of tax cuts and unemployment insurance extensions.¹¹³

The Obama Administration has argued in the current and past editions of the *Report* that ARRA helped to restore economic growth and reduce earnings inequality. Yet, as mentioned in Chapter 1 of the *Response*, the pace of real GDP growth over the course of the current recovery still remains roughly half the pace of the average post-1960 recovery.¹¹⁴

As Harvard economist Larry Summers testified in 2008 before the JEC, “a stimulus program should be timely, targeted and temporary.”¹¹⁵ In terms of timeliness, previous JEC Majority staff analysis notes that 10 percent of ARRA funds were still being spent through 2013.¹¹⁶ ARRA temporarily expanded benefits in the SNAP;¹¹⁷ relatedly, the number of caseloads remained elevated above 2010 levels through 2016.¹¹⁸ ARRA’s expansion of SNAP did not expire until November 2013, and the emergency extension of unemployment benefits did not expire until January 2014, nearly five years after ARRA was enacted. In some cases, such as for TANF, ARRA funding will not expire until the end of fiscal year 2018.¹¹⁹

In terms of targeting the stimulus, a Mercatus Center analysis from 2011 found that roughly half of the workers hired by businesses receiving ARRA funds were hired directly from other firms instead of from the intended pool of jobless workers, revealing an important lesson on the difficulty of implementing targeted stimulus programs: “even in a weak economy, organizations hired

the employed about as often as the unemployed.”¹²⁰ The aforementioned JEC analysis concludes that while it could be argued that some individual programs may have achieved Summers’ Keynesian stimulus standards, ARRA as a whole failed to meet the standards set in place by the Obama Administration.¹²¹

The Obama Administration’s Record on Inequality and Mobility

While painting a picture of the disparities that exist between the lowest quintile and the top 1 percent, the Obama Administration fails to prove the problem with the disparity. It is likely that a growing number of retirees occupy the lowest income quintile, even though they may have sizable wealth in the form of cash savings and a paid-off house, for example. Many small businesses—known as passthrough businesses—occupy the top 1 percent because they pay individual income tax rates rather than corporate rates. Unlike C corporations, passthrough businesses generally are not taxed, but rather their owners are taxed as if the income was earned directly by them; the income “passes through” to the owners’ tax returns.¹²² The most common types of passthrough businesses include sole proprietorships, partnerships, limited liability companies, and S corporations. Research shows that, as of 2011, roughly two-thirds of pass-through business income accrued in the top 1 percent.¹²³ Furthermore, passthrough business income drove nearly half the rise in income of the top 1 percent between 1980 and 2013.¹²⁴

Boasting of an average tax increase of more than \$500,000 on those projected to have incomes of greater than \$8 million in 2017, the *Report* seems to suggest that the top 1 percent and top 0.1 percent of the income distribution is solely occupied by “the most fortunate Americans”¹²⁵ and not by businesses as well, using additional terms including “highest-income families” or “[f]amilies in the top 0.1 percent.”¹²⁶ As explained in Chapter 8,

raising taxes on businesses that pay through the individual income tax system ultimately leaves these businesses with fewer resources to expand and hire more workers.

The *Report* points to the works of Chetty and his coauthors to demonstrate that the “defining challenge” does indeed extend beyond income inequality to intergenerational mobility, or how well one’s progeny does compared to his or her parents, but the data highlighted in the *Report* focus on mobility for those born into the bottom income quintile to the top income quintile, which misses much of the mobility that occurs to and from the quintiles in between.

Furthermore, Chetty’s work suggests that the United States sees worse mobility rates than other developed countries. In recent research, Winship noted that mobility rate comparisons between the United States and other countries are actually similar when ensuring that the mobility measures used match across countries, rather than comparing measures that appear more like apples to oranges, such as the comparison of parental family income in the United States with *paternal* earnings of other countries.¹²⁷

The *Report* indicates that income, wealth and consumption inequality have risen sharply over recent decades, demonstrating that change in its Table 3-1, which compares values from 1980 to the “most recent available” for each metric. The choice of 1980 (and values from 1980-82) as a basis for comparison is not good, because the economy was in recession that year for seven months. Another sharp and relatively deep recession followed from July 1981 to November 1982. The *Report* itself points out that income inequality decreases during a recession when based on more comprehensive income measures.¹²⁸ Comparing data from a recession to that of more recent data that is close to mid-business cycle makes it more difficult to discern business cycle influences

on the distribution and relationships of income, wealth, consumption and wage measurements. Investment income inequality measured in 1980 may appear narrower due to the recession and earnings inequality consequently may appear wider. Furthermore, though all three measurements are useful to determine a snapshot of economic well-being at any given point in time, omitting more detailed mobility measures excludes the dynamics that take place over time, significantly affecting policymakers' perceptions of the state of Americans' well-being over the course of their lives. As noted in last year's *Response*:

For wealth measurements, age is an even more important factor (in many cases, young adults have negative net worth as they pay off student loans, car payments, and mortgages, while the recently retired may have substantive wealth built over a lifetime to live off of in retirement), in addition to household formation (for example, if a married couple divorces and creates two households with lower wealth than they previously held combined, is this a policy concern when it comes to how it changes wealth inequality?), along with a number of other factors associated with the valuation of wealth as well.¹²⁹

Mobility still matters very much. Recent research reconfirms that absolute mobility rates for adults who were poor as children is still high, very likely above 90 percent, and although overall absolute mobility rates may have slowed down somewhat, most people continue to do better than their parents at the same age.¹³⁰

CONCLUSION

The most straightforward policy solutions involve putting a greater emphasis on letting people earn. Potential solutions span the breadth of tax, spending, and regulatory policies.

Recommendations

Specifically, the Committee Majority recommends that the new Congress and Administration:

- Remove or at least lessen the disincentives to work found in social support programs;
- Encourage or at least do not discourage two-parent households by the structure of taxes and support programs;
- Remove or at least lessen the disincentives of the tax code to work and invest; and
- Stop relying on Keynesian stimulus to engender economic growth.

CHAPTER 4: CONFRONTING HEALTH CARE CHALLENGES

- Chapter 4 of the *Report* offers the Obama Administration's defense of its signature law, the *Affordable Care Act*.
- The ACA has failed to make health care more affordable and accessible. It has left patients with fewer choices and less flexibility and facing rising costs.
- The *Better Way* health reform plan offers a framework for replacing the ACA with patient-centered reforms including: more choices, lower costs, more effective health care, and less bureaucracy.

THE FLAWED LEGACY OF THE AFFORDABLE CARE ACT

A Failed Rollout and New Federal Command to Purchase Insurance

The ACA was an attempt by the Obama Administration to make health insurance more affordable and prevalent through a top-down design reliant on a complex web of regulations, taxes, and incentives. However, the shrinking individual marketplaces, one of the pillars of the ACA, shows the failure of this government-centered approach.

Obamacare directed the establishment of a Federal health insurance marketplace for states that elected not to create their own exchange. Individuals without employer-sponsored insurance or coverage by a Government program—but with

incomes too high to qualify for Medicaid—are required to purchase government-approved insurance either through the ACA-established marketplace exchanges, or otherwise through the individual market. Those who choose insurance through Federal or State exchanges with incomes between 133 percent and 400 percent of the poverty line are eligible for Federal premium subsidies, which are sent directly to the insurer they select.¹³¹

In order to enforce the requirement that Americans have insurance that meets ACA requirements, the ACA created a tax on uninsured Americans known as the individual mandate that becomes more severe over time. The tax is now the higher of 2.5 percent of household income (capped at the national average price of a Bronze plan on the exchange) or \$695 per adult and \$347.50 per child (capped at \$2,085).¹³²

The rollout of Obamacare was error-prone from the start. While the idea of an online health insurance marketplace was hardly innovative (for example, eHealthinsurance.com had operated since 1998),¹³³ the Centers for Medicare and Medicaid Services (CMS) utterly botched the rollout of the Healthcare.gov website. The project was plagued from the outset with conflicting government directives and cost overruns. A Government Accountability Office (GAO) report found CMS incurred “cost increases, schedule slips, and delayed system functionality... From September 2011 to February 2014, [Federal marketplace] obligations increased from \$56 million to more than \$209 million. Similarly, data hub obligations increased from \$30 million to nearly \$85 million.”¹³⁴

As if the growing costs were not bad enough, the website repeatedly crashed upon going live to the public.¹³⁵ Even after months of troubleshooting,¹³⁶ Healthcare.gov continued to experience crashes.¹³⁷ In March 2016, GAO released another

report on Healthcare.gov's several ongoing weaknesses in security that could place sensitive information of enrollees at risk of disclosure, modification, or loss.¹³⁸

Subdued Enrollment and Missing Millennials

Privately funded insurance is based on sharing among a large group of policyholders the cost of adverse events that have an equal chance, as far as an insurance company can ascertain, of befalling any one of them and that is less than a certainty. Policyholders in such a group who choose the same coverage will pay the same premium. In the case of health insurance, that means policyholders who have the same risk of incurring medical costs and filing claims for cost reimbursement within a similar range are charged the same premium.

The ACA prohibits insurers from refusing to cover enrollees based on medical history or preexisting conditions.¹³⁹ The ACA also narrowed the age-rating ratio band to 3:1 nationwide,¹⁴⁰ essentially meaning that older patients could not be charged more than three times what younger people paid for their policy. Prior to Obamacare, the most common ratio was 5:1. These requirements detach the premiums insurers can charge from the differential risks of and reimbursements paid to different groups of policyholders. Furthermore, the requirement to provide coverage, while well-intentioned, motivates consumers to avoid paying premiums while healthy and wait until they become ill before they purchase insurance, which raises the probability to insurers of having to reimburse them to 100 percent.

This is the problem of adverse selection: an increasing percentage of people who buy insurance need medical care and file insurance claims, which raises the cost of insuring the pool and drives up premiums. Young and healthy people who as a group face low risk and low medical expenses are charged premiums that exceed

the value of insurance to them and cause them not to buy it. This development increasingly constricts the private insurance model built on cost sharing among large groups of policyholders with similar risk and reimbursement profiles. Obamacare relied on the individual mandate and associated taxes to combat adverse selection,¹⁴¹ but these measures and the program's design were not successful.

The technology magazine *WIRED* pointed out how technology failures added to the problem of adverse selection:

*Since would-be buyers of health insurance in 36 states have no other options, many of them will simply not bother, regardless of the individual mandate. This goes especially for the 'healthy young people' demographic without whom the economics of Obamacare fall apart. Are 23-year-olds who don't really think they need health insurance anyway really going to 'queue' until Healthcare.gov deigns to let them in?*¹⁴²

Healthcare economists both inside the Obama Administration¹⁴³ and outside it¹⁴⁴ projected that the insurance exchanges would need roughly 40 percent of their enrollees to be young adults between the ages of 18-34 years of age. In reality, only about 28 percent of exchange enrollees were in this essential age bracket, and that percentage has changed little in the following years.¹⁴⁵ Without these younger people sharing the cost of care for the older, sicker population, insurers are forced to increase the price of insurance or leave the marketplaces entirely.

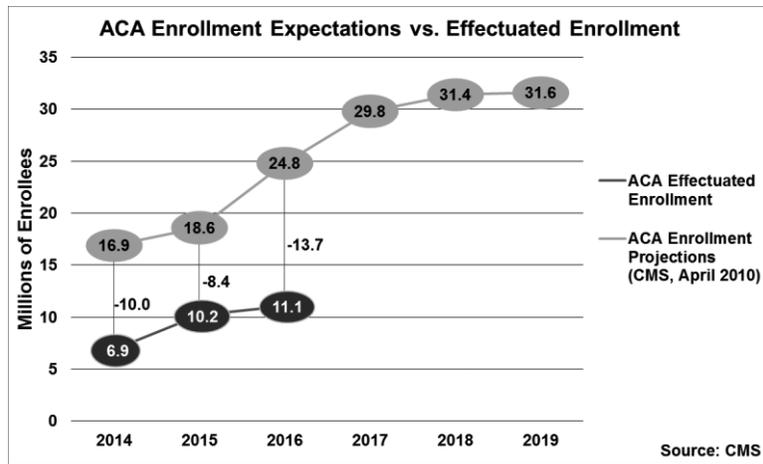
A 2016 report from BlueCross BlueShield found that its enrollees in ACA plans tended to be sicker overall and had expenses 22 percent higher than enrollees in its employer-sponsored plans.¹⁴⁶ The Obama Administration suggested this should not be a surprise

since the ACA mandated everyone regardless of health status have access to health insurance.¹⁴⁷ However, Obamacare was expressly written with incentives and punishments intended to keep these premium costs down and enrollment numbers of healthy people up. The Obama Administration's complex web of Federal policy failed to do so.

Enrollment of younger and healthier individuals is not the only lagging projection. Total enrollment in the Obamacare exchanges has also underperformed expectations. In 2010, the chief actuary of CMS predicted that in 2014, the first year of marketplaces implementation, 16.9 million people would enroll.¹⁴⁸ CBO made more conservative estimates in 2010 with a prediction of eight million exchange enrollees.¹⁴⁹ The actual effectuated enrollment, measuring those who both selected a plan and paid their premium, fell far short of the rosy CMS projection. Only 6.9 million people signed up and paid for a plan in 2014.¹⁵⁰

Actual, effectuated enrollment continues to underperform in the ACA individual marketplaces. CMS projected that in 2015 18.6 million people would be enrolled, 24.8 million would be enrolled by 2016, and 29.8 million would be enrolled by 2017. Even the more conservative CBO projections, which varied depending on the year, as recently as January 2015 predicted that 2015 enrollment would be 12 million people, 2016 would see 21 million people enrolled, and 25 million people would be enrolled by 2017.¹⁵¹ Actual enrollment in the first quarter of each year was well below expectations with 10.2 million in 2015¹⁵² and 11.1 million in 2016 (Figure 4-1).¹⁵³

Figure 4-1



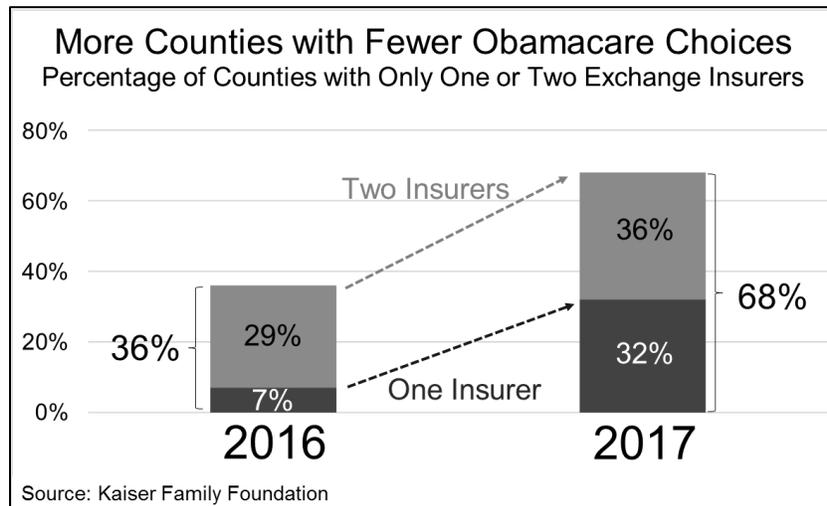
The 2017 numbers are not shaping up to be much better. According to the most recent report from CMS, 11.5 million people selected a 2017 marketplace plan as of December 24, 2016.¹⁵⁴ The Department of Health and Human Services (HHS) predicted that 13.8 million people will select a plan by the end of open enrollment on January 31, 2017.¹⁵⁵ On average about 13 percent of open enrollees will not be effectuated by paying the first month's premium by the end of the first quarter. Assuming that the Obama Administration will finally accurately predict enrollment, and the usual drop-off between enrollment and effectuation occurs, then only 11.9 million people will remain enrolled by the end of the first quarter. Additionally, CBO continues to downgrade projections on ACA marketplace enrollment and projects just ten million people on average will be enrolled in the marketplace through 2017, less than occurred in 2016.¹⁵⁶

Failing to meet enrollment targets has consequences far beyond embarrassing the ACA's proponents. A larger risk pool helps to ensure costs such as premiums and deductibles stay low for the

people who enroll in these plans. Insurance companies must raise rates in order to pay for the increased costs of caring for a smaller risk pool with sicker enrollees. Failing to meet expectations has very real, very expensive consequences on a population the ACA was intended to help.

Insurers Leaving the Marketplace

A common Obama Administration claim was that if customers shopped around on the ACA marketplaces, they could lower their premium costs.¹⁵⁷ While it is true that more competition tends to drive down costs, this method of controlling costs works more effectively in markets where consumers have an actual choice. Unfortunately, that is not the case in many states. From 2016 to 2017, the number of counties nationwide with only one insurer offering insurance on the exchange increased from 225 to 1,021. Five states will have just one insurer in their marketplace in 2017, up from one in 2016.¹⁵⁸ As the chart below illustrates (Figure 4-2), the number of counties with only two insurance choices also increased significantly. In total, roughly seven in ten counties now have only one or two insurers in their exchanges, which is hardly a meaningful choice.

Figure 4-2

Obamacare architect Jonathan Gruber understood that competition helps lower premiums,¹⁵⁹ and the Obama Administration as recently 2016 stated, “Increased numbers of issuers in a market means more competition. More competition tends to put downward pressure on premiums.”¹⁶⁰ In a report from 2015, HHS found that counties with three or more insurance choices had ACA benchmark plan premiums that were nine percent lower than counties with just one or two providers.¹⁶¹ As insurers continue to leave the ACA marketplaces, more Americans will face higher premiums and fewer choices.

The Obamacare CO-OP Implosion

Unsurprisingly, the *Report* contains no discussion of the ACA’s Consumer Operated and Oriented Plans (CO-OPs). Insurers participating in CO-OPs were given \$2.4 billion in Federal support to create plans that were ultimately incapable of being sustained. The Obama Administration originally provided funding for 24 CO-OPs, one of which failed before open enrollment even began, leaving 23 CO-OPs across 25 states. The likelihood of CO-OP

failure was clear from the beginning; even initial HHS estimates predicted about one-third of all loans would not be repaid, amounting to roughly \$792 million not including forgone interest.¹⁶² Yet, the Obama Administration never established criteria to determine whether a CO-OP was viable or sustainable,¹⁶³ further increasing the risk to the Federal Government. As a result of the flawed design, 21 of the CO-OPs reported net losses in 2014.¹⁶⁴ Another was forcibly taken over by the Iowa State Insurance Commissioner because of financial instability and was ultimately liquidated.¹⁶⁵

As of 2017, only five of the 23 CO-OPs have not failed, and many of the survivors are suffering financially.¹⁶⁶ The cost of these failing CO-OPs will be borne by the taxpayers, based upon the Obama Administration's initial assumptions. Worse than the original HHS estimates that one-third of the CO-OP loans would not be repaid,¹⁶⁷ the total taxpayer loss as of 2017 approaches \$1.9 billion.¹⁶⁸

Examining the experience in Ohio, the CO-OP InHealth Mutual recorded a loss of \$80 million in 2015, including a \$32 million cushion for expected losses in 2016.¹⁶⁹ Upon entering the exchanges, InHealth experienced tripling enrollment and an almost sevenfold increase in revenue. But the influx in new enrollees and revenue was not enough to keep the insurer operating. By May 2016, InHealth faced the choice of raising premiums by at least 60 percent in 2017 or shutting down to prevent further losses. The insurer had completely used its capital cushion from 2015 and almost all of the \$113 million loaned to it from the Federal Government.¹⁷⁰ InHealth became another CO-OP casualty of Obamacare and forced 22,000 Ohioans to scramble to find a new insurer within 60 days or go without health coverage.¹⁷¹

In Utah, Arches Health Plan applied to raise its 2016 insurance prices by an average of 43 percent. Even with such drastic rate increases, Arches failed in October 2015. Its failure sent 66,000 consumers searching to find new insurers. Those 31,000 Utahans who bought Arches on the exchanges were faced with a familiar problem under Obamacare: approximately two-thirds of Utah counties only had one insurer on the exchange.¹⁷² Doctors and hospitals also suffered from the collapse of Arches. By the middle of 2016, Arches still had not paid over \$30 million to hospitals throughout Utah.¹⁷³ It remains to be seen how much of the over \$89 million Federal loan given to Arches will be repaid.¹⁷⁴ In many ways, InHealth and Arches exemplify a common problem with the ACA: Americans facing a loss of their plans are forced into making more expensive choices, while taxpayers are liable for much of the cost.

Rising Rates

The degree to which premiums increase can vary depending on the condition of the insurance markets in a particular state. Between 2014 and 2015, average marketplace premiums increased modestly.¹⁷⁵ However, premiums for 2017 plans have skyrocketed in both the exchanges and elsewhere in the individual market. In an analysis of individual market plans, weighted by the number of people covered by each plan, the Committee Majority found that the national average premium faced by consumers increased by over 25 percent.¹⁷⁶ On the exchanges, the price of the benchmark silver plans increased by an average of 22 percent nationwide. Among other reasons, missing healthy enrollees and lack of competition are causing the premiums for insurance in ACA plans to increase.

Figure 4-3

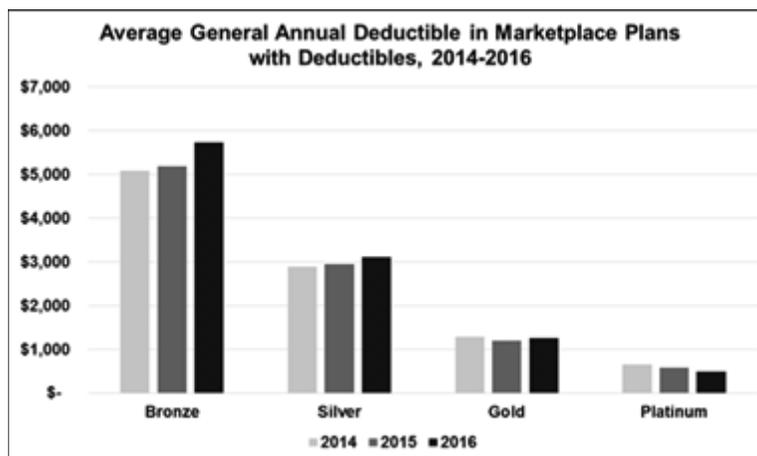
STATE	RATE INCREASE
<i>National Average</i>	25.2%
Alabama	36.1%
Alaska	7.3%
Arizona	53.7%
Arkansas	9.6%
California	14.3%
Colorado	20.4%
Connecticut	24.8%
District of Columbia	7.3%
Delaware	31.5%
Florida	19.1%
Georgia	27.4%
Hawaii	31.2%
Idaho	24.0%
Illinois	50.3%
Indiana	18.7%
Iowa	30.1%
Kansas	36.6%
Kentucky	24.4%
Louisiana	31.6%
Maine	23.5%
Maryland	25.1%
Massachusetts	9.2%
Michigan	16.7%
Minnesota	55.5%
Mississippi	15.8%
Missouri	27.9%
Montana	48.2%
Nebraska	33.1%
Nevada	10.6%
New Hampshire	8.3%
New Jersey	8.5%
New Mexico	29.5%
New York	16.6%
North Carolina	24.3%
North Dakota	2.0%
Ohio	16.6%
Oklahoma	76.0%
Oregon	26.8%
Pennsylvania	32.5%
Rhode Island	1.5%

Figure 4-3 (Continued)

STATE	RATE INCREASE
South Carolina	27.0%
South Dakota	37.0%
Tennessee	56.2%
Texas	34.0%
Utah	31.1%
Vermont	7.0%
Virginia	18.5%
Washington	13.6%
West Virginia	36.3%
Wisconsin	15.9%
Wyoming	7.4%

Source: JEC Staff Calculations.

Aside from the harm inflicted by rising premiums, deductibles and other out-of-pocket costs are also increasing. In 2016, bronze-level plans had deductibles over \$5,700 and silver plan deductibles climbed to \$3,100.¹⁷⁷ High deductibles make using the health insurance that consumers are forced to buy even more expensive to use. Numerous media reports describing how consumers cannot afford to use their ACA health insurance should not be surprising.¹⁷⁸

Figure 4-4

Source: Commonwealth Foundation¹⁷⁹

“If You Like Your Insurance...”

For many, one of the most infuriating effects of the ACA was the damage it did to the existing health insurance landscape. Repeatedly, President Obama and his Administration pledged that if people liked their doctor, they could keep their doctor and if they liked their health insurance plan, they could keep their plan.¹⁸⁰ In practice, however, this proved to be untrue. Fact checkers from various media outlets rated the President’s claims as “false,”¹⁸¹ or a “pants on fire”¹⁸² lie. Politifact called President Obama’s much-repeated claim the Lie of the Year in 2013.¹⁸³

Obamacare required all health insurance plans to meet Federally mandated minimum standards, including requiring them to cover types of care an individual may not want or need.¹⁸⁴ After the ACA’s enactment, millions of people who were enrolled in health plans received notices that their plan would no longer be offered.¹⁸⁵ By some estimates, roughly four million Americans lost their health insurance despite the President’s promises.¹⁸⁶ While some plans could be grandfathered and allowed to continue, these plans must have existed on March 23, 2010, covered a particular person as of that date, and not have changed substantially since then.¹⁸⁷ These caveats made it difficult for plans to qualify for or maintain grandfathered status, thus rendering the original promise functionally moot.

Employer-Sponsored Insurance under the ACA

Employer-sponsored health insurance (ESI) plans cover half of the non-elderly population in the United States.¹⁸⁸ As a result, government tinkering with ESI affects a large number of Americans across the nation. Given this, proposed changes to the ESI market should be carefully considered.

The Obama Administration attempted to take credit for the relatively slow premium increases in the employer-sponsored insurance market.¹⁸⁹ But there are several problems with this claim. The first is that the trend of smaller growth in premiums predates the Obama Administration, and evidence suggests broader economic trends slowed the growth of health care spending. Second, President Obama promised repeatedly that his Administration would significantly *decrease* costs for the average American family.¹⁹⁰

The *Report* stated, “The average premium for employer-based family coverage was nearly \$3,600 lower in 2016 than it would have been if nominal premium growth since 2010 had matched the average rate recorded over the 2000 through 2010 period.”¹⁹¹ This overview ignores that the “slowdown” in premium growth actually began in 2005. According to CBO, “private insurance premiums grew more slowly from 2005 to 2013 (4.5 percent per year, on average) than they did from 2000 to 2005 (9 percent per year).”

+¹⁹² This slower growth found by CBO is in line with average growth rates seen in the first years of the ACA, but it is a trend that predates both the ACA and the Obama Administration.

Premiums may have increased more slowly than in the prior decade, but employees are taking on a larger share of those premiums. According to a Kaiser Family Foundation survey, employees with single coverage were expected to cover roughly 14 percent of their premiums in 1999, but 18 percent by 2016. For family coverage, employees were expected to cover 27 percent of their premiums in 1999, but by 2016 this increased to 30 percent.¹⁹³ To make matters worse, premiums have increased faster than wages.¹⁹⁴ Employee pay raises are outstripped by premium growth.

In summary, the last Administration claimed that premiums would decrease for the typical American family, but premiums have increased. The *Report* claimed that the ACA has lowered the rate of increasing premiums, but broader structural trends contributed significantly to slower growth in health care spending and premiums. CEA named a section of the *Report* “Higher Wages, Lower Premiums, and Lower Out-of-Pocket Costs for Workers.” However, wages have increased more slowly than premiums and workers shoulder a greater share of plan costs.¹⁹⁵

“I will not raise taxes on the middle class...”

Despite President Obama’s pledge not to raise taxes on those making less than \$200,000 (\$250,000 if filing jointly) per year,¹⁹⁶ several new taxes among the over \$1 trillion in Obamacare tax increases hit Americans with incomes far below that threshold.¹⁹⁷ The Joint Committee on Taxation (JCT) confirmed that many ACA taxes affect lower-income taxpayers, either directly by increasing their tax burden or indirectly through higher consumer prices arising from taxes on insurance and health care products. Significantly, JCT found that one tax alone—the tax increase on people with high medical expenses—will hurt more low- and middle-income Americans in 2017 than will be helped with premium tax credits.¹⁹⁸

While JCT and CBO have not provided detailed estimates of each of the taxes in recent years, the House Ways and Means Committee compiled information contained in Figure 4-5 based on 2012 projections. Provisions in bold represent taxes affecting the middle class. Figure 4-5 also illustrates how the size of the total tax increase nearly doubled from 2010 estimates as more taxes phased in and grew in severity.

Figure 4-5

Provision	2010 10-year estimate	2012 10-year estimate
Additional 0.9 percent payroll tax on wages and self-employment income and new 3.8 percent tax on dividends, capital gains, and other investment income for taxpayers earning over \$200,000 (singles)/\$250,000 (married)	210.2	317.7
“Cadillac tax” on high-cost plans	32	111
Employer mandate	52	106
Annual tax on health insurance providers	60.1	101.7
Individual mandate	17	55
Annual tax on drug manufacturers / importers	27	34.2
2.3 percent excise tax on medical device manufacturers / importers	20	29.1
Limit flexible spending arrangements (FSAs) in cafeteria plans	13	24
Raise 7.5 percent adjusted gross income floor on medical expense deduction to 10 percent	15.2	18.7
Deny eligibility of “black liquor” for cellulosic biofuel producer credit	23.6	15.5
Codify economic substance doctrine	4.5	5.3
Increase penalty for nonqualified health savings account (HSA) distributions	1.4	4.5
Limit use of HSAs, FSAs, and health reimbursement arrangements to purchase over-the-counter medicines	5	4
Impose fee on insured and self-insured health plans for patient-centered outcomes research trust fund	2.6	3.8
Eliminate deduction for expenses allocable to Medicare Part D subsidy	4.5	3.1

Figure 4-5 (Continued)

Provision	2010 10-year estimate	2012 10-year estimate
Impose 10 percent tax on tanning services	2.7	1.5
Limit deduction for compensation to officers, employees, directors, and service providers of certain health insurance providers	0.6	0.8
Modify section 833 treatment of certain health organizations	0.4	0.4
Other revenue effects	60.3	222
Additional requirements for section 501(c)(3) hospitals	Negligible	Negligible
Employer W-2 reporting of value of health benefits	Negligible	Negligible
Form 1099 reporting for small businesses	17.1	Repealed by P.L. 112-9
TOTAL GROSS TAX INCREASE (BILLIONS OF DOLLARS)	569.2	1,058.3

Source: House Ways and Means Committee, 2012

Additionally, other taxes aimed at higher-income individuals may diminish job opportunities for lower-income Americans by increasing business tax burdens. As mentioned in Chapter 8 of this *Response*, the ACA's 3.8 percent investment income tax contributed to the top tax rate on small businesses rising from 35 percent when President Obama took office to 44.6 percent today.¹⁹⁹

Addressing the Costs of Health Care

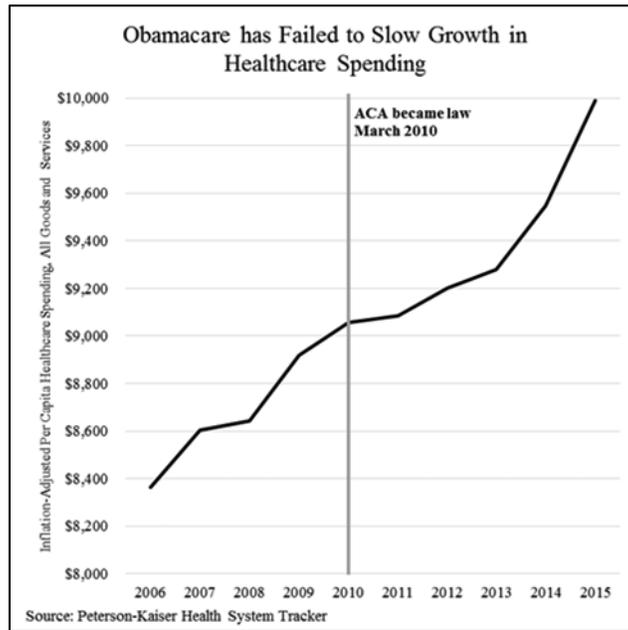
The *Report* claimed that the ACA has been responsible for slowing costs in the American health care system by fundamentally altering the cost structure.²⁰⁰ It is true that measurements from

2011 to 2013 showed unusually low growth in health care spending, partially due to low growth in the economy as a whole. However, health care spending growth had been on a long-run downward trajectory before the Obama Administration, casting doubt on the claimed positive impact of the ACA. Health care economists from Johns Hopkins and the University of Southern California found that at “...least 70 percent of the recent slowdown in health care spending can likely be explained by long term patterns...the Great Recession’s effect on reduced real per capita income and subsequent effect on reduced health care spending, as about 41 percent of the recent slowdown can be explained by these reductions in income.”²⁰¹ Since health care spending grew more slowly in the last recession, it follows that spending growth would continue to be slow a few years into the slowest economic recovery in the modern era.²⁰²

Further, spending returned to its previous course in 2014 and 2015. National Health Expenditures (NHE) grew 5.3 percent in 2014 (the first year of the ACA exchanges) and 5.8 percent in 2015, with CMS predicting average annual NHE growth of 5.8 percent per year from 2015 to 2025.²⁰³ From 2001 to 2005, NHE grew by an average of 8.1 percent per year; from 2006 to 2010 by 5.1 percent, and from 2011 to 2015 by 4.3 percent.²⁰⁴ The projected 5.8 percent increase per year from 2015 to 2025 represents a steeper trend than the expenditure growth seen from 2006 to 2010 prior to Obamacare passage. CMS projects that health care expenditure growth will continue to outpace GDP growth by 1.3 percentage points per year through 2025, with NHE increasing to more than a fifth of GDP by 2025, up from 17.5 percent in 2014.²⁰⁵ Additionally, the Obama Administration’s CMS found that part of the recent and future expected acceleration in health spending is due to the ACA.²⁰⁶ The chart below shows the sharp uptick in

costs per person in recent years as the ACA became fully implemented.

Figure 4-6



Further, the Obama Administration’s CMS attributed some slowdown in spending growth to “trends such as increasing cost-sharing in private health insurance plans and various Medicare payment update provisions.”²⁰⁷ As noted previously, unaffordable deductibles discourage Americans from seeking care.

SOLUTIONS FOR CONSUMER-DRIVEN HEALTH CARE

As discussed later in this chapter, consumer-driven health care is a much better method of controlling costs, since it both provides patients a means of affording cost-sharing and empowers them to make wise decisions about how their health care dollars are spent. Improvements in efficiency driven by market forces is beneficial for patients and the system as a whole, but making health care so

unaffordable that patients cannot access the care they need should not be an acceptable method of cost containment. Unfortunately, the ACA's poor design has caused skyrocketing premiums for plans with increasingly unaffordable deductibles.

A Better Way

In light of Obamacare's failure to fix the health care system through onerous regulation and mandates, the Committee Majority recommends moving in a more productive direction. To that end, the *Better Way: Health Care*²⁰⁸ blueprint provides a useful framework for replacing the ACA. The *Better Way's* health proposals are structured around a number of major principles and policies that aim to maintain access to coverage, improve portability and consumer control, and contain health care costs.

Consumer-Directed Health Care

One of the most unfortunate features of Obamacare was that it placed the Federal Government in the center of managing health care for many Americans. Rather than one-size-fits-all prescriptions from Washington, the *Better Way* proposes improved consumer involvement through the expansion of Health Savings Accounts (HSAs) tied to High-Deductible Health Plans (HDHPs). This combination protects consumers from unexpected catastrophic health care expenses while allowing patients themselves to manage day-to-day health care expenses using funds in tax-favored accounts. This provides greater patient control over health care decisions, allowing consumers to understand the costs of care and make their own decisions about when and where to seek treatment.²⁰⁹

The Kaiser Family Foundation has estimated that 29 percent of covered workers who obtain insurance from their employer are enrolled in HDHP/HSA or HDHP/Health Reimbursement

Arrangement (HRA)²¹⁰ plans, compared to only 4 percent in 2006. However, this popular type of health insurance was treated unfavorably by the ACA. The *Better Way* would roll back undue restrictions imposed by the ACA and also make several reforms, including allowing spouses to make catch-up contributions to a joint HSA account, allowing qualified medical expenses from 60 days prior to the start of coverage to be reimbursed from an HSA, setting the contribution limit for HSAs equal to the combined deductible and out-of-pocket expense limit of the associated HDHP, and expanding access to HSAs to groups such as those covered by TRICARE and the Indian Health Service. The *Better Way* provides consumers the flexibility to choose the plan, whether HDHP/HSAs or another option, that best meets their health care needs.²¹¹

Price Transparency in Health Care

One serious flaw in the American health care market is a lack of price transparency. Patients and consumers are not able to comparison-shop effectively for coverage and care if cost levels are opaque and only become apparent once care has been received. This information asymmetry leads to higher prices for consumers and an inefficient health care market. Thus, a critical aspect of reforming the system must be requiring price transparency, which will bring down prices by allowing consumers to make informed decisions about their health care purchases and injecting competitive pressures into the health care sector that lower costs. This approach is particularly important when paired with consumer-direct health care options such as increasingly popular HDHP/HSAs.

Health Insurance Portability

Another major issue confronting the American health care system is the lack of portable health insurance. For millions of

Americans, access to affordable insurance means finding work with an employer who offers coverage and staying with that employer to maintain it. The *Better Way* envisions a future in which Americans can transition easily from employer-based group coverage to individual plans without major disruptions in their health care. The cornerstone of this plan is a universal refundable tax credit, adjusted for age and inflation, for those who do not have access to care through their employer, Medicare, or Medicaid. This credit would facilitate access to private insurance, allowing consumers to select a plan with coverage that is right for them rather than approved by Washington bureaucrats. This will fill the coverage gaps left by Obamacare, eliminate the work disincentives in Obamacare's core structure,²¹² and free workers from being locked into a job to maintain insurance. A secondary benefit is that the tax credit structure will help control premium costs. While Obamacare subsidies automatically increase payouts to insurers when insurers raise rates, the *Better Way* premium tax credit is tied to broader measures of inflation that will require insurance companies to compete and control costs for consumers.²¹³

Purchasing Coverage across State Lines

In the current health care system, consumers are confined to purchasing health plans licensed in their state of residence. This restriction reduces competition and can drive up insurance prices. In contrast, *Better Way* reforms allow individuals to purchase plans licensed in other states, thereby increasing competition and consumer choice while driving down prices. Additionally, expanding the health insurance markets across state lines opens up new opportunities with interstate pooling compacts.²¹⁴

Expanding Opportunities for Pooling

In 2015, a National Federation of Independent Businesses survey identified cost as the single largest obstacle small businesses face in offering health insurance to their employees.²¹⁵ While Obamacare has failed to address this barrier, the *Better Way* proposes a different path that allows small business to band together (pool) to offer small business health plans, also called association health plans (AHPs). This would allow small businesses and voluntary organizations to join in offering health coverage at lower prices through improved bargaining power and more diverse risk pools. The *Better Way* would prohibit plans from selecting only the healthiest individuals and prevent plans from charging more to those who are sick in excess of state statutory limits.²¹⁶

Similarly, the *Better Way* would allow individuals to band together into individual health pools (IHPs). Like AHPs, IHPs allow individuals to leverage more market power to drive down costs. IHP enrollees would have the same protections against undue discrimination as those in AHPs and would see the same advantages of access to affordable coverage.²¹⁷

Protecting Employee Wellness Programs

Many employers support programs that reward employees for taking steps to improve their health, such as participation in smoking cessation and weight loss programs. Unfortunately, the Obama Administration took a different view with increasing regulatory burdens and legal challenges that undermines the ability of insurers to promote these mutually beneficial programs for employees. The *Better Way* guarantees that employers may offer wellness programs that include financial rewards or surcharges, so long as those programs do not exceed limits imposed under current statutes. Additionally, it provides legal

protections for these programs, while ensuring that voluntary collection of medical information from an employee's family member complies with the *Genetic Information Nondiscrimination Act*. Taken together, these steps would allow employers to offer wellness programs without fear of costly litigation and regulation from Washington.²¹⁸

Protecting Flexibility for Employers to Self-Insure

Many companies in the United States choose to provide health insurance directly to their employees rather than contracting with a third-party insurer. This allows companies to design a structure that is best for their workforce. However, they also assume the financial risk involved in paying for claims directly. For this reason, many companies with self-insurance arrangements purchase stop-loss insurance to protect against extreme, unexpectedly high claims or expenses. This is a necessary part of making self-insurance flexible and affordable.²¹⁹

Unfortunately, rather than encouraging these tools, the Obama Administration has tried to block employers from self-insuring through costly regulation and has threatened to define these stop-loss insurance policies as "group health insurance," subjecting these intentionally narrow policies to Federal regulatory burdens and limits on their use. Instead of undermining an effective and flexible insurance arrangement because it doesn't conform to one-size-fits-all Washington mandates, the *Better Way* protects employers' ability to both self-insure and to purchase stop-loss coverage without Federal interference.²²⁰

Medical Liability Reform

Washington's failure to enact medical liability reform has had negative repercussions for many Americans. The system has imposed enormous unnecessary costs both on physicians and

patients. Estimates show that reforming medical liability would save the nation's health care system \$300 billion in costs each year.²²¹ California and Texas, among other states, have made progress in medical liability reform. In the states without reform, injured patients receive only 46 cents of every dollar awarded; the rest is lost to attorneys and administrative fees.²²² The reforms proposed in the *Better Way* cap non-economic damages at reasonable levels while ensuring that wronged patients are able to recover all economic damages and that these damages will not be diverted to excessive contingency fees. The plan will also work with the states to develop innovative ways to reduce frivolous lawsuits and defensive medicine, while improving accountability and encouraging professionalism in the medical community.

Pre-Existing Condition Coverage and Other Reforms

The *Better Way* plan would prohibit insurers from turning away or limiting coverage on the basis of a pre-existing condition. The plan also allows dependents to stay on their parents' plan through age 26 and prohibits insurers from imposing lifetime limits on coverage. In addition, the framework bars insurers from cancelling or refusing to renew coverage to any American simply because of illness or health condition.²²³

Continuous Coverage Protections

The *Better Way* expands protections for Americans that maintain continuous health insurance coverage—already a successful feature of the employer-based market—to apply to the individual insurance market. Under the blueprint, any American who maintains continuous coverage cannot be charged more than standard rates when they change insurers due to a qualifying life event. This ensures that insurance is portable, and no longer ties an individual to a particular employer or insurance plan.²²⁴

One-Time Open Enrollment

The *Better Way* will provide a one-time open enrollment period to allow previously uninsured Americans to purchase coverage regardless of their health or age as if they had previously been insured. This would allow patients to take advantage of the new continuous coverage protections. Individuals could choose to forego enrollment without penalty, but doing so would forfeit the continuous coverage protections, which could lead to higher health insurance premiums in the future.²²⁵

Fixing Age Rating Bands

Prior to the ACA, most states used a 5:1 age rating ratio under which the standard premium of an older individual's plan could be no more than five times that of a younger person's standard premium. However, the ACA mandated a universal 3:1 age rating ratio, which in practice has proved unrealistic and has led to an insurer market bereft of younger and healthier Americans. The *Better Way* returns the default age rating ratio to the proven 5:1 standard, but allows individual states the flexibility to adjust it at their discretion to better suit the conditions of their markets and the needs of their citizens.²²⁶

Grants for State Innovation

States have long been laboratories of government policy, testing new and innovative approaches to solve problems within their communities. The *Better Way* invests at least \$25 billion in performance-based, sliding-scale State Innovation Grants to reward states that find effective ways to make health care more accessible and less expensive.²²⁷

Robust High-Risk Pools

State-based high-risk pools provide financial assistance to high-risk individuals who are priced out of traditional insurance markets. The *Better Way* allocates at least \$25 billion in Federal funding for high-risk pool programs, which the Federal Government would operate in partnership with the states.²²⁸

The Need for Medicaid Reform

Medicaid is a crucial safety net for our nation's most vulnerable patients. It currently covers almost 72 million Americans, with estimates approaching 98 million who could be covered by the program at some point in a given year.²²⁹ Largely because of the expansion under the ACA, Medicaid spending has increased dramatically and is expected to double over the next decade.²³⁰

The GAO has designated Medicaid as a program with a high risk for fraud and abuse because of its “size, growth, diversity of programs, and concerns about the adequacy of fiscal oversight.”²³¹ As Medicaid struggles to contain these issues, it also faces issues with excessive red tape and major lapses in oversight that led to continuing payments to banned providers and millions of dollars in benefits for deceased beneficiaries.²³²

Additionally, the ACA changes to Medicaid detract from the core mission of the program by providing a higher rate of Federal matching funds for able-bodied adults with household incomes above the poverty line than it does for those who are disabled, elderly, or living in poverty. This creates a perverse budgetary incentive for states with financial challenges to cut services for the more vulnerable traditional Medicaid population.²³³

These new issues combine with older, longer-standing flaws and perverse incentives to cause a drag on the entire Medicaid system. The *Better Way* plans to bring Medicaid into the 21st century by

providing Medicaid recipients and states with more choices and flexibility.

Fixing Obamacare's Medicaid Trap

Obamacare expanded eligibility for Medicaid to individuals with incomes up to 138 percent of the poverty level.²³⁴ At the same time, it prohibited those eligible for Medicaid from receiving insurance subsidies in the exchanges. In the states that did not expand Medicaid income eligibility to 138 percent, ACA guidelines required individuals to earn at least 100 percent of the poverty level to qualify for a premium subsidy. That left two and a half million low-income Americans below 100 percent of the poverty level with a dilemma: in spite of Obamacare's command that they have insurance, they earned too much to qualify for traditional Medicaid and too little to get help affording a private plan.²³⁵ Essentially, Obamacare left them with no meaningful coverage option.

Others in the Medicaid system discovered that they could not obtain necessary care. A report from the HHS Office of Inspector General examined the most prevalent type of Medicaid structure and found a troubling lack of access to care:

We found that slightly more than half of providers could not offer appointments to enrollees. Notably, 35 percent could not be found at the location listed by the plan, and another 8 percent were at the location but said that they were not participating in the plan. An additional 8 percent were not accepting new patients. Among the providers who offered appointments, the median wait time was 2 weeks. However, over a quarter had wait times of more than 1 month, and 10 percent had wait times longer than 2 months. Finally, primary care

*providers were less likely to offer an appointment than specialists; however, specialists tended to have longer wait times.*²³⁶

A Kaiser Family Foundation survey found similar results with 67 percent of primary care physicians refusing to accept new Medicaid patients, compared with 94 percent who accept new patients with private insurance.²³⁷ A study by the nonpartisan Medicaid and CHIP Payment and Access Commission (MACPAC) observed that over a third of “Medicaid enrollees report greater difficulty obtaining care from specialists.”²³⁸ Clearly, patients with private insurance have an advantage in accessing care. Further, while those newly covered through Medicaid are accessing more care than those without insurance, no data suggest their health outcomes are better now thanks to the ACA.²³⁹

Unlike the ACA, which provides only a one-size-fits-all choice for low-income Americans—and in some cases no choice at all—the *Better Way* would allow those eligible for Medicaid to leave that system and use the premium tax credit to purchase a higher-quality private plan.²⁴⁰

More Medicaid Choices for States

Under the current system, states must ask the Federal Government for waivers—which are not always granted—if they seek to adjust Medicaid requirements to better suit the needs of their population.²⁴¹ The *Better Way* provides states more authority to design Medicaid to fit the needs of their state, including allowing them to expand coverage. It will also provide transition relief in the states that have already expanded coverage. States could choose a more traditional approach by receiving a per capita allotment based on the history of Medicaid spending in that state, or a block grant that would allow more flexibility and innovation

in serving the Medicaid population. Under either option, states would be required to fulfill the Medicaid purpose of serving the most vulnerable populations.²⁴²

Promoting Innovation in Health Care

The *21st Century Cures Act*, which was passed by Congress and signed by President Obama on December 13, 2016,²⁴³ was a bipartisan effort to accomplish a variety of health objectives. In particular, the legislation reduces regulatory barriers to analyzing health data, modernizes the process for clinical trials, provides incentives and funding for research into curing new diseases, and seeks to unleash the power of precision medicine and other new technologies to improve health care in the United States. Enactment of this legislation was a major step forward, and the *Better Way* seeks to build on it by reforming restrictions on electronic health records in order to spur innovation and technology-driven improvements in care while protecting patient privacy. These records would be portable for consumers, freeing patients from paperwork burdens each time they see a new provider and preventing medical errors that occur because of incomplete information about medical history.²⁴⁴

Preserving and Protecting Medicare

Medicare currently serves 57 million older Americans and people with disabilities. However, the program faces a number of critical challenges in the 21st century that render it unsustainable in the longer term due to both its expected spending growth and complex structure. Obamacare's treatment of Medicare has been described in the *Better Way* as "raid and ration." First, the ACA instituted cuts to the Medicare program that now amount to \$800 billion. Rather than using program savings to ensure the long-term sustainability of the program for beneficiaries, the ACA diverted those funds to finance other Obamacare programs. Another

unpopular feature of the ACA established the unelected Independent Payment Advisory Board, which some fear will lead to rationed care for beneficiaries, as described next. The *Better Way* instead focuses on a three-step approach to make Medicare sustainable for current and future beneficiaries: repealing the most damaging Obamacare provisions, adopting bipartisan reforms to make the program sustainable and offer greater choice to beneficiaries, and placing Medicare on a sound long-term path.²⁴⁵

Repeal IPAB

The Independent Payment Advisory Board (IPAB) is a 15-member panel of bureaucrats created by Obamacare with the task of reducing Medicare spending if it exceeds certain targets. However, the panel is prohibited from changing beneficiary cost-sharing eligibility or benefit levels; as a result, rationing care is the only legal option available to it. It is also empowered with significant rulemaking powers that can only be reversed with an overwhelming vote in both chambers of Congress. The *Better Way* provides a more humane way to contain costs through market-driven competition and structural reform.²⁴⁶

The Status Quo is Unsustainable

CBO's January 2017 baseline projects that, under current law, the Medicare Hospital Insurance (HI) trust fund will be exhausted in 2025, a full year earlier than its March 2016 projections had anticipated.²⁴⁷ That same year, total spending on Medicare will exceed any offsetting receipts by more than a trillion dollars, worsening as more time passes. The current course will not preserve Medicare for future generations.

Strengthening Medicare Advantage

Medicare Advantage (MA), originally established in 2003, is a voluntary program within Medicare that allows seniors to seek

benefits from a Medicare-approved private health plan. Today, nearly 32 percent of Medicare recipients choose Medicare Advantage, and CBO projects this will increase to nearly 41 percent in 2027.²⁴⁸ However, the ACA made a number of negative changes to MA, including limiting the ability of seniors to switch plans in response to unexpected changes, capping quality bonuses in a way that undermines plan incentives to provide a high-quality product, and cutting the program's funding by \$150 billion.²⁴⁹ The *Better Way* would repeal the caps on quality bonuses, restore flexibility for seniors to adapt to unexpected plan changes, and limit the ability of the executive branch to arbitrarily cut MA funding.²⁵⁰

Merging Medicare Parts A and B and Other Reforms

Since Medicare's creation in 1965, the private insurance system has transformed, but Medicare has not kept pace with the changes.²⁵¹ The old-style structure of Medicare features a confusing array of copays and deductibles for different programs and a fee for service (FFS) structure that rewards cost rather than quality. At the same time, three separate assistance programs are designed to help low-income beneficiaries with Part B premiums. The *Better Way* would consolidate the assistance programs into one simplified program, and also merge Medicare Part A (covering hospital related services) and Part B (covering physician and outpatient services) into a single program with a combined deductible, a single annual out of pocket maximum, and uniform 20 percent cost-sharing for all services.²⁵²

Protect Flexibility in Doctor-Patient Relationships

The *Better Way* recognizes that, despite the many diverse and important actors in the health care sector, the most important factor is the relationship between patients and their doctor. However, this relationship has been strained by numerous onerous

regulations and requirements that have been forced on physicians in the last decade. The *Better Way* seeks to reduce these regulations and elevate the doctor-patient relationship back to the forefront of medical practice.²⁵³

Information Sharing in Medicare: Medicare Compare

The *Better Way* proposes a Medicare Compare system that empowers seniors to easily compare traditional Fee-for-Service Medicare to available Medicare Advantage plans on a number of core quality measures.²⁵⁴

Greater Choice and Competition through a Premium Support Option

Beginning in 2024, the *Better Way* would offer Medicare beneficiaries a choice of remaining in traditional Medicare or selecting a private plan. Private plans would compete on a Medicare Exchange modeled on the successful Federal Employee Health Benefit (FEHB) exchange program. Beneficiaries could choose the specific plan that best suits their needs, with a support payment subsidizing the cost sent directly to the insurer. The competitive structure proven successful by the Medicare Part D prescription drug program would be a check on premium increases. Ultimately, premium support would ensure that the Medicare program remains affordable by embracing a market-driven approach to providing care as a check on waste while combating skyrocketing premiums. It would also provide seniors a choice as to which plan best suits their needs and preferences, preserving the positive aspects of traditional Medicare while ensuring the program will continue to serve future generations.²⁵⁵

CONCLUSION

On the metrics of providing affordable and accessible care for patients and controlling health care costs, the Committee Majority

believes the Obamacare experiment has proved to be a failure. We urge the new Congress and Administration to pursue patient-centered reforms such as those in the *Better Way* in order to fix our broken health care system.

Recommendations

Specifically, the JEC Majority recommends that Congress consider:

- Providing patients with more control and choice over the health insurance they choose, including through enhanced HSAs, purchases across state lines, pooling arrangements for purchasing power, or another option they select;
- Promoting portability of insurance with the assistance of a tax credit with protections for patients with pre-existing conditions;
- Relieving Americans from burdensome ACA taxes;
- Empowering states with more authority to design a Medicaid program that best suits the needs of their population; and
- Rescuing Medicare from impending bankruptcy and providing seniors with more choices in order to preserve this important program for current and future beneficiaries.

CHAPTER 5: ADDRESSING HIGHER EDUCATION

- Taxpayers—many of whom never attended college—would carry the financial burden of policy proposals like *America’s College Promise*, discussed in the *Report*.
- The problem is not insufficient credit for students to attend college, but that credit is too easily available, motivating irresponsible borrowing.
- When the economy is weak, jobs are scarce including for recent college graduates.
- Pouring billions of additional taxpayer dollars into failing PreK-12 schools is not benefitting children or taxpayers.

POLICY LESSONS ON HIGHER EDUCATION

The *Report* states that, on average, individuals with a higher level of education earn more money, are more likely to be in the labor force, and are less likely to be unemployed. It presents predictable data on earnings, labor force participation, and unemployment for various levels of educational attainment. Furthermore, the Obama Administration argues that, since there are benefits to the individual and the nation and so-called “market failures” in higher education financing, an economic rationale exists for Federal support of higher education. None of this is surprising.

However, the arguments for strong Federal involvement expose a misunderstanding of financial markets, ignore regional differences, overlook the root cause of the challenges, and fail to demonstrate the necessity for a Federal monopoly of student loans. Additionally, as distressing as it is to say this, recent policies by the Obama Administration stand to reduce the benefits associated

with higher educational attainment, making it more difficult for Americans to justify spending time and money attending college.

America's College Promise

The *Report* states that it is "...committed to ensuring all students, regardless of their background, have access to a college education that prepares them for success in the workplace and life."²⁵⁶ Arguably, this has already been achieved in America with community colleges and need-based financial aid. Community colleges are located in all 50 states, have no entrance requirement beyond high school completion, and Pell grants are available to cover costs for low-income individuals.²⁵⁷ If students wish to pursue education beyond an associate's degree, they can seek the advice of the community college's guidance counselor and admission personnel at four-year state and private colleges and universities. While many problems do exist in America's education system, affordable access to an associate's degree is not among them.

However, the Obama Administration believes more money should be redistributed from working Americans to college students. President Obama argued that community college should be "free" to everyone—including high-income students and families—and in 2015 he unveiled America's College Promise (ACP), "...two years of community college free for hard-working students."²⁵⁸ The problems with ACP are threefold. First, nothing is free because costs are always borne by someone; second, potential beneficiaries of the program tend to be higher earners who are capable of taking financial responsibility for their education; and third, beneficiaries of the program would no longer have skin in the game—money of their own invested—and, consequently, there is no financial cost to the student for academic failure.

For decades, Federal aid has been available so students with financial need can attain education beyond a high school diploma.²⁵⁹ These grants are available to undergraduate students attending two- and four-year colleges and universities. The state and Federally funded ACP would apply exclusively to community colleges and simply shift the financial burden of college from the student to taxpayers. The beneficiaries of the taxpayer-funded program are students whose family earnings are too high to qualify for need-based Pell grants.

The implications of the program are that students from families with high income could attend community college at the taxpayer's expense. Some of these students would be low-performing students, and if they fail to complete the program, there are minimal costs to the student. Others will be high-performing students—those who would have attended either community college or a four-year college at their own expense. These students would now be able to earn an associate's degree at the taxpayer's expense. ACP would do nothing to increase accessibility to college for low-income Americans and should not be implemented.

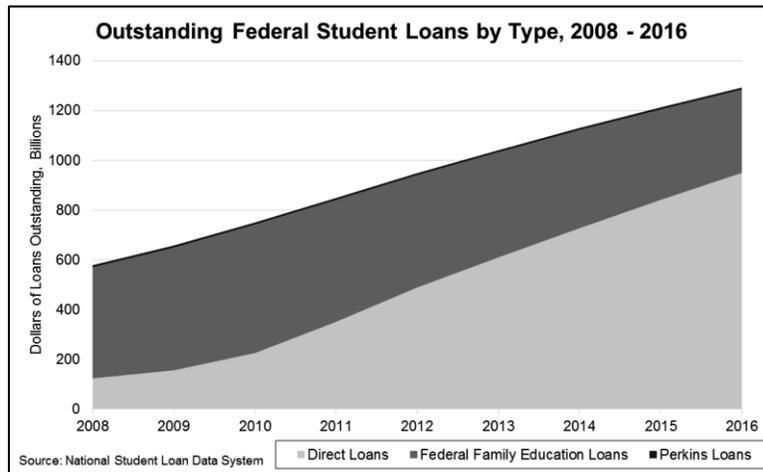
Financial Markets and Student Loans

The *Report* discusses the challenges that students face in acquiring student loans. However, the analysis reveals a lack of understanding of financial market behavior that leads to a misdiagnosis of the issues. The result is a government-run system where students have few choices, and all of the risk falls onto taxpayers.

The *Report* states that private markets—presumably banks and other financial intermediaries—are often unwilling to provide loans because there is no collateral in the event of default, additionally claiming that this is a market failure.²⁶⁰ This assertion

is incorrect. Private markets are willing to provide loans, so long as lenders receive a rate of return that is consistent with the level of risk. In other words, the rate of return that lenders require on any investment is based on the characteristics of that investment. One of the most important characteristics is the level of default risk—the risk of not receiving payment of principal or interest. The greater the risk, the higher the required rate of return. Lending money to a college student, with no collateral and no assurance that the student will graduate and have sufficient earnings to repay the loan, is extremely risky. However, investors are willing to take that risk if the rate of return is appropriate for that risk. If Federal regulations set the rate of return too low, private lenders will avoid the high-risk investments.

Figure 5-1



Additionally, the *Report* refers to banks' risk aversion as a market failure. However, risk-averse lending is the market functioning efficiently through financial institutions acting responsibly with depositors' money. Alternatively, when government mandates are imposed on financial markets, the markets cease operating efficiently. For example, the financial crisis of 2008-2009 largely

resulted from government-sponsored enterprises (GSE) Fannie Mae and Freddie Mac encouraging private institutions to act irresponsibly with depositors' money.²⁶¹ GSEs, in an effort to meet Federally mandated homeownership goals, encouraged private institutions to issue low-interest, high-risk, subprime mortgages by agreeing to purchase those loans once issued.²⁶² This led to the housing bubble, subsequent price collapse, and recession.²⁶³ In the context of student loans, banks' risk-aversion—requiring a higher rate of return for lending to students—protects depositors' money. This contrasts with the GSEs' pursuit of homeownership goals, which resulted in large-scale defaults, bank failures, and a taxpayer-funded Federal bailout. Chapter 6 of this *Response* discusses the financial crisis in detail.

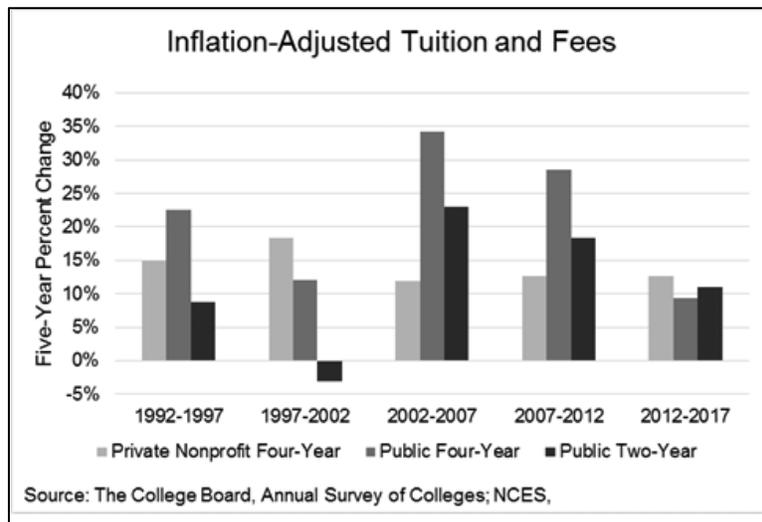
In 2010, the *Health Care and Education Reconciliation Act* was signed into law, removing private financial intermediaries from the student loan process. This created a true market failure—a Federal monopoly for student loans. Today, there are nearly \$1.3 trillion in outstanding high-risk student loans provided by taxpayers—double the amount in 2008 (Figure 5-1).²⁶⁴ CBO projects an additional \$1.4 trillion student loan debt from 2013 to 2023.²⁶⁵ This debt earns a very low rate of return or zero, in the case of subsidized student loans.²⁶⁶ These fall well below the rate appropriate for the risk and put taxpayer money in jeopardy. A better student loan program would be locally managed and include competing private lenders.

Rising Tuition

The *Report* focuses on a number of issues but overlooks the root cause of the college education financing problem, which stems from rising tuition and fees. For decades, the cost of attending college has risen far faster than other prices. In the 114th Congress,

Mitchell E. Daniels, President of Purdue University, testified before the Committee that tuition prices have increased by “... 225 percent over the last 30 years, after inflation.”²⁶⁷

Figure 5-2



The root cause of runaway college costs is not that there is too little credit available to college students; but rather, that credit is too easily available. The availability of subsidized-credit to nearly all college students allows colleges and universities to easily increase their tuition (Figure 5-2). This phenomenon was famously presented in a 1987 *New York Times* op-ed titled, “Our Greedy Colleges,” by William Bennett, then-Secretary of Education.²⁶⁸ In the article he stated, “If anything, increases in financial aid in recent years have enabled colleges and universities blithely to raise their tuitions, confident that Federal loan subsidies would help cushion the increase.”

Since 1987, there has been a number of studies to test the “Bennett Hypothesis.”²⁶⁹ A 2016 study by the Federal Reserve Bank of

New York found that for every dollar of subsidized student loan received by the college, the tuition increased by 60 cents, and for every Pell grant dollar received, tuition increased by 40 cents.²⁷⁰ A better policy would require colleges and universities to share the risk associated with student loans, incentivizing the accurate identification of students who are likely to succeed in college versus those who are not.

Flexible Repayment

Historically, most student loans had to be repaid in equal monthly installments over ten years. Graduates were required to meet their loan obligations to taxpayers irrespective of their income level. However, in 1987, President Ronald Reagan signed into law a pilot program that included “income-contingent loans” to allow students to repay their student loan over a period of time in excess of ten years, in order to lessen the burden for new graduates and reduce defaults. The loans were unsubsidized—interest accrued while the student remained in school, removing a costly Federal subsidy. In addition, colleges had to contribute 10 percent of the loan, and annual repayment could never exceed 15 percent of the graduate’s income.²⁷¹

Although the pilot program was discontinued, elements of it survived and were implemented in more recent programs, including among those of the Obama Administration.²⁷² Regrettably, the Obama Administration’s programs, while similar on the surface, are poorly designed and incentivize irresponsible borrowing by passing the cost to taxpayers. Reagan’s plan was developed to increase the likelihood that students will repay the full amount of their student loan. In comparison, the Obama Administration’s plan ensures that many students will have a portion of their student debt burden passed on to taxpayers.

The *Report* touts the benefits to the borrower of the extended payoff period for income-driven repayment plans while ignoring the cost to taxpayers.²⁷³ The Obama Administration’s versions of these plans were implemented in the 2012 *Pay as You Earn* (PAYE), the 2015 *Revised Pay as You Earn* (REPAYE)—both plans cap payments at 10 percent of graduates’ discretionary income—and the 2009 and 2014 Income Based Repayment (IBR) plans that cap payments at 10 or 15 percent of discretionary income. All of the plans forgive outstanding debt after 20 years of payments.²⁷⁴ While appealing to borrowers, taxpayers bear a substantial cost.

Figure 5-3

Repayment Plan	Initial Payment	Final Payment	Payment Years	Total Paid By Borrower	Total Paid By Taxpayers
A. REPAYE	\$60	\$296	20	\$32,358	\$24,253
B. PAYE & IBR	\$60	\$296	20	\$39,517	\$27,823
C. PAYE & IBR	\$185	\$612	20	\$97,705	\$41,814

With the recognition that loan repayments will never exceed 10 or 15 percent of earnings and that payments end after 20 years, there is no additional cost to students for borrowing additional dollars—assuming students expect to have an unpaid balance after 20 years. Figure 5-3 presents three scenarios. Scenarios A and B assume a \$30,000 loan and a starting salary of \$25,000, and scenario C assumes a \$60,000 loan and starting salary of \$40,000.²⁷⁵ If the students borrowed more than the \$30,000 or \$60,000, their payments, and the total paid by borrower, would not change. The only change from a greater amount of debt is an increase in the portion of their education expense borne by taxpayers—the last

column in the table. Thus, the Obama Administration's loan policies incentivize students to maximize debt—borrowing irresponsibly and exacerbating the problem of high student debt—leaving taxpayers responsible for the unpaid portion after 20 years. A better program would require full loan repayment by the student to taxpayers.

The President's Recovery

It is not surprising that, on average, the greater the educational attainment achieved, the higher the salary earned.²⁷⁶ When the economy is strong—high growth and a tight labor market—there are more opportunities for college graduates. However, when the economy is weak and jobs are scarce, all Americans, including recent graduates, suffer. The current economic recovery is the weakest in decades, falling far short of past recoveries.²⁷⁷ Annual real GDP growth under the Obama Administration never reached 3 percent.²⁷⁸ No other Administration since 1933 has failed to attain this level of growth, including Presidents that presided over the Great Depression and the economic malaise of the 1970s.²⁷⁹

Today, college graduates face a weak economy, high college debt, and the responsibility of servicing the nearly \$20 trillion gross Federal debt—an amount that doubled under the Obama Administration and is forecast to grow indefinitely.²⁸⁰ Federal debt interest payments alone are forecast to nearly triple from 2017 to 2027, a cost that taxpayers must bear.²⁸¹ Chapter 2 of this *Response* presents a thorough discussion on the weak economy of the past eight years. A better strategy would be to pursue pro-growth policies that benefit all Americans—regardless of educational attainment—rather than burdensome redistribution policies that benefit some at others' expense.

Challenges for those from Disadvantaged Backgrounds

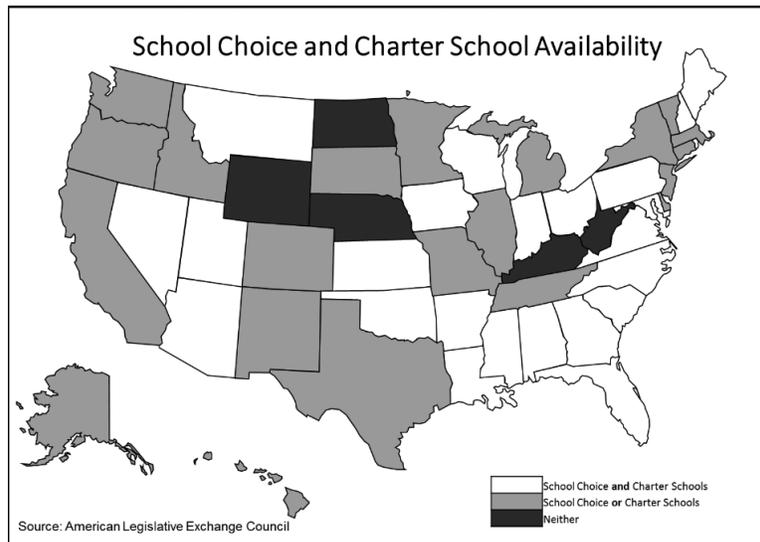
The *Report* states that the challenges to access quality post-secondary education are especially high for low-income families, first-generation college families, and other disadvantaged groups.²⁸² Additionally, it states that loan default rates are highest for students with a low amount of debt because they are more likely to have dropped out of college prior to completing the program.²⁸³ These two phenomena are linked in that public PreK-12 schools often fail to prepare low-income and/or first-generation college students for a successful college career;²⁸⁴ and a large portion of these students fail to complete a post-secondary program, ultimately defaulting on their student loan.²⁸⁵

These issues are far from new. In 2008, the Pell Institute conducted a thorough analysis on the experiences of low-income first-generation college students.²⁸⁶ The study recommends substantial improvement for middle schools, high schools and community colleges. Middle schools need to better counsel students about completing gateway courses well before high school. High schools need to offer study-skill support, encourage student participation in college preparatory courses, assure teachers are equipped to offer challenging college-preparatory and advanced-placement courses, and assure that counselors have more comprehensive knowledge about the college access process. Community colleges need to help high school students develop a comprehensive long-term education plan, including steps for high school, two-year, and four-year colleges. Additionally, community colleges need to ensure students take courses that address academic shortcomings—especially in math—and offer strong transfer counseling with an emphasis on financial aid.

Over the past eight years, little has changed to better prepare these students for a successful college career. The Obama

Administration spent billions through the School Improvement Grants (SIG) program to fix underperforming schools. A Department of Education review of the program found, “...no significant impacts of SIG-funded models overall on math or reading test scores, high school graduation, or college enrollment...”²⁸⁷ Many American parents continue to be forced to place their children in government-assigned public schools based on their zip code rather than the parents’ opinion regarding what is the best school for their child. In some cases, these schools fail to provide even basic education and safety, and often these children have no alternatives because their state fails to offer any education choices.²⁸⁸ While twenty-five states have some form of school choice and charter schools, the others lack either one or both of these options as shown in Figure 5-4.²⁸⁹

Figure 5-4



Continuing to pour billions of taxpayer dollars into the same failing schools is not serving our children or taxpayers well. While

progress must be made at the Federal level, state and local governments must also improve. Better policies would include school voucher programs that encourage parent choice and innovation, unleashing the drive and creativity of the free-market system, and ultimately putting pressure on public schools to improve.²⁹⁰ A market-based approach would reward those schools that create value for their stakeholders while weeding out schools that fail to create value. This will allow children to attend better schools, facilitate school improvement, and address students' specific needs, ultimately better preparing them for the academic demands of college or whatever path they choose.

Income Inequality and the Incentives

Most students invest time and money into college to gain skills so they can work in the career of their choice, earning a higher income than they would be able to earn with solely a high school diploma. In other words, it is the existence of income inequality that partly motivates and financially justifies investing in post-secondary education. The *Report* correctly states that there is a 70 percent earnings premium for a bachelor's degree over a high school diploma. However, the Obama Administration has aggressively moved to reduce the reward for pursuing higher education by implementing policies that reduce income for high earners.

Chapter 3 of the *Report* discusses how the Obama Administration has increased existing taxes on income—making the system more progressive—and imposed new taxes to fund Federal spending.²⁹¹ However, by reducing after-tax income, the earnings premium for attending college decreases, which in turn reduces the incentive and rationale for attending college. This harms both the individuals who then choose not to attend college and the nation by weakening additional skill acquisition of the labor force. A

better strategy would promote policies that increase the reward for acquiring skills—college or otherwise—encouraging Americans to better themselves. This includes policies such as lowering marginal tax rates and removing onerous business regulations and barriers to entrepreneurship.

Moving Forward

To increase access and successful completion of college, America should move away from a top-down bureaucratic education system toward a more locally run system that includes private lenders. Additionally, policies that embrace choice and innovation would improve PreK-12 and better prepare students for college.

The current one-size-fits-all Federally-run program ignores regional differences, which precludes states and localities from creating the most suitable program for their residents. A higher education program that suits a rural state like Wyoming may be inappropriate for a state with a substantial urban and suburban population, such as Maryland. In the *Report*, the Obama Administration cites the Knox Achieves and Kalamazoo Promise as successful examples of Promise programs stating that, “Evaluations of early local Promise programs show that these programs can significantly improve high school graduation, college enrollment, and college graduation rates.”²⁹² However, both programs were initiated prior to the Obama Administration, and more importantly, neither was initiated nor managed by the Federal Government. Localities tailored these privately funded programs to meet the needs of their residents. Given the differences between the two programs—Knox Achieves covers two years of college while Kalamazoo Promise covers four—there is no reason to believe that these programs are best for other states.

The static Federally-run system lacks the dynamic nature of private financial markets and eliminates access to all of the lending

products that private-sector financial institutions might generate. Unlike government at any level—Federal, state, or local—private-sector financial institutions can implement and test new forms of lending without risking taxpayer dollars. In an attempt to best serve their customers, financial intermediaries will generate various lending products. The products and firms that serve their customers well will expand and prosper; those firms that fail to produce valued products face the discipline of the market. This process of creative destruction works best when firms are permitted to enter markets freely and are not restricted by overly burdensome regulations or excluded by the presence of a government monopoly. For example, the 1994 *Riegle-Neal Interstate Banking and Branching Efficiency Act* provides evidence of the benefits of private lending and deregulation. The Act permitted banks to operate across state lines.²⁹³ The result was expanded access to student loans and an increase in college enrollment of roughly 4.9 percent, with the largest effect on low- and middle-income families.²⁹⁴

Today, the Federal student loan system passes all of the risk to taxpayers. A better system would distribute risk among various willing parties. Colleges and universities that receive the funds should bear some of the risk. They currently receive all of the money upfront irrespective of student qualifications upon entering the school, actual program completion, or eventual loan repayment. President Reagan's pilot program applied the concept of shared risk by requiring the educational institution to contribute 10 percent of the loan. This gives the institution a stake in the success of the student, alleviating part of the responsibility from the taxpayer. Private lenders should also bear some risk. If the pure Federal system of loans, created by the Obama Administration, can be replaced by a system including private financial intermediaries, then they should bear some of the risk.

The Federal Government could guarantee a part of the loan rather than all of it—as they have done in the past—so they too have a stake in the students’ success.

Other alternatives, beyond the traditional method of financing college through loans, warrant consideration. In his earlier referenced testimony before the Committee, Mitchell Daniels also recommended Income Share Agreements (ISA).²⁹⁵ ISA’s are more like equity than debt; investors provide funding for students in exchange for a negotiated, freely chosen percentage of future income. There are several benefits to this structure. First, students are assured that their payments never become too onerous, since ISA payments remain a constant share of earnings rather than a fixed payment; second, investors have a new investment opportunity and stake in a student’s success in completing a degree and in launching his or her career; and third, the risk is taken voluntarily by the investor and not forced on taxpayers.

IMPROVING PREK-12 EDUCATION

America must also improve PreK-12 education. State governments should expand school choice for students, especially those forced to attend failing government-assigned schools. There is mounting evidence that school choice programs benefit students. School voucher programs create higher rates of youth entrepreneurship.²⁹⁶ Student exposure to schools in the voucher system is associated with higher graduation rates as well as enrollment and persistence in four-year colleges.²⁹⁷ Evidence also suggests that school voucher programs benefit many disadvantaged student populations.²⁹⁸ Globally, there is substantial evidence that private schools outperform public schools in the overwhelming majority of cases; thus, more access to private schools will benefit students.²⁹⁹

In addition to reforming higher education financing and PreK-12, new college graduates will benefit from entering a labor market where their newly acquired skills will fetch them a prosperous career. This can only be achieved by moving away from the high-tax, high-regulation environment that the Obama Administration created over the past eight years. It is time for a change in course in order to help current and future high school students, college students, and graduates.

CONCLUSION

Rather than preparing students for the 21st century, the Obama Administration's policies have led to unsustainable levels of student debt, rising tuition prices, fewer opportunities and rewards for achieving success, and greater risk for taxpayers.

Recommendations

The Committee Majority recommends that policy makers examine alternative approaches to expand opportunities and promote responsible choices, such as:

- Asking colleges and universities to share the risk associated with student loans;
- Including a greater role for private lenders in the student loan system;
- Shifting the risk of student loans to borrowers and lenders rather than taxpayers;
- Promoting reforms that increase rather than deter the reward for acquiring skills—college or otherwise—encouraging Americans to better themselves; and

- Expanding school choice and charter school opportunities for students, especially for those forced to attend failing schools.

CHAPTER 6: STRENGTHENING THE FINANCIAL AND REGULATORY SYSTEM

- Chapter 6 of the *Report* highlights the events leading up to the 2008 financial crisis and how it spread through the banking sector and the economy.
- Rather than acknowledge any part the government played, the Obama Administration vastly expanded its role with record-breaking levels of complex regulations based on the Dodd-Frank.
- The *Report* claims progress toward ending “too big to fail” banks but does not identify bank “runs” as the critical problem whose resolution remains elusive.
- Piling on more regulation does not make the financial system more secure but furthers agency overreach and causes unintended consequences.
- Unproductive regulatory burdens hinder lending by community banks and financial innovation, although the *JOBS Act* was a constructive step.

INTRODUCTION

The *Report* attributes the financial crisis to market failures but does not fully explain the institutional framework in which the market operated. The government created that framework and has been extensively involved in shaping the conduct of market participants. When the framework malfunctions, the government cannot pretend to bear no responsibility.

Further, the government pursued social objectives with respect to credit availability for specific segments of the population and homeownership generally by the rules governing lending and borrowing and by direct intervention as GSEs Fannie Mae and Freddie Mac massively expanded credit to the mortgage market. These actions similarly entangled the government in the course of events. Finally, the Federal Reserve influences interest rates and affects the flow of credit through monetary policy, which has a bearing on the housing sector from which the crisis emanated.

As in other chapters, the *Report* uses what it characterizes as market failures to justify more government intervention, this time in the financial sector. That is fundamentally unhelpful. The government has legitimate functions in money and finance but how and to what extent it should carry them out is the question. The CEA does not make a sufficient case for the path the government has taken since the crisis because it fails to completely diagnose what is the key financial sector problem to be resolved and acknowledge the inherent limitations of the regulatory process, and it neglects to evaluate alternative approaches.

Too Big to Fail

For a market economy to function properly, successful firms must be allowed to earn profits and unsuccessful firms must be allowed to incur losses. Without the threat of losses, firms can take more risk than is prudent and worry less about failure. A “Too Big to Fail” (TBTF) firm is one whose failure would have widely adverse economic repercussions, and therefore would induce the government to save it. TBTF entities can enjoy higher profits from taking more risk while taxpayers help to cover the losses. TBTF firms enjoy lower funding costs as investors expect a rescue in the event of the firms’ failure. The competitive advantage of such firms in the capital market can be observed by the so-called TBTF

discount (also referred to as a premium), a measurable difference in the cost of borrowing, credit insurance, and credit ratings.

Firms engaged in financial intermediation and, in particular, liquidity and maturity transformation (borrowing short and lending long), face the risk of “runs,” meaning that many lenders want to withdraw their money or refuse to roll over their loans as they mature, at the same time. This problem is at the heart of bank panics and financial crises and it is the problem government must contain to secure the financial system. TBTF is one manifestation of the underlying problem of initiating widespread “runs,” but any institution regardless of size whose failure could motivate a general “freeze” of lending is systemically too important to fail.

Dodd-Frank promised to end TBTF; its preamble and President Obama promised “the days of taxpayer-funded bailouts are over.”³⁰⁰ Implicit in that statement is the contention that the government will prevent or contain runs. Dodd-Frank attempts to do so with an enormous amount of regulation; it is a legislative and regulatory behemoth.

At 848 pages, Dodd-Frank is over 16 times larger than the *Banking Act of 1933*, commonly known as “Glass-Steagall.”³⁰¹ Researchers Patrick McLaughlin and Oliver Sherouse quantified the number of restrictive terms in Dodd-Frank’s promulgated regulations and found more regulatory restrictions from the Act than all the other Obama regulatory restrictions combined.³⁰² Using the regulators’ cost calculations and paperwork hours required, the American Action Forum estimates the 140 finalized regulations from Dodd-Frank amount to cumulative costs of \$36.5 billion and almost 75 million hours of compliance paperwork.³⁰³

Six years after Dodd-Frank was signed into law, many of the regulations have yet to be written. According to the Davis Polk Dodd-Frank progress report, there are still 80 rules, or a fifth of

the 390 required rulemakings, that have not even been proposed yet, and 32 of them have missed their statutory deadline.³⁰⁴

The problem of runs has not been solved. Even with all its laudatory claims about Dodd-Frank, the *Report* acknowledges the TBTF premium. As with many other claims about Obama-era initiatives that did not live up to the rhetoric, the *Report* claims success by a lower standard, namely that the chances of a firm being considered too big to fail have decreased since the 2008 crisis. But the premium will be low when financial markets are calm as they are now and rise if and when anxiety spreads (see Figure 6-x, p. 396 in the *Report*). Despite the growing mountain of regulation, there remains continuing concern that the risks of bank runs reoccurring persists, supporting the belief that very large financial institutions are safer because the government will have no choice but to rescue them in order to keep the financial system functioning.

Meanwhile, the Dodd-Frank regulatory apparatus promotes governmental overreach and causes unintended consequences.

The Financial Stability Oversight Council

“Shadow banking” outside of commercial banking started growing rapidly around the start of the new millennium, as depicted in Figure 6-6 (p. 366) of the *Report*. Entities engaged in financial activity include non-bank financial institutions that could be insurance companies, for example, or parts of conglomerates. Dodd-Frank created the Financial Stability Oversight Council (FSOC) whose mandate includes identifying risks and responding to emerging threats to financial stability, often referred to as systemic risk, whatever the source. The reason for creating the FSOC was that it is no longer necessarily straightforward to define a “financial institution,” and the risk of initiating widespread runs is not necessarily quantifiable by a particular set of metrics. In the

regulatory framework created that focuses on micromanaging market participants' conduct, identifying who and what needs regulating becomes a matter of judgement.

The problems are that (1) the individuals making the judgments are fallible, and (2) judgment unconstrained by strict limits and subject to due process can become arbitrary and capricious. MetLife sued the FSOC for designating it a non-bank systemically important financial institution (SIFI) and won.³⁰⁵

An alternative would be to set certain basic, easy to monitor requirements, such as capital (i.e., equity) requirements for firms engaged in financial dealings and minimize the regulation of conduct. Unfortunately, the *Report* does not evaluate alternatives to the Dodd-Frank philosophy of financial regulation.

The Consumer Financial Protection Bureau

Dodd-Frank created the Consumer Financial Protection Bureau (CFPB) uniquely insulated from Congressional oversight and with the ability to set its own budget.³⁰⁶ Rather than establish a board or commission with a range of perspectives and experience, it gives unchecked regulatory authority to a single director. The structure has been ruled unconstitutional by the District of Columbia Circuit Court.³⁰⁷ The judges noted in their ruling that “the [CFPB Director] enjoys more unilateral authority than any other officer in any of the three branches of the U.S. Government, other than the President.”³⁰⁸

Unlike the majority of Federal agencies and the military, the CFPB is also completely outside the Congressional appropriations process. The CFPB obtains its funding from the earnings of the Federal Reserve System without any input from Congress or the Federal Reserve Chair. Normally, annual reviews and budget debates inform Americans about what priorities are adopted but

without any Congressional oversight, unaccountable bureaucrats make the decisions by themselves.

At the same time that a new agency with extraordinary powers is regulating consumer credit, one wonders whether financial oversight is sufficiently vigilant in matters that potentially could be more damaging. In 2016, hackers misdirected millions from the Federal Reserve Bank of New York. Iran-linked hackers have continually attacked bank websites since 2011.³⁰⁹ Although the Federal Financial Institutions Examination Council (FFIEC) attempts to raise awareness of cybersecurity risks, financial reform should look toward ever-changing new threats.

The Securities and Exchange Commission

As an independent agency, the Securities and Exchange Commission (SEC) is not required to conduct cost-benefit analysis of its rules. However, multiple Federal court cases have struck down new SEC rules in connection with Dodd-Frank directives for insufficient justification.³¹⁰ The House of Representatives passed the *SEC Regulatory Accountability Act* in January 2017, which would require the SEC to properly identify the problems it intends to solve, calculate costs and benefits for its proposed solutions, and review the effectiveness of the rules it implements every five years.³¹¹

Unintended Consequences: Small and Community Banks

Small and community banks follow the traditional banking model. They take in deposits from their community and lend it back to it in the form of small business loans, various small loans to households, and mortgages. Small banks specialize in serving their local citizens with products fitting their communities' needs and rarely engage in the complicated financial dealings that contributed to the 2008 financial crisis. In 2015, banks with \$10

billion in assets or less accounted for \$15.9 trillion in bank assets. These same banks provide 55 percent of small business loans and 75 percent of agricultural loans, and according to the Federal Reserve's 2015 Small Business Credit Survey, small businesses rate small banks as the most satisfactory lenders.³¹² The importance of these institutions across the country cannot be overstated.

Community banks face increasing pressures from low interest rates and regulatory burdens. Small banks' market share fell from 62 percent in 1992 to 19 percent in 2015.³¹³ Dodd-Frank granted an exemption from "extra supervision" for banks holding \$50 billion or less in assets. Unfortunately, this was too low and not indexed to inflation. Even former Representative Barney Frank himself now concedes that the rules are too costly for the smallest institutions and that the asset threshold for the exemption should be much higher.³¹⁴

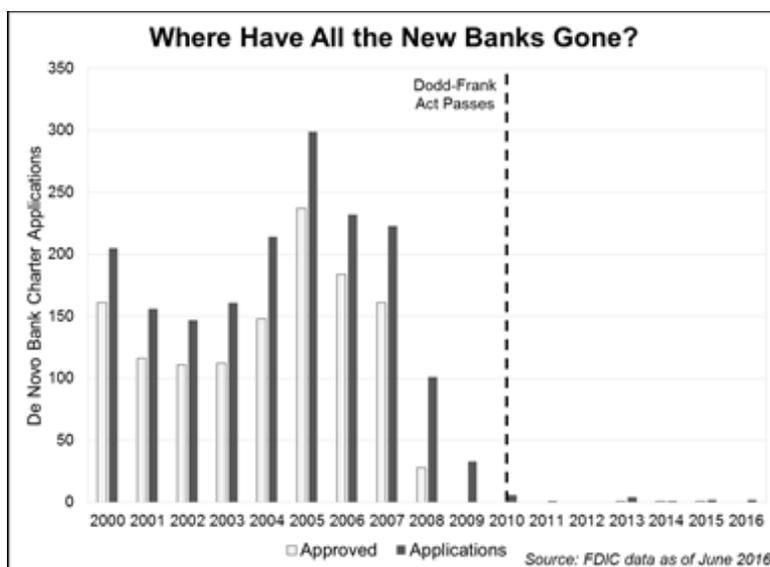
Although never cited by the *Report*, there is extensive research on how community banks are faring under Dodd-Frank. A 2013 survey of small banks across 41 states reveals that over 90 percent of banks reported increased compliance costs since Dodd-Frank's passage. Even more concerning, the same survey found over 80 percent of small banks experienced compliance cost increases of over 5 percent. Such burdens force small banks to change the nature and mix of products; more than half were forced to do so in response to regulatory requirements.³¹⁵ In a 2016 Federal Reserve and Conference of State Bank Supervisors survey of small bankers, "regulatory burden" was the top reason that small bankers reported curtailing services. Some bankers are choosing to leave certain markets as a result. The new regulations are codifying a big-bank style that limits community banks' ability to adapt to their communities' needs. One Ohio community banker described compliance examinations as "taking away the uniqueness of

institutions and creating a culture with no opportunity to make decisions.”³¹⁶

The results of a study conducted by Federal Reserve economists indicate that compliance costs as a percent of noninterest expense were three times as high for banks with less than \$100 million in assets compared to banks with assets of \$1 billion to \$10 billion. Additionally, the researchers found that a higher compliance expense was not uniformly associated with better performance.³¹⁷

Regulation has caused thousands of banks to close or merge and stopped new banks from opening, leaving a shrinking community bank presence across the country. Since the enactment of Dodd-Frank, there have only been three new bank charters approved (Figure 6-1).³¹⁸ Dodd-Frank created a system that the Federal Reserve Bank of Dallas described as “too small to succeed.”³¹⁹ The first *de novo* bank since 2010 was the Bank of Bird-in-Hand serving Amish communities in Pennsylvania. The local Amish community needed farm loans. The Federal Deposit Insurance Corporation (FDIC) required the bank to appoint directors with banking experience and required initial application documents that measured 18 inches thick.³²⁰

Figure 6-1



Financial Innovation

Financial technology, also known as “fintech,” was barely known in 2010 but has since skyrocketed in popularity according to Google searches.³²¹ The non-partisan Congressional Research Service states that more than \$24 billion has been invested in fintech companies since 2010.³²² The McKinsey Institute found that the number of fintech startups doubled between April 2015 and February 2016.³²³ Modern consumers, especially younger generations, readily adopt new fintech. The Federal Reserve reports that use of online/mobile banking has doubled in the past five years, and it is the primary form of banking done by millennials.³²⁴ Almost three out of every four millennials believe mobile banking is very important to them.³²⁵

Figure 6-2

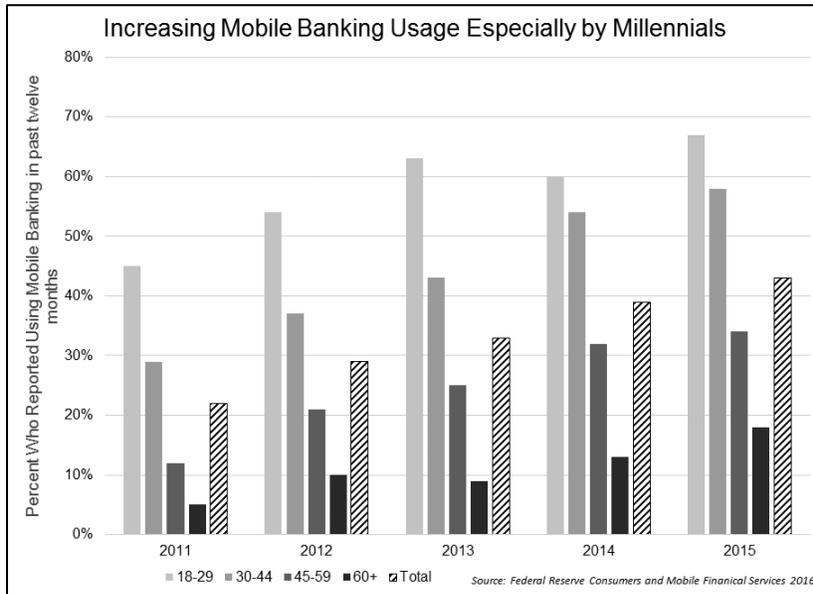
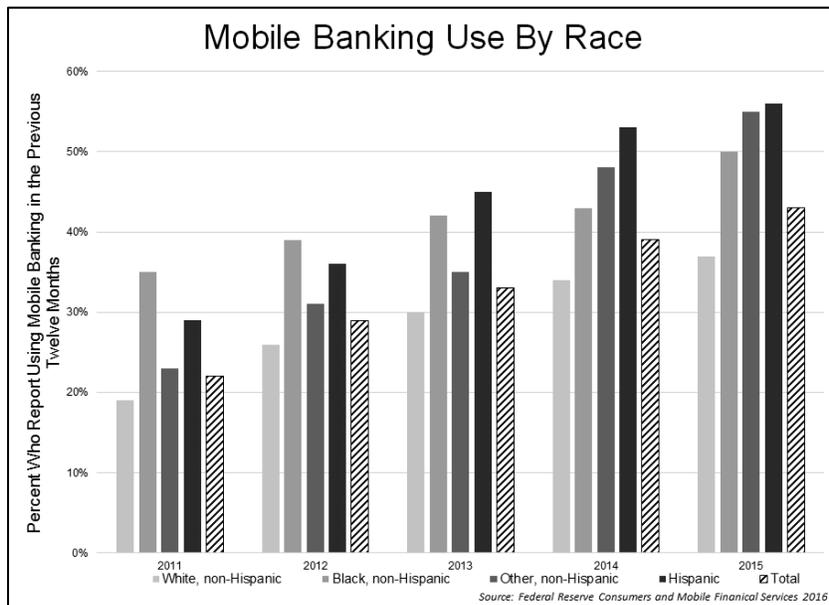
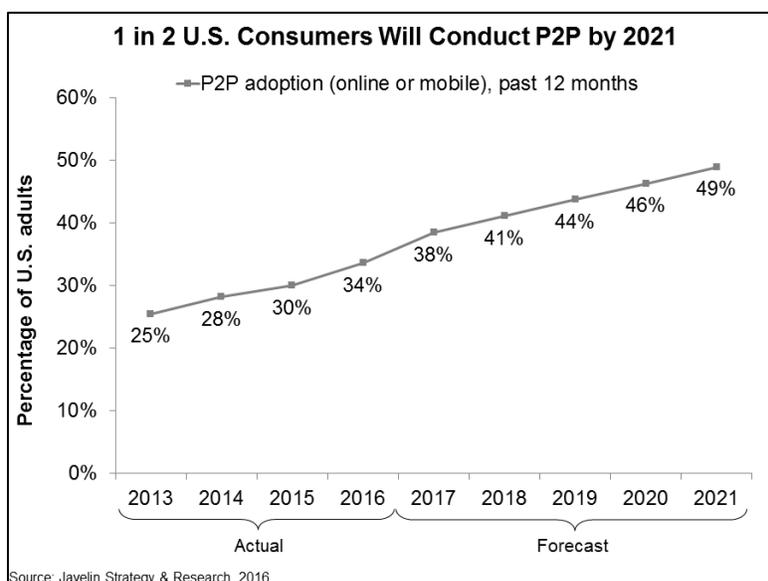


Figure 6-3



Financial innovations that improve consumers' lives are not limited to traditional banking institutions. "Peer-to-Peer" (P2P) fund transfers managed by non-financial companies like PayPal, Venmo, GooglePay and Square have increased rapidly, according to Federal Reserve experts, with minimal impact from Dodd-Frank regulation (Figure 6-4).³²⁶ More than half of millennials report using these new payment services to transfer money.³²⁷ With these new financial services, millennials lead the charge on going cashless. More than a fifth of millennials carry less than five dollars cash.³²⁸ Such innovation is most important to the "underbanked," consumers with a basic bank account who use "alternative" providers for other financial services.³²⁹ Approximately two-thirds of underbanked people own smart phones, and as of 2015, 55 percent of them accessed online banking services. The most common services requested are low balance alerts and payment due notices that help customers avoid overdraft and late payment fees.³³⁰

Figure 6-4



As emerging technologies play a larger role in financial services and markets, care must be taken to protect beneficial innovation from burdensome regulation that will repress new technologies in favor of old. With the FSOC's and CFPB's broad reach, entrepreneurs can never be certain what the rules are and what impositions on their business they may face.

The *Report* covers the reforms and benefits of the *Jumpstart Our Business Startups (JOBS) Act*. Members of Congress, in a bipartisan fashion, worked together to craft a law that would free up capital for small business and democratize the ability for Americans to lend as equity investors through crowdfunding. The *JOBS Act*, passed by Congress in 2012, provides an example of how to assure investors access to new tools like crowdfunding by applying proper disclosure and limits without discouraging innovation.³³¹ There is much need for more bipartisan initiatives to ease regulatory burdens, increase regulatory certainty, and encourage entrepreneurs and startups.

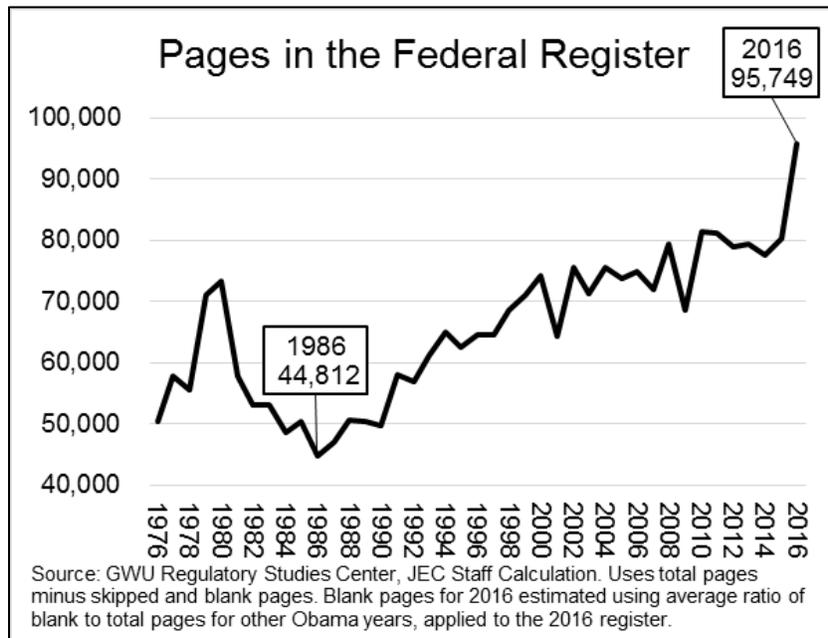
General Regulatory Oversight

At the end of 2016, the *Federal Register* had 95,749 (non-blank) pages of regulations, an all-time high (Figure 6-5).³³² Excluding blank and skipped pages, the Obama Administration created seven of the eight largest *Federal Registers* in history.³³³ Assuming the same blank-to-substantive-page ratio from the Obama era holds for 2016, the number of substantive pages in the register grew by 19.3 percent from 2015 to 2016 alone.³³⁴ The Competitive Enterprise Institute estimated Federal regulations alone cost the economy nearly \$1.9 trillion in lost output in 2015.³³⁵

In 2016, regulatory agencies issued 18 official rules and regulations for every law Congress passed.³³⁶ This total does not account for “guidance documents” and other memos released by agencies. Such “guidance” purports to be advisory in nature but

often proves coercive, by broadly reinterpreting previous rules in unintended ways to expand agency powers or advance an agenda without following the normal rulemaking process. These memos have been called “regulatory dark matter,”³³⁷ and together with rampant agency rulemaking threaten to usurp Congress as the originator of the laws that govern America.

Figure 6-5



On January 3, 2017, the first day of the 115th Congress, Representative Doug Collins introduced the *Regulations from the Executive in Need of Scrutiny (REINS) Act* (H.R.26).³³⁸ The bill passed the House on January 5, and as of February 1 awaits action in the Senate. This bill is a successor of then-Congressman, now-Senator, Todd Young’s *REINS Act* from previous Congresses; Senator Rand Paul is the Senate sponsor of the measure. This proposal inverts the *Congressional Review Act* (CRA) design by requiring that major rules be affirmatively approved by Congress

rather than relying on the disapproval process currently in place.³³⁹ The bill would also establish a fast-track procedure for the approval of these rules that would allow for expedited consideration in Congress, thus ensuring that appropriate and necessary rules can be affirmed in a timely manner. The *REINS Act* restores Congressional primacy by requiring major regulatory actions directly affecting Americans be approved by their elected representatives.

Under President Trump, the CRA in its present form provides a pathway for blocking the most egregious “midnight regulations” issued by the Obama Administration in its final days, reversing regulations submitted on or after June 13, 2016.³⁴⁰

Another proposal that allows for more direct Congressional oversight of the regulatory burden in the United States is the concept of a regulatory budget. A regulatory budget would cap the regulatory costs that agencies would be able to impose on Americans alongside the normal Congressional budget process. It would limit red-tape growth while providing agencies incentives to accomplish their goals in the least onerous way possible. Regulatory budget levels would be set by Congress, and the process would allow Congress and the President to join in direct oversight of the level and type of regulations produced by the bureaucracy.

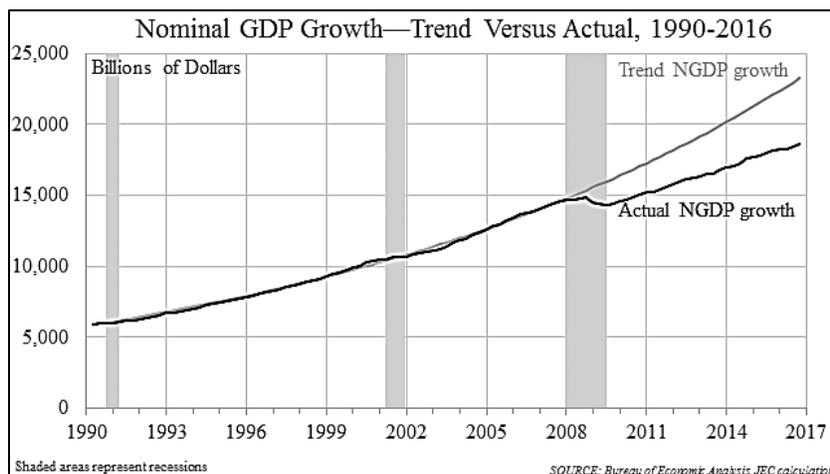
On January 30, 2017, President Trump issued Executive Order 13771 requiring that for every new regulation put into place, two old regulations must be rescinded.³⁴¹ The United States now joins a list of other governments using this approach to reduce regulatory burdens. The United Kingdom, Canada, and Australia have all seen success in cutting red tape through similar policies.³⁴² The “one in, two out” policy is an excellent start to address overregulation, but further reforms should be enacted to

codify red-tape control into statute and return Congress to its position of primacy. To that end, in the 114th Congress, Vice Chairman Lee proposed the *Regulatory Budget Act* to allow Congress to vote on the total regulatory burden each federal agency imposes on the U.S. economy on an annual basis.³⁴³

CONCLUSION

The policies of the last eight years have had serious constraining effects on the U.S. economy that are plainly visible. The mass of Federal regulation applied to the economy overall and to the financial sector in particular has a large role in that.

Figure 6-6



Recommendations

For the economy to recover in a true sense, meaning for it to get back to its full potential:

- The overall regulatory onslaught must be turned back and regulation of the financial sector must become geared toward the critical risk factor, which is “runs” on financial institutions that can spread widely;

- The government sponsored enterprises Fannie (Federal National Mortgage Association) and Freddie (Federal Home Loan Mortgage Corporation) must be reformed in a manner that ensures they do not return to a status as private entities that operate for profit but with implicit public guarantees (as the *Report* correctly advises³⁴⁴).

What can prevent or contain runs more efficiently than government micromanaging private financial intermediation? That is the central question. The regulation in place now not only is inefficient, it may actually increase the risk in certain ways, such as by continuing to encourage financial institutions to retain or acquire “TBTF” status, by providing a false sense that regulators can control events, and by thwarting more market competition from small banks and innovative financing vehicles.

CHAPTER 7: ADDRESSING CLIMATE CHANGE

- The Obama Administration's approach to global warming is ineffective and too costly; it is centered on U.S. emissions, on wind and solar power, and is unconcerned with costs.
- Greenhouse gas emission reduction requires attacking large and fast-growing sources, which are in emerging economies, not in the United States.
- We should find ways to spur faster development in emerging economies, especially with respect to electrification that draws on various technologies and fuels the United States could supply.
- U.S. workers and businesses should benefit from increased gas and coal exports, in particular, and foreign direct investments in modern natural gas, coal, and nuclear power plants.

INTRODUCTION

Beyond rhetoric about U.S. leadership in greenhouse gas emission control and advancing nonbinding international goals for emissions reduction, the applied aspect of Obama Administration climate policy focused on the domestic economy. But domestic-only policies can lead to increased emissions abroad as a result of so-called carbon leakage, i.e., from production shifting to other countries with lesser controls. The domestic focus also misses that international trade and foreign direct investment can lead to technology diffusion that can lower emissions in other countries.³⁴⁵

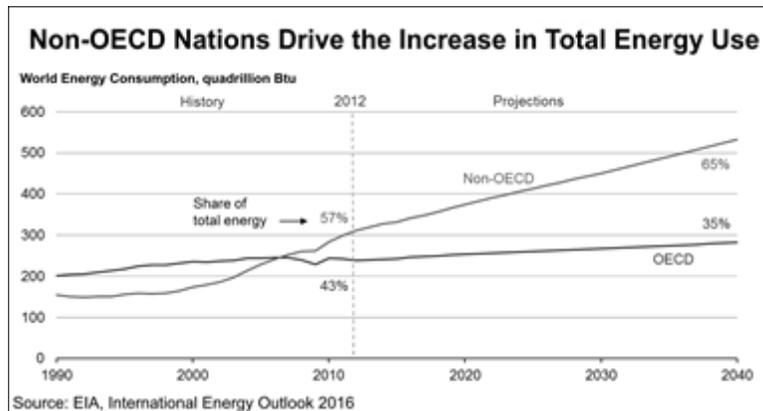
Efficient Global Resource Allocation

Economists are not climate scientists, but can speak to efficiently reducing global greenhouse gas emissions. The central principle of using resources efficiently is to direct them where they make the greatest difference in reaching an objective.³⁴⁶ For cutting industrial emissions, that means adding more and better equipment where it makes proportionally the largest difference, or introducing control equipment where none exists. The same holds for substituting cleaner burning fuels or replacing an existing process with more advanced production processes.

In advanced economies, such as the United States, devoting resources to reducing greenhouse gas emissions is unlikely to produce the greatest incremental reduction. Emission controls are already far more extensive and intensive in North America, Europe, and Japan than other countries where the emission volume is large and growing. Incremental efforts dedicated to reducing emissions in the United States, for the most part, face greatly diminishing returns. Technology breakthroughs could change that, but until they occur, incremental steps to push emissions still lower are extraordinarily costly with marginal benefit and thus also prone to cause carbon leakage.

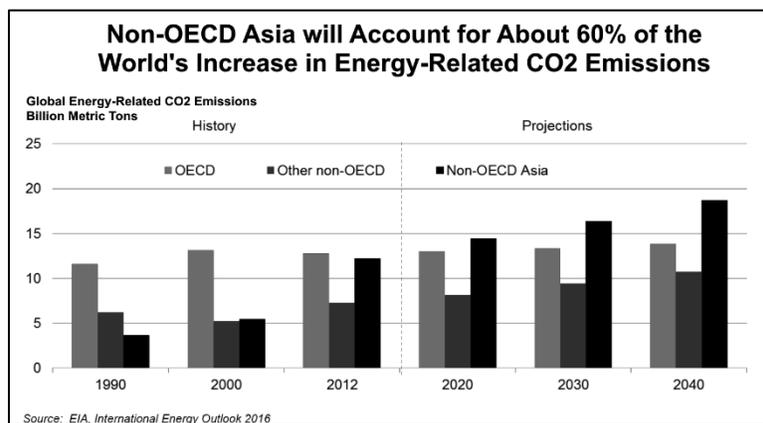
The reverse is true in India, for example, which uses lower fuel grades, less emission abatement equipment, and less efficient technology for electric power generation and other purposes. Energy consumption and associated emissions are rising substantially in developing countries like India (non-OECD countries), and not in the already more advanced countries like the United States [see, Energy Information Administration (EIA) projection in Figure 7-1].³⁴⁷

Figure 7-4



According to EIA projections, worldwide energy-related carbon dioxide emissions will rise from about 32 billion metric tons in 2012 to 36 billion metric tons in 2020 and then to 43 billion metric tons in 2040, a 34 percent increase with current policies and regulations.³⁴⁸ Most of the increase is in developing (non-OECD) economies (Figure 7-2).

Figure 7-5



Economic efficiency considerations clearly would direct emission reduction to countries like India where they are more easily

attainable and will have a larger impact. The *Report* states that some of the least expensive marginal emission reduction opportunities are in the power sector, thereby invoking the efficiency principle, but it refers only to the United States.³⁴⁹ The CEA attaches great urgency to reducing emissions, but it ignores the largest and fastest growing emission sources worldwide.

Opportunities for U.S. Industry

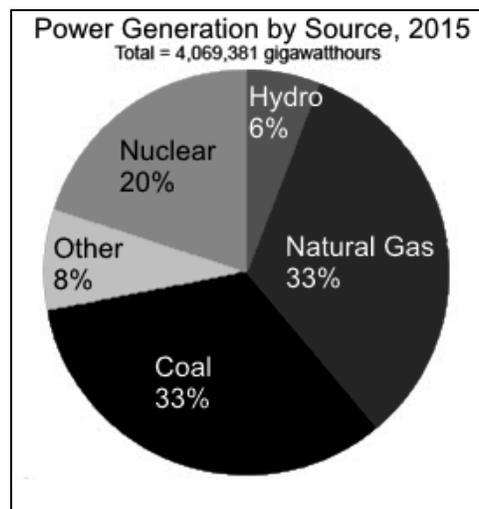
U.S. industry finds ways of cost and revenue sharing with other countries to facilitate the development of their natural resources, particularly oil and gas. Foreign military sales can include joint production agreements that preserve or increase production and employment at home as well as abroad and possibly could serve as a model for equipment and technology sales that lead to lower emissions in emerging economies. Prior Obama Administration *Reports* never explored the critical question of what opportunities exist for expanding U.S. foreign trade and investment in emerging economies with respect to greener energy consumption and electricity generation.

The United States has the world's largest reserves of coal, some of which is low in sulfur and some of which has a high "heat rate," and may be superior to what other countries are burning. The United States also has large natural gas and uranium reserves. American companies know how to build state-of-the-art electrical power plants using these fuels. Furthermore, the United States is a leader in wind and solar power generation.³⁵⁰ Besides reducing greenhouse gas emissions, greater U.S. energy exports and greater foreign energy investments also would reduce toxic pollutants resulting in substantial health and safety benefits, while increasing U.S. jobs and earnings from exports and international investments.

“All-of-the-Above” Strategy

Given the *Report’s* emphasis on reducing emissions sooner rather than later, one would expect full consideration of all options. The Obama Administration initially paid lip service to an “all-of-the-above” energy strategy, but then devolved into advocating mostly wind and solar—so-called zero emission sources—and energy conservation, all of which focused on the United States. Especially with respect to emission reduction, the omission of nuclear power is striking. It is a zero-emission source, and as shown in Figure 7-3, already supplies 20 percent of the nation’s electricity—far more than wind and solar.

Figure 7-6



Source: U.S. Energy Information Administration, *Electric Power Monthly*, February 2015, preliminary data



Fear of radiation still causes anxiety the way electricity once did, but commercial nuclear power generation protects against radiation exposure. Nuclear power generation has been operational since 1958 in the United States, and U.S. submarines and aircraft carriers started using nuclear power more than a half

century ago as well. In France, nuclear power plants provide 75 percent of the national electricity supply.³⁵¹ Around the globe, more people are injured or die supplying the other energy sources shown in Figure 7-3 than nuclear power.³⁵² Long ago, one major cause of anxiety was the so-called China Syndrome, which refers to an accidental nuclear chain reaction that would burn through the floor of a nuclear power plant and continue unstopably through the core of the earth all the way to the other side, i.e., come out in China, figuratively speaking.³⁵³

The point is not to advocate for nuclear power, but its benefits as a reliable, clean, and scalable option for power generation should be weighed against its risks and costs, and other alternatives. It is a reliable and, importantly, scalable option for affordable power generation that emits no greenhouse gases whatsoever. Unfortunately, the *Report* does not discuss nuclear energy at all.³⁵⁴

Economies and Diseconomies of Scale

The *Report* claims renewable sources are becoming cost competitive with conventional energy sources. It bases this claim, in part, on the contention that solar and wind technologies have no fuel costs.³⁵⁵ However, while sunlight and wind are free, they must be collected and processed into usable energy much like uranium, crude oil, coal, and natural gas, and the cost structure of doing so matters greatly to the final cost of delivering electricity.

How much of the United States would have to be covered in solar panels and windmills to raise their market share from a combined 5 percent to, say, 50 percent? Visualizing a greatly expanding area devoted to collecting and transmitting electricity derived from the wind and the sun over increasing distances to where it is consumed makes clear the long-run supply curve slopes upward. The cost estimates CEA cites consider only marginal increases in supply and do not take account of the increasing difficulties siting ever

more windmills and solar panels presents. By contrast, it is not difficult to imagine the nuclear power supply increasing from a 20 percent to a 50 percent market share as it requires little space given its high energy density. Suitable placement of windmills and solar panels is far more geography-dependent and more likely to encounter land use limitations the larger the area they cover. In short, renewables, including biofuels,³⁵⁶ are subject to significant diseconomies of scale whereas the nuclear power supply is not, certainly not to the same extent; it may even be subject to economies of scale. In any event, the cost comparison and its implications in the *Report* are incomplete and misleading.

Adaptation

Economists can also speak constructively to ways of protecting humanity from adverse climate change effects. The emphasis has been on mitigating warming, but if efforts to reduce emissions will be inadequate, then resources instead should be directed to mitigating the warming's adverse effects rather than the warming itself. This might include building higher, stronger dams, fortifying infrastructure, strengthening building codes, moving residences farther inland, and so on. Certainly, we should do so in places where mitigation efforts have reached diminishing returns and adaptation is subject to increasing returns.

The point of making adaptation to climate change a priority is not new. The Committee's 2013 *Response* remarked favorably on a section in that year's *Report* entitled "Preparing for Climate Change," but faulted it for not addressing the costs and benefits relative to alternative policies.³⁵⁷ In 2014, former CEA chairman Ed Lazear published an op-ed entitled "The Climate Change Agenda Needs to Adapt to Reality"³⁵⁸ suggesting that by simple arithmetic the Obama Administration's far-reaching policies to reduce carbon emissions and mitigate climate change are not

capable of making a difference. He stated that we would be wise to “consider strategies that complement and may be more effective than mitigation—namely, adaptation.” This year’s *Report* also raises the subject of adaptation, but again, it does not follow through with any cost-benefit analysis.

A major weakness of the mitigation strategy is that we are not sure how much we reduce warming for a given reduction in emissions.³⁵⁹ It is easier to measure the benefits of adaptive investments based on the damage from past floods, storms, and droughts than of investments to reduce the global temperature. Hence, one can perform cost-benefit analyses for alternative adaptive investments and compare their relative returns with reasonable accuracy, and one can do so without knowing the reasons why floods, storms, and droughts occur.³⁶⁰

It would help policymakers immensely if the connection between emissions and warming were reliably quantifiable. Until it is, economic reasoning recommends resources be devoted to protecting humanity from the natural elements, and emission mitigation efforts concentrate on where they have large incremental impacts, because they are more likely to affect the temperature and can cut high associated levels of toxic pollutants in the process.

U.S. Leadership

In its fight against climate change, the Obama Administration interpreted the U.S. global leadership role as demonstrating a willingness to impose large, unspecified costs on Americans. At the Paris Climate conference in December 2015, the State Department made a pledge for the year 2025 that the United States will reduce its greenhouse gas emissions by 26 to 28 percent below the 2005 level without specifying what it would mean for the economy.³⁶¹ Other countries made similar representations, but

there is no enforcement mechanism. From an economic standpoint, this will not work.

India and other emerging economies struggle with the economic growth tradeoff that emission control entails. Whatever governments and their citizens believe about global warming, they know they have a pollution problem. That is obvious from pictures of people in China, for example, wearing protective masks to filter the particle-filled air they must breathe. The population in emerging economies endures the pollution, because the alternative is abject poverty. What they want are solutions that help their economy grow with less environmental stress.

Some believe massive aid transfers from rich countries is the answer. However, the general population in advanced economies does not consider itself rich, for one thing; and for another, subsidies are fraught with distorting, deleterious effects that get worse the larger they are. Market reforms and engaging with the global economy bring accelerated economic growth and ultimately lower harmful emission levels.³⁶² Relying on markets should be the first priority, and then the question is how the U.S. government can best advance emissions-oriented public policy through international trade and investment initiatives with particular emphasis on benefits to U.S. companies and workers.

The *Report* touts President Obama's call for global free trade for specified environmental goods both in his Climate Action Plan in 2013 and in his negotiations on the Environmental Goods Agreement the following year, with "a group of countries that accounts for more than 85 percent of global trade in environmental goods."³⁶³ But it fails to mention that World Trade Organization talks on that subject collapsed in December 2016.

CONCLUSION

America expends many resources where it makes relatively little incremental difference to emissions, and it is unknown whether the difference averts adverse temperature increases; it may even push production abroad where there are fewer emission controls. Facilitating trade and investment associated with diffusion of modern technology around the world can create jobs at home, raise living standards abroad, and lower undesirable emissions of various kinds.

The *Report* does not address the relative efficiency of different approaches to reducing emissions nor alternative approaches preparing us for a warmer climate. The government could do more to protect citizens from the elements where the benefits are clear and relatively large. Doing so has calculable benefits for society and the economy. Specifically, it would not erode our economic growth potential, as does blindly pouring resources into domestic emission reductions. The Committee Majority's responses of prior years have pointed out previous *Reports'* neglect to take these perspectives.

The Obama Administration and former CEA recognized the need for emission mitigation around the globe, and they touted the good intentions many other countries have professed. But if the problem is big and the urgency great, then the focus and mechanism are not up to the task. We would need to get international trade and investment moving in a way that can make major inroads against emissions.

Recommendations

The Committee Majority recommends that policymakers:

- Scope out opportunities for economic development deals that can have environmental and climate benefits among

other things with foreign countries, such as electrical grid buildout, power station upgrades, and cleaner fuels;

- Evaluate the costs and benefits of expanded nuclear power plants use at home and abroad;
- Analyze the costs and benefits of adaptive investments in the United States to protect the population and the economy from severe weather events and increase resiliency to them.

CHAPTER 8: THE MISSING CHAPTER ON TAX REFORM

- Chapter 3 of the *Report* emphasizes tax policy as a means of redistributing income among taxpayers, but it ignores the pressing need to overhaul the extraordinarily burdensome tax code.

The *Response* seeks to fill the void by addressing:

- How comprehensive tax reform will spur economic growth, boosting American jobs and investment;
- How our high corporate rate and outdated international rules have made American firms less competitive;
- Why tax reform that fails to address individual tax rates will penalize small businesses;
- Why heavy taxation on savings and investment, estate taxes, and slow cost recovery dampens growth; and
- How simplifying the tax code could relieve businesses, families, and individuals of an unnecessary burden.

THE CONNECTION BETWEEN TAX REFORM AND ECONOMIC GROWTH

Tax policy affects individuals, businesses, and the broader economy in ways that either help or hinder American prosperity. An economy operating at full potential needs its working age population in the workforce (labor supply), businesses willing and able to hire and equip workers with the best equipment and know-how (capital investment), and technological innovation that empowers workers to produce more per hour (productivity). Given the declines in labor force participation and sluggish

productivity growth during the Obama Administration described in Chapter 2 combined with tax increases on capital that will be discussed in this chapter, the current forecast of slow economic growth should not be surprising.

As explained by the Joint Committee on Taxation (JCT), tax policy affects economic growth in several ways. For example, lowering the tax rate paid by individuals allows them to keep more of the money they earn, thus increasing the incentive to work. Similarly, lowering the tax rates paid by businesses allows them to invest more in their workers by purchasing equipment that will make employees more productive.³⁶⁴ That higher productivity leads to higher wages for workers.³⁶⁵

Tax policy can also distort individual behavior and the broader economy by rewarding certain types of activities or industries over others. In an efficient economy, taxpayers would make decisions based on what is best for their business or family, rather than what produces the best tax outcome.

In addition, tax policy can have a direct impact on the location of investments. If the domestic tax climate makes it less profitable to invest in the United States, then businesses have a greater incentive to invest in and possibly even relocate to other countries with more favorable tax systems. A tax code that makes America the best place in the world to work, invest, and start a business is a key ingredient in strong economic growth.

A Lost Opportunity for Pro-Growth Reform

Four years ago in the 113th Congress, policymakers seemed focused on comprehensive tax reform to boost economic growth and fix our broken tax system for businesses, families, and individuals alike. Unfortunately, the possibility of fundamental reform was diminished by President Obama's insistence on

massive tax increases on the individual side of the tax code, where the rates and rules affect not only every individual taxpayer, but also the vast majority of businesses. Discussions then pivoted to reforming the business side of the tax code in isolation because the Administration had indicated openness to revenue neutrality in that context.³⁶⁶ Unlike the 2017 *Report's* single paragraph³⁶⁷ on the subject, the 2015 *Report* contained an entire chapter dedicated to business tax reform and its potential for spurring economic growth.³⁶⁸ However, the Administration's refusal to address the high individual tax rates paid by small businesses limited prospects for business tax reform.

Later in the 114th Congress, the conversation narrowed again to international tax reform, a subset of business tax reform addressing the overseas tax climate for American companies. Unfortunately, President Obama's Fiscal Year 2017 budget plan with large net tax increases on the business side of the code doomed the possibility of business tax reform or even more limited international tax reform during his tenure.³⁶⁹ Recognition that taxes should be reformed in a holistic way that addresses the needs of individuals and all types of businesses, both domestically and abroad, is the key to boosting economic growth and making the tax code work for Americans.

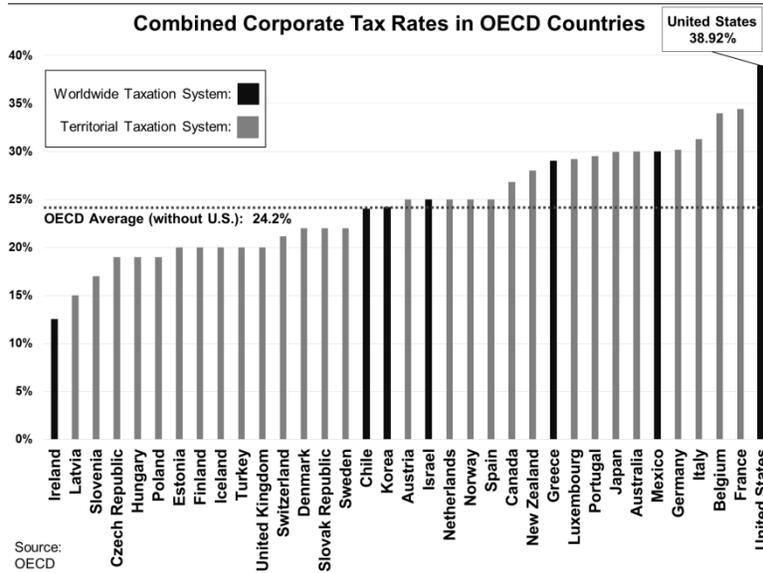
The Highest Corporate Tax Rate in the Developed World

Members of Congress from both parties as well as the Obama Administration have acknowledged that the U.S. corporate tax rate is too high and internationally uncompetitive. The decades-old corporate rate reduction in the *Tax Reform Act of 1986* lowered the U.S. rate so that it would be one of that era's lowest internationally.³⁷⁰ Since then, America has lost ground by standing still while our global competitors moved aggressively to lower

their corporate rates and attract investment to their shores. Today, the U.S. corporate rate is the highest in the developed world.

Among the 34 advanced economies in the OECD, the U.S. corporate rate tops all others at nearly 39 percent, including both the 35 percent Federal rate and average state taxes (see Figure 8-1).³⁷¹ President Obama’s framework for business tax reform proposed a Federal corporate rate reduction from 35 percent to 28 percent.³⁷² While this would have been an improvement, it would have left the U.S. rate still among the highest and far above the 24.2 percent average rate enjoyed by our OECD competitors. In contrast, America’s competitive position would be dramatically improved by the 20 percent corporate rate in the tax reform framework contained in Speaker Ryan’s *Better Way* plan.³⁷³ Further, President Trump proposed a top business rate of 15 percent for all sizes and types of companies.³⁷⁴

Figure 8-1



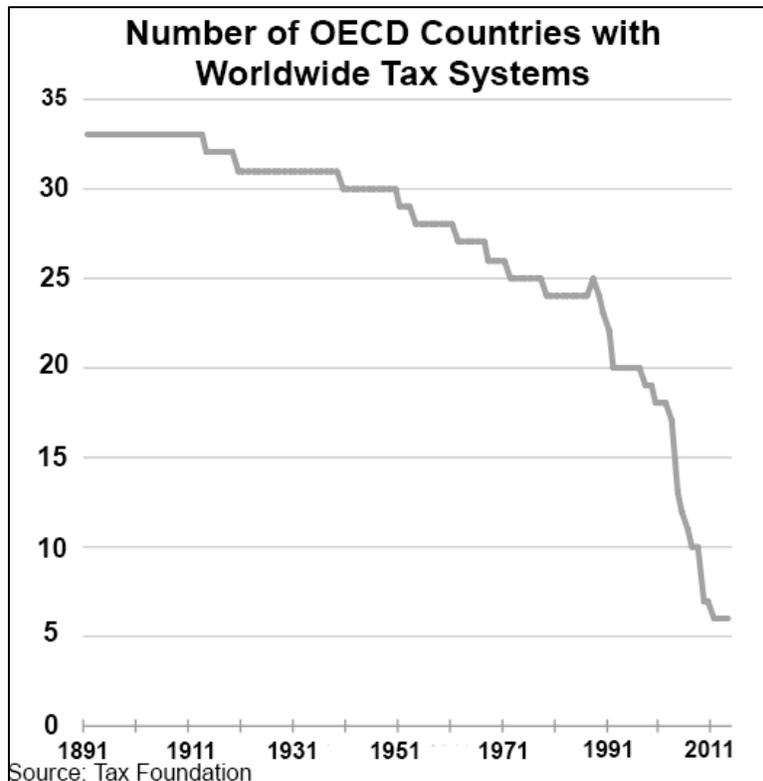
Clearly, the need for bold rate reduction and reform has become even more urgent with the proliferation of patent boxes, or

innovation boxes, among our trading partners. These arrangements tax the income from intellectual property at rates far below the statutory rate of the host country, and can entice companies to locate valuable intellectual property and related jobs overseas.³⁷⁵

International Tax Systems

In addition to facing the highest corporate rate in the developed world, U.S. businesses are burdened with an uncompetitive worldwide tax system rather than a territorial system. Territorial systems allow active income earned overseas to be brought back to the home country with little or no tax. In contrast, America's worldwide system subjects all income to U.S. taxation, regardless of where it was earned. As illustrated in Figure 8-1 by the relatively few dark bars in the graph, America is an outlier in taxing worldwide earnings and has the OECD's highest tax rate. The tax is triggered when profits are brought back to the United States, giving companies a strong incentive to leave earnings overseas. This creates a lock-out effect, which results in reduced levels of investment by these companies in the United States. The other six OECD countries with worldwide systems have the advantage of significantly lower corporate rates. Figure 8-2 shows the growing trend to territorial tax systems.

Figure 8-2



Rather than proposing a competitive territorial system, the Obama Administration proposed international tax reform that it described as “hybrid,” in which an immediate 19 percent minimum tax would be imposed on all new foreign earnings of U.S. companies.³⁷⁶ Former CEA Chair during the Clinton Administration, Laura D’Andrea Tyson, criticized both the Obama Administration’s failure to adopt a territorial approach and the 19 percent minimum tax, which she pointed out would amount to an effective rate of 22.4 percent because of its disallowances of other taxes paid.³⁷⁷ In contrast, the *Better Way* tax reform plan calls for a purely territorial system with no international minimum tax so that American companies are free to use foreign earnings to

expand investment and jobs in the United States without penalty.³⁷⁸

The exceedingly high U.S. corporate rate and uncompetitive international taxation creates a strong incentive for American companies to move their corporate headquarters overseas to more favorable tax climates. The Obama Administration attempted to address this practice—also called a corporate inversion—through a series of punitive legislative proposals and regulations.”³⁷⁹

Alternatively, the experience in Great Britain provides a lesson on how pro-growth tax reform can more effectively stem the tide of inversions and entice inverted companies to return. Like the United States, Great Britain underwent a period of “headquarter flight,” but responded as the United States should: by lowering its corporate tax rate and moving to an internationally competitive tax system. As a result, companies have returned to Great Britain and new companies are incorporating there.³⁸⁰ The best solution for stopping the loss of U.S.-headquartered companies is to treat the root of problem—an uncompetitive tax system—rather than enact punitive measures to treat the symptoms.

Passthrough Businesses and the Individual Tax Rate

While the Obama Administration proposed a lower tax rate for C corporations that pay the corporate tax, no similar rate reduction was offered to the 95 percent of businesses that pay taxes at the individual level rather than corporate level, known as passthrough businesses.³⁸¹ The vast majority of small businesses are organized as passthroughs, and as such a lower corporate rate would be little help to them.

When President Obama took office, the top Federal tax rate paid by small businesses was identical to the top rate paid by large corporations, 35 percent. However, with the combination of ACA

taxes and President Obama's insistence on raising the top individual rate and reviving other penalties, the top rate paid by small businesses is now 44.6 percent.³⁸² Significantly, the claim in Chapter 3 of the *Report* that the hike in the top individual tax rate and capital gains rate was simply a return to Clinton-era rates is false, since it ignores the impact of the ACA's 3.8 percent tax on investment income.³⁸³

The President's reform framework would have put small businesses in an even worse position. If certain business tax preferences were eliminated—a common feature of President Obama's and most reform frameworks—and the proceeds used only to lower the corporate rate, then many small and mid-sized passthrough businesses would have faced an even higher effective tax rate. The 2015 *Report* argued that higher passthrough rates are justified because C corporations face a double tax at both the corporate and shareholder level on dividends and capital gains, while passthroughs generally pay only a single layer of tax. However, CBO has found that passthrough businesses pay an effective tax rate of 27 percent, only 4 percentage points lower than the C corporation effective rate of 31 percent.³⁸⁴

Under President Obama's framework, C corporations would have experienced a top rate reduction from 35 percent to 28 percent, while small businesses would have been taxed at a top rate of 44.6 percent and lost many of the tax preferences that lower their effective rate. This could have led to the worst of both worlds for businesses, as President Obama's preferred corporate rate would not have been low enough to make large corporations competitive, while the tax burden on smaller companies would have increased.

Policies aimed at penalizing the wealthy through higher individual tax rates often hit business income, which in turn lowers opportunities for workers, as explained above. In fact, the Obama

Administration's own Treasury Department found that almost 80 percent of taxpayers in the highest one percent of income earners are business owners.³⁸⁵

Double Taxation of Savings and Investment

Another Obama Administration tax increase aimed at the wealthy raised the top capital gains rate from 15 percent to 23.8 percent when ACA taxes are included.³⁸⁶ President Obama also proposed another hike in the top capital gains rate to 28 percent.³⁸⁷ As this section makes clear, America already has the second-highest integrated capital gains rate in the developed world. Further, there are sound economic and policy justifications for keeping capital gains taxes low.

Under the current tax code, the published tax rates for long-term capital gains and qualified dividends are lower than the tax rates on ordinary income. In reality, however, capital gains and dividends face a hidden double tax that often exceeds ordinary income rates. The dividends companies pay to shareholders are first taxed at the corporate level. Shareholders also pay the corporate tax when they sell stock and consequently receive a reduced capital gain. In addition, whenever a taxpayer buys stock, land, or another capital asset, the income used to purchase the asset was likely taxed at the individual level already.

A 2015 Ernst & Young study explains the economic damage caused by the double tax:

The double tax affects a number of economic decisions. It lowers the after-tax return of equity-financed corporate investment, which discourages capital investment and results in less capital formation. With less capital available for each worker to work with, labor productivity is lowered,

*which reduces the wages of workers and, ultimately, Americans' standard of living. In addition to discouraging capital formation generally, the double tax also distorts a number of other economic decisions.*³⁸⁸

Inflation also operates as a hidden tax on capital gains. Ordinary income, such as wages or salaries, is generally taxed in the year it is earned. Capital gains are not taxed until the gain is realized (generally when the asset is sold). This delay can lead to pernicious effects. Economist Kyle Pomerleau illustrated this point using a hypothetical saver: this saver may purchase stock for \$89.18 in 2000 and sell it in 2013 for \$100 dollars. Nominally, this saver earned \$10.82 in capital gains profit. At a 23.8 percent capital gains rate, the saver would pay \$2.57 in taxes. However, because of inflation, the \$100 in 2013 is worth less than the original \$89.18. In real terms, the saver paid \$2.57 in taxes on a capital loss of \$4.88, essentially an infinite effective tax rate.³⁸⁹

The level of the capital gains rate can have a very strong influence on taxpayer behavior and the economy as a whole. Taxpayers can avoid paying a high capital tax by holding onto their assets, which inhibits capital from moving to its highest valued uses, dampening economic growth. When capital gains taxes are low, taxpayers do not face as strong a disincentive to sell assets. For example, after the capital gains tax rose to 28 percent in 1987, sales of capital assets sank and remained depressed until Congress lowered the capital gains rate to 20 percent in 1997.³⁹⁰ Following this cut, capital gains tax revenues ballooned and helped balance the budget.³⁹¹

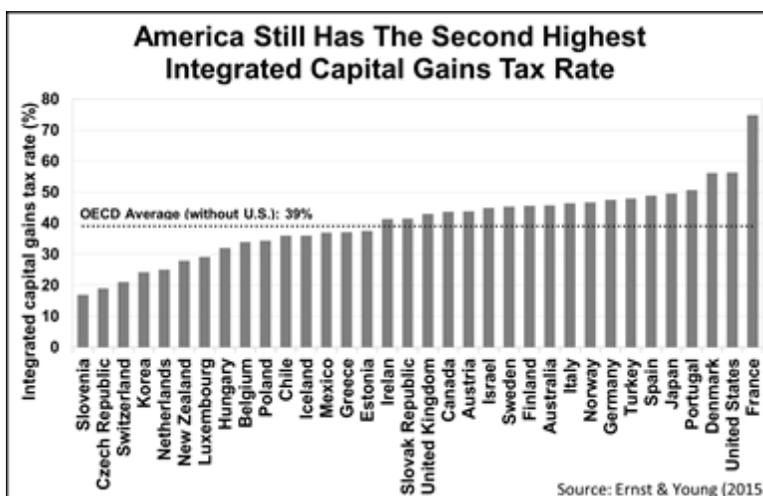
This raises the question of what capital gains rate would generate the most tax revenue. The JCT estimates that we are already near the revenue-maximizing rate, and that is perhaps why the Obama

Administration's proposed additional hike went no further than 28 percent. Other economists, such as Ohio State University economist Paul D. Evans, have come to a very different conclusion. Using statistical analysis through the years 1976 to 2004, Professor Evans estimated how taxpayers would respond to increasing capital gains taxation and found the revenue-maximizing rate would be much closer to 10 percent.³⁹² This implies that tax reform could raise more revenue and free up more capital for the economy.

The Tax Foundation modeled President Obama's proposed 28 percent capital gains rate and found that it would reduce GDP by 0.8 percent in the long run and result in lost revenues of over \$11 billion. Even worse, it would reduce the capital stock (tools, machines, factories, buildings etc.) by over 2 percent and lower wages by over 0.65 percent.³⁹³ In an ever competitive world, American workers cannot afford to be less productive.

Regarding international competition, the 2013 increase in the capital gains tax rate was opposite the historical trend among our OECD trading partners. Using an integrated capital gains rate that accounts for the corporate and individual double tax on capital gains, the United States ranks second in severity (Figure 8-3). Even adding Brazil, Russia, India, and China, our rate remains the second highest.

Figure 8-3



In 2000, the average OECD integrated capital gains rate was 45.2 percent. By 2014, the other OECD countries had an average integrated capital gains rate of 39.7 percent, over five percentage points lower than in 2000. Japan, the world's third-largest economy, reduced its top integrated rate by 6 percentage points. Canada reduced its top rate almost 20 percentage points from over 63 percent to just under 44 percent.³⁹⁴ Over that same time, the United States' integrated capital gains rate declined from 54.5 percent following the 2003 capital gains rate cut, and then rose to a level of 56.3 percent. This is not only a net increase of almost 2 percentage points domestically; it also places the U.S. rate more than 16 percentage points above the OECD average.³⁹⁵

Rather than a separate rate structure for capital gains, the *Better Way* tax reform plan would tackle double taxation by allowing taxpayers to deduct half of their income from savings (capital gains, dividends, interest, etc.) from taxation. The other half would be subject to the ordinary income tax rates. With the addition of the plan's top individual rate of 33 percent, this would effectively lower the top capital gains rate from the current 23.8

percent to 16.5 percent. Additionally, the *Better Way* plan also reduces the corporate tax rate from 35 percent to a flat 20 percent.³⁹⁶ This reform would reduce the top integrated rate from a punishing 56.3 percent to roughly 41 percent, an over 15 percentage point decrease that would place the United States only slightly above the OECD average.³⁹⁷ The Tax Foundation's analysis of the corporate rate and capital gains rate reductions in the *Better Way* found that these two changes would boost GDP growth by 2.0 percentage points in the long run.³⁹⁸

Cost Recovery and Investment

Under the current tax code, a business generally cannot deduct the full cost of equipment in the year it is purchased. Instead, a company can deduct the cost from taxes only over a number of years under applicable depreciation schedules. In essence, the tax code requires businesses to defer recognition of a substantial portion of equipment cost for purposes of reporting their income, so that the income reported and taxed in a given year exceeds the actual cash profit earned. This tax treatment discourages businesses—particularly those that depend on cash flow—from purchasing new equipment. It also requires business owners to track when an asset was purchased, which depreciation schedule applies to particular assets, and how much has already been deducted from the purchase price.

Expensing allows businesses to recognize the full cost of an asset in the tax year it is purchased when reporting its income. With expensing, businesses pay less tax early on after they purchase an asset and can recover its cost faster. Later on, their tax payments will be larger as there is no depreciation to deduct from the earnings. Faster cost recovery means breaking even sooner on an investment, which encourages more investment.

In 2015, Congress took the welcome step of making recent levels of allowable expensing for small businesses permanent,³⁹⁹ a move based on legislation introduced by the current JEC Chairman, Rep. Pat Tiberi.⁴⁰⁰ This greatly improves certainty, encourages investment, and relieves paperwork burdens on small businesses. However, the tax code still limits the amount a business may expense, the type of assets that can be expensed, and the total amount of asset purchases a company can make and still qualify for small business expensing.⁴⁰¹

In order to boost economic growth, Congress has also passed temporary extensions of bonus depreciation, under which companies of all sizes can deduct a large portion of the purchase price in the first tax year. However, bonus depreciation is currently scheduled to phase down from an extra 50 percent deduction in the year of purchase to 30 percent in 2019, after which it will expire.⁴⁰²

In the last Congress, the current Committee Chairman introduced legislation that would have made 50 percent bonus depreciation permanent.⁴⁰³ The Tax Foundation estimates that this policy would improve economic growth by 1 percent in the long run.⁴⁰⁴

The *Better Way* tax reform plan takes this pro-growth policy a step further by allowing full expensing for all business assets purchased domestically.⁴⁰⁵ The Tax Foundation estimates that this element of the plan alone would boost GDP by 5.4 percent over a decade and add over a million new jobs.⁴⁰⁶

The JCT has also acknowledged the growth potential of policies that allow businesses to recover the costs of their investments more quickly. In 2012 testimony before the Senate Finance Committee, JCT noted that while the extent of growth resulting from expensing differs in the economic literature, “changes in taxes do have a noticeable impact on investment.”⁴⁰⁷ Faster cost

recovery is one of the most powerful policies used to boost growth and productivity.

While a change from depreciation to expensing appears to have a large impact on revenue in the short term, over the long run much of the revenue will be recouped as the depreciation deductions that would have been taken in later years disappear. Additionally, the positive growth effects from faster cost recovery can mitigate the revenue loss in the first decade. For example, the Tax Foundation estimates that without accounting for growth effects, moving to expensing would reduce Federal revenues by \$2.2 trillion dollars. When the macroeconomic effects are included, the loss drops to \$883 billion.⁴⁰⁸ The loss will drop even further in the second decade as write-offs from the old depreciation system fully disappear. Thus, while the loss to the Treasury from moving to expensing would be largely temporary, the benefits to the economy and workers from greater levels of investment would be lasting.

Should Death Be a Taxable Event?

The current tax system treats a taxpayer's death as a taxable event. While an exemption is provided for assets worth \$5 million (\$10 million for spouses) or less, indexed for inflation, the tax code imposes an estate tax of up to 40 percent on the remaining assets of the deceased.⁴⁰⁹ The exemption amounts may seem large at first glance, but the estate tax has a disproportionate impact on family-owned businesses and farms, many of which may appear rich in land, equipment, or inventory, but in reality are cash-poor. As a result, the estate tax often breaks up businesses or family farms by forcing the sale of land or other assets to pay the tax.

In 2011, economist Stephen J. Entin authored a report on the economic effects of the estate tax that concluded the tax was so

devastating that it reduced, rather than raised, Federal revenue on a dynamic basis:

*In reality, the estate tax is so destructive on investment and employment that it reduces Federal revenue over time by eroding the tax base. Our report takes this into consideration by applying a model of the estate tax's effect on capital formation, GDP, wages, and other income to calculate the budget effect of reducing the tax, allowing for the increase in GDP and other revenue.*⁴¹⁰

Another analysis examined the damaging economic effects of compliance costs associated with the estate tax—which involve complex valuations by both the taxpayer and tax collector of a variety of assets—and concluded that compliance and avoidance costs outweigh any revenue raised by estate taxes.⁴¹¹ Economic efficiency is also lost when family businesses spend resources in order to manage estate taxes so the company can survive to the next generation that could be put to more productive uses.

Moreover, the estate tax may even be counterproductive with respect to the Obama Administration's goal of reducing income inequality outlined in Chapter 3 of the *Report*. The previous analysis also determined that estate taxes have either a negligible or counterproductive effect on inequality by preventing the transfer of assets to heirs.⁴¹² The *Better Way* tax reform plan would repeal the estate tax, which would not only reduce the emotional and financial toll on families grieving the death of a loved one, but also remove an impediment to economic growth. The Tax Foundation's model predicts that this change will boost economic growth by 0.9 percent over a decade.⁴¹³

The Cost of Unnecessary Complexity

As of 2014, a compilation of all the statutes, regulations, and case law necessary to comply with the tax code totaled 74,608 pages.⁴¹⁴ The U.S. Taxpayer Advocate Service (TAS) has also stated, “The most serious problem facing taxpayers—and the [Internal Revenue Service (IRS)]—is the complexity of the Internal Revenue Code.”⁴¹⁵ In a 2012 report, TAS found that the tax code had been changed 4,680 times since 2001, a rate of more than one change per day.⁴¹⁶ More changes and complexities have been added since then.

TAS also estimated that Americans spend over 6.1 billion hours each year preparing their taxes.⁴¹⁷ The IRS projects that 90 percent of taxpayers seek assistance with tax preparation, either through hiring a paid preparer (56 percent) or buying software (34 percent).⁴¹⁸ Even 27 percent of IRS employees turn to outside help with tax preparation.⁴¹⁹

The JCT has identified four specific negative effects of complexity in the tax code:

- Decreased levels of voluntary compliance;
- Increased costs of compliance for taxpayers;
- Reduced perceptions of fairness in the Federal tax system; and
- Increased difficulties in the administration of tax laws.⁴²⁰

While estimates of the annual cost of compliance differ, a 2011 study by Arthur Laffer, Wayne Winegarden, and John Childs found that Americans paid over \$430 billion in a single year to comply with the tax code. Of this amount, \$216 billion was borne by individuals, businesses incurred roughly \$162 billion, and the

remaining \$53 billion represented preparers' fees, IRS administration, and auditing.⁴²¹

Another calculation conducted by economists at the Mercatus Center found a range of compliance costs between \$67 and \$378 billion annually. The researchers then projected lost economic growth from time spent planning and filing taxes at \$148 to \$609 billion per year. Combining both the compliance and growth estimates, the study projected that the U.S. tax system costs \$215 to \$987 billion each year.⁴²²

The compliance burden that the U.S. tax system imposes on the domestic economy also is large compared with other OECD countries. National Taxpayer Union Foundation analyst Michael Tasselmyer measured the average time required each year for an American business to comply with taxes compared to peers in the OECD. On average, a business spends just under 180 hours, or 22 and a half working days, to comply each year. France is the closest competitor on complexity with an average of 133 hours, representing more than a full work week less than in the United States.⁴²³

Many of these estimates were done prior to implementation of the ACA, which imposed new taxes on both individuals and businesses. Even a provision designed to benefit taxpayers has added complexity and compliance burdens. The ACA distributes its premium tax credit for purchasing health insurance on the exchanges through the IRS. As GAO has noted, the IRS has had severe difficulty implementing the premium tax credit, further burdening taxpayers with opaque requirements.⁴²⁴

In one of the studies previously mentioned, Laffer and his coauthors also estimated the economic benefits of reducing compliance costs. For every \$100 billion reduction in compliance

costs, the study projects the economy would benefit by \$30 to \$34 billion per year.⁴²⁵

Another analysis indicated that low- and middle-income taxpayers would benefit most from simplification. The study found that 54 percent of the time and money saved by simplifying individual taxes would benefit taxpayers with \$50,000 or less in adjusted gross income.⁴²⁶

The *Better Way* tax reform blueprint would make great strides in simplification for both individuals and businesses. Individuals would be able to file taxes on a form no larger than a postcard. In addition, other elements of the plan such as flatter tax rates, elimination of special tax provisions, full expensing, and repeal of the estate tax would vastly reduce the compliance costs of businesses.⁴²⁷

CONCLUSION

Recommendations

In order to boost economic growth, job creation, and the wages of workers, the JEC Majority recommends enacting tax reform that:

- Simplifies and modernizes our broken tax code;
- Lowers and consolidates tax rates for both individuals and businesses;
- Moves to a more competitive territorial tax system;
- Eliminates special tax preferences that reward certain industries over others;
- Reduces the double taxation of capital and eliminates estate taxes.

In a time of stagnant economic growth and declining workforce participation, our nation desperately needs pro-growth policies like those outlined above that reward work, savings, and investment while relieving unnecessary burdens on families and businesses. The Committee urges the new Congress and Administration to implement the policies outlined in this *Response* that will restore prosperity and boost America's true growth potential.

ENDNOTES

- ¹ “Economic Report of the President (ERP) 2017,” Council of Economic Advisers, p. 43, January 2017.
<https://obamawhitehouse.archives.gov/administration/eop/cea/economic-report-of-the-President/2017>
- ² ERP 2017, p. 21.
- ³ “Weekly Economic Update: January 30 – February 3, 2017,” Joint Economic Committee Republicans, January 30, 2017.
<https://www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=0AE4B15B-23E6-4534-AD9A-3B381E4BF246>
- ⁴ “The Budget and Economic Outlook: 2017 to 2027”, Congressional Budget Office, January 24, 2017. <https://www.cbo.gov/publication/52370>
- ⁵ Ip, Greg, “How Demographics Rule the Global Economy,” *The Wall Street Journal*, November 22, 2015.
<https://www.wsj.com/articles/how-demographics-rule-the-global-economy-1448203724>
- ⁶ Proctor, Bernadette D. et al., “Income and Poverty in the United States: 2015”, U.S. Census Bureau, p. 7, September 2016.
<http://www.census.gov/content/dam/Census/library/publications/2016/demo/p60-256.pdf>
- ⁷ Boucher, Alex et al., “Growth in Personal Income Shows Uneven U.S. Recovery,” The Pew Charitable Trusts, April 19, 2016.
<http://www.pewtrusts.org/en/research-and-analysis/analysis/2016/04/19/growth-in-personal-income-shows-uneven-us-recovery>
- ⁸ ERP 2017, p. 21.
- ⁹ ERP 2017, p.25.
- ¹⁰ “The 2016 Distressed Communities Index,” Economic Innovation Group, p. 9, February 2016.
<http://eig.org/wp-content/uploads/2016/02/2016-Distressed-Communities-Index-Report.pdf>
- ¹¹ Russolillo, Steven, “Baby Boomers vs. Millennials: The Uneven Jobs Recovery,” *The Wall Street Journal*, December 1, 2016.
<http://www.wsj.com/articles/baby-boomers-vs-millennials-the-uneven-jobs-recovery-1480624537>
- ¹² ERP 2017, p. 41.
- ¹³ “ARRA’s Five Year Anniversary,” Republican Staff Analysis, Joint Economic Committee, February 18, 2014.
http://www.jec.senate.gov/public/_cache/files/14f6cd86-8235-4999-bd59-1f22cf08f05d/stimulus-5-year-anniversary.pdf; see also: “Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output from October 2012 Through December 2012,” Congressional Budget

Office, February 2013.

<https://www.cbo.gov/sites/default/files/cbofiles/attachments/43945-ARRA.pdf>

¹⁴ “Economic Report of the President 2014,” Council of Economic Advisers, p. 269-298, March 2014.

https://obamawhitehouse.archives.gov/sites/default/files/docs/full_2014_economic_report_of_the_president.pdf

¹⁵ The CEA did not apply “process evaluation” to the newly introduced ACA (Chapter 4). See, “Box 7-1: Impact Evaluations, Process Evaluations, and Performance Measurement” ERP 2014, p. 270.

¹⁶ ERP 2017, p. 57.

¹⁷ ERP 2017, p. 63.

¹⁸ ERP 2017, p. 63.

¹⁹ ERP 2017, p. 21, 28.

²⁰ “The Daily History of the Debt Results,” TreasuryDirect, U.S. Department of the Treasury, January 20, 2009 – January 20, 2017.

<https://www.treasurydirect.gov/NP/debt/search?startMonth=01&startDay=20&startYear=2009&endMonth=01&endDay=20&endYear=2017>

²¹ “Historical Tables,” Office of Management and Budget, Table 1-2.

<https://obamawhitehouse.archives.gov/omb/budget/Historicals>

²² “The 2016 Long-Term Budget Outlook”, Congressional Budget Office (CBO), p. 14, July 2016.

<https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51580-LTBO.pdf>

²³ Summers, Lawrence H., “Demand Side Secular Stagnation,” American Economic Review, 105(5): p. 60-65, May 2015.

<https://www.aeaweb.org/articles?id=10.1257/aer.p20151103>

²⁴ “Is the ‘Full Employment’ Glass Half Full?” Joint Economic Committee Republicans, p. 4, February 10, 2016.

http://www.jec.senate.gov/public/_cache/files/b0aba7c1-5a2d-4470-abb8-b1fc0222f260/2-10-full-employment-brief.pdf; see also: “Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output in December 2013,” Congressional Budget Office, p. 8, February 2014. <http://www.cbo.gov/sites/default/files/cbofiles/attachments/45122-ARRA.pdf>

²⁵ “Hearing on: The Economic Outlook,” Joint Economic Committee, November 17, 2016.

<http://www.jec.senate.gov/public/index.cfm/hearings-calendar?ID=6C0739C1-5C9D-4EDD-BA4F-4DD1274F4B99>

²⁶ ERP 2017, p. 61.

²⁷ “Joint Economic Report 2016,” Joint Economic Committee, p. 13, March 1, 2016. https://www.jec.senate.gov/public/_cache/files/0db793da-5e90-4f9d-ad9e-487f28652c7a/3-2-2016-joint-economic-report-w-minority-views-final.pdf

²⁸ ERP 2017, p. 60.

²⁹ Matthews, Dylan, “America’s Taxes are the Most Progressive in the World. Its Government is Among the Least,” *The Washington Post*, April 5, 2013. https://www.washingtonpost.com/news/wonk/wp/2013/04/05/americas-taxes-are-the-most-progressive-in-the-world-its-government-is-among-the-least/?utm_term=.c6801861d7e4

³⁰ “The Distribution of Federal Spending and Taxes in 2006,” Congressional Budget Office, p. 17, November 2013. <https://www.cbo.gov/sites/default/files/113th-congress-2013-2014/reports/44698-distribution11-2013.pdf>

³¹ “Trends in the Distribution of Household Income between 1979 and 2007,” Congressional Budget Office, p. XII, October 2011. <https://www.cbo.gov/sites/default/files/cbofiles/attachments/10-25-HouseholdIncome.pdf>, p. 14.

³² Henderson, David R., “Most of the Benefits of a Minimum Wage Increase Would Not Go to Poor Households,” National Center for Policy Analysis, January 13, 2014. <http://www.ncpa.org/pub/ba792>

³³ Furman, Jason and Krista Ruffini, “Six Examples of the Long-Term Benefits of Anti-Poverty Programs,” Council of Economic Advisers, <https://obamawhitehouse.archives.gov/blog/2015/05/11/six-examples-long-term-benefits-anti-poverty-programs>

³⁴ Tanner, Michael, “SNAP Failure,” Cato Institute, October 16, 2013. https://object.cato.org/sites/cato.org/files/pubs/pdf/pa738_web.pdf
The reforms to Aid to Families with Dependent Children (AFDC) that brought about TANF proved highly successful in the immediate years following, but much of that reform has been rolled back. Early childhood education has been mixed. Food stamp programs like the Supplemental Nutrition Assistance Program (SNAP) have seen an incredible expansion of beneficiaries, which remains elevated nearly eight years after the recession’s end. Evidence suggesting that SNAP’s success is measured by loosened eligibility standards and active recruitment of new participants rather than addressing proper nutrition and moving families to self-sufficiency.

³⁵ Miron, Jeffrey A., “Rethinking Redistribution,” *National Affairs*, Issue Number Six, Winter 2011. <http://www.nationalaffairs.com/publications/detail/rethinking-redistribution>

³⁶ “Volunteering in the United States – 2015,” Bureau of Labor Statistics, p. 1-2, February 25, 2016. <https://www.bls.gov/news.release/pdf/volun.pdf>

³⁷ “The Reward of Work, Incentives, and Upward Mobility,” Joint Economic Committee Republicans, December 1, 2016. <http://www.jec.senate.gov/public/index.cfm/republicans/2016/12/the-reward-of-work-incentives-and-upward-mobility>

³⁸ ERP 2017, p. 59.

³⁹ JER 2016, p. 20, March 1, 2016.

⁴⁰ ERP 2017, p. 64.

⁴¹ “The ‘New Normal’? Part 2: Subdued Employment,” Joint Economic Committee Republicans, October 17, 2016.
<http://www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=7C5BB9BA-8C3F-439F-97AE-AEC57E8C871A>

⁴² The ‘New Normal’? Part 2: Subdued Employment.
<http://www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=7C5BB9BA-8C3F-439F-97AE-AEC57E8C871A>

⁴³ “The ‘New Normal’? Part 1: Economic Stagnation,” Joint Economic Committee Republicans, October 5, 2016.
<http://www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=B47A025D-F45B-4657-A26D-C2252E363E48>

⁴⁴ “The ‘New Normal’? Part 3: Fiscal Recklessness,” Joint Economic Committee Republicans, November 1, 2016.
<http://www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=4D3872F9-BC37-4860-B934-B1B57CCE0474>

⁴⁵ “Curing America’s Growth Gap,” Joint Economic Committee Republicans, September 19, 2013.
<http://www.jec.senate.gov/public/index.cfm/republicans/republican-reports?ID=A0A88CAC-B2BF-41C8-81B2-DA10AD5ECE23>

⁴⁶ “Revisions to CBO’s Projection of Potential Output Since 2007,” Congressional Budget Office, p.1, February 2014.
<https://www.cbo.gov/publication/45150>

⁴⁷ “The Budget and Economic Outlook: 2017 to 2027,” Congressional Budget Office, January 24, 2017. <https://www.cbo.gov/publication/52370>

⁴⁸ CBO estimates real potential GDP based on long-run labor force, capital, and productivity trends. Business cycle fluctuations therefore should not affect potential GDP, yet CBO progressively lowered its projection each year from 2007 to 2016. CBO’s projection in 2007 of real potential annual GDP through 2017 provides a benchmark for the economy’s untapped potential while the reduced estimates provide a measure of the output gap.

⁴⁹ “Revisions to CBO’s Projection of Potential Output Since 2007,” Congressional Budget Office, February 7, 2014.
<https://www.cbo.gov/publication/45150>

⁵⁰ 2017 was the last year both CBO’s Economic Outlook releases held in common.

⁵¹ 2009 dollars.

⁵² The remaining 8 percent comes to changes in “other sectors” of the economy. The aforementioned estimates occurred in the nonfarm business sector of the economy.

⁵³ References to the previous expansion’s average in this chapter of the *Response* refer to the period of December 2001 to November 2007.

⁵⁴ References to the current expansion’s average in this chapter of the *Response* refer to the period of July 2009 to the most recent available data.

⁵⁵ ERP 2017, p. 76

⁵⁶ ERP 2017, p. 76

⁵⁷ Measured by the Bureau of Labor Statistics U-3 series. It is frequently referred to as the headline unemployment rate.

⁵⁸ “Is the ‘Full Employment’ Glass Half Full?” February 10, 2016.

⁵⁹ “Revisions to CBO’s Projection of Potential Output Since 2007,” CBO.

⁶⁰ “Multifactor Productivity Trends, 2015,” Bureau of Labor Statistics, May 5, 2016. <https://www.bls.gov/news.release/prod3.nr0.htm>

⁶¹ “Revisions to CBO’s Projection of Potential Output Since 2007,” CBO.

⁶² Measured from the BEA’s annual GDP (billions of chained 2009 dollars) series. The same calculation is applied for 2016. At the time of publication, only the advance estimate of GDP was available.

⁶³ “Budget FY 2017 – Economic Assumptions FY 1976 – FY 2017,” Office of Management and Budget, Row 12, Sheet AT, February 2016.

<https://www.govinfo.gov/content/pkg/BUDGET-2017-EA/xls/BUDGET-2017-EA.xls>

⁶⁴ “Wall Street Journal January 2015 Economic Survey,” *The Wall Street Journal*, December 2015.

<http://online.wsj.com/public/resources/documents/wsjecon1215.xls>

⁶⁵ “10-Year Economic Projections,” Congressional Budget Office, January 2016. <https://www.cbo.gov/sites/default/files/recurringdata/51135-2016-01-economic-projections.xlsx>

⁶⁶ Bullard, James, “The Rise and Fall of Labor Force Participation in the United States,” Federal Reserve Bank of St. Louis Review, p. 2-3, Q1 2014.

⁶⁷ We do not know what that capacity is exactly. We do know that we are already in an uncomfortable range when one considers the possibility of another crisis that may cause still larger deficits.

⁶⁸ “Federal Debt: Direction, Drivers and Dangers,” September 8, 2016, United States Congress, Joint Economic Committee, Washington, D.C.

<https://www.jec.senate.gov/public/index.cfm/2016/9/federal-debt-direction-drivers-and-dangers>

⁶⁹ Net interest consists of the government’s interest payments on the debt held by the public minus interest income the government receives.

⁷⁰ “The Budget and Economic Outlook: 2017 – 2027,” CBO, p. 92.

⁷¹ The Coalition for Fiscal and National Security is chaired by retired Navy Adm. Mike Mullen, former Chairman of the Joint Chiefs of Staff, and includes former Secretaries of State Madeleine Albright and Henry Kissinger, former Defense Secretaries Robert Gates and Leon Panetta, and former National Security Advisers Zbigniew Brzezinski and Brent Scowcroft.

⁷² Wong, Kristina, “National security experts sound alarm on long-term debt,” *The Hill*, May 10, 2016. <http://thehill.com/policy/defense/279320-prominent-group-says-long-term-debt-the-single-greatest-threat-to-us-national>.

⁷³ ERP 2017, p.145

⁷⁴ ERP 2017, p. 151.

⁷⁵ ERP 2017, p. 192.

⁷⁶ Tiberi, Patrick J., “H.R. 828 Investing in Opportunity Act,” Congress.gov, February 2, 2017. <https://www.congress.gov/bill/115th-congress/house-bill/828>

⁷⁷ Ryan, Paul, “A Better Way: Poverty, Opportunity, and Upward Mobility,” Better.gop, June 7, 2016. <https://abetterway.speaker.gov/assets/pdf/ABetterWay-Poverty-PolicyPaper.pdf>

⁷⁸ ERP 2017, p. 151.

⁷⁹ JER 2016.

⁸⁰ Winship, Scott, “Choosing Our Battles: Why We Should Wage a Wage on Immobility Instead of Inequality,” Testimony before the Joint Economic Committee, U.S. Congress, Washington, DC, January 16, 2014. https://www.jec.senate.gov/public/_cache/files/4472dcdb-4bc9-40e0-974d-dc050719891e/testimony-winship.pdf

⁸¹ JER 2016.

⁸² Winship, Scott, “The Surprising Basics of Economic Mobility,” FREOPP, December 9, 2016. <https://freopp.org/the-contrarian-basics-of-economic-mobility-81aaf59465e5#.ihb8xheqp>

⁸³ JER 2016, p. 7.

⁸⁴ “The Reward of Work, Incentive, and Upward Mobility,” Joint Economic Committee, December 1, 2016. http://www.jec.senate.gov/public/_cache/files/6668a0d4-cf64-4bc5-8465-1980295846af/12-1-reward-of-work.pdf

⁸⁵ Casey B. Mulligan, “How ObamaCare Wrecks the Work Ethic,” *The Wall Street Journal*, October 2, 2013, <http://www.wsj.com/articles/SB10001424127887323623304579061423122639430>

⁸⁶ JEC Reward of Work.

⁸⁷ JEC Reward of Work.

⁸⁸ Leonhardt, David, “In Climbing Income Ladder, Location Matters,” *The New York Times*, July 22, 2013. <http://www.nytimes.com/2013/07/22/business/in-climbing-income-ladder-location-matters.html?pagewanted=all&r=0>

⁸⁹ “Addressing the Opportunity Gap,” Joint Economic Committee Republicans, February 25, 2014. http://www.jec.senate.gov/public/_cache/files/b237b83b-631f-4e4b-8373-b615fc48228b/addressing-the-opportunity-gap-increasing-economic-mobility-update-2-25-14.pdf

⁹⁰ Sawhill, Isabel V. and Joanna Venator, “Six Quotes from Isabel Sawhill on ‘Why Marriage is the Best Environment for Kids’,” Brookings Institution, October 14, 2014, <http://www.brookings.edu/blogs/social-mobility-memos/posts/2014/10/17-marriage-best-environment-podcast-sawhill>

⁹¹ Sawhill, Isabel V. “Generation Unbound: Drifting into Sex and Parenthood without Marriage,” Brookings Institution Press, September 25, 2014.

“Not Your Mother’s Labor Market,” Joint Economic Committee, May 9, 2016.

<http://www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=E84D7B24-A44D-4042-BDF3-A63D91C3F9F8>

⁹² Fichtner, Jason and Jacob Feldman, “The Hidden Cost of Federal Tax Policy,” Mercatus Center, 2015.

<https://www.mercatus.org/system/files/Fichtner-Hidden-Cost-ch7-web.pdf>

⁹³ W. Bradford Wilcox, Joseph Price, and Robert I. Lerman, “Strong Families, Prosperous States: Do Healthy Families Affect the Wealth of States?” Institute for Family Studies, American Enterprise Institute, October 2015,

<https://www.aei.org/wp-content/uploads/2015/10/IFS-HomeEconReport-2015-FinalWeb.pdf>, p. 35.

⁹⁴ Testimony of C. Eugene Steuerle on “The Widespread Prevalence of Marriage Penalties” before the Subcommittee on the District of Columbia Committee on Appropriations, United States Senate, May 3, 2006,

<http://www.urban.org/sites/default/files/alfresco/publication-pdfs/900952-The-Widespread-Prevalence-of-Marriage-Penalties.PDF>

⁹⁵ ERP 2017. P. 153, 184.

⁹⁶ Plesko, George and Eric Toder, “Changes in the Organization of Business Activity and Implications for Tax Reform,” *National Tax Journal*, Vol. 66 (4), December 2013. <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/413009-Changes-in-the-Organization-of-Business-Activity-and-Implications-for-Tax-Reform.PDF>

⁹⁷ Schiff, Peter, “The Fantasy of a 91% Top Income Tax Rate,” *The Wall Street Journal*, December 6, 2012.

<https://www.wsj.com/articles/SB10001424127887324705104578151601554982808>

Smiley, Gene, “Cutting Marginal Tax Rates: Evidence from the 1920s,” Foundation for Economic Education, October 1, 1996.

<https://fee.org/articles/cutting-marginal-tax-rates-evidence-from-the-1920s/>

Reynolds, Alan, “The Misuse of Top 1 Percent Income Shares as a Measure of Inequality,” Cato Institute, October 4, 2012.

<https://object.cato.org/sites/cato.org/files/pubs/pdf/WorkingPaper-9.pdf>

⁹⁸ Greenburg, Scott and Stephen Entin, “Modeling the Economic Effects of Past Tax Bills,” Tax Foundation, September 14, 2016.

<http://taxfoundation.org/article/modeling-economic-effects-past-tax-bills>

⁹⁹ ERP 2017, p. 171.

¹⁰⁰ JER 2016.

¹⁰¹ Kaeding, Nicole, “State Individual Income Tax Rates and Brackets for 2016,” Tax Foundation Fiscal Fact, No. 500, February 2016.

https://files.taxfoundation.org/legacy/docs/TaxFoundation_FF500.pdf

¹⁰² ERP 2017, p. 178.

¹⁰³ “The Effects of a Minimum-Wage Increase on Employment and Family Income,” Congressional Budget Office, February 18, 2014,

<https://www.cbo.gov/publication/44995>

- ¹⁰⁴ Thomas, Derek, “The Cliff Effect: One Step Forward, Two Steps Back,” Indiana Institute for Working Families,” October 2012.
<http://www.incap.org/documents/iiwf/2012/Cliff%20Effect.pdf>
- Jana Kasperkevic, “The Benefits Cliff: When Minimum Wage Increases Backfire on the People in Need,” *The Guardian*, July 20, 2014,
<https://www.theguardian.com/money/2014/jul/20/benefits-cliff-minimum-wage-increase-backfire-poverty>
- ¹⁰⁵ Casey Mulligan, “The Economist Who Exposed ObamaCare,” *The Wall Street Journal*, February 7, 2014,
<http://www.wsj.com/articles/SB10001424052702304680904579367143880532248>
- ¹⁰⁶ “Not Your Mother’s Labor Market,” Joint Economic Committee Republicans, May 9, 2016,
<http://www.jec.senate.gov/public/index.cfm/republicans/2016/5/not-your-mother-s-labor-market>
- ¹⁰⁷ ERP 2017, p. 152.
- ¹⁰⁸ ERP 2017, p. 166.
- ¹⁰⁹ “The Distribution of Household Income and Federal Taxes, 2013,” Congressional Budget Office, June 8, 2016.
<https://www.cbo.gov/publication/51361>
- ¹¹⁰ Mulligan, Casey, “The Affordable Care Act and the New Economics of Part-Time Work,” Mercatus Center, October 7, 2014.
<https://www.mercatus.org/publication/affordable-care-act-and-new-economics-part-time-work>
- ¹¹¹ Mulligan, Casey, “Labor-market growth turns negative, with many coincidences,” supply and demand (in that order), January 9, 2017.
<https://caseymulligan.blogspot.com/2017/01/slow-labor-market-growth-continues-with.html>
- ¹¹² 2016 Joint Economic Report.
- ¹¹³ ERP 2017, p. 152.
- ¹¹⁴ Among recoveries lasting longer than 6 months.
- ¹¹⁵ Lawrence H. Summers, “Fiscal Stimulus Issues,” Testimony before the Joint Economic Committee, January 16, 2008, http://larrysummers.com/wp-content/uploads/2012/10/1-16-08_Fiscal_Stimulus_Issues.pdf
- ¹¹⁶ “ARRA’s Five Year Anniversary: Reviewing the Performance of the American Recovery and Reinvestment Act,” Joint Economic Committee, February 18, 2014. <http://www.jec.senate.gov/public/cache/files/14f6cd86-8235-4999-bd59-1f22cf08f05d/stimulus-5-year-anniversary.pdf>
- ¹¹⁷ ERP 2017, p. 163.
- ¹¹⁸ “Supplemental Nutrition Assistance Program,” United States Department of Agriculture, February 3, 2017. <https://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap>
- ¹¹⁹ “Temporary Assistance for Needy Families March 2016 Baseline,” Congressional Budget Office, March 2016.
<https://www.cbo.gov/sites/default/files/recurringdata/51314-2016-03-tanf.pdf>

- ¹²⁰ Jones, Garrett and Daniel Rothschild, “Did Stimulus Dollars Hire the Unemployed,” Mercatus Center, August 30, 2011. <https://www.mercatus.org/publication/did-stimulus-dollars-hire-unemployed>
- ¹²¹ JEC ARRA’s Five Year Anniversary
- ¹²² Bunker, Nick, “The shifting sources of U.S. business income and its contribution to income inequality,” Washington Center for Equitable Growth, September 28, 2015. <http://equitablegrowth.org/equitablog/the-shifting-sources-of-u-s-business-income-and-its-contribution-to-income-inequality/>
- ¹²³ “Who Owns U.S. Business? How Much Tax Do They Pay?” National Bureau for Economic Research, February 22, 2017. <https://www.nber.org/digest/jan16/w21651.html>
- ¹²⁴ Cooper, Michael et al., “Business in the United States: Who Owns It and How Much Tax Do They Pay?” Department of the Treasury Office of Tax Analysis, October 2015. <https://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/WP-104.pdf>
- ¹²⁵ ERP 2017, p. 191.
- ¹²⁶ ERP 2017, p. 175.
- ¹²⁷ Winship, Scott, “The State of Economic Mobility and Why It Matters,” St. Louis Federal Reserve, April 2, 2015. https://www.stlouisfed.org/~media/Files/PDFs/Community%20Development/EconMobilityPapers/Section1/EconMobility_1-2Winship_508.pdf
- ¹²⁸ ERP 2017, p. 159.
- ¹²⁹ JER 2016.
- ¹³⁰ Winship, Scott, “Why Are Fewer Adults Surpassing Their Parents’ Incomes?” FREOPP, December 9, 2016. <https://freopp.org/the-new-chetty-bomb-fewer-adults-are-surpassing-their-parents-income-3b7e60d93b24>
- ¹³¹ “Key Features of the Affordable Care Act By Year,” Health and Human Services (HHS), <https://www.hhs.gov/healthcare/facts-and-features/key-features-of-aca-by-year/index.html#2014>
- ¹³² “If you don’t have health insurance: How much you’ll pay,” HHS, Healthcare.gov, <https://www.healthcare.gov/fees/fee-for-not-being-covered/>
- ¹³³ eHealth, “Our Story,” *eHealthinsurance.com*, <https://www.ehealthinsurance.com/about-ehealth/our-story>
- ¹³⁴ “Healthcare.gov: Ineffective Planning and Oversight Practices Underscore the Need for Improved Contract Management,” *GAO Report to Congressional Requesters*, Government Accountability Office, July 2014, <http://www.gao.gov/assets/670/665179.pdf>
- ¹³⁵ Andrews, Wyatt and Anna Werner, “Healthcare.gov plagued by crashes on 1st Day,” CBS Evening News, October 1, 2013, <http://www.cbsnews.com/news/healthcaregov-plagued-by-crashes-on-1st-day/>
- ¹³⁶ “HealthCare.gov Progress and Performance Report,” HHS, December 1, 2013, http://c0.nrostatic.com/sites/default/files/pdf_corner_120113_hhs.pdf
- ¹³⁷ Dupree, Jamie, “Improved Healthcare.gov Website Not Exactly Revving at High Speed Right Now,” Twitter, December 2, 2013, <http://twitpic.com/dnd8j7>

¹³⁸ “Healthcare.gov: Actions Needed to Enhance Information Security and Privacy Controls,” *GAO Report to Congressional Requesters*, Government Accountability Office, March 2016, <http://www.gao.gov/products/GAO-16-265>

¹³⁹ 29 U.S.C. §1182(a)(1)(A)-(H)

¹⁴⁰ “Overview: Final Rule for Health Insurance Market Reforms,” Center Medicaid and Medicare Services (CMS), February 27, 2013, <https://www.cms.gov/CCIIO/Resources/Files/Downloads/market-rules-technical-summary-2-27-2013.pdf>

¹⁴¹ 42 U.S. Code § 18091

¹⁴² Wohlsen, Marcus, “Obamacare Website is in Great Shape—If This Were 1996,” *WIRED*, December 4, 2013, <https://www.wired.com/2013/12/obamacare-is-ecommerce/>

¹⁴³ Kliff, Sarah, “One in Four Obamacare Enrollees Are Young Adults. That’s Below the Target,” *The Washington Post*, January 13, 2014, https://www.washingtonpost.com/news/wonk/wp/2014/01/13/one-in-four-obamacare-enrollees-are-young-adults-thats-below-the-target/?utm_term=.a8b798352a17

¹⁴⁴ Levitt, Larry, Gary Claxton, and Anthony Damico, “The Numbers Behind ‘Young Invincibles’ and the Affordable Care Act,” Kaiser Family Foundation (KFF), December 17, 2013, <http://kff.org/health-reform/perspective/the-numbers-behind-young-invincibles-and-the-affordable-care-act/>

¹⁴⁵ Herman, Bob, “How Slow Uptake by ‘Young Invincibles’ is Driving the ACA’s Exchange Rates Higher,” *Modern Healthcare*, May 14, 2016, <http://www.modernhealthcare.com/article/20160514/MAGAZINE/305149980>

¹⁴⁶ Blue Cross Blue Shield, “Newly Enrolled Members in the Individual Health Insurance Market After Health Care Reform: The Experience from 2014 and 2015,” <https://www.bcbs.com/news/press-releases/blue-cross-blue-shield-association-examines-health-conditions-and-costs-caring>

¹⁴⁷ Sun, Lena H., “They’re Sicker, Plus ACA enrollees Cost More in Care, Major Insurer Finds,” *The Washington Post*, March 30, 2016, <https://www.washingtonpost.com/news/to-your-health/wp/2016/03/30/theyre-sicker-plus-aca-enrollees-cost-more-in-care-major-insurer-finds/>

¹⁴⁸ Foster, Richard S., “Estimated Financial Effects of the ‘Patient Protection and Affordable Care Act,’ as Amended,” CMS, April 22, 2010, https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/downloads/ppaca_2010-04-22.pdf

¹⁴⁹ Elmendorf, Douglas W., Letter to Speaker Nancy Pelosi regarding estimated spending and revenue effects of PPACA, Congressional Budget Office, March 20, 2010, <https://www.cbo.gov/sites/default/files/amendreconprop.pdf>

¹⁵⁰ Tavenner, Marilyn, “Administrator, Center for Medicare & Medicaid Services on the Affordable Care Act Before the U.S. House Committee on Oversight & Government Reform,” December 9, 2014,

<https://oversight.house.gov/wp-content/uploads/2014/12/Tavener-CMS-Statement-12-9-ObamaCare1.pdf>

¹⁵¹ Congressional Budget Office, “Insurance Coverage Provisions of the Affordable Care Act—CBO’s January 2015 Baseline,” CBO, January 2015, Table B-2, <https://www.cbo.gov/sites/default/files/recurringdata/51298-2015-01-aca.pdf>

¹⁵² “March 31, 2015 Effectuated Enrollment Snapshot,” CMS, June 2, 2015, <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-06-02.html>

¹⁵³ “March 31, 2016 Effectuated Enrollment Snapshot,” CMS, June 30, 2016, <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2016-Fact-sheets-items/2016-06-30.html>

¹⁵⁴ “Health Insurance Marketplace 2017 Open Enrollment Period: January Enrollment Report,” CMS, January 10, 2017, <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2017-Fact-Sheet-items/2017-01-10.html?DLPage=1&DLEntries=10&DLSort=0&DLSortDir=descending>

¹⁵⁵ “13.8 million Americans expected to select Marketplace plans during the upcoming Open Enrollment,” HHS, October 19, 2016, <http://wayback.archive-it.org/3926/20170127192735/https://www.hhs.gov/about/news/2016/10/19/13-8-million-americans-expected-to-select-marketplace-plans-during-the-upcoming-open-enrollment.html>

¹⁵⁶ “Federal Subsidies Under the Affordable Care Act for Health Insurance Coverage Related to the Expansion of Medicaid and Nongroup Health Insurance: Tables from CBO’s January 2017 Baseline,” CBO, Table 1, January 24, 2017, <https://www.cbo.gov/sites/default/files/recurringdata/51298-2017-01-healthinsurance.pdf>

¹⁵⁷ O’Donnell, Jayne, “HealthCare.gov Opens for Insurance Plan Shoppers,” *USA Today*, November 9, 2014, <http://www.usatoday.com/story/news/nation/2014/11/09/obamacare-open-enrollment-reenrollment-rate-changes/18606207/>

“Switching Plans Resulted in Significant Savings for Marketplace Consumers,” HHS, October 28, 2015, <https://www.hhs.gov/about/news/2015/10/28/switching-plans-resulted-significant-savings-marketplace-consumers.html>

“More than 70 Percent of Consumers Can Find Marketplace Plans for Less Than \$75 Per Month,” HHS, October 24, 2016, <https://www.hhs.gov/about/news/2016/10/24/more-70-percent-consumers-can-find-marketplace-plans-less-75-month.html>

¹⁵⁸ “Insurer Participation in the 2017 Individual Marketplace,” Kaiser Family Foundation. <http://kff.org/slideshow/insurer-participation-in-the-2017-individual-marketplace/>

¹⁵⁹ Gruber, Jonathan, Leemore Dafny, Christopher Ody, “More Insurers Lower Premiums: Evidence from Initial Pricing in Health Insurance Marketplaces,” NBER Working Paper, May 2014, <http://www.nber.org/papers/w20140>

¹⁶⁰ Obama, Barack J.D., “United States Health Care Reform: Progress to Date and Next Steps,” JAMA, August 2, 2-16, <http://jamanetwork.com/journals/jama/fullarticle/2533698> p. 529-530.

¹⁶¹ “Competition and Choice in Health Insurance Marketplaces, 2014-2015,” HHS ASPE. <https://aspe.hhs.gov/basic-report/competition-and-choice-health-insurance-marketplaces-2014-2015-impact-premiums>

¹⁶² “Patient Protection and Affordable Care Act; Establishment of Consumer Operated and Oriented Plan (CO-OP) Program,” Proposed Rule, *Federal Register* Vol. 76, No. 139, July 20, 2011, <https://www.gpo.gov/fdsys/pkg/FR-2011-07-20/pdf/2011-18342.pdf>, p. 43247.

¹⁶³ “Actual Enrollment and Profitability was Lower than Projections Made by the Consumer Operated and Oriented Plans and Might Affect Their Ability to Repay Loans Provided Under the Affordable Care Act,” Office of the Inspector General, United States Department of Health and Human Services, July 2015. <http://oig.hhs.gov/oas/reports/region5/51400055.pdf>, p. 5.

¹⁶⁴ *Ibid*, p. 8.

¹⁶⁵ *Ibid*, p. ii.

¹⁶⁶ “CO-OP Catastrophe,” House Energy and Commerce Committee. <https://energycommerce.house.gov/healthcarecentral/co-op-catastrophe-total-losses-near-19-billion>

¹⁶⁷ “Patient Protection and Affordable Care Act; Establishment of Consumer Operated and Oriented Plan (CO-OP) Program,” Proposed Rule, *Federal Register* Vol. 76, No. 139, July 20, 2011, <https://www.gpo.gov/fdsys/pkg/FR-2011-07-20/pdf/2011-18342.pdf>, p. 43247.

¹⁶⁸ CO-OP Catastrophe

¹⁶⁹ Ghose, Carrie, “InHealth Mutual stays buoyant in face of red ink,” Columbus Business First, March 18, 2016. <http://www.bizjournals.com/columbus/print-edition/2016/03/18/inhealth-mutual-stays-buoyant-in-face-of-red-ink.html>

¹⁷⁰ Ghose, Carrie, “Ohio shutting down state’s Obamacare nonprofit co-op InHealth – claims paced \$3M per week,” *Columbus Business First*, May 26, 2016. <http://www.bizjournals.com/columbus/news/2016/05/26/ohio-shuts-down-states-obamacare-nonprofit-co-op.html>

¹⁷¹ Sullivan, Peter, “Ohio ObamaCare co-op shutting down due to finances,” *The Hill*, May 26, 2016. <http://thehill.com/policy/healthcare/281436-ohio-obamacare-co-op-shutting-down-due-to-finances>

¹⁷² Moulton, Kristen, “Utah shuts down Arches, the state’s nonprofit insurance co-op,” *The Salt Lake Tribune*, October 27, 2015. <http://www.sltrib.com/home/3108049-155/utah-shuts-down-arches-utahs-nonprofit>

¹⁷³ “Collapse of Utah Obamacare co-op leaves \$33 million in unpaid claims,” Insurance and Financial Advisor, July 4, 2016. <http://ifawebsite.com/2016/07/04/collapse-of-utah-obamacare-co-op-leaves-33-million-in-unpaid-claims>

¹⁷⁴ “Consumer Oriented and Operated Plan (CO-OP) Loans Awarded,” Kaiser Family Foundation, December 16, 2014. <http://kff.org/health-reform/state-indicator/co-op-loans/?currentTimeframe=0>

¹⁷⁵ Herman, Bob, “CMS’ Health Exchange Rates Show Modest Increases,” *Modern Healthcare*, November 14, 2014, <http://www.modernhealthcare.com/article/20141114/NEWS/311149965>
Levitt, Larry, Cynthia Cox, Gary Claxton, Rosa Ma, and Robin Duddy-Tenbrunsel, “Analysis of 2015 Premium Changes in the Affordable Care Act’s Health Insurance Marketplaces,” Kaiser Family Foundation, January 6, 2015, <http://kff.org/health-reform/issue-brief/analysis-of-2015-premium-changes-in-the-affordable-care-acts-health-insurance-marketplaces/>

¹⁷⁶ “2017 Approved Obamacare Premium Increase Over Previous Year by State,” Joint Economic Committee Republicans., November 1, 2016, <http://www.jec.senate.gov/public/index.cfm/republicans/state-aca-data/>

¹⁷⁷ Gabel, Jon R., Matthew Green, Adrienne Call, Heidi Whitmore, Sam Stromberg, Rebecca Oran, “Changes in Consumer Cost-Sharing for Health Plans Sold in the ACA’s Insurance Marketplaces, 2015 to 2016,” The Commonwealth Fund, May 2016. <http://www.commonwealthfund.org/publications/issue-briefs/2016/may/cost-sharing-increases>

¹⁷⁸ Jan, Tracy, “Critics say High Deductibles Make Insurance ‘Unaffordable,’” *Boston Globe*, November 16, 2015, <https://www.bostonglobe.com/news/politics/2015/11/16/high-deductible-health-plans-make-affordable-care-act-unaffordable-critics-say/eaWZZJNrFhm6vVPDBcdZOI/story.html>

Pear, Robert, “Many Say High Deductibles Make Their Health Law Insurance All but Useless,” *The New York Times*, November 14, 2015, <http://www.nytimes.com/2015/11/15/us/politics/many-say-high-deductibles-make-their-health-law-insurance-all-but-useless.html>

Wood, Danny, “As Obamacare Enrollment Deadline Looms, People Frustrated By High Cost of Plans,” *KCUR*, January 30, 2017, <http://kcur.org/post/obamacare-enrollment-deadline-looms-people-frustrated-high-cost-plans#stream/0>

¹⁷⁹ Gabel, J., H. Whitmore, M. Green et al., “Consumer Cost-Sharing in Marketplace vs. Employer Health Insurance Plans, 2015,” The Commonwealth Fund, December 2015 <http://www.commonwealthfund.org/publications/issue-briefs/2015/dec/cost-sharing-marketplace-employer-plans>

Gabel, Jon R., Matthew Green, Adrienne Call, Heidi Whitmore, Sam Stromberg, Rebecca Oran, “Changes in Consumer Cost-Sharing for Health Plans Sold in the ACA’s Insurance Marketplaces, 2015 to 2016,” The

- Commonwealth Fund, May 2016, <http://www.commonwealthfund.org/publications/issue-briefs/2016/may/cost-sharing-increases>
- ¹⁸⁰ Politifact, "Obama: 'If You Like Your Health Care Plan, You'll Be Able to Keep Your Health Care Plan,'" Politifact, <http://www.politifact.com/obama-like-health-care-keep/>
- ¹⁸¹ CNN Staff, "Fact Check: You Can Keep Your Doctor," CNN Politics, September 26, 2013, <http://politicalticker.blogs.cnn.com/2013/09/26/fact-check-you-can-keep-your-own-doctor/>
- ¹⁸² Jacobson, Louis, "Barack Obama Says That What He'd Said Was You Could Keep Your Plan 'If It Hasn't Changed Since the Law Passed,'" Politifact, November 6, 2013, <http://www.politifact.com/truth-o-meter/statements/2013/nov/06/barack-obama/barack-obama-says-what-hed-said-was-you-could-keep/>
- ¹⁸³ Holan, Angie, "Lie of the Year: 'If you like your health care plan, you can keep it,'" Politifact, December 12, 2013. <http://www.politifact.com/truth-o-meter/article/2013/dec/12/lie-year-if-you-like-your-health-care-plan-keep-it/>
- ¹⁸⁴ HHS, "10 Health Care Benefits Covered in Health Insurance Marketplace," *Healthcare.gov*, August 22, 2013, <https://www.healthcare.gov/blog/10-health-care-benefits-covered-in-the-health-insurance-marketplace/>
- ¹⁸⁵ Crawford, Jan, "Policy Cancellations, Higher Premiums Add to Frustration Over Obamacare," CBS News, October 30, 2013, <http://www.cbsnews.com/news/policy-cancellations-higher-premiums-add-to-frustration-over-obamacare/>
- See Also: Myers, Lisa and Hannah Rapple, "Obama Administration Knew Millions Could Not Keep Their Health Insurance," NBC News, October 29, 2013, <http://www.nbcnews.com/news/other/obama-administration-knew-millions-could-not-keep-their-health-insurance-f8C11485678>
- ¹⁸⁶ Drobnic Holan, Angie, "Lie of the Year: 'If You Like Your Health Care Plan, You Can Keep It,'" Politifact, December 12, 2013, <http://www.politifact.com/truth-o-meter/article/2013/dec/12/lie-year-if-you-like-your-health-care-plan-keep-it/>
- ¹⁸⁷ "Grandfathered Health Insurance Plans," HHS, *Healthcare.gov*, <https://www.healthcare.gov/health-care-law-protections/grandfathered-plans/>
- ¹⁸⁸ "Employer Health Benefits: 2016 Annual Survey," KFF, p. 1, September 14, 2016, KFF, <http://kff.org/health-costs/report/2016-employer-health-benefits-survey/>
- ¹⁸⁹ Furman, Jason and Matt Fiedler, "New Data Show Slow Health Care Cost Growth is Continuing," *WhiteHouse.gov*, September 22, 2015, <https://www.whitehouse.gov/blog/2015/09/22/new-data-show-slow-health-care-cost-growth-continuing>
- ¹⁹⁰ Wogan, J.B., "No Cut in Premiums for Typical Family," Politifact, August 31, 2012, <http://www.politifact.com/truth-o-meter/promises/obameter/promise/521/cut-cost-typical-familys-health-insurance-premium/>

¹⁹¹ ERP 2017, p. 291

¹⁹² “Private Health Insurance Premiums and Federal Policy,” February 11, 2016, Congressional Budget Office, <https://www.cbo.gov/publication/51130>

¹⁹³ “Employer Health Benefits: 2016 Annual Survey,” KFF, p. 87, exhibit 6.1, September 14, 2016. <http://kff.org/health-costs/report/2016-employer-health-benefits-survey/>

¹⁹⁴ “Average Annual Workplace Family Health Premiums Rise Modest 3% to \$18,142 in 2016; More Workers Enroll in High-Deductible Plans With Savings Option Over Past Two Years,” KFF Newsroom, KFF, September 14, 2016. <http://kff.org/health-costs/press-release/average-annual-workplace-family-health-premiums-rise-modest-3-to-18142-in-2016-more-workers-enroll-in-high-deductible-plans-with-savings-option-over-past-two-years/>

¹⁹⁵ “Average Annual Workplace Family Health Premiums Rise Modest 3% to \$18,142 in 2016; More Workers Enroll in High-Deductible Plans With Savings Option Over Past Two Years,” KFF Newsroom, KFF September 14, 2016. <http://kff.org/health-costs/press-release/average-annual-workplace-family-health-premiums-rise-modest-3-to-18142-in-2016-more-workers-enroll-in-high-deductible-plans-with-savings-option-over-past-two-years/>

¹⁹⁶ “No family making less than \$250,000 will see ‘any form of tax increase’,” Politifact, <https://goo.gl/WOWqo5>

¹⁹⁷ “CBO/JCT Confirm that Obamacare is a \$1 Trillion Tax Hike,” House Ways and Means Committee, July 25, 2012. <https://goo.gl/7GkO5w>

¹⁹⁸ “Hearing to Consider the Anticipated Nomination of [Mnuchin] to be Secretary of the Treasury,” Senate Finance Committee, January 19, 2017. <https://goo.gl/QXRcgC>

¹⁹⁹ “Tax Revenues to More Than Double by 2023, While Top Tax Rates Hit Highest Level Since 1986,” House Ways and Means Committee, February 13, 2013. <https://goo.gl/r0sTvG>

²⁰⁰ ERP 2017, p. 198

²⁰¹ Herring, Bradley and Erin Trish, “Explaining the Growth in US Health Care Spending Using State-Level Variation in Income, Insurance, and Provider Market Dynamics,” INQUIRY: The Journal of Health Care Organization, Provision, and Financing, Mercatus Center, February 2016, <https://www.mercatus.org/system/files/INQUIRY-2015-Herring-0046958015618971.pdf>

²⁰² JEC Republicans, “‘The New Normal?’ Part 1: Economic Stagnation,” Joint Economic Committee Majority, October 5, 2016, <http://www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=B47A025D-F45B-4657-A26D-C2252E363E48>

²⁰³ “National Health Expenditure Projections 2015-2025,” Center for Medicare and Medicaid Services, p. 1. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/Proj2015.pdf>

²⁰⁴ “NHE Tables,” CMS, Table 01. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/Tables.zip>

²⁰⁵ “National Health Expenditure Projections 2015-2025,” Center for Medicare and Medicaid Services, p. 1. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/Proj2015.pdf>

²⁰⁶ “NHE Fact Sheet,” CMS, 12-2-2016. <https://goo.gl/YQ2Tve>.

²⁰⁷ “National Health Expenditure Projections 2015-2025,” Center for Medicare and Medicaid Services, p. 1. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/Proj2015.pdf>

²⁰⁸ “A Better Way: Our Vision for a Confident America, Health Care,” Speaker Paul Ryan, June 22, 2016. <https://abetterway.speaker.gov/assets/pdf/ABetterWay-HealthCare-PolicyPaper.pdf>

²⁰⁹ Better Way Health p. 13

²¹⁰ A HRA is a health benefit plan in which an employer agrees to cover an employee’s health spending up to a limit, with unused funds being available for use in future years. Unlike an HSA, HRAs are not portable. Because a HRA has an annual limit, stand-alone HRAs were restricted by the Obama administration through regulations justified by the ACA.

²¹¹ Better Way Health, p. 13

²¹² See “How CBO Estimates the Effects of the Affordable Care Act on the Labor Market,” Congressional Budget Office, December 2015, Pages 17-18. https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/workingpaper/51065-ACA_Labor_Market_Effects_WP.pdf

²¹³ Better Way Health, p. 14

²¹⁴ Better Way Health, p. 16

²¹⁵ Better Way Health, p. 16, Footnote 39

²¹⁶ Better Way Health, p. 16

²¹⁷ Better Way Health, p. 16

²¹⁸ Better Way Health, p. 16-17

²¹⁹ Better Way Health, p. 18

²²⁰ Better Way Health, p. 18

²²¹ Better Way Health, p. 18

²²² Better Way Health, p. 18

²²³ Better Way Health, p. 20

²²⁴ Better Way Health, p. 20-21

²²⁵ Better Way Health, p. 22

²²⁶ Better Way Health, p. 21

²²⁷ Better Way Health, p. 21

²²⁸ Better Way Health, p. 21-22

²²⁹ Better Way Health, p. 23.

- ²³⁰ “The Budget and Economic Outlook: 2017 to 2027,” Congressional Budget Office, January 24, 2017, p. 16.
- ²³¹ Better Way Health, p. 23, Footnote 60.
- ²³² Better Way Health, p. 23
- ²³³ Better Way Health, p.24
- ²³⁴ CBO (2017), p. 15.
- ²³⁵ Garfield, Rachel and Anthony Damico, “The Coverage Gap: Uninsured Poor Adults in States that Do Not Expand Medicaid,” Kaiser Family Foundation, October 19, 2016. <http://kff.org/uninsured/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/>
- ²³⁶ “Access to Care: Provider Availability in Medicaid Managed Care,” Office of the Inspector General for the Department of Health and Human Services, Executive Summary Page, December 2014. <https://oig.hhs.gov/oei/reports/oei-02-13-00670.pdf>
- ²³⁷ Boccuti, Cristina, et al., “Primary Care Physicians Accepting Medicare: A Snapshot,” KFF, October 30, 2015, <http://kff.org/medicare/issue-brief/primary-care-physicians-accepting-medicare-a-snapshot/>
- ²³⁸ “Medicaid Access in Brief,” Medicaid and CHIP Payment and Access Commission, November 2016, p. 2. <https://www.macpac.gov/wp-content/uploads/2016/11/Adults-Experiences-in-Obtaining-Medical-Care.pdf>
- ²³⁹ Wherry and Miller, “Early Coverage, Access, Utilization, and Health Effects Associated with the Affordable Care Act Medicaid Expansions: A Quasi-experimental Study,” *Annals of Internal Medicine*, April 2016.
- Sommers et al., “Changes in Self-Reported Insurance Coverage, Access to Care, and Health Under the Affordable Care Act,” *The Journal of the American Medical Association*, p. 366-374, July 2015.
- ²⁴⁰ Better Way Health, p. 23-28.
- ²⁴¹ “Section 1115 Demonstrations,” CMS, <https://goo.gl/BdHTpT>
- ²⁴² Better Way Health, p. 23-28.
- ²⁴³ Thompson, Dennis, “Obama Signs 21st Century Cures Act,” United Press International, December 13, 2016. http://www.upi.com/Health_News/2016/12/13/Obama-signs-21st-Century-Cures-Act-into-law/2001481665105/
- ²⁴⁴ Better Way Health, p. 28-29
- ²⁴⁵ Better Way Health, p. 30
- ²⁴⁶ Better Way Health, p. 32
- ²⁴⁷ “Medicare – Congressional Budget Office’s January 2017 Baseline,” CBO, January 24, 2017. <https://www.cbo.gov/sites/default/files/recurringdata/51302-2017-01-medicare.pdf>
- ²⁴⁸ “Medicare – Congressional Budget Office’s January 2017 Baseline,” CBO, January 24, 2017. <https://www.cbo.gov/sites/default/files/recurringdata/51302-2017-01-medicare.pdf>
- ²⁴⁹ Better Way Health, p. 31

- ²⁵⁰ Better Way Health, p. 31-32
- ²⁵¹ Better Way Health, p. 33
- ²⁵² Better Way Health, p. 33-34
- ²⁵³ Better Way Health, p. 34
- ²⁵⁴ Better Way Health, p. 35
- ²⁵⁵ Better Way Health, p. 36
- ²⁵⁶ ERP 2017, p. 299.
- ²⁵⁷ “Why Community College,” College Board.
<https://professionals.collegeboard.org/guidance/college/community-college>
 Some programs within community colleges are selective with limited enrollment and have admission requirements.
- ²⁵⁸ ERP 2017, p. 316.
- ²⁵⁹ “Pell Grants,” The Pell Institute.
http://www.pellinstitute.org/pell_grants.shtml
- ²⁶⁰ ERP 2017, p. 305.
- ²⁶¹ Duca, John V., “Subprime Mortgage Crisis,” Federal Reserve Bank of Dallas, November 22, 2013.
<http://www.Federalreservehistory.org/Events/DetailView/55>
- ²⁶² Holmes, Steven A., “Fannie Mae Eases Credit to Aid Mortgage Lending,” *The New York Times*, September 30, 1999.
<http://www.nytimes.com/1999/09/30/business/fannie-mae-eases-credit-to-aid-mortgage-lending.html>
- ²⁶³ “Subprime Mortgage Crisis,” 2013.
- ²⁶⁴ “Federal Student Loan Portfolio,” Federal Student Aid, U.S. Department of Education. <https://studentaid.ed.gov/sa/about/data-center/student/portfolio>
- ²⁶⁵ “Options to Change Interest Rates and Other Terms on Student Loans,” Congressional Budget Office, June 10, 2013, p. 1.
<https://www.cbo.gov/publication/44318>
- ²⁶⁶ “Subsidized and Unsubsidized Loans,” Federal Student Aid, U.S. Department of Education. <https://studentaid.ed.gov/sa/types/loans/subsidized-unsubsidized>
- ²⁶⁷ “Hearing on: Financing Higher Education,” Joint Economic Committee, September 30, 2015. <http://www.jec.senate.gov/public/index.cfm/hearings-calendar?ID=7C64D2C3-1A88-423F-86E0-D524721C4AE2>
- ²⁶⁸ Bennett, William J., “Our Greedy Colleges,” *The New York Times*, February 18, 1987. <http://www.nytimes.com/1987/02/18/opinion/our-greedy-colleges.html>
- ²⁶⁹ Lucca, David O. et al, “Credit Supply and the Rise in College Tuition: Evidence from the Expansion in Federal Student Aid Programs,” Federal Reserve Bank of New York Staff Reports, Staff Report No. 733, p. 35 – 37. July 2015, revised October 2016.
https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr733.pdf
- ²⁷⁰ “Credit Supply and the Rise in College Tuition: Evidence from the Expansion in Federal Student Aid Programs,” p. 3.

- ²⁷¹ Rothman, Robert, "E.D. Selects 10 Colleges to Participate in Pilot Loan Program," Education Week, May 13, 1987.
<http://www.edweek.org/ew/articles/1987/05/13/3-33loan.h06.html>
- ²⁷² James, Kevin J., "Fixing student-loan repayment," American Enterprise Institute, September 12, 2015. <https://www.aei.org/publication/fixing-student-loan-repayment/>
- ²⁷³ ERP 2017, p. 324, 325.
- ²⁷⁴ "Income-Driven Plans," Federal Student Aid, U.S. Department of Education. <https://studentaid.ed.gov/sa/repay-loans/understand/plans/income-driven>
- ²⁷⁵ "Income-Driven Plans," U.S. Department of Education.
- ²⁷⁶ ERP 2017, p. 306, 307.
- ²⁷⁷ "The 'New Normal'? Part 1: Economic Stagnation," Joint Economic Committee Republicans, October 5, 2016.
<http://www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=B47A025D-F45B-4657-A26D-C2252E363E48>
- ²⁷⁸ "National Economic Accounts," Bureau of Economic Analysis, U.S. Department of Commerce.
<https://www.bea.gov/national/>
- ²⁷⁹ "National Economic Accounts," BEA.
- ²⁸⁰ "The 2016 Long-Term Budget Outlook," Congressional Budget Office, July 12, 2016, p. 7. <https://www.cbo.gov/publication/51580>
- ²⁸¹ "The Budget and Economic Outlook: 2017 to 2027," Congressional Budget Office, January 24, 2017, p. 10. <https://www.cbo.gov/sites/default/files/115th-congress-2017-2018/reports/52370-outlook.pdf>
- ²⁸² ERP 2017, p. 301.
- ²⁸³ ERP 2017, p. 322.
- ²⁸⁴ "Moving Beyond Access: College Success for Low-Income, First-Generation Students," The Pell Institute, 2008.
<http://files.eric.ed.gov/fulltext/ED504448.pdf>
- ²⁸⁵ Stinebrickner, Todd and Ralph, "Academic Performance and College Dropout: Using Longitudinal Expectations Data to Estimate a Learning Model," National Bureau of Economic Research, NBER Working Paper Series, No. 18945, p. 28, 29, April 2013. <http://www.nber.org/papers/w18945>
- ²⁸⁶ Engle, Jennifer and Vincent Tinto, "Moving Beyond Access: College Success for Low-Income, First-Generation Students," The Pell Institute, 2008.
<http://files.eric.ed.gov/fulltext/ED504448.pdf>
- ²⁸⁷ "School Improvement Grants: Implementation and Effectiveness," U.S. Department of Education, January 2017.
<https://ies.ed.gov/ncee/pubs/20174013/pdf/20174013.pdf>
- ²⁸⁸ "School Choice in America 2009: What it Means for Children's Futures," The Heritage Foundation, Backgrounder, No. 2332, November 4, 2009.
<http://www.heritage.org/research/reports/2009/11/school-choice-in-america-2009-what-it-means-for-childrens-futures>

²⁸⁹ “Report Card on American Education,” American Legislative Exchange Council, p. 8 - 58, 2016. https://www.alec.org/app/uploads/2016/12/2016-ALEC-Education-Report-Card_Final_Web.pdf

²⁹⁰ “Public Schools: Make Them Private,” *Education Economics*, Vol. 5, No. 3, p. 341, December, 1997.

²⁹¹ ERP 2017, p. 174-175.

²⁹² ERP 2017, p. 319.

²⁹³ Medley, Bill, “Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994,” Federal Reserve Bank of Kansas City, September 1994. <http://www.Federalreservehistory.org/Events/DetailView/50>

²⁹⁴ “Credit Constraints and Demand for Higher Education: Evidence from Financial Deregulation,” *The Review of Economics and Statistics*, March 2016, 98(I), p. 12-24.

²⁹⁵ “Hearing on: Financing Higher Education,” Joint Economic Committee, September 30, 2015. <http://www.jec.senate.gov/public/index.cfm/hearings-calendar?ID=7C64D2C3-1A88-423F-86E0-D524721C4AE2>

²⁹⁶ “Does school choice increase the rate of youth entrepreneurship?” *Economics of Education Review*, Volume 27, 2008, p. 429-438.

²⁹⁷ “School Vouchers and Student Attainment: Evidence from a State-Mandated Study of Milwaukee’s Parental Choice Program,” *Policies Studies Journal*, Vol. 41, No. 1, 2013, p. 147-168.

²⁹⁸ “School Voucher Programs: What the Research Says About Parental School Choice,” *Brigham Young University Law Review*, (2005), p. 415-446.

²⁹⁹ Coulson, Andrew J., “Markets vs. Monopolies in Education A Global Review of the Evidence,” Cato Institute, Policy Analysis, No. 620, p. 10, September 10, 2008.

<https://object.cato.org/sites/cato.org/files/pubs/pdf/pa620.pdf>

³⁰⁰ Obama, Barack, “Weekly Address: Wall Street Reform is Working,” The White House, July 25, 2015.

<https://www.youtube.com/watch?v=K5rmgUonkk0>

³⁰¹ JEC Calculations based on page count

³⁰² McLaughlin, Patrick and Oliver Sherhouse, “The Dodd-Frank Wall Street Reform and Consumer Protection Act May Be the Biggest Law Ever,” Mercatus Center, July 20, 2015. <https://www.mercatus.org/publication/dodd-frank-wall-street-reform-and-consumer-protection-act-may-be-biggest-law-ever>

³⁰³ “Explore the Data,” Regulation Rodeo (American Action Forum), http://regrodeo.com/?year%5B0%5D=2016&year%5B1%5D=2015&year%5B2%5D=2014&year%5B3%5D=2013&year%5B4%5D=2012&year%5B5%5D=2011&year%5B6%5D=2010&topic%5B0%5D=tag_2

³⁰⁴ “Dodd-Frank Progress Report,” Davis Polk, July 19, 2016.

<https://www.davispolk.com/sites/default/files/2016-dodd-frank-six-year-anniversary-report.pdf>. American regulators are not alone in their challenge to meet regulatory deadlines. The Third Basel Accord or Basel III represents the newest international banking requirements agreed to in 2010 and 2011,

which were pursued by the Obama Administration, but international regulators are delaying Basel III capital rules as they cannot reach agreement with all the countries on the appropriate rules and requirements. Brush, Silla, et al., “Global Bank Capital-Rule Revamp Postpones as Europe Digs In,” Bloomberg Markets, January 3, 2017.

<https://www.bloomberg.com/news/articles/2017-01-03/global-bank-regulators-delay-key-meeting-on-capital-rule-revamp>.

³⁰⁵ The U.S. District Court in D.C. rescinded the FSOC’s MetLife designation on March 30 and unsealed its decision on April 7, 2016.

³⁰⁶ The House Financial Services Committee highlighted the results of CFPB operating without Congressional controls in a 2013 hearing: “CFPB Lacks Oversight and Accountability,” House Financial Services Committee, June 18, 2013.

<http://financialservices.house.gov/news/documentsingle.aspx?DocumentID=339512>. See Also: Pollock, Richard, “Fat Paychecks of CFPB officials, hundreds paid more than Fed Chairman, congressmen, Supreme Court justices,” *The Washington Times*, July 18, 2013.

<http://www.washingtonexaminer.com/fat-paychecks-for-cfpb-officials-hundreds-paid-more-than-fed-chairman-congressmen-supreme-court-justices/article/2533189>

³⁰⁷ Weiss, Debra Cassens, “Consumer Financial Protection Bureau has unconstitutional structure, DC Circuit rules,” *ABA Journal*, October 11, 2016. http://www.abajournal.com/news/article/consumer_financial_protection_bureau_has_unconstitutional_structure_dc_circ; contains a summary of the ruling and links to the court documents.

³⁰⁸ “PHH Corporation, et al., v. CFPB,” United States Court of Appeals DC Circuit, October 11, 2016.

[https://www.cadc.uscourts.gov/internet/opinions.nsf/AAC6BFFC4C42614C852580490053C38B/\\$file/15-1177-1640101.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/AAC6BFFC4C42614C852580490053C38B/$file/15-1177-1640101.pdf)

³⁰⁹ “Iranians Charged with Hacking U.S. Financial Sector,” Federal Bureau of Investigation, March 24, 2016. <https://www.fbi.gov/news/stories/iranians-charged-with-hacking-us-financial-sector>

³¹⁰ Zaring, David, “The State of Cost-Benefit Analysis at the S.E.C.,” *The New York Times*, July 13, 2015.

https://www.nytimes.com/2015/07/14/business/dealbook/the-state-of-cost-benefit-analysis-at-the-sec.html?_r=0

³¹¹ Wagner, Ann, “SEC Regulatory Accountability Act,” Congress.gov, January 3, 2017. <https://www.congress.gov/bill/115th-congress/house-bill/78?q=%7B%22search%22%3A%5B%22SEC+Regulatory+Accountability+Act%22%5D%7D&r=1>

³¹² “2015 Small Business Credit Survey: Report on Employer Firms,” Federal Reserve Bank of New York, March 2016.

<https://www.newyorkfed.org/smallbusiness/small-business-credit-survey-employer-firms-2015>

- ³¹³ “Too Small to Succeed?-Community Banks in a New Regulatory Environment,” Dallas Federal Reserve, December 31, 2015. <https://www.dallasfed.org/~/media/documents/outreach/fi/2015/fi1504.pdf>
- ³¹⁴ Neidig, Harper, “Barney Frank admits ‘mistake’ in Dodd-Frank,” *The Hill*, November 20, 2016. <http://thehill.com/policy/finance/banking-financial-institutions/306906-barney-frank-admits-mistake-in-dodd-frank>
- ³¹⁵ Peirce, Hester et al., “How Are Small Banks Faring under Dodd-Frank?” Mercatus Center, February 27, 2014. <https://www.mercatus.org/publication/how-are-small-banks-faring-under-dodd-frank>
- ³¹⁶ “Community Banking in the 21st Century,” Federal Reserve / Conference of State Bank Supervisors, September 28-29, 2016, p. 54. https://www.communitybanking.org/documents/2016-Conference-Papers/CB21Cpublication_2016.pdf
- ³¹⁷ Dahl, Drew et al., “Bank Size, Compliance Costs and Compliance Performance in Community Banking,” Federal Reserve Bank of St. Louis, May 2016. https://www.communitybanking.org/documents/2016-Conference-Papers/Session2_Paper2_Neely.pdf
- ³¹⁸ “Statement of Martin J. Gruenberg, Chairman, Federal Deposit Insurance Corporation on De Novo Banks and Industrial Loan Companies before the Committee on Oversight and Government Reform,” FDIC, July 13, 2016. <https://www.fdic.gov/news/news/speeches/spjul1316.html>
- ³¹⁹ “Too Small to Succeed,” Dallas Federal Reserve, December 2015.
- ³²⁰ Peters, Andy, “Amish Bank Charter to Set Standard for Future Applications,” December 4, 2013. <https://www.americanbanker.com/news/amish-bank-charter-to-set-standard-for-future-applications>
- ³²¹ “fintech,” Google Trends. <https://www.google.com/trends/explore?date=all&q=fintech>
- ³²² “Introduction to Financial Services: ‘Fintech’,” Congressional Research Service, November 23, 2016. <http://www.crs.gov/reports/pdf/IF10513>
- ³²³ Dietz, Miklos et al., “Cutting through the noise around financial technology,” McKinsey & Company, February 2016. <http://www.mckinsey.com/industries/financial-services/our-insights/cutting-through-the-noise-around-financial-technology>
- ³²⁴ “Consumers and Mobile Financial Services,” Federal Reserve Board of Governors, p. 9, March 2016. <https://www.Federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201603.pdf>
- ³²⁵ “American Millennials and Banking: A Cross-Generational Study,” ICBA, 2014. <http://www.icba.org/docs/default-source/icba/solutions-documents/knowledge-vault/icba-surveys-whitepapers/icbacrossgenerationalstudyofamericansandbanking2014topline.pdf?sfvrsn=18>

³²⁶ Nerdwallet explains the basics of P2P in Murakami-Fester, Amber, “Venmo, PayPal, Square Cash and More: What Are Peer-to-Peer Payments?” Nerdwallet, October 21, 2016. <https://www.nerdwallet.com/blog/banking/p2p-payment-systems/>.

³²⁷ Jankowiak, Lucas, “Millennials and Money: How Fintech Will Help Lower The Risks in a Cashless Society,” *International Business Times*, January 23, 2017. <http://www.ibtimes.com/millennials-money-how-fintech-will-help-lower-risks-cashless-society-opinion-2479617>

³²⁸ “American Millennials and Banking,” ICBA, 2014.

³²⁹ “Consumers and Mobile Financial Services,” March 2016, p. 2.

³³⁰ “Consumers and Mobile Financial Services,” March 2016, p. 25.

³³¹ “Crowdfunding and the JOBS Act: What Investors Should Know,” Financial Industry Regulatory Authority, May 16, 2016. <http://www.finra.org/investors/alerts/crowdfunding-and-jobs-act-what-investors-should-know>

³³² Ryan Young, “This Week in Ridiculous Regulations: 2016 Wrap-Up,” Competitive Enterprise Institute, January 3, 2017. <https://cei.org/blog/week-ridiculous-regulations-2016-wrap>
See Also: “Federal Register,” Vol. 81, No. 251, December 30, 2016, P. 97,110. <https://www.gpo.gov/fdsys/pkg/FR-2016-12-30/pdf/FR-2016-12-30.pdf>

³³³ “Total Pages in the Federal Register, 1936 – 2015,” George Washington University Regulatory Studies Center. <https://regulatorystudies.columbian.gwu.edu/reg-stats>

³³⁴ JEC Staff Calculation: Substantive Federal Register Pages 2015: 80,260. Estimated Substantive Federal Register Pages 2016: 95,749. $(95,749 - 80,260) / 80,260 = .193$

³³⁵ Crews, Clyde Wayne Jr., “Ten Thousand Commandments 2016,” p. 3, May 3, 2016. <https://cei.org/sites/default/files/Wayne%20Crews%20-%20Ten%20Thousand%20Commandments%202016%20-%20May%204%202016.pdf>

³³⁶ Crews, Clyde Wayne, “The 2017 Unconstitutionality Index: 18 Federal Rules for Every Law Congress Passes,” Competitive Enterprise Institute, December 30, 2016. <https://cei.org/blog/2017-unconstitutionality-index-18-federal-rules-every-law-congress-passes>

³³⁷ “Young, Ryan, “Regulatory Dark Matter,” Competitive Enterprise Institute, December 9, 2015. <https://cei.org/blog/regulatory-dark-matter>

³³⁸ Rep. Doug Collins, “Regulations from the Executive in Need of Scrutiny Act of 2017,” Congress.gov, January 6, 2017. <https://www.congress.gov/bill/115th-congress/house-bill/26>

³³⁹ Major rules are defined as any rules which are deemed to result in “an annual effect on the economy of \$100 million or more . . . , a major increase in costs or prices for consumers, individual industries, government agencies, or geographic regions, or . . . significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based

enterprises to compete with foreign-based enterprises.” Rep. Bill Archer, “Contract with America Advancement Act of 1996,” PL 104-121, March 29, 1996, <https://www.congress.gov/bill/104th-congress/house-bill/3136?q=%7B%22search%22%3A%5B%22104-121%22%5D%7D&r=1>

³⁴⁰ Davis, Christopher, and Richard Beth, “Agency Final Rules Submitted on or After June 13, 2016, May Be Subject to Disapproval by the 115th Congress,” Congressional Research Service, December 15, 2016. <https://fas.org/sgp/crs/misc/IN10437.pdf>

³⁴¹ “Presidential Executive Order on Reducing Regulation and Controlling Regulatory Costs,” The White House, January 30, 2017. <https://www.whitehouse.gov/the-press-office/2017/01/30/presidential-executive-order-reducing-regulation-and-controlling>

³⁴² Wheeler, Lydia and Lisa Hagen, “Trump signs ‘2-for-1’ order to reduce regulations,” *The Hill*, January 30, 2017. <http://thehill.com/homenews/administration/316839-trump-to-sign-order-reducing-regulations>

³⁴³ “Lee Unveils Article I Regulatory Budget Act,” May 25, 2016, <https://www.lee.senate.gov/public/index.cfm/2016/5/lee-unveils-article-i-regulatory-budget-act>

³⁴⁴ ERP 2017, p. 421.

³⁴⁵ Golub, Stephen et al., “Defining and Measuring Green FDI: An Exploratory Review of Existing Work and Evidence,” Organization for Economic Co-operation and Development, OECD Working Papers on International Investment, 2011/02, September 1, 2011. <http://dx.doi.org/10.1787/5kg58j1cvcvk-en>

³⁴⁶ This is the reasoning underlying the concept of “cap-and-trade,” incidentally, although the emissions cap in legislation that passed the House (it was never brought to a vote in the Senate) was only on the United States.

³⁴⁷ Sieminski, Adam, “International Energy Outlook 2016,” Center for Strategic and International Studies, U.S. Energy Information Administration, May 11, 2016.

http://www.eia.gov/pressroom/presentations/sieminski_05112016.pdf

³⁴⁸ “International Energy Outlook 2016,” p. 3. Figure 7-1 is on page 10. Figure 7-2 is on page 34.

³⁴⁹ ERP 2017, p. 433.

³⁵⁰ “Solar Industry Data,” Solar Energy Industries Association. www.seia.org/research-resources/solar-industry-data

The United States ranks 5th in the world in solar module manufacturing and total installed capacity, but market shares are not necessarily a good measure of technological leadership as government subsidies affect them and there may be excess capacity as well. Data on reserves of U.S. natural resources is available on EIA’s website.

³⁵¹ “Country Analysis Brief: France,” U.S. Energy Information Administration, August 2016.

www.eia.gov/beta/international/analysis.cfm?iso=FRA

In 2015, nuclear power generated about 76 percent of total net generation in France.

³⁵² “Safety of Nuclear Power Reactors,” World Nuclear Association, May 2016. <http://www.world-nuclear.org/information-library/safety-and-security/safety-of-plants/safety-of-nuclear-power-reactors.aspx>

According to the World Nuclear Association, no nuclear workers or members of the public have ever died as a result of exposure to radiation from a commercial nuclear incident, with the exception of the 1986 accident at the nuclear reactor in Chernobyl, Ukraine where the death toll was 56 people. That accident and the ensuing release of radiation were the result of major design deficiencies including that the Chernobyl reactor did not have a containment building as used in the West and in post-1980 Soviet designs.

³⁵³ A movie by the title “The China Syndrome” was released in 1979 by Columbia Pictures shortly after the Three Mile Island nuclear power plant accident. However, the fear of such an uncontrolled chain reaction is unfounded, as it would soon fizzle.

³⁵⁴ ERP 2017.

Nuclear receives incidental mention twice in the text, in some footnotes, and it appears without commentary in two graphs, one of consumption by source (Figure 7-16) and the other of future cost of new generations of different technologies (Figure 7-22).

³⁵⁵ ERP 2017, p. 462.

³⁵⁶ For example, ethanol encounters a so-called blend wall in the gasoline supply, which refers to the incompatibility of mid- and high-ethanol fuel blends with the vast majority of vehicle engines and fueling infrastructure. See Lewis, Marlow, Jr., “Running Drivers into the Blend Wall,” OnPoint, No. 219, Competitive Enterprise Institute, July 25, 2016.

<https://cei.org/content/running-drivers-blend-wall>

³⁵⁷ “Joint Economic Report 2013,” Joint Economic Committee, p. 30-40, December 11, 2013. <http://www.jec.senate.gov/public/cache/files/e00331db-e083-4b36-ab60-aa14946bc71b/2013-joint-economic-report.pdf>

³⁵⁸ Lazear, Edward, “The Climate Change Agency Needs to Adapt to Reality,” *The Wall Street Journal*, September 2, 2014.

<https://www.wsj.com/articles/edward-p-lazear-the-climate-change-agenda-needs-to-adapt-to-reality-1409700618>

³⁵⁹ Lomborg, Bjorn, “Obama’s Climate Policy Is a Hot Mess,” *The Wall Street Journal*, July 1, 2016. <https://www.wsj.com/articles/obamas-climate-policy-is-a-hot-mess-1467327996>

Bjorn Lomborg, president of the Copenhagen Consensus Center, cites a range of temperature estimates for the promises made at the Paris Agreement worldwide of 0.08 degrees Fahrenheit from the U.N.’s model to 1.6 degrees Fahrenheit for the Climate Action Tracker by the end of the century. The Paris Agreement runs through 2030, but if one assumes that the cuts are not only met but sustained through the rest of the century, then the U.N. model projects a temperature drop of 0.3 degrees, the equivalent of delaying global warming

by less than four years at the end of the century. The Climate Tracker estimate assumes that deeper cuts follow the Paris agreement. Lomborg cites cost estimates running in the many trillions of dollars for these miniscule, model generated temperature reductions decades into the future.

³⁶⁰ One can also run the analysis with alternative rates of future floods, storms, droughts, etc.

³⁶¹ JER 2016, p. 123.

For the 2015 United Nations Climate Change Conference held in Paris from November 30 to December 12, the State Department made a pledge for the year 2025 that the United States will reduce its GHG emissions by 26 to 28 percent below the 2005 level, substantially surpassing the targeted reduction pledged at the Copenhagen Conference for 2020.

See also: “Budget of the U.S. Government Fiscal Year 2017,” Office of Management and Budget, p. 15 - 29, February 9, 2016.

<https://www.govinfo.gov/content/pkg/BUDGET-2017-BUD/pdf/BUDGET-2017-BUD.pdf>

The Administration’s 2017 budget does not address quantitatively what its climate policies mean for economic growth. In the section entitled “Economic Assumptions and Interactions with the Budget,” the Office of Management and Budget discusses its economic forecast at length and mentions policies related to trade agreements, immigration reform, business tax reform, infrastructure investment, community college subsidies, and boosting the labor supply, but not climate change.

³⁶² The stagnating centrally planned, nationalized economies of the former Soviet bloc were among the worst environmental offenders—an important fact to keep in mind whenever someone blames the profit motive for pollution.

³⁶³ ERP 2017, p. 56.

³⁶⁴ “Economic Growth and Tax Policy,” Joint Committee on Taxation, p. 2-3, February 20, 2015.

<https://www.jct.gov/publications.html?func=startdown&id=4736>, p. 2, 3.

³⁶⁵ Mankiw, Greg, “How are wages and productivity related?” Greg Mankiw’s Blog, August 29, 2006. <http://gregmankiw.blogspot.com/2006/08/how-are-wages-and-productivity-related.html>

³⁶⁶ “General Explanations of the Administration’s Fiscal Year 2016 Revenue Proposals,” Department of the Treasury, February 2015,

<https://www.treasury.gov/resource-center/tax-policy/Documents/General-Explanations-FY2016.pdf>

³⁶⁷ ERP 2017, Box 2-9, p. 145, 146.

³⁶⁸ “2015 Economic Report of the President,” p. 10, February 2015.

https://www.whitehouse.gov/sites/default/files/docs/cea_2015_erp_complete.pdf, p. 203-239

³⁶⁹ “The President’s Budget for Fiscal Year 2017,” Office of Management and Budget. <https://obamawhitehouse.archives.gov/omb/budget/>

³⁷⁰ “Decision time for tax reform,” PriceWaterhouseCooper, p. 10, January 2017. <https://www.pwc.com/us/en/tax-services/assets/2017-tax-policy-utlook-sml.pdf>

³⁷¹ “Table II.1 Corporate income tax rate,” OECD, Retrieved February 22, 2017. https://stats.oecd.org/Index.aspx?DataSetCode=TABLE_III

³⁷² “Fiscal Year 2017: Budget of the U.S. Government,” Office of Management and Budget, p. 51. <https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/budget.pdf>,

³⁷³ “A Better Way: Our Vision for a Confident America: Tax,” Better.gop, p. 15, June 24, 2016. <https://abetterway.speaker.gov/assets/pdf/ABetterWay-Tax-PolicyPaper.pdf>

³⁷⁴ Dan Mitchell, “The Growing Need for Trump’s Proposed 15 percent Corporate Tax Rate,” November 19, 2016. <https://danieljmitchell.wordpress.com/2016/11/19/the-growing-need-for-trumps-proposed-15-percent-corporate-tax-rate/>

³⁷⁵ “Patent Boxes,” AAF, February 2016.

³⁷⁶ “General Explanations of the Administration’s Fiscal Year 2017 Revenue Proposals,” Department of the Treasury, February 2016, <https://www.treasury.gov/resource-center/tax-policy/Documents/General-Explanations-FY2016.pdf>

³⁷⁷ Tyson, Laura D’Andrea, “Testimony before the U.S. Senate Committee on Finance,” Senate Finance Committee, p. 8-9, February 24, 2015. <http://www.finance.senate.gov/imo/media/doc/Testimony%20-%20Tyson.pdf>

³⁷⁸ “A Better Way: Our Vision for a Confident America: Tax,” Better.gop, p. 15, June 24, 2016. <https://abetterway.speaker.gov/assets/pdf/ABetterWay-Tax-PolicyPaper.pdf>

³⁷⁹ ERP 2015, p. 213-214.

³⁸⁰ McBride, William, “Tax Reform in the UK Reversed the Tide of Corporate Tax Inversions,” Tax Foundation, October 14, 2014, <http://taxfoundation.org/article/tax-reform-uk-reversed-tide-corporate-tax-inversions>

³⁸¹ “Selected Issues Relating to Choice of Business Entity,” Testimony before the Senate Finance Committee, p. 5, August 1, 2012, <https://www.jct.gov/publications.html?func=startdown&id=4478>

³⁸² “Tax Revenues to More Than Double by 2023, While Top Tax Rates Hit Highest Level Since 1986,” House Ways and Means Committee, February 13, 2013, <http://waysandmeans.house.gov/tax-revenues-to-more-than-double-by-2023-while-top-tax-rates-hit-highest-level-since-1986/>

³⁸³ ERP 2017, p. 174.

³⁸⁴ “Taxing Capital Income Effective marginal Tax Rates Under 2014 Law and Selected Policy Options,” Congressional Budget Office, p. 10, December 2014, https://www.cbo.gov/sites/default/files/113th-congress-2013-2014/reports/49817-Taxing_Capital_Income_0.pdf

³⁸⁵ Knittel, Matthew et al., “Methodology to Identify Small Business and Their Owners,” Department of the Treasury Office of Tax Analysis, August 2011. <https://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/TP-4.pdf>

³⁸⁶ “Corporate dividend and capital gains taxation: A comparison of the United States to other developed nations,” Alliance for Savings and Investment, p. 3, April 2015. <http://theasi.org/assets/EY-ASI-2014-International-Comparison-of-Top-Dividend-and-Capital-Gains-Tax-Rates.pdf>

³⁸⁷ “General Explanations of the Administration’s Fiscal Year 2016 Revenue Proposals,” Department of the Treasury, p. 156, February 2015. <https://www.treasury.gov/resource-center/tax-policy/Documents/General-Explanations-FY2016.pdf>

³⁸⁸ ASI, Corporate Dividend and Capital Gains Taxation, p. 3.

³⁸⁹ Pomerleau, Kyle, “How One Can Face an Infinite Effective Tax Rate on Capital Gains,” Tax Foundation, January 7, 2015. <https://taxfoundation.org/how-one-can-face-infinite-effective-tax-rate-capital-gains>

³⁹⁰ Reynolds, Alan, “Why 70% Tax Rates Won’t Work,” *The Wall Street Journal*, June 16, 2011. <http://online.wsj.com/news/articles/SB10001424052702304259304576375951025762400>

“The Distribution of Household Income and Federal Taxes, 2011,” Congressional Budget Office, November 12, 2014. <https://www.cbo.gov/sites/default/files/cbofiles/attachments/49440-Distribution-of-Income-and-Taxes.pdf>

³⁹¹ “The Buffett Ruse,” *The Wall Street Journal*, January 27, 2012. <http://online.wsj.com/news/articles/SB10001424052970203806504577183250095478594>

³⁹² “The Relationship Between Realized Capital gains and Their Marginal Rate of Taxation,” Institute for Research on the Economics of Taxation, October 9, 2009. <http://iret.org/pub/CapitalGains-2.pdf>

³⁹³ Entin, Stephen, “President Obama’s Capital Gains Tax Proposals: Bad for the Economy and the Budget,” Tax Foundation, January 21, 2015. <https://taxfoundation.org/president-obama-s-capital-gains-tax-proposals-bad-economy-and-budget>

³⁹⁴ “Corporate Dividend and Capital Gains Taxation,” ASI, p. 13.

³⁹⁵ “Corporate Dividend and Capital Gains Taxation,” ASI.

³⁹⁶ Better Way Tax, p. 25.

³⁹⁷ JEC calculations using top capital gains rate from Better Way (16.5%), flat corporate rate from Better Way (20 percent), and the weighted average of state capital gains from the E&Y 2015 Report (4.5%).

³⁹⁸ Pomerleau, Kyle, “Details and Analysis of the 2016 House Republican Tax Reform Plan,” Tax Foundation, July 5, 2016. <https://taxfoundation.org/details-and-analysis-2016-house-republican-tax-reform-plan>; Note: Adds 0.3% and 1.7% from Table 5 together.

³⁹⁹ “Section-By-Section Summary of the Proposed ‘Protecting Americas from Tax Hikes Act of 2015’,” Senate Finance Committee.

<https://www.finance.senate.gov/imo/media/doc/Summary%20of%20the%20Protecting%20Americans%20from%20Tax%20Hikes%20PATH%20Act%20of%202015.pdf>

⁴⁰⁰ “Tiberi, Kind Reintroduce America’s Small Business Tax Relief Act,” Congressman Pat Tiberi, February 2, 2015.

<http://tiberi.house.gov/news/documentsingle.aspx?DocumentID=394730>

⁴⁰¹ See section 179 of the Internal Revenue Code of 1986.

⁴⁰² See section 168(k) of the Internal Revenue Code of 1986.

⁴⁰³ Tiberi, Patrick, “H.R. 2510,” Congress.gov, May 21, 2015.

<https://www.congress.gov/bill/114th-congress/house-bill/2510>

⁴⁰⁴ Greenberg, Scott, “The Twelve Most Important Provisions in the Latest Tax Bill,” Tax Foundation, December 17, 2015.

<https://taxfoundation.org/twelve-most-important-provisions-latest-tax-bill>

⁴⁰⁵ Better Way Tax, p. 25-26

⁴⁰⁶ “Options for Reforming America’s Tax Code,” Tax Foundation, June 6, 2016, p. 77.

https://files.taxfoundation.org/20170130145208/TF_Options_for_Reforming_Americas_Tax_Code.pdf

⁴⁰⁷ “Background and Present Law Relating to Cost Recovery and Domestic Production Activities,” Joint Committee on Taxation, p. 80, March 6, 2012.

<https://www.jct.gov/publications.html?func=startdown&id=4401>

⁴⁰⁸ Pomerleau, Analysis of the 2016 House Republican Tax Plan

⁴⁰⁹ See subtitle B of the Internal Revenue Code of 1986.

⁴¹⁰ Entin, Stephen, “Estate Taxes, Deficits, and Budget Implications,”

American Family Business Foundation, p. 2, October 2011.

<http://businessdefense.org/sites/default/files/pages/estatetaxesdeficitsandbudgetimplications.pdf>

⁴¹¹ Logan, David, “The Economic Effects of the Estate Tax,” Tax Foundation, p. 2, October 17, 2011.

http://taxfoundation.org/sites/taxfoundation.org/files/docs/tax_foundation_testimony_pennsylvania_estate_tax-20111017.pdf

⁴¹² Logan, “The Economic Effects of the Estate Tax,” p. 3.

⁴¹³ Pomerleau, “Analysis of the 2016 House Republican Tax Plan.”

⁴¹⁴ “Federal Tax Law Keeps Piling Up,” Wolters Kluwer, 2014.

[http://www.cch.com/wbot2014/Chart_TaxLawPileUp_\(16\)_f.pdf](http://www.cch.com/wbot2014/Chart_TaxLawPileUp_(16)_f.pdf)

⁴¹⁵ “2010 Annual Report to Congress,” Taxpayer Advocate Service, January 5, 2011. <http://www.taxpayeradvocate.irs.gov/2010-annual-report-to-congress>

⁴¹⁶ “Infographics,” Taxpayer Advocate Service, January 2013.

<http://taxpayeradvocate.irs.gov/2012-Annual-Report/Report-Infographics.html>

⁴¹⁷ Taxpayer Advocate, “2010 Annual Report.”

⁴¹⁸ “Written Testimony of John A. Koskinen Commissioner Internal Revenue Service before the Senate Finance Committee on Regulation of Tax Return

Preparers,” Senate Finance Committee, April 8, 2014.

<http://www.finance.senate.gov/imo/media/doc/Koskinen%20Testimony.pdf>

⁴¹⁹ “Analysis of Internal Revenue Service Employees’ Use of Tax Preparation Assistance,” Treasury Inspector General for Tax Administration, January 9, 2012.

<https://www.treasury.gov/tigta/auditreports/2012reports/201240001fr.pdf>

⁴²⁰ “Complexity in the Federal Tax System,” Joint Committee on Taxation, March 6, 2015.

<https://www.jct.gov/publications.html?func=startdown&id=4738>

⁴²¹ Laffer, Arthur et al., “The Economic Burden Caused by Tax Code Complexity,” Laffer Center, April 2011. <http://www.laffercenter.com/wp-content/uploads/2011/06/2011-Laffer-TaxCodeComplexity.pdf>

⁴²² Fichtner, Jason and Jacob Feldman, “The Hidden Cost of Federal Tax Policy,” Mercatus Center, 2015.

<http://mercatus.org/sites/default/files/Fichtner-Hidden-Cost-full-web.pdf>

⁴²³ Tasselmyer, Michael, “A Complex Problem: The Compliance Burdens of the Tax Code,” National Taxpayer Union, April 8, 2015.

<http://www.ntu.org/foundation/policy-paper/a-complex-problem-the-compliance-burdens-of-the-tax-code>

⁴²⁴ “Patient Protection and Affordable Care Act: IRS Needs to Strengthen Oversight of Tax Provisions for Individuals,” Government Accountability Office, July 29, 2015. <http://www.gao.gov/products/GAO-15-540>

⁴²⁵ Laffer, “Tax Code Complexity.”

⁴²⁶ Warcholik, Wendy, et al., “The Rising Cost of Complying with the Federal Income Tax,” Tax Foundation, January 10, 2006.

<http://taxfoundation.org/article/rising-cost-complying-Federal-income-tax>

⁴²⁷ Better Way Tax, p. 16.

**MINORITY VIEWS OF RANKING MEMBER
MARTIN HEINRICH**

I am pleased to share the Joint Economic Committee (JEC) Democratic response to the 2017 *Economic Report of the President*. The JEC is required by law to submit findings and recommendations in response to the *Economic Report of the President (or Report)*, which is prepared and released each year by the Council of Economic Advisers (CEA).

This Democratic response details the economic progress made during the eight years of the Obama Administration and highlights the risks posed to this progress by the policies of the Trump Administration. The response also points to the work we still need to do to further strengthen the economy, especially in areas that haven't seen a full recovery yet.

Our research shows that the policies proposed by the Trump Administration would increase inequality, take health care insurance away from millions of Americans, reduce access to a college education, threaten financial stability and roll back actions to address climate change. These policies would harm Americans and the economy.

This response provides a short review of the current state of the U.S. economy nine years since the start of the Great Recession, and focuses on select areas of the *Report* by evaluating issues related to key structural challenges Americans face:

- The Challenge of and Imperative for Reducing Inequality,
- The Road Ahead for Americans' Health Care System,

- Issues in Higher Education Quality, Affordability, and Accessibility, and
- The Economic Risks and Opportunities of Climate Change

The Trump Administration inherited an economy in much stronger shape than it was eight years ago when President Obama assumed the office—a time when the economy was shedding 800,000 jobs each month and the auto industry and financial sector were on the brink of collapse. As President Trump assumed office, the private sector had added jobs for a record 83 consecutive months, the unemployment rate had been cut by more than half from its peak, falling to just 4.7 percent in December 2016.

As a result of sustained low unemployment, average hourly earnings for non-management workers has begun to grow faster than inflation again for the first time in years, producing real income gains for American workers.¹ More than 20 million Americans have gained health insurance coverage and all Americans currently enjoy the peace of mind of knowing that their insurance company cannot cut off their coverage just when they need it most, or deny them coverage in the first place, because they have a pre-existing condition. And we have started down a viable path working in partnership with the private sector to tackle the risks of climate change, seizing the opportunity to lead the world in innovating and producing a clean energy revolution capable of transforming the 21st Century economy. Though progress is being made, there is still a long way to go to make sure that America's economy is delivering for all the people who work and build their lives here.

Our nation must build on the progress of the past eight years, not squander it—and that is how the Trump Administration should be

measured. Job creation remains the top priority. While the private sector accounts for the overwhelming majority of jobs in the U.S. economy, the government has a key role to play in supporting continued economic recovery, rolling back inequality and laying the groundwork for future growth by investing in education, infrastructure and research and development.

The economy confronts several long-term structural challenges. The first is declining labor force participation. As America's baby boomers begin aging out of the labor force, America will simply have a smaller share of the population willing and able to work, which may soon place upward bounds on America's potential for economic growth. In addition to the downward pressure on participation from an aging population, the country faces a broader participation rate problem among prime-age workers, especially men. Among men ages 25-54, participation rates have fallen by nine percentage points since 1953. Women's participation rates, which had climbed during the second half of the 20th century, have plateaued and reversed slightly.

Second, productivity gains have slowed since 2004, limiting GDP growth and income gains. Productivity gains and wages, which used to move up together in the immediate post-World War II period, have become delinked. As productivity growth has slowed, wages have not even kept pace with that slower growth. Identifying ways to bolster productivity growth and ensure that gains lead to wage increases are major challenges facing policymakers. Key to raising productivity will be redoubling American efforts to invest in human capital through higher education and lifelong skills training, and access to quality health care. Along with that, we must fund the technological and physical infrastructure that will fuel job creation and enable goods,

services, people, and ideas to move more easily, reducing costs for businesses and families alike.

Third, Americans and the world face a crisis in climate change that, if left unchecked, will impose steep costs on the U.S. and global economies, dramatically altering the way we live. Global climate change presents some of the greatest risks and opportunities for the U.S. economy today and in the decades ahead. The effects of climate change are already having significant impacts on our economy that will continue to increase. The risks posed by climate change also present opportunities for broad, new areas of the economy to attract investment and provide jobs through world-leading technological innovations—opportunities for those both in America’s urban and rural economies.

Finally, America’s long-term trend of rising inequality continues to worsen and constrain economic growth and opportunity for upward mobility in the United States, making it increasingly difficult for workers to provide for their families. Rising inequality does not have one singular cause, but rather is the result of multiple policy and structural changes in our economy over the past nearly four decades. These include: decreasing progressivity in our tax code; an erosion of labor market institutions, such as the declining real value of the minimum wage and collective representation in labor unions; deregulation and the increasing prevalence of monopolistic market power, particularly in the financial sector; increasing global competition from low-wage countries under rules that do not set a level playing field; shifting demands for workers of different skill levels; and of course the historical legacies of informal and explicitly codified discrimination against particular groups in our society.

Although some of these features are global in nature, others are unique to the experience of the United States and will require uniquely American solutions. That America stands apart from other advanced economies as one of the most unequal, even though other countries face similar trends, suggests that policy choices rather than natural law are the primary force behind inequality. It is clear that unless America can reverse this trend of widening inequality, the promise of upward mobility that has underpinned the American Dream risks slipping away, and will undermine our country's overall economic performance and leadership in the world.

As the Trump Administration and Republican-led Congress transition to governing, historical experience and economic theory are clear that their vision will not make America great again. Rather, the Republican agenda risks taking America backward in all of our key structural challenges, undoing much of the economic progress made over the past eight years, ultimately leaving Americans worse off and ceding America's economic leadership on the world stage.

**INTRODUCTION: PROGRESS MADE UNDER THE OBAMA
ECONOMY AND THE CHALLENGES AHEAD**

The final *Economic Report of the President* (2017) of the Obama Administration reviews economic developments over the past eight years, evaluates the policies advanced in response to the unfolding economic events and ongoing challenges to broadly shared prosperity. This response to the *Economic Report* from Joint Economic Committee (JEC) Democratic staff emphasizes some of these key structural challenges facing American families and the U.S. economy overall, and looks ahead to the economic issues that are likely to arise under the stewardship of President Trump and a Republican-led Congress.

Joint Economic Committee Democrats share President Obama's view that the American economy is not working until it is delivering for all people in America. We recognize both the progress made for much of the country in the face of daunting economic challenges, as well as the obstacles that remain to achieving this goal as Republicans take control of government in Washington and in many state capitals.

The steps taken by the Obama Administration to cushion the blow from a real estate market collapse that began in 2006, a recession that began in December 2007, and a financial crisis that unfolded in September 2008—all before President Obama assumed office—first and foremost halted America's economic freefall. These policy decisions helped contain the severe financial system fragility and household economic stress in the economy inherited when President Obama took office in January 2009. Absent policy responses from the outgoing George W. Bush Administration in 2008 and the Obama Administration thereafter, the economic downturn in GDP would have been 3.5 times deeper,

unemployment would have spiked 1.6 times higher, and the recession would have lasted more than twice as long.² The combined policy response to the Great Recession created an additional 9 million job-years and boosted GDP by 9.5 percent through 2012.³

Even so, the downturn Americans faced was the worst since the Great Depression, and the Obama Administration spent much of its time and effort digging the U.S. economy out of this hole, often with an uncooperative Congress. Since the labor market bottomed out in February 2010, private sector employers added more than 16 million new jobs.⁴ The unemployment rate receded to 4.8 percent in January 2017 before President Trump took office, down from a high of 10.0 percent. Though U.S. labor markets have tightened enough to yield positive, inflation-adjusted wage growth for the first time in a long time, significant shares of the population exited the labor force and the economy is creating too few good opportunities to entice would-be workers back in. The share of the overall population in work still has not recovered to the pre-recession level, which had never recovered in the previous business cycle expansion to the peak before the much more mild 2001 recession.

Additionally, the Obama Administration took steps to address critical problems in key sectors of the economy. The Dodd-Frank Wall Street Reform and Consumer Protection Act aimed to bring stability to financial markets and rein in dangerous excesses in the financial sector that had caused the real estate bubble and financial collapse and undermined economic progress. The Obama Administration also took steps to remediate the crisis in America's health care system that left 44 million people without access to health insurance and saw health care costs growing at alarming

rates that strained both public and family budgets, crowding out other critical expenditures. The 2010 Patient Protection and Affordable Care Act (ACA), often colloquially referred to as Obamacare, put a stop to the most predatory practices in the health care sector, created incentives to reduce costs and improve health outcomes, and drastically expanded the number of Americans with access to health insurance coverage. The Administration also took steps to improve the affordability, accessibility, and quality of higher education, which enhances the productivity and technological leadership of America's workforce. The Administration also set America and the world on a path to environmental sustainability, taking steps to accelerate America's development of renewable energy systems and to lead Americans and the world on a path to global environmental sustainability.

These initiatives staved off what certainly otherwise would have been a deeper and wider spread economic collapse and laid a foundation for future economic improvements. President Trump took over an economy in far better shape than his predecessor, though there is still much work to be done to tackle structural impediments to broadly-shared and growing prosperity in America's economy now and in the future.

JEC Democrats' response to President Obama's final economic report highlights four key areas:

- The Challenge of and Imperative for Reducing Inequality,
- The Road Ahead for Americans' Health Care System,
- Issues in Higher Education Quality, Affordability and Accessibility, and

- The Economic Risks and Opportunities of Climate Change.

JEC Democrats are gravely concerned that President Trump and Congressional Republicans are poised to move America in the wrong direction to address critical structural impediments to the country's and individual American families' revitalized economic success. Given what we know from historical experience and from economic research, the policy proposals President Trump and Republicans in Congress intend to advance will make America's economic challenges worse and will leave us less prepared to respond to unforeseen economic shocks that may arise under their watch.

THE CHALLENGE OF AND IMPERATIVE FOR REDUCING INEQUALITY

Rising inequality has constrained economic growth and opportunity in the United States for decades, making it increasingly difficult for families to lead comfortable, middle-class lives. Even as the country has grown wealthier, the vast majority of poor and middle-class households have been left behind. Since 1980, pre-tax income for the bottom half of households has stagnated, while income for the top 1 percent more than tripled.⁵ During this time period, the share of wealth held by the top 1 percent increased from 24 percent to 42 percent.⁶ These developments have prompted some economists to refer to the United States as “a tale of two countries,” making the case for the need to “rewrite the rules” of the economy in order to move toward shared prosperity.⁷

While the Obama Administration made strides toward combatting inequality, the new President might unravel much of this progress. The Trump Administration and the Republican Party want to ramp up the trickle-down policies that exacerbated inequality in the first place. By claiming that a rising tide lifts all boats, the GOP is hoping to justify tax cuts for the rich and large corporations, deregulation of the financial industry, and a weakening of basic worker protections. History has shown that these policies benefit the wealthy at the expense of American workers.

Inequality is an Impediment to Overall Economic Prosperity

Traditionally, thinking within the field of economics reasoned that there exists a tradeoff between equality and efficiency.⁸ An implication of this theoretical belief was that focusing on combatting inequality through policies such as progressive

taxation and income supports would ultimately prove futile by diminishing long-term prospects for economic growth by creating inefficiencies and distorting incentives.⁹

Recent empirical evidence in economics proves this long-held belief not to be the case. Economists at the International Monetary Fund showed that not only do countries with lower inequality exhibit higher growth rates and longer durations of growth spurts, but also that generous redistribution systems are no impediment to economic growth.¹⁰ In the United States in particular, this conclusion should be obvious given how much sky-rocketing incomes at the top of the distribution derive from economic rents—income extracted by exercising market power rather than earned from ability and effort.¹¹ Economic rents are fundamentally inefficient, so we should expect that increasing tax progressivity to eliminate rents would have at worst negligible effects on efficiency, though evidence indicates that promoting equality could improve efficiency and performance in the overall economy.¹²

There is now greater recognition that inequality is harmful to economic performance.¹³ For example, inequality may preclude individuals from accessing a good education and quality health care, keeping those individuals from realizing and contributing their full productive potential.¹⁴ And despite the hypotheses held by believers in supply-side economics, rising inequality can actually undermine incentives for entrepreneurship.¹⁵ Economists at the Organization for Economic Co-operation and Development (OECD) estimate that the increase in income inequality between 1985 and 2010 reduced growth across OECD countries by 4.7 percentage points.¹⁶

Inequality also undermines democracy and political stability. Though early economic research focused on this effect in developing countries with weaker political and market institutions, the effects of inequality on political polarization are almost certainly being felt now in the United States and other advanced economies.¹⁷ In his farewell address, President Obama recognized this by calling stark inequality “corrosive to our democratic idea,” sowing “cynicism and polarization in our politics.”¹⁸ Inequality might allow the wealthy to have an undue influence over the political process, reaping favors that further their personal gains over the common good.¹⁹ Political science research emphasizes inequality’s association with a general erosion of social trust, which can increase transaction costs for businesses and divert business investment into non-productive assets and activities such as legal actions contesting property rights and technologies to monitor workers and protect private property from crime.²⁰ The social pangs of inequality are felt deepest at a time when the American promise of upward mobility appears to be slipping away.

Wealth inequality in the United States—the outcome of income inequality—is even more extreme than that for income. In fact, the top 1 percent of households hold 42 percent of the wealth in the United States.²¹ The racial wealth gaps are particularly glaring. The median Black and Latino households hold only 6 and 8 percent of the wealth of the median white household, respectively.²²

The Scale and Causes of Rising Inequality in the United States

In 2016, Americans expressed palpable frustration over our economy working only for a narrow slice of the most privileged workers. This sentiment is borne out in the data. With inequality

rising since roughly 1980, the United States has come to be among the most unequal of the developed nations.²³

Most people are more concerned with their own family's economic situation than how a small segment of the population at the very top has fared. This anxiety is reflected in increasing household financial fragility, with median wages stagnating and prices for key items like housing, health care, child care and higher education accelerating way ahead of overall consumer price inflation.²⁴ The majority of Americans have been squeezed by these rising costs while the top 1 percent of income earners captured an increasing share of overall national income. In 2010, the share of income going to the bottom 99 percent in the U.S. was 63 cents of every dollar of income in the U.S. economy, whereas in 1980 the bottom 99 percent took more than 78 percent of national income.²⁵

Rising inequality does not have one singular cause, but rather is the result of multiple policy and structural changes ensuing in our economy over the past nearly four decades, including: decreasing progressivity in our tax and transfer system; an erosion of labor market institutions, such as the declining real value of the minimum wage and membership in labor unions; monetary policy that in practice privileges stable prices and low inflation over maximum employment and wage growth; deregulation and the increasing concentration of monopolistic market power, particularly in the financial sector; increasing global competition from low-wage countries; and, shifting demands for workers of different skill levels.²⁶

Some of these factors are relatively unique to the United States, but others—like globalization and technological change—are challenges shared across most countries.²⁷ That other advanced

economies are similarly exposed to trade with low-wage economies and employ computers and robots like the United States, but have not experienced a similarly staggering increase in inequality as the U.S., suggests that rising inequality results more from policy choices than from immutable economic laws of nature.

Other dimensions of inequality have a structural and enduring nature, resulting from formal and informal discrimination against specific social groups that limit opportunities to participate fully in America's economic life. Such structural inequality underscores the point that policy choices are at the root of America's inequality problems, choices that unnecessarily limit the country's economic potential.²⁸

This trend of rising inequality has put the American Dream further out of reach for many Americans and left even those with means with a sense of increased financial stress.²⁹ Critically, the development of high and rising inequality is undermining faith in Americans' opportunities for upward economic mobility. Mounting evidence shows that opportunities for learning and health early in a child's life can impact cognitive and social development and lifelong earnings potential.³⁰ Inequality literally begins before a child is born, with access to the right prenatal health care, and continues into early childhood with the entrenched nature of inequality of opportunities. This means that a child's future socioeconomic status is often closely tied to the status of his or her parents. In the absence of effective policies to rebalance the distribution of opportunity, such a phenomenon transmits inequality across generations.

Progress Tackling Runaway Inequality under the Obama Administration

The Obama Administration tackled inequality on three fronts: by limiting the depth of the Great Recession and restoring growth; providing health insurance coverage through the Affordable Care Act; and enacting a more progressive tax code. Together, these measures will boost after-tax incomes of the poorest Americans by 18 percent in 2017.³¹ President Obama also addressed inequality by supporting initiatives to raise wages, such as a higher minimum wage, expansions of the overtime pay rule, the Lilly Ledbetter Fair Pay Act, and the White House Equal Pay Pledge, among other actions.

When President Obama took office in January 2009, the United States was on the heels of the worst financial crisis since the Great Depression.³² Economic downturns tend to increase inequality because of higher rates of unemployment and home foreclosures. By pushing an aggressive fiscal response, the Administration eased the depth of the Great Recession and saved jobs, setting the economy back on track toward growth. One study estimates that without the broad policy response, the recession would have lasted twice as long with twice as many jobs lost.³³

The Affordable Care Act reduced inequality by expanding health insurance coverage to low-income families that are vulnerable to financial hardship in the event of a major or chronic illness. The ACA increased coverage for families with incomes below 150 percent of the Federal poverty line by 13 percentage points, and will boost incomes for families in the lowest quintile by 16 percent, or \$1,900 in 2017 alone.³⁴

Changes in the personal income tax code help build toward a more progressive tax system. The Obama Administration restored Clinton-era tax rates for the highest-income families, permanently extended Bush-era tax rates for middle-class families, and expanded the Earned Income Tax Credit (EITC) and the Child Tax Credit (CTC).³⁵ In addition to these efforts, the Obama Administration also increased funding for higher education, job training and apprenticeship programs, early childhood education, and affordable child care—critical investments that will reduce inequality in the long term. All in all, the Administration’s efforts constitute the largest increase in Federal investment to combat inequality since the Great Society programs under President Lyndon B. Johnson.³⁶

Why President Trump’s and Congressional Republicans’ Policies Will Escalate Inequality

TAX REFORM. Throughout the 2016 election, President Trump pledged to help working Americans climb back up the economic ladder. However, his policy proposals and those favored by his Cabinet appointees and allies in a Republican-led Congress will do more harm than good. In fact, President Trump’s proposals are the same trickle-down policies that have failed average workers for decades.

President Trump promises to cut taxes for the middle-class, but his proposal actually increases taxes for more than half of all single parents and at least one in five households with children. More than 26 million individuals live in households that face a tax increase, based on conservative estimates. For example, a single mom of three children making \$50,000 with no child care expenses will face a tax increase of \$1,188.³⁷ By contrast, the top

0.1 percent of earners will face an average tax break of \$1.1 million.³⁸

President Trump's proposal will also reduce the corporate tax rate to 15 percent, eliminate the alternative minimum tax (AMT) and the estate and gift tax.³⁹ President Trump supports repealing the estate tax despite the fact that it only applies to 2 out of every 1,000 estates, and is only levied on an estate's value in excess of \$10.9 million per couple.⁴⁰ Trump's overall tax reform proposal will increase the Federal debt by at least \$7 trillion over ten years, and at least \$20.7 trillion by 2036, starving the budget of necessary revenue to make investments in programs that can combat inequality in both the short and long term.⁴¹

The tax plan advanced by Republicans in Congress is equally regressive. Under the House GOP plan, the top 0.1 percent of households would receive a tax break of \$1.3 million, compared with a mere \$50 tax cut for the bottom 20 percent of earners. By 2025, a remarkable 99.6 percent of the total tax cut would go to the top 1 percent of earners.⁴²

President Trump also supports a repatriation tax holiday for corporate profits held overseas with deferred tax payments.⁴³ The tax giveaway would impose a one-time, 10 percent tax on profits held abroad—much lower than the tax due to the United States—to entice corporations to bring their profits back onshore.⁴⁴ While some imagine such a policy will spur a boon to business investment, this belief is based on the same flawed supply-side economics logic as discussed above. Corporations with sufficient resources to seek tax loopholes in offshore tax havens have no problem raising capital for investment. Thus, the untaxed profits held overseas are not holding companies back from investing in America; almost certainly, such money returning to the United

States will go straight into share buybacks and dividend payments, contributing to rising inequality. This is exactly what happened during the tax holiday that was part of the American Jobs Creation Act of 2004. Instead of boosting investment or stimulating job growth, the repatriated funds from the tax holiday were mostly used for share repurchases and dividend issues.⁴⁵

DEREGULATION. President Trump and Republicans in Congress have pledged to unleash industry by easing the regulatory burden on businesses. In his second week in office, President Trump signed an executive order mandating that every new Federal regulation must be accompanied by the repeal of two existing regulations.⁴⁶ Such a dogmatic approach to governing not only threatens the welfare of citizens, workers, and consumers, but also undermines the stability and efficiency of America's market institutions that entice business investment from all over the world.

President Trump has called the Dodd-Frank legislation a "disaster," and has promised to do "a big number" on it.⁴⁷ President Trump has already begun chipping away at Dodd-Frank through an executive order that authorizes a review of financial regulations, with the intent of scaling back reforms.⁴⁸ Despite oft-repeated rhetoric that Dodd-Frank is crippling America's financial sector, President Trump's National Economic Council Chair Gary Cohn has said, American banks are "the best, most highly capitalized banks in the world" and Federal Reserve Chair Janet Yellen testified that American banks today are outcompeting their global rivals, so clearly Dodd-Frank regulations have not imposed undue hindrance on the financial sector.⁴⁹ Rather than hurting small businesses, Dodd-Frank will contribute \$351 billion to GDP over a 10-year period by decreasing the likelihood of a future

financial crisis.⁵⁰ While Dodd-Frank addressed many of the institutional and regulatory failings that allowed the crisis to occur and left American taxpayers rather than financial executives footing the bill, the tools Dodd-Frank created to address potential future crises have yet to be tested. Undoing these reforms will re-expose American families and taxpayers to the risks of financial crisis from which some are still suffering.

President Trump has also moved toward deregulation by halting the implementation of the fiduciary rule that requires financial advisers to look out for the best interests of their clients rather than their own profits. Although President Trump campaigned on doing what's best for Main Street and not Wall Street, his actions prioritize corporate profits over consumer protection. Deregulation will encourage the same kind of excessive risk-taking in the financial industry that crashed the economy during the Great Recession. These actions are effectively laying the groundwork for the next financial crisis.

WORKER PROTECTIONS. Average workers deserve a raise, but President Trump and Republicans in Congress have resisted efforts to raise the minimum wage, expand overtime pay, and protect collective bargaining rights. The minimum wage of \$7.25 has not increased since 2009, and the tipped minimum wage of \$2.13 has not increased since 1991.⁵¹ Republicans have repeatedly bucked efforts to gradually raise the minimum wage to \$12 an hour over the course of five years, despite the fact that such an increase would raise wages for 35.1 million workers.⁵² In doing so, Republicans ignore the popular will at their own peril. Minimum wage increases remain very popular and almost always win statewide ballot initiatives. Republicans have also fought President Obama's efforts to raise the salary threshold for those

qualifying for overtime pay, currently blocking the new rule's implementation through legal action, despite estimates that it would benefit 12.5 million workers.⁵³

Labor unions, which have historically played a central role in raising wages and improving working conditions, have long faced a secular decline with the widespread loss of manufacturing production and employment in the United States. Compounding this decline are efforts by Republicans to roll back basic worker rights of collective bargaining through “right-to-work” laws, which have been adopted in 28 states.⁵⁴ The union membership rate today is nearly half of what it was in 1983, dropping from 20.1 percent to 10.7 percent.⁵⁵ The private sector union membership rate is even lower, at 6.4 percent.⁵⁶ With workers already largely marginalized in the workplace, Republicans continue to push national and state-level “right-to-work” laws, restricting worker's rights to representation in collective bargaining and freedom of association.⁵⁷

THE AFFORDABLE CARE ACT. President Trump and Republicans in Congress have vowed to repeal the Affordable Care Act despite not having a replacement. As discussed in further detail in the following chapter, repeal of the ACA will deteriorate individuals' health, weaken the economy and bleed jobs, but it will also escalate inequality. Many poor and middle-class families depend on the ACA for insurance, and repeal will make them vulnerable to financial hardship. The Congressional Budget Office (CBO) estimates that following just the first year of implementation of the repeal, 18 million individuals will lose their health insurance, including 5 million individuals who receive coverage through the Medicaid expansion. By 2026, the number of uninsured will rise by 32 million to a total of 59 million individuals.⁵⁸

CONCLUSION

If the President is serious about helping working families thrive, he should pursue policies that grow the economy from the middle out instead of the top down. This entails changing the rules of the economy to facilitate shared prosperity. Instead, President Trump and his party in Congress appear poised to take America in the opposite direction.

THE ROAD AHEAD FOR AMERICANS' HEALTH CARE SYSTEM

President Trump inherits a health care sector that provides vastly improved outcomes for consumers and employers. Because of the 2010 Patient Protection and Affordable Care Act (ACA), millions more Americans are covered by health insurance, insurance companies can no longer discriminate against people because of preexisting health conditions, and young adults are able to remain on their parents' insurance until the age of 26. Rather than building on the successes of the Affordable Care Act and tackling the entrenched special interests that stand between Americans and quality, affordable health care, President Trump and congressional Republicans are actively seeking to dismantle hard-fought gains. Congressional Republicans have voted repeatedly to repeal the ACA, but they have no plan but to serve Americans up to private insurance companies who would once again be able to deny service and extract exorbitant prices from patients and medical providers alike. The irresponsible Republican approach should raise concerns for every aspect of the health care economy, which itself accounts for more than one-sixth of the overall U.S. economy.

Before the 2010 Affordable Care Act

Prior to passage of the ACA, more than half of Americans received health coverage through their employers, though strained by rapidly rising costs, 44 million Americans were uninsured, and families purchasing individual health insurance in the private market struggled to find the coverage they needed at a price they could afford.⁵⁹ Insurance companies were able to discriminate against consumers on a number of factors that led to higher prices, higher out-of-pocket costs and health plans that provided essentially nothing in the case of catastrophic medical events. One

in three Americans struggled with medical debt even if they had health insurance.⁶⁰

With as many as 129 million non-elderly Americans with a preexisting condition, insurance companies could charge higher premiums, set annual or lifetime limits, exclude coverage for the very preexisting condition the consumer had, or deny coverage outright.⁶¹ Insurance companies could also deny coverage for maternity care, as they did in 62 percent of individual, “non-group” market plans for those without employer-based health care and ineligible for Medicare or Medicaid.⁶² Additionally, 34 percent of enrollees in individual plans had plans that did not cover substance use disorder services, and nearly one-fifth had plans that did not cover mental health care.⁶³ Consumers in the individual market had limited options that included high cost-sharing arrangements and plans that covered less than 60 percent of an enrollee’s medical needs, less coverage than is available through a bronze plan in the ACA marketplace today.⁶⁴

Further complicating matters, the pre-ACA delivery and payment systems led to steeply rising costs that did not yield better health and financial outcomes for patients, but did produce an abundance of growth in a number of large firms in insurance, hospitals, pharmaceutical medicines and medical devices, home health and long-term care industries. This consolidated monopolistic power over national (and sometimes even global) markets for the private sector services around which most U.S. health care is organized. Amid a market structure incentivized to create and capture economic rents from consumers and taxpayers, Americans were saddled with a system that provided expensive, poorly coordinated care which was denied to some while administered to others with sometimes excessive or inefficient treatments.⁶⁵

The fragmented and inaccessible system was also expensive. In 2009, the United States spent 80 percent more as a share of GDP than the median OECD country in combined public and private spending, while yielding a life expectancy two years shorter than America's OECD peers.⁶⁶ The Affordable Care Act set in motion a series of reforms that have improved health outcomes and stemmed health costs for the 317 million Americans covered under private and public insurance programs (excluding individuals covered by the U.S. military or Veterans Administration).⁶⁷

Tabulating the Benefits from Health Reform

In March 2010, President Obama signed the Patient Protection and Affordable Care Act into law. For the past six years, those reforms have increased access to coverage, slowed the growth of health costs and improved health outcomes. The ACA and subsequent legislation sought to reform the health delivery and payment systems by rewarding Medicare providers for efficient, quality care instead of solely quantity of care, and encouraging private insurers to share and use best practices.⁶⁸ Progress is being made, as 20 million more Americans now have health insurance and an estimated 24,000 fewer deaths occur annually.⁶⁹

INDIVIDUAL MARKETPLACE. The ACA revamped the individual health insurance market to bring greater affordability and transparency to consumers. Here, consumers earning up to 400 percent of the Federal poverty level can qualify for a premium support tax credit. Eighty-five percent of consumers (more than 9 million people) who secure insurance in the individual market receive a premium support tax credit to make the cost of insurance more affordable.⁷⁰

PRIVATE INSURANCE REFORMS. The ACA took on the insurance industry and implemented a series of much-needed reforms benefiting all consumers—both those shopping in the new marketplace and those receiving employer-sponsored coverage. No longer are insurance companies permitted to discriminate against those with preexisting conditions or to set annual or lifetime limits. The rate of uninsured young adults dropped 7.4 percentage points in three years as 2.3 million young adults were able to stay on their parents' health plans until age 26.⁷¹ The ten essential health benefits established by the ACA ensured that all plans would provide access to core health services, such as maternity care, behavioral health services and prescription drug coverage.⁷²

EXPANDED MEDICAID COVERAGE. The Medicaid program, which is jointly funded by the Federal Government and states, provides health coverage to nearly 70 million Americans, including children, pregnant women, low-income adults and seniors and people with disabilities.⁷³ To help drive down the number of uninsured and increase the affordability of health care options, the ACA expanded this program to reach adults up to 138 percent of the Federal poverty line, which was \$33,534 in 2016 for a family of four, up from 100 percent of the poverty line, or \$24,300.⁷⁴ While a lawsuit prevented the immediate expansion of Medicaid in all 50 states, 31 states and the District of Columbia elected to expand Medicaid and received a total sum of \$333.8 billion in transfers in 2015 from the Federal Government to benefit recipients in their states.⁷⁵

Medicaid enrollees in states that expanded Medicaid have reported stronger financial security. Since Medicaid coverage protects enrollees from catastrophic out-of-pocket medical costs, fewer

people reported difficulty paying bills because of medical expenses and debt collection dropped by \$600 to \$1,000 per new enrollee.⁷⁶ Hospitals in expansion states also benefited as higher insurance rates cut uncompensated care costs in half. These costs would otherwise be factored into the prices that hospitals bill insurance companies and individual payers.⁷⁷

MEDICARE COST SAVINGS FOR SENIORS AND TAXPAYERS. The ACA contained several provisions that strengthened and enhanced the Medicare program. Reforms in the ACA extended the solvency of the Medicare program from 2019 to 2028. In addition to providing more preventive services at no cost to seniors, the ACA helped stem the growth of Medicare spending, leading to lower than expected premium costs for seniors.⁷⁸ For example, Medicare Part B premiums for 2016 were 10 percent lower than projected, while Part D premiums were 29 percent lower, saving seniors enrolled in both programs \$336 per year as compared with expectations.⁷⁹ Seniors' cost-sharing for Parts A and B were also lower than forecast, 23 and 13 percent respectively, amounting to an average of \$372 in savings. Together, slower growth in health costs and other ACA-based reforms saved seniors an average of \$708 each in 2016 and CBO projects Medicare savings will save taxpayers \$125 billion by 2020.⁸⁰

Seniors who face high drug costs are also spending less on prescription drugs despite rising prescription drug costs.⁸¹ Prior to the ACA, seniors spending more than \$2,700 on prescriptions had to pay the next \$3,500 in drug expenses out of their own pocket before Medicare would pick up any additional costs. The ACA began reducing this financial burden—commonly referred to as the “donut hole”—for seniors and is on track to eliminate the donut hole completely by 2020. By closing the donut hole, 11

million seniors have saved an average of \$2,100 each on prescription drugs since 2010.⁸²

EMPLOYER-BASED COVERAGE. The 150 million Americans receiving employer-sponsored health insurance also saw improvements due to the ACA. Because of slower growth in health costs, employer-sponsored health plan premiums are about \$3,600 lower than projections based on pre-ACA growth levels. Adding in reductions in out-of-pocket costs, families with employer coverage saved \$4,400 in 2016.⁸³ Additionally, ACA insurance reforms extended additional financial security to 22 million workers who faced unlimited out-of-pocket costs before the law.⁸⁴

Increased financial security has freed workers from so-called “job lock”—the inability to leave one’s job because of limited ways to find quality, affordable health coverage. As we enter the fourth year of the marketplace’s operation, ACA reforms may have given workers a viable alternative to employer-sponsored coverage, and may have encouraged employment mobility and entrepreneurship.⁸⁵ These reforms for workers took hold at the same time that the economy rebounded and added 13.5 million full-time jobs. Contrary to Republican predictions that ACA would reduce employment, states’ uninsured rates in 2013 show essentially no correlation with employment growth in the years following ACA implementation.⁸⁶ In fact, states that expanded Medicaid have experienced higher job growth than those that have refused expansion.⁸⁷

TAMING HEALTH CARE COSTS. ACA reforms significantly slowed the growth of health care costs, in turn improving households’ as well as the nation’s financial outlook. Prior to the ACA, health costs were growing 5.4 percent annually during the preceding 50

years and 3.2 percent annually during the preceding decade. After passage of the ACA, health costs still grew, but at a much slower rate of 1.7 percent annually, the slowest increase in health care costs since economists began collecting this data in 1959.⁸⁸ With millions of Americans gaining health coverage, America's national expenditures on health care for the first decade after ACA are now projected to be \$2.6 trillion lower than projected before the ACA.⁸⁹ Through these multiple improvements, CBO found, the ACA will reduce the budget deficit by more than \$300 billion over 2016-2025.⁹⁰

Republicans' Plan to Reverse Progress

The ACA has worked to tame skyrocketing health costs, improve household financial stability, and strengthen the Federal Government's fiscal sustainability. To continue this progress, Congress should focus on improving the law to continue to drive down premiums and other health care costs such as the growing cost of pharmaceuticals, increase competition, and spur innovation.⁹¹ Unfortunately, with President Trump in the White House and majorities in both houses of Congress, Republicans are advancing an agenda for the 115th Congress to scrap the ACA and all of the improvements that came along with it, while leaving states and families to foot the bill.

The catch is that while Republicans are unified on tearing down the health care system, they have little consensus on what to put up in its place. This tear it down first, fix it later approach promises to spark financial concerns through every corner of the health care sector and for middle-class families unable to take on additional health care costs. CBO estimates that repealing the ACA would result in 18 million Americans losing their health coverage in the first year following enactment of repeal, and

another 14 million joining the ranks of uninsured by 2026. Taken together, Republicans' current plan would result in 32 million Americans losing their health coverage. For those who maintain coverage, CBO estimates that repeal would cause insurers to hike premiums in the individual market by 20 to 25 percent in the first year following repeal and to double them by 2026. Furthermore, the Republican approach leaves 21 percent, or one in five, of the nonelderly population uninsured.⁹²

Yet, Republicans do not need to wait to pass legislation or employ budget gimmicks to upend the health insurance market. On his first day in office, President Trump signed an executive order calling on relevant Federal departments overseeing the law to use every tool available to minimize the law's reach.⁹³ While ambiguous, the executive order signals to Federal workers and health workers alike that, at best, the entire health system is on shaky ground, and at worst, the Administration could be orchestrating a collapse of our health system as we know it.

Now that the Senate has confirmed Dr. Tom Price to head the Department of Health and Human Services, ACA-foes have the perfect fox entering the health care henhouse. A persistent ACA opponent, Secretary Price has myriad ways to slow or reverse health reform implementation that could spark the unraveling of the law, such as forcing insurance companies to hike up premiums or abandon the marketplace altogether.

Our nation's health sector is at a unique crossroad. Republican leaders must determine whether to work to stabilize markets or tear apart the system. One thing is certain—as millions of Americans are at risk of losing their health coverage, the nation's health care providers from our urban centers to our most rural outposts will be watching to see how the actions or inaction in

Washington affects their ability to provide care in their communities.

ISSUES IN HIGHER EDUCATION QUALITY, AFFORDABILITY, AND ACCESSIBILITY

In both good and bad economic times workers with higher education levels on average fare better in the labor market: earning higher wages, experiencing fewer episodes of unemployment, and being more likely to hold jobs providing benefits like health insurance and paid time off. Higher education is not only a path to a more prosperous career, it is also a part of the innovation and productivity engine that drives America's economy and secures America's technological leadership in the world. The social challenges of financing investment in higher education and the tremendous positive spillovers that higher education yield our economy make a strong case for a large public role in education.

Although workers at all education levels have seen unemployment rates fall to at least half their height in the wake of the Great Recession, today the unemployment rate for those with a college degree remains less than a third of the rate for those with less than a high school degree.⁹⁴ The unemployment rate for those with an advanced degree is even lower, at a mere 2.2 percent.⁹⁵ As wage growth begins to reflect the strength of the economy, almost every educational group saw an increase in wage growth in 2016 over the earlier stages of the recovery, but the earnings premium for college graduates remains at historically high levels.⁹⁶ Workers with higher levels of education are also more likely to have access to benefits: college graduates are twice as likely as those without a high school degree to have access to paid leave and are also much more likely to have access to health insurance.⁹⁷

Despite the efforts of the Obama Administration, there are still issues to be dealt with in the education arena. Concerns over affordability and accountability of higher education continue in policy discussions and at the kitchen tables of American families. Instead of building on this progress and addressing the key challenges of strengthening the affordability and quality of American higher education, the Trump Administration and Congressional Republicans want to undermine these efforts, often for the benefit of private industry.

In order to help students reap the benefits of higher education, the Obama Administration took actions that led to at least an additional 250,000 students attending college or completing a college degree in the 2014-2015 academic year alone, and cut taxes by an average of over \$1,800 for nearly ten million families with a family member getting a post-secondary education in 2016. At the same time, partly due to state cuts, tuition continues to rise, affecting affordability, and is deterring individuals from choosing to pursue higher education. According to the Center on Budget and Policy Priorities, tuition at four-year public colleges has risen by 33 percent since the 2007-2008 school year, while average state spending is down 18 percent per student from 2008.⁹⁸ President Trump and Congressional Republicans have not announced any plans to address this shortfall, and in fact seem likely to propose further cuts.

In order to meet the gap between need and individual financial resources, many students must take out loans. While most students can manage their student loan burdens, many cannot, and even those who are current on their loans may need to postpone investments in assets like housing as student loan payments crowd out other expenditures in personal budgets.⁹⁹ The Trump

Administration and Congressional Republicans want to expand the role of private industry in student loans—despite the fact that a private loan can cost a typical borrower almost \$250 more a month than a Federal loan—and freeze Pell grants, which would cost students up to around \$1,500 dollars a year as of 2026.¹⁰⁰

The Trump Administration also appears likely to undo the Obama Administration's Gainful Employment rules that protect students from predation by institutions charging high fees and delivering minimal learning or bleak employment prospects. The institutions affected by these rules are almost entirely for-profit institutions. Fifty-five percent of students at for-profit colleges do not complete their degrees and are by far the most likely to default on their student loans.¹⁰¹ Other non-education policies already underway in the Trump Administration have the potential to severely disrupt higher education systems, including recent actions to restrict immigration.

Institutions in the United States are a global magnet for foreign students to study in our universities, a significant share of whom endeavor to remain in the country, contributing to the economy with newly acquired skills and knowledge. U.S. undergraduate institutions enrolled over 400,000 international students in 2014 and graduate programs enrolled almost 350,000.¹⁰² International students and professors contribute to our overall productivity; research has shown that international faculty are more productive in research.¹⁰³

Finally, we need to ensure that students for whom higher education is not the right choice still have the chance to develop skills that will help them achieve a more secure livelihood and to contribute more to overall U.S. economic performance. For instance, apprenticeships are another way for workers to gain

skills that help them succeed in the workplace. Employers get an average return of almost 50 percent on apprenticeship investments, and the average starting wage for an apprentice is above \$60,000.¹⁰⁴ From 2014 to 2016, the United States added more than 125,000 new apprenticeships, the largest increase in nearly a decade.¹⁰⁵ However, Congressional Republicans have shown limited interest in funding apprenticeship programs.¹⁰⁶

LABOR MARKET BENEFITS OF EDUCATION

The Great Recession underscored a long evident truth about the importance of education: those with higher levels of education are better able to succeed in today's labor market. In the wake of the Great Recession, unemployment of those with at least a bachelor's degree never rose above 5 percent, while for those with less than a high school degree it rose to a high of 15.8 percent.¹⁰⁷ The relative resilience of labor markets for workers with higher levels of education throughout the downturn and recovery is reflected in their higher earnings. Over the course of 2016, those with less than a high school degree saw their nominal weekly wages increase by 3.4 percent, those with a high school degree by 1.2 percent, those with some college by 4.4 percent, and those with at least a college degree by 2.0 percent.¹⁰⁸ The earnings premium for college graduates is at historic levels: in 2015 it reached 70 percent.¹⁰⁹ This premium has been steadily trending up from under 15 percent in 1975 to its current level.

The increased earnings of workers with higher levels of education accumulate impressively over the course of a lifetime: the median worker with a bachelor's degree will earn nearly \$1 million more than a similar worker with only a high school diploma, and a worker with an associate degree will earn about \$330,000 more.¹¹⁰ While the entire premium is not attributable to education (those

who attend college differ from those who do not), researchers calculate that attending college is responsible for an increase in earnings of 5 to 15 percent on average per year of college.¹¹¹

Education also improves the probability that individuals' income levels will surpass those of their parents. At a time of decreasing mobility, ensuring that individuals have increased education levels has become even more important. Children born to parents in the bottom income quintile are 15 percentage points more likely to out-earn their parents if they have a college degree. Given the high likelihood that these children out-earn their parents (81 percent of those with no college degree out-earn their parents), it is also useful to look at children whose parents are in the middle income quintile. Eighty-six percent of these children who earned a college degree out-earn their parents, compared with 60 percent of those who did not.¹¹²

Workers with higher levels of education also have better access to non-wage benefits. For instance, 71 percent of those with a bachelor's degree or higher had access to paid leave, whereas only 35 percent of those with less than a high school degree did.¹¹³ Only 61 percent of those with less than a high school degree had health insurance, compared with over 90 percent of those with a bachelor's degree or higher.¹¹⁴

Macroeconomic Benefits

Higher levels of education do not just benefit the individual worker—it creates widely-shared benefits for our economy overall. Researchers have found that GDP growth is positively related to education of the populace.¹¹⁵ Higher productivity from more educated workers can actually spillover to other workers, leading to more productivity among these workers.¹¹⁶ Researchers

have found that a workforce that has stronger mathematics and scientific skills “has a consistent, stable, and strong relationship with economic growth.”¹¹⁷ Researchers have also emphasized that it is not just the quantity of schooling, but the quality of schooling that affects growth, reflecting the importance of measures that direct students into programs that give them the skills they need to succeed.¹¹⁸ Without the innovation and productivity growth flowing from workers with higher education and our world-leading universities, future improvements in U.S. economic growth and living standards would be severely curtailed.

The Public Role in Higher Education

There are several fundamental economic reasons for a strong public role in education, and higher education in particular. First, while an individual certainly can gain skills and knowledge making them more productive and capable of finding more favorable employment opportunities, the gains from education are not fully captured by the individual, but spillover to benefit others in the economy. Economists have long known that, where the private gains from investment are not fully appropriable, private individuals will tend to underinvest in those assets, even when they may gain from doing so. The higher productivity and individual earnings associated with higher education carry a host of social benefits from higher tax revenue, to lower government expenditure on transfers, decreased crime, improved health, and increased productivity of other workers.¹¹⁹

Second, many potential students face credit constraints. The private market is often unwilling to supply loans to students because the asset they borrow is difficult for lenders to collateralize, and the viability of the loan—particularly as higher education costs rise—is less certain as the variation in returns for

higher education is increasing. Thus, the private loan market supplies an inefficiently low amount of credit, an issue that is mitigated by the Federal Government's role in higher education financing.

Third, students may not understand the variations in quality of schools or effects of program or study choices. They may also lack information about costs and options for financial aid. Low-income and first-generation prospective students can overestimate the costs by two or three times the actual amount.¹²⁰ In addition, the complexities of Federal aid can deter students: one study found that 30 percent of college students who would qualify for a Pell grant fail to file the necessary paperwork.¹²¹

Despite the efforts of the Obama Administration, challenges remain. Costs of college remain out of reach for many individuals—even with financial aid—and many borrowers still struggle to repay student loans that can amount to more than the cost of a house in many parts of the country. Low-quality schools that prey on unwitting students demand further regulation to ensure that they do not take advantage of students striving to gain a good education. PreK-12 education also needs to be strengthened so that students enter college with the knowledge and abilities they need to succeed.

Unfortunately, President Trump and Congressional Republicans are unwilling to solve these market failures. Instead of putting forth plans to tackle these problems, the Trump Administration wants to roll back the steps Democrats have taken to improve chances for students to get an education that makes them and their families better off. Republican actions would hurt students' ability to pay for college, increase student susceptibility to bad actors, and undermine the PreK-12 system that prepares students for college.

What is Needed to Improve Student Access and Benefits from Higher Education

Over the past eight years, the Obama Administration took steps to ensure that students can benefit from access to education and reap the benefits in the labor market by helping students pay for college; easing the burden of student loan debt; improving information about college quality and protecting students from low-quality programs; and ensuring more students are college-ready. Although progress has been made, more action is needed to ensure that students are receiving the education they need to succeed in the workplace and to fuel the competitiveness of business in America in a globally integrated and competitive economy.

AFFORDABILITY. During the Great Recession, as states cut funding for public institutions, tuition and fees rose. Tuition rose by 9.4 percent for the 2009-2010 school year and by 6.6 percent for the 2010-2011 school year.¹²² To help, President Obama and Congress increased the maximum Pell Grant award by roughly \$1,000. Pell Grants reduced the cost of college by \$3,700 for over 8 million students last year. Given research showing that an offer of \$1,000 in grant aid increases the probability of attending college by 3.6 percentage points, these increases had large effects on college attendance and completion.¹²³ The Council of Economic Advisers found that Pell Grant expansions under the Obama Administration led to at least an additional 250,000 students attending college or completing a college degree in 2014-2015, for an additional \$20 billion in earnings and a 2:1 return on the investment. The Obama Administration established the American Opportunity Tax Credit (AOTC) to reduce taxes for low- and middle-income families with a member attending college. In

2014, 23 percent of credit and tuition deduction dollars went to filers with incomes under \$25,000, compared with 5 percent before the AOTC. In 2016, the AOTC cut taxes by an average of over \$1,800 for nearly ten million families.¹²⁴ Due to the Obama Administration's actions, even as the sticker cost of attendance rose from 2009 to 2017, the price after grants and tax aid rose more slowly, or even fell.¹²⁵

The Obama Administration also took steps to both improve access to Federal student loans and improve affordability. The 2010 student reform law shifted over \$60 billion in savings to students from private financial institutions and banks and kept interest rates for student borrowers low. The Obama Administration also worked to ensure that students have affordable loan payments. While most students have modest levels of debt (59 percent of borrowers owed less than \$20,000 in 2015) or have high earnings to match their high debt levels (as happens for instance for many law school graduates), borrowers who attend low-quality schools or leave without a degree struggle with repayment. In fact, defaults are actually more likely among those with lower debt burdens because those borrowers tend to not have received the quality education necessary to realize earnings gains.¹²⁶ In response, the Administration expanded income-driven repayment plans: over 20 percent of borrowers are now in income driven repayment, up from less than 4 percent in 2011.¹²⁷

Although most students have levels of debt they can handle, student loan debt may be causing them to delay or forgo other key milestones in life such as buying a home, getting married, and saving for retirement. Investments in housing by young Americans with student loan debt have yet to return to their pre-recession levels.¹²⁸ Research from the Federal Reserve Bank of

Boston shows that student loan debt is associated with lower wealth holdings, due to greater expenses and lower disposable income with which to build savings.¹²⁹

Many students also continue to have “unmet need”—the gap between college costs and what students can afford to pay on their own or with grants.¹³⁰ The problem is particularly acute among lower-income students: 95 percent of full-time students in community college in the lowest income quartile had unmet need in 2011-2012.¹³¹ Need-based grants can increase the probability that students not only attend college, but also graduate.¹³²

Instead of helping students afford higher education, Republicans have proposed freezing the maximum Pell Grant for ten years, at the same time as tuition and other costs are increasing.¹³³ Maximum Pell Grants are already only about 30 percent of the cost of attending a 4-year public college, down from about 70 percent in 1980. If their plan were put into place, by 2025 it would only cover about 20 percent of the cost, hurting the ability of students from low-income families to get an education and succeed in the labor market.¹³⁴ Assuming current inflation projections, this would cost students up to around \$1,500 dollars in 2026.¹³⁵

The Trump Administration does not appear to be interested in a large driver of increases in tuition costs, which is cuts in state funding.¹³⁶ On average, states are spending 18 percent less per student than before the recession, and spending in nine states is down by more than 30 percent.¹³⁷ Decreases in state spending contributed to high tuition increases: tuition at public 4-year schools for the 2009-2010 school year was up by 9.4 percent over the previous year, adjusted for inflation.¹³⁸ While the growth rate has now slowed to 1.6 percent in the most recent school year, students have not seen a decrease since 1980-1981.¹³⁹ The Trump

Administration has not proposed steps to increase state funding, and if anything seems likely to propose further cuts.

Congressional Republicans have also called for expanding the role of private industry in student loan origination, which would make education less affordable for many students.¹⁴⁰ Many students find it difficult to obtain fair private-sector loans. Future earnings from education are difficult to predict, and lenders do not have tangible assets that they can claim in the case of default (as opposed to, for example, a mortgage).¹⁴¹ In addition, private sector loans are often more expensive for students: they can have interest rates that are at least four times as high as those available from the Federal Government.¹⁴² That would mean that the average student borrower graduating from college in 2015 could be paying almost \$250 more a month in student loans if they borrow from a private lender, for a total cost of almost \$30,000 over the life of the loan.¹⁴³ Finally, while, the Federal Government offers income-based repayment to help payers manage their loans, current private sector loans do not offer such services.¹⁴⁴

ACCOUNTABILITY. The Obama Administration also worked to inform students about colleges that may not serve them well. The Department of Education's College Scorecard provides data on college outcomes for all institutions, allowing students to see how colleges perform on measures like graduates' employment. In addition, given that some colleges fail to meet baseline levels of quality, the Obama Administration took actions to protect students. Fifty-five percent of students at for-profit colleges do not complete their degrees, and they are by far the most likely to default on their student loans. That is why the Gainful Employment regulations state that Federal aid will be eliminated to career college programs that consistently fail accountability

standards. In 2014, about 1,400 programs serving 840,000 students did not pass these standards. Ninety-nine percent of these programs are at for-profit institutions. The Obama Administration also released rules to protect students from aggressive and deceptive recruiting practices.¹⁴⁵

In contrast, President Trump wants to decrease college accountability to the Federal Government, claiming that it would save costs.¹⁴⁶ Instead, he is likely to make students more susceptible to for-profit institutions that make false claims to students and leave them struggling with student loan debt. Investors seem to believe that President Trump will be good for the profits of for-profit schools: stock prices of for-profit college companies rose sharply after the election.¹⁴⁷ This supposition is backed up by the testimony of Secretary of Education Betsy DeVos during her confirmation, who stated that the Department of Education would review the Gainful Employment rule.¹⁴⁸ Despite Republicans' dire claims, research shows that sanctions on for-profit colleges lead to students enrolling in local community colleges, meaning that they can access education at a more reasonable price.¹⁴⁹

CONNECTING TO ELEMENTARY AND SECONDARY EDUCATION. Finally, President Trump and Congressional Republicans have proposed actions that would undermine our K-12 educational system expected to make more students unprepared for higher education. President Trump has proposed taking \$20 billion in Federal funding and turning them into block grants for vouchers in the states.¹⁵⁰ Research on other types of block grants to states has shown that these funds tend to be used for purposes that are not the original intention of the grants.¹⁵¹ Block grants also respond poorly to changing conditions—such as an increase in the

number of students—that may require more funding.¹⁵² Vouchers also do not work in rural areas or other areas of low population density where there may be only one or two schools.¹⁵³

CONCLUSION

Although the Obama Administration has taken more actions to help students reap the benefits of higher education in an affordable way, more needs to be done to reverse decades of rising costs, ensure that students are protected from predatory or low-quality institutions, and prepare students for a college education.¹⁵⁴ Instead of taking steps to build on this progress, the Trump Administration and Congressional Republicans want to let the private sector once again benefit at the expense of students, cut funding that helps students get a good education, and forgo the societal benefits of increased college attendance. These proposals are not good for students or our economy.

ECONOMIC RISKS OF AND OPPORTUNITIES OF CLIMATE CHANGE

Global climate change presents some of the greatest risks and opportunities for the U.S. economy today and in the decades ahead. The effects of climate change are already having significant impacts on the U.S. and global economy. These costs and disruptions will only continue to grow in the future, particularly if the United States and others in the global community delay actions to avert irreversible climate changes.

In the near term, increased temperatures are projected to result in adverse health outcomes for individuals, potentially lowering life expectancies and increasing the cost of health care. Labor productivity for workers that spend substantial time outside will decrease, and agricultural output along with it. Rising temperatures are also linked to an increase in extreme weather events, such as heat waves and floods, which cause damage to private and public property, disrupt economic activity, and squeeze public budgets. Further, rising sea levels will displace coastal communities, can drastically lower property values, and raise the specter of widespread crop failures. In the longer term, these changes will dramatically reshape how humans live across the globe.¹⁵⁵

The risks posed by climate change also present opportunities to attract new investment and create good, new jobs producing world-leading technological innovations—opportunities that will benefit in America’s urban and rural areas alike. Investment and job creation, however, are unlikely to materialize on their own. Advanced research in technologies relevant for renewable energy generation and distribution, and technologies for climate change adaptation face concrete market failures that result in less

investment supplied from the private sector than is socially optimal. This would be true even without the costly subsidization of fossil fuel-based energy, even though innovation and productivity gains are making renewable energies increasingly cost competitive with legacy fossil-fuel technologies.

Recognizing these risks and opportunities, the Obama Administration took historic strides to steer the United States on a path toward lowering carbon emissions and mitigating the worst of climate change's effects, while stimulating investment in the renewable energy systems of the future. President Trump, however, has repeatedly called climate change a hoax, and members of his Administration, along with many Republican members of Congress, have threatened to roll back the progress made to date and attempted to muzzle privately and publicly funded scientific research that threatens the status quo.¹⁵⁶ If climate change and science skeptics prevail, failure to mitigate the risks and prepare for the devastation of climate change will saddle future generations with severe environmental and economic challenges. Further, by obstructing the transition to a clean energy economy already underway, Republicans are preventing American workers and businesses from leading the world on what may prove the 21st Century's most important technological revolution.

Hidden and Explicit Pollution Subsidies Distort Business and Consumer Choices

The issue of climate change raises numerous textbook examples of negative externalities—costs of an individual's choice or activity that are borne by people beyond that individual. These costs are not incorporated in the market price signals that consumers and investors face. These negative externalities

resulting in climate change from greenhouse gas emissions are significant and pervasive. When buyers and sellers engage in transactions that produce emissions and other pollutants, they generally are not being asked to fully pay for the cost of the damage to the environment and economy that result. Because prices in these markets do not reflect the true costs, individual choices to consume goods with high negative externalities lead to outcomes that produce more polluting emissions than is optimal for general welfare.

Without a policy that internalizes the costs that carbon emissions and other pollution create, such as a carbon tax, the price of carbon will not make economic sense. Recent research from the National Bureau of Economic Research finds that these incentive structures, along with climate change skepticism, are lowering the pace of innovation and implementation for clean energy technologies.¹⁵⁷

Current government policies exacerbate this even further, though. Already implicitly subsidized by a policy failure to account for the costs of pollution, the Federal Government explicitly subsidizes fossil fuel production with \$4 billion per year in tax credits, incentivizing the over-exploitation of oil, coal and natural gas.¹⁵⁸ The government has also leased out large swaths of Federal land to coal companies at less than prevailing market values. Flaws in the auction and leasing processes for public lands and use rights for extractive industries have resulted in coal companies receiving extremely generous leases at below-market rates, subsidizing coal production by more than \$300 million a year.¹⁵⁹ These policies further distort the energy market to advantage fossil fuels at the expense of the environment and economy.

These market failures have led to rapid rises in greenhouse gas emissions tracing back to the Industrial Revolution. Since 1800, the concentration of carbon dioxide (CO₂) in the atmosphere—the main greenhouse gases emitted by humans—has risen by 45 percent, with half of that increase occurring in the past 35 years.¹⁶⁰ Scientists overwhelmingly conclude that these increased emissions (and those of other greenhouse gases) are driving the warming that the globe is experiencing.¹⁶¹ Indeed, 2016 was the warmest year on record, and the third straight year in which that record was broken. Moreover, 16 of the 17 warmest years on record occurred between 2001 and 2016.¹⁶²

Although challenging to quantify costs of the myriad externalities associated with greenhouse gas emissions and climate change, the Obama Administration estimated a measure of the Social Cost of Carbon measure, which attempted to calculate this cost. The measure accounts for changes in net agricultural productivity, human health, property damages from floods and energy system costs, among other factors. Overall, the Administration estimated that one ton of CO₂ emitted in 2015 cost society \$42 that is not incorporated into market pricing of carbon producing consumption.¹⁶³ With 6.9 million tons of CO₂ emitted annually in the United States, this is nearly \$300 billion in costs that society bears each year as a result of price signals failing to coordinate efficient individual decisions in the private marketplace.¹⁶⁴ The measure projects that this cost will rise over time, as the marginal impact of further emissions increases with the growing prominence of greenhouse gasses in Earth's atmosphere, and is forecast to rise to \$81 per ton of CO₂ by 2050.¹⁶⁵

A reliable Social Cost of Carbon measure allows Federal regulators and policymakers to factor widely felt climate change impacts into cost-benefit analyses. Some experts, however, believe that this measure errs on the conservative side by not fully incorporating the full range of costs. One recent study suggests that the cost could already be as high as \$225 per ton of CO₂, which equates to about an additional \$2.21 per gallon of gasoline.¹⁶⁶

In 2006, the United Kingdom released a review of the scientific research on climate change. This report, known as the Stern Review, concluded that climate change will decrease global GDP by 5 to 20 percent per year in the long run if no action is taken to mitigate it.¹⁶⁷ A more recent study suggests that the costs will likely be at the high end of that range—costing the global economy 20 percent of GDP by the year 2100.¹⁶⁸ Unless aggressive steps are taken now to make headway in mitigating and adapting to the challenges of climate change, changes will be irreversible and will dramatically reshape the lives of Americans and the rest of the world.

Risks of Reversing Progress

There is little time to lose in mitigating the worst effects of climate change.¹⁶⁹ The Obama Administration took important strides toward putting the United States on a path to do this: investing in clean energy research and deployment; establishing emission standards for power plants; updating and issuing new efficiency standards for vehicles and appliances; and committing with a group of 197 countries in agreeing to work together in mitigating climate change in the 2015 Paris Agreement.¹⁷⁰ The rhetoric of President Trump and officials in his Administration, as well as that of congressional Republicans, however, forebode hostile

resistance to the progress made to date that will set America back in its efforts to tackle climate change and to harness the economic opportunities created by this existential environmental challenge.

Republicans frequently and wrongly cite Obama-era regulations as the main driver in the declining fortunes of the coal sector and coal's share in the U.S. energy portfolio.¹⁷¹ In reality, though, coal's declining market share is due to the emergence of cheap, abundant natural gas and declines in the cost of renewable energy production, even despite the implicit subsidy to coal production and energy generation from externalities inadequately addressed by law making and regulation.¹⁷² The hardships that traditional coal-driven economies are an important concern for policymakers, who must find ways to deliver investment and opportunities for re-employment in good jobs for workers in coal country as the industry becomes increasingly economically inviable. But any actions taken by Trump to artificially prop up legacy fossil fuel companies are unlikely to permanently reverse the market-based trends leading toward cleaner energy sources. They will, however, delay progress toward transitioning to clean energy and mitigating the effects of climate change.

As part of the Paris Agreement, the United States and other countries agreed to work together to keep global temperatures from rising more than 2 degrees Celsius above pre-industrial levels—the level of warming necessary to avert the most devastating effects of climate change.¹⁷³ Altogether, these countries likely need to limit further carbon emissions to under 800 gigatons in order to meet the goal. If all of the fossil fuels in already-producing mines and oil fields were consumed, though, total emissions would be more than 940 gigatons of CO₂.¹⁷⁴ This suggests that countries should be looking to transition away from

existing fossil fuel extraction and energy generation, not subsidizing the opening of new mines and fields. President Trump's energy agenda, however, could include restarting sweetheart Federal contracts for coal reserves.¹⁷⁵ This would further distort the market advantage enjoyed by fossil fuels from implicit subsidies and incentivize fossil fuel producers to ramp up extraction, putting GHG targets farther out of reach for Americans and the rest of the world.

President Trump and the GOP have also pledged to stop factoring climate change into regulatory decision making, such as the Administration's decision to proceed with the Dakota Access Pipeline. President Trump's transition webpage said that his Administration would stop focusing on "phony" environmental challenges, and pledged to repeal Obama-era regulations and withdraw from the Paris Agreement.¹⁷⁶ Speaker Paul Ryan's Better Way plan stated that "efforts to target [greenhouse gas] emissions are a serious and growing barrier to energy development and use."¹⁷⁷ In addition to the potential for actually repealing laws and regulations that reduce greenhouse gases, this is a strong signal to businesses and individuals that energy efficiency and emission reduction are no longer priorities for the Federal Government.

One of the primary Republican targets for deregulation is the Clean Power Plan (CPP), which set carbon emission targets for power plants and gave states the autonomy to tailor their own plans for meeting these targets in ways that best fit each state's unique situation. The CPP is projected to decrease emissions by 870 million tons of carbon by 2030, which would create a net benefit to the economy of \$25 billion to \$45 billion in 2030.¹⁷⁸ Removing these targets would make it much harder to meet long-term

emission-reduction targets, and more likely that Americans will face the consequences of climate change.

The United States has a big role to play in taking on climate change, as the second-largest contributor to global carbon emissions according to the latest data available.¹⁷⁹ The United States also committed to support the Paris Agreement by providing resources to developing countries to help them tackle climate change. Withdrawing from the Agreement and not making progress toward its targets would greatly harm global efforts to mitigate the effects of climate change. It would also make the United States one of the few countries not actively addressing the threat of climate change.

This will likely only delay the United States' efforts to take on climate change, but it could also have lasting effects on the economy. The Council of Economic Advisers found that if a delay causes global temperatures to rise to 3 degrees Celsius above pre-industrial temperatures, global output would fall by 0.9 percent. Additionally, when the United States inevitably rejoins the fight against climate change, even more dramatic steps will need to be taken, which will undoubtedly cause the cost of taking those actions to rise.¹⁸⁰

Even under the most optimistic scenario, in which the United States and other countries aggressively work toward mitigating climate change, some adverse effects are unavoidable. Temperatures are already on the rise, and extreme weather events are becoming more frequent.¹⁸¹ Policymakers in the United States need to prepare for these impacts at the same time as working toward mitigation by enhancing infrastructure to withstand extreme weather, building up emergency management resources and funds, and educating people and businesses to make smart

energy use choices and investments. If the Trump Administration and Republicans in Congress fail to address these issues seriously, state and local governments, businesses, and individuals will be saddled with the full costs of climate change's unavoidable consequences.

Missing Opportunities to Lead a New Energy Revolution

Republicans frequently depict climate change as a choice between helping the environment and fostering economic growth, but the two can be powerful complements when combined with smart policymaking. Many countries, including the United States, have seen their economies grow while simultaneously decreasing emissions in recent years.¹⁸² The Obama Administration demonstrated how this can be accomplished, investing \$90 billion in clean energy research and deployment in response to the Great Recession—these investments supported more than 100,000 jobs per year from 2009 to 2015 while spurring major advances in renewable energy.¹⁸³ The Trump Administration and GOP, however, can hinder the growth of the clean energy industry in America, and in turn cause American workers to miss out on the jobs and other economic benefits that it will create.

The clean energy sector is already a substantial part of America's economy. More people now work in solar electricity generation (373,000 workers) than in coal, natural gas and other fossil fuel industries combined (198,000 workers). Wind energy, too, is a major employer in the United States, with more than 100,000 jobs in 2016. Overall, an additional 2.2 million Americans are employed in the design, manufacturing and installation of energy efficiency goods and services, according to the Department of Energy estimates.¹⁸⁴

The industry has vast potential to continue growing. Estimates suggest that fully transitioning to clean energy would create more jobs than are lost in fossil fuel sectors—potentially gaining two million net new jobs.¹⁸⁵ This aligns with research that demonstrates that most job growth comes from new and growing firms, not mature incumbents.¹⁸⁶

Clean energy jobs are generally good jobs, as well. Brookings Institution researchers found that workers in the Clean Economy earned wages 13 percent higher than the median wage in 2011, while the jobs also required less formal education than the average job. Further, the industry is more heavily concentrated in manufacturing and exports a greater share of its products than the economy overall.¹⁸⁷ If the Trump Administration wants to follow through on its promises to raise wages for the working class, support American manufacturing, and reduce the trade deficit, investing in clean energy would be a good place to start.

Evidence to date, though, suggests that the Trump Administration and Congressional Republicans are more likely to attempt to hinder this transition by reducing or even zeroing out Federal investment in clean energy and continuing to distort markets to advantage fossil fuels.¹⁸⁸ While they are doing this, the rest of the globe will be increasing their investments and efforts to transition to the energy sources of the future. China recently announced that they would invest more than \$360 billion in renewable energy by 2020—four times the investment the United States made in the American Recovery and Reinvestment Act.¹⁸⁹ Other countries, too, are ramping up investments in clean energy technology.¹⁹⁰

CONCLUSION

It is likely that America's clean energy sector will continue to grow despite Republicans' best efforts. However, absent a significant role for the public sector to illuminate the path ahead and to correct market failures by setting welfare-enhancing incentives, the United States risks fall behind and becoming dependent on imported renewable energy technology, goods, and services. With the Federal Government no longer supporting the industry while other countries are enhancing their support, though, it is also likely that some investments that would have otherwise been made in America will go to China and other countries. Having a president who is explicitly and vocally opposed to their mission will factor into companies' decisions on whether to locate factories and other assets in the United States, or to locate them in countries where they will receive support and investment from the government. Rather than leading the United States to energy independence, President Trump is likely leading us to a future where America is importing solar panels, wind turbine parts and batteries from China or other foreign sources.

ENDNOTES

¹ That is, production and non-supervisory workers.

² Blinder, Alan S. and Mark Zandi. “The Financial Crisis: Lessons for the Next One.” Center on Budget and Policy Priorities. October 15, 2015. <http://www.cbpp.org/sites/default/files/atoms/files/10-15-15pf.pdf>.

³ A “job-year” is the equivalent of one full-time job for one year. Council of Economic Advisers. “Chapter 1: Eight Years of Recovery and Reinvestment,” In *Economic Report of the President*. January 2017.

⁴ NBER business cycle dating identifies June 2009 as the overall economy’s business cycle bottom. However, consistent with the preceding two business cycles, the U.S. labor market remained depressed for some time. JEC Democrats date the labor market trough from the Great Recession to February 2010. <http://www.nber.org/cycles.html>.

⁵ Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman. “Economic growth in the United States: A tale of two countries.” Washington Center for Equitable Growth. December 6, 2016. <http://equitablegrowth.org/research-analysis/economic-growth-in-the-united-states-a-tale-of-two-countries/>.

⁶ Zucman, Gabriel and Emmanuel Saez. “Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data.” Accessed February 15, 2017. <http://gabriel-zucman.eu/uswealth/>

⁷ Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman. “Economic growth in the United States: A tale of two countries.” Washington Center for Equitable Growth. December 6, 2016. <http://equitablegrowth.org/research-analysis/economic-growth-in-the-united-states-a-tale-of-two-countries/>; and, Stiglitz, Joseph. *Rewriting the Rules of the American Economy*. New York: Roosevelt Institute, May 2015.

⁸ Okun, Arthur M. *Equality and Efficiency: The Big Tradeoff*. Washington, DC: Brookings Institution Press, 1975.

⁹ Council of Economic Advisers. “Chapter 1: Inclusive Growth in the United States.” In *Economic Report of the President*. February 2016.

¹⁰ Ostry, Jonathan D., Andrew Berg, and Charalambos G. Tsangarides. “Redistribution, Inequality, and Growth.” International Monetary Fund. February 2014. <http://www.imf.org/external/pubs/ft/sdn/2014/sdn1402.pdf>.

¹¹ Bivens, Josh and Lawrence Mishel. “The Pay of Corporate Executives and Financial Professionals as Evidence of Rents in Top 1 Percent Incomes.” *Journal of Economic Perspectives* 27, no. 3 (2013): 57-78.

¹² Stiglitz, Joseph. *Rewriting the Rules of the American Economy*. New York: Roosevelt Institute, May 2015; Council of Economic Advisers. “Chapter 1: Inclusive Growth in the United States.” In *Economic Report of the President*. February 2016; and, Piketty, Thomas, Emmanuel Saez, Stefanie Stantcheva. “Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities.”

National Bureau of Economic Research Working Paper 17616. Revised March 2013. <http://www.nber.org/papers/w17616>.

¹³ Stiglitz, Joseph. *The Price of Inequality: How Today's Divided Society Endangers Our Future*. New York: W. W. Norton & Company, April 2013.

¹⁴ *Ibid*; and, Ostry, Jonathan D., Andrew Berg, and Charalambos G. Tsangarides. "Redistribution, Inequality, and Growth." International Monetary Fund. February 2014. <http://www.imf.org/external/pubs/ft/sdn/2014/sdn1402.pdf>.

¹⁵ Mondragón-Vélez, Camilo. "How Does Middle-Class Financial Health Affect Entrepreneurship in America?" Center for American Progress. May 2015. <https://cdn.americanprogress.org/wp-content/uploads/2015/05/MiddleClassEntrepreneurs-5.7.pdf>.

¹⁶ OECD. *In It Together: Why Less Inequality Benefits All*. Paris: OECD Publishing, 2015.

¹⁷ Alesina, Alberto and Dani Rodrik. "Distributive Politics and Economic Growth." *Quarterly Journal of Economics* 109, no. 2 (1994): 465-490. <https://www.mtholyoke.edu/courses/epaus/econ213/rodrिकासina.pdf>.

¹⁸ "President Obama's Farewell Address: Full Video and Text." *The New York Times*. January 10, 2017. https://www.nytimes.com/2017/01/10/us/politics/obama-farewell-address-speech.html?_r=0.

¹⁹ Pickett, Kate and Richard Wilkinson. "The Spirit Level: Why Greater Equality Makes Societies Stronger." New York: Bloomsbury Press, April 2010.

²⁰ Pickett, Kate and Richard Wilkinson. "The Spirit Level: Why Greater Equality Makes Societies Stronger." New York: Bloomsbury Press, April 2010; Milanović, Branko. *Global Inequality: A New Approach for the Age of Globalization*. Cambridge: Harvard University Press, April 2016; Bjørnskov, Christian. "How does social trust affect economic growth?" *Southern Economic Journal* 78.4 (2012): 1346-1368.

<http://www.jstor.org/stable/pdf/41638856.pdf>; Jayadev, Arjun, and Samuel Bowles. "Guard labor." *Journal of Development Economics* 79 no. 2 (2006): 328-348; Boushey, Heather and Adam Hersh. "The American Middle Class, Income Inequality, and the Strength of Our Economy." Center for American Progress. May 17, 2012.

<https://www.americanprogress.org/issues/economy/reports/2012/05/17/11628/the-american-middle-class-income-inequality-and-the-strength-of-our-economy/>; and Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman. "Economic growth in the United States: A tale of two countries." Washington Center for Equitable Growth. December 6, 2016. <http://equitablegrowth.org/research-analysis/economic-growth-in-the-united-states-a-tale-of-two-countries>.

²¹ Saez, Emmanuel and Gabriel Zucman. "Wealth Inequality in the United States Since 1913: Evidence from Capitalized Income Tax Data." *The*

Quarterly Journal of Economics 131, no. 2 (May 2016): 519-578.

<http://gabriel-zucman.eu/files/SaezZucman2016QJE.pdf>.

²² Demos and Institute for Assets & Social Policy. “The Racial Wealth Gap: Why Policy Matters.” 2015.

http://www.demos.org/sites/default/files/publications/RacialWealthGap_2.pdf;

Demos and Institute for Assets & Social Policy. “The Asset Value of Whiteness.” February 2017.

http://www.demos.org/sites/default/files/publications/Asset%20Value%20of%20Whiteness_0.pdf.

²³ While many developed countries exhibit similar levels of inequality in market incomes, other countries stand apart from the United States in the way their tax and transfer systems redistribute from the highest rungs of the income ladder to those down below. Measured in post-tax and transfer income—that is after redistribution and including social spending programs—the United States ranks most unequal among the advanced countries. For example, see Gornick, Janet C. and Branko Milanovic. “Income Inequality in the United States in Cross-National Perspective: Redistribution Revisited.” Luxembourg Income Study Center. May 4, 2015.

https://www.gc.cuny.edu/CUNY_GC/media/CUNY-Graduate-Center/PDF/Centers/LIS/LIS-Center-Research-Brief-1-2015.pdf.

²⁴ “The Middle-Class Squeeze: A Picture of Stagnant Incomes, Rising Costs, and What We Can Do to Strengthen America’s Middle Class.” Edited By Jennifer Erickson. Center for American Progress. September 14, 2014.

<https://www.americanprogress.org/issues/economy/reports/2014/09/24/96903/the-middle-class-squeeze/>.

²⁵ Giovannoni, Olivier. “What Do We Know About the Labor Share and the Profit Share? Part III: Measures and Structural Factors.” Levy Economics Institute of Bard College Working Paper 805. May 2014.

http://www.levyinstitute.org/pubs/wp_805.pdf.

²⁶ Stiglitz, Joseph. *Rewriting the Rules of the American Economy*. New York: Roosevelt Institute, May 2015.

²⁷ *Ibid.*

²⁸ Hsieh, Chang-tai, et al. “The Allocation of Talent and U.S. Economic Growth.” *National Bureau of Economic Research* Working Paper 18693. January 2013.

<http://www.nber.org/papers/w18693.pdf>.

²⁹ Weller, Christian E. and Amy B. Helburn. “Financial Stress and Asymmetric Financial Decisions.” PERI Working Paper 243, Political Economy Research Institute, University of Massachusetts Amherst. December 2010. <https://core.ac.uk/download/pdf/6262350.pdf>.

³⁰ Heckman, James J. and Dimitriy V. Masterov. “The Productivity Argument for Investing in Young Children.” *Review of Agricultural Economics* 29, no. 3: 446-493.

http://jenni.uchicago.edu/papers/Heckman_Masterov_RAE_2007_v29_n3.pdf

³¹ The policies of the Obama administration will boost after-tax incomes of the bottom quintile of households by 18 percent and reduce incomes of the top 0.1 percent by 10 percent in 2017. Altogether, these policies have scaled back one-third of the decline in the share of after-tax income of households in the bottom quintile that occurred between 1979 and 2007. Council of Economic Advisers. “Chapter 3: Progress Reducing Inequality,” In *Economic Report of the President*. January 2017.

³² Bivens, Josh. “Worst Economic Crisis Since the Great Depression? By a Long Shot.” Economic Policy Institute.

http://www.epi.org/publication/snapshot_20100127/.

³³ Blinder, Alan S. and Mark Zandi. “The Financial Crisis: Lessons for the Next One.” Center on Budget and Policy Priorities. October 15, 2015.

<http://www.cbpp.org/sites/default/files/atoms/files/10-15-15pf.pdf>.

³⁴ Council of Economic Advisers. “Chapter 3: Progress Reducing Inequality,” In *Economic Report of the President*. January 2017.

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ Batcherder, Lily L. “Families Facing Tax Increases Under Trump’s Tax Plan.” Urban Institute & Brookings Institution Tax Policy Center. October 28, 2016. <http://www.taxpolicycenter.org/sites/default/files/alfresco/publication-pdfs/2000983-Families-Facing-Tax-Increases-Under-Trumps-Plan.pdf>.

³⁸ Nunns, Jim et al. “An Analysis of Donald Trump’s Revised Tax Plan.” Urban Institute & Brookings Institution Tax Policy Center. October 18, 2016.

<http://www.taxpolicycenter.org/sites/default/files/alfresco/publication-pdfs/2000924-an-analysis-of-donald-trumps-revised-tax-plan.pdf>.

³⁹ Nunns, Jim et al. “An Analysis of Donald Trump’s Tax Plan.” Urban Institute & Brookings Institution Tax Policy Center. December 22, 2015.

<http://www.taxpolicycenter.org/sites/default/files/publication/128726/2000560-an-analysis-of-donald-trumps-tax-plan.pdf>.

⁴⁰ Huang, Chye-Ching and Chloe Cho. “Ten Facts You Should Know About the Federal Estate Tax.” Center on Budget and Policy Priorities. September 8, 2016. <http://www.cbpp.org/sites/default/files/atoms/files/1-8-15tax.pdf>.

⁴¹ Nunns, Jim et al. “An Analysis of Donald Trump’s Revised Tax Plan.” Urban Institute & Brookings Institution Tax Policy Center. October 18, 2016.

<http://www.taxpolicycenter.org/sites/default/files/alfresco/publication-pdfs/2000924-an-analysis-of-donald-trumps-revised-tax-plan.pdf>.

⁴² Nunns, Jim et al. “An Analysis of the House GOP Tax Plan.” Urban Institute & Brookings Institution Tax Policy Center. September 16, 2016.

<http://www.taxpolicycenter.org/sites/default/files/alfresco/publication-pdfs/2000923-An-Analysis-of-the-House-GOP-Tax-Plan.pdf>.

⁴³ Picker, Leslie. “Will Donald Trump’s Corporate ‘Tax Holiday’ Create Jobs? Not Necessarily.” *The New York Times*. December 26, 2016.

https://www.nytimes.com/2016/12/26/business/dealbook/will-donald-trumps-corporate-tax-holiday-create-jobs-not-necessarily.html?_r=0.

⁴⁴ Sommer, Jess. “A Stranded \$2 Trillion Overseas Stash Gets Closer to Coming Home.” *The New York Times*. November 4, 2016. <https://www.nytimes.com/2016/11/06/your-money/strategies-corporate-cash-repatriation-bipartisan-consensus.html>.

⁴⁵ Congressional Research Service, U.S. Library of Congress. “Tax Cuts on Repatriation Earnings as Economic Stimulus: An Economic Analysis.” December 20, 2011. <https://fas.org/sgp/crs/misc/R40178.pdf>; and, Clausing, Kimberly A. “Profit Shifting and U.S. Corporate Tax Policy Reform.” Washington Center for Equitable Growth. May 2016. <http://equitablegrowth.org/report/profit-shifting-and-u-s-corporate-tax-policy-reform/>.

⁴⁶ Executive Order on Reducing Regulation and Controlling Costs. January 30, 2017. <https://www.whitehouse.gov/the-press-office/2017/01/30/presidential-executive-order-reducing-regulation-and-controlling>.

⁴⁷ Thrush, Glenn. “Trump Vows to Dismantle Dodd-Frank ‘Disaster.’” *The New York Times*. January 30, 2017. <https://www.nytimes.com/2017/01/30/us/politics/trump-dodd-frank-regulations.html>.

⁴⁸ Executive Order on Core Principles for Regulating the United States Financial System. February 3, 2017. <https://www.whitehouse.gov/the-press-office/2017/02/03/presidential-executive-order-core-principles-regulating-united-states>.

⁴⁹ Bender, Michael C. and Damian Paletta. “Donald Trump Plans to Undo Dodd-Frank Law, Fiduciary Rule.” *The Wall Street Journal*. February 3, 2017. <https://www.wsj.com/articles/trump-moves-to-undo-dodd-frank-law-1486101602>. Yellen, Janet. “Monetary Policy and the State of the Economy,” Testimony before the U.S. House of Representatives Committee on Financial Services. February 15, 2017.

⁵⁰ Liner, Emily. “The Economic Benefit of a Stable Financial System.” Economic Policy Institute. January 11, 2017. <http://www.thirdway.org/report/the-economic-benefit-of-a-stable-financial-system>.

⁵¹ Economic Policy Institute. “Minimum Wage Tracker.” Last Modified January 31, 2017. http://www.epi.org/minimum-wage-tracker/#/tip_wage/.

⁵² Cooper, David. “Raising the Minimum Wage to \$12 by 2020 Would Lift Wages for 35 Million American Workers.” Economic Policy Institute. July 14, 2015. <http://www.epi.org/files/2015/raising-the-minimum-wage-to-12-dollars-by-2020-would-lift-wages-for-35-million-american-workers.pdf>.

⁵³ Eisenbrey, Ross and Will Kimball. “The new overtime rule will directly benefit 12.5 million working people.” Economic Policy Institute. May 17, 2016. <http://www.epi.org/files/pdf/107106.pdf>.

⁵⁴ National Conference of State Legislatures. “Right-to-Work Resources.” Accessed February 15, 2017. <http://www.ncsl.org/research/labor-and-employment/right-to-work-laws-and-bills.aspx>.

⁵⁵ Bureau of Labor Statistics, U.S. Department of Labor. “Union Members Summary.” Last Modified January 26, 2017. <https://www.bls.gov/news.release/union2.nr0.htm>.

⁵⁶ Bureau of Labor Statistics, U.S. Department of Labor. “Table 3. Union affiliation of employed wage and salary workers by occupation and industry, 2015-2016 annual averages.” Last Modified January 26, 2017. <https://www.bls.gov/news.release/union2.t03.htm>.

⁵⁷ *National Right to Work Act*, proposed bill, S. 391, 114th Cong. (2016). <https://www.congress.gov/bill/114th-congress/senate-bill/391>.

⁵⁸ Congressional Budget Office. “How Repealing Portions of the Affordable Care Act Would Affect Health Insurance Coverage and Premiums.” January 2017. <https://www.cbo.gov/sites/default/files/115th-congress-2017-2018/reports/52371-coverageandpremiums.pdf>.

⁵⁹ Long, Michelle, Matthew Rae, Gary Claxton, and Anthony Damico. “Trends in Employer-Sponsored Insurance Offer and Coverage Rates, 1999-2014.” The Henry J. Kaiser Family Foundation. March 21, 2016.

⁶⁰ Pollitz, Karen, Cynthia Cox, Kevin Lucia, and Katie Keith. “Medical Debt Among People With Health Insurance.” The Henry J. Kaiser Family Foundation. January 7, 2014.

⁶¹ Council of Economic Advisers. “Chapter 4: Reforming the Health Care System.” In *Economic Report of the President*. January 2017.

⁶² *Ibid.*

⁶³ *Ibid.*

⁶⁴ Garber, Alan M. and Jonathan Skinner. “Is American Health Care Uniquely Inefficient?” *Journal of Economic Perspectives* 22, no. 4 (2008): 27-50.

⁶⁵ Council of Economic Advisers. “Chapter 4: Reforming the Health Care System.” In *Economic Report of the President*. January 2017.

⁶⁶ *Ibid.*

⁶⁷ Center for Medicare & Medicaid Services, U.S. Department of Health & Human Services. “November 2016 Medicaid and CHIP Enrollment Data Highlights.” <https://www.medicare.gov/medicaid/program-information/medicaid-and-chip-enrollment-data/report-highlights/index.html>; Center for Medicare & Medicaid Services, U.S. Department of Health & Human Services. “Total Medicare Enrollment: Total, Original Medicare, and Medicare Advantage and Other Health Plan Enrollment, Calendar Years 2008-2013.” <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/CMSProgramStatistics/2013/Enrollment.html>; Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health & Human Services. “Health Insurance Marketplaces 2016 Open Enrollment Period Final Enrollment Report for the period: November 1, 2015 – February 1, 2016.”

<https://aspe.hhs.gov/sites/default/files/pdf/187866/Finalenrollment2016.pdf>; and, U.S. Census Bureau. “Health Insurance Coverage in the United States: 2015.” <http://www.census.gov/library/publications/2016/demo/p60-257.html>

⁶⁸ Council of Economic Advisers. “Chapter 4: Reforming the Health Care System.” In *Economic Report of the President*. January 2017.

⁶⁹ *Ibid.*

⁷⁰ *Ibid.*

⁷¹ *Ibid.*

⁷² The ACA’s ten essential benefits that must be included in all health plans are: ambulatory services, emergency services, hospitalization, maternity and newborn coverage, behavioral health services, prescription drug coverage, rehabilitation services and devices, laboratory services, preventive services, and pediatric services. See, *Patient Protection and Affordable Care Act of 2010*, Public Law 111-148, Sec. 1302.

⁷³ Center for Medicare & Medicaid Services, U.S. Department of Health & Human Services. “November 2016 Medicaid and CHIP Enrollment Data Highlights.” <https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-enrollment-data/report-highlights/index.html>.

⁷⁴ Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health & Human Services. “Computations for the 2016 Annual Update of the HHS Poverty Guidelines for the 48 Contiguous States and the District of Columbia.”

<https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2016-Fact-sheets-items/2016-06-30.html>; The official income threshold is 133 percent of FPL plus provides a 5 percent income disregard to account for unexpected income, making the effective threshold 138 percent of poverty. See, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health & Human Services. “Prior HHS Poverty Guidelines and Federal Register References.” <https://aspe.hhs.gov/prior-hhs-poverty-guidelines-and-federal-register-references>.

⁷⁵ Council of Economic Advisers. “Chapter 4: Reforming the Health Care System.” In *Economic Report of the President*. January 2017; *National Federation of Independent Business v. Sebelius*. 11–393 (2011); and, Truffer, Christopher J., Christian J. Wolfe, Kathryn E. Rennie. “2016 Actuarial Report of the Financial Outlook for Medicaid.” Office of the Actuary, Centers for Medicare & Medicaid Services, U.S. Department of Health & Human Services. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/MedicaidReport2016.pdf>.

⁷⁶ Council of Economic Advisers. “Chapter 4: Reforming the Health Care System.” In *Economic Report of the President*. January 2017.

⁷⁷ *Ibid.*

⁷⁸ *Ibid.*

⁷⁹ *Ibid.*

⁸⁰ *Ibid.*

⁸¹ *Ibid.*

⁸² *Ibid.*

⁸³ *Ibid.*

⁸⁴ *Ibid.*

⁸⁵ *Ibid.*; and, Chatterji, Pinka, Peter Brandon, and Sara Markowitz. "Job mobility among parents of children with chronic health conditions: Early effects of the 2010 Affordable Care Act." 48 (2016): 26-43.

<http://www.sciencedirect.com/science/article/pii/S0167629616300042>.

⁸⁶ Bureau of Labor Statistics, U.S. Department of Labor. "Labor Force Statistics from the Current Population Survey."

<https://data.bls.gov/timeseries/LNS12500000>.

⁸⁷ *Ibid.*

⁸⁸ *Ibid.*

⁸⁹ *Ibid.*

⁹⁰ *Ibid.*

⁹¹ *Ibid.*

⁹² Congressional Budget Office. "How Repealing Portions of the Affordable Care Act Would Affect Health Insurance Coverage and Premiums." January 2017. <https://www.cbo.gov/sites/default/files/115th-congress-2017-2018/reports/52371-coverageandpremiums.pdf>.

⁹³ Office of the Press Secretary, The White House. "Executive Order Minimizing the Economic Burden of the Patient Protection and Affordable Care Act Pending Repeal." January 20, 2017.

<https://www.whitehouse.gov/the-press-office/2017/01/20/executive-order-minimizing-economic-burden-patient-protection-and>.

⁹⁴ Joint Economic Committee Calculations, from the Bureau of Labor Statistics Weekly Earnings Data from the Current Population Survey.

⁹⁵ Bureau of Labor Statistics, Current Population Survey, Table 7 Annual averages. <https://www.bls.gov/cps/cpsaat07.htm>.

⁹⁶ Joint Economic Committee Calculations, from the Bureau of Labor Statistics Weekly Earnings Data from the Current Population Survey; and, Council of Economic Advisers. "Chapter 5: Investing in Higher Education," In *Economic Report of the President*. January 2017.

⁹⁷ Council of Economic Advisers. "Chapter 4: The Economics of Family-Friendly Workplace Policies," In *Economic Report of the President*. February 2015; and, Joint Economic Committee Calculations, from the American Community Survey 5-Year.

⁹⁸ Mitchell, Michael, Michael Leachman, and Kathleen Masterson. "Funding Down, Tuition Up." Center on Budget and Policy Priorities. 2016.

<http://www.cbpp.org/research/state-budget-and-tax/funding-down-tuition-up>.

⁹⁹ Council of Economic Advisers. "Chapter 5: Investing in Higher Education," In *Economic Report of the President*. January 2017; and, Cooper, Daniel and J. Christina Wang. "Student Loan Debt and Economic Outcomes." Federal Reserve Bank of Boston: Current Policy Perspectives 2014, no. 7 (2014).

<https://www.bostonfed.org/publications/current-policy-perspectives/2014/student-loan-debt-and-economic-outcomes.aspx>.

¹⁰⁰ Joint Economic Committee Calculations, based on a loan of \$31,000 over 10 years, with 3.76 percent interest for Federal loans and 18 percent interest for private loans.

¹⁰¹ Council of Economic Advisers. "Chapter 5: Investing in Higher Education," In *Economic Report of the President*. January 2017.

¹⁰² National Science Board, Science & Engineering Indicators 2016. Table 2-11. <https://www.nsf.gov/statistics/2016/nsb20161/uploads/1/12/tt02-11.pdf>.

¹⁰³ Mamiseishvili, Ketevan, and Vicki J. Rosser. "International and citizen faculty in the United States: An examination of their productivity at research universities." *Research in Higher Education* 51, no. 1 (2010): 88. <http://link.springer.com/article/10.1007/s11162-009-9145-8>.

¹⁰⁴ White House Fact Sheet. "Fact Sheet: Investing More than \$50 Million through ApprenticeshipUSA to Expand Proven Pathways into the Middle Class."

<https://www.dol.gov/sites/default/files/newsroom/newsreleases/WhiteHouseFactSheet-ApprenticeshipUSA-FY2016.pdf>.

¹⁰⁵ *Ibid.*

¹⁰⁶ *Ibid.*

¹⁰⁷ Bureau of Labor Statistics, Current Population Survey.

¹⁰⁸ Joint Economic Committee Calculations, from the Bureau of Labor Statistics Weekly Earnings Data from the Current Population Survey.

¹⁰⁹ The earnings premium compares the median full-time, full-year worker over age 25 with a bachelor's degree only to the same type of worker with just a high school degree. Prior to 1992, bachelor's degree is defined as four years of college. Earnings premium from CEA calculations. Council of Economic Advisers. "Chapter 5: Investing in Higher Education," In *Economic Report of the President*. January 2017.

¹¹⁰ Council of Economic Advisers. "Chapter 5: Investing in Higher Education," In *Economic Report of the President*. January 2017.

¹¹¹ *Ibid.*

¹¹² Isaacs, Julia, Isabel V. Sawhill, and Ron Haskins. "Getting Ahead or Losing Ground: Economic Mobility in America." (2016).

https://www.brookings.edu/wp-content/uploads/2016/06/02_economic_mobility_sawhill.pdf.

¹¹³ Council of Economic Advisers. "Chapter 4: The Economics of Family-Friendly Workplace Policies," In *Economic Report of the President*. February 2015.

¹¹⁴ Joint Economic Committee Calculations, from the American Community Survey 5-Year.

¹¹⁵ Barro, Robert J. "Economic Growth in a Cross Section of Countries." *The Quarterly Journal of Economics* 106, no. 2 (1991): 407-43.

<http://www.jstor.org/stable/2937943>.

- ¹¹⁶ Moretti, Enrico. "Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level Production Functions." *The American Economic Review* 94, no. 3 (2004): 656-90. <http://www.jstor.org/stable/3592947>.
- ¹¹⁷ Hanushek, Eric A., and Dennis D. Kimko. "Schooling, labor-force quality, and the growth of nations." *American economic review* (2000): 1184-1208. <http://www.jstor.org/stable/pdf/2677847.pdf>.
- ¹¹⁸ Barro, Robert J. "Human capital and growth." *The American Economic Review* 91, no. 2 (2001): 12-17. <http://www.jstor.org/stable/pdf/2677725.pdf>; Barro, Robert and Jong-Hwa Lee. *Education Matters: Global Schooling Gains from the 19th to the 21st Century* (New York: Oxford University Press, 2015); and, Hanushek, Eric A., and Ludger Woessmann. "Do Better Schools Lead to More Growth? Cognitive Skills, Economic Outcomes, and Causation," *Journal of Economic Growth* 17, no. 4, p. 267-321.
- ¹¹⁹ Council of Economic Advisers. "Chapter 5: Investing in Higher Education," In *Economic Report of the President*. January 2017.
- ¹²⁰ *Ibid.*
- ¹²¹ *Ibid.*
- ¹²² College Board, numbers adjusted for inflation.
- ¹²³ Council of Economic Advisers. "Chapter 5: Investing in Higher Education," In *Economic Report of the President*. January 2017.
- ¹²⁴ *Ibid.*
- ¹²⁵ *Ibid.*
- ¹²⁶ *Ibid.*
- ¹²⁷ *Ibid.*
- ¹²⁸ Brown, Meta, Sydnee Caldwell, and Sarah Sutherland. "Just Released: Young Student Loan Borrowers Remained on the Sidelines of the Housing Market in 2013." Federal Reserve Bank of New York: Liberty Street Economics. 2014. <http://libertystreeteconomics.newyorkfed.org/2014/05/just-released-young-student-loan-borrowers-remained-on-the-sidelines-of-the-housing-market-in-2013.html#.U3KfrOZdXoU>.
- ¹²⁹ Cooper, Daniel and J. Christina Wang. "Student Loan Debt and Economic Outcomes." Federal Reserve Bank of Boston: Current Policy Perspectives 2014, no. 7 (2014). <https://www.bostonfed.org/publications/current-policy-perspectives/2014/student-loan-debt-and-economic-outcomes.aspx>.
- ¹³⁰ Choitz, Vickie, and Patrick Reimherr. "Mind the Gap: High Unmet Financial Need Threatens Persistence and Completion for Low-Income Community College Students." CLASP. 2013. <http://www.clasp.org/resources-and-publications/files/CLASP-Unmet-Need-Brief-041213-final-ab-2.pdf>.
- ¹³¹ Walizer, Lauren. "Barriers to Success: High Unmet Financial Need Continues to Endanger Higher Education Opportunities for Low-Income Students." CLASP. 2015. <http://www.clasp.org/resources-and-publications/publication-1/Barriers-to-Success-High-Unmet-Financial-Need-Continues-to-Endanger-Higher-Education-Opportunities.pdf>.

¹³² Council of Economic Advisers. “Chapter 5: Investing in Higher Education,” In *Economic Report of the President*. January 2017.

¹³³ House Budget Committee Majority Staff. “FY 2016 Budget Resolution: A Balanced Budget for a Stronger America.” <http://budget.house.gov/uploadedfiles/fy16budget.pdf>.

¹³⁴ Reich, David and Brandon Debot. “House Budget Committee Plan Cuts Pell Grants Deeply, Reducing Access to Higher Education.” Center on Budget and Policy Priorities. 2015. <http://www.cbpp.org/research/house-budget-committee-plan-cuts-pell-grants-deeply-reducing-access-to-higher-education>.

¹³⁵ Congressional Budget Office. “The Budget and Economic Outlook: 2017 to 2017.” 2017. <https://www.cbo.gov/publication/52370>; and, Joint Economic Committee Calculations using CBO data.

¹³⁶ Mitchell, Michael, Michael Leachman, and Kathleen Masterson. “Funding Down, Tuition Up.” Center on Budget and Policy Priorities. 2016. <http://www.cbpp.org/research/state-budget-and-tax/funding-down-tuition-up>.

¹³⁷ *Ibid.*

¹³⁸ College Board. Table 2. Average Tuition and Fees and Room and Board. <https://trends.collegeboard.org/sites/default/files/cp-2016-table-2.xls>.

¹³⁹ *Ibid.*

¹⁴⁰ Stratford, Michael. “With GOP in control, private sector pushes for increased role in student loans.” *PoliticoPro*. December 9, 2016. <https://www.politicopro.com/education/story/2016/12/with-gop-in-control-private-sector-pushes-for-increased-role-in-student-loans-140376>.

¹⁴¹ Council of Economic Advisers. “Chapter 5: Investing in Higher Education,” In *Economic Report of the President*. January 2017.

¹⁴² Department of Education. “Federal vs. Private Loans.” Accessed February 15, 2017. <https://studentaid.ed.gov/sa/types/loans/Federal-vs-private>.

¹⁴³ Assuming an average debt of \$30,100 over 10 years, with a 3.76 percent interest rate from Direct Subsidized Loans as opposed to an 18 percent interest rate in the private sector. <http://ticas.org/posd/map-state-data>, <https://studentaid.ed.gov/sa/types/loans/subsidized-unsubsidized#how-much>. Total payment over the life of the loan is a monthly payment over 10 years, not adjusted for inflation.

¹⁴⁴ Department of Education. “Federal vs. Private Loans.” Accessed February 15, 2017. <https://studentaid.ed.gov/sa/types/loans/Federal-vs-private>.

¹⁴⁵ Council of Economic Advisers. “Chapter 5: Investing in Higher Education,” In *Economic Report of the President*. January 2017.

¹⁴⁶ Douglas-Gabriel, Danielle. “Trump just laid out a pretty radical student debt plan.” *Washington Post*. 2016. https://www.washingtonpost.com/news/grade-point/wp/2016/10/13/trump-just-laid-out-a-pretty-radical-student-debt-plan/?utm_term=.cfac23c0545c.

¹⁴⁷ Dynarski, Susan. “With Trump, Investors See Profits Again in For-Profit Colleges.” *New York Times*. November 18, 2016.

<https://www.nytimes.com/2016/11/19/upshot/with-trump-investors-see-profits-again-in-for-profit-colleges.html>.

¹⁴⁸ Douglas-Gabriel, Danielle. “What we learned about Betsy DeVos’s higher education positions...not much.” *Washington Post*. January 18, 2016. https://www.washingtonpost.com/news/grade-point/wp/2017/01/18/what-we-learned-about-betsy-devoss-higher-education-positions-not-much/?utm_term=.73da0f04ad82.

¹⁴⁹ Cellini, Stephanie R., Rajeev Darolia, and Lesley J. Turner. “Where Do Students Go when For-Profit Colleges Lose Federal Aid?” *National Bureau of Economic Research Working Paper 22967*. 2016. <http://www.nber.org/papers/w22967>.

¹⁵⁰ Donald J Trump for President. “Trump Outlines Bold New Plan for School Choice.” Accessed February 15, 2017. <https://www.donaldjtrump.com/press-releases/donald-j.-trump-remarks-on-school-choice>.

¹⁵¹ Schott, Liz and Ife Floyd. “How States Use Funds Under the TANF Block Grant.” Center on Budget and Policy Priorities. 2017. <http://www.cbpp.org/research/family-income-support/how-states-use-funds-under-the-tanf-block-grant>.

¹⁵² Center on Budget and Policy Priorities. “Chart Book: TANF at 20.” 2016. <http://www.cbpp.org/research/family-income-support/chart-book-tanf-at-20>.

¹⁵³ Whitehurst, Grover. “Public School Vouchers: Where are the Campaigns?” Brookings Institution. 2015. <https://www.brookings.edu/research/public-school-vouchers-where-are-the-campaigns/>.

¹⁵⁴ College Board. Table 2. Average Tuition and Fees and Room and Board. <https://trends.collegeboard.org/sites/default/files/cp-2016-table-2.xls>.

¹⁵⁵ Council of Economic Advisers. “Chapter 7: Addressing Climate Change.” In *Economic Report of the President*. January 2017.

¹⁵⁶ Jacobson, Louis. “Yes, Donald Trump did call climate change a Chinese hoax.” *Politifact*. June 3, 2016. <http://www.politifact.com/truth-o-meter/statements/2016/jun/03/hillary-clinton/yes-donald-trump-did-call-climate-change-chinese-h/>; Volcovici, Valerie and P.J. Huffstutter. “Trump administration seeks to muzzle U.S. agency employees.” *Reuters*. January 24, 2017. <http://www.reuters.com/article/us-usa-trump-epa-idUSKBN15822X>; and, Roberts, David and Brad Plumer. “Most people are wildly underestimating what Trump’s win will mean for the environment.” *Vox*. November 14, 2016. <http://www.vox.com/science-and-health/2016/11/14/13582562/trump-gop-climate-environmental-policy>.

¹⁵⁷ Kahn, Matthew E. and Daxuan Zhao. “The Impact of Climate Change Skepticism on Adaption in a Market Economy.” *National Bureau of Economic Research Working Paper 23155*. <http://www.nber.org/papers/w23155>.

¹⁵⁸ Council of Economic Advisers. “Chapter 7: Addressing Climate Change.” In *Economic Report of the President*. January 2017.

¹⁵⁹ Council of Economic Advisers, “The Economics of Coal Leasing on Federal Lands.” The White House. June 2016

¹⁶⁰ JEC Economic Committee calculations, using Mauna Loa CO₂ weekly mean and historical comparisons database, from “Trends in Atmospheric Carbon Dioxide.” National Oceanic and Atmospheric Administration. Accessed February 15, 2017.

<https://www.esrl.noaa.gov/gmd/ccgg/trends/data.html>.

¹⁶¹ “Scientific consensus: Earth’s climate is warming.” National Aeronautics and Space Administration. Accessed February 15, 2017.

<http://climate.nasa.gov/scientific-consensus/>; and, Intergovernmental Panel on Climate Change. Fifth Assessment Report. 2013.

https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_SPM_FINAL.pdf.

¹⁶² “NASA, NOAA Data Show 2016 Warmest Year on Record Globally.” National Aeronautics and Space Administration. January 18, 2017.

<https://www.nasa.gov/press-release/nasa-noaa-data-show-2016-warmest-year-on-record-globally>.

¹⁶³ Adjusted to December 2016 dollars using CPI-U-RS. “The Social Cost of Carbon.” Environmental Protection Agency. Accessed February 15, 2017.

<https://www.epa.gov/climatechange/social-cost-carbon>.

¹⁶⁴ Joint Economic Committee calculations from Environmental Protection Agency. “U.S. Greenhouse Gas Inventory Report: 1990-2014.” April 2016.

<https://www.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-1990-2014>.

¹⁶⁵ Adjusted to December 2016 dollars using CPI-U-RS. “The Social Cost of Carbon.” Environmental Protection Agency. Accessed February 15, 2017.

<https://www.epa.gov/climatechange/social-cost-carbon>.

¹⁶⁶ Joint Economic Committee calculations, adjusted to December 2016 dollars using CPI-U-RS, from Moore, Frances C. and Delavane B. Diaz.

“Temperature impacts on economic growth warrant stringent mitigation policy.” *Nature Climate Change* 5. January 2015.

[https://www.researchgate.net/publication/271204757_Temperature_Impacts_o](https://www.researchgate.net/publication/271204757_Temperature_Impacts_on_Economic_Growth_Warrant_Stringent_Mitigation_Policy)

[n_Economic_Growth_Warrant_Stringent_Mitigation_Policy](https://www.researchgate.net/publication/271204757_Temperature_Impacts_on_Economic_Growth_Warrant_Stringent_Mitigation_Policy); and, “How much carbon dioxide is produced by burning gasoline and diesel fuel?” U.S. Energy Information Administration. April 26, 2016.

<https://www.eia.gov/tools/faqs/faq.cfm?id=10&t=10>.

¹⁶⁷ Stern, Nicholas. “The Economics of Climate Change.” H.M. Treasury. Commissioned by the Government of the United Kingdom. October 2006.

http://mudancasclimaticas.cptec.inpe.br/~rmclima/pdfs/destaques/sternreview_report_complete.pdf.

¹⁶⁸ Burke, Marshall, Solomon M. Hsiang, and Edward Miguel. “Global non-linear effect of temperature on economic production.” *Nature* 527. November 12, 2015.

<http://web.stanford.edu/~mburke/climate/BurkeHsiangMiguel2015.pdf>.

¹⁶⁹ Stern, Nicholas. “The Economics of Climate Change.” H.M. Treasury. Commissioned by the Government of the United Kingdom. October 2006.

http://mudancasclimaticas.cptec.inpe.br/~rmclima/pdfs/destaques/sternreview_report_complete.pdf.

¹⁷⁰ Council of Economic Advisers. “Chapter 7: Addressing Climate Change.” In *Economic Report of the President*. January 2017.

¹⁷¹ “An America First Energy Plan.” Trump-Pence Transition website. May 26, 2016. Accessed February 15, 2017. <https://www.donaldjtrump.com/press-releases/an-america-first-energy-plan>.

¹⁷² Saha, Devashree and Sifan Liu. “Coal plant retirements will continue despite Trump’s EPA pick.” Brookings Institution. December 19, 2016. <https://www.brookings.edu/blog/the-avenue/2016/12/19/coal-plant-retirements-will-continue-despite-trumps-epa-pick/>; and, “6 Charts that Will Make you Optimistic About America’s Clean Energy Future.” U.S. Department of Energy. September 28, 2016. <https://energy.gov/articles/6-charts-will-make-you-optimistic-about-america-s-clean-energy-future>.

¹⁷³ “The Paris Agreement.” United Nations Framework Convention on Climate Change. Accessed February 15, 2017. http://unfccc.int/paris_agreement/items/9485.php.

¹⁷⁴ Muttitt, Greg. “The Sky’s Limit.” Oil Change International. September 2016. http://priceofoil.org/content/uploads/2016/09/OCI_the_skys_limit_2016_FIN_AL_2.pdf.

¹⁷⁵ Sneed, Annie. “Trump’s First 100 Days: Climate and Energy.” *Scientific American*. November 29, 2016. <https://www.scientificamerican.com/article/trumps-first-100-days-climate-and-energy/>.

¹⁷⁶ “An America First Energy Plan.” Trump-Pence Transition website. May 26, 2016. Accessed February 15, 2017. <https://www.donaldjtrump.com/press-releases/an-america-first-energy-plan>.

¹⁷⁷ “A Better Way: The Economy.” Speaker Paul Ryan. June 14, 2016. http://abetterway.speaker.gov/_assets/pdf/ABetterWay-Economy-PolicyPaper.pdf.

¹⁷⁸ Council of Economic Advisers. “Chapter 7: Addressing Climate Change.” In *Economic Report of the President*. January 2017.

¹⁷⁹ The most recent international comparison data is from 2013, “CO₂ emissions (kt).” The World Bank. Accessed February 15, 2017. <http://data.worldbank.org/indicator/EN.ATM.CO2E.KT>.

¹⁸⁰ Council of Economic Advisers. “Chapter 7: Addressing Climate Change.” In *Economic Report of the President*. January 2017.

¹⁸¹ Council of Economic Advisers. “Chapter 7: Addressing Climate Change.” In *Economic Report of the President*. January 2017; and, Auel, Erin and Allison Cassady, “The Costs of Climate Inaction.” Center for American Progress. September 22, 2016. <https://www.americanprogress.org/issues/green/reports/2016/09/22/144386/the-costs-of-climate-inaction/>.

- ¹⁸² Saha, Devashree and Mark Muro. “Growth, carbon, and Trump: State progress and drift on economic growth and emissions ‘decoupling.’” Brookings Institution. December 8, 2016. <https://www.brookings.edu/research/growth-carbon-and-trump-state-progress-and-drift-on-economic-growth-and-emissions-decoupling/>.
- ¹⁸³ Council of Economic Advisers. “A Retrospective Assessment of Clean Energy Investments in the Recovery Act.” The White House. February 2016.
- ¹⁸⁴ “U.S. Energy and Employment Report.” U.S. Department of Energy. January 2017. https://energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report_0.pdf.
- ¹⁸⁵ Jacobson, Mark Z. et al. “100% clean and renewable wind, water, and sunlight (WWS) all-sector energy roadmaps for all 50 United States. Energy and Environmental Science, Issue 7. 2015. <http://web.stanford.edu/group/efmh/jacobson/Articles/I/USStatesWWS.pdf>.
- ¹⁸⁶ Haltiwanger, John C., Ron S. Jarmin, and Javier Miranda. “Who Creates Jobs? Small vs. Large vs. Young.” National Bureau of Economic Research. No. 16300. August 2010. <http://www.nber.org/digest/feb11/w16300.html>; and, Wiens, Jason and Chris Jackson. “The Importance of Young Firms for Economic Growth.” Ewing Marion Kauffman Foundation. September 13, 2015. <http://www.kauffman.org/what-we-do/resources/entrepreneurship-policy-digest/the-importance-of-young-firms-for-economic-growth>.
- ¹⁸⁷ Saha, Devashree, Jonathan Rothwell, and Mark Muro. “Sizing the clean economy: A national and regional green jobs assessment.” Brookings Institution. July 13, 2011. <https://www.brookings.edu/research/sizing-the-clean-economy-a-national-and-regional-green-jobs-assessment/>.
- ¹⁸⁸ Roberts, David and Brad Plumer. “Most people are wildly underestimating what Trump’s win will mean for the environment.” *Vox*. November 14, 2016. <http://www.vox.com/science-and-health/2016/11/14/13582562/trump-gop-climate-environmental-policy>.
- ¹⁸⁹ Forsythe, Michael. “China Aims to Spend at Least \$360 Billion on Renewable Energy by 2020.” *New York Times*. January 5, 2017. <http://www.nytimes.com/2017/01/05/world/asia/china-renewable-energy-investment.html>; and, Romer, Christina. “Impact of the American Recovery and Reinvestment Act on the Clean Energy Transformation.” The White House. April 22, 2010. <https://obamawhitehouse.archives.gov/blog/2010/04/21/impact-american-recovery-and-reinvestment-act-clean-energy-transformation>.
- ¹⁹⁰ “Global Trends in Renewable Energy Investment 2016.” Commissioned by the United Nations Environment Programme. 2016. http://fs-unep-centre.org/sites/default/files/publications/globaltrendsinrenewableenergyinvestment2016lowres_0.pdf.