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THE 2016 JOINT ECONOMIC REPORT

REPORT

OF THE

JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

ON THE

2016 ECONOMIC REPORT OF THE PRESIDENT

TOGETHER WITH MINORITY VIEWS



MARCH 1, 2016.-Ordered to be printed

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LETTER OF TRANSMITTAL

March 1, 2016

HON. MITCH McConnell Majority Leader, U.S. Senate Washington, DC

DEAR MR. LEADER:

Pursuant to the requirements of the *Employment Act of 1946*, as amended, I hereby transmit the 2016 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,

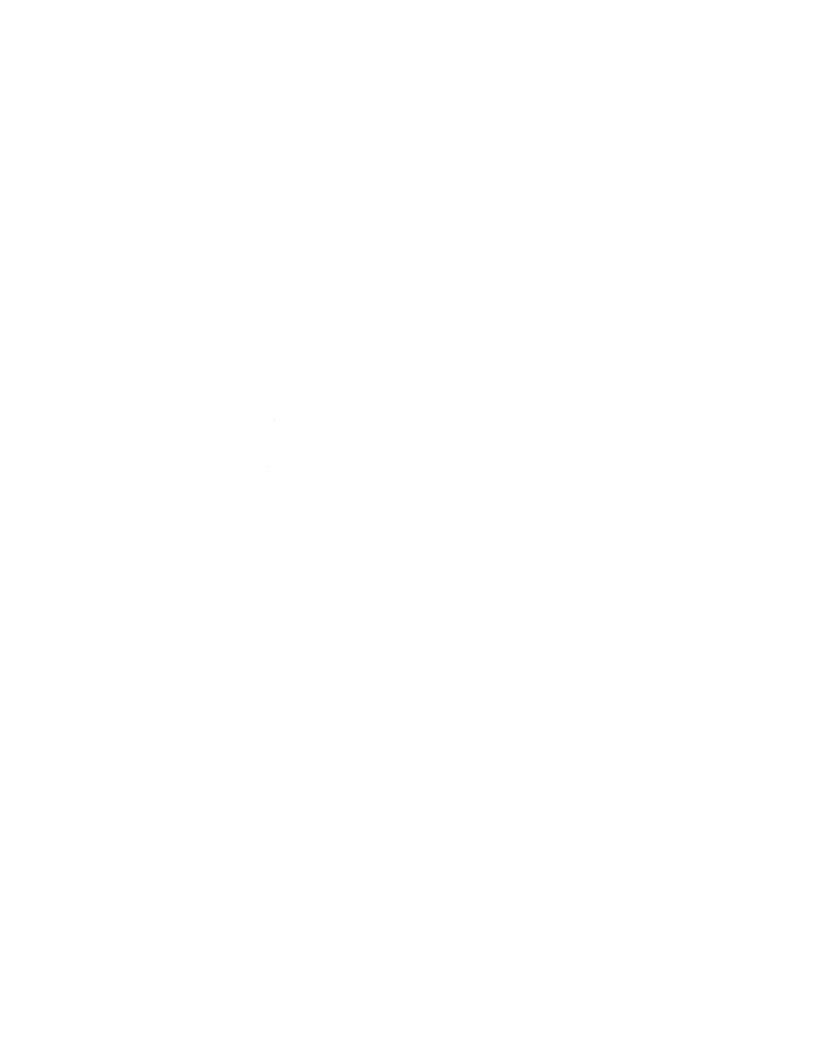
Dan Coats Chairman

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THE 2016 JOINT ECONOMIC REPORT

MARCH 1, 2016. - Ordered to be printed

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

REPORT

together with

MINORITY VIEWS

Report of the Joint Economic Committee on the 2016 Economic Report of the President

CHAIRMAN'S VIEWS

Nearly seven years into the recovery, Americans are still waiting for a sign of stronger growth in their incomes that would help them move up the economic ladder. In the final *Economic Report of the President and the Annual Report of the Council of Economic Advisers* (*Report*) of this Administration, the crux of the *Report* promotes "inclusive growth" as a way of addressing income inequality, which the Administration characterizes as a "defining challenge of the 21st century economy." Yet here in America, we do not have a class system that relegates families to one particular income group; the American economy is incredibly dynamic and still harbors great potential for upward mobility.

Instead, America faces two defining challenges today. The first is slower economic progress over the course of the recovery from the not-so-recent recession. The second related challenge is the looming fiscal unsustainability that threatens to devastate what could be a bright economic future. These challenges will determine whether we will be able to continue the American tradition of passing down to the next generation a future that is more prosperous and full of opportunities than in the previous generation.

The longer the delay, the more painful the necessary fiscal policy changes will become. While unequal opportunities, as the Report highlights, are indeed concerning and a precursor for economic Administration's immobility. many of the policy recommendations could thwart stronger economic growth and mobility for the most vulnerable individuals as well as postpone critical reforms to ensure fiscal sustainability. With the use of carefully determined metrics to measure Americans' well-being and the performance of policies going forward, solutions abound for stronger economic mobility. These include reforms to the tax, regulatory, and education systems, and better policy outcomes for the welfare of the American people in the 21st century.

CHAPTER 1: GROWTH AND MOBILITY IN 21ST CENTURY AMERICA

This year's Economic Report of the President places emphasis on "inclusive growth" for the middle class, bolstered by policies aimed at promoting productivity, participation, and "equality of outcomes." However, equality of outcomes is a potentially dangerous misnomer for the resolution of "excessive" economic inequality, as it misplaces focus from the true problem of insufficient economic opportunities as detrimental to economic mobility and potential for growth. Moreover, any discussion of economic inequality must necessarily include economic mobility. While the analysis highlights the importance of removing barriers to employment and entrepreneurship that arise from unequal opportunities, its promotion of unionization and minimum wage increases beget a word of caution as these policies also present potential barriers to entry for the most vulnerable workers. Among the longer-term challenges listed above, high and rising publicly held Federal debt is unfortunately not among them.

In the final year of this Administration, the 2016 Economic Report of the President and the Annual Report of the Council of Economic Advisers (CEA) (ERP, or Report), though quick to point out how far the economy has come from the recent recession, strikes a more moderate tone on economic growth going forward than offered in previous reports. Echoed in the Report, the President argued in his January 2016 State of the Union address: "The United States of America, right now, has the strongest, most durable economy in the world." Strength and durability are not synonymous. The economy has endured, but growth is not strong. Now nearly seven years into the recovery from the December 2007-June 2009 recession, economic growth can at best be characterized as moderate.²

Over the course of this recovery, the country has learned hard lessons on how excessive spending, overzealous regulation, and overwhelmingly accommodative monetary policy can cause more harm than good to society. Unfortunately, the resulting low business investment, labor force participation, and productivity growth promise to continue for the foreseeable future. Forecasters now anticipate an era of slower growth than previous decades, and subdued expectations about economic, population, and labor force growth have placed additional pressures on Federal budget constraints. In turn, Federal policies will have a lasting effect on the labor force and the country's potential for growth. As the Congressional Budget Office (CBO) noted in its recent update to the *Budget and Economic Outlook*, the potential labor force is expected to decline in part due to Federal policies, including the *Affordable Care Act* (ACA) and real tax bracket creep.³

The first of a "Growth and Prosperity" Series produced by Joint Economic Committee (JEC) Republican staff in October 1999 entitled, "Economic Growth and the Future Prospects of the U.S. Economy," provided prescient caution about Federal policies in light of anticipated demographic changes:

The United States is at an important crossroads. If we control government spending during the next decade, the economy will grow more rapidly and thereby reduce the burden accompanying the retirement of the "baby boom" generation. In contrast, if the federal government undertakes new spending initiatives and does nothing to reform existing health care and retirement programs, the U.S. will become a big-government, Europeanstyle economy when the baby boomers retire. This will lead to slower growth and less prosperity... If we are not sensitive to this situation, the combination of new spending commitments and current obligations to future retirees will cause the

U.S. to become a stagnating "big government" economy sometime after 2010.⁴

At that time, baby boomers were in their peak earning years, providing a positive impact on the Federal budget and the economy which provided the growth that precipitated the budget surpluses of the late 1990s. In addition, publicly held Federal debt as a share of gross domestic product (GDP) stood at a comfortable 38.2 percent and Federal outlays at 17.9 percent.

The failure to take the necessary steps to address these challenges has resulted in outcomes that are as unfortunate as they were foreseeable. Health care and retirement programs are expected to comprise approximately half of Federal spending in fiscal year 2016 as baby boomers begin to retire, up from just over a third in 1999. Federal spending is expected to rise to 21.2 percent of GDP this fiscal year, and publicly held Federal debt is expected to rise to 75.6 percent, nearly double the 1999 level and the long-term historical average of 38 percent of GDP.

The trajectory for Federal spending obligations, deficits, and debt are only expected to grow worse over time. In just ten years, 99 percent of revenue will go to mandatory and net interest spending, crowding out funds for other important priorities like national defense and medical research.⁶ Deficits are projected to double as a share of GDP over the next decade while Federal spending rises to 23.1 percent of GDP in 2026. Publicly held Federal debt is projected to rise to 86.1 percent by the end of the next decade, and to 155 percent within three decades—the highest percentage ever recorded in the United States.⁷

In his State of the Union address this year, President Obama stated that he wanted "to focus on the next five years, the next 10 years, and beyond." However, he failed to note one of the most important issues that America faces in the coming years: the financial obligations that will come due over those periods. Debt was not mentioned once in his address, and how to achieve fiscal

sustainability was not among the four questions the President argued that "we as a country have to answer." 9

Perhaps ironically, in last year's *Report*, it was growth in labor force participation that the President and his advisers were counting on to tackle deficits and debt posed by "the pig in the python" baby boomer retirement. Analysis from CBO, the Bureau of Labor Statistics (BLS), and other institutions, however, paint a very different picture about the ability of the labor force to stabilize debt. CBO estimates that if lawmakers were to aim for maintaining debt at 74 percent of GDP by 2040, revenues would need to increase six percent annually or spending would need to fall 5.5 percent annually. BLS notes that "stabilization is likely to come at a cost... the need to fund mandatory programs (such as Social Security and Medicare) while constraining deficits poses an increasingly large problem for the economy." 12

In mid-2015, the Wells Fargo Economics Group also noted the dire consequences associated with the current policy trajectory:

Waiting until 2021 to enact tax policy changes to stabilize the debt-to-GDP ratio at the current 74 percent of GDP would translate into an additional \$570 in taxes per year for a household in the middle income quintile (making around \$66,400 per year)... In the case that Congress and the administration wait until 2021 and decide to enact across-the-board spending cuts, the impact on Social Security benefits for the average individual would be rather dramatic as well. For example, to just stabilize the national debt, across the board cuts to all non-interest spending would reduce the average annual Social Security benefits for a median income earner for someone born in 1955 by approximately \$1,393 per year. 13

The Wells Fargo analysis noted that, on net, the long-run fiscal and economic benefits of addressing the unsustainable fiscal policy outlook outweigh the short-term costs.

Rather than address these imposing challenges, this year's Report instead focuses on narrower inequality measures. The Report claims that it "examines the economics and policies that can strengthen productivity without exacerbating inequality, promoting robust and inclusive growth that can be shared by a broad group of households." It further identifies inequality as a "defining challenge of the 21st century economy" that affects both the United States and abroad, suggesting that "unequal outcomes" arise from "unequal opportunities." 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." Given the incredibly diverse and vibrant population that makes up modern America, nothing could be so blatantly further from the truth. The American Dream has nothing to do with equality of outcomes and everything to do with equality of opportunity.

ECONOMIC INEQUALITY AND MOBILITY

Metrics

As in last year's *Report*, the 2016 *Report* fails to define the "middle class." And as the 2015 *Joint Economic Report* (*Response*) made clear, metrics still matter. Specifically, to set achievable goals and measure progress, it is necessary to agree on the metrics:

The [2015] Report itself doesn't seem clear on that metric; its reference to the bottom 90 percent of households and the median household weave throughout the first chapter, suggesting that the

"lens" is not quite clear. As it stands, there is no unified, broad definition of income, let alone a clear cut definition of "middle class." Income, even when clearly defined, is only one measure of many in determining the welfare and success of an individual. The "typical" or median household may make sense when referencing a moment in time, but is less useful when comparing the median household over time. 14

For example, recent research over the last year suggested that the middle class has narrowed compared to the growing lower- and upper-income classes. Pew Research Center (Pew) recently released an in-depth study on changes in lower-, middle-, and upper-income households over the past several decades. Researchers found that the middle class has shrunk compared to the growing lower- and upper-income classes, down to 50 percent in 2015 from a 61 percent majority in 1971.¹⁵

However, it is important to keep several considerations in mind when discussing the changes that have occurred in the distribution of income over time. Income commonly refers to more than just wages earned, and is one metric among others such as net worth and consumption patterns, in determining the financial well-being of Americans. Moreover, such metrics can be measured by person, household, or even family. In the Pew study, income was measured by household using the Census definition of money income, which excludes certain money receipts, tax payments, dues and deductions, and benefits like foods stamps, health insurance, subsidized housing and energy assistance.

Although the recent findings from the Pew study appear to confirm the *Report's* concern that the middle class is shrinking, several caveats are worth exploring in any discussion relating to the middle class. The income metric used to determine who falls into the middle class matters to the entire framing of the discussion. Different definitions, such as using only the middle-fifth of income or excluding the top and bottom quintiles, will yield different results than the Pew-defined size-adjusted households that fall between two-thirds to double the median U.S. households income. In fact, middle-income household advancement has been stronger in the past several decades¹⁸ than the oft-cited statistics indicate because the data tends to overstate increases in the disparities between the income groups.¹⁹ Many Americans still identify themselves as middle class, though less so since the recession.²⁰ Given the cost of living variations across America,²¹ what it means to be middle class varies by state and even metropolitan area.²² In addition, the Pew-defined threshold for middle income has not only broadened over time, but risen in real terms, suggesting a rising standard of living.²³

Also noteworthy is that the upper-income group grew at a faster pace than the lower income group. As Pew reported: "From 1971 to 2015, the number of adults in upper-income households increased from 18.4 million to 51 million, a gain of 177%. During the same period, the number of adults in lower-income households increased from 33.2 million to 70.3 million, a gain of 112%."²⁴ By comparison, middle-income households grew by 51 percent from 80 million to 120.8 million. The fact that the upper-income group broadened—meaning that a relatively larger share of households frequent the upper-income group today than had in the past—is a positive trend and should ameliorate some of the concern regarding the "concentration" of income in the upper-income group. Such concern is misplaced if income mobility keeps to its historical pace or strengthens.²⁵

Mobility still matters. The makeup of income groups is anything but static, with people frequently moving among the lower, middle-, and upper-income groups. The distribution of households in each income group at any given moment is a snapshot of a dynamic flow (i.e. mobility) of households between income groups over time. Mobility is most commonly measured in both absolute terms, whereby a child is better off than his or her

parents regardless of origin in the distribution, and also in relative terms, whereby a child moves up or down depending on where in the distribution they originated (i.e. a child in the bottom group could still be better off than his or her parents in the bottom group, suggesting upward mobility in the absolute sense, but immobility in the relative sense).

Many would likely be surprised to learn that, contrary to recently developed conventional wisdom, economic mobility in America has not lagged that of its international peers.²⁶ Relatively new research delves into a mobility-related measure known as intergenerational elasticity, which measures the relationship between a person's income and that of their parents. The findings suggest that roughly half of parental income advantages are passed down to children.²⁷ The *Report* points out that intergenerational earnings elasticity of fathers and sons in the United States is lower compared to most major developed economies, noting: "the higher the elasticity, the less mobile the society. Such a mobility can be understood as a measure of the inequality of opportunity."²⁸ This particular issue for young men in the United States is in fact an important one that must be addressed. An Organization for Economic Cooperation and Development (OECD) study also notes that this is true of France, Italy, and the United Kingdom as well.²⁹ However, similar research demonstrates that the United States is out of sync with other countries on intergenerational earnings mobility only for sons who had fathers in the bottom fifth of earnings-not exactly a middle-class issue, but rather one of low-income families looking to move into the middle class. In fact, the United States falls in the middle of the pack for other father and child correlations.³⁰

Young Adults and Mobility in the 21st Century

As noted in last year's *Response*, alternative metrics continue to indicate a shift in the relationship that young individuals have with the labor market. While previous generations may have faced tough labor markets as they entered the workforce, as baby

boomers did in the 1981-82 recession, the labor market recovery for millennials has been "much less robust" following the 2007-09 recession.³¹ A Georgetown University Center on Education and the Workforce study notes that, like those in school in their late teens and early twenties, the share of people in their late twenties (26-30 years of age) participating in the labor force has also declined, down from 88 percent in 2000 to 80 percent in 2012. This is the lowest rate in the 60 years that data has been collected. The share of adults in their late twenties working full-time, yearround jobs has fallen by 15 percentage points for men to 65 percent from 2000 to 2012. Women have also seen a six percentage-point decrease over the same time period. The study further suggests that entering the labor market in a bad economy can have negative long-term effects on earnings and employment that can last for 10 to 15 years.³² The data further suggest that millennials, collectively the youngest and largest generation in the workforce today, are also switching jobs at a slower pace than previous generations.³³

Longer-term trends, however, suggest that the issue was building even prior to the recession. Between 1992 and 2000, each successive graduate class of college and post-college degree holders saw an increase in the likelihood of entering jobs that require "brains" instead of "brawn" at the start and in the middle of their careers. However, this pattern began to reverse after 2000, contributing to the declining job and income prospects young work entrants currently face. Wages of recent graduates haven't been keeping up with previous generations' starting wages relative to the median wage. The drag of graduating college during a recession can have a permanent effect on lifetime income. This seems to be true of certain college degrees over others. Graduates with scientific and business degrees see an increase in earnings graduating into a recession, while arts and social sciences see a decrease.³⁴ Nonetheless, a 2013 Urban Institute study found that the average wealth of millennials between 20 and 30 years of age in 2010 was 7 percent lower than the average wealth of baby boomers within that age group in 1983.³⁵

According to Census Bureau data, 15.1 percent of 25- to 34-year-olds live with their parents, increasing for the fourth consecutive year. Compared to just 12 years ago when the rate was just above 10 percent, the trend remains historically elevated and continues to inch higher.³⁶ A household is formed when an adult leaves the home of another adult and finds his or her own place of residence, whether owned or rented. However, as the *Report* also highlights, two-thirds of the new households created over the year ending in June were created by Americans between 65 and 74 years old.³⁷

As mentioned in the 2015 Report, this year's Report notes that millennials' delayed purchase of homes will continue to affect household formation in the near term, but finds that this will be remedied in the coming years as graduates pay off their student loans. Unfortunately, millennials and the generations that follow them face a number of unprecedented problems that could affect their mobility going forward, including a record amount of average student loan debt, elevated underemployment, lower starting wages than previous generations, and long-term fiscal challenges originating from entitlement and public pension programs.³⁸ Recent research from the Federal Reserve Bank of St. Louis finds that the average per-capita lifetime net benefit from Federal benefits received minus taxes paid turns from significantly positive to significantly negative beginning with Generation X, and only worsens for millennials and post-millennial generations.³⁹ The longer reform is delayed, the greater the intergenerational imbalance will grow, and the more painful and drastic the necessary fiscal policy changes will become.

In addition, with the oldest baby boomers only recently becoming eligible for full Social Security benefits,⁴⁰ their retirement is only just beginning and will span at least the next two decades. In fact, baby boomers most commonly comprise the upper-income group because many are still in their highest earning years.⁴¹ Though

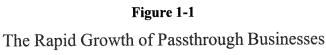
baby boomers are retiring at a slower rate than previous generations, as the labor force participation rate for Americans age 55 and older is rising⁴² while younger age cohorts' participation is falling, their retirement will not only leave a lasting impact on the labor force,⁴³ but it also means more Americans will be living on relatively lower retiree incomes than they made in their working years.

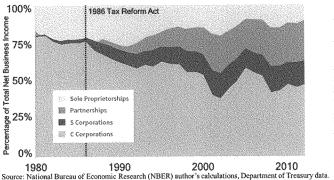
Economic Inequality, Mobility and Growth

The *Report* makes the following point that omits a significant reason for the divergent trends in top 1 percent income shares between the United States and other G-7 countries:

Until the 1980s, the United States experience was similar to other countries; as recently as 1975, the top 1 percent garnered a similar share of the income in the United States as in other G-7 countries, as shown in Figure 1-1. But since 1987 the share of income going to the top 1 percent in the United States has exceeded every other G-7 country in each year that data are available.⁴⁴

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 (Figure 1-1),⁴⁵ 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.⁴⁶





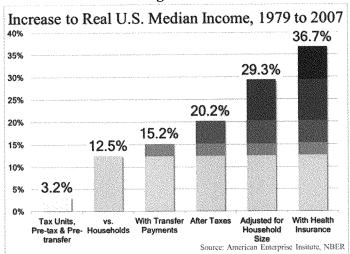
The *Report* also notes that technological change has played a role in increasing wage inequality and job polarization in both the United States and abroad. Information technology has changed relative demand for workers with different skill levels, known as skill-biased technological change (SBTC). Over the last nearly four decades, SBTC altered demand for different types of labor as the cost of acquiring and utilizing information technology assets fell rapidly and U.S. businesses substituted computers and computerized machinery for workers performing routine tasks. As discussed at length in last year's *Response*, previous JEC research found that SBTC explained a majority of the increase in income inequality among U.S. households over the past several decades, and that SBTC is also driving the increase in income inequality abroad.⁴⁷

As supporting evidence of the growing global attention to inequality, the *Report* goes on to highlight Thomas Piketty's seminal 2014 book, *Capital in the Twenty-First Century*. However, data issues plague the work of scholars like Piketty and Emmanuel Saez. Specifically, the use of tax return data (particularly of pre-tax income) instead of after-tax household income fails to account for government benefits and employer-provided health insurance. As Manhattan Institute scholar Scott

Winship states, "they do not account for the main ways in which we mitigate income concentration via public policy." This begets the question: why does it make sense to measure inequality in a manner that does not account for the effect of the very policies meant to mitigate it? The answer is simple: It makes no sense whatsoever. Such a question underscores the importance of clearly defining the metrics and understanding their underpinnings before predicating policy changes upon them.

As pointed out in a previous JEC staff analysis, the increase to real U.S. median income over the past several decades has been far greater than reported using only pre-tax and pre-transfer income. Economist Richard Burkhauser noted that, after accounting for size of households, government transfer payments, taxes, and employer-provided health insurance, the real U.S. median income has actually increased 36.7 percent from 1979 to 2007 (pre-dating the recent recession), as compared to the unadjusted, pre-tax median income tax unit increase of 3.2 percent (Figure 1-2). Burkhauser's numbers compare similarly with CBO, which found that for the 60 percent of the population in the middle of the income scale, real after-tax household income growth was just under 40 percent from 1979 to 2007.

Figure 1-2



Despite the issues associated with measuring income inequality, the Report makes a brief attempt to point out that wealth inequality is even more unequally distributed, though making the caveat that wealth inequality is "particularly difficult to measure accurately because we do not track wealth in the way we do income and trends in wealth inequality are concentrated among a small number of households."50 Not only is wealth inequality inherently more difficult to track, but it is unclear if it is a larger issue than income inequality. 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.

The *Report* also highlights the 21 percent wage disparity between the typical woman and typical man working full-time as another

area of inequality of opportunity. However, there is nothing typical or accurate about comparing the two averages. Recent research that uses median hourly earnings and makes adjustments for education, experience, and job type among workers age 25 to 34 found that all but 7 percent of the wage disparity disappears.⁵¹ Furthermore, a study completed in 2010 using median, full-time income data at the metropolitan level found that among young adults age 22 to 30 never-married with no children, women were out-earning men by 8 percent on average among the metropolitan areas studied and by as much as 21 percent more. Interestingly, while women's earnings appear to benefit from the expansion of the knowledge-based economy, Silicon Valley was noted among the "holdout" areas where young men's earnings still surpass women's. 52 Adjusting for these factors makes for a better applesto-apples comparison by controlling for the choices individual Americans make which may influence their income disparities and may have very little to do with their earnings. Once again, the metrics are extremely important to policymakers' understanding of the problems that they wish to address.

The *Report* further states that inequality is correlated with lower mobility, trotting out the "Great Gatsby" curve first introduced in 2011. However, evidence of changes in income inequality and mobility in the United States reveal no such relationship.⁵³ Despite periods of high and rising inequality, including in the 1990s when income was increasingly concentrated within the top one percent and incomes were rising across the board, recent research from economist Raj Chetty finds that mobility did not fall. In fact, the research concluded "measures of social mobility have remained remarkably stable over the second half of the twentieth century in the United States."⁵⁴

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. However, as aforementioned, economic mobility in America is not laggard compared to international peers, and mobility in America has remained largely unchanged over the last 20 years. Despite this, income immobility, the ability to "move to opportunity," and the relationship between child and parent earnings will continue to play prominent roles in the changes to distribution in income over time, and it remains more important than ever to remove barriers to opportunity and continue to every effort to improve economic mobility.

RENT-SEEKING AND THE ROLE OF GOVERNMENT

The *Report* states: "Rents arise when markets are not perfectly competitive, such as when uncompetitive markets yield monopoly profits or preferential regulation protects entities from competition." No market, however, is perfectly competitive. The *Report* continues: "Classic examples of such rents include monopoly profits and the unearned benefits of preferential government regulation." In fact, there are few better examples of preferential government regulation that promote rent-seeking behavior than the politically-designed energy policies pursued by this Administration, which are discussed in more detail in Chapter 6.

This is also true of increasing market concentration. Consolidation has become ubiquitous precisely because of increased regulation brought by this Administration. The sectors in which the *Report* cites massive consolidation are air travel, telecoms, banking, food-processing—a veritable "who's who" of overregulation. It is also of particular note that, largely as a result of the changes in the healthcare landscape brought on by the ACA, the healthcare sector—especially insurance—has recently undergone consolidation. In all its zeal, the Administration issued a record number of 82,036 pages of regulation to the Federal Register in 2015, amounting to more than 3,378 final rules and regulations and adding to the near-\$2 trillion in lost economic

productivity and higher prices due to cumulative regulatory burdens.⁵⁷

The *Report* claims that evidence suggests in many cases that rentseeking behavior "exacerbates inequality and can actually impair growth." Rent-seeking is just political entrepreneurship by another name, as explained by economist Wayne Brough:

The entrepreneurial calculus may change in response to institutional changes brought by an expanding regulatory state. Some entrepreneurs will focus more on redistributing existing rents through the political process rather than innovating for the benefit of consumers... As political entrepreneurs crowd out economic entrepreneurs, society shifts from the positive-sum game of wealth creation to the zero-sum game of wealth transfers.⁵⁹

The Report wraps up discussion of problems associated with rentseeking behavior by suggesting political reforms to reduce the influence of regulatory lobbying: "Finally, to the degree that rentseeking warps regulations, policymakers should reduce the ability of people or corporations to seek rents successfully through political reforms and other steps to reduce the influence of regulatory lobbying."60 The implication that the rent-seeking and regulations relationship is causal in only one direction is puzzling, as it is equally likely that regulation could incite or re-channel rentseeking behavior. As pointed out in economist Bruce Yandle's classic "Bootleggers and Baptists" theory of rent-seeking behavior, the bootleggers—standing to profit handsomely from new regulation—support, or rent-seek, "tee-totaling" Baptist politicians to maintain prohibition of the sale of alcohol on Sundays. Such a relationship exists between interest groups, politicians and regulators:

In a democratic society, economic forces will always play through the political mechanism in ways determined by the voting mechanism employed. Politicians need resources in order to get elected. Selected members of the public can gain resources through the political process, and highly organized groups can do that quite handily. The most successful ventures of this sort occur where there is an overarching public concern to be addressed (like the problem of alcohol) whose "solution" allows resources to be distributed from the public purse to particular groups or from one group to another (as from bartenders to bootleggers). 61

In fact, Nobel laureate economist Milton Friedman described this relationship as more of an "iron triangle," an insurmountable connection between interest groups, bureaucracies, and politicians that makes reform particularly difficult, and virtually always fails the consumer. ⁶² As noted by economist Mancur Olson in his study of special-interest privileges, nations that allow entrenched interest groups to grow in power and influence over time engender the relative decline of those nations. ⁶³

Moreover, political reforms that ultimately reduce unproductive rent-seeking require that government, and the (redistributive) power of the purse associated with it, necessarily demand that the target of rent-seeking—government itself, in all of its current largess—become less tantalizing to seek in the first place. Less rent-seeking for political favor due to smaller government allows for a greater ability to address the current unsustainable spending problem. As discussed in a previous JEC staff study, if fiscal consolidation and pro-growth reforms are to be successful in the long term, policymakers must credibly commit to addressing the multifaceted growth of government, including the size of

government, the roles of government and how revenues are spent.⁶⁴

PRO-GROWTH POLICY OPPORTUNITIES

Barriers to Entry: Unionization, Occupational Licensing and Minimum Wage

The *Report* extensively discusses the issues associated with barriers to entry into jobs and markets, and offers several policy solutions including greater support for collective bargaining, minimum wage, reducing occupational licensing barriers, and removing restrictive land use regulations. However, for all of the points that are made about occupational licensing and other regulations, the *Report* stops short of connecting these barriers to entry with the equally significant ones that unionization and minimum wage present:

First, the employment barriers created by licensing raise wages for those who are successful in gaining entry to a licensed occupation by restricting employment in the licensed profession and lowering wages for excluded workers. Estimates find that unlicensed workers earn 10- to 15-percent lower wages than licensed workers with similar levels of education, training, and experience (Kleiner and Krueger 2010). Second, research finds that more restrictive licensing laws lead to higher prices for goods and services, in many cases for lower-income households, while the quality, health and safety benefits do not always materialize (Kleiner 2015). Finally, some statespecific licensing requirements create unnecessary barriers to entry for out-of-state licensed practitioners, reducing mobility across state lines (Johnson and Kleiner 2014).65

The employment barriers detailed in the *Report* resulting from occupational licensing also extend to union membership by: (1) increasing wages for licensed (union) workers compared to non-licensed (non-union) workers, and (2) increasing the price of goods and services, particularly burdensome on lower-income households.⁶⁶ In addition, the third and final point with regard to state-specific requirements is the same concept behind frequent criticism that the ACA restricts choice by disallowing shopping for insurance out-of-state.⁶⁷

The *Report* notes that union membership declined consistently since the 1970s.⁶⁸ However, over the same time frame, occupational licensing was consistently rising. In fact, economist Morris Kleiner, the very same mentioned by the Report in the quote above, makes this link in a paper with fellow economist and former economic adviser to the President, Alan Krueger: as the prevalence of union membership fell into decline, from nearly one-third of workers in the 1950s to just above one-in-ten in 2008, so occupational licensing rose from roughly 5 percent in the 1950s to nearly 29 percent in 2008. The study additionally notes: "Indeed, the wage premium associated with licensing is strikingly similar to that found in studies of the effect of unions on wages."69 Though Kleiner and Krueger find that unions reduce inequality (by way of compressing the wage distribution), 70 their research does not suggest that the "balance of bargaining power leans toward the firm"⁷¹ in absence of greater unionization.

As the *Report* acknowledges, occupational licensing can too often be a clumsy solution to ensure customer health and safety. Consumer health and safety can be prioritized in other ways, such as voluntary certification, without hurting entrepreneurship and job creation. The justification for licensing should include why certification is not enough. States should re-examine their occupational licensing laws to ensure that they are not serving the interests of incumbent groups in place of the consumers they are meant to protect.⁷²

President Obama again included raising the minimum wage among his list of proposals for the year ahead in his State of the Union address. In step, the *Report* misleadingly argues that the minimum wage is "geared toward workers with the very least bargaining power." However, evidence shows that the minimum wage is far from a useful tool to help the poor. The main effect of minimum wage increases is a reduction in the number of low-skill and entry-level jobs. In fact, CBO projected that a proposed Federal minimum wage to \$10.10 per hour could amount to an employment reduction of as many as one million workers. These are the very jobs that the most vulnerable workers in the labor force—those just starting out and looking to get a foothold into their job paths—rely upon the most. This flies in the face of the President's narrative for one simple reason: an unemployed worker is not an empowered worker.

Over time, the minimum wage gives employers added incentive to automate, which reduces job opportunities for those with limited skills. Yet one cannot easily distinguish the advances in technology that are motivated by artificially increased wage cost from those that occur independently. Consequently, the detrimental effect of the minimum wage on employment likely is greater than what can be definitively attributed to it.⁷⁷

In an effort to alleviate the struggle in which many young workers find themselves in seeking to obtain their first job, President Obama has proposed a \$5.5 billion dollar collective of grants, skill investment and direct wage payments. As noted by Mercatus Center scholar Adam Millsap, the fact that the minimum wage has a negative effect on teenage and young adult employment is a "glaring omission" from the President's proposal, especially given the glut of evidence demonstrating that minimum wages harm the most vulnerable and least skilled workers. Other arguments against raising the minimum wage include that fact that an increase creates both winners and losers: those who keep their jobs

at the new higher wage, and those who see a reduction in hours, job loss, or fail to obtain a job at all.⁷⁹

Policy Goals and Full Employment

Despite assertions of being near "full employment," broader indicators continue to show significant slack in the labor market. 80 The unemployment rate has historically been used to determine progress towards full employment. However, as detailed above and in greater detail in the subsequent chapter, labor force dropouts, discouraged workers, and long-term unemployment have not fully recovered from the recession, even adjusting for population changes.

Furthermore, the *Report* states that the same macroeconomic policies used to return the economy to full employment can be used to reduce income inequality introduced by cyclical unemployment:

Indeed, unemployment or sub-optimal employment is a form of inequality in itself, resulting in zero or insufficient labor earnings for a subset of workers. The same macroeconomic policies usually employed to boost growth and return the economy to full employment can unambiguously reduce this cyclical form of income inequality. 81

While Federal law establishes full employment as an official policy goal as detailed in Chapter 7, blind commitment to full employment at all costs can be wildly counterproductive. There are significant tradeoffs associated with using fiscal and monetary policies to bring the economy back to full employment. Federal borrowing to meet that goal comes with long-term economic costs and exacerbates intergenerational inequities.

In fact, the reasons for workers to find themselves jobless or leave the labor force may suggest a different remedy today than the illconceived stimulative measures initially pursued through fiscal and monetary policies during and in the immediate aftermath of the recent recession. Many economists and policymakers believe that, at least in theory, using these macroeconomic stabilization tools as "counter-cyclical" policy can boost economic growth in times of distress and rein in growth when the economy is perceived to be overheating (i.e. when growth is occurring at an unsustainable rate and demand outpaces production, leading to higher prices). However, the reality is that the appropriate policies may not be chosen in a timely manner or at all. The stakes are high: the wrong move may very well yield a worse outcome for the economy than would have occurred had no action been taken at all.

Although the *Report* places the discussion of income inequality in the specific context of cyclical unemployment (which results from insufficient aggregate demand), F.A. Hayek argued that not all unemployment above the natural rate is indicative of insufficient aggregate demand, and pursuit of full employment through spending meant to increase aggregate demand risks not only chronic inflation, but imposes a pervasive mismatch between the type of labor supplied and the type of labor demanded by employers. Hayek goes on to note the true problem is to achieve a distribution of labor with a sustainable level of high employment without artificial stimulus. However, Hayek cautions that we are incapable of knowing what that distribution of labor is beforehand.⁸²

Federal policymakers have an important role in fostering a freemarket economy in which Americans enjoy ample opportunities for employment, but government should not and cannot be the paramount facilitator of the labor market. The private sector is the true driver of labor market dynamism.

It is quite possible that the recession, paired with longer-term structural trends in technology and demographics, as well as policy changes that affect the reward of work, have altered incentives to participate in the workforce, work more hours, and start and grow businesses. Many policies that the Administration has pursued in the aftermath of the recession are estimated to negatively affect employment. Examples include the President's proposed minimum wage increase, the ACA's 30-hour full-time work threshold, 83 and the pending increase in the Department of Labor's income threshold for overtime pay eligibility.⁸⁴ As aforementioned, CBO projected that a proposed Federal minimum wage to \$10.10 per hour could amount to an employment reduction of as many as one million workers.85 In addition, CBO also estimates the implementation of the ACA will cause a labor force reduction of roughly two million full-time equivalent workers by 2025.86 Full implementation of the increase in the Department of Labor's income threshold of overtime pay could reduce full-time equivalent jobs by as much as half a million jobs or more.⁸⁷ These and other regulations effectively reduce economic productivity and thwart job growth for the most vulnerable workers.

Rather than the Administration's policies, Congress should look to pro-growth, structural policy measures and reforms, including changes in spending and tax provisions, and deregulatory measures that aim to increase the incentives for potential workers to find jobs, and for businesses and entrepreneurs to hire and train workers. ⁸⁸ Above all, in this uncharacteristically slow-growth environment, it remains more important than ever that the Administration, Congress and the Federal Reserve avoid taking hasty action that risks destabilizing an already fickle economy.

Improving Workforce Potential

Overall wage growth was middling for most of 2015, picking up in the final month of the year. By one measure, the 12-month change of average hourly earnings, nominal wage growth rose 2.5 percent in December 2015, suggesting long-awaited momentum for stronger growth had finally arrived, though the average annualized change for 2015 stood at 2.2 percent.⁸⁹ However, nominal wages are still increasing more slowly than the 3.5

percent rate which the Federal Reserve considers "healthy." Furthermore, that momentum has a long way yet to translate into higher household incomes. Real median household income for 2014 (the latest data available) was slightly lower at \$53,657 than in 2013 (\$54,462).91

As aforementioned, wage gains for millennials have been much slower. In fact, other costs typical to a young person—such as rent and student loan debt— are actually outpacing wage gains. In addition, the starting wages of recent college graduates since the beginning of the recent recession have changed very little, and a gap has grown between recent graduates and overall median weekly earnings, an occurrence that predates the recent recession by several years. 92 In fact, the aforementioned Pew research on the middle class found that young adults age 18 to 29 were among the biggest "losers with a significant rise in their share in the lower-income tiers."93 Economist Tyler Cowen argues that does not bode well for our economic future.⁹⁴ This is particularly concerning if the economy is giving way to a "Great Reset" that, in a low-productivity growth environment, 95 will offer far less favorable long-run wage prospects and slower growth in living standards, borne out most clearly by the young entering into the workforce. Ultimately, it remains to be seen whether young adults will surmount the challenges they face today. 96

In his State of the Union address, President Obama brought his proposal for two years of free community college back to the fore, stating that he will "keep fighting to get that started this year." However, the Administration's focus in the realm of education remains misplaced and the solution offered does little to remedy the education deficits with which so many students across the nation are saddled. As mentioned in the *Response* last year:

Making community college free does not ensure that students who graduate from said programs will actually have the skills they need to obtain a good paying job. Today, many of the classes offered at community colleges are remedial, compensating for deficits in education received at the high school level. Financially, community college is not perceived as a chokepoint for many students, as most low-income individuals are already able to receive a community college education for free if they are eligible for Pell Grants. Furthermore, of the nearly 40 percent that are able to graduate, their incomes remain scant above that of workers with only a high school diploma if they do not go on to complete a college degree. 98

Recent research from the Federal Reserve Bank of New York indicates that nearly half of recent college graduates were underemployed between 2009 and 2013, working in jobs that do not require a college degree, though these recent graduates are making more than other young workers of a similar age without a degree. Only approximately one-fifth of underemployed recent graduates were in low-skilled jobs, including baristas, bartenders and cashiers.⁹⁹

In testimony before the JEC, American Enterprise Institute scholar Andrew Kelly argued that evidence increasingly suggests that not only does an affordability crisis exist in American higher education, but that a value crisis exists as well. This is especially true in the case of recent college graduates, given that the wages of recent college graduates have declined over the past decade. The result is that students are paying more for a lower return to education. ¹⁰⁰ In the same hearing, former Indiana governor and current Purdue University President Mitchell E. Daniels noted that accessibility and affordability of higher education and career readiness are imperative to economic growth and argued that universities should have more "skin in the game" to hold them accountable for student outcomes. ¹⁰¹

CONCLUSION

Nearly seven years into the recovery, Americans are still waiting for a sign of stronger income growth and resulting economic mobility. As the JEC marks its 70th anniversary this year, as discussed in more depth in Chapter 7, it is remarkable that our nation finds itself continuing to address many of the same challenges raised in previous years. For instance, in its *Response* on the 50th anniversary of the JEC, the Committee noted that though President Clinton and his CEA were painting a picture of economic robustness, members were concerned that things like a booming stock market belied economic fundamentals:

The President wants anxious workers to know that he 'feels their pain' while at the same time boasting...that this is the best economy in decades. Economic statistics paint a contradictory picture. The so-called "misery index" (inflation plus unemployment) is admittedly quite low (thank you [Fed Chairman] Alan Greenspan), but this economic expansion has been unambiguously poor....The facts are clear. No matter how you slice it, Bill Clinton's economic expansion record—anemic growth of 2.3%—is dismal.¹⁰²

Not only did these words make it clear that Members believed tough times lay ahead (confirmed when the dot-com bubble burst), they have also proved timeless. One could easily read the exact same paragraph in today's paper with a couple of names changed to reflect different Administrations, and have no idea that it had been written 20 years ago.

It is only fair to note that although the JEC has a good track record, the Committee's *Response* has admittedly not always been spot on. For instance, the then-Majority's 2010 *Response* set out a three-point agenda that they claimed would kick start the post-financial crisis economy:

An effective, targeted stimulus would include a portfolio of policies. First, extending unemployment insurance would have ripple effects across the entire economy, triggering broad-based economic growth...Second, federal investment in small businesses would help jumpstart job creation....Finally, federal funds for innovation and basic research play a key role in economy recovery. 103

After six years of irresponsible spending on programs like these, the United States remains mired in economic growth barely topping two percent. Deficits and debt are on the rise and one in ten people age 16 and older is underemployed or unemployed. Furthermore, the likelihood of the United States slipping into recession has risen to 25 percent according to Bank of America. Perhaps the Administration should have heeded the conclusion of the Minority Views at that time:

Despite the daunting challenges facing our nation and recent steps by the majority in the wrong direction, we remain confident that entrepreneurial spirit and drive of America will survive and prosper. It will emerge—not with the interference of an expansive government, but with the hard work, thrift, and determination of its Harnessing that work, thrift and people. determination requires that government help provide a transparent and fair playing field, but also requires that government let its working families and productive enterprises flourish by allowing them to reap the benefits of their activities. Higher taxes and expanded government serves to diminish rewards to entrepreneurial efforts. 107

As discussed in last year's *Response*, the Administration should broadly support policies that promote economic mobility for all Americans in addition to focusing on individuals who experience little to no economic mobility, such as those who lack the necessary skills to compete in today's workforce.

Furthermore, as longer-term technological trends continue, labor market polarization¹⁰⁸ will continue to affect the types of jobs demanded in the economy as middle-skill jobs are automated. Policies that negatively alter work incentives will reduce work opportunities, flexibility, and hours. Regulatory barriers to entrepreneurship, specifically the cumulative burdensome requirements imposed at the Federal level and occupational licensing laws at the state level, will continue to impede the creation and development of businesses and the jobs that come with it.¹⁰⁹ Altogether, these shifts in technology and policy will ultimately be reflected in the income earned, the number of earners, and the hours worked by individuals in these households, regardless of distribution.

As discussed in the *Report*, much concern remains over the considerable slowdown in productivity over the past decade, and labor productivity in the nonfarm business sector remained fairly subdued over the course of 2015. Strong growth in productivity is a key component to output, profit, and wage and income growth. Yet nonfarm business sector productivity growth has achieved a mere 0.6 percent average annual rate since the first quarter of 2010, and fell at an annual rate of 3.0 percent in the last quarter of 2015. Thus far, it would appear that the Administration's hopes of higher productivity have been dashed, undermining the Administration's budget and expected lower future deficits.

In addition, while demographic trends continue to affect the overall labor force participation rate, the participation rate of prime-age workers (age 25 to 54) remains 1.8 percentage points below the recovery start after decelerating during the recession and reflecting a longer-term declining trend. As mentioned in the

Response last year, though it is hoped that these trends will improve, productivity and labor force participation growth alone cannot address the Federal spending problems that have been years in the making. Furthermore, if the projected long-term trends in demographics and participation in the labor force serve to frame the future labor market, then countries such as the United States would be wise to ensure their fiscal sustainability to avoid potentially slower future economic growth.

CHAPTER 2: MACROECONOMIC OUTLOOK

The *Report* points out that relatively strong job growth has been particularly disconnected with slower GDP growth over the course of this recovery, and labor market "churn" has continued its long-run, declining trend. Yet whether this is due to greater job stability or workers' reduced ability to achieve wage gains by switching jobs remains to be seen. Despite presuming a relatively optimistic economic outlook going forward based upon a budget that presumes debt will at least "stabilize" over the next 10 years, the *Report* again fails to recognize the long-term impending debt crisis that, if left unaddressed, will hurt the U.S. economy, dampen wages, threaten our national security, and reduce the Federal Government's ability to respond to future challenges.

In the next decade, outlays on mandatory programs and interest payments on the debt will be the driving forces of increased spending, consuming 99 percent of all Federal revenues by 2026. Two of the primary trust funds used to provide certain Social Security and Medicare benefits will be exhausted by 2030 and 2026, respectively. It will cost over \$5.9 trillion in additional spending to preserve scheduled Social Security benefits for 10 years after its insolvency date, and it will cost over \$2.8 trillion to preserve Medicare services for an additional 10 years. Another key driver of mandatory outlays stems from the ACA, the costs of which have been grossly underestimated. The ACA essentially takes money from Medicare in order pay for the health law, and the JEC expects increased spending in the order of trillions will result from the ACA.

NEAR-TERM OUTLOOK

Gross Domestic Product

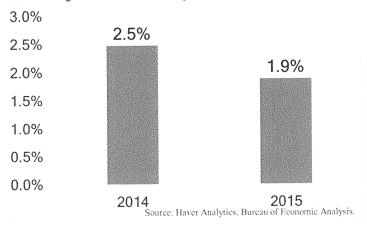
Economic growth continued at a relatively muted pace in 2015. After yet another slow start in the first quarter of 2015, GDP demonstrated tepid growth in the second quarter, a relatively strong third quarter, followed by deceleration in growth for the final quarter. Despite attaining average real GDP growth of only 2.1 percent over the course of the current recovery, President Obama's Fiscal Year 2017 Budget still assumes a relatively optimistic 2.4 percent average GDP growth over the next five years, ticking down to 2.3 percent average growth from 2022 through 2026.111 By contrast, CBO expects a more conservative average rate of 2.1 percent over the next five years and 2.0 percent average growth from 2022 through 2026.112 A smaller economy over the next decade would mean less revenue than the Obama Administration expects to meet ever-growing spending obligations. This comparison is limited by the fact that the CBO's economic assumptions are based on current law, and the President's budget is based on a variety of changes to current law and economic assumptions that differ from the CBO's analysis.

Real GDP growth in the fourth quarter of 2015 appears sluggish compared to earlier quarters in the year, though revised up to 1.0 percent. As measured from fourth quarter to fourth quarter, which is the preferred measurement used by CBO and the Federal Open Market Committee (FOMC), real GDP growth from the fourth quarter of 2014 to the fourth quarter of 2015 slowed to 1.9 percent (Figure 2-1).

Figure 2-1

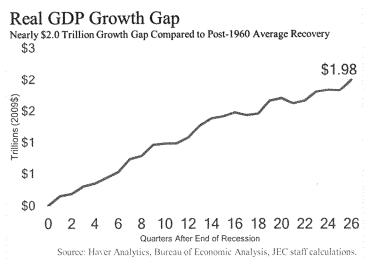
Real GDP Growth Slower in 2015 than in 2014

Percent change in real GDP from fourth quarter 2014 to fourth quarter 2015



The economy continues to suffer from gaps in economic growth, private-sector jobs, and real income growth, lagging far behind the average post-1960 recovery. If real GDP had grown at the average rate of other post-1960 recoveries, real GDP would be nearly \$2.0 trillion (2009 dollars) larger (see Figure 2-2).

Figure 2-2



The current recovery continues to rank last among post-1960 recoveries in terms of real economic growth. Since the recession ended in the second quarter of 2009, real GDP has grown at an average annual rate of 2.1 percent. In other post-1960 recoveries, real GDP expanded at an average annual rate of 3.9 percent during the comparable six-and-one-half year period (see Figure 2-3).

Growth Significantly Below Past Recoveries Compared to Other Post-1960 Recoveries 6% 5% Annual Growth Rate (Real GDP) 4.7% Average of Prior Recoveries = 3.9% 4% 3.6% 3.6% 3.6% 3% 2.5% 2% 1% 0% Q1:1961 Q1:1975 Q4:1982 01:1991 Q4:1970 Quarter Recession Ended Source: Haver Analytics, Bureau of Economic Analysis, JEC staff calculations.

Figure 2-3

CBO projected in the January 2016 release of its Budget and Economic Outlook that real GDP will grow at a much slower rate during the 2015-2026 period—an average of 2.1 percent annually—than it did during the 1980s and 1990s, and slower than its previous August 2015 projection of 2.3 percent annually over the 2015-2025 period. 113 A growth of roughly 2 percent over the next decade and beyond is significantly lower than the average of nearly 3.4 percent growth enjoyed over the previous 50-year period prior to the recent recession, resulting in a smaller economy than previously anticipated going forward.

Labor Market

The Report highlights the last two years as the best job growth since 1999 and reiterates that the past year continues to post impressive job growth, adding 2.7 million jobs in 2015, bolstering the slightly stronger gains seen in 2014.¹¹⁴ However, in today's economy, many people would like to work more hours, it takes longer for the unemployed to find a job, and wage growth remains tepid. The current economy is marked by slower economic growth, productivity and entrepreneurship.

The current recovery also suffers from a large and persistent private-sector jobs gap. Compared to the end of the recession in the second quarter of 2009, the private-sector jobs gap stands at 6.0 million compared with the average of other post-1960 recoveries (see Figure 2-4).

Large Private Sector Jobs Gap Remains Compared to the Average Growth of Other Post-1960 Recoveries 7.0 6.0M Millions of Private-Sector Payroll Jobs 6.0 5.0 4.0 2.8M3.0 2.0 1.0 0.0 End of Recession Cycle Low Source: Haver Analytics, Bureau of Economic Analysis, JEC staff calculations.

Figure 2-4

A recent Georgetown University Center on Education and the Workforce study found that the economy would have 6.4 million more nonfarm payroll jobs than it does today if the recession had never occurred, achieving more than 155 million payroll jobs in total based on pre-recession trends.¹¹⁵

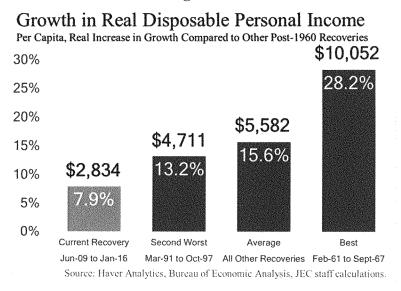
For measuring progress on job gains, the Administration typically focuses on the period since February 2010, when private-sector payroll employment hit bottom, rather than the June 2009 end of

the recession. Even on that more favorable basis, the private-sector jobs gap stands at 2.8 million compared to the average of other post-1960 recoveries. Over the last six months, the economy has added an average of 213,000 private-sector jobs per month. Even if that pace were to continue through the end of 2016, the private-sector jobs gap measured from the end of the recession would be 4.6 million compared with the average of other post-1960 recoveries.

As with the growth gap in real GDP, closing the private-sector jobs gap by the end of 2016 will require much more rapid job growth than the Obama recovery has delivered to date. To eliminate the 6.0 million private-sector jobs gap by the end of 2016, the economy will need to add 630,000 jobs each month over the next 11 months. That mark has not been achieved once during the current recovery.

CBO and other institutions have continued to revise GDP growth projections downward to account for demographic trends and for slower workforce growth in the years ahead, dulling expectations for stronger growth in the United States. Global growth has also slowed, and the trends in the United States and abroad kindled implications of the beginning of a "new normal" of slower economic growth. CBO's latest projections demonstrate muted expectations for nominal GDP growth over the next decade. revising nominal GDP down by approximately \$5 trillion in 2025 compared to August projections. 116 In this projected slow-growth environment, it is estimated that standard of living growth will slow by half compared to previous growth rates over the past halfcentury. 117 Growth of real private nonresidential fixed investment has continued to steadily expand, but taxes, the ACA, and the everincreasing accumulation of regulations continue to raise the aftertax cost of new investment.

Figure 2-5



The relatively sluggish income growth over the course of the recovery has left many American households feeling bereft of the stronger gains seen in previous recoveries and on tighter budgets. Over the last six-and-one-half years, real disposable personal income per capita has increased 7.9 percent, or \$2,834 (2009 dollars). In an average post-1960 recovery, the per capita increase would have been 15.6 percent or \$5,582 (Figure 2-5). As aforementioned, median household income, at \$53,657 in 2014, remains 6.5 percent below its recent 2007 peak of \$57,357 (in 2014 dollars). 118

Payroll Jobs

While jobless claims continued to trend downward over the year, nonfarm payroll growth averaged 228,000 and private-sector payrolls averaged 220,000 per month over the course of 2015 (Figure 2-6). The total recovery average is 155,000 for total nonfarm payrolls and 162,000 for private-sector job payrolls.

Figure 2-6 Average Monthly Payroll Job Growth spuesnou 250 ■ Private ■ Total Nonfarm 251 240 200 193 198 185 200 174 150 107 100 50 0 2010 2011 2012 2013 2014 2015 Source: BLS, Haver Analytics

In addition, CBO projects nonfarm payroll employment to rise by an average of 196,000 jobs per month in 2016, slowing to less than 75,000 nonfarm payroll jobs added on average per month by 2026.¹¹⁹

Unemployment

The *Report* highlights the continued decline of the unemployment rate, decreasing to 4.9 percent in the latest estimate for January 2016. The unemployment rate continued to decline over the course of 2015 since its October 2009 peak of 10 percent, but long-term jobless workers still comprise more than a quarter of the unemployed. Long-term unemployed (unemployed 27 weeks and longer) fell from one-third to one-quarter of unemployed persons in the first six months of the year, and has hovered near that share for the final six months, still nearly double its 40-year historical pre-recession average of approximately 14 percent.

Recent research from the Federal Reserve Board finds that the prospects for the long-term unemployed remain relatively dim. St. Louis Federal Reserve Vice President Stephen Williamson suggests that the evidence points to the long-term unemployed

lacking the necessary skills to attain a job, and that if history is a guide, many will drop out of the labor force altogether, as "[t]hey are unlikely to be hired under any conditions." As it stands, the median and average duration of unemployment remains significantly elevated in the aftermath of the recent recession at a median 11 weeks and an average 29 weeks.

CBO estimates that if the unemployment rate returned to its natural rate and the labor force participation rate equaled its potential, there would have been 2.5 million more workers in the fourth quarter of 2015. CBO expects the unemployment rate to fall below its natural rate from 2016 through early 2019, thus narrowing the employment shortfall, but the slack between the labor force participation rate and its potential rate is projected to fall but not completely disappear over the same time frame.¹²¹

Labor Force Participation and Employment-to-Population Ratio

The labor force participation rate remains subdued, near a recovery low, and the share of part-time workers looking for full-time work remains elevated. The overall labor force participation rate continued to decline, as did the participation rate for prime-age workers (ages 25-54). The long-term trends continue to show steady declines overall and among prime-age workers, which slightly accelerated during the recession and through the recovery. While a decline in the overall participation rate was expected well in advance of the recession, the decline appeared sooner and at a faster rate than any previous predictions anticipated (Figure 2-7). 122

Figure 2-7

Labor Force Participation Rate Projections



After holding steady between 62.7 and 62.9 percent for more than a year between April 2014 and May 2015, the labor force participation rate hit a new recovery low of 62.6 percent in June 2015, and remained there for three consecutive months in total before falling to yet a new recovery low of 62.4 percent in September 2015. As of January 2016, the labor force participation rate remains near a recovery low at 62.7 percent, down 3.0 percentage points since the recovery started (Figure 2-8).

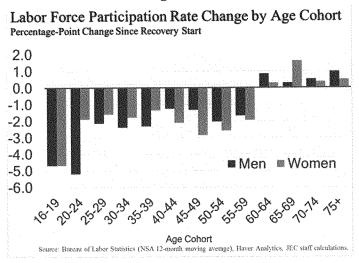
Figure 2-8



The workforce is also smaller among Americans in their prime working years. This is not just baby boomers aging out of the workforce; as mentioned in Chapter 1, at 81.1 percent, the participation rate for prime working age Americans remains 1.8 percentage points below its recovery start. As mentioned in last year's *Response*, prime-age workers have also seen their labor force participation in decline as a group since the early 2000s, and more rapidly over the course of the recession. 123 While the prime-age labor force participation rate has fallen 3.5 percentage points from its high in January 1999, the participation rate for workers age 55 and older has increased by 8.5 percentage points to 40.0 percent over the same time frame.

More recently, as shown in Figure 2-9, when broken down into five-year age cohorts, only workers age 60 and older have seen their participation increase since the start of the recovery. By comparison, workers age 59 and younger, particularly ages 16 to 19 and men ages 20 to 24, have seen their workforce participation decline significantly over the course of the recovery.

Figure 2-9



According to CBO, growth of the potential labor force is less than previous estimates. As was discussed at great length at the JEC hearing, "What Lower Labor Force Participation Rates Tell Us about Work Opportunities and Incentives," while many believe that America has entered a "new normal" characterized by lower economic growth and workforce participation, and subsequently requires policies that lessen negative consequences, it is perhaps too soon to claim that these trends are permanent features of the American economy. Manhattan Institute scholar Scott Winship stated in his written testimony, "Policies to help low-income individuals and families should not presume that the American job-creation machine is broken, or that our recent cyclical challenges portend a 'new normal' in the coming decades." 124

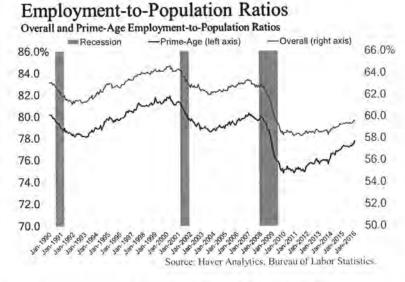
In her testimony before the Committee, American Enterprise Institute scholar Aparna Mathur cited reduced job mobility, the decline in demand for "middle-skill" labor, and job quality among the reasons for the decline in workforce participation. ¹²⁵ Winship testified that Federal disability benefits "increasingly serve as a shadow long-term unemployment program for able-bodied men who struggle to find work." ¹²⁶ For Americans still in their prime-

earning years, periods spent out of the labor force, underemployed, and jobless can have far-reaching implications for their well-being, including lower income, lower lifetime earnings, and less time to accumulate assets and financial security.

BLS, CBO, and the Social Security Administration (SSA) have known for some time that labor force participation would decline in the coming years as baby boomers retired. Yet none of these institutions predicted that the overall rate would fall this fast and this soon. Back in 2007, none of them could have predicted the lasting impact that the recent recession would have on the labor market, and the extent to which the recession introduced structural changes as well as cyclical ones remains a subject of debate today. As Mathur pointed out in her testimony, the fall in participation is troubling because participation is also declining among younger generations as well.

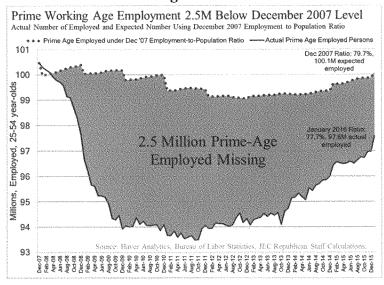
employment-to-population ratio remained relatively unchanged over the course of 2015. The overall employment-topopulation ratio is 0.2 above the recovery start level, but it is still 3.1 percentage points below its pre-recession level. For prime-age workers, the employment-to-population ratio is up 0.3 percentage point since the recovery's start, but remains 2.0 percentage points below its pre-recession level. Though the employment-topopulation ratio has continued to show an upward trend, the January 2016 rate of 59.6 percent still remains well below the prerecession level of 62.9 percent (see Figure 2-10). Despite recent gains in the ratio, it would appear that the return to the prerecession peak in the employment-to-population ratio will not occur in the near term.

Figure 2-10



Over the course of the recession and part of the recovery, the number of Americans between the ages of 25 and 54 actually fell by roughly a million, before beginning to recover again starting around the beginning of 2013. Despite this interesting demographic turn of events, using the employment-to-population ratio nonetheless shows the ratio of the population, regardless of its size, which is working.

Figure 2-11

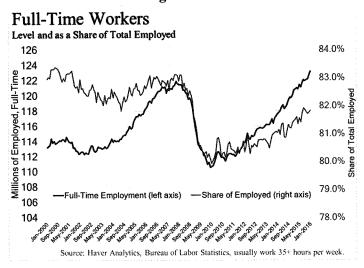


As shown in Figure 2-11, even accounting for changes in the prime-age worker population, there would be approximately 2.5 million more prime-age workers employed if the employment-to-population ratio for prime-age workers was the same rate as it was in December 2007, when the recession began.

Full-time and Part-time Employment

For the first time since the recession began, full-time employment achieved its pre-recession level briefly in August 2015, and subsequently regained and surpassed that level in October 2015 and beyond. Nearly eight years later, it now stands at 123,141,000 in January 2016. As a share of total employed, however, full-time employment remains more than a percentage point below its pre-recession share of employed as part-time employment continues to gain. Part-time jobs jumped during the recession and remain elevated by more than 2 million compared to pre-recession levels. As a share of the employed, part-time work is up 1.3 percentage points compared to its pre-recession level.

Figure 2-12



The share of those working part-time for economic reasons has fallen considerably over the past year, yet still remains elevated above its pre-recession average, and as noted in the *Report* still contributes to the elevated U-6 unemployment rate of 9.9 percent, also frequently termed the "real" unemployment rate given that it captures a broader array of labor underutilization data.

The Effects of the Affordable Care Act on Labor

The Response to last year's Report outlined numerous negative effects of the ACA on the supply of labor. The ACA continues to cast a long-term shadow over the labor market. As aforementioned, CBO's most recent projections indicate that the ACA will reduce the labor supply by 0.86 percent by 2025, translating to 2 million fewer full-time equivalent workers in the labor force than if the ACA had never become law. This projected labor supply reduction is due to various disincentives to work created by provisions of the ACA designed to subsidize health insurance coverage, mandate the purchase or provision of health insurance coverage, and raise revenue through different taxes and penalties.

Half of the total labor supply reduction projected by CBO (0.43 percent) is attributable to the health insurance premium and cost-sharing subsidies available through the ACA marketplace. ¹²⁸ Premium subsidies are available to individuals with incomes between 100 and 400 percent of the Federal Poverty Level (FPL) who lack access to employer-sponsored health insurance. Because premium subsidies on the marketplace decrease as income rises, the result is an increased effective marginal tax on work. ¹²⁹ This disincentive to work is compounded for individuals with incomes between 100 and 250 percent of FPL who obtain health coverage through the marketplace because the effective marginal tax on work is more pronounced as a result of the sharp phase-out "cliffs" built into the ACA's cost-sharing subsidy formula.

Subsidized health coverage is also available to individuals with incomes below 138 percent of FPL in states that have either expanded traditional Medicaid as originally envisioned by the ACA or in states that have expanded coverage through an alternative model incorporating waivers from Medicaid's rules. Because state Medicaid programs generally provide more heavily subsidized coverage in comparison to subsidies gained through the ACA marketplace, individuals whose incomes rise above the Medicaid eligibility threshold are therefore subject to a subsidy cliff and increased effective marginal tax on work. Individuals with incomes just above the eligibility threshold also have an incentive to work less in order to land on the more advantageous side of the Medicaid eligibility threshold, thereby gaining access to lower-cost health insurance.

However, the exact design of Medicaid programs vary by state, largely depending on whether the program is viewed as more of a temporary bridge to self-sufficiency as opposed to a permanent entitlement. For example, Indiana's alternative to traditional Medicaid, Healthy Indiana Plan, mitigates the subsidy cliff by requiring personal health account contributions from all enrollees

who choose the more robust "HIP Plus" plan and from all enrollees with incomes above the poverty line. The required contribution amount, 2 percent of income, in fact matches exactly the ACA exchange premium cap for individuals up to 138 percent FPL. 130 Other Indiana reforms, such as a 6-month "lock-out" period for non-payment and the absence of retroactive coverage, replicate standard policies found in the private insurance market as well as the ACA marketplace. Indiana's plan also incorporates a "Gateway to Work" referral program to help participants develop and hone marketable skills and matches them with prospective employers, thereby enhancing the participant's prospects for upward mobility.

The ACA imposes new taxes on individual income that will 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. According to a Tax Foundation study, these taxes will reduce the number of full-time equivalent jobs by 0.3 percent. ¹³¹

Small and medium-sized employers with 50 or more full-time equivalent employees are mandated to offer health insurance coverage or face a tax, prorated monthly, per each full-time employee over the first 30 employees. The tax is indexed each calendar year to the premium growth rate, and in 2016 the annual tax rises to \$2,160. Larger employers offering health insurance could face \$3,240 tax in 2016 for each full-time employee receiving a subsidy to purchase health insurance coverage through the marketplace. The employer mandate creates an incentive for employers to hire less full-time employees and shift some existing full-time employees to part-time employment. Employers may also choose instead to reduce wages as an offset to the cost of the tax. However, in light of the relatively recent imposition of this

tax, it remains to be seen how exactly employers will alter their structure and compensation to manage its full costs.

Economist Casey Mulligan, Professor of Economics at the University of Chicago, estimates that the ACA's explicit and implicit taxes will affect nearly half of the working population, reducing average wages by \$1,000 per year, or about four percent for low-income families and nearly two percent for higher-income families. 132 Mulligan also estimates that, by 2017, the ACA's labor effects will translate to roughly three percent less in weekly employment, three percent fewer total hours worked, two percent less in labor income, and two percent less GDP compared to the economy in absence of the ACA.¹³³ CBO notes that, when factoring in labor supply elasticities, it will take some time for workers to fully adjust to the harmful incentive structures created by the ACA, meaning that the overall impact of the ACA on the supply of labor will become progressively worse as time goes by. 134 This also means that it is not too late for Congress to step in and prevent the bulk of the labor market damage projected to occur as a result of the ACA's existence.

Housing Market

The weak recovery of the past seven years has been barely apparent to middle-class families, whose income growth remains muted, and to retirees, whose retirement savings earn little interest as a result of years of low rates driven by Federal Reserve policies. One of the few financial benefits they have seen is an increase in the value of their home. The residential real estate market has achieved steady gains since the recession, and American households' balance sheets show higher equity.

The *Report* finds that the housing market's recovery is well underway, ¹³⁵ and net housing wealth is nearing 2008 levels. ¹³⁶ However, the Administration has not taken advantage of improving market conditions to push for reforms that could strengthen the government-sponsored housing enterprises, Fannie

Mae and Freddie Mac. As a result, Federal Housing Finance Agency Chairman Watt is warning that taxpayers may again be asked to bail out Fannie Mae, as they did in 2008. The Administration should take immediate action to improve underwriting, discourage lending criteria that is leading to higher default risk in an improving market, and protect the taxpayer.

However, several variables present risks to continued residential real estate market gains. First, the mortgage market remains dominated by Federal agencies, 138 offering consumers a limited range of mortgage options and "one-size-fits-all" approval criteria that freeze out would-be homeowners. 139 Second, Federal lending is returning to the low-down-payment programs that contributed to the real estate bubble of a decade ago, and contributed to a financial crisis that wiped out the equity many homeowners believed they had. 140 Third, as aforementioned, graduating millennials have started careers in a weak job market; this slow start in their independent adult lives means they delay marriage and purchases of their first homes.¹⁴¹ Federal policy should take action to mitigate these risks and encourage a thriving privatemarket economy that rewards work and innovation, supports families, and provides a backstop against imprudent borrowing and lending. Furthermore, if Americans adjust to a "new normal" lifestyle supported by the two percent real GDP growth rate characterized by the current recovery, fewer may ever achieve sufficient income and savings to move up from their "starter home," leaving "move-up" homeowners in a market that has fewer buyers than sellers. 142

Fiscal Policy

The *Report* repeats the claim President Obama touted in his State of the Union address that the Federal budget deficit has been cut "by almost three-quarters." While technically correct, the *Report's* lack of context misrepresents the issue. It is misleading to emphasize deficit reduction without also noting that the President's starting point for such a comparison was one of the

most expensive years in U.S. history. Due to the coupling of a weak economy and a large growth in Federal spending from the stimulus. Federal outlays reached 24.4 percent of GDP in fiscal year 2009—the President's starting point. Since 1930, only three other years have had higher outlays than this starting point: 1943-1945.144

According to CBO and the President's Office of Management and Budget (OMB), Federal deficits are actually expected to increase in fiscal year 2016 from the previous year. 145 Deficits are projected to continue to rise, even though revenues are expected to be higher than historical averages. The historical average of Federal outlays over the past 50 years is 20.2 percent of GDP, while revenues average 17.4 percent of GDP during the same time. 146 As shown in Figure 2-13, revenues are expected to hover around 18 percent of GDP through 2026, whereas outlays will continue to climb above the historical average and will hit 23.1 percent of GDP in 2026.

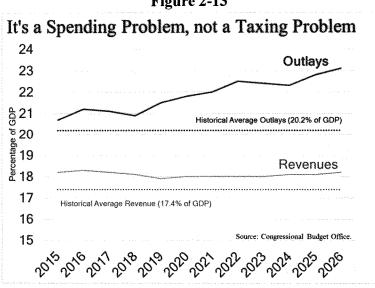


Figure 2-13

Under President Obama, outlays have averaged over 22 percent of GDP.¹⁴⁷ The OMB even expects deficits to be higher than CBO's calculations, with OMB estimating a \$616 billion deficit in 2016,¹⁴⁸ compared to CBO's \$543 billion.¹⁴⁹ Such trends make the President's blanket-claim of reduced deficits all the more dubious, particularly when he and this *Report* fail to mention the burgeoning growth of gross and publicly held Federal debt.

The President's Fiscal Year 2017 Budget, however, seeks to remove the previously-established budget caps in favor of additional spending, offset by increased taxes. The President's budget would increase Federal spending by \$2.5 trillion and raise taxes by \$3.4 trillion over the next 10 years. Even with this additional \$3.4 trillion in proposed taxes, the President's budget never balances and would result in \$24.7 trillion in debt—an increase of 30 percent—by 2027. 150

The day President Obama was first sworn into office, the total Federal debt held by the public stood at \$10.6 trillion. Due to a rapid expansion of Federal spending, the debt now tops \$19 trillion. In fact, President Obama managed to add more to the Federal debt in his first 7 years of office than during the combined 16 years Presidents Bill Clinton and George W. Bush held office.

Monetary Policy

In December 2015 the FOMC of the Federal Reserve (Fed) ended seven years of holding the Federal funds rate at the zero bound. The Fed raised the target Federal funds rate to a modest 1/4 percent, and maintained this level at the January 2016 FOMC meeting. 154 Federal Reserve Chair Janet Yellen has stressed that the rate increase trajectory will be slow and gradual, though recent data signals that trajectory may be even slower. Important though this rate hike was, the Fed remains nowhere close to a normalized monetary policy, evidenced by several factors. These include the Fed's elevated balance sheet—which can be the fuel for

inflation—and the FOMC's policy of reinvesting, rather than unwinding, principal from its holdings in agency mortgage-backed securities.

It is troubling that the Fed has not found a way to normalize monetary policy in the years following the 2008 financial crisis. Certainly, the Fed is not alone among its global central banking peers, and perhaps it should even be commended for resisting the temptation to engage in further quantitative easing, like the European Central Bank, or the move to negative interest rates, like the Bank of Japan. Nonetheless, the current policy has pushed many, including those on fixed incomes, into equities and other investments that may not be appropriate for their age and circumstances. Equity prices have surged in this loose monetary policy environment, but the recent market volatility, owing partially to developments in the energy sector and China, demonstrates that such investments are not without risk.

Moreover, when the economy is flying "low-and-slow" as it has throughout this weak economic recovery, the effect of external economic shocks can be much more dramatic. Absent a normalized monetary policy, the Federal Reserve has no playbook with tested scenarios to which it can turn. Rather, it must learn as it goes in an environment where not much separates appropriate boldness from rash hubris, leading to national fiscal peril. Such is the case when the ordinary tools of monetary policy have been exhausted and not reset.

Meanwhile the effects of Administration policies—with respect to the national debt and deficits, having one of the highest corporate tax rates in the world, and an ever increasing regulatory burden such as that imposed by the ACA—weigh on the national economy and hinder our global competitiveness. In response, the Fed has directed monetary policy on a course to try and achieve what monetary policy simply cannot achieve. The Fed would do well to return its monetary focus to the one thing that it can achieve—stable prices over the long term—and leave removal of

fiscal and regulatory obstacles to long-term economic growth and job creation to their rightful domain, the Congress and the Administration.

LONG-TERM OUTLOOK

Once again, in this year's *Report*, as in last year's, there is little to no discussion regarding the dangers of the nation's increasing debt burden, despite the fact that CBO expects deficits to begin rising again in 2016, one year sooner than projected in the *Budget and Economic Outlook* released in August 2015. In fact, CBO projects trillion-dollar deficits will return in 2022, three years earlier than previously projected, with deficit growth projected to outpace economic growth by 2019. ¹⁵⁵ As aforementioned, debt is expected to reach levels never before seen in the United States, with debt held by the public rising to 155 percent of GDP within the next 30 years under current law (Figure 2-14). ¹⁵⁶

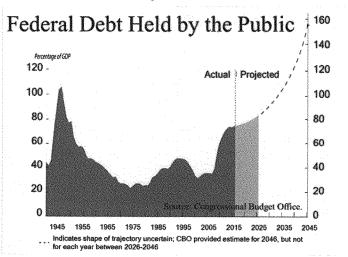


Figure 2-14

The Risk of High and Rising Debt

The accumulation of such staggering levels of debt are nothing short of reckless, and this *Report* does a serious disservice by

downplaying the impacts of such egregiously high levels of debt. The consequences of the United States' unmanageable debt include reduced private capital in the economy, lower productivity and wages, and higher interest rates—discussions of which are noticeably absent in the *Report*.

Ironically, the *Report* notes the global economic harm that has resulted from high levels of debt in *other* countries, yet the *Report* and the Administration fail to extend its analysis to the destructive consequences of the U.S. Federal Government's debt. The *Report* rightfully mentions that high levels of debt in major advanced economies—except the United States—has decreased demand and private investment in those countries, resulting in "persistently disappointing world growth over the last half-decade," while not acknowledging that the United States is following suit. Instead, the *Report* claims that long-term debt will stabilize under the President's proposed budget, but relies on dramatic tax increases and unrealistic economic conditions to achieve such debt stabilization.

For example, the *Report* emphasizes the "dangers [that] have materialized in Japan" as a result of unsustainable debt levels, an aging population, and fewer workers to support pensions. The end result is a stagnant economy that is expected to persist in the coming years. The *Report* also emphasizes the increased challenges Japan faces in attempts to manage government debt and finance future government commitments—all of which are having global reverberations that "are now coming to the forefront of the global economy." ¹⁵⁸

Interestingly, the *Report* omits the obvious similarities that the United States will soon have to grapple with. The number of Americans age 65 or older is already more than twice what it was only 50 years ago, and as the baby boomer generation continues to retire, the number of Americans over 65 is expected increase by more than 30 percent in the next decade. Similar to Japan, the aging population equates to increased Federal spending for this

population's pensions, Social Security and Medicare benefits. Also like Japan, the labor force participation rate in the United States has been on a continual decline in recent years and that trend is expected to continue for at least the next decade. Even though the United States will be in an eerily similar situation to that currently facing Japan—with remarkably high debt, an aging population and declining labor force participation—the *Report* does not provide a shred of concern for impending consequences to the U.S. economy and financial burden being placed on younger generations.

The Congressional Research Service (CRS) has also concluded that increased Federal debt dampens economic growth and burdens future generations:

The current consensus view among economists is that the source of the burden associated with the national debt is the government budget deficit that gives rise to the debt. In a fully employed economy, the deficit "crowds out" private sector spending, especially spending on capital goods. Thus, a smaller private capital stock and a lower level of output are passed along to future generations and it is this lower level of output that is the burden of the national debt. And, it is a burden that is largely shifted forwarded [sic] to future generations. Thus, according to the consensus view, the burden of a national debt is borne by future generations. ¹⁶¹

The average share of the Federal debt for children born in 2016 is over \$58,800 and that burden is expected to rise to nearly \$84,000 by the time they are 10 years old. Forcing children to pay the price—both financially and economically—for our spending is the worst kind of intergenerational theft.

Beyond the "crowding out" effect of the Federal deficits and debt, increased debt would make it riskier to invest in the United States.

This would deter investors from financing the Federal Government's continued deficit spending, unless they receive substantially higher interest rates from the government. CBO estimates that interest payments on the debt will account for about 13 percent of Federal outlays in 2026, more than double the 2016 expectations of 6 percent. Diverting potentially even more money than CBO currently anticipates just to pay for the interest on the Federal debt, let alone address the principle, will further contribute to the decline in private capital and economic growth.

Simply put, debt prevents the economy from reaching its full potential. The *Report* names employment and economic growth as key goals in the coming years. However, the "crowding out" effect of increased Federal outlays makes it virtually impossible to achieve these goals without reducing our debt burden.

Perhaps the most glaring omission in this *Report*, especially during this period of geopolitical unrest, is the lack of discussion concerning debt's adverse effects on national security. High levels of debt increase the likelihood of a fiscal crisis in the United States, as lawmakers will have less flexibility to respond to unexpected challenges—whether they be military or fiscal.¹⁶⁴

Former Chairman of the Joint Chiefs of Staff U.S. Navy Admiral Michael Mullen rightfully stressed this, stating, "The most significant threat to our national security is our debt," in large part because the United States must have a strong economy in order to provide the resources necessary to defend its citizens. Adm. Mullen went on to say, "That's why it's so important that the economy move in the right direction, because the strength and the support and the resources that our military uses are directly related to the health of our economy over time." When Adm. Mullen made those remarks, our debt was \$13 trillion, so it stands to reason that it is an even larger security threat today.

The U.S. debt has historically risen during war times, but it has typically been paid down shortly thereafter. 167 The *Report*

reiterates the President's repeated calls for increased spending and deficits, reversing the historical trends of cutting spending after military drawdowns in order to reduce the debt. As has previously been noted, increased debt weakens economic growth. Without a vibrant economy, the United States risks losing its unparalleled creditworthiness, thereby making it more difficult to finance the resources necessary to protect the country.

To prevent the looming debt explosion, we must address the key causes of increased spending: interest payments on the debt and mandatory spending. As aforementioned, by 2026, interest on the debt and mandatory spending programs will consume nearly 99 percent of all Federal revenues. 169

Reducing our debt naturally becomes more difficult as levels increase, primarily due to higher interest costs associated with the greater risk of sovereign default. Within only 10 years, the nominal interest payments alone on the debt held by the public will have nearly quadrupled, costing taxpayers \$830 billion in 2026. ¹⁷⁰ Net interest payments, which are the third-largest driver of increased spending—behind only Social Security and mandatory health care programs—can only truly be addressed by paying down debt and restructuring programs so that the United States borrows less.

Mandatory Spending Programs Drive Debt

Similar to interest payments, mandatory programs run on autopilot and, unlike discretionary programs, are not subject to the annual appropriations process. This status has enabled them to grow to 69 percent of all spending, or 14.7 percent of GDP, on track to rise to 78 percent within 10 years—16 times higher than the level in 1966.¹⁷¹

Social Security and major health care entitlement programs—including Medicare, Medicaid, Children's Health Insurance Program, and the ACA—are unquestionably the two primary drivers of increased Federal outlays. In fact, Social Security and

Medicare alone will account for nearly half of all increased spending over the coming decade.¹⁷² Rather than confronting these mandatory program, this *Report* doubles-down on President Obama's failed tax-and-spend policies that have only exacerbated the impending debt crisis.

Without taking serious action, the two primary trust funds associated with Social Security and Medicare are all projected to be exhausted by 2030¹⁷³ and 2026,¹⁷⁴ respectively. This means that by the time a current 50-year old becomes eligible for retirement at age 65 (and full retirement by age 67), the trust funds used towards paying for traditional Medicare and Social Security retirement benefits will be exhausted. Put starkly, the government will be unable to keep its promise to seniors.

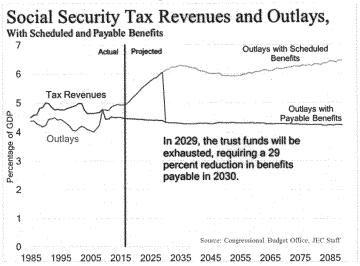
Since 2010, the annual outlays for Social Security—including Social Security Disability Insurance (SSDI) and Old-Age and Survivors Insurance (OASI)—have exceeded non-interest revenues. This funding gap has continued since and without any changes, the combined outlays for OASI and SSDI will exceed revenues by nearly 30 percent in 2025.¹⁷⁵

One of the most significant pieces of legislation impacting the Social Security trust funds in recent years is the *Balanced Budget Act of 2015*. This law extended the life of SSDI, which was expected to hit insolvency by 2017, but it was done at the expense of OASI. Rather than fixing the majority of the underlying causes pushing SSDI and OASI towards insolvency, the law extended the life of SSDI by four years by cutting the life expectancy of OASI by a year. CBO now estimates that the SSDI trust fund will be exhausted in fiscal year 2021, followed by the OASI trust fund's exhaustion in 2030. When measured together, the trust funds will now be exhausted by 2029.¹⁷⁶

Though the *Report* attempts to downplay the upcoming Social Security crisis, all 500 economic simulations run by CBO found that Social Security outlays will exceed or be equal to revenues by

2030.¹⁷⁷ When the trust funds are exhausted, the Social Security Administration will be forced to shift from the current system of "scheduled benefits" to "payable benefits," in which Social Security benefits would be reduced so that annual outlays would not exceed annual revenues.¹⁷⁸ As a result, without changes, Social Security benefits would be cut by nearly one-third beginning in 2030. This funding shortfall is expected to persist through the end of CBO's projections in 2089.¹⁷⁹ The JEC estimates that it will cost over \$5.9 trillion just to maintain scheduled benefits through 2040 and about \$12.2 trillion¹⁸⁰ to maintain benefits through 2050 (Figure 2-15).¹⁸¹

Figure 2-15



Major health care entitlement programs are the other key drivers of Federal spending and debt. The ACA is one of the primary reasons for the recent spikes in spending for mandatory health care entitlement programs. In 2015, major health care entitlement programs accounted for 40 percent of all gross mandatory spending, or approximately \$1 trillion. Outlays for these programs are expected to double, costing \$2 trillion in 2026. In addition, the *Report* indicates that "health care price growth remained at low

levels,"¹⁸³ yet it is health care price inflation that is buoying core inflation, and has increased sharply over the past two years. ¹⁸⁴

Medicare outlays will encompass \$1.3 trillion of the \$2 trillion in total outlays in 2026 for mandatory health care entitlement programs, ¹⁸⁵ the same year in which CBO expects the Medicare Hospital Insurance (HI) trust fund to be exhausted. ¹⁸⁶ Even after accounting for offsetting receipts, the HI trust fund is expected to run deficits every year through the next decade, except in 2018, until the fund is exhausted in 2026. ¹⁸⁷

The Medicare Trustees have a slightly more optimistic outlook, estimating that the HI trust fund will not be exhausted until 2030. After the fund is exhausted, the Trustees expect that Medicare revenues will only be sufficient to pay for 86 percent of the HI costs. However, there is no provision of the *Social Security Act* outlining what would happen when the HI trust fund becomes insolvent. Additional legislation would need to be enacted to provide the necessary funding to cover the costs of HI services. 189

The JEC estimates that it will cost approximately \$7.7 trillion to make up for the HI shortfall through 2045.¹⁹⁰ The *Report* does not account for the increased outlays in such a scenario and it fails to provide a framework for response, much less a preemptive plan. Yet, the likelihood of such an event happening and having a large financial impact is high.

In fact, the Centers for Medicare and Medicaid Services (CMS) Actuary and the Medicare Trustees warn that the underlying law used for their estimates assumes much rosier economic growth than is likely to occur. In its most recent findings, the Trustees stressed that the current assumptions that funding will remain available until 2030 "assumes a substantial long-term reduction in per capita health expenditure growth rates relative to historical experience," and that "current-law projections indicate that Medicare still faces a substantial financial shortfall that will need to be addressed with further legislation." ¹⁹¹

Medicaid is in similarly poor financial shape, most recently because of the expansion of the program resulting from the ACA. Outlays have been higher than was previously estimated, and CBO actually increased its cost estimates for the program between its August 2015 projection and its January 2016 projection. CBO noted that the actual enrollment numbers for Medicaid were so much higher than expected that the increase in Medicaid outlays was one of the "most significant adjustments" in projected spending since its August 2015 projection, 192 accounting for an additional \$187 billion in outlays than previously expected. 193 Medicaid outlays increased by \$48 billion, or 16 percent, between 2014 and 2015. This is on par with the enrollment increase of 55 percent between 2014 and 2015. The increase in enrollment and outlays is particularly substantial when the increase between 2013 and 2014 already witnessed sharp spending increases of \$36 billion, or 14 percent, which was the largest annual increase in spending. 194

CBO projects Medicaid costs will continue to grow at these elevated rates, increasing by another \$31 billion in 2016.¹⁹⁵ About two-thirds of the increased growth of Medicaid "resulted from enrollment of people who were newly eligible because of the ACA," according to CBO.¹⁹⁶ Beginning in 2017, Federal outlays for Medicaid are expected to grow more slowly, but only because the Federal Government's share of the costs associated with ACA-eligible enrollees will decline.¹⁹⁷ The growing aggregate financial burden increasingly will be borne by the states, allowing the Federal Government to erroneously claim fiscal discipline at the expense of states' finances.

This is yet another reason why the Federal Government must give states the flexibility to administer Medicaid in a fashion that works best for them. Medicaid was established as a state-administered program, yet Federal Medicaid rules and mandates have created a one-size-fits-all system that does not work for all states and makes it challenging for states to develop ways to reduce costs and

improve health outcomes. 198 Even the Medicaid demonstration waiver process is bureaucratically cumbersome and time consuming. The potential for state-level innovation was first recognized under President Harry S. Truman, whose 1949 Commission on the Organization of the Executive Branch developed the concept, stating that "a system of grants should be established based upon broad categories—such as highways, education, public assistance, and public health—as contrasted with the present system of extensive fragmentation." Rather than unleashing the potential of Medicaid block grants, the *Report* entirely ignores the consequences of traditional Medicaid's rigidity for enrollees and states.

The ACA Compounds Long-Term Fiscal Issues

The subsidies for individuals to purchase insurance is the most expensive provision of ACA, accounting for over 70 percent, or \$27 billion, of ACA-related spending in 2015. The cost of these subsidies is projected to jump to \$39 billion in 2016, consuming the majority of the \$56 billion in ACA-related outlays. By 2026, outlays for ACA subsidies are expected to hit \$93 billion annually.²⁰⁰

The costs associated with the ACA are particularly concerning when the number of enrollees in exchanges is substantially lower than initial projections. In 2014, CBO and CMS estimated that 13 million—18.6 million people would be enrolled through the exchanges in 2015, and that 21 million—24.8 million people would be exchange enrollees by 2016.²⁰¹ In reality, CBO found that only 9.5 million people were enrolled through the exchanges in 2015 and only 8 million of those people received subsidies to purchase health insurance on the exchanges.²⁰²

After the open enrollment period for 2016 coverage, 12.7 million individuals were enrolled in a plan through the exchanges.²⁰³ However, previous years have shown that a number of individuals do not remain enrolled through the duration of the year.²⁰⁴ That is

why, by the end of 2016, the Department of Health and Human Services (HHS) expects that 2.7 million consumers will have dropped their coverage, leaving only 10 million consumers enrolled through the exchanges.²⁰⁵

These poor projections resulted in a \$2.5 billion aggregate loss for insurers within the individual marketplace in 2014. This \$2.5 billion loss comes after calculating for the risk corridor, meaning the \$2.5 billion is only a portion of the insurers' losses. Brian Blase with the Mercatus Center estimates that the actual losses, without adjustments for the risk corridor, are closer to \$4 billion within the individual market in 2014. 207

The high cost of coverage is the predominant reason why millions of people are actively choosing not to enroll in health insurance, particularly those that are relatively young and healthy.²⁰⁸ Researchers have found that healthy individuals who do not qualify for large premium subsidies are consistently worse off if they buy insurance than they are by remaining uninsured,²⁰⁹ even after considering the penalty in 2016 is the greater of \$695 or 2.5 percent of household income.²¹⁰

However, the ACA was constructed such that, without these healthy enrollees, insurance risk, premiums, and the risk of program deficits would all rise. This is exacerbated by the fact that people with preexisting conditions cannot be denied coverage under the ACA nor be subject to higher premiums because of their health. The end result is a much sicker risk pool within the exchanges, since the insurance is most attractive to the sick people that need the coverage which, in turn, leads to a much more expensive population to insure.

To make up these losses, the average cost of health insurance premiums is increasing across the country, which only compounds the already massive functional and financial problems with the ACA. It is also why President Obama's repeated promises that the average family will save \$2,500 annually after the ACA's

enactment have proven false.²¹¹ Premiums for plans offered on the exchange continued to increase, on average, each year since their implementation. According to CMS, the average rate increase for the 37 states using the Federal HealthCare.gov exchange was 7.5 percent in 2016.²¹² However, the amount by which a premium changed from 2015 to 2016 varied widely, depending on the consumer's age, health status, and location. For example, the Kaiser Family Foundation's analysis of 2016 premium changes in the ACA marketplaces found that the national average premium increase was just over 10 percent, or about \$300 per month, for a 40-year old non-smoker earning \$30,000 annually.²¹³

Even insurers that were given \$2.4 billion in Federal support to create the Consumer Operated and Oriented Plans (CO-OPs) were incapable of financially sustaining the CO-OPs due to the magnitude of problems that have arisen as a result of the ACA. The Administration originally provided funding for 24 CO-OPs, one of which failed before open enrollment even began, creating 23 CO-OPs across 23 states. The likelihood of these CO-OPs failing was clear from the beginning—even HHS initial estimates stated that about one-third of all loans would not be repaid, which is roughly \$792 billion not including any forgone interest.²¹⁴ Yet, the Administration never established criteria to determine whether a CO-OP was viable or sustainable, 215 further increasing the risk to the Federal Government. As a result of the ACA's failure, 21 of the CO-OPs reported net losses in 2014.216 Another was forcibly taken over by the Iowa State Insurance Commissioner because of financial instability and was ultimately liquidated.²¹⁷

As of 2016, over half of the 23 CO-OPs have failed and many of the others are suffering financially. The cost of these failing CO-OPs will be borne by the taxpayers, based upon the Administration's initial assumptions. Unlike HHS's estimates that one-third of the CO-OP loans will not be repaid, the JEC estimates it is the more likely scenario that HHS's high-cost

estimate of less than 50 percent, or about \$1.2 billion, of the CO-OPs loans will be repaid.²²⁰

Higher insurance premiums lead to higher Federal subsidies, which in turn increases Federal deficits. The *Report* and President Obama ignore the fact that as health insurance premiums outpace GDP growth, the annual cost to the Federal Government will also increase accordingly. ACA subsidies are tied to the recipients' income: families with incomes between 100 and 133 percent of the FPL receive subsidies to ensure they do not pay more than two percent of their annual income in premiums and a family between 300 and 400 percent of the FPL does not pay more than 9.5 percent of their income in premiums.²²¹ Over the next 10 years, the annual cost of health insurance premiums are expected to outpace per capita income by two percentage points.²²² This is just one of the reasons why the true costs of the ACA are not yet reflective in the current ACA outlays.

Beyond the ACA outlays, the productivity adjustment factor is the single largest non-revenue, cost-saving provision within the ACA and is specifically indexed to produce outcomes that merely appear to save money, rather than reflect the true costs. Similar mechanisms have been used in previous legislation, as discussed in this chapter, but Congress later passed legislation to prevent the automatic cuts from going into effect. If history repeats itself and the automatic productivity adjustment cuts from the ACA are averted, then the ACA could end up costing trillions more than expected. Furthermore, the ACA productivity "savings" are nothing but a budget gimmick, achieved by cutting funding for Medicare, undermining the ACA's core mission of providing health care for all.

The law requires Medicare payment rates to be updated based upon a "productivity adjustment factor." This productivity factor is a measure of output per worker across the entire economy, not specifically within the health care industry. While there may be changes in the level of additional goods and services individual workers can produce across the economy, it fails to capture the actual cost of care for Medicare beneficiaries. Under the ACA, as the productivity factor increases across the economy, Medicare payments to providers decrease by the same percentage.²²³

This productivity factor assumes that Medicare services will achieve the exact same productivity improvement as the rest of the economy, regardless of whether such levels of productivity are actually plausible. The productivity factor and other ad hoc reductions took effect for Medicare payments to hospitals in 2012 and the adjustment will continue to be used to update payments each year going forward.²²⁴

CBO found that this Medicare cut will reduce costs by about \$196 billion over 10 years, whereas the CMS Actuaries predict savings of \$205.3 billion.²²⁵ However, CBO has expressed concerns that the ACA's Medicare cuts are unlikely and may be "difficult to sustain over a long period of time," in part because the ACA assumes that "Medicare spending would increase significantly more slowly during the next two decades than it has increased during the past two decades..." Further, CBO noted that past attempts to reduce Medicare provider costs by simply cutting their payments has proven ineffective.²²⁶

Similar indexing measures were included in the 1997 *Balanced Budget Act* (BBA) to reduce Medicare payments to physicians through what became known as the Sustainable Growth Rate (SGR). Rather than tying the payments to the cost of the services, the payments were indexed to grow no faster than GDP.²²⁷ When the BBA was enacted, the SGR was projected to save \$11.7 billion over 10 years.²²⁸

Because the indexing provisions in the BBA were not in sync with the actual cost of care, Congress subsequently passed legislation—which became known as "doc fixes"—to prevent the automatic Medicare reductions.²²⁹ These subsequent fixes cost \$170 billion from 2003 through 2015, until subsequent legislation was enacted

to fully repeal the SGR. CBO projected that the full repeal of the SGR will increase deficits by \$175 billion, compared to the current baseline that assumed a 21 percent cut in Medicare payments to physicians beginning in April 2015.²³⁰

In the end, rather than saving \$11.7 billion within 10 years, the United States spent \$345 billion in the long-run fixing the SGR problem. In March 2010, CBO estimated the productivity factor alone would reduce Medicare spending by \$196 billion over 10 years. Should Congress and the President suspend or repeal the productivity factor provisions of the ACA, which is plausible given the history of the SGR, then the budgetary effects of the ACA will result in a worse financial outcome for the United States than the *Report* indicates.

It is astounding that the *Report* again fails to provide a single plan of action to address these key areas of spending. This failure only increases the magnitude of the country's ticking debt bomb, and it will only make future actions to address the debt more painful.

CHAPTER 3: THE GLOBAL MACROECONOMIC SITUATION

Chapter 3 of the *Report* assesses trends in the global economy, focusing on slowing growth around the world and the ramifications this will have for U.S. growth. Further, the *Report* underscores the benefits of U.S. trade with the world. Trade agreements such as the Trans-Pacific Partnership (TPP) provide comprehensive benefits including increased exports, higher gross domestic product (GDP), and more jobs across America.

The extensive economic problems around the world illustrate why the President's claim that America enjoys the "strongest, most durable economy in the world" is not a remarkable achievement. Also, regarding trade, several specific elements of the TPP agreement the Administration negotiated are cause for concern.

Finally, absent from the *Report* is any serious discussion of increasing international competitiveness and boosting growth by reforming America's tax system. Currently, the United States has the highest corporate tax rate in the OECD and is one of the few OECD countries with a worldwide tax system. Such an uncompetitive system has led many companies to move headquarters and capital overseas. Instead of seriously addressing the fundamental reforms required, the Administration instead proposes higher taxes and spending that would drive more companies offshore and hinder economic growth.

Chapter 3 of the *Report* focuses on economic growth throughout the world and trade policies that would boost both American and international growth. While the *Report* begins with a message from the President, echoing his State of the Union address, that America has "the strongest, most durable economy in the world," 232 the litany of problems around the world gives context to why this is not surprising. In fact, claims about America's current economic strength relative to the rest of the world are much like taking pride in—as House Speaker Paul Ryan termed it—"the nicest car in the junkyard." 233

Eurozone

Overall, 2015 was a tumultuous year for the Eurozone. The Eurozone's growth rate of 1.6 percent annually in the third quarter and its low year-over-year inflation rate of 0.4 percent belie the fluctuations which occurred in the Eurozone in 2015. While consumers benefitted from the decline in oil prices last year and the European Union (EU) is largely unaffected by the supply-side effects, the Eurozone continued to be adversely affected by economic slowdowns in China and other emerging markets, which accounted for nearly 25 percent of the area's exports.²³⁴ It also remains to be seen how southern European countries will handle their high debt-to-GDP ratios and how countries like Greece will fare after the bailout negotiations of last year.

In the beginning of 2015, the Greek parliament could not elect a President and had to have a special election, which put Alexis Tsipras and the Syriza party in charge.²³⁵ Tsipras and Syriza quickly called for an end to austerity and began demanding renegotiations of the previous rescue agreement. Starting in February 2015, the Greek government negotiated a four-month extension to Greece's bailout in exchange for lifting some antiausterity measures.

In the middle of 2015, the European Central Bank (ECB) ended emergency funding to Greece. Facing a crisis, the Greeks closed banks and instituted capital controls, leading Greek voters to overwhelmingly reject the European Union's bailout terms in a July referendum. By June, Greece was facing a potential exit from the Eurozone and an impending bankruptcy.²³⁶ In the end, Greece

and its creditors agreed to a third bailout dependent upon the very tax increases and spending cuts that Syriza pledged to end when the party took power.²³⁷

Like many major central banks, including the Federal Reserve, the European Central Bank had trouble hitting its inflation target of 2 percent in 2015. Plagued by weak growth, the ECB pursued a strategy of large-scale asset purchases, commonly called "quantitative easing." In March 2015, the ECB began purchasing securities including central government bonds and bonds issued by recognized agencies, international organizations and multilateral development banks located in the euro area. The monthly purchases of these assets—totaling 60 billion euros—were initially set to continue until March 2017, though the ECB left further action on the table. In December 2015 the Bank announced that the program would continue until "the Governing Council sees a sustained adjustment in the path of inflation that is consistent with its aim of achieving inflation rates below, but close to, 2% over the medium term."

Further stimulative attempts by the ECB occurred this year to boost the lackluster recovery the Eurozone has experienced in the wake of the 2008 financial crisis.²⁴⁰ Current projections for Eurozone growth are currently 1.8 percent for the year,²⁴¹ and if the projection is met, it would be one of the stronger years since the end of the 2008 financial crisis.

Japan

As aforementioned in Chapter 2, the Japanese economy has been stagnating for years, slowed by an aging and shrinking population, outdated and rigid regulations, and increasing debt. In 2012, the Japanese legislature elected Shinzo Abe to be Japan's prime minister. Prime Minister Abe quickly laid out a new economic plan, nicknamed "Abenomics," to revive Japan's stagnating economy. Abenomics had three principles or "arrows":

accommodative monetary policy, expansionary fiscal policy, and structural reforms.

The monetary arrow set a 2 percent inflation target for the Bank of Japan (BoJ) to achieve through monetary policy. Financial markets were stunned in late 2014 when the BoJ announced it was pursuing stepped-up quantitative easing to shake the deflationary mindset. Even with quantitative easing, the BoJ still had not achieved its 2 percent inflation target as of January 2016, leading the BoJ governors to vote 5-4 to begin using negative interest rates. Even

The fiscal policy arrow first involved a massive stimulus package focused on infrastructure and private investment in 2013 with supplementary fiscal measures in 2014 and 2015.²⁴⁴ Although the *Report* highlights the recent labor negotiations and "flexible" stimulus aspects of this arrow, absent is any mention of Prime Minster Abe's efforts to lower the corporate tax rate. Prime Minster Abe has been clear he wants to lower Japan's corporate tax rate of 35.6 percent, the second highest in the G-7 countries behind the United States, to spur investment and encourage more foreign investment.²⁴⁵ However, Japan's fiscal measures have to be limited because its public debt is approaching 245 percent of GDP, the highest among countries in the OECD.²⁴⁶

The final arrow of Abenomics promised structural reforms to Japanese markets. As aforementioned, Japan has both a shrinking population and labor force. Prime Minister Abe wants to spur population growth and encourage more women to join the workforce. Besides labor market reforms, Abenomics hopes to liberalize the agricultural market by curtailing government subsidies and opening up Japan to the international market through trade agreements such as the Trans-Pacific Partnership.²⁴⁷

Growth effects from Abenomics have yet to materialize, and slow growth continues. Japan's GDP contracted from the second quarter of 2014 through the second quarter of 2015.²⁴⁸ After

returning to growth temporarily, Japan again contracted by 1.4 percent in the fourth quarter of 2015.²⁴⁹ The opportunities from structural reform have yet to give Japan the boost it was looking for, and larger government spending has increased the public debt-to-GDP ratio to nearly 250 percent. The *Report* obliquely refers to Japanese debt trends and demographics, but it fails to make parallels to the similar challenges facing America, which are also discussed in Chapter 2 of this *Response*.

China and Other Emerging Markets

The four largest emerging market economies are Brazil, Russia, India, and China (BRIC). All four were part of the ten largest countries by GDP in 2014.²⁵⁰ As the *Report* notes, India and China accounted for half of the underperformance of the G-20 economies compared to 2010 projections.

China's economy grew 7.3 percent in 2014 and only 6.9 percent last year after years of double-digit growth—its lowest rate of growth since 1990 according to official data. Much of the deceleration has been concentrated in the country's industrial and construction sectors. China's industrial sector has been slowing over the past few years, weighed down by weak demand from many of its trading partners and appreciation in the Chinese yuan.²⁵¹ Slowing demand and yuan appreciation led to a surprising devaluation by the People's Bank of China in August that stunned financial markets.²⁵²

Over the past few years, China's housing market experienced a severe contraction. In January 2014, China's year-over-year housing starts were growing at almost a 10 percent rate. Growth in housing starts began to slow in September 2014 and continued for 12 months. Fortunately, housing starts began to rebound at the end of 2015.²⁵³

Meanwhile, other BRIC countries are experiencing slow growth or outright recession. Brazil is in the midst of its deepest recession since 1901. Analysts estimate the Brazilian economy contracted by 3.7 percent last year and project it will contract by roughly 3 percent in 2016.²⁵⁴ Inflation in the Brazilian economy rose to 10.7 percent in 2015, its highest rate in 13 years.²⁵⁵

Russia is experiencing similar problems, albeit for different reasons. According to official preliminary estimates, its economy contracted 3.9 percent in 2015.²⁵⁶ While gridlock and corruption may play a part, low oil prices and international sanctions appear to continue weighing on the Russian economy. The International Monetary Fund (IMF) and the World Bank project further contraction in 2016.²⁵⁷ Although the Central Bank of Russia has been able to lower inflation, it remains elevated at 12.9 percent.²⁵⁸

India is the outlier among the BRIC economies. India experienced year-over-year growth of 7.3 percent²⁵⁹ with an inflation rate of 5.6 percent in December.²⁶⁰ Unlike many of the other emerging markets, low oil prices have been a boon for India since it imports so much crude oil. Although headline growth is solid, the numbers mask an economy in need of reforms. Prime Minister Modi has been trying to push through land and labor reforms to boost employment and investment, but the pace has been slower than anticipated.²⁶¹

Oil

A common threat to oil-producing emerging markets is the precipitous decline in the price of crude oil. Although cheaper oil helps consumers, it harms the bottom line of oil producers, which includes many emerging market economies. While the *Report* briefly mentioned declining oil prices, it did not discuss root causes. The fall in the price of oil can be traced to three main causes: the U.S. fracking revolution, weak global demand, and a glut of crude oil exacerbated by high levels of production by the countries that make up the Organization of Petroleum Exporting Countries (OPEC)—primarily Saudi Arabia.

As detailed in Chapter 6, the fracking revolution in the United States has fundamentally changed the global oil market. For the first time in decades, there is a substantial source of incremental supply outside of OPEC that expanded quickly at costs far below the \$100 per barrel price that had prevailed. Even as the oil price fell, technological innovation continued to reduce shale oil extraction costs, which made the U.S. production rate surprisingly resilient.²⁶²

Technology is not the only development that will make U.S. oil production more resilient; recent policy changes are helping as well. The *Report* makes no mention of last year's removal of America's 40-year-old oil export ban.²⁶³ Independent analysis has shown this will further increase U.S. production and investment through 2030 while lowering prices for American consumers.²⁶⁴ Further analysis by the U.S. Energy Information Administration confirmed that gasoline prices either will not change or will decline as production increases.²⁶⁵

Another factor in the falling price of oil is the economic deceleration in China and other countries that has considerably weakened global demand. This decrease has hit the U.S. energy sector especially hard since these struggling countries have not been able to absorb the incremental supply as expected. To the extent stock traders interpret an oil price decline as reflecting weakening demand and infer that economic growth is slowing, stock prices tend to go down. However, different forces are acting on demand and supply simultaneously, and it can be difficult to discern the reasons for, and implications of, oil price movements.

Finally, the international boycott of Iranian oil has come to an end, and it is unclear how much additional supply will enter the world market as a result. Saudi Arabia has been increasing its rate of production in the face of falling oil prices to prevent U.S. firms and the Iranian government from gaining market share.²⁶⁶

International Trade

In general, America benefits from entering into trade agreements. Because the United States already has open markets and low tariffs, trade agreements generally have the effect of further opening foreign markets for American goods and services while requiring relatively little sacrifice on the part of the United States. Businesses benefit when new foreign markets and customers become available. They also benefit from lower input prices. Workers benefit from trade through greater demand for their products and the higher wages that accompany export-related jobs. Additionally, trade benefits consumers through lower prices due to reductions in tariffs and restrictions.

Last year, Congress enacted legislation to reauthorize Trade Promotion Authority (TPA) for the first time since 2002. TPA provides the President with the necessary authority to negotiate trade agreements with other nations. It also reaffirms the special function performed by Congress in determining U.S. trade policy. Under the U.S. Constitution, the President can negotiate trade agreements, but only Congress can approve or reject an agreement and enact the terms of the agreement into U.S. law. TPA set forth the priorities of Congress relative to trade policy, and it provides the President with instructions on how to conduct trade agreements that will engender congressional support. TPA also establishes a detailed process for congressional review and consideration of trade agreements. These provisions guarantee that our system of checks and balances remains intact with regard to international trade policy.

Enactment of TPA has been particularly important for the President's negotiations relative to the Trans-Pacific Partnership (TPP) agreement. As mentioned in the *Report*, the TPP is a proposed Asia-Pacific free trade agreement involving 12 countries, including the United States, Canada, Japan, Australia, New Zealand, Mexico, Vietnam, Singapore, Malaysia, Brunei, Chile, and Peru. The TPP offers tremendous potential for new markets and increased exports for U.S. businesses. According to the International Trade Administration, goods exported to TPP countries support 3.1 million U.S. jobs. Services exports to these

countries support an additional 1.1 million U.S. jobs. Upwards of 177,000 U.S. businesses export goods to TPP countries, and 97 percent of those are small- and medium-sized businesses.²⁶⁷

A strong TPP agreement holds great promise in terms of increasing America's economic and strategic influence in the region. Indeed, the Administration has positioned the TPP as the key economic component to a "rebalancing" in the Asia-Pacific Region relative to China. Lawmakers on both sides of the aisle see the TPP as a crucial measure to ensure that America establishes the rules of the road in the new global economy, rather than ceding that role to China. The TPP offers the United States the opportunity to both generate new, high-paying jobs here at home and establish an economic framework that will benefit American interests over the long term.

Nonetheless, Congress will only approve an agreement that achieves the standards prescribed in TPA. Unfortunately, at this stage it seems the President has fallen short in the negotiations with regard to a number of significant elements. For example, the President has failed to achieve adequate intellectual property protections for innovative American pharmaceuticals. Such protections are foundational for U.S. trade and must be robust to give American businesses the confidence to sell their products abroad. The current deal also fails to protect proprietary data stored by financial services companies. It also inexplicably denies market access for certain U.S. goods. Hopefully, the Administration will choose to address these concerns prior to any congressional action on the TPP agreement.

In a positive development, Congress recently enacted the largest legislative reform in customs and enforcement policy in nearly 20 years. The *Trade Facilitation and Trade Enforcement Act* authorizes the U.S. Customs and Border Protection and modernizes operations for more efficient flow of trade across the border.²⁶⁹ It also establishes robust tools that will strengthen

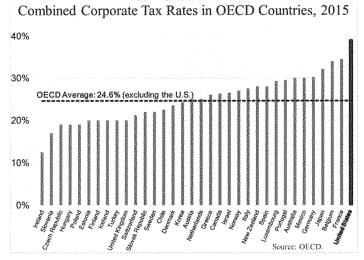
enforcement of U.S trade laws and better ensure a level playing field.

International Tax Competitiveness

Last year's *Economic Report of the President* contained an entire chapter dedicated to business tax reform and its potential to boost economic growth.²⁷⁰ In addition, the budget submitted by the Administration last year contained a reserve fund for "business tax reform that is revenue neutral in the long run."²⁷¹ The reserve fund for business tax reform is missing from the President's FY2017 budget. In fact, the Administration's budget plan now represents a net tax increase on both businesses and individuals that totals \$2.8 trillion. This is hardly a constructive first offer to spur bipartisan action on tax reform. Similarly, this year's *Report* seems to indicate a lack of enthusiasm for reforming the tax code, since it only contains passing references to business tax reform. In fact, the largest discussion in the *Report* is a single paragraph in Chapter 2.²⁷²

Any discussion of the global macroeconomic situation must address the severe uncompetitive nature of the U.S. tax system compared to those of our trading partners. Among the 34 advanced economies in the OECD, the U.S. corporate rate is the highest at 39 percent, including the 35 percent Federal rate and state taxes (Figure 3-1).²⁷³ The President's FY2017 budget contains a brief reference indicating that it still endorses the Administration's past framework for business tax reform, which proposed a Federal corporate rate of 28 percent.²⁷⁴ While this would be an improvement, it falls short of the 25 percent rate supported by many in Congress. A corporate income tax rate of 25 percent (not including state taxes) would be closer to the average of other developed countries, while a 28 percent rate would still place the U.S. rate among the highest.

Figure 3-1



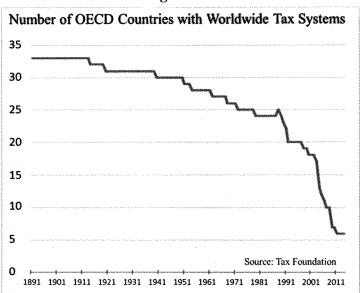
Additionally, America is facing new competitive pressures because many of our trading partners have adopted "patent boxes" or "innovation boxes," which are also discussed in Chapter 5 of this *Response*. These arrangements tax the income from intellectual property at rates far below the statutory rate of the host country, and could entice companies to locate valuable intellectual property and related jobs overseas.

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, the worldwide system of the United States is an outlier, subjecting all income of companies to U.S. tax, regardless of where in the world it is earned. Because the tax is triggered when the profits are brought back to the United States, companies have 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. Figure 3-2 below illustrates the trend of our international competitors choosing to adopt territorial tax systems, while the United States has been left behind.

Figure 3-2



In testimony last year before the Senate Finance Committee that echoed past testimony before the JEC, Laura D'Andrea Tyson, former CEA Chair during the Clinton administration, argued that the United States should move to a territorial system. This would allow U.S. multinationals to compete more effectively in foreign markets, which comprise roughly 80 percent of the world's purchasing power.²⁷⁵ However, the Administration instead clings to international tax reform that it describes as "hybrid," in which an immediate 19 percent minimum tax would be imposed on all new foreign earnings of U.S. companies going forward.²⁷⁶ In her testimony, Tyson argued forcefully against the competitive disadvantage of such an approach, which she explained would amount to an effective rate of at least 22.4 percent and incentivize American companies to move their headquarters overseas.²⁷⁷

Corporate Inversions

In a recent speech before the New York Bar Association Tax Section, CEA Chairman Furman highlighted the disturbing trend of U.S. companies merging with foreign companies and moving their headquarters to the lower-taxed jurisdiction, known as "corporate inversions." However, the Administration's proposed legislative solution to corporate inversions is deeply flawed.

Under current law, an "inverted" company continues to be taxed as a U.S. corporation if 80 percent or more of the shareholder ownership does not change after the inversion, unless there are "substantial business activities" in the foreign jurisdiction.²⁷⁹ The Administration's anti-inversion proposal would lower the 80 percent threshold of shareholder ownership to 50 percent, effectively meaning that foreign ownership would have to dominate following the merger or acquisition in order for the new entity to change tax headquarters.

Requiring the American share of the business to be smaller than the foreign share would create several unintended consequences. For example, this could encourage larger U.S. companies to splinter into smaller spin-offs that would then be acquired by more dominant foreign competitors. It would also make American companies attractive takeover targets for large foreign multinationals, a phenomenon that is already occurring. The President's framework would give a greater advantage to foreign competitors than already exists. While foreign competitors could be nimble with their investments and already enjoy more favorable tax systems, U.S. companies would be stuck in an even more uncompetitive tax system.

In addition to the 50 percent of shareholder ownership threshold, the Administration would also tax inverted companies as U.S. corporations if the "management and control" of the company is primarily in the United States. This test would chase high-quality

management jobs outside the United States, as domestic and foreign companies would respond by moving jobs. This concern was echoed by Senator Charles Schumer when he spoke about legislation similar to the Administration's proposal.²⁸¹

Further, while the Administration's plan is aimed at trapping American-headquartered companies in the U.S. tax system, the proposal is likely to discourage new companies from choosing American headquarters. Every day, entrepreneurs launch new companies and decide where to place the headquarters. Selecting a location that attempts to trap its businesses in an uncompetitive tax system indefinitely would be illogical.

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 a competitive international tax system. As a result, companies have returned to Great Britain and new companies are incorporating there. The best solution for stemming inversions is to treat the root of problem—an uncompetitive tax system—rather than enact punitive measures to treat the symptoms.

Using New Taxes for Spending Programs Rather Than Competitiveness

The President's proposed framework would impose a 14 percent tax on existing earnings of American companies invested overseas, known as "deemed repatriation." However, rather than using this revenue to transition to a more competitive international tax system, the Administration would use these revenues solely to pay for infrastructure spending, as explained more fully in Chapter 6 of this *Response*. The President's proposed tax is substantially higher than rates outlined in other reform plans, such as the one introduced by then-House Ways and Means Chairman Dave Camp in the last Congress, and does not contribute to American companies' competitiveness in the world marketplace.

Passthrough Businesses

While the Administration has proposed lower tax rates for C corporations, no similar rate reduction is offered to the 95 percent²⁸³ of businesses that pay taxes at the individual level rather than corporate level, known as passthrough businesses. The vast majority of small businesses are organized as passthroughs, and as such, a lower corporate rate would be of little help. 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, because of ACA taxes and the President's insistence on raising the top individual rate and imposing other penalties, the top rate paid by small businesses is now 44.6 percent.²⁸⁴

The President's framework would put small businesses in an even worse position. If certain business tax preferences are eliminated, and the proceeds used only to lower the corporate rate, then many small businesses will face even higher effective tax rates. CEA Chairman Furman's recent speech, as referenced earlier, argued that higher passthrough rates are justified because C corporations face a double tax, at both the corporate and shareholder level, while passthroughs generally pay only a single layer of tax. Such a statement seems to suggest that the effective tax rates of passthroughs must already be far lower than the rates paid by double-taxed corporate taxpayers. However, CBO has determined that even with just a single level of tax, passthrough businesses only enjoy a four percent lower effective tax rate of 27 percent, compared to the C corporation effective rate of 31 percent.²⁸⁵

Under the President's framework, C corporations would experience a top rate reduction from 35 percent to 28 percent, while small businesses would be taxed at a top rate of 44.6 percent and lose many of the tax preferences that lower their effective rate.

Chapter 5 of the *Report* discusses technology and innovation, and one section laments the decline of "business dynamism" and start-

ups.²⁸⁶ Ironically, while the *Report* acknowledges that barriers to market entry play a role in discouraging start-ups, the Administration does not seem to recognize that rising tax burdens on small businesses may be a source of declining entrepreneurship, representing another significant market barrier.

Lost Opportunities for Pro-Growth Reform

In the last 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 President's insistence on massive tax increases on the individual side of the tax code diminished possibilities for fundamental reform. Then discussions turned to business tax reform, since the Administration had indicated openness to revenue neutrality in that context. However, the Administration's refusal to address the tax rates paid by small businesses further limited the possibility of reform.

More recently, the conversation narrowed to international tax reform, a subset of business tax reform. However, the President's recent budget submission with large net tax increases on the business side of the code seems to destroy the possibility of either broad business tax reform or even limited international tax reform occurring during the current Administration. Declining prospects for reforming the tax code in a holistic way will only continue to further disadvantage American businesses competing abroad and at home while making foreign headquarters more attractive. The Administration's apparent waning enthusiasm for reform also represents a tragic lost opportunity to boost economic growth and create more jobs at a time when the country is in dire need of both.

CHAPTER 4: OPPORTUNITY FOR ALL

The *Report* devotes much attention to the economic conditions facing low-income families and proposes several ways to address poverty. In doing so, the *Report* largely relies on the continuation of existing government programs that were created decades ago for a different time and economy. This chapter highlights how these programs far too often end up hindering the very people they are designed to help.

To break the cycle of poverty, public policy must remove the government-imposed barriers that impede economic mobility and develop smarter solutions that empower individual success. Smart reforms include: 1) increased economic growth, which expands opportunity; 2) strong, properly aligned incentives that promote savings, investment, and learning; and 3) long-term sustainability for the programs and, in turn, the beneficiaries.

The *Report* chronicles numerous challenges facing low-income families in America today. Too often, children who are born into poverty receive substandard nutrition, live in unsafe environments, or attend failing schools. These conditions are not easy for families to overcome, and the *Report* correctly notes that breaking the cycle of poverty is indeed a challenging endeavor for policymakers.

The Federal Government certainly has an important role to play in assisting individuals and families in need. However, real long-term progress for low-income families must start with strategies that foster individual empowerment and attainment of self-sufficiency. As economist Arthur C. Brooks notes form his research:

What I found was that economic inequality doesn't frustrate Americans at all. It is, rather, the

perceived lack of economic opportunity that makes us unhappy. To focus our policies on inequality, instead of opportunity, is to make a grave error—one that will worsen the very problem we seek to solve and make us generally unhappier to boot.²⁸⁷

Sound public policy in this area must therefore involve the removal of government-imposed barriers that impede upward economic mobility. One example of such a mobility barrier is the exorbitant tax rate that public assistance programs impose on those at or near the poverty line. The interaction between taxes and the phase-outs of public assistance benefits as household income increases frequently imposes an extremely high effective marginal tax—in some cases, exceeding 100 percent—on earning additional income.²⁸⁸

This overall phenomenon, commonly referred to as the "poverty trap," discourages individuals in low-income households from entering the labor force, working extra hours, or seeking career advancement that would contribute to their economic mobility and well-being. As Scott Winship points out, existing government programs intended to create a safety net can also create a ceiling to success. Though these programs have helped lift many poor Americans out of destitution, they often come with the unintended consequence of discouraging the upward mobility of low-income families.²⁸⁹ In fact, a study from the Cato Institute finds that public assistance benefits can pay more than the minimum wage in 35 states, even after accounting for the Earned Income Tax Credit (EITC), and in 13 of those states, welfare can pay more than \$15 per hour.²⁹⁰

Policymakers can encourage relative mobility by reforming programs that currently discourage saving, investing, and learning. Basic economic theory and, more importantly, practical experience is instructive when assessing what programs to reform and how. The policy spectrum is rife with opportunities for smart reform, including welfare reform, amending the tax penalty on

married couples, education reforms such as school choice, and developing novel programs to slow the cost growth of higher education that has risen due to, not despite, the increasing prevalence of Federal student loans.²⁹¹

Smart reform—especially in this policy area—is guided by fundamental principles by which potential solutions can be judged. A useful checklist by which to judge policies designed to ensure all Americans have equal access to opportunity and upward mobility includes:

- Increased economic growth: As the economy expands, so does opportunity. Opportunity in the form of more, better-paying jobs closely tracks economic growth, and policy should aim to foster a fertile economy.
- Strong, properly aligned incentives: Any policy should create or enhance incentives to save, invest, and learn skills, each of which boosts relative mobility and reduces inequality of opportunity.
- 3. Long-term sustainability: Reforms cannot and should not be undertaken on a nearsighted basis. Inflating the well-being of working generations at the expense of their children does not constitute real reform. When smart policy is implemented, there will not be any can to kick down the road.

The public sector can play an important role in helping those in poverty or on the cusp of poverty harness their individual talents and attain a greater sense of dignity through self-sufficiency. However, the *Report* generally advocates for a continuation and expansion of longstanding Federal policies and programs focused more towards alleviating short-term symptoms rather than offering sustainable pathways toward earned success. Unfortunately, Federal anti-poverty programs have so far failed to achieve their original goals, mostly because they too often contain

perverse incentives that effectively penalize low-income individuals for maintaining employment.²⁹²

When President Lyndon B. Johnson's (LBJ) Great Society programs were implemented in 1966, the Federal poverty rate was 14.7 percent. Shortly after signing these programs into law, LBJ said that "Our American answer to poverty is not to make the poor more secure in their poverty but to reach down and help them lift themselves out of the ruts of poverty and move with the large majority along the high road of hope and prosperity."²⁹³ However, nearly 50 years and \$15 trillion spent since President Johnson declared a "war on poverty," the Federal poverty rate at the end of in 2014 was 14.8 percent, as demonstrated by Figure 4-1.²⁹⁴

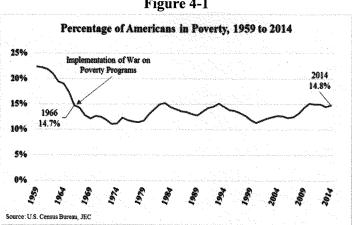


Figure 4-1

Similarly, the year-end labor force participation rate in 2015 was 62.6 percent—the lowest point since 1976.²⁹⁵ These numbers are particularly concerning since employment opportunities have become available for a larger share of the population. Women have made great progress in their ability to enter the workforce, with 56.8 percent of women are now in the workforce, up from 41 percent at the end of 1966. However, these gains have been mitigated as the percentage of men in the labor force has been steadily declining since the implementation of LBJ's anti-poverty

initiatives, falling from 80.5 percent participation in 1966 to 68.9 percent by the end of 2015.²⁹⁶

Families do not remain in poverty because they do not *want* to work. Surveys of those enrolled in welfare programs "consistently show their desire for a job."²⁹⁷ The outdated Federal welfare system no longer works for the 21st century and in turn harms the very people they are designed to help.

The Federal Government now funds 126 different programs targeted towards helping low-income Americans.²⁹⁸ These programs have been largely ineffective at addressing the underlying problems, as evidenced by the essentially stagnant level of poverty across the nation since 1966. The *Report* rightfully notes that children born into poverty are more likely to have a difficult time finding steady employment as adults.²⁹⁹ Unfortunately, the *Report* fails to recognize broader shortcomings of the Federal system for providing public assistance and instead proposes a continuation of the same policies and programs that have locked many families in a cycle of poverty for generations.

The Illinois Policy Institute demonstrated this fact using the example of a single mother of two in Cook County, Illinois earning \$12.00 per hour, or approximately \$22,100 annually. The value of the welfare benefits the mother receives is \$41,476 annually, bringing her total take-home (benefits plus salary) to about \$64,000. Should this mother be offered a job that pays twice as much per hour, she would lose over \$39,000 in benefits. In part because welfare benefits are not taxed as income, ³⁰⁰ this mother would have to earn \$38.00 per hour, which is the equivalent of \$80,000 annually, in order to make up for the loss of benefits she received making only \$12.00 per hour. ³⁰¹ Rather than providing an opportunity to gradually increase her earnings over time, the welfare benefit structure incentivize her to remain in a low-paying job.

Supplemental Nutrition Assistance Program

One of the largest public assistance programs highlighted in the *Report* is the Supplemental Nutrition Assistance Program (SNAP), formerly known as food stamps. The concept of SNAP began after the Great Depression, but the program as we know it today was created as part of LBJ's Great Society. SNAP is now the largest of the 18 separate food assistance programs and accounted for over \$74 billion of the more than \$100 billion spent on these programs in 2014. 304

The *Report* asserts that SNAP is an important tool in improving the health and economic outcomes of children born into poverty. Unquestionably, these programs provide a lifeline to millions of Americans in need. However, the *Report* focuses on research comparing outcomes to impoverished children with a stable food source verses the outcomes of children from low-income families that do not have the same level of access to food. It's understandable that children have better outcomes when they are not living in hunger.

The bigger picture that the *Report* fails to capture is that all impoverished children are best served when their parents are given the opportunity to lift the family out of poverty. This was one of SNAP's primary goals; however, changes to the program over time that have expanded or waived eligibility criteria, as noted in Figure 4-2 below, have resulted in SNAP's key role in the poverty trap.³⁰⁶

Figure 4-2

Selected Expansions in SNAP 2008 Farm Bill		
Increased minimum standard deduction for certain households to \$144	X	Х
Eliminated cap on dependent-care deductions	X	X
Increased minimum benefit for certain households to 8% of Thrifty Food Plan	X	
Indexed asset test to inflation		X
Excluded tax-preferred retirement plans from asset test		X
Let states exclude or deduct child- support payments from household income	the training again about a facility of	X
Excluded certain education- assistance payments from means test	X	X
Excluded certain state assistance- program payments from means test	X	X
Excluded certain types of income from means test	X	X
Reduced households' reporting requirements	X	
Raised asset-test threshold for households with disabled members		X
Let states exclude certain resources from means test	Andrews of the second sec	X
Increased transitional benefits for certain households	X	X
Source: "War on Poverty: 50 Years La Budget Committee Report, 2014.	nter," A House	99-96-96-96-96-96-96-96-96-96-96-96-96-9

This fact is apparent when considering that, since 2009, the national unemployment rate has been cut in half to 4.9 percent,³⁰⁷ while the number of SNAP enrollees has actually increased by

more than 12 million people.³⁰⁸ SNAP is largely countercyclical; therefore, it's expected that enrollment will increase as the unemployment rate rises. When the opposite occurs, it shows that SNAP program is not achieving its goal of bringing people out of poverty.

Earned Income Tax Credit

SNAP is only one of the programs creating an aggregate system of government dependency. The *Report* barely touches the surface of this problem by promoting the EITC, which is traditionally a policy tool of the Administration used to reduce inequality and strengthen families. While some believe the EITC is an effective policy tool for encouraging work and reducing poverty, others have concerns about using the tax code as a transfer payment program and the high level of improper payments and fraud associated with EITC.³⁰⁹

As a whole, the *Report* fails to acknowledge the significant consequences that have resulted from Federal public assistance programs and, instead, simply proposes throwing more good money after bad. This includes programs created by LBJ and the subsidies created under the ACA, which is expected to further reduce work incentives, as discussed in Chapter 2.

Head Start Program

Another component of LBJ's war on poverty that the *Report* promotes is the Head Start program, which is a Federal grant to help low-income children attend preschool. The program has since repeatedly been reauthorized, most recently in 2007.³¹⁰ The *Report* attempts to bolster President Obama's efforts to expand Head Start through his "preschool for all" initiative, along with Early Head Start for toddlers and infants.³¹¹ The *Report* uses of only a handful of studies—some of which are decades old—in order to justify a top-down, one-size-fits-all preschool program across the country.

The *Report* conveniently does not mention a comprehensive study of the Head Start program conducted by President Obama's own Department of Health and Human Services (HHS). HHS's 2010 study found that Head Start has had little to no impact in the long run, across 22 different cognitive measures. Any area in which Head Start did have an impact, those gains were completely nullified by the time the students entered 3rd grade. Even more concerning, the study concluded that three-year-olds who attended Head Start were actually worse in math than their peers that did not attend Head Start.³¹²

The Obama administration continues to advocate for Head Start, despite these findings. While there may be some benefits to early education programs, the Federal Government's insistence on having a highly restrictive, top-down approach leaves little room for flexibility at the state or local level. Not surprisingly, some states are instead developing solution-oriented preschool programs that meet the needs of their states.

For example, On My Way Pre-K is Indiana's pre-kindergarten pilot program, which pays for low-income four-year-old's preschool. Signed in 2014 by Governor Mike Pence, On My Way Pre-K is unique in it allows parents to send their children to the preschool of their choice. In 2015, Governor Mike Pence expanded the program and invested in improving preschool facilities around the state.³¹³ Even local area leaders and nonprofits are fundraising to help enroll four-year-olds in the program.³¹⁴ Early on, Governor Pence had the option of utilizing Federal preschool funds. However, the Federal requirements would have forced Indiana to launch their program before it was even ready.³¹⁵

K-12 and School Choice

Given Head Start's shortcomings, it becomes increasingly important for children from low-income families to have access to a quality K-12 education. As previously mentioned in the

chapter's opening, too many children born into poverty are forced to attend failing schools district, simply because of where the child's family lives—or can afford to live.

Despite claims to the contrary, school choice does exist within the traditional public school system. Those with the financial means are able to choose a home located in a good school district, or they can choose to send their children to private school. However, the choices available for families living in poverty are much more limited and the children of these families are often forced into failing schools.

President Obama's answer to this problem is not to provide families in poverty with more choices, but to spend more money on education. However, the United States already allocates about \$115,000 to educate each student. Globally, the United States ranks fifth out of 34 in the amount spent per student, but places 17th in math and reading, which is only slightly better than its 21st place in science. ³¹⁷

This misnomer that increased education spending equates to better outcomes is further exemplified in the District of Columbia (the District). In 2013, the nation's capital ranked third in the amount it spends per pupil enrolled in public school, which was nearly \$18,000 annually. Yet, researchers found that out of all 50 states and the District, the District's overall rank was 50. The District also ranked dead last, or second to last, in reading, math, SAT scores, and dropout rates. 319

Congress created the D.C. Opportunity Scholarship Program (OSP) in 2003 to provide low-income students in underperforming schools with the opportunity to receive vouchers to attend a better-performing public charter school or private school.³²⁰ The OSP independent evaluator identified substantial improvements and noted that OSP "increased the likelihood of a student graduating by 21 percentage points." The evaluator further stressed that, "in scientific terms, we are more than 99

percent confident that access to school choice through the OSP was the reason why students in the program graduated at these much higher rates and not some statistical fluke."³²¹

The impact of school choice should not be overlooked, but should be used as a framework for Congress and the President to improve the educational opportunities for impoverished children. The Federal Government created a public school system that limits the educational opportunities for children from poor families and owes it to these families to take the necessary steps to alleviate the consequences of government dependency—starting with expanding school choice to all families, regardless of income.

The Impact of Two-Parent Families

The *Report* correctly acknowledges the important role of parents and caregivers during the early years of a child's life. The correlation between stable, two-parent households and better outcomes for children is striking. 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. Sawhill goes on to say that, "family formation is a new fault line in the American class structure."

For those born into poverty, the impact of marriage is even more profound. Richard Reeves of Brookings Institution found that the child of a poor, unwed mother has a 50 percent risk of remaining at the bottom of the economic ladder and only a five percent chance of rising to the top income level.³²⁴

Similarly, when comparing the economic performance of states with higher rates of marriage against states with the lowest rates of marriage, researchers found that children in states with the highest rates of marriage had a 10.5 percent greater chance of upward income mobility. The states with higher marriage rates also had a 13.2 percent lower rate of child poverty than states with

the lowest rates of marriage.³²⁵ What is important to note about this study is that the data controlled for numerous variables including the parent's education, race, age, and even the state's environment, such as minimum wage, education expenditures, crime, and tax rates.³²⁶

The median age that women have their first child (25.7 years) is now younger than the median age at which women are first married (26.5 years). This phenomenon, referred to as the "Great Crossover," first occurred decades ago for the most economically underprivileged women, and more recently for women who have at least a high-school degree or some college. Today, about half of the children born in the United States are born to unwed parents.³²⁷

In light of the substantial evidence demonstrating the positive impact marriage has on children, particularly children from low-income families, it is important that public policy not discourage the practice. Yet, many public policies 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."³²⁸

Using the aforementioned Illinois Policy Institute's example of the single mother of two in Cook County, Illinois earning \$12.00 per hour, the welfare marriage penalty could actually put this same mother in a worse financial situation if she chooses to get married, particularly if she married someone who was also a low-income earner. If this mother and her spouse earned a combined salary of \$22.00 per hour, their Federal welfare benefits would drop from the prior level—when she was unwed—of \$41,476 annually to \$6,814. As a married couple earning \$22.00 per hour, their takehome value (income plus benefits) would total \$47,210 annually, 329 compared to approximate \$64,000 she received unmarried. 330

A similar marriage penalty exists within the Federal tax code where couples may have a higher tax burden if they are married. While this marriage penalty does not affect all couples, it typically occurs when both partners have similar earnings, ³³¹ and would be more difficult for couples with lower-incomes to bear. A low-income couple with similar incomes and with one child would owe almost \$1,100 more in Federal taxes each year as a married couple than if they were unmarried. ³³² This is yet another example of how the Federal tax system is broken, as discussed in the previous chapter.

In order to create a smarter system that promotes achievement and helps Americans fulfill their desires of employment, the President and Congress must recognize the power of opportunity. These steps must include providing states more flexibility in administering welfare programs and job training programs. States and local communities are better assessors of their needs, and the Federal Government should afford them the opportunity to develop ways to meet those needs. The policies of the LBJ era have proven that a one-size-fits-all system cannot serve the entire country. It's time to shift the focus from Federal control to state flexibility through the utilization of block grants.

CHAPTER 5: INNOVATION, TECHNOLOGICAL CHANGE, AND AUTOMATION

The Report highlights the concerning trends of less dynamism in the business sector, lower productivity growth, and subdued startup rates that pre-date the recent recession. These trends highlight a recurrent theme in this era of slower growth expectations: a divergent path that yet remains unclear for the future of America and worldwide. In the optimistic view, the Report suggests that investment will return to its historical trend after the capital overhang following the recent recession. In the pessimistic view, it is possible that the recent slowdown in investment may reflect lower capital intensity, slower labor force growth, or fewer startups going forward. Implementation of pro-growth policies remains important as ever in fostering a competitive business environment both here and abroad, as well as recognition of government's role in removing barriers to entry, protecting property rights and promoting the rule of law. thereby bolstering economic activity and entrepreneurship.

When the Administration talks of the middle class, it is usually in the context of insulating that demographic (however they define it) from disruptions in the economy. The Administration wants to ensure that the labor market is strong enough to encourage people to retrain to find work and reenter the labor force, yet participation remains at low levels not seen since the Carter administration. With these priorities in mind, it is curious that the Obama administration pursues, in the name of income security and redistribution, policies that would be counterproductive to reducing slack in the U.S. labor market. As Greg Ip notes in his book, *Foolproof*, "[S]ocieties and economies...are not inherently stable. They are constantly changing, evolving, and usually getting better in the process. Stability is blissful, but it may also

be illusory, hiding the buildup of hidden risks or nurturing behavior that will bring the stability to an end."333 In favor of increased stability, this Administration has sacrificed the entrepreneurial spirit that seeks to introduce new products, services and technologies. The policies proposed and passed into law may have simply redirected the underlying risks it seeks to mitigate into areas as yet unanticipated, which will likely result in the continuation of unfortunate, unintended consequences that have become a hallmark of the Administration.

Productivity Growth

Although productivity data is notoriously volatile, the Administration teases out three distinct 15-year periods of average annual growth: 1948-1973 averaging 2.9 percent annually; 1973-1995 averaging 1.5 percent annually; and 1995-2014 averaging 2.2 percent per year.³³⁴ However, the San Francisco Fed sees a slightly altered version of these periods (Figure 5-1).

Contributions to Business-Sector Output Growth Annualized Average Growth over Each Time Period 4.5% ■ Labor Productivity **■** Hours 4 3.5 3 2.5 2 1.5 1 0.5 0 -0.5 1948:Q1-1973:Q2-1996:Q1-2004:Q1-2008:O1-1973:Q1 1995:Q4 2003:Q4 2007:Q4 2014:Q1 Source: Bureau of Economic Analysis, Bureau of Labor Statistics, and San Francisco Fed calculations.

Figure 5-1

Noting that output grows as a result of increased hours worked, productivity (output per hour), or both, the San Francisco Fed finds that labor productivity was relatively robust in the 1948-

1973 and 1996-2003 periods, averaging nearly 3.5 percent annually. Growth in hours accounted for another approximate percentage point in contributions to output growth over those time periods. In contrast, the time periods including 1973-1995, 2004-2007, and 2008-2014 are characterized by relatively sluggish productivity growth, but with the exception of the 2008-2014 period, nonetheless exhibit stronger growth in hours worked. The 2008-2014 period saw a decline in hours worked on average of nearly 0.5 percent annually in combination with a sluggish 1.5 percent growth in productivity. The research further finds that capital per hour worked "has continued to grow modestly." 335

Total factor productivity (TFP) represents another challenge, according to the *Report*. TFP is the productivity that results from employing both labor and capital. It grows when a fixed value of aggregate resources (i.e. labor and capital) produces more economic output. One of the downfalls of relying on TFP as an economic indicator is that it is subject to significant measurement error.³³⁶ Yet the Administration relies heavily on TFP in economic forecasts for the President's ambitious fiscal year 2017 budget.

The *Report* points out that, compared to other G-7 nations, labor productivity growth in the United States is performing well. Further, the *Report* argues that the recent slowdown is mostly due to capital deepening (a.k.a. a declining pace of investment per worker).³³⁷ Overall, the *Report* suggests that the recent weakness is due to cyclical, rather than structural factors. Hopefully this turns out to be the case. If not, however, the *Report* notes that, "...if sustained, slower productivity growth will mean...slower improvements in living standards."³³⁸

Declining Dynamism

The *Report* highlights that business dynamism, "the so-called churn or birth and death rate of firms" has been in decline since the 1970s, thereby increasing the age of existing firms.³³⁹ New

business creation fell by more than 30 percent during the recession and has been slow to recover.³⁴⁰ A study by the Kauffman Foundation found that the rate of new entrepreneurial activity has fallen to new recovery lows for Americans age 20-34. In other words, millennials are not starting companies at the same pace as baby boomers did.³⁴¹ Furthermore, studies by economists at the Brookings Institution found that the share of start-ups (firms less than 1 year old) had fallen from 15 percent of all businesses in 1978 to 8 percent in 2011. By contrast, the share of older firms (older than 16 years) jumped from under a quarter to more than a third of all businesses.³⁴²

The *Report* argues that there are three puzzles relating to slower investment growth: (1) the effect of technology on investment, (2) rising returns to capital, and (3) potential mismeasurement. However, how these bode for long-term trends remains to be seen. The *Report* posits two contrasting views, one optimistic and one pessimistic. The optimistic perspective suggests that dissipating headwinds from the recent recession have left investment poised to return to its prior trend of stronger growth going forward. In the pessimistic view, however, "there are decades-long trends of less dynamism in the business sector which could suggest a shift in previous patterns of investment. The share of new firms among all firms—the startup rate—has trended down over the past decades." The potential of a structural slowdown in the startup rate is concerning for a few reasons.

Many unintended consequences of the cumulative burden of regulation, redistribution efforts, and the current tax and welfare structures serve to negatively affect investment and entrepreneurialism. As noted in Chapter 1, the *Report* spends pages deriding rent-seeking behavior while at the same time defending the Administration's regulatory regime. However, it is this regulatory overreach that incites rent-seeking behavior and draws entrepreneurial activity away from more productive pursuits.

Administrative and bureaucratic compliance costs borne by firms have increased significantly. The annual costs of federally imposed rules is nearly \$1.9 trillion in compliance according to the Competitive Enterprise Institute.³⁴⁴ As measured by the Economic Freedom of the World Index, economic freedom in the United States has dramatically worsened since 2000, precipitating a decline within the overall Economic Freedom rankings from 2nd to 16th.³⁴⁵

It is difficult to overstate how harmful regulation can be to business investment, but the economic effects of deregulation in the United States and United Kingdom in the 1970s and 1980s were clear. As the utility, communications, and transportations were deregulated, investment in these sectors as a percentage of capital stock more than doubled. In stark contrast, European countries—such as Italy, France, and Germany—that did not undertake these large-scale reforms saw a five percent decline in investment.³⁴⁶

Entrepreneurship is the seed of creative destruction. In an effort to make themselves better off, entrepreneurs develop new products and services. Entire industries and the firms within them survive by improving the lives of their customers with better performance, lower prices, greater convenience, and new features.

For example, technological advancements in telecommunications have enabled the industry to enable 96 billion more calls with 106,000 fewer operators today compared to three decades ago. One obvious benefit for consumers was that all of this efficiency was achieved while simultaneously costing consumers less to make long-distance calls. However, it appears in recent years that all the "low-hanging fruit" in technological gains may have been plucked. Technological innovation still occurs, but rather than making economic gains by leaps and bounds, improvements are incremental and less valuable. Just think of how much value harnessing electricity and inventing the telephone created, versus

what the innovations of social media have done for society from an economic standpoint.

Economist Joseph Schumpeter originally coined the phrase "creative destruction" as a way to describe the dynamic evolution of the economy as markets change, industries rise and fall, businesses open and close, and workers gain and lose jobs. He argued that it is an essential fact of capitalism:

The opening up of new markets, foreign or domestic, and the organizational development from the craft shop to such concerns as U.S. Steel illustrate the same process of industrial mutation—if I may use that biological term—that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism.³⁴⁹

Creative destruction makes scarce resources more productive by "shifting resources from declining sectors to more valuable ones as workers, inputs, and financial capital seek their highest returns."³⁵⁰ By allowing creative destruction as a natural process of economic evolution, societies grow more productive and richer over time as they see the benefit of new and improved products, less dangerous jobs, and higher living standards.³⁵¹ In many ways, both measurable and immeasurable, Americans are better off than generations before them as their living standards have increased over time. Modern conveniences like the refrigerator, for example, now occupy space in approximately 99.2 percent of households, according to the Census Bureau.³⁵²

However, as economic growth slows, so too do gains in standard of living. Recent analysis finds that annual productivity increases of three percent double the U.S. standard of living every 24 years. Unfortunately, annual productivity increases have fallen by half of

that figure to roughly 1.5 percent on average per year—which translates to a 23-year increase in the time it takes to double the standard of living (bringing the total time to 47 years). The sluggish recovery has led many institutions, including CBO and BLS, to reduce projected estimates of potential GDP growth, labor force participation, productivity. As such, recent analysis finds that there is "little room for gains in real incomes." It is perhaps even more unsettling that it is unclear for how long these trends will continue.

One bright spot for the United States is that population and workforce projections point to positive growth over the next half-century, albeit significantly slower than the historical norm. Compared to other countries, however, the United States remains "demographically fortunate" over the long term given that its working-age population is expected to grow 10 percent by 2050. In contrast, other advanced economies will see their workforces shrink by at least one-quarter in many cases over the same period. 355

Research and Development and the Role of Patents

Real private research and development (R&D) trends are a positive signal for future strength in U.S. productivity growth. Fortunately, the *Report* is quick to note that private R&D investment has grown by nearly five percent annually since the start of 2013 and that "2015 was the best year for private R&D growth since 2008." The focus on the benefits of private spending, however, is fleeting. The *Report* then shifts its focus almost exclusively to the misguided notion that federally funded research is more important than that undertaken by the private sector. To make this argument, the *Report* points to the fact that "basic research" is primarily funded by the government. However, this obfuscates the overall picture showing that the private sector outspends the Federal Government on R&D by a ratio of greater than two to one. 357

Other than direct spending, another means by which countries incentivize private R&D is preferential tax treatment. In the United States, some form of tax incentive supporting R&D has been in place since 1981 when President Reagan signed the *Economic Recovery Tax Act* into law.³⁵⁸

The R&D staple in the tax code is formally known as the Research and Experimentation (R&E) Tax Credit. The R&E credit is equal to a certain percentage of a business' qualified research expenses in excess of a base amount. The credit can be claimed by corporations or by shareholders in S-corporations or other types of pass-through entities, in which case business income is taxed at the individual level. However, only recently did the R&E tax credit become permanent. Until December 2015, it was one of many "tax extenders," a set of Federal tax provisions that expire every one or two years and are sometimes renewed retroactively after their expiration. However, the R&E credit finally gained "permanent" status when the *Protecting Americans from Tax Hikes* (PATH) *Act* was signed into law late last year. 360

In addition to the R&E credit, tax code section 174 allows businesses to fully deduct R&D expenses in the year they are incurred (known as "expensing") rather than amortizing and deducting them over a number of years like other capital expenditures. Since expensing and the R&E tax credit are applied when a firm invests in research and development, they are referred to as "front-end" tax incentives.

The past 15 years, however, have seen growth of "back-end" tax incentives in countries around the world, especially in Europe. As opposed to front-end incentives which allow R&D credits or deductions when the expense is incurred, these incentives tax the income derived from the development of intellectual property (IP) at rates much lower than the country's corporate tax rate. Tax systems that treat IP income preferentially in this way are referred to as "patent boxes" (a.k.a. innovation boxes or license boxes). Their proliferation among the tax codes of America's competitors

(see Figure 5-2) has brought the debate to Washington. In fact, members of Congress have already begun to explore, in a bipartisan fashion, how such a regime would work in the United States.

Figure 5-2

R&D Tax Incentives by Country		
Country	R&D Credit	Patent Box
Austria	X	
Belgium	X	X
Canada	X	
France	X	X
Hungary	X	X
Ireland	X	
Italy	X	X
Netherlands	X	X
Portugal	X	
Spain	X	X
Switzerland		X
United Kingdom	X	X
United States	X	
Source: PricewaterhouseCoopers, 2015	5	

The preferential tax treatment of both R&D expenses as well as IP income is common throughout the developed world and beyond. Countries seem to be intent on fostering innovation and keeping the resulting IP—as well as the income derived from it—within their borders since many economists note that the creation of IP in the United States generally leads to innovators developing and expanding their businesses domestically rather than headquartering in another country solely for tax reasons.³⁶¹ Put

simply, the more innovation-driving entrepreneurs in one economy, the better. These persons and the companies they create are part of an integral process known as "creative destruction"—the abrupt disruption of an industry, typically creating positive externalities and making the economic pie bigger for everyone.³⁶²

Technological Advancement and the Sharing Economy

The Report notes that the sharing economy, or "on-demand" economy, disrupts incumbent businesses. The on-demand economy is not new, but it is changing. Temporary-hire workers, from writers and artists to home health professionals and computer technicians, have a storied experience in earning their income as freelancers, and a third of the workforce earns some temporary income.³⁶³ Computers and smartphones expand the possibilities of finding freelance "gigs" through an "on-demand platform" that facilitates communication between providers and users. Younger generations most readily adopt this new technology; workers between the ages of 25 and 34 make up more than a quarter of today's on-demand workforce.³⁶⁴ Aided by technology, the number of on-demand workers grew at a faster rate from 2002 to 2014 than the overall job market.³⁶⁵ In innovative services like drive-sharing, companies like Uber and Lyft, which began business is 2009 and 2012 respectively, have created 22,000 jobs in just a few years.

Like many emerging technologies, existing regulations can serve as a barrier to entry that protects incumbents.³⁶⁶ Due to their contractual nature and low barrier to entry, gig work is readily available and very flexible, allowing gig workers to set their own hours. By the same token, gig work lacks the usual protections and benefits associated with a traditional employer-employee relationship.³⁶⁷ However, the *Report* also notes that consumers appear to benefit from the on-demand economy because of lower prices and greater choice.³⁶⁸ Gigs offered by on-demand platforms are growing because consumers who use them find them affordable and convenient,³⁶⁹ and the services offered expand

continuously. New platforms help consumers shop, sell goods they no longer want, park their cars, and walk their dogs.³⁷⁰

Economist Dwight Lee takes a long view on the potential of this on-demand or "sharing economy": "What is now seen as the sharing economy is really a continuation of a long history of sharing through markets that enriches all our lives."³⁷¹ Technology may give entrepreneurs a marketing reach that only established businesses had in the past, and may broaden consumer options. Appropriate regulations will provide consumer assurances while protecting on-demand innovation.³⁷² The challenge of meeting this balance is a key factor in determining its growth and appeal to consumers.

Education for the 21st Century

As economist Alex Tabarrok argues in The Chronicle of Higher Education, while there appears to be a need for a greater focus of funding toward science, technology, engineering, mathematics (STEM) education—which have the potential to confer greater benefits to society through technological innovations—there remains a pressing need to focus more on students that have fallen behind, including millions of college and high school dropouts. Tabarrok points out that the "obsessive focus" on attaining a college degree has not served taxpayers or students well. Given that the United States has the highest college dropout rate in the developed world, it is perhaps problematic that the U.S. education system has developed only one path to knowledge, when there are "many roads to education." 373

In the United States, vocational high school programs frequently receive a bad reputation as only for struggling and "at risk" students, and in many cases, lack a connection to real jobs. In contrast, many OECD countries boast high school graduation rates that exceed 90 percent. Instead of college, high school students in Germany often start apprenticeship programs in high school, and go on to graduate with the equivalent of a technical degree, better

equipped than most American students for the workforce.³⁷⁴ In fact, 40 to 70 percent of students in Austria, Denmark, Finland, Netherlands, Norway, and Switzerland will opt for a high school education that combines classwork with learning in the workplace. These programs allow students to be paid while receiving high-skill technical training in apprenticeship programs that acclimate them to success-yielding attitudes and practices. As Tabarrok concludes, "We need to provide opportunities for all types of learners, not just classroom learners. Going to college is neither necessary nor sufficient to be well educated."³⁷⁵

The President's budget has called for nearly \$6 billion in funding for employment training, apprenticeship programs, and partnerships with private companies. Approximately \$2 billion would be dedicated over five years to a mandatory Apprenticeship Training Fund to assist employers and states in creating apprenticeship programs.³⁷⁶ Such funding is duplicative of money currently spent on the Registered Apprenticeship (RA) program administered by the Department of Labor in conjunction with State Apprenticeship Agencies. The Federal Government already registers programs and apprentices in 25 states, while programs are run at the state level in the other 25 states and the District of Columbia.³⁷⁷ More mandatory spending will simply add to the future debt burden of the potential apprentices the Fund would be meant to help.

The high variance of the quality of education students receive across America is also worrisome. Many students find themselves unprepared for even the most basic post-secondary courses. While the President's call for K-12's "new basic" skill of computer science is a laudable goal, it seems unwise to totally refocus education policy when American students' aptitude for truly fundamental skills—such as arithmetic—lags behind that of their international peers. The recently enacted *Every Student Succeeds Act* places quality improvements to K-12 education systems under

state purview, enabling them to determine how best to equip students with fundamental skills.³⁷⁸

The existing deficiencies in education quality have compounded over time and resulted in the unfortunate skills gap that has partly driven unemployment and lower labor force participation. As was mentioned in last year's *Response*, part of making participation in the labor force more attractive involves strengthening the connection between workers and employers, empowering workers with the skills they need to fill the jobs that employers offer. Government can encourage thriving employer-employee relationships through smart regulatory reform that accomplishes two goals: 1) a reduction the cost of hiring workers, and 2) a relinquishment of business resources otherwise spent on compliance.

As emphasized above, the traditionally healthy increase in living standards is slowing. Many are still struggling in the aftermath of the recession. Most alarming is the possibility that—unlike their parents and grandparents—today's youngest generations may not be able to attain the standards enjoyed by the generations that came before them. If they are left burdened with legacy debt caused by excessive Federal spending, there promises to be a dearth of socioeconomic mobility and a flagging economy. The Administration is right that a number of long-term issues remain to be tackled but, sadly, fiscal sustainability—and its importance for American entrepreneurship, innovation, and well-being—was not listed among them.

CHAPTER 6: INFRASTRUCTURE & ENERGY

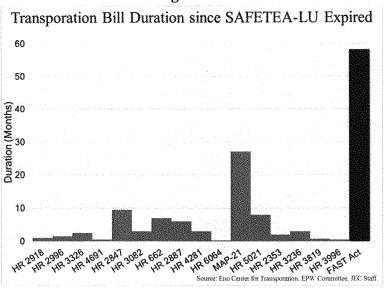
In the *Report*, the Administration discusses the economic benefits of investing in U.S. infrastructure. It proposes a series of new clean technology programs and expanded public transit. The *Report* minimizes the role of the private sector, despite the encouraging prospects for public-private partnerships. The Administration proposes to pay for its clean energy agenda with a deemed repatriation tax on multinational corporations and a new tax of \$10.25 per barrel on crude oil and imported petroleum products. An analysis prepared by the Tax Foundation found that the oil tax would reduce GDP by \$48 billion and cost 137,000 full-time jobs.

The *Report* provides diminutive discussion of the energy sector or the Administration's aggressive regulation of American energy production. Absent from the *Report* is any discussion of the economic costs of the Clean Power Plan or the Paris Agreement on greenhouse gases. NERA Economic Consulting has estimated that the Clean Power Plan will cost between \$220 billion and \$292 billion. The *Report* also misses a chance to substantively highlight the revolutionary innovation in the energy sector related to hydraulic fracturing and horizontal drilling in an entire Chapter 5 dedicated to innovation.

INFRASTRUCTURE

In the *Report*, the Administration rightly notes that America needs an efficient transportation system to remain competitive globally. In recent years, the lack of a long-term highway bill has undermined economic growth and stymied private sector job creation by relying on short-term extensions that failed to give the private sector the certainty it needed to make investments and create jobs.

Figure 6-1



The situation changed significantly in 2015 with the passage of a comprehensive, long-term bill to improve America's surface transportation infrastructure (see Figure 6-1).³⁷⁹ The *Fixing America's Surface Transportation* (FAST) *Act* provides long-term certainty for improving our roads, bridges, transit systems, and rail transportation network. The FAST Act is set to have an immediate impact to fuel economic growth, enhance global competitiveness, and empower the private sector to create new quality jobs.

Notwithstanding Congress's achievement, the challenge of how to fund infrastructure improvements remains a central focus for policymakers. CBO estimates that infrastructure outlays will continue to outpace revenues from motor fuel taxes stretching into the future.³⁸⁰ Notably, the FAST Act provided sources of funding to offset the Highway Trust Fund shortfalls without raising taxes.

The Report Favors New Taxes to Fund Infrastructure

In contrast, the President's Fiscal Year 2017 Budget proposes to divert funds from international tax reform to fund infrastructure. Lawmakers from both sides of the aisle have expressed support for the concept of an international tax reform that would include a one-time tax on the overseas profits of U.S. businesses. The purpose would be to transition to a more competitive tax system in which businesses could return profits earned overseas to the United States without high tax penalties. This one-time transition tax is known as "deemed" repatriation because it would impose a tax as if the earnings had been repatriated, but in reality the funds could either be brought back or left overseas.³⁸¹

As noted in Chapter 3 of this *Response*, U.S. companies are currently at a competitive disadvantage with businesses based in countries with more favorable tax systems. While the vast majority of OECD competitors have territorial regimes in which their businesses can bring overseas profits back to their home countries with little or no tax, the United States has a worldwide tax system that imposes the full corporate tax rate (the highest in the developed world) when overseas profits are repatriated to the United States. This creates a "lock-out" effect whereby businesses are incentivized to leave profits overseas in order to avoid high domestic taxes.

Under the President's transportation framework, the revenues from deemed repatriation would be solely used to finance highway trust fund spending, rather than to lower other tax rates or otherwise transition to a more competitive tax system.³⁸²

In addition, the rate of tax the Administration proposed for deemed repatriation is 14 percent. This is much higher than the rates in other tax reform plans, such as the one proposed by then-Ways and Means Chairman Camp in the last Congress.³⁸³ This 14 percent tax could be very painful for U.S. companies, particularly since not all overseas earnings are liquid. Some may already be invested

in brick and mortar. In addition, U.S. financial institutions may need to retain foreign earnings overseas due to the capital requirements of the host country.

Moreover, Federal highway spending has traditionally been financed by a "user pays" system in which those who use the roads generally pay for road construction and maintenance. Imposing a high tax on U.S. businesses with international operations that bears no relationship to their use of roads and does nothing to improve our international competiveness sets a very dangerous precedent.

In addition, the *Report* endorses the President's proposed \$10.25-per-barrel oil tax (discussed further below) that would be used not to improve our nation's roads, but for mass transit, high-speed rail, and other so-called "Clean Transportation" options that already account for an increasing portion of the revenues that fund the Highway Trust Fund and do not directly benefit many of those paying these taxes. The *Report* also praises the President's Build America Bonds program from the 2009 stimulus bill, which the Government Accountability Office chided for both a lack of efficiency and transparency.³⁸⁵

Efficiency and the Private Sector

The President's preference for tax and spend policies is no longer tenable. This country can and must live within its means. Doing so will require us to make more efficient use of the resources available. A study conducted by the Indiana Department of Transportation found that it could replace a bridge in Indiana at a cost 10-25 percent lower using local funds rather than Federal funds, due to costly Federal regulations. Such Federal regulatory "strings" include Davis-Bacon wage controls, *National Environmental Protection Act* requirements that open the door for huge litigation costs, set-aside contracting requirements, and "Buy American" mandates. Using local funds also allows a state to avoid a diversion of funds into non-motorized federally-mandated

programs, such as so-called enhancement projects, nature trails, parking lots, and ferry boats.

Living within the nation's means will also require finding new resources from non-traditional venues. For instance, rather than pursuing traditional government-run spending policies, we need to pursue pro-growth infrastructure policies that better leverage the private sector. The Report acknowledges that public-private partnerships—or "P3s"—get the private sector off the sidelines and put new resources to work to meet our growing transportation needs. P3s allow the private sector to assume more responsibility in one or more stages of infrastructure development: including planning, financing, design, construction, operation, and maintenance. Some P3s involve the leasing of existing infrastructure from the public sector to the private sector, while other projects entail the financing and construction of new infrastructure.³⁸⁷ Evidence suggests that significant private capital sits available for investment today. In 2008, the U.S. Department of Transportation estimated that \$400 billion in private capital was ready to pour in from the sidelines to finance infrastructure projects.388

P3s offer advantages beyond providing new money. Studies conducted by the International Monetary Fund, among others, have concluded that the private sector can build infrastructure cheaper than the public sector. P3s P3s can also effectively accelerate projects and thereby allow states and localities to reap the benefits of new or improved infrastructure much earlier. Rather than wait ten years for sufficient funds, states can go ahead and build that connector, or widen that vital artery, to encourage economic development and growth today.

Another major advantage of P3s is risk allocation. In addition to the financial risks, the private sector often assumes most or all of the project risk. If a design flaw increases the costs of construction, or if demand falls unexpectedly, P3s can shift the risk from the taxpayer to the private partner. In this way, P3s can

serve as an insurance policy for the public partner. Often the private partner can better manage these risks and does so at a lower cost.

Finally, P3s represent genuine user financing. The motorists who use the road pay directly for what they use. Of course, P3s won't solve all of our nation's infrastructure problems. But as we look for new and innovative ways to pay for highways, P3s can play an important role.

Box 6-1. Indiana Toll Road

One major P3 success worth highlighting occurred in the state of Indiana. After his election in 2004, then-Governor Mitch Daniels tasked his cabinet with finding a way to fund the hundreds of roads and bridges projects that had been promised for years that did not involve raising taxes or taking on more debt. He began exploring the feasibility of leasing the Indiana Toll Road to a private entity. After a bidding process involving 11 proposals, a 75-year lease concession was awarded to a private consortium for a single lump-sum payment of \$3.8 billion. That figure is nearly four-times the yearly allocation that Indiana receives from Federal highway programs.

Prior to its leasing, the Toll Road had operated at a loss, needed repairs, and expansions had been chronically postponed. As part of the lease agreement, the consortium agreed to spend millions to improve the road and ensure a higher level of maintenance. Governor Daniels used the proceeds from the lease to fund a large number of highway construction and preservation projects under his monumental Major Moves initiative. Major Moves fully funded the State's 10-year transportation plan, including 65 roadway projects completed or under construction and 720 bridges rehabilitated or replaced by 2012, and accelerated critical highway arteries. In addition, the seven counties through which the toll road passes received

payments of between \$15 million and \$40 million for local transportation projects.

As mentioned previously, P3s allow states to shift risk over to the private partner. In this case, the recession and sluggish recovery distorted some of the economic assumptions made at the deal's signing and the consortium declared bankruptcy. However, a new buyer stepped forward last year, and this new buyer will be liable for the same obligations of maintenance and improvements as the original consortium. The fact that there is a new buyer demonstrates the value of the Toll Road and of P3 projects more generally. There is clearly interest in the private sector for P3s.

ENERGY AND CLIMATE CHANGE

The *Report* provides very little discussion about energy or how the energy sector has become revolutionized by innovative technologies. It also noticeably fails to discuss the economic costs of the Administration's aggressive clean air agenda.

Fracking Technology Lowers the Price of Oil

The price of crude oil has gone into steep decline over the past year-and-a-half, in large part due to the incremental supply brought on by fracking and horizontal drilling technology. The price has fallen, presently to around \$30 per barrel, and many North American oil producers have come under severe pressure from imported oil, but a fundamental change has occurred in the domestic oil supply. Fracking and horizontal drilling enable substantial and relatively rapid supply increases at costs per barrel that are far below the \$100-plus level prevailing before adoption of the technology started to spread in the United States. At present, it appears that large amounts of oil can be produced with the technology on a sustained basis at a cost per barrel in an approximate range of \$40 to \$60, and the cost is still falling.

The long-term significance of this development for the economy is that the threat of an oil shock is much reduced. The domestic oil fracking supply curve, in effect, limits how high a price OPEC can charge. Prices between about \$40 and \$60 per barrel will not push the economy into a recession, as the economy has managed far higher crude oil prices for an extended period of time.

At around \$30 per barrel, the oil price may force some operators to exit the market. A study by Deloitte suggests that up to 35 percent of independent oil companies could declare bankruptcy in 2016.³⁹⁰ However, the oil industry's ability to frack vast oil and gas deposits in the United States remains. New operators can take over the production facilities and continue to produce and sell oil at prices that do not threaten to cause a recession in the United States. That is an important development the *Report* fails to note, even as it discusses the impact of oil price declines.³⁹¹

Toward a Secure and Stable Supply of Oil

Fracking combined with horizontal drilling in the United States, oil sands production in Canada, and a liberalized oil field development policy in Mexico that permits foreign companies to participate, may make it possible for North America to meet its own oil demand in the future without dependence on overseas imports.³⁹²

If allowed to operate more freely, the marketplace will settle how much oil is efficient to import from overseas based on the relative costs of supply from the United States, Canada, and Mexico, and while not necessarily zero, the level of overseas oil imports should constitute a lower market share and command a much lower price than would be the case if North American sources are artificially constrained by government.

The chance for North American independence from unreliable overseas sources of oil rests on the supply capability in North America. Restraining the U.S. domestic and the North American oil and gas supply will most directly increase the supply from

outside sources, and is unlikely to significantly increase supply from alternative forms of energy whose costs at scale are much higher and whose supply cannot be increased rapidly in response to price changes.

Since the Arab oil embargo of 1973, oil price shocks have repeatedly caused or contributed to economic recessions in the United States and posed a threat to national security.³⁹³ The *Report* misses the fact that U.S. shale oil production technology, Canadian oil sands development, and the opening of Mexico's oil and gas sector to foreign investment together present a historic opportunity to greatly reduce the threat that oil shocks pose to the United States and North America.

Administration's Proposed Oil Tax

Consistent with the Administration's theme of raising taxes to cover new spending, the President's budget has proposed a new oil fee of \$10.25 per barrel on domestic and imported crude oil as well as imported petroleum products. The fee—which is essentially a new tax on production—would phase in over a five-year period. The White House estimates the new oil tax will raise approximately \$319 billion in revenue over ten years. The President plans to use the revenue to fund broad new spending on this Administration's preferred green energy initiatives.

The White House Fact Sheet on the Budget affirms that oil companies would shoulder the burden of the new tax hike, ³⁹⁵ ignoring the basic economic reality that producers will pass along this new cost to consumers. Indeed, CRS concluded that, as a result of the new tax, "[C]onsumers will likely see higher prices, not only directly for gasoline and other consumer products, but, in general, for many products to varying degrees." Even the President's own director of the National Economic Council, Jeff Zients, estimates that the oil tax will increase the cost of gasoline by 24 cents per gallon. ³⁹⁷ Zients further conceded that oil

companies would likely shift the burden of the fee to consumers.³⁹⁸

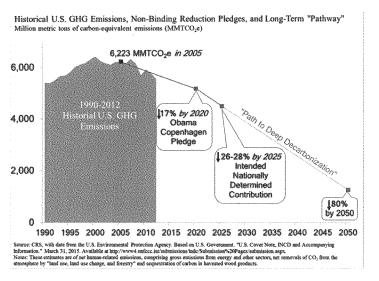
The nonpartisan Tax Foundation analyzed the oil tax to evaluate the effects it would have on the economy broadly. It found that the tax would reduce GDP by \$48 billion and cost 137,000 full-time jobs. Furthermore, the tax would disproportionately impact poor and lower-income households. Besides gasoline prices, the proposed tax would apply to a myriad of oil products unrelated to transportation, such as plastics, dyes, lubricants, asphalt, toothpaste, lipstick, and many other products.

Notably, while some of the most direct impacts of the President's oil tax would be felt through gasoline prices, the proposal would do little or nothing to improve the solvency of the Highway Trust Fund. It calls instead for significant new spending for transit, high-speed rail, a new "Climate Smart Fund," clean fuel technology, and heating oil support in the Northeast. None of these initiatives would result in new roads, improved transportation efficiency, or the repair of aging infrastructure.

The Paris Climate Agreement, GHG Regulations, and the Economy

The President has made greenhouse gas (GHG) emission reduction a major goal of his Administration. 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 Figure 6-2).

Figure 6-2



The Environmental Protection Agency (EPA) has issued increasingly stringent emission mandates. The Administration has announced that the EPA's Clean Power Plan (CPP), issued in August of last year, is expected to reduce the carbon dioxide emissions of electric power generation from 2005 levels by 32 percent in 2030, and there are other reductions expected from efficiency standards for heavy- and medium-duty trucks, for example. The Administration has not committed to policies and measures that could reach the Copenhagen Climate Conference target with certainty or that are able to reach the Paris Climate Conference target range, though it has identified additional measures that, under optimistic assumptions, could result in the 26 percent reduction by 2025 pledged in Paris. 402

The CPP itself is controversial; 27 states are contesting it in court. The EPA made debatable assumptions in its impact analysis, 403 and NERA Economic Consulting has estimated the present value of energy sector expenditures will increase by \$220 billion to \$292 billion from 2022 to 2033 as a result of implementing the CPP, not including potential increased costs for transmission and

distribution infrastructure. According to NERA, some states could experience average electricity price increases of 30 percent or more. 404

It is puzzling that the CEA does not address the economic implications of such a major undertaking as the Paris Climate Agreement, especially since the Administration apparently has changed the energy mix it envisions will be utilized in the United States to pursue its emission targets. The President used to speak of an "all-of-the-above" energy strategy⁴⁰⁵ and endorsed increased use of natural gas, in particular, as a relatively clean "bridge" fuel. He does so no more,⁴⁰⁶ even as he touts substantial emission reductions in recent years that would not have been possible without increased use of natural gas. The CPP would leave the market share of natural gas flat.⁴⁰⁷ Nuclear power has zero CO₂ emissions, but the President has not expressed support for nuclear power either. Nuclear power accounts for 19 percent of electric power generation and 8 percent of total U.S. energy consumption as of 2014 (see Figures 6-3a and 6-3b).

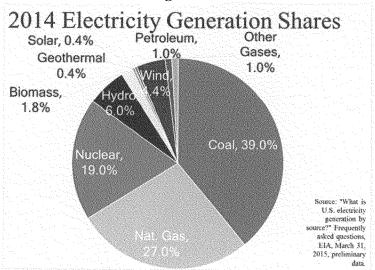
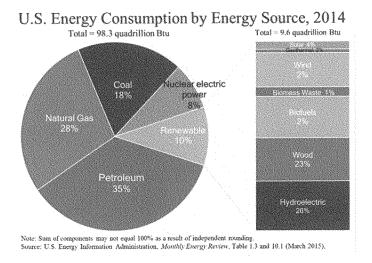


Figure 6-3a

Figure 6-3b

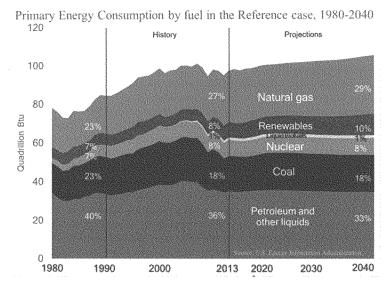


The power industry has made and continues to make substantial capital investments in emissions reduction from coal-fired electric generating units to comply with EPA policies that began well before the most recent CPP. The cumulative investments made since 2000, not counting the incremental operating costs, in air pollution control alone reached more than \$110 billion as of 2015. 408 However, the Administration's pursuit of more ambitious climate goals and its preference for alternative fuels—to the extent of waging what some call a "war on coal"—is forcing many coal plants to close. EPA policy-induced shut downs and fuel conversions are causing 410 electric generating units representing nearly 67,000 megawatt (MW) of generating capacity, which is 21 percent of total coal-generating capacity, to abandon the use of coal. 409 Hence, the turn away from an "all-of-the-above" energy strategy is stranding emissions control investments. It also has disruptive employment effects in coal-producing regions, where tens of thousands of jobs have been destroyed.

While clearly not among this Administration's preferred energy sources, oil, natural gas, coal, and nuclear power together account

for 85 percent of electricity generation and 90 percent of total energy consumption in the United States, whereas solar and wind account for 0.4 percent and 1.8 percent of energy consumption, respectively. Wind and solar power generation have increased during this Administration but continue to hold very small shares of the U.S. energy market. Furthermore, non-fossil fuels are by no means free of unwelcomed impacts that can provoke opposition to them, such as against new hydroelectric power projects and the placement of windmills, and they face difficulty scaling up commercial production, which is a particularly troublesome problem for meeting Federal cellulosic ethanol mandates. The biofuel supply consists mostly of corn ethanol whose use in gasoline is constrained by the so-called blend wall, the limited tolerance of engines for concentrations of ethanol in gasoline above 10 percent. Wind generated electricity requires extensive use of land. These are only selected examples of the challenges facing efforts to expand the supply of renewable fuels. As a result, the Energy Information Administration (EIA) projections for the nation's energy mix through 2040 show only a marginal increase in the share of all renewables (see Figure 6-4).

Figure 6-4
(EIA Annual Energy Outlook 2015)



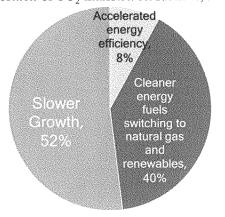
Shifting from sources that provide 90 percent of the energy supply to sources that currently supply 10 percent is an enormous undertaking. How will this be accomplished and at what cost? In the 2013 *Report*, the CEA wrote:

As the economy improves, GDP will rise, and the weakness of the economy in 2007-09 will no longer restrain energy consumption. Thus if the recent reductions in emissions are to be continued, a greater share will need to be borne by fuel switching into natural gas and into zero-emissions renewables, and by accelerating improvement in economy-wide energy efficiency.⁴¹¹

This statement was followed by Figure 6-3 of the 2013 *Report* (Figure 6-5 below) showing the contribution of slower economic growth and fuel switching to emission reductions.⁴¹²

Figure 6-5

Decomposition of CO₂ Emission Reductions, 2005-2012



Source; Bureau of Economic Analysis, National Income and Product Accounts; EIA (2013); CEA Calculations.

If the Administration no longer believes that large emissions reductions require substantially increased use of natural gas, does not want to rely on more zero emission nuclear power plants, and now believes that emissions reductions do not reduce economic growth, then the CEA should explain the reasons. However, the Report says not a word about the Paris Agreement or the Clean Power Plan in either its macroeconomic outlook ("The Outlook," p. 106-117) or any other part of the *Report*. The President's State of the Union Address this year did not go into the huge changes required in the economy to meet his pledges, nor does the President's Fiscal Year 2017 Budget. 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," OMB 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 (p. 15), but not climate change.

Economic analysis should inform setting quantitative targets, identify the most cost effective policies to achieve them, and show

the public what material sacrifices to expect. Unfortunately, the *Report* does not address the costs to the economy of the retooling that would be required or the efficiency of the policies to be pursued in an effort to meet the pledges made at the Paris Climate Conference.

Among the key questions the Administration has failed to answer are:

- How do different emission levels relate to the rate of economic growth (or decline), and how did the Administration decide to set its emission targets?
- What will be the anticipated energy mix and energy technologies used to support the economy and achieve the emission reductions pledged by the Administration?
- What are the alternative policies that might achieve the targets, what are their comparative costs, and how did the Administration choose the policies it is using?

Inadequacy of the Administration's Energy Policies

The President has never made his climate policy priorities explicit with respect to their impact on economic growth and national security. The President has also not explained how his Administration sets emissions targets or justified how his chosen policies, which rely primarily on regulatory mandates, are the best way to achieve them. Unfortunately, this year's *Report* also fails to elaborate on these particulars.

It appears anything that increases the use of wind, solar power and biofuels is a good thing in the view of the Administration, and together with mandated conservation measures, it apparently expects these fuels to deliver the huge CO₂ emissions reductions it has pledged. However, the supply of all the alternative fuels is difficult to scale up, and they are not environmentally harmless

either. The Administration also appears to support anything that reduces the use of all other domestic energy sources, even if it increases the use of imported oil.

For decades, Administrations of both parties have sought to break the dependence on oil from unreliable sources, and now that the goal is within reach, the Administration seems at best disinterested and at worst is working at cross-purposes, as exemplified by its denial of the Keystone pipeline.

If the Administration is serious about meeting the emissions targets it has pledged and is not merely waging a campaign in favor certain industries and against others, there are a number of unanswered fundamental questions that the *Report* fails to address.

CHAPTER 7: 70TH ANNIVERSARY OF THE JOINT ECONOMIC COMMITTEE

Chapter 7 of the *Report* Commemorates the 70th Anniversary of the Council of Economic Advisers, which was created by the *Employment Act of 1946*. The same statute created the Joint Economic Committee.

The legislative history of the 1946 Act illustrates the tension that exists between interventionist and free-market economic philosophies. This chapter commemorates the 70th anniversary of the JEC by discussing its history, prestige over the years, and continuing role in advising Congress and contributing to sound economic policy.

The *Employment Act of 1946*, signed into law on February 20, 1946, established two advisory panels: the President's Council of Economic Advisers, and its congressional counterpart, the Joint Economic Committee. The legislative history behind the Act illustrates the competing political philosophies in the 20th Century—which continue today—about the proper role of government in influencing economic conditions.

Origins of the Employment Act of 1946

With the Great Depression in recent memory and World War II not yet ended, Senator James E. Murray of Montana introduced the Full Employment Bill of 1945. 414 As a strong supporter of President Roosevelt's New Deal, Senator Murray had an interventionist view of the economy and aimed to establish full employment as a "right" to be assured by the Federal Government. The bill's "Statement of Policy" declared that:

All Americans able to work and seeking work have the right to useful, remunerative, regular, and fulltime employment, and it is the policy of the United States to assure the existence at all times of opportunities to enable all Americans who have finished their schooling and who do not have housekeeping responsibilities to freely exercise that right. 415

The bill seemed to contemplate unlimited Federal spending to enforce this right, stating that:

[I]t is the further responsibility of the Federal Government to provide such volume of Federal investment and expenditures as may be needed to assure continuing full employment.⁴¹⁶

To that end, the bill directed the President to submit an annual "National Production and Employment Budget" to be referred to as the "National Budget." The National Budget would evaluate and provide estimates of the labor force and the extent to which investments by the private sector and other non-Federal sources would provide the necessary conditions for full employment. To the extent the National Budget deemed these non-Federal investments "insufficient to provide a full employment volume of production," the bill directed the President to submit a program for Federal spending that would sustain the level of production the National Budget determined necessary for full employment. 417

The bill also created a congressional Joint Committee on the National Budget to study and advise Congress on the National Budget. The proposed Joint Committee would include chairmen of some of the most powerful committees in both the Senate and House of Representatives.

Legislative Compromise

In the year following the bill's introduction, World War II ended. Congress remained concerned about employment opportunities, particularly for the veterans returning home from the battlefield. However, as the bill was revised while moving through the legislative process, it became less interventionist and placed more emphasis on the role of the private sector. 418



President Truman signs the Employment Act of 1946 Source: Federal Reserve History

By the time President Harry S Truman signed the *Employment Act* of 1946 into law, the term "full employment" was removed from the title of the bill, as was the characterization of full employment as a "right" that should be enforced by the spending power of the Federal Government.

While the 1946 Act still envisioned a strong role for Federal policymakers in the economy and a goal of "maximum" employment, this was softened to focus more on creating opportunities and fostering certain conditions. It also placed a greater emphasis on the private sector, reflecting a compromise between interventionists and those with a more free-market philosophy.

The new Declaration of Policy stated that it is the Federal Government's role to use its resources "for the purpose of creating and maintaining, in a manner calculated to foster and promote free and competitive enterprise and the general welfare, conditions under which there will be afforded useful employment for those able, willing, and seeking work, and to promote maximum employment, production, and purchasing power."⁴¹⁹

By the time of the final compromise, the National Budget had become the *Economic Report of the President*. While this report would still evaluate economic conditions and outline the President's programs for improving them, it no longer assumed that Federal spending programs were the necessary tools of those policies.

Recognizing that the President would need economic expertise to assist with the *Economic Report of the President*, the 1946 Act created the Council of Economic Advisers within the Executive Branch. Among its duties, the Council was charged with submitting an annual report to the President. The *Economic Report of the President* and CEA's annual report are the genesis of this year's *Report* issued by CEA.

Similarly, the advisory committee for Congress—termed the Joint Committee on the National Budget in the original bill—became the Joint Economic Committee on the Economic Report, later renamed the Joint Economic Committee. The duties outlined for the JEC included a continuing study of matters in the *Economic Report of the President*, a study of ways to coordinate programs in order to achieve the goals of the 1946 Act, and a response to the *Economic Report* as a guide to Congress. The latter duty of the JEC is being fulfilled by the issuance of this *Response*.

The JEC was designed to include an equal number of members of the House and Senate, in a manner reflecting the party composition of Congress. For this reason, while the CEA has generally served and promoted the views of one President, the JEC has reflected the diversity of views that exist within Congress.

Later Amendments to the 1946 Act

When Senator Hubert H. Humphrey was Chairman of the JEC, he noted in a 1976 hearing, "It is my judgment that [the 1946 Act] has, from time to time, been conveniently ignored." He believed Congress should enact legislation to set more explicit employment objectives, and wanted the government to provide jobs should these employment goals not be achieved. In the following Congress, the *Full Employment and Balanced Growth Act of 1978* was enacted, known as "Humphrey-Hawkins." Although Senator Humphrey passed away before President Jimmy Carter signed the bill into law, his widow, Muriel Humphrey, succeeded him in the Senate and attended the signing ceremony.



Senator Muriel Humphrey shakes the hand of President Carter at the signing ceremony for the 1978 Act Source: Associated Press

Humphrey-Hawkins made several amendments to the *Employment Act of 1946*, which—like the 1946 Act—reflected a number of compromises between those in Congress who were interventionist and those who were concerned about fiscal responsibility and maintaining the primary role of the private sector in maximizing employment.

The Declaration of Policy in the 1946 Act was amended to change "maximum" to "full" employment and include additional economic and policy goals beyond employment and production, including price stability (given the high level of inflation in 1978) and increased real income. Other goals included "balanced growth, a balanced Federal budget, adequate productivity growth, proper attention to national priorities, [and] achievement of an improved trade balance through increased exports."

While stopping short of having Congress establish full employment as a statutory right to be enforced by the Federal Government, the 1978 Act referred to full employment as if it were an inherent right that already existed. Rather than establishing a national right, the Statement of Policy established a national "goal" of fulfilling a nebulous "right to full employment" it assumed already existed beyond statute.

In a nod to fiscal responsibility and the role of the private sector, the 1978 Act amended the 1946 Act to clarify that its purpose is "to rely principally on the private sector for expansion of economic activity and creation of new jobs for a growing labor force." To promote private-sector reliance, the amendment clarified that the law's purpose was to encourage "the adoption of fiscal policies that would establish the share of the gross national product accounted for by Federal outlays at the lowest level consistent with national needs and priorities."

Significantly, as detailed in Chapter 2, CBO recently determined that outlays as a share of GDP are above their historical average and on a decidedly upward trend over the next decade, 423 seemingly contrary to the purpose enumerated in the amended 1946 Act.

Role of the Joint Economic Committee

As the economic and fiscal policy goals outlined in the 1946 Act expanded in 1978, so did the breadth of the JEC's mandate to study economic policy and programs that would achieve those goals.

Through the 1978 amendments, the JEC's authority grew to issuing a monthly economic indicators report and analyzing the short- and medium-term goals of the *Economic Report of the President* for the House and Senate Budget Committees. 424

Regarding economic indicators, Colleen Healy—long-time staffer for the Joint Economic Committee—recalls the days before economic data was widely available electronically. In that era, the JEC was considered the preeminent source of the most recent and comprehensive information on economic indicators. Members of Congress, congressional staff, members of the media, and many others frequently visited the Committee's office in order to procure paper copies of the latest data. Today, the JEC still distributes and analyzes economic data, but does so chiefly through electronic means.

Under its current structure, the JEC is composed of 10 Members of the House of Representatives and 10 Members of the Senate, in proportions reflecting the party composition of Congress. The chairmanship of the JEC alternates between the House and Senate each Congress. Due to the changing leadership and composition of the Committee, the JEC over the years has chosen to emphasize different goals within the 1946 Act, as well as different means of achieving them. One constant has been the JEC's role as the economic think tank and incubator of ideas for Congress.

Prestige of the Joint Economic Committee

Taking stock of the JEC's growing contributions to public discourse, President Eisenhower wrote, "The JEC and the Congress through special studies and public hearings have become a major instrument in promoting better economic understanding."

As noted by former Senate Historian Richard Baker, a 1952 *Nation's Business* article stated the following:

[The Joint Economic Committee] has been called the country's 'most important economic policy group.' ... The committee... has been a major force in shaping American economic policy not only in Congress but in the [Eisenhower] Administration and business world as well. Its studies and publications are must reading among economists. The accomplishments of the Joint Economic Committee, in the decade following its creation, confirmed the goals of congressional reformers who had long sought to strengthen the quality and independence of expertise available to members of Congress. 426

The Committee has also drawn a number of renowned economists in its 70-year history. In fact, economist Paul Douglas chaired the Committee in its infancy. It was Douglas who, in part, constructed the Cobb-Douglas utility function, one of the foundations of modern microeconomic theory.

In 1957, *Business Week* featured the talented team of staff economists on the Joint Economic Committee:

They perform many of the tasks that economists perform for private business, and that the Council of Economic Advisers performs for the President. But there's this difference: Instead of working in the quiet retreat preferred by economists, [they] perform always in the glare of political controversy. They deal with such explosive matters as taxation, tight money, and rising prices—and do it with powerful [Members] of both parties looking over their shoulders. 427

As the Committee's reputation grew, it attracted some of the most well-known economists of the modern era who would help foster debate on what would become the two main competing theories in public economics—Keynesian and supply-side theory and practice.

Norman Ture, one of the foremost advocates of supply-side economics and one of the architects of the 1964 and 1981 tax cuts, began his career as a JEC staffer. His primary duty was to organize tax policy hearings, information from which he would later use when crafting policies for Presidents Kennedy, Johnson, and Reagan. His focus on creating a simpler and less burdensome tax code culminated in the first hearing to be held on the notion of a flat tax—a concept that permeates almost any contemporary discussion of tax reform to this day. 428

Other important milestones in the history of the JEC include its role in moving away from the gold standard, recommending tax cuts in the 1960s, and providing leadership during the vast tax reforms of the 1980s.⁴²⁹

In the 1960s, the JEC recommended broad-based tax cuts to promote economic growth and reach full employment. In its *Joint Economic Report* of 1961, Members recommended a "review [of] the tax structure with a view to recommending a downward revision of taxes—not a temporary 'tax cut'—and that it make further periodic reviews for the same purpose, say, every five years." This forced the CEA to concur in its *Economic Report of the President* and ultimately paved the way for the 1964 tax cuts.

The Committee once again called for tax cuts and simplification of the tax code during the Reagan administration. In the 1980 Joint Economic Report, the Committee outlined why cutting taxes had become so difficult:

Policymakers have not viewed tax reductions as an important device to improve the structure of the economy because of the absence of economic models capable of adequately assessing the effects of supply side tax policies. 431

Not long thereafter, the Committee worked to create such a model and remove one of the barriers to progress. The model showed that "tax policies, such as depreciation schedule adjustment, can lower the inflation rate substantially over the decade." Senator Lloyd Bentsen, Chairman of the JEC in 1980, wrote, "This new model is an important tool which will help policymakers implement the supply side policies which are being advocated by the JEC." The model would prove instrumental in gaining support for the 1981 and 1986 tax rate reductions.

Additionally, the Committee has followed a tradition of hearing annual testimony from the Chair of the Federal Reserve Board of Governors, dating back to Chairman Marriner Eccles in 1947. In December 2015, Chair Janet Yellen testified before the JEC shortly before the Fed announced its much-anticipated increase in interest rates.

The Joint Economic Committee also boasts an extraordinarily distinguished group of alumni. In alphabetical order, some notable names include:

- Lloyd Bentsen, Democratic Vice-Presidential nominee, Secretary of the Treasury, and U.S. Senator from Texas
- Sam Brownback, Governor of Kansas and U.S. Senator from Kansas
- J. William Fulbright, founder of the Fulbright scholarship program and U.S. Senator from Arkansas
- Barry Goldwater, Republican Presidential nominee and U.S. Senator from Arizona
- Al Gore, Vice President, Democratic Presidential nominee, and former U.S. Senator from Tennessee
- Hubert H. Humphrey, Vice President, Democratic Presidential nominee, and U.S. Senator from Minnesota

- John F. Kennedy, 35th President of the United States and U.S. Senator from Massachusetts
- George McGovern, Democratic Presidential nominee and U.S. Senator from South Dakota
- Donald Rumsfeld, two-time Secretary of Defense and U.S. Congressman from Illinois
- Paul Ryan, current Speaker of the House of Representatives, Republican Vice-Presidential nominee, and U.S. Congressman from Wisconsin
- Robert Taft, former Senate Majority Leader and U.S. Senator from Ohio
- James Webb, Secretary of the Navy and U.S. Senator from Virginia

Commemorating the 70th Anniversary

With each anniversary, the JEC takes time to reaffirm its dedication to promoting fiscal policy that achieves America's economic goals. Fifty years ago, President Truman wrote, "Twenty years ago today, as President, I signed into law the Employment Act of 1946. It is significant that the JEC has chosen this anniversary date for a bipartisan rededication to the great objectives of the Employment Act and a reconsideration of our national goals and the means of achieving them." "432"

Chairman Dan Coats recently issued the following statement in honor of the Committee's 70th anniversary:

For 70 years the Joint Economic Committee has served as Congress's incubator of economic thought and a vital sounding board for fiscal policy proposals. The JEC continues to foster important discussion on ways to encourage growth in our changing world.⁴³³

Over the last 70 years, the U.S. economy has experienced a great amount of turbulence that has required the attention of the JEC. Since the 1946 Act was enacted, 12 Presidents have been in the White House, 11 recessions have roiled the economy, and countless booms and busts—for example, the housing and dotcom bubbles—have tested America's policymakers.⁴³⁴

The Joint Economic Committee remains dedicated to fulfilling the mandates set out by the *Employment Act of 1946* by advising Congress on the appropriate policy tools for achieving economic goals, as well as examining and presenting data in new and creative ways. As the economy changes, the Committee will continue to adapt and provide insightful analyses and advice to Congress. Lawmakers have relied and called upon the Committee and its staff for 70 years. The Joint Economic Committee looks forward to answering whatever calls lie ahead in the next 70.

Figure 7-1

	rigure /					
Joint Economic Committee Leadership (1946-present)						
Name of	Party-					
Chairman/Chair	State	Date(s) Served	Congress			
Sen. Dan Coats	(R-IN)	2015-present	114th			
Rep. Kevin Brady	(R-TX)	2013-2014	113th			
Sen. Robert Casey Jr.	(D-PA)	2011-2012	112th			
Rep. Carolyn Maloney	(D-NY)	2009-2010	111th			
Sen. Charles Schumer	(D-NY)	2007-2008	110th			
Rep. Jim Saxton	(R-NJ)	2005-2006	109th			
Sen. Robert Bennett	(R-UT)	2003-2004	108th			
Rep. Jim Saxton	(R-NJ)	2001-2002	107th			
Sen. Connie Mack	(R-FL)	1999-2000	106th			
Rep. Jim Saxton	(R-NJ)	1997-1998	105th			
Sen. Connie Mack	(R-FL)	1995-1996	104th			
Rep. David Obey	(D-WI)	1993-1994	103rd			
Rep. Kweisi Mfume	(D-MD)	April 1994	103rd			
Sen. Paul Sarbanes	(D-MD)	1991-1992	102nd			
Rep. Lee Hamilton	(D-IN)	1989-1990	101st			
Sen. Paul Sarbanes	(D-MD)	1987-1988	100th			
Rep. David Obey	(D-WI)	1985-1986	99th			
Rep. Gillis Long *	(D-LA)	January 1985	99th			
Sen. Roger Jepsen	(R-IA)	1983-84	98th			
Rep. Henry Reuss	(D-WI)	1981-82	97th			
Sen. Lloyd Bentsen	(D-TX)	1979-80	96th			
Rep. Richard Bolling	(D-MO)	1977-78	95th			
Sen. Hubert Humphrey	(D-MN)	1975-76	94th			
Rep. Wright Patman	(D-TX)	1973-74	93rd			
Sen. William Proxmire	(D-WI)	1971-72	92nd			
Rep. Wright Patman	(D-TX)	1969-70	91st			
Sen. William Proxmire	(D-WI)	1967-68	90th			
Rep. Wright Patman	(D-TX)	1965-66	89th			
Sen. Paul Douglas	(D-IL)	1963-64	88th			
Rep. Wright Patman	(D-TX)	1961-62	87th			
Sen. Paul Douglas	(D-IL)	1959-60	86th			
Rep Wright Patman	(D-TX)	1957-58	85th			
Sen. Paul Douglas	(D-IL)	1955-56	84th			
Rep. Jesse Wolcott	(D-MI)	1953-54	83rd			
Sen. Joseph O'Mahoney	(D-WY)	1951-51	82nd			
Sen. Joseph O'Mahoney	(D-WY)	1949-50	81st			
Sen. Robert Taft	(R-OH)	1947-48	80th			
Sen. Joseph O'Mahoney**	(D-WY)	February 20, 1946	79th			
Rep. Edward Hart**	(D-NJ)	February 20, 1946	79th			

^{*} Passed away before committee organized

^{**}Co-Chairmen

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MINORITY VIEWS OF RANKING MEMBER CAROLYN B. MALONEY

Introduction

The Joint Economic Committee (JEC) is required by statute to submit findings and recommendations in response to the *Economic Report of the President* (or *Report*), which was released by the Council of Economic Advisers (CEA) on February 22, 2016.

The *Report* is a comprehensive assessment of the economy that analyzes data collected by nonpartisan government statistical agencies and reviews work from respected academic economists. It provides important information on the status of the current economic recovery, reviews the outlooks for future growth and provides policy recommendations for further strengthening the economy.

The *Report* also offers new thinking on some of the defining economic issues of our times, notably income inequality and how abuses of market power can exacerbate it. When corporations become so large and influential that they use their sway to impose barriers to entry for startup firms, this can limit innovation and productivity growth. And without labor protections, such as collective bargaining and strong labor unions, economic gains can become increasingly concentrated at the top.

The *Report* and this Democratic response put the recovery in context, reviewing how the seven-year recovery has taken place in the wake of the worst economic catastrophe since the Great Depression in the 1930s. To evaluate the recovery, it is first necessary to understand the severity of the recession and the global financial crisis that precipitated it. It has been well documented that financial crises have deeper, more-damaging and longer-

lasting effects. Thus, this recovery cannot be compared to a recovery from an "average" recession.

Several obstacles have limited growth during the recovery. The devastation in the housing sector prevented homebuilding from playing its customary leading role in the recovery; after the Federal Reserve lowered interest rates to zero, monetary policy was limited in its ability to further stimulate the economy and; fiscal policy at the federal, state and local levels slowed rather than accelerated growth for much of the recovery, a significant departure from previous recoveries.

Other challenges facing the economy long predate the recession. The size of the labor force is growing much more slowly than it did for most of the second half of the 20th century, a result of baby boomers entering retirement and women's labor force participation rates plateauing after several decades of rapid growth. Demographic forces will continue to constrain economic growth in the years ahead.

Despite these obstacles, the *Report* demonstrates that the American economy has made tremendous progress as it recovers from the Great Recession. A broad range of economic indicators continue to show strong improvement, including private-sector job creation, the unemployment rate and GDP growth.

This progress is the result of bold actions taken by the Obama administration, Democrats in Congress and the Federal Reserve to halt the freefall and put the economy back on a path to growth. Research by economists Alan Blinder and Mark Zandi shows that without these joint efforts the recession would have lasted twice as long and job losses would have been about twice as great.

This successful response to the financial crisis reinforces the concept—long understood by mainstream economists—that government has a key role to play in stimulating demand during a recession, particularly a severe recession. The government steps in

to invest when the private sector will not or cannot, and to sustain demand for goods and services when families are hurting.

Unfortunately, some have forgotten these basic principles. Republicans opposed the Recovery Act in 2009. And, after gaining control of Congress in 2010, Republicans cut government spending at precisely the moment government investment was needed to boost demand. These cuts slowed the recovery.

The *Report* and this response also explore the effects of increased globalization and automation. While these changes have driven higher productivity and increased growth in the economy as a whole, the benefits and costs are not evenly shared. As many jobs have been replaced by robots and production has shifted overseas, U.S. workers have seen wages stagnate, putting sustained pressure on middle-class families who are coping with rising costs of living but have limited wage leverage.

Some segments of the population have been hit especially hard. Millions of U.S. manufacturing jobs, for example, have disappeared since manufacturing employment peaked in 1979. Identifying effective ways to reintegrate these and others workers and helping them to build new skills that are in demand by employers must be a top priority for policymakers. This response includes a significant discussion of the importance of education and training programs to giving everyone a shot—or sometimes a badly needed second chance—at the American Dream.

Looking around the globe, the United States has recovered from the recession faster than other advanced economies as a result of the strong fiscal and monetary response. However, weak global demand combined with the strong U.S. dollar have presented headwinds in recent years, which are expected to continue. As an example, net exports have been a drag on GDP for the past two years as weak foreign demand for U.S. goods has constrained growth here at home.

There is little debate that the private sector is the engine of growth in the U.S. economy. But the government has a key role to play in supporting continued economic recovery and laying the groundwork for future growth. This Democratic response the *Report* discusses three key challenges policymakers should work to address moving forward: slowing growth in the size of the labor force, lower rates of productivity growth and the increasingly inequitable distribution of gains from economic growth.

Both the *Report* and this response discuss policies to boost labor force participation, increase productivity and reduce inequality. These policies take many forms:

Implementing family-friendly policies such as paid leave and workplace flexibility will deepen women's attachment to the labor force.

- Achieving equal pay for equal work will reduce inequality.
- Reforming the immigration system will raise both the labor force participation rate and productivity.
- Rebuilding the nation's infrastructure will boost productivity and strengthen U.S. competitiveness.
- Investing in early childhood education, including universal pre-K, will help to reduce inequality and ensure a more productive labor force down the road.
- Policies such as these will strengthen the economy and promote inclusive growth that reaches households across income levels.

The economy is in stronger shape than it has been in years—now, policymakers must build on that progress and ensure that all Americans benefit from the economic recovery.

PUTTING THE RECOVERY IN CONTEXT: OVERVIEW OF ECONOMIC PROGRESS

Any assessment of the current state of the economy must keep in mind the severity of the financial crisis and the Great Recession, the significant obstacles this recovery has faced and how underlying structural trends can impact economic growth. Collectively, these factors make comparisons with recoveries from much less severe postwar recessions deeply misleading.

This section reviews the state of the economy when President Obama took office and the significant progress that has been made since then. It describes why comparing the current recovery to "average" recoveries is inappropriate, and shows that, in fact, the U.S. recovery has fared well when measured against the recoveries in other advanced economies that suffered from the same devastating global financial crisis.

A Severe Recession

When President Obama took over from President Bush, the world had just experienced "[...] the worst financial crisis in global history, including the Great Depression," according to former Federal Reserve (Fed) Chairman Ben Bernanke. Former Fed Chairman, Alan Greenspan, called it "the most debilitating financial crisis ever." According to the Financial Crisis Inquiry Commission, the crisis was the "avoidable" result of a number of factors, including lax financial regulation and excessive risk taking on Wall Street. As the crisis spread from Wall Street to Main Street, millions of people lost their jobs, their homes or both.

During the last five quarters of the Bush presidency, real GDP fell 4.1 percent. This included a drop of 8.2 percent at an annual rate in the fourth quarter of 2008, the single worst quarterly economic performance in more than 50 years. The economy shed more than 4.5 million private-sector jobs during President Bush's last year in office, including more than 800,000 in January 2009 alone. The unemployment rate jumped nearly 3 percentage points from

January 2008 to January 2009, and it was on its way to peaking at 10.0 percent just eight months later.

The country's manufacturing base was rapidly eroding. The automotive industry was on the brink of collapse. From December 2007 to June 2009, auto industry employment plunged by more than 600,000 jobs—more than one-fifth of total employment in the industry.⁴ Auto sales in 2009 ended at a 27-year low. The crisis threatened parts suppliers and retail outlets across the country.⁵

The housing sector was in shambles. Home values nationally were in the process of plummeting about 20 percent between 2007 and 2011, according to the Federal Housing Finance Agency's purchase-only index. In the states hit hardest by the housing crash, prices fell by more than twice as much. At the worst of the downturn, nearly one-third of all homeowners were underwater on their mortgages, meaning that they owed more on their home loans than their home was worth. All told, more than 9 million families would ultimately lose their homes due to foreclosure or distressed sale during the period from 2006 through 2014.⁶

Driven by steep losses in home values and the stock market, nearly \$13 trillion in household wealth evaporated during the last seven quarters of the Bush presidency, severely impacting consumer spending and GDP growth. According to the CEA, this constituted an initial shock to household wealth that exceeded the one that precipitated the Great Depression of the 1930s. The economy was teetering on the brink of total meltdown, and fears of another depression were very much real.

A Steady Recovery

President Obama faced a dire economic situation when he took office, and his administration took quick, decisive action. Policies enacted by President Obama with support from Democrats in Congress, along with aggressive Fed monetary policies, stabilized the financial system, provided support to the economy when it needed it most and laid the foundation for a return to growth.

The American Recovery and Reinvestment Act ("the Recovery Act" or "the Stimulus"), enacted in February 2009, was the largest and most significant fiscal policy response to the Great Recession. Additional support would come to include extensions of unemployment insurance, tax credits for individuals and small businesses, incentives for hiring veterans and the rescue and restructuring of the U.S. auto industry. Many of these policies that helped to get the economy out of a tailspin were strongly opposed by most Republicans in Congress. But they were both necessary and successful in preventing the country from experiencing another Great Depression.

Instead of a sustained period of economic contraction, the economy returned to growth less than a year into President Obama's first term. Real GDP has now grown by 14.5 percent since the start of the Obama administration. The economy has expanded in 24 of the past 26 quarters (see **Figure 1**).

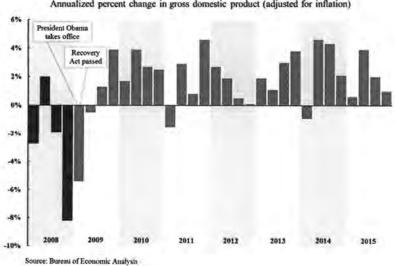


Figure 1. U.S. Economy Has Grown in 24 of the Last 26 Quarters Annualized percent change in gross domestic product (adjusted for inflation)

Today, the economy is in the midst of the longest streak of private-sector job creation in history. Businesses have added 14 million jobs over a record 71 consecutive months of private-sector job growth (see **Figure 2**). The economy added an average of about 233,000 private-sector jobs per month over 2014 and 2015, the strongest two years of private-sector job creation since the 1990s.

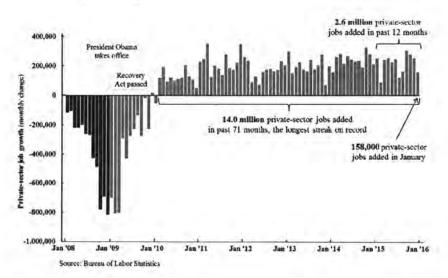


Figure 2. Longest Streak of Private-Sector Job Growth Continues

On net, all jobs added since early 2010 have been full-time jobs, despite Republican claims that the Affordable Care Act (ACA) would drive up part-time employment (see **Figure 3**).

Figure 3. All Employment Growth Has Been Full-Time Jobs Net change in employment, January 2010 to January 2016



Source: JEC Democratic staff calculations using data from the Bureau of Labor Statistics Note: Seasonally-adjusted data

The Obama administration's actions averted a near collapse of the U.S. auto industry. Auto sales hit a record high of 17.4 million units in 2015. Annual car and truck production has more than doubled since 2009. The auto industry has added nearly 640,000 jobs since mid-2009, including both manufacturing and retail (see **Figure 4**). Motor vehicle and parts manufacturers have added nearly 300,000 jobs since June 2009, contributing to job growth of more than 900,000 in the manufacturing sector overall during the recovery.

President Obama takes office

Recovery Act passed

10,000

-10,000

-30,000

-50,000

-70,000

-110,000

-130,000

2007

2008

2009

2010

2011

2012

2013

2014

2015

Source: Bureau of Labor Statistics

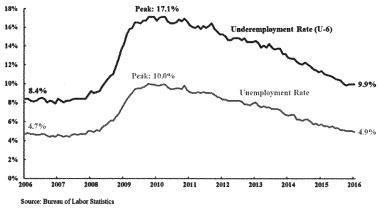
Figure 4. The U.S. Auto Industry Has Added Jobs for 6 Straight Years
Ouarterly change

Notes: Includes workers in the motor vehicle and parts industries of the manufacturing and retail trade sectors;

The unemployment rate has been more than cut in half since it peaked at 10.0 percent in October 2009. The 4.9 percent unemployment rate in January was the first reading below 5.0 percent in nearly eight years. The decline in unemployment has been broad-based. Hispanic unemployment is now 5.9 percent, down from a peak of 13.0 percent in August 2009. African-American unemployment is now 8.8 percent, down from 16.8 percent in March 2010. Post-9/11 veteran unemployment averaged 5.8 percent in 2015, down from an annual average peak of 12.1 percent in 2011.

Other labor-market indicators have also seen substantial improvements. The long-term unemployment rate has been slashed by more than two-thirds from its peak, and the duration of a typical spell of unemployment is less than half as long as it was at the worst of the downturn. The broadest measure of labor underutilization (the U-6), which includes workers employed part time but who would prefer full-time jobs as well as discouraged workers who have dropped out of the labor force but who want and would accept a job if offered, is down sharply from a peak of 17.1 percent and was 9.9 percent in January (see **Figure 5**).

Figure 5. Unemployment and Underemployment Rates Have Declined Significantly from Recession Peak January 2006 to January 2016



Notes: "Underemployment Rate (U-5)" includes those marginally attached to the labor force and those employed part time for economic reasons: seasonally-adjusted data

The housing sector has recovered from severe losses. The FHFA purchase-only index is higher now than it was before prices began to fall precipitously in early 2007. The share of single-family homes with underwater mortgages has been more than cut in half. The percentage of residential mortgage loans that are seriously delinquent (at least 90 days past due) is at its lowest level in more than eight years. The rate of new foreclosures hit its lowest level since 2003 in the fourth quarter of 2015.

Buoyed by the recovery in home values and stock market gains, nominal household wealth has increased by more than \$30 trillion since President Obama took office. It is now about \$17.5 trillion higher than it was before the recession.

The policy response: By virtually every measure of economic health, the economy is undoubtedly in a stronger position now than when President Obama took office. The policies of the Obama administration and Federal Reserve made a major contribution to this recovery. A recent study by economists Alan Blinder and Mark Zandi found that, jointly, fiscal and monetary policy actions dramatically reduced the severity and length of the

Great Recession. Specifically, the study found that, without those responses, the economy would have contracted for more than twice as long, the unemployment rate would have reached nearly 16 percent and about twice as many jobs would have been lost.⁹

Putting the Recovery in Proper Context

Despite the significant progress made during the Obama years, the president's critics continue to assail his management of the economy. Some argue that the pace of the Obama recovery pales in comparison to "average" recoveries in the modern era, in particular to the Reagan recovery in the 1980s.¹⁰

While it is true in a narrow sense that GDP growth has been slower than during other recoveries since World War II, this is a deeply misleading comparison. The Great Recession was an economic cataclysm that rocked the global economy to its core. And it came at a time when structural and demographic trends were already working to hold down growth. In fact, compared to other advanced economies, the strength and resilience of the U.S. economy stands out—the recovery has been faster in the United States than virtually anywhere else.

Obstacles to recovery: Numerous factors that make this recovery different from other recent recoveries are discussed below.

Financial crisis origins. Comparing this recovery to an "average" recovery does not make sense because the Great Recession was not an "average" recession. It resulted from a severe global financial crisis and was the deepest and most protracted economic decline since the Great Depression. Economic research shows financial crises have deeper, more-damaging and longer-lasting effects. A recent study looked at recoveries from 100 systemic banking crises spanning three centuries and concluded that: "postwar business cycles are not the relevant comparator for the recent crises in advanced economies" In fact, as a witness called by Republicans at a recent House Ways and Means Committee hearing noted, "The U.S. growth path has been in line with what

the history of recoveries from financial crisis would suggest it would be."¹²

Overleveraged housing sector. The bursting of the housing bubble and the loss of more than \$7 trillion in home equity devastated the economy and prevented housing from fueling a recovery as it has after other recessions. Typically, an "outsized proportion" of growth in the first two years of a recovery comes from residential investment. However, the crash, debt overhang and tight lending standards severely restricted residential construction's contribution to economic growth during this recovery. In addition, the need for Americans to deleverage restrained growth in consumer spending for an extended period of time.

Monetary policy constraints. Unlike the situation after many other postwar recessions, Federal Reserve's ability to use its strongest monetary policy tools to assist the recovery was limited. Typically, Federal Reserve works to stimulate a weak economy by lowering the federal funds rate, which filters through into other interest rates, spurring borrowing and investment and bolstering economic growth. For example, during the 1981 recession, the Volcker Fed cut rates by 10 percentage points to support the recovery. The Fed's actions were a major reason for the relatively strong recovery during the Reagan presidency. However, this time, the federal funds rate quickly hit what is known as the "zero lower bound," forcing Federal Reserve to turn to comparatively weak monetary policy instruments to support the economy further.

<u>Federal fiscal headwinds</u>. With Federal Reserve having exhausted its most powerful tools, the economy desperately needed additional support from fiscal policymakers. Federal fiscal policy had made a positive contribution to the recoveries following the 1981 and 2001 recessions, for example, in both cases due in part to increases in defense spending. However, the House Republican leadership that came to power following the 2010 elections, instead of providing support, undermined the recovery by

repeatedly threatening government shutdowns, arguing over whether the nation should pay its bills and demanding deep, counterproductive spending cuts. According to one estimate, fiscal uncertainty and fiscal drag in tandem reduced GDP growth by about 1 percentage point and cost the economy more than 2 million jobs.¹⁷

State and local headwinds. The unusual circumstances of this recovery can also be seen in the state and local government sector. During the recovery period following every other postwar recession, state and local government spending increased, helping to raise GDP. However, this time, it continued to drop, in part due to declining property tax and other revenues as home values, incomes and consumer spending all fell precipitously. ¹⁸ Only over 2014 and 2015 have state and local governments begun to make a modest positive contribution to GDP growth again.

Global headwinds. This recovery is also different because it follows a truly global crisis. Many other countries that fell into recession have not fared as well as the United States over the recovery period. Slow global growth has in turn had ramifications for the U.S. recovery, for example by limiting demand for U.S. exports. The uncertainty of the economic situation overseas remains a challenge to the U.S. economy, and it is explored further in a section later in this report.

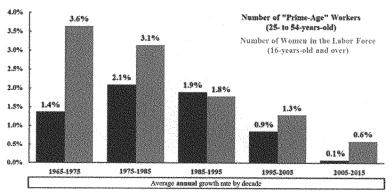
Demographic trends. In contrast to much of the second half of the 20th century, underlying demographic trends that long predate the Great Recession are no longer fueling an increase in the labor force participation rate and an acceleration in economic growth. Two factors in particular deserve mention: the aging of members of the baby boom generation out of their prime working years, and a plateauing of the number of women in the workforce after several decades of rapid growth.

From 1965 to 2005, the number of Americans ages 25 to 54 grew at a 1.6 percent annual rate, but growth of this population has

slowed to a virtual stop since then as baby boomers have aged, increasing just 0.1 percent per year this past decade. In addition, the number of women in the labor force increased at a 2.5 percent annual rate over the 1965 to 2005 period. Growth in the number of women the workforce has since slowed to an average rate of 0.6 percent per year since 2005. The figure below shows these data broken out by decade over the past 50 years (see **Figure 6**).

According to CBO, a major reason why growth this recovery has been slower than other postwar recoveries is slowing growth in potential output—largely reflecting slower growth in the size of the potential labor force due to these demographic trends. Demographic factors threaten to restrain economic growth in the future, regardless of the party or policies of future presidents. This report discusses demographics in greater depth in a later section.

Figure 6. Demographic Trends Are No Longer Fueling An Acceleration in Economic Growth Average annual growth rate by decade, 1965-2015



Source: JEC Democratic staff calculations using data from the Bureau of Labor Statistics

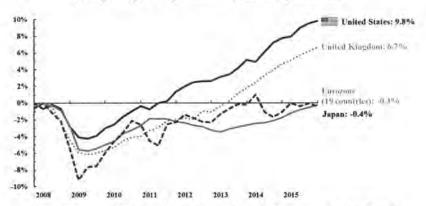
Notes: "Number of Prime-Age' Workers" refers to the civilian noninstitutional population 25- to 54-years-old; "Number of Women in the Labor Force" includes women 16-years-old and over who are either employed or unemployed data are not seasonally adjusted

International comparison: Although it is difficult to provide a meaningful benchmark for a recovery from an economic crisis of the magnitude of the Great Recession, one plausibly reasonable method is to compare the U.S. recovery to the recoveries in other

advanced economies from the same crisis. By this measure, the United States stands out as having among the strongest recoveries.

The current unemployment rate in the United States is less than half the unemployment rate in the Eurozone (10.4 percent). And while real GDP in the Eurozone remains below its prerecession peak, in the United States it is 9.8 percent higher than it was before the recession (see **Figure 7**). The U.S. recovery also exceeds the recoveries in the United Kingdom and Japan.

Figure 7. U.S. Economy Has Grown Faster Than Other Leading Advanced Economies
Percentage change in real gross domestic product from prerecession peak



Sources: JEC Democratic staff calculations through Q4-2015 using data from the Bureau of Economic Analysis, Statistical Office of the European Communities, Cabinet Office of Japan, and the Office for National Statistics of the United Kingdom Notes: Eurozone refers to countries in the European Union that use the Euro as their common currency; prerecession peak in United States was Q4-2007; this peak was Q4-2008 for all others depicted

The aggressive policy response by the Obama administration and Federal Reserve is a major reason why the U.S. recovery has been faster than the recoveries in countries that pursued fiscal austerity and had central banks that moved too quickly to slam on the brakes.

OVERVIEW OF MACROECONOMIC CONDITIONS

The *Report* includes extensive economic data demonstrating that the recovery continued throughout 2015. The Council of Economic Advisers predicts that economic growth will accelerate slightly in 2016 to a rate of 2.7 percent.²⁰ This projection is in line with forecasts from the Congressional Budget Office and leading private-sector forecasters.

By many measures, the economy has recovered to its prerecession level. For example, real GDP is higher now than its pre-recession peak. In addition, more Americans are working today than when the recession began in December 2007 and the unemployment rate is below its prerecession average.

Challenges for Interpreting Economic Indicators

Understanding macroeconomic indicators demands broad knowledge of both medium-term cyclical trends and long-term structural trends. Pundits often cite the most recent economic indicator as an example that the economy is heating up or heading downhill. However, some indicators—notably GDP, housing starts and weekly jobless claims—are notoriously "noisy" so short-term variations have little meaning.

Evaluating economic data in the wake of a recession poses special challenges because it is difficult to choose an appropriate reference point. In the case of the Great Recession and the recent recovery, this is compounded by the fact that the recession was precipitated by a severe global financial crisis—as explained in Chapter 2, it is more difficult to recover from a financial crisis than a more typical economic downturn. Moreover, it is difficult to say whether the benchmark for any indicator should be the prerecession peak, the recession trough, the historical average, or conditions in other countries recovering from a similar recession.

The recent economic crisis, preceded by an enormous housing bubble, serves as a good example. It would be misleading to focus primarily on conditions the moment before the bubble burst as the standard for measuring economic recovery. It is more useful to look at performance over the previous business cycle or to compare data to broader historical averages.

It is also important to remember that aggregate indicators do not fully describe the contours of the economy. Although in some respects the economy has almost fully recovered from the recession, the recovery has proceeded at a different pace in different parts of the country, for different ages, for people with different levels of education, and for people at different income levels. Some Americans still suffer acutely from the effects of the financial crisis and the Great Recession.

With these principles as a guide, this chapter on current macroeconomic conditions attempts to build on the excellent analysis of *The Economic Report of the President*. Because the *Report* analyzes many of the most important economic indicators in detail, some will be mentioned here only in brief. Where possible, this chapter attempts to provide a different perspective on the data or shed light on indicators that are sometimes overlooked.

Recent Trends in Output Growth

Gross Domestic Product: GDP data fluctuate significantly quarter to quarter due to a variety of factors. For this reason, it is important to evaluate GDP over the long term. It is also essential to consider business cycles—in this case within the context of the global financial crisis.

The financial crisis had a catastrophic impact on the U.S. economy. GDP growth fell by 2.8 percent during the last year of the Bush administration, including a drop of more than 8 percent at an annualized rate during President Bush's last quarter in office. Growth remained negative during the first two quarters of the Obama administration, though the pace of decline slowed significantly in the second quarter.

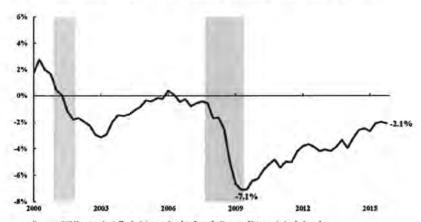
Since that time there has been a steady turnaround, with real gross domestic product growing in 24 of the past 26 quarters (see **Figure 1**). Overall, during the Obama administration, the economy has grown by 14.5 percent.

However, the growth of output slowed in 2015, as real GDP rose a modest 1.9 percent between the fourth quarter of 2014 and the fourth quarter of 2015. This was down from growth of 2.5 percent in each of the previous two years.

In addition to long-term trends in GDP growth, it is useful to compare the current level of GDP to its potential. CBO estimates potential GDP based on a variety of factors, including the size of the potential labor force, the capital stock and total factor productivity.

At its peak in 2009, the gap between actual GDP and its potential reached 7.1 percent, meaning that the economy fell far behind what CBO estimated to be its potential.²¹ However, there has been steady upward improvement since that time (see **Figure 8**). At the end of 2015, the difference between actual and potential GDP was only 2.1 percent – almost the same level it was during President Bush's first term in 2003.²²

Figure 8. U.S. Output Gap
Actual minus potential real GDP as percent of potential GDP, Q1-2000 to Q4-2015

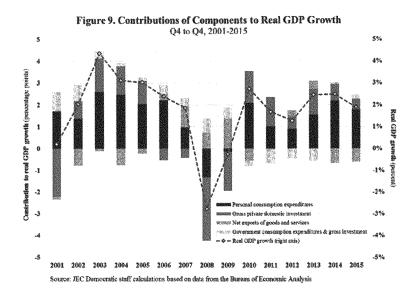


Sources: JEC Democratic staff calculations using data from the Bureau of Economic Analysis and Congressional Budget Office, The Budget and Economic Outlook: 2016 to 2026 (January 2016)

Note: Grey areas represent periods of recession as determined by the National Bureau of Economic Researce

GDP's four principal components—consumer spending, private investment, government expenditures and net exports—are each discussed in detail below. As seen in **Figure 9**, consumer spending sustained economic growth until the crisis, when both consumer expenditures and private investment collapsed and dragged GDP down. As the economy has recovered, consumer spending has played a key role, contributing an increasing share to output growth. In fact, GDP growth in 2015 was largely driven by continued gains in consumer spending.

During the past two years, government purchases also have contributed positively to the growth of output, after subtracting from GDP during most of the recovery. By contrast, net exports were a drag on growth during the past two years, as the strong dollar and weak global demand weighed on exports and imports continued to rise.



Consumer spending: Consumer spending, which comprises about two-thirds of GDP, expanded by 2.6 percent in 2015, a pace slightly below that of the previous year. This was due in large part to a 3.1 percent increase in real disposable income over the past year, which was in turn attributable to employment growth, modest gains in hourly wages and falling prices of oil and gasoline.

In recent years, consumer spending has been somewhat restrained by consumers' efforts to pay down debt—a hangover from the collapse of the housing market. In prior years, when home prices were soaring, many households extracted wealth from their homes through cash-out refinancing or home equity loans which allowed them to spend beyond their means. But the dynamic reversed when the bubble burst and families restricted spending and reduced their debt. This deleveraging enabled families to regain their financial footing, but by reducing spending it also slowed GDP growth.

The same pattern can be seen in savings rates, which in 2007 stood at only about 3 percent of disposable income. The housing collapse forced families to cut spending and increase savings, and by 2012 the saving rate jumped to 7 percent.²³ It has now drifted down to about 5 percent, allowing an uptick in consumer spending.

A similar trend is reflected in the ratio of household debt to disposable income, which jumped from an average of 99 percent in 2002 to a peak of 128 percent in early 2008. But by the third quarter of 2015 the ratio dropped to 101 percent.²⁴ Together these patterns in both the savings rate and debt to disposable income ratio suggest that the deleveraging process has largely run its course and that it is no longer restraining spending.

Residential investment: Another source of strength was residential investment, which rose by about 9 percent in 2015, a significantly higher rate than in the previous year. Residential investment currently accounts for only about 3.5 percent of GDP, a share that is below the historical average of about 4.5 percent prior to the emergence of the housing bubble.²⁵ Residential investment reached 6.5 percent of GDP in 2005, though it is not a fair benchmark because that occurred at the peak of the housing bubble, shortly before it popped. Today, conditions for continued strength from this sector are favorable since household formation is beginning to pick up, interest rates and vacancy rates are low, and deleveraging has run its course.

Business investment: In contrast, business investment slowed in the second half of 2015, largely due to declining investment in oil drilling equipment. More broadly, over the past several years business investment has flattened as a share of GDP at a level slightly below its average during the two decades before the recession.²⁶

As noted in the *Report*, one key determinant of the level of business investment historically has been the rate of growth of overall aggregate demand. For example, a faster rate of consumer spending attracts higher levels of business investment. Consequently, the forces that restrained consumer spending during and immediately following the recession indirectly slowed

business investment. In simple terms, consumers were spending less so businesses decided not to expand or hire new workers. Along these lines, it is noteworthy that business investment has also fallen below prerecession trends in other advanced economies.

Government: In 2015, government spending at the federal, state and local levels added about 0.2 percentage points to the growth of GDP.²⁷ This represents a sharp contrast with the period from 2010 to 2013, when reductions in government spending slowed GDP growth by an average of 0.5 percentage points per year.

Slower GDP growth in the latter period was due in part to the waning effects of the 2009 American Recovery and Reinvestment Act (ARRA), which is estimated by CBO to have boosted GDP growth by between 0.6 and 3.5 percent in 2009, the year it was passed. The effect of ARRA began to wane in 2011, restraining growth in that and the next several years even though the level of GDP was still higher than it would have been without ARRA. The problem was compounded by deep cuts by state and local governments, nearly all of which are required to balance budgets and therefore in the wake of the Great Recession were forced to slash spending. The situation was further exacerbated when after the 2010 elections House Republicans forced further spending cuts at the federal level, slowing the economy at a time it needed stimulus.

Federal government spending is now on a slight upward trajectory and it likely will make a positive contribution to GDP growth in 2016.

Net exports: During the past two years, net exports have been a significant drag on GDP growth.³⁰ The decline in exports has largely been the result of slow economic growth worldwide and an appreciating U.S. dollar, which made American exports more expensive compared with those of foreign competitors. In 2015, real exports declined by 0.8 percent, while real imports rose by 2.9

percent. Overall, real net exports subtracted about 0.7 percentage points from GDP growth in 2014, and 0.6 percentage points in 2015.³¹

The Labor Market

Labor market conditions continued to improve in 2015. The economy added an average of 220,000 private sector jobs per month in 2015, a total of 2.6 million during the year. This extends the record string of 71 consecutive months of private sector job growth through January 2016. Most major industry categories participated in that growth, with especially large contributions from professional and business services and from health care. However, as noted in the *Report*, 133,000 jobs were lost in mining and logging in 2015 in large part due to the collapse of oil prices. Most of these losses were in oil and gas extraction and in support activities for oil and gas operations.

With the strong job growth, the unemployment rate has continued to fall, dropping below 5 percent in January for the first time since early 2008. January's 4.9 percent unemployment rate matches several current estimates of the sustainable rate, including CBO's estimate of the natural rate of unemployment and the median longer-run projection in the Federal Open Market Committee's December Summary of Economic Projections.³²

Unemployment rates within all demographic categories have come down substantially from their post-recession highs and are now close to their prerecession averages. Nonetheless, unemployment rates for some groups, including African Americans, Hispanics, the young and the least-educated are higher than the overall average.

African Americans: The unemployment rate for African Americans was 8.8 percent in January, cut almost in half from its peak of 16.8 percent reached in March 2010. This rate is also somewhat lower than its prerecession average of 9.8 percent.³³ The 8.8 percent unemployment rate for African Americans

remains double the 4.3 percent rate for whites and almost 4 percentage points above the overall unemployment rate.

Hispanics: The unemployment rate for Hispanics was 5.9 percent in January, cut by more than half from a peak of 13.0 percent in August 2009. This is below its prerecession average of 6.5 percent.³⁴

Young workers: Young workers, those ages 16-24, experienced unemployment rate of 10.3 percent in January. This is a decline from its peak of 19.5 percent and below its prerecession average of 11.4 percent.³⁵

Less than high school education: Those workers ages 25 and older without a high school diploma had an unemployment rate of 7.4 percent in January, below the prerecession average of 7.9 percent for this group.³⁶ This 7.4 percent rate is almost triple the 2.5 percent unemployment rate for workers with at least a bachelor's degree, reinforcing the key role education plays in employment prospects.

Long-term unemployment: There was continued progress in reducing long-term unemployment in 2015. The long-term unemployment rate fell 0.5 percentage points over the year, reaching 1.3 percent in December, slightly above its 1.0 percent prerecession average.³⁷ As noted in the *Report*, the decline in the long-term unemployment rate accounted for more than 85 percent of the decline in the overall unemployment rate during the year.³⁸ Still, more than one-in-four unemployed workers have been jobless for six months or more.

One factor contributing to the reduction in long-term unemployment has been gains in the ability of unemployed people to find a job. At the end of 2015, the probability that a person who was unemployed in a given month had by the next month found a job averaged 25 percent, up from 19 percent just two years earlier.³⁹ This figure was as low as 16 percent in late 2009, though it is still below its average of 28 percent in 2007. This

improvement reflects gains in the number of people hired, as measured in the Job Openings and Labor Turnover Survey.

Other labor market indicators: The labor force participation rate in January stood at 62.7 percent, down from about 66 percent before the recession. More than half of that decline can be attributed to the aging of the population, as members of the large baby boomer generation reach ages where people tend to retire and leave the labor force. 40

Some have claimed that the drop in the unemployment rate largely is due to workers leaving the labor force. However, evidence does not support this claim. The participation rate dropped by only 0.2 percentage point between January 2015 and January 2016 while the unemployment rate fell 0.8 percentage point, from 5.7 percent to 4.9 percent. Moreover, the participation rate for people in their prime working years (ages 25 to 54) rose by half a percentage point between September and January, and the overall employment-to-population ratio has risen over the past year even with the downward pull arising from population aging. These data indicate that the drop in the unemployment rate is largely due to the fact that more people found jobs in 2015.

Another useful measure of labor market health is BLS' U-6 measure of underutilization, which in addition to unemployment captures marginally-attached and part-time workers who would prefer but are unable to find a full-time job or whose hours were reduced due to slack demand. The U-6 stood at 9.9 percent in January, down from just over 11 percent in early 2015. As a point of reference, it should be noted that the U-6 reached a peak of 17.1 percent in late 2009 (see **Figure 5**).

The growth of hourly wages recently has shown signs of picking up. Over the past year, average hourly earnings of production and nonsupervisory workers have risen by 2.5 percent, up from 2 percent a year earlier. Over the past six months, average hourly earnings of all private industry workers have risen at a 2.9 percent

annual rate, the fastest 6-month rate of increase since the Great Recession. With a very low rate of inflation over the past year, this has translated to a sizable gain in real earnings.

Inflation

The rate of inflation, which has been quite low during most of the period since the Great Recession, was even lower in 2015. Both the chain price index for personal consumption expenditures (PCE) and the Consumer Price Index (CPI) rose by just 0.7 percent in 2015. To a significant degree slowing inflation in 2015 reflected falling prices for oil and gasoline. However, "core" measures of inflation—that is, measures excluding the often volatile food and energy components—were also subdued. Most notably, the core PCE index rose by 1.5 percent, a rate significantly below the Federal Reserve's target of 2 percent inflation.⁴¹

On one hand, the low rate of inflation resulting from lower oil and gasoline prices represents a boon for households, translating their nominal gains in income into greater real gains. On the other hand, households that borrow are hurt by extremely low inflation rates because a modest amount of inflation decreases the real value of outstanding debt.

In addition, if inflation continues to run below the target it would complicate the Federal Reserve's efforts to normalize monetary policy. If low inflation leads the Federal Reserve to keep interest rates close to their effective zero lower bound, there would be little room for monetary policy to respond to the next recession using conventional tools. In that situation, if Congress were to remain reluctant to stimulate the economy through fiscal policy, any downturn would be deeper and more prolonged than necessary.

The Outlook

The forecast presented in the *Report*, based on information available as of early November 2015, calls for real GDP to grow by 2.7 percent in 2016 and 2.5 percent in 2017.⁴² This forecast is

identical to that of CBO, which was completed in late December, and similar to other forecasts completed late last year and in early January. In addition, the Report's forecast and others anticipate some further decline in the unemployment rate this year and less slack in the economy. These forecasts also anticipate that inflation will remain below the Federal Reserve's target in 2016, but will move toward that target during the next several years.

Because the projected rate of GDP growth is significantly faster than CBO's estimate of the growth of potential GDP (the latter being 1.6 percent in 2016, 1.7 percent in 2017), under this forecast the output gap would be down to about 1 percent by the end of 2016.⁴⁴ It would go away entirely during 2018.

However, recent developments suggest a downside risk to these projections, particularly due to the decline in the stock market, continued appreciation of the dollar, and a further weakening of the global outlook. February's *Blue Chip* consensus forecast downgraded its projection for growth in 2016 from 2.6 to 2.4 percent.⁴⁵

While some analysts suggest there could be an elevated risk of recession, most do not believe that recession is likely this year. Still, in the face of soft global demand, residual slack in the labor market, and an inflation rate that remains below the Federal Reserve's target, fiscal and monetary policies should remain at least slightly expansionary in the near term.

THE EFFECT OF THE GLOBAL ECONOMY

The economic recovery in the United States has been faster than in other countries hit by the global financial crisis, in large part due to aggressive actions by the Obama administration and the Federal Reserve. However, sluggish global growth has slowed the U.S. recovery and remains a downside risk to the U.S. economy.

Global real GDP growth decelerated in 2015, from 3.4 percent in 2014 to an estimated 3.1 percent. While the growth in advanced economies edged up slightly from 1.8 percent to an estimated 1.9 percent, growth in emerging markets dropped from 4.6 percent to an estimated 4.0 percent.⁴⁶

The slow real GDP growth weakened global consumer demand, one of the factors weighing down U.S. exports. Net exports subtracted 0.6 percent from real GDP growth over the past four quarters.

The decline in exports also was driven by appreciation in the value of the U.S. dollar, which increased by about 10 percent in 2015.⁴⁷ The strong dollar has generally made U.S. exports more expensive overseas, reducing the demand for American goods. At the same time, the strong dollar has increased demand by U.S. consumers for relatively inexpensive foreign goods, driving up imports.

Overall, while the global economy continues to grow at a modest pace, several global factors—such as the collapse of commodity prices and weak growth in major U.S. trading partners—pose both upside and downside risks to the U.S. economy. This section provides analysis to assess whether these factors will translate to net gains or net losses to the U.S. economy in the near term.

The Effects of a Sharp Decline in Oil Prices

The U.S. economy has been greatly affected by falling worldwide commodity prices—a positive development for commodity-using manufacturers and consumers, but a strongly negative one for commodity producers. The United States, a net importer of

commodities, should theoretically gain more than it loses from dropping commodity prices. United States net import of commodities as share of GDP has fallen from 1.7 percent in 2011 to 0.4 percent in the first three quarters of 2015.⁴⁸

The most precipitous drop was in crude oil prices, which have fallen by more than 70 percent since mid-2014—from over \$100 a barrel in 2014 to around \$30 at the beginning of 2016.⁴⁹ The price collapse can be attributed primarily to the global supply of crude oil persistently exceeding demand, resulting in an excess supply of about 2 million barrels per day in 2015 (see **Figure 10**).⁵⁰ This excess supply has pushed the global stockpile of crude oil to a record-level.

Figure 10. Monthly Crude Oil Price and Global Excess Supply, 2000-2015

Drops in crude oil prices cause gain and pain: As with other commodities, dropping oil prices creates winners and losers in the domestic economy. Drivers in the United States saw regular retail gasoline prices drop from \$3.63 in June 2014 to \$1.68 per gallon in February 2016.⁵¹ The U.S. Energy Information Administration (EIA) estimates that as a result, U.S. households spent an average of about \$700 less on gasoline in 2015.⁵² Families spent a portion

of that windfall, boosting consumer spending and GDP growth. However, falling oil prices also hurt U.S. oil producers, who had experienced dramatic growth over the past decade when oil prices were relatively high.

The United States is the largest petroleum products producer in the world, surpassing Saudi Arabia and Russia in 2013 (see **Figure 11**). United States petroleum production increased by 68 percent from 2005 to 2014.⁵³ As a result, U.S. petroleum production as a share of world production has risen from 9.1 percent in Q4-2005 to 15.8 percent in Q2-2015.⁵⁴

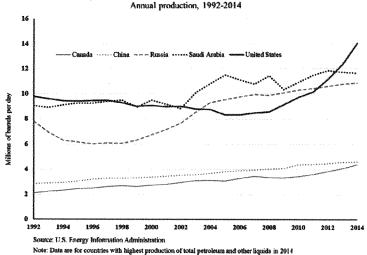


Figure 11. World's Largest Petroluem Producers

The United States is also the largest petroleum consumer in the world, consuming a total of almost 7 billion barrels in 2014.⁵⁵ Thus, despite the surge in production in recent years, domestic production has yet to catch up with the consumption level, and the United States is still a net importer of oil, with net imports averaging about 5 million barrels per day in 2014 when global price averaged around \$99 per barrel.⁵⁶

The total cost of petroleum imports is somewhat mitigated by the fact that the United States has decreased its consumption of oil,

from a peak of 20.8 million barrels per day in 2005 to around 19 million barrels per day in 2014, an 8.5 percent decline despite a growing population. The CEA attributes this "consumption surprise" to a variety of factors such as improvement in fuel efficiency and changes in driving habits.⁵⁷

The decline in consumption and increase in production, combined with lower prices, have led to a substantial decrease in U.S. crude oil imports as a share of GDP, from about 6 percent in 2010 to about 3 percent in 2015.⁵⁸

Because the United States is a net importer of petroleum, dropping oil prices should have an overall positive effect on the economy. However, the benefits are hard to calculate because there are countervailing forces—e.g., lower prices could potentially translate into higher consumer spending and faster economic growth, but they also impose losses on U.S. oil producers, who in turn invest less on drilling and hire fewer workers, which can slow GDP growth.

The impacts on consumer spending: From Q4-2014 to Q4-2015, energy expenditures as a share of disposable personal income declined by 0.85 percent. However, instead of spending the windfall, households appear to have put most of it in the bank last year, as personal saving as a share of disposable personal income increased by 0.75 percent while non-energy expenditures as a share of disposable personal income increased by only 0.17 percent during the period.⁵⁹

One plausible explanation is that consumers have yet to believe oil prices will remain low. One recent survey finds that 70 percent of U.S. consumers expect gasoline prices to go back up in the next three months, and this expectation of rising prices contributes in part to consumers refraining from spending the extra cash. Along with the recent volatile market conditions, it may take longer for households to alter their consumption habits. However, U.S. GDP

growth could also exceed expectations this year if consumers begin to spend down their savings from last year.

The impacts on investments: Since 2009, the combination of high oil prices and advancements in drilling technologies attracted a massive influx of capital to the oil and gas sector, making it one of the fastest-growing sectors in the economy. However, falling oil prices in 2015 have caused the industry to tumble.

Cutbacks in oil and gas industry investment have a sizable impact on the overall economy—declines in mining fixed investment took 0.43 percent off real U.S. GDP growth in 2015. However, for energy using firms, especially heavy oil-users, the lower cost of production should boost their investment. In fact, non-mining fixed investment grew by 6 percent in 2015 (see **Figure 12**).

2.0% Mining WMNon-Mining Total

1.5%
0.5%
0.0%
2.0%
2001
2003
2005
2007
2009
2011
2013
2015

Figure 12. Mining and Non-Mining Private Fixed Investment
Contribution to percent change in real GDP from Q4 to Q4, percentage points, 2001-2015

Source: JEC Democratic staff calculations using data from the Bureau of Economic Analysis

Notes: Mining includes investment in petroleum and mineral exploration, shafts and wells; non-mining is real private fixed investment except mining

The impacts on employment: The oil and gas sector remains a relatively small part of the overall U.S. labor market. Even at its peak, oil and gas comprised only about 0.4 percent of total private nonfarm payroll employment.⁶¹ Nonetheless, it contributed substantially to employment growth during the recovery. A recent analysis concludes that oil and gas extraction led to an increase in

U.S. employment of 725,000 and a 0.5 percent decrease in the unemployment rate during the Great Recession.⁶²

Steeply falling petroleum prices have forced producers to slash payrolls and cut capital expenditures. Mining and exploration investment declined 35 percent in 2015, the largest year-over-year decline since 1986.⁶³ The impact is concentrated in only a few oil-producing states. A study finds that lower oil prices would adversely affect total employment in eight states—Alaska, Louisiana, North Dakota, New Mexico, Oklahoma, Texas, West Virginia and Wyoming—where concentration of energy-related employment is the highest.⁶⁴

However, lower costs of production for energy-using firms could also lead to more hiring in non-energy sectors, as observed in the robust job growth in recent years.

The possibility of large indirect costs: Low oil prices may not only place substantial costs on American petroleum producers, but there may also be much larger indirect costs that extend far beyond the oil industry and cannot be captured adequately in standard economic analysis. Low prices may encourage higher levels of worldwide consumption of fossil fuels, which play a large role in global climate change. The long-term cost of climate change, to the extent that it is attributable to lower oil prices, is beyond calculation.

Slow Growth in China

Slowing economic growth in China, the second largest economy in the world after the United States, has raised concerns about the impact this could have on the U.S. economy. China's real GDP growth averaged 10.7 percent from 2001 to 2008, but has dipped down to about 7 percent since 2012 and is projected to further decelerate to about 6 percent in the near term.⁶⁵ This so-called "soft landing" is primarily due to the Chinese government's rebalancing reform agenda, as it attempts to shift the economy from investment-led to consumption-led growth.⁶⁶

The impact of China's growth on global demand: The growth of the Chinese economy during the past two decades has been an important source of demand for global products. Chinese imports as a share of total world imports of goods and services climbed from 1.4 percent in 1990 to 8.8 percent in 2014. In comparison, U.S. imports as a share of the world imports of goods and services fell from 18.6 percent to 11.4 percent during the same period.⁶⁷

The main mechanism through which the slowdown in China will affect the U.S. economy is through lower commodity prices. China is an important consumer in global commodity markets and lower Chinese demand has drastically reduced demand for commodities. Overall commodity prices fell by a staggering 35 percent between 2014 and 2015, mostly driven by the collapse of energy prices, and the International Monetary Fund projects that they will fall another 25 percent in 2016 (see Figure 13). Prices of U.S. corn and soybeans have fallen below their cost of production, and Chinese steel prices fell by 37 percent at one point last year.⁶⁸

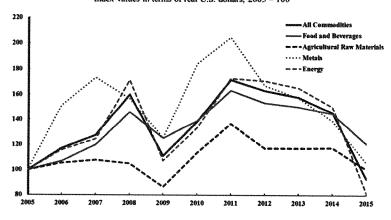


Figure 13. Global Commodity Prices Index values in terms of real U.S. dollars, 2005 = 100

ratic staff calculations using data from the International Monetary Fund and the Bureau of Economic

Notes: International Monetary Fund data are nominal monthly index values; data are averaged by year, adjusted for inflation using the Bureau of Economic Analysis GDP Implicit Price Deflator and reindexed to 2005

Declines in Chinese equity indices: The major Chinese stock market index, Shanghai Composite, has fallen by nearly 48

percent from its recent peak in June 2015. The stock market crash raised concerns for a full-blown recession, or a "hard landing."

However, the lost equity value should not pose a significant threat to China's real economy. The linkage between the equity market and the real economy is weaker in China than in the U.S. and most other developed economies because corporate fundraising is mostly conducted through bank loans and bonds, not by issuing stock. Consequently, lower stock prices have little impact on business investment in China. Stock holdings also comprise an insignificant share of household wealth.⁶⁹

Still, the significant decline in the Shanghai Composite has rattled U.S. markets, contributing to the decline in U.S. equities during the first months of 2016. Further equity market declines in China could also create panic that spill over to its foreign exchange market and erode business and consumer confidence.

Preventing a currency crisis: Capital flight has become one of the biggest threats to the stability of the Chinese economy. Monetary policy normalization in the United States, coupled with China's domestic macroeconomic concerns, have led to massive capital outflows and put downward pressure on the value of the yuan—its exchange rate vis-à-vis the U.S. dollar has fallen by about 8 percent from January 2014 to January 2016.⁷⁰

The prospect of further yuan depreciation will add deflationary pressure to the U.S. dollar in the near term, as Chinese imports comprise 23.2 percent of U.S. non-oil goods imports.⁷¹ A weaker yuan will also boost U.S. imports from China, creating further drags on the net exports component of U.S. real GDP growth and could have a significant negative impact on the U.S. manufacturing sector.

In order to prevent a currency crisis, most analysts expect the Chinese central bank to intervene by drawing down foreign exchange reserves and further tightening capital controls such as limiting cash withdrawal outside China. China's massive foreign exchange reserve and relatively low foreign exchange debt should provide sufficient buffer, but further devaluation of the yuan seems likely.

The outlook for growth: One of the most significant factors putting downward pressure on growth in China is its rising debt. Debt levels in both public and private sectors have reached 282 percent of GDP in 2014, a level that is not sustainable, according to the McKinsey Global Institute. China has relied on credit to stimulate growth since the global financial crisis in 2008, but it is no longer feasible to continue down that path.

Meanwhile, excess capacity in housing and industry will continue to put downward pressure on housing prices and investment. These factors point to a further deceleration of growth in the near term, although China is still expected to incrementally add to global demand but at a markedly slower pace.

Nonetheless, the overall impact of China's decelerating growth on the U.S. economy is likely to be fairly limited. Even though the impressive growth of the Chinese economy in the past few decades has elevated China's importance as a driver of global demand, U.S. exports to China still represent less than 1 percent of GDP (see **Figure 14**).

2.5%
2.0%
1.5%
1.0%
Canada Mexico China Japan United Kingdom Korea Korea Kong Regima Kong

Figure 14. U.S. Exports of Goods and Services as Share of GDP 2004-06 average vs. 2012-14 average

Sources: IEC Democratic staff calculations using data from the Bureau of Economic Analysis and U.S. Census Bureau

Financial linkages between the two countries are also limited, although the *Report* suggests the possibility of a spreading contagion in the financial markets, with China as its origin.⁷⁴

Major U.S. Trading Partners

The most important U.S. trading partners—Canada, Mexico and the Euro area—together comprised almost half of total U.S. exports in 2015. Weak growth in these countries puts downward pressure on U.S. exports and GDP growth.

Canada: Canada is the number one destination for U.S. exports, accounting for 19 percent of U.S. exports in 2015. Canada is a net exporter of petroleum, with crude oil production representing about 3 percent of the Canadian economy. The decline in oil prices has also affected Canada—its real GDP contracted in the first half of 2015, before resuming modest positive growth in the second part of the year. However, with substantial depreciation of the Canadian dollar, along with continued monetary and fiscal easing, Canada's growth is expected to remain positive, albeit at a modest pace.

Mexico: Mexico, the second largest export destination of the United States, also experienced disappointing growth in 2015 as a result of low oil prices. Industrial production was very weak this past year, in part because the mining sector experienced its worst year since 1993 amid low oil prices, and the manufacturing sector suffered from a slowdown in automobile production and sales to the United States. In the past decade, the Mexican government has increased spending with the extra tax revenue collected from the petroleum sector. With lower oil prices, government expenditures could become contractionary and slow growth in 2016. In addition, the Mexican peso exchange rate vis-à-vis the U.S. dollar fell significantly in 2015, further lowering demand for U.S. imports.

The Euro area: The Eurozone sovereign debt crisis stabilized in the second half of 2015, with the currency bloc remaining intact after Greece entered negotiation to avoid an exit from the Eurozone. However, many downside risks remain in the area, such as the increasingly high government debt burdens that reached 93 percent of GDP in 2015.⁷⁹ And as discussed in the *Report*, even though the job market improved slightly in 2015, the unemployment rate in the region remains alarmingly high at 10.4 percent as of December 2015. The pace of recovery is also highly uneven across the member countries.

Other prominent near term challenges faced by the Euro area include the refugee crisis, which will further increase the burden on governments and reduce fiscal space for reacting to future downturns. Political uncertainties created by antiestablishment political parties across Europe also undermine business and consumer confidence. Most private analysts predict the growth in the Euro area will improve slightly relative to the past few years, but still be well below 2 percent in 2016.80

Emerging Market Economies

Emerging markets, a significant source of growth for global demand in the past several years, took a blow in 2015 as a result of the significant decline in commodity prices. Commodity exporters and countries that rely on extensive trade ties with China have experienced significant slowdowns over the past year due to depressed commodity prices and slowing Chinese import demand.

Many emerging markets, such as Russia and Brazil, were built on high commodity prices, and the recent price collapse has created major headwinds for their continued growth. While still accounting for over 70 percent of global growth, growth in emerging markets has been decelerating for the past five consecutive years, to 4 percent in 2015, its slowest pace since the 2008-09 financial crisis.⁸¹

In the latest update, the International Monetary Fund revised down its 2016 emerging market growth projection by 0.2 percentage points, to 4.3 percent. Even though the updated projection represents a slight pickup in growth compared to 2015, the downward revision is symptomatic of the fact that emerging markets continue to perform weaker than previously expected.

Many analysts initially viewed the deflationary forces in emerging markets as transitory. But an oversupply of labor and capital, together with an overcapacity in industries that borrowed heavily to build new production facilities over the past few years, will continue to exert downward pressure on the growth of emerging markets in the near term.

Effects of a Global Slowdown on the U.S. Economy

The strong dollar and net exports: Weaker growth abroad relative to the United States will continue to put upward pressure on the U.S. dollar and downward pressure on exports. With the dollar expected to stay strong, savings realized from lower commodity prices will likely be offset by an increase in imports of

non-commodity goods and a decline in exports. Therefore, net exports will continue to act as a drag to real GDP growth in the near term. The combination of stronger dollar and drags on net exports may slow the pace of Federal Reserve's normalization policy path.⁸²

Uncertain effects: While the sluggish global growth will have some negative impacts on the U.S. economy, it is important to note that the effects are expected to be limited, as only 10 percent of value added in the U.S. economy is directly attributable to final spending in the rest of the world. The slowdown abroad would have to be catastrophic for U.S. trade to have any major effect on U.S. GDP growth. Nonetheless, there are substantial risks for spillovers through other channels such as financial contagion as global financial integration continues to deepen, so the overall prospect remains highly uncertain. 84

Policy implications: With weak global demand and uncertainties surrounding the effects of lower commodity prices on the U.S. economy, U.S. growth prospects will continue to rely heavily on domestic factors in the near term. Policymakers should set fiscal and monetary policies to adequately counter these global headwinds and sustain U.S. growth. Specifically, if domestic consumption growth is not sufficient to offset the drag from these global headwinds, policymakers should implement effective fiscal stimulus to help the economy achieve its growth objective.

Furthermore, the slow global growth outlook suggests that commodity prices will likely stay low for some time, so policymakers should take advantage of the lower construction costs to implement the much needed infrastructure projects when it is relatively cheap to do so.⁸⁵

KEY LONG-TERM ECONOMIC CHALLENGES

Earlier sections of this report discuss headwinds that have slowed the recovery from the Great Recession, as well as the outlook for the economy in the short term. This section takes a broader look at three key challenges that long predate the recession and that the economy will continue to face in the years ahead.

The first challenge is mitigating the consequences of demographic trends, especially the aging U.S. population, which will continue to exert downward pressure on labor force participation and economic growth, while also straining the federal budget. The second challenge is to accelerate labor productivity growth, which has slowed in recent years. The third challenge is ensuring that that economic gains are shared more broadly in the future than they have been in recent decades.

Steps policymakers can take to address these three challenges are outlined in the final section of this report.

Demographics and Population Aging

The size of the working-age population, and the share of this population participating in the labor force, are core drivers of economic growth. All else equal, if the number of people in the labor force is growing, GDP will increase. This was the case for much of the second half of the 20th century when baby boomers were entering adulthood and women began to participate in the labor force in much greater numbers than in the past. By contrast, if the size of the labor force is constant or shrinking, economic growth must come from other sources.

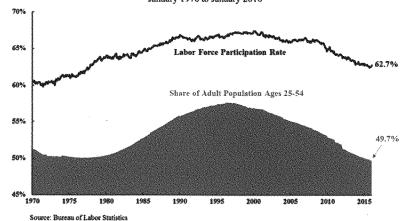
CBO estimates that the potential labor force (the number of people working or seeking work in an economy with full utilization of labor and capital resources) will grow just 0.5 percent per year over the next 10 years. While this matches the average from 2008 to 2015, it is down markedly from growth rates during earlier decades. Average annual growth in the potential labor force has

been trending down for years, from 2.5 percent from 1974 to 1981, to 1.6 percent from 1982 to 1990, to 1.3 percent from 1991 to 2001, to 1.0 percent from 2002 to 2007.86

Aging of the population: The U.S. population is older than ever before. This is due to a variety of reasons—the aging of the baby boom generation, declining birth rates and longer lifespans. In 1964, 9.5 percent of the population was at least 65 years of age. By 2004, this share had increased to 12.4 percent. By 2014, it was 14.5 percent. According to CBO, there are nearly two and a half times as many people age 65 and older today than there were 50 years ago, and this number is expected to increase by more than another 35 percent over the next 10 years.⁸⁷

As the population has become older, the share of adults in their prime working years (ages of 25 to 54) has declined. This share peaked at around 57 percent in the mid-1990s but has since fallen to less than 50 percent (see **Figure 15**). In raw numerical terms, growth in the number of people in this age bracket has slowed to a virtual stop, from an average annual growth rate of 1.6 percent from 1965 to 2005, to an increase of just 0.1 percent per year since then.

Figure 15. Labor Force Participation Rate and Share of Adult Population in Prime Working Years (Ages 25-54) January 1970 to January 2016



Notes: "Labor Force Participation Rate" is seasonally adjusted and ages 16 years and over; "Share of Adult Population Ages 25-54" is not seasonally adjusted

The rise and fall of the labor force participation rate has closely tracked the aging of the baby boomer generation (individuals born between 1946 and 1964). The oldest of the baby boomers entered their prime working years beginning in 1971, and their entrance into the labor force was a significant driver of labor force participation rate increases during the latter part of the 20th century. During this period, the growth in the size of the labor force was an important contributor to growth in GDP. However, as baby boomers have reached retirement age, with the first turning 65 in 2011, labor force participation has fallen.

One element that weighs against the trend of declining labor force participation is that many older Americans remain in the labor force longer than they did in the past. Although in 1995 only 38 percent of people ages 62 to 64 were in the labor force, in 2015 more than 50 percent were. Participation is also higher among individuals 65 and older, which has traditionally been considered retirement age. Among 65 to 69 year olds, the share in the labor force increased from 22 percent to 32 percent from 1995 to 2015.

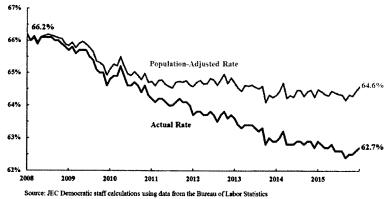
Nonetheless, the trend toward later retirement for many workers in recent years offsets only a small portion of the aging effect on the overall labor force participation rate. There remains a sharp drop off in participation as people age: for example, 72 percent of 55 to 59 year olds were in the labor force in 2015, as were 62 percent of 60 to 61 year olds and just 50 percent of 62 to 64 year olds.

This long-anticipated shift in the population's age distribution has served as a drag on labor force growth in recent years, and it is not expected to reverse. Federal Reserve Chair Janet Yellen has noted that this trend will continue in the coming years and that, consequently, the labor force participation rate should not be expected to return to its prerecession level anytime soon.⁸⁸

Economists have attempted to quantify the effect of an aging population on the labor force participation rate. Researchers at CBO, the CEA and the Federal Reserve have found that about half of the recent decline in the labor force participation rate is due to aging of the population. An analysis by the JEC Democratic staff confirms this. If the age distribution today were the same as at the start of 2008, the decline in the labor force participation rate over the past eight years would have been nearly cut in half. In other words, the labor force participation rate would be nearly 2 percentage points higher than it is today (see Figure 16).

Figure 16. Aging Trends Explain About Half of Decline in Labor Force Participation Rate

January 2008 to January 2016



Note: The "Population-Adjusted Rate" calculation denotes what the "Actual Rate" would be without aging trends starting in the year 2008

Although policymakers can and should take steps to boost workforce participation across various demographic groups (as discussed in the policy section below), the aging population will continue to exert downward pressure on the labor force participation rate in the years ahead regardless of the policies pursued.

Slowdown of women entering the labor force: Another factor that boosted labor force participation during the latter half of the last century was the steady increase in participation among women. In 1950, roughly one in three women ages 16 and older were in the labor force. By 2000, after five decades of steady growth, the share had risen to three in five. That increase in participation roughly translated into an additional 30 million women in the paid labor force.

Several factors were behind the steady growth in women's labor force participation. The women's equality movement sparked vast changes in women's roles. Widespread access to household technologies such as electric washing machines, dryers and dishwashers helped to free up time for women to take jobs in the paid workforce. More reliable contraception enabled women to delay starting families while they pursued their careers. And the increase in women's earnings relative to men's helped to draw more women into the paid labor force.⁹⁰

In addition, many families have depended on women's earnings to meet increased financial pressures stemming from the rising costs of raising a family. Between 1960 and 2013, the amount a typical middle-income, two-parent family spent on providing for a child through age 17 increased 24 percent in (inflation-adjusted) terms. The composition of these expenses also changed, with the share of spending going to child care and education growing ninefold from just 2 percent in 1960 to 18 percent in 2013. The share of family income spent on health care doubled to 8 percent during that time. The rising cost of college has put additional strain on family budgets, with the average cost of attending a four-year public university more than doubling in real terms between 1963 and 2013.

However, after peaking in 2000, the female labor force participation rate has plateaued (see **Figure 17**). Between 2000 and the start of the recession in 2007, women's participation rate hovered between about 59 and 60 percent. In the wake of the recession, the share of women in the labor force has fallen to around 57 percent. While part this trend is attributable to population aging, the labor force participation rate for prime-age women has declined as well, from about 77 percent in 2000 to the current level of about 74 percent. The decline in women's labor force participation since its peak in 2000 is due in part to a lack of policies that would allow them to remain in the workforce while caring for children or other family members, such as paid leave and workplace flexibility.⁹⁵

Figure 17. Labor Force Participation Rates by Gender
January 1950 to January 2016



Decline in male labor force participation: The share of men in the labor force has been steadily falling for over half a century during both Democratic and Republican administrations. This has stemmed in part from a decline in middle-skilled job opportunities due to the effects of globalization and technology. ⁹⁶ As a result, men in their prime working years (ages 25 to 54) without a college degree have experienced larger declines in workforce participation over the past several decades than men with college degrees. ⁹⁷

The decline accelerated during the recent recession and has generally continued throughout the recovery, in part due to the aging of the baby boomers. Looking only at men ages 25 to 54, the participation rate has fallen from a high of nearly 98 percent in the 1950s to around 91 percent on the eve of the Great Recession in 2007 to about 89 percent today.

Impact of increased schooling on labor force participation: Labor force participation among 18 to 24 year olds has been declining for several decades as more young adults have delayed entering the workforce in favor of pursuing education beyond high school, a response to the growing wage premium for workers with

more education. ⁹⁸ In 1980, only about 25 percent of 18 to 24 year olds were enrolled in college. By 2014, that share had increased to 40 percent. ⁹⁹ Higher school enrollment reduces participation in the labor force among young adults in the short term. However, in the future, it is likely that they will have stronger attachment to the labor force and higher earnings.

Putting declines in labor force participation in context: Declining labor force participation poses a significant challenge for future economic growth. Labor force participation among prime-age workers (ages 25 to 54) in particular remains lower than economists and policymakers would like and below what would be expected in a robust economy. A portion of this decline reflects the lingering impact of the Great Recession on the labor market. However, most of the decline in labor force participation is due to reasons that long predate the Great Recession.

Some drivers of the long-term decline are worrisome, such as the long-term trend toward lower workforce participation among less educated men and the more recent decline in the share of women in the workforce.

Others drivers represent healthy developments for the economy, namely the increase in young people furthering their education. Spending time out of the labor force to acquire more training typically translates into an investment in human capital development, which has individual benefits, as well as benefits for the broader economy. This is also the case for temporary exits from the labor force by parents to care for young children, which benefits their children's development. The largest contributor to the decline, the aging of the baby boomers, may also be considered a positive to the extent that it reflects older Americans leaving the labor force because they are financially prepared to retire.

Rebutting misleading claims about labor force participation: Some critics of the Obama administration decry the decline in the labor force participation rate, using its drop to levels last seen during the Carter administration to imply that the economy remains very weak, while downplaying the long-term demographic drivers of the trend. Others have significantly overstated the severity of the situation by pointing to the fact that more than 90 million Americans—about 40 percent of the adult population—are not working. ¹⁰⁰ This misleading claim is rooted in the fact that there are more than 90 million people over the age of 15 not in the labor force. However, half of these people are either elderly or disabled. An additional 18 percent are younger than 65 and enrolled in school, and 6 percent are under 65, not in school, not disabled and have a child under the age of six. ¹⁰¹

Not only has this specific claim been fact checked by several organizations and found to be misleading, the conservative American Enterprise Institute has noted, "it's non-factual to suggest that nearly 100 million American [sic] are unemployed." 102

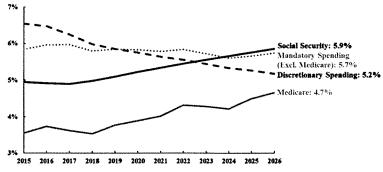
The impact of an aging population on the federal budget: In addition to constituting a drag on economic growth, the aging of the baby boomers into their retirement years is perhaps the single largest contributor to projected budget deficits in the years to come. ¹⁰³ This is due to the fact that a ballooning number of people will begin to draw on the Social Security and Medicare benefits they have earned. In fact, according to an analysis by former CBO Director Douglas Elmendorf, if all components of the budget other than Social Security and Medicare were held at their current levels as a share of GDP, the aging population alone would push the primary budget deficit (the deficit excluding interest) well above the actual long-term CBO projections. ¹⁰⁴ Other factors—including declining discretionary spending as a share of GDP—are projected to partially offset the budgetary impact of population aging.

According to the most recent CBO 10-year budget and economic outlook, published in January, Social Security outlays are expected to increase as a share of GDP from 5.0 percent in 2015 to 5.9 percent in 2026, while Medicare outlays are expected to

increase from 3.6 percent to 4.7 percent (see **Figure 18**). ¹⁰⁵ For Medicare, the projections account for not only the impact of the aging population but also rising health care costs, which are generally considered to be the another major driver of long-term growth in the deficit.

Figure 18. Aging Population Will Raise Spending on Social Security and Medicare; All Other Spending Projected to Decline

Primary (non-interest) spending as a share of Gross Domestic Product, 2015 (actual) to 2026 (projections)



Source: JEC Democratic staff calculations using data from the Congressional Budget Office, The Budget and Economic Outlook: 2016 to 2026 (January 2016)

Notes: Discretionary spending includes both defense and nondefense; mandatory spending excluding Medicare includes Medicaid, the Chikhren's Health Insurance Program (CHIP), health care exchange subsidies and a variety of income security, education and veterans programs

By contrast, spending on virtually all other functions of government is projected to decline as a share of GDP over the coming decade. Nondefense discretionary spending is projected to fall from 3.3 percent of GDP in 2015 to 2.6 percent in 2026, which would be 1.2 percentage points below its 50-year average and the lowest level since at least 1962, when recordkeeping began. Defense discretionary spending is also projected to fall to its lowest level on record as a share of GDP, from 3.3 percent in 2015 to 2.6 percent in 2026.

While Medicaid spending is projected to increase from 2.0 to 2.3 percent of GDP, in part due to rising health care costs, spending on other mandatory programs such as the Supplemental Nutrition Assistance Program (SNAP), unemployment insurance, Temporary Assistance for Needy Families (TANF) and Pell

Grants is projected to decline as a share of GDP, from 3.9 percent in 2015 to 3.4 percent in 2026.

In dollar terms, Social Security and Medicare alone are projected to account for 45 percent of total outlays in 2026, while net interest will account for another 13 percent. Defense and nondefense discretionary spending are each projected to account for about 11 percent of total outlays in 2026, down from 16 percent in 2015.

Increases in spending on Social Security and Medicare account for nearly half (48 percent) of the projected increase in total nominal outlays between 2016 and 2026. Net interest accounts for another 23 percent of the projected increase in outlays. By contrast, nominal increases in nondefense discretionary spending are projected to account for just 4 percent of the increase in outlays over the next decade. ¹⁰⁶

Some imply that rising deficits and debt stem from runaway government spending, or excessive waste, fraud and abuse. However, it is clear that deficits are projected to rise largely because of a long-anticipated increase in older Americans as a share of the population, which significantly increases spending on Social Security and Medicare, along with rising health care costs. For decades, there has been a broad bipartisan commitment to protecting older Americans from being impoverished or unable to obtain medical care.

There has been significant progress in recent years in reducing excess growth in health care costs, in part due to cost-control measures included in the ACA as well as the permanent Medicare Sustainable Growth Rate (SGR) fix passed last year.¹⁰⁷ The impact is reflected in lower long-term projections for Medicare spending as a share of GDP. In 2007, CBO projected that Medicare spending would be 14.8 percent of GDP in 2082.¹⁰⁸ However, CBO now estimates that Medicare spending will be 8.9 percent of GDP in 2082.¹⁰⁹ Repeated Republican efforts to repeal the Affordable

Care Act, if successful, would undercut this progress and lead to increases in deficits. 110

In the early 2000s, President George W. Bush and Republican-led Congresses knew the coming demographic wave would strain the federal budget. However, they squandered the surpluses that had been accumulated during the final years of the Clinton administration on tax cuts tilted toward the wealthy and borrowed heavily to pay for wars in Iraq and Afghanistan.¹¹¹

Long-term demographic trends will continue to strain the federal budget in coming years, in particular by increasing the portion of the deficit that is attributable to Social Security and Medicare obligations. Policymakers will be forced to grapple with this, even though it is driven in large part by factors beyond their control.

Slowdown in Labor Productivity Growth

Labor productivity growth is a key engine of economic growth. Large increases in productivity during the decades following World War II coupled with substantial increases in the size of the workforce helped make the U.S. economy the most powerful in the world. While the slowdown in the growth of the working-age population is virtually certain to continue to exert downward pressure on economic growth in the years ahead, the contribution of labor productivity to growth remains an open question.

In recent years, labor productivity growth has slowed in the United States and in other advanced economies around the world. Though recent trends are reason for concern, it is too soon to know whether persistently low labor productivity growth is likely, or whether productivity growth will accelerate as the economy continues to heal from the Great Recession. The answer may depend to a large extent on policy choices.

Framing the issue: There are two principal ways to raise the economy's output: either increase the number of workers or increase output per worker. The amount of real output per hour of

labor is known as labor productivity. Productivity is largely driven by market forces—competition encourages companies to try to produce goods and services as efficiently as possible. However, government can play a large role in driving productivity growth as well by making long-term investments in education, infrastructure, and research and development.

Higher labor productivity is particularly important because, in general, if workers produce more, this leads to increases in real wages and living standards. However, this process does not happen automatically. A decrease in the power of labor or an increase in the market power of firms can keep workers from sharing in the benefits of productivity growth. In recent decades, labor productivity growth has outstripped growth in wages for most workers.¹¹³

Moreover, productivity improvements, in particular those stemming from technological advancements, have affected different categories of workers in different ways. Automation has contributed to job losses concentrated among those with lower levels of education, while it has led to higher wages for those toward the top of the income spectrum. There is clearly work to do to ensure that workers reap the fruits of their labor and that workers up and down the income spectrum benefit from productivity growth. This topic is discussed later in this report.

Nonetheless, labor productivity growth is effectively a prerequisite for growth in real wages and living standards, and increasing it should be a priority for policymakers.

Drivers of increases in labor productivity: Labor productivity growth can come from three categories of sources. First, it can come via capital deepening, meaning that each worker has more machines, tools and other capital to work with, which allows them to produce more. Second, workers can be more productive if they have more human capital, for example higher levels of education and training. Finally, labor productivity can increase through

improvements in total factor productivity (TFP), a nebulous but critical concept that essentially means that more can be produced with the same levels of labor and capital inputs. Innovation—new technologies and processes that make workers more efficient—is generally considered to be the foremost driver of TFP growth. Better matching of workers with positions that align with their skills and experience can also raise TFP.

Historically, other drivers of labor productivity growth in the United States include the arrival of immigrants who complement native-born workers' skills and often develop new innovations, entrepreneurs who launch businesses and patent new products, building out of transportation and other infrastructure networks, and expanding international trade.

The Federal government has played an invaluable role in raising labor productivity. Investments in the interstate highway system have helped to connect workers with jobs and allow businesses to move their products to market. From land-grant colleges and universities to the GI Bill to Pell Grants, public investments have helped more Americans get an education. And federal investments in research and development have laid the groundwork for numerous breakthrough innovations from Whirlwind (among the first digital computers) to ARPANET (the basis for the Internet) to the mapping of the human genome. 116

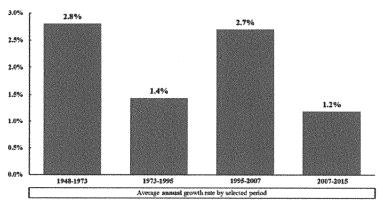
In each of these cases, the government has a role to play because of shortcomings in private markets, which economists call "market failures." The private sector alone does not invest at socially desirable levels in infrastructure, education or research and development because those are to a large extent public goods with spillover effects that cannot be captured by individual businesses. They are all areas where government investment is necessary for the betterment of the country.

Trends in labor productivity growth: It is important to measure productivity over extended time periods because it is a volatile

data series. Fluctuations on a quarter-to-quarter or even year-to-year basis are not necessarily indicative of underlying trends. The postwar period can be divided into several periods with distinct levels of productivity growth (see **Figure 19**). From 1948 to 1973, labor productivity in the nonfarm business sector grew at a rate of 2.8 percent per year, in part due to World War II-era innovations filtering their way into civilian applications. The postwar boom faded in the 1970s and 80s, with labor productivity growing at an average annual rate of 1.4 percent over the 1973 to 1995 period, half the rate of the earlier decades.

In the 1990s, innovations in information technology accelerated and new products from computer software to telecommunications equipment made their way through the economy. This led labor productivity growth to accelerate to an average annual rate of 2.7 percent from 1995 to 2007. However, since the onset of the Great Recession in 2007, growth has slowed to just 1.2 percent per year.

Figure 19. Labor Productivity Growth Has Declined in Recent Years
Average annual growth rate in labor productivity in the nonfarm business sector, 1948-2015



Source: JEC Democratic staff calculations using data from the Bureau of Labor Statistics Notes: Calculations are made using annual averages for real output per hour of all persons in the business sector, data are preliminary for Q4-2015

Analyzing the recent slowdown: Some argue that the recent slowdown in observed labor productivity is an artifact of data mismeasurement—in particular an inability to fully capture the

value of quality improvements and real output in the digital sector.¹¹⁹ However, recent research shows that this is unlikely to be more than a modest contributor to the trend.¹²⁰ Several key factors that may be driving the slowdown are described below.

Low business capital investment. Typically over the postwar period, capital intensity (the amount of capital per hour of labor) and labor quality have made consistently positive—and generally stable—contributions to productivity growth, with movements in headline labor productivity driven largely by fluctuations in TFP growth. However, capital intensity actually declined from 2010 to 2014, constituting a drag on productivity growth. Lower rates of capital investment stem to a great extent from lower aggregate demand in the aftermath of the Great Recession. Had demand been higher, there would have been a greater incentive for businesses to invest in ways to increase output.

Possible drop off in innovation. Annual TFP growth has only been about half its historical average since 2007, further dragging down labor productivity growth. 124 Some suggest that the slowdown in productivity growth over about the past decade has occurred because the benefits from the information technology revolution have started to fade, and new innovations have not been sufficient to provide a further boost to productivity growth. 125 This may be due in part to decreased government investment in research and development, which has historically played an important role in the innovation process. While federal research and development spending as a share of GDP exceeded 1 percent every year from 1956 to 1992, it has been below 1 percent every year since then.

Federal research and development spending increased in 2009 and 2010 in part due to the Recovery Act, a critical piece of legislation that served the dual purpose of supporting the recovery and laying the groundwork for long-term improvements in productivity. However, federal research and development spending has since fallen to its lowest level as a share of the GDP since the 1950s (0.7 percent in 2015), less than half its peak of 1.8 percent in the 1960s.

While, encouragingly, private business investment in research and development has picked up over the past couple of years, the decline in public investment is disconcerting. The government has a critical role to play in driving innovation in the U.S. economy, in particular by funding basic research, a public good that has substantial spillovers to the broader economy that individual businesses are unable to capture. Business expenditures, by contrast, tend to be concentrated in development because it has more direct commercial applicability. 126

One example of how the public and private sectors complement each other is in the field of biomedical research. Research funding from the Department of Health and Human Services (HHS), including the National Institutes of Health, goes to support basic and applied research rather than later-stage development. ¹²⁷ Biotech firms then build upon the knowledge base that this research establishes to develop products that save lives and improve Americans' health and quality of life. For example, HHS-funded research led to the development of the first antiretroviral drug that increased life expectancy for HIV patients, AZT. ¹²⁸

<u>Decline in startups.</u> One possible contributor to the productivity slowdown is the decline in new business startups. New firms have been steadily declining as a share of all firms for decades. ¹²⁹ This is worrisome because research shows that competition and dynamism in the business sector—with new, innovative firms replacing older firms—has a major impact on productivity growth. ¹³⁰ By contrast, established firms may have less incentive to innovate in the absence of new market entrants. ¹³¹

Encouragingly, an index measuring trends in startup activity compiled by the Kauffman Foundation halted its downward slide last year, increasing in 2015 by the most it had in two decades. Nonetheless, it remains well below the level it was at during much of the 1990s and 2000s.

Increase in market power of existing firms. In general, it is a good thing when small firms grow into large firms that employ increasing numbers of workers. Large corporations can be more productive via economies of scale, and in certain instances having one firm or firms with substantial monopoly power in an industry can make economic sense because of network externalities (for example, in the case of telecommunications). But when large corporations increase their profits not by increasing their productivity but by stifling competition, this can be harmful.

As the *Report* discusses, some argue that an increase in market power of existing firms leads to barriers to entry for startup firms. A recent paper by CEA Chairman Jason Furman and former OMB Director Peter Orszag found that the revenue share for the top 50 firms in three-quarters of all sectors of the economy increased over the 1997 to 2007 period. To the extent that powerful incumbent firms influence the regulatory environment to the detriment of new challengers, this harms productivity.

The *Report* devotes a significant amount of space to this topic, which has received little public attention to date. While it is often assumed by economic theory that markets are perfectly competitive and that the free market will generate the most productivity and the best outcomes, in practice this does not always occur. Larger firms that enjoy a degree of monopoly power may be able to extract "economic rents"—profits beyond what are necessary to keep labor at work or capital invested—that not only harm productivity growth but also drive up prices for consumers and increase wage inequality. As the *Report* notes, this topic has been understudied by economists and merits further research. ¹³⁵

<u>Plateauing of educational attainment.</u> While rapid increases in educational attainment fueled human capital accumulation and productivity growth through much of the postwar period, the rate of increases has slowed over time. This is despite the increase in the demand for workers with higher levels of education and the wage premium these workers receive. As noted in the *Report*, the

growth rate of the college-educated population slowed from 3.9 percent per year from 1960 to 1980 to 2.3 percent per year between 1980 and 2005.¹³⁶ The share of people ages 25 to 29 with a bachelor's degree or higher increased from 11 percent in 1960 to nearly 23 percent in 1980 to about 29 percent in 2005.¹³⁷ By 2014, that share had increased to 34 percent.

Skills mismatch. A related challenge could be a growing mismatch between workers and the education and skills needed for available jobs. Some surveys of businesses suggest that they are having difficulty finding workers with the skills they need for the positions they have open.¹³⁸ One indicator of a possible skills mismatch is the still depressed level of "churn" in the labor market, the rate at which people switch jobs (often to go to positions that are better matches for them).¹³⁹ The *Report* discusses several possible reasons for this, including the decline in new entrepreneurial firms and obstacles to worker mobility such as housing regulations and occupational licensing.¹⁴⁰

The Affordable Care Act seeks to enhance worker mobility and improve job matches by reducing "job lock." ¹⁴¹ In the past, workers may have chosen to remain in jobs that were not the best match for their skills and abilities in order to keep health insurance coverage. Decoupling quality, affordable health insurance from the employer model allows people to take more risks, move across the country in search of a new job that better suits their skills and interests, or even strike out on their own and start a new businesses, which could help to increase entrepreneurship.

A lack of family-friendly policies such as paid family leave can also exacerbate the skills matching challenge, for example if women or men leave jobs that were otherwise a good fit for them.¹⁴²

Global perspective: Most of the trends discussed in this section are not unique to the United States—far from it. As a recent OECD report found, the slowdown in productivity growth in recent years

is common across advanced economies.¹⁴³ So too are the trends toward lower capital investment growth, the plateauing of typical levels of educational attainment and the decline in business startups as a share of all firms. In fact, start up rates and growth in labor productivity overall has held up comparatively well in the United States relative to the vast majority of other advanced economies discussed in the OECD report.

One implication of this finding is that—despite the claims of some—tax and regulatory policies in the United States are not a major factor behind the productivity slowdown, since a similar trend is occurring in countries around the world with all manner of tax and regulatory systems.

Outlook for the future: Productivity is a critical engine of growth, and it will be even more important in the future given existing demographic trends. The big question moving forward is whether productivity growth can accelerate to rates approaching what the economy experienced in past decades, or whether there are structural factors fueling the slowdown that will be difficult to counteract. Economists are not in agreement on the answer. Robert Gordon, for example, has made the case that the innovations that drove solid productivity growth in the immediate postwar decades, from air conditioning to airplanes, were largely one-time factors stemming from the second industrial revolution, unlikely to be repeated moving forward. In the title of a recent paper, he raises the question "Is U.S. Economic Growth Over?" 144

Conversely, both the OECD paper and CEA Chairman Jason Furman are more optimistic about the outlook for labor productivity growth—if policymakers can take appropriate steps to foster it. Both have argued that the slowdown in business investment since the Great Recession can be traced largely to cyclical factors. With less demand for their products, businesses were less motivated to invest in methods that would increase productivity. The high fixed costs involved with many capital

investments likely made them hesitant to invest even as the recovery has taken hold, due to lingering uncertainty.¹⁴⁶

A positive sign for the future is that business investment in R&D has picked up recently. Should demand further strengthen, it is likely that capital investment will rise to boost labor productivity to meet heightened demand. The *Report* describes two developments in particular that show promise: robotics and digital communications technology. ¹⁴⁷ In both cases, policymakers will need to work to address the potential impact on inequality that could arise from increasing innovation in these areas. Other sectors where innovation could further productivity growth and improvements in quality of life include clean energy and medicine.

For its part, the Congressional Budget Office, in its most recent 10-year Budget and Economic Outlook, noted that the deep recession and its enduring consequences have led it to lower its estimate of potential TFP growth, a major contributor to decreases in its estimates of potential GDP growth overall over the coming decade. However, CBO does expect potential labor productivity growth to accelerate toward the back-end of the 10-year window, increasing from a 0.9 percent average annual growth rate from 2008 to 2015 to a 1.5 percent rate from 2021 to 2026. 149

The OECD report discusses several policy approaches to foster faster labor productivity growth around the world. These include: increasing public funding for basic research, improving the transmission of innovations from the most innovative firms to other firms throughout the economy, promoting competitive markets so that incumbent firms do not have an insurmountable advantage over often more innovative newcomers and enhancing lifelong education and training to reduce skill mismatches. ¹⁵⁰ U.S. policymakers should consider these and other options discussed later in this report in order to boost labor productivity.

Rising Inequality

The size of the labor force and the productivity of workers are the two core components of economic growth. However, raising overall economic growth is not sufficient for all Americans to get ahead: policymakers must also work to ensure that economic gains are shared more broadly in the future than they have been in recent decades. The *Report* devotes its first chapter to describing the causes and consequences of inequality in the United States, and many of the policy proposals outlined in the *Report* and by the Obama administration in its FY 2017 budget would advance the critical goal of promoting shared prosperity.

This section summarizes key trends related to increased economic inequality in the United States. While many of these trends were exacerbated by the Great Recession, they have developed over decades. It then turns to a discussion of how economic well-being varies across the states. The section describes several factors that are driving inequality, including globalization, the reduced bargaining power of labor and technological innovations that leave behind workers who do not have the skills to adapt to change. It concludes by underscoring that inequality—in particular inequality of opportunity—undermines overall economic growth.

Trends in economic inequality: President Obama has called growing inequality "the defining challenge of our time." Former Fed Chairman Ben Bernanke has warned that rising inequality is "a very bad development... creating two societies." His predecessor Chairman Alan Greenspan has said he considers income inequality "the most dangerous part of what's going on in the United States." Most recently, current Fed Chair Janet Yellen cautioned that widening inequality leads to "stagnant living standards for the majority." ¹⁵⁴

Economic inequality takes three principal forms: inequality of income, inequality of wealth and inequality of opportunity. These

three channels are discussed in the *Report*. They are also considered in more detail below.

The trend of widening inequality predates the Great Recession. In fact, in the period immediately following the 2007 to 2009 downturn, there was by some measures a pause in the trend. Households at the upper end of the distribution were hit hard by large losses in wealth, while households outside the top of the distribution benefited from increased safety-net spending. However, the trend toward widening inequality resumed during the recovery as the stock market soared and high-skilled workers made significant gains. Now, by many common measures of economic inequality, the gap between the haves and have-nots has reached near-record levels.

Economic inequality is a global challenge faced by nearly every country. But that challenge is particularly pronounced in the United States. The so-called Gatsby Curve—a plot showing the correlation between income inequality and economic mobility—shows the United States has far greater income inequality and far less economic mobility than many other advanced economies.¹⁵⁶

<u>Incomes.</u> The years following the end of World War II marked a period of shared growth. Rapid labor productivity growth, in combination with the influx of women into the paid labor force, led to a decline in income inequality. Average income for households in the bottom 90 percent of the income distribution grew by 2.8 percent per year between 1948 and 1973, a pace that led incomes to double about once every generation. ¹⁵⁷ During that time, the share of total income going to the bottom 90 percent increased slightly, and the share of income going to the top 1 percent decreased by almost one-third. ¹⁵⁸

Since the 1970s, the disparity in incomes between those at the top and bottom of the distribution has grown. ¹⁵⁹ Incomes have risen more rapidly for the highest-income families, while they have stagnated or risen only slightly for the rest of families. ¹⁶⁰ In 2014,

income for families at the 95th percentile was about 60 percent higher than it was in 1973, while income for families in the middle (50th percentile) was about 20 percent higher. For the poorest fifth of families (20th percentile), income was virtually unchanged.¹⁶¹

As a result, income inequality has increased and the concentration of income at the top of the distribution has neared an all-time high. In 2014, 18 percent of all income went to the top 1 percent of earners. And as it has been every year since 1987, that share is markedly higher than in other G-7 countries.

The trend of a greater concentration of income at the very top of the distribution results from growing inequality in both labor income—wages, salaries and benefits—and capital income—capital gains, dividends and interest. An analysis by economists Thomas Piketty and Emmanuel Saez found that about two-thirds of the increase in the top 1 percent's share of income between 1970 and 2010 was due to increased inequality within labor income, while the remaining roughly one-third was due to increased inequality within capital income such as capital gains and dividends. As the *Report* notes, policymakers in the recent past have focused almost exclusively on income from labor. But to address inequality at a deeper level, policymakers must also consider inequality in capital income. 165

CBO projects that earnings for higher-income individuals will continue to grow faster over the next 10 years, an indication that current trends in income inequality in the United States are not expected to reverse anytime soon.¹⁶⁶

Wealth. If trends in income inequality are cause for concern, trends in wealth inequality are even more alarming. Limited data make measuring wealth inequality more difficult than income inequality. However, the available sources of wealth data suggest that wealth, which is heavily influenced by income, is significantly more concentrated than income. The most recent Survey of Consumer Finances conducted by the Federal Reserve

shows that the top 3 percent of households received 31 percent of before-tax income, but held 54 percent of wealth in the United States. The bottom 90 percent of households received 53 percent of before-tax income, but held only 25 percent of wealth.¹⁶⁸

The share of wealth held by the very top of the distribution has been increasing consistently over about the past 25 years, while the share held by the bottom 90 percent has steadily fallen. As the *Report* notes, "the loss in wealth share experienced by the bottom 90 percent of households...is accounted for by the rise in share captured by the top 3 percent." ¹⁶⁹

Data which examine wealth at the very top of the distribution show that the growth in wealth inequality over the past several decades has been driven by the dramatic increase in the share of wealth held by the top 0.1 percent of households. ¹⁷⁰ In other words, the very rich are pulling away from the rich, and the rich are pulling away from everyone else. Those 160,000 households in the top 0.1 percent combined to hold 22 percent of wealth in the United States in 2012, a more than threefold increase since 1979 and nearly matching what it was just before the Great Depression. ¹⁷¹

Several factors contribute to the dramatic rise in wealth inequality, including uneven growth in incomes across the distribution and disparities in savings rates. As the *Report* explains, economists Emmanuel Saez and Gabriel Zucman theorize that "income inequality has a 'snowballing effect' on the wealth distribution: a larger share of income is earned by top wealth holders, who then save at higher rates, which pushes wealth concentration up; this dynamic leads to rising capital-income concentration and contributes to even greater top income and wealth shares."

This becomes a self-perpetuating cycle, with the wealthy having an increasingly large advantage over everyone else, and passing along even greater opportunities to their children. In the meantime, the rest of the country falls further behind. Opportunity. The American Dream was built on the premise of equal opportunity. However, as a result of many changes in the economy which are discussed in more detail below, large segments of the U.S. population face barriers to achieving their full economic potential, putting the American Dream increasingly out of reach.

Quantifying inequality of opportunity is difficult, if not impossible. However, measures of economic mobility—the likelihood that a child raised in one income group will move to a different income group as an adult—provide a useful way to gauge differences in opportunity. The odds of moving from the bottom to the top in the United States are not good. Forty-three percent of Americans raised in the bottom income quintile remain there as adults, while 40 percent of those raised in the top quintile maintain that status.¹⁷² As President Obama has stated, "A child born into the bottom 20 percent has a less than 1-in-20 shot at making it to the top 20 [20 percent]."¹⁷³

Economic mobility in the United States has continued to lag behind mobility in other advanced economies. A common metric used to measure economic mobility is the correlation between the earnings of fathers and sons (women's earnings across generations are more difficult to analyze because they may spend more time out of the labor force). Among OECD countries, the only ones that have higher correlations between the earnings of fathers and sons are the United Kingdom, Italy, Chile and Slovenia. ¹⁷⁴ In Denmark, Norway, Finland and Canada, the correlation between a father's and son's earnings is less than half of what it is in the United States. ¹⁷⁵ A child born in the bottom income quintile in Canada is nearly twice as likely to reach the top quintile as child born in the bottom quintile in the United States. ¹⁷⁶

While economic mobility in the United States has remained about the same over the past 25 years, the cost of immobility has increased, since the lifetime gaps in earnings between those at the top and bottom have grown dramatically.¹⁷⁷

Disparities in economic well-being: There are wide variations in economic well-being across the U.S. population. Those facing the largest gaps in opportunity generally have lower incomes and hold less wealth. Race, ethnicity, gender and education are all factors in economic well-being. Recent labor market developments for these groups are discussed in the "Overview of Macroeconomic Conditions" section earlier in this report.

In addition, during the 114th Congress, the Joint Economic Committee Democratic staff has published reports which provide a detailed examination of some of the groups that have borne the brunt of the rise in economic inequality in the United States. These include reports entitled *Economic Challenges in the Black Community*, *The Economic State of the Latino Community in America* and *How Working Mothers Contribute to the Economic Security of American Families*. The staff will continue to examine the economic barriers facing segments of the population.

Prospects for workers and their children depend in part on where they live. Rural economies in particular have often struggled in recent years. The following section highlights economic inequality across the states, focusing on jobs and unemployment, income, poverty, income inequality and economic mobility, which all vary significantly across the United States. In some cases these disparities have arisen in recent years, while in other instances they long predate the recent recession and recovery.

Jobs and unemployment. Differences in the employment situation across the states are in part due to differences in the mix of industries in each state, as well as differences in the typical level of education of the state's workers. Some states experienced severe job losses during the Great Recession, while employment in others declined more modestly. Approximately three-quarters of states have now recovered all of the private-sector jobs lost during the economic downturn. Unemployment rates in December 2015 ranged from a low of 2.7 percent in North Dakota to a high of 6.8 percent in Mississippi.

Income. Compensation for middle-class workers, as measured by median household income in 2014 (the most recent year for which data are available), also varies widely by state, from a high of \$76,200 in Maryland to less than half as much in Mississippi (\$35,500). Median income is below \$43,000 in four other states: West Virginia, Alabama, Louisiana and Kentucky. In addition to Maryland, median household income is more than \$70,000 in three states: Connecticut, New Hampshire and Hawaii.

<u>Poverty.</u> Poverty rates range from a low of 7.2 percent in New Hampshire (2014 data) to a high of 23.1 percent in Louisiana. The poverty rate is highly correlated with the high school dropout rate. In Louisiana, about 19 percent of 18 to 24 year olds and roughly 16 percent of individuals 25 and older have less than a high school diploma. On the other hand, in New Hampshire, just over 11 percent of 18 to 24 year olds and roughly 8 percent of individuals 25 and older have less than a high school diploma. ¹⁷⁹

Income inequality. The wide variation in the poverty rate and median household income across states has contributed to a similar variation in income inequality. Income inequality, as measured by the 2014 Gini Index, is highest in the District of Columbia, New York and Connecticut. It is lowest in Nevada, Iowa and Indiana.¹⁸⁰

Economic mobility. Economic mobility is more than four times as high in North Dakota as it is in Georgia, according to an economic analysis of data over a period of decades by the Equality of Opportunity Project at Harvard University. In seven states, less than 6 percent of children whose parents were in the bottom quintile of income reach the top quintile. In North Dakota and Wyoming, both of which have relatively high secondary education completion rates that number tops 15 percent. Is 2

Drivers of inequality: As the *Report* describes, there is no single reason for rising inequality in the United States—multiple factors are at play. ¹⁸³ Some inequality is the inevitable result of economic

gains flowing to those who are most productive and that have skills that are most valued in the global economy. And to some extent, a degree of inequality is in fact a desirable reflection of a market economy that rewards skills, hard work and innovation.

But far too often, inequality of outcomes stems from inequality of opportunity. This reflects a lack of effective policies to help people build the skills they need to compete in an expanding, constantly-changing economy, as well as institutional structures that make it difficult for labor to share in the gains that accrue to businesses that become more productive. Several contributors to rising inequality are described below.

Technological change. Innovation fuels productivity growth, but workers often do not benefit evenly from new technologies. Some workers who have been put out of work by technological advancements have struggled to find new, stable jobs and may never fully recover. Increased automation has been particularly detrimental to workers in the low to middle end of the income distribution. At the same time, technologies tend to complement the skills of workers at the upper end of the distribution, leading to real wage gains for them. This is referred to by economists as "skill-biased technological change," and for much of the 1990s, there was a broad consensus among economists that it was the leading cause of increases in inequality in the United States. 184

This consensus has since eroded, in part because other advanced economies have seen similar technological changes without experiencing the same degree of heightened inequality. Nonetheless, economists Erik Brynjolfsson and Andrew McAfee warn in their 2011 book entitled *Race against the Machine* that millions of workers could be left behind as technology continues to change the nature of work. And the *Report* cites research showing that workers in lower income brackets may be most vulnerable to further job losses due to automation in the future. Thus, in the absence of policy action to mitigate the consequences

for certain categories of workers, technological change threatens to continue to exacerbate inequality in the years ahead.

<u>Globalization</u>. Much like innovation, globalization has substantial benefits for the U.S. economy in the aggregate—it allows the country to focus on its comparative advantages, opens up vast new markets for U.S. products and leads to decreases in consumer prices as well as increases in product variety.

However, it can also impose costs on some American workers. When businesses are able to offshore production to the countries with the lowest labor costs, it can lead to lost jobs and lower wages for workers in the United States. Economists have found that the increase in trade with China was particularly harmful to U.S. workers. Studies show that workers in regions with industries that were in more direct competition with China saw greater job losses and suffered long-term damage to their labor force participation and income prospects.¹⁸⁸ Thus, for millions of Americans, globalization presents a dilemma. It means, for instance, that workers can buy inexpensive clothes and flat screen televisions at big box stores, but at the same time it may put them at a greater risk of losing their jobs.

Slowing growth in educational attainment. Both technological change and globalization have opened up opportunities for workers with more education and skills. Unfortunately, increases in educational attainment for U.S. workers on the whole have stagnated in recent decades after achieving strong growth in the immediate postwar decades. According to economists Claudia Goldin and Lawrence Katz, who authored the book *The Race between Education and Technology*, the increase in the wage premium for college-educated workers from 1980 to 2005 stemmed from demand for workers with higher levels of education outstripping the supply of those workers.¹⁸⁹

There are significant disparities in educational attainment across demographic and income groups. Among 25 to 29 year olds, about

41 percent of non-Hispanic white Americans have a bachelor's degree or higher compared to 22 percent of African Americans and 15 percent of Hispanics. As the *Report* discusses, these disparities can stem from inequality of opportunity at a very early age, with wealthier families in a much stronger position to set their children up for success than families below or near the poverty level. By around the time they enter kindergarten, children in families below the poverty line are already about four times more likely to score "very low" on reading and math assessments than children in better-off families (those above 185 percent of the poverty level). Plane of the poverty level).

Upgrading the education and skills of all Americans regardless of race, ethnicity or income level is essential to counteracting the effects of globalization and technological change on the prospects for many U.S. workers. Moreover, since today's workers are less likely to stay at the same employer for an extended period of time, employers may be less likely to invest in training their workforce. ¹⁹² This means that the responsibility for educating and training a skilled workforce falls even more to government.

Investing in everything from early education to teaching STEM (Science, Technology, Engineering and Math) and computer science in high schools to workforce training programs could all help to prepare U.S. workers to compete for higher-paying jobs. At the same time, these investments would help to raise the productivity level of the U.S. workforce as a whole, increasing real output and having long-term benefits for the nation overall.

Economic rents and market power. The contributors to inequality described above largely flow from productivity enhancements that have raised overall growth but hurt certain categories of workers. However, other drivers of inequality may in fact lower productivity and detract from overall economic growth. The *Report* outlines this line of argument in its discussion of economic rents and market power.¹⁹³

When firms achieve more market power, they have a greater ability to act as wage setters rather than wage takers. In the absence of mechanisms to help workers get their fair share of economic rents, firms may be able to hoard profits to the detriment of labor. In other cases, when a small share of firms obtain substantially higher returns than the vast majority of firms, it can allow those firms to raise wages for their workers, while workers at other firms suffer. This exacerbates inequality.

<u>Declining unionization rates.</u> For much of the 20th century, the labor movement was an important countervailing force that checked the power of firm owners and ensured that workers got their fair share of the benefits of economic growth. Collective bargaining allowed workers to negotiate for higher wages and benefits, and union workers typically earned more than non-union workers, up to 25 percent more according to estimates. ¹⁹⁶ Research shows that workers in the lower and middle portions of the income distribution often benefited the most from unions. ¹⁹⁷

However, the share of U.S. workers who are members of labor unions has declined substantially over a period of decades. This has occurred for a number of reasons including global pressures that decreased unions' negotiating leverage to laws and judicial decisions that made it harder to organize. From the 1950s through the 1970s, one quarter or more of all workers were in labor unions, but that share has since fallen to just below 10 percent in 2014. The decline has been especially pronounced for workers in the private sector, where unionization rates have plummeted from a high near 30 percent in the 1950s to less than 7 percent of workers in 2014. Today, unionization rates vary considerably by industry and state, as many states have enacted so-called "right-to-work" laws that reduce the power of unions.

As the *Report* notes, economic research shows that the decline in unionization is a major contributor to increasing inequality—accounting for between one-fifth and one-third of the increase in inequality since the 1970s.²⁰¹

<u>Falling real value of the minimum wage</u>. The minimum wage guards against income inequality by preventing wages at the lowest end of the income distribution from lagging too far behind wages for people in the middle and top of the distribution. It also keeps firms from exploiting workers that are the most vulnerable and have the least power to bargain over compensation.²⁰² However, the real (inflation-adjusted) value of the minimum wage has fallen considerably over time (see **Figure 20**). In 1968, a full-time minimum wage worker earned \$22,670 in today's dollars. By 2015, that amount had fallen to \$15,080. The nominal value of the

1968 Peak: \$25,000 \$22,670 \$20,000 \$15,000 \$10,000 \$15,080 \$5,000 1968 1975 1961 1982 1989 1996 2003 2616 Sources: JEC Democratic staff calculations using data from the U.S. Department of Labor and the U.S. Notes: Real minimum wage is expressed in 2015 dollars using the CPI-U; assumes a worker is subject to the

Figure 20. Annual Earnings of a Full-Time Minimum Wage Worker 2015 dollars

minimum wage has not increased from \$7.25 per hour since 2009.

<u>Insufficiently progressive tax code.</u> Public policy seeks to mitigate extreme levels of inequality through the tax and transfer system. And in fact, the distribution of net income (after taxes and transfers) in the United States is substantially less inequitable than the pre-tax income distribution.²⁰³ Nonetheless, research shows that there has also been a sizable increase in net income inequality

over the past several decades, suggesting that the tax and transfer system is not doing enough to counteract increasing inequality.²⁰⁴

One major contributor to this trend is that wealthy individuals and corporations tend to benefit disproportionately from exemptions and deductions in the tax code known as tax expenditures. According to a 2013 CBO report, more than 50 percent of the dollar value of the top 10 tax expenditures in the individual tax code goes to households in the top 20 percent of the income distribution, and 17 percent goes just to the top 1 percent.²⁰⁵

This spending through the tax code that largely benefits the wealthy also drives up the Federal budget deficit. In FY 2015, tax expenditures cost more than \$1.2 trillion, more than twice as much as all discretionary spending and more than either Social Security or Medicare and Medicaid combined.²⁰⁶

Impact of inequality on growth: Some degree of inequality of outcomes is a necessary and desirable feature of a market economy. The ability to achieve higher income and wealth and pass it along to children and grandchildren drives people to work harder, take risks and innovate in ways that change the economy and the world for the better. It is at the core of the American Dream, and it has helped the U.S. economy to become the strongest in the world. Public policy should not undermine these basic incentives.

However, when inequality is very high and deeply entrenched across generations, large numbers of people are effectively denied the chance to achieve the American Dream. As President Obama said in his State of the Union earlier this year, these trends "offend our uniquely American belief that everyone who works hard should get a fair shot."

Economic inequality at the individual level undermines economic growth at the national level. Inequality of opportunity is especially corrosive, and as the *Report* notes, it can keep people from

achieving their full potential, depriving the economy of skilled workers and innovators.²⁰⁸

Recent economic research has found evidence of a link between higher inequality and lower growth. An International Monetary Fund study, for example, looked at cross-country evidence and determined that lower net inequality is associated with "faster and more durable" growth, and that policies that make the distribution of economic gains more equitable generally do not have a negative impact on growth.²⁰⁹ An OECD analysis highlighted in the *Report* also found a connection between higher inequality and lower growth.²¹⁰

Economist Joseph Stiglitz has written extensively about inequality, authoring a book entitled *The Price of Inequality: How Today's Divided Society Endangers Our Future*. In his work, he outlines a number of mechanisms through which inequality endangers growth. One is that many of those that have benefited the most are not in fact innovators and entrepreneurs but, rather, those in the financial sector.²¹¹

Another critical mechanism through which inequality impacts growth highlighted by Stiglitz and other economists is that lower- and middle-income Americans spend a higher share of their income than wealthier Americans do.²¹² This is what economists refer to as having a higher "marginal propensity to consume." Simply put, the ultra-rich can only buy so many yachts, while many Americans are barely keeping up with basic living expenses and would spend more money if they had it.

Because nearly 70 percent of the U.S. economy is driven by consumer spending, increasing the incomes of those who are most likely to spend it promotes overall economic growth. Fiscal policies that target those with a higher marginal propensity to consume can also be more effective in reducing any remaining slack in the labor market as the economy continues to heal from the effects of the Great Recession.

POLICY APPROACHES FOR ECONOMIC GROWTH AND SHARED PROSPERITY

All three key long-term challenges discussed above—bolstering labor force participation, improving labor productivity growth and reducing inequality—are complex and multifaceted. There are no easy solutions, and factors beyond the control of policymakers will often intervene. Nonetheless, Congress can take steps to address these major challenges facing the economy.

This chapter describes several approaches policymakers should consider, many of which are outlined in the *Report*. It is an illustrative but not exhaustive list. In some cases, certain policies can help the country meet two or even all three of the key challenges at the same time. Increasing access to education and training programs, for example, can build a more productive workforce, raise labor force participation rates and reduce inequality by making sure everyone has an opportunity to succeed.

This chapter also includes sections that focus on two key issues of concern. The first highlights immigration reform as a way to increase the size of the labor force and spur innovation and productivity growth. The second underscores the importance of expanding economic opportunity for women by removing barriers that prevent them from maximizing their economic potential.

Bolstering Labor Force Participation

As the discussions in both the *Report* and this Democratic response make clear, boosting labor force participation is central to economic growth. Current trends pose significant challenges to achieving robust labor force growth—namely, the aging of the population, the leveling off of women entering the paid workforce and the ongoing decline in labor force participation among working-age men.

However, there are steps Congress can take to mitigate the consequences of these long-term trends. Several policy options are

outlined in this section, including increasing access to pro-family workplace policies, reforming the criminal justice system and investing in education and training for individuals who have been displaced because of globalization and technological change. These policies would reduce barriers to employment faced by segments of the population.

Immigration reform: Major reform of our country's immigration system would help expand the working-age population, countering the drop in labor force participation as a result members of the baby boomer generation entering retirement. An increase in legal immigration has already produced significant benefits for the U.S. economy by creating a larger working-age population. The productivity of these workers has also increased, in part because of technology innovation. Those benefits could be amplified with immigration reform that enables more foreign-born workers to enter the country legally. The effects of immigration on labor force participation, productivity and wages are discussed in detail at the end of this section.

Training displaced workers for new jobs: As noted in the *Report*, both technological change and globalization can confer substantial benefits to the nation as a whole, but they can also cause acute pain to displaced workers. This is especially true for workers in the manufacturing sector, many of whom have had no formal education beyond high school. High-quality training programs are a way to help some displaced workers find new jobs in the ever-evolving economy.

Education is essential for maintaining high rates of labor force participation. More educated workers have higher labor participation rates. Last year, only 67 percent of male high school graduates who have not gone to college were in the labor force. By comparison, nearly 80 percent of men with a college degree were in the labor force.

Training programs can help keep unemployed workers attached to the labor force, especially during economic downturns. Effective programs help displaced workers develop new skills that are needed in growing sectors of the economy. Research has shown that aligning training programs so that they teach the specific skills in demand by employers increases the likelihood of that training leading to jobs. This approach is embodied in the bipartisan Workforce Innovation and Opportunity Act that President Obama signed into law in 2014, which is serving as a roadmap for improving workforce training.

The benefits of an educated workforce extend beyond increased labor force participation and high earnings. American businesses also benefit from a greater supply of highly skilled workers, which helps them compete in a growing and global economy. One example is the administration's TechHire initiative, which empowers a diverse array of Americans with the skills needed for information technology jobs, including younger workers and those with disabilities.

Making it easier for Americans to balance work and family:

A lack of family-friendly workplace policies—including paid leave, workplace flexibility and affordable quality child care—makes it difficult for both men and women to work while caring for their families. This central modern dilemma not only places stress on families, but it has larger economic effects because it lowers labor force participation.

The United States lags behind other countries in adopting family-friendly workplace policies. This has contributed to the decline of labor force participation among prime-age workers, and particularly women. More than one-half of workers are caregivers, including for children, elderly parents and relatives with disabilities. The 2015 Economic Report of the President, which devoted a chapter to economic benefits of such policies, notes that employers have been slow to adapt to the changes in family

dynamics making it more difficult for men and women to meet the often conflicting demands of work and family.²¹⁴

<u>Paid family leave</u>. Paid family leave would ensure that workers are able to take extended leave, with pay, to care for a new child, recover from a serious illness or care for an ill family member, and that they are able to return to their job afterward. Not only do all other developed countries guarantee leave with pay to new mothers, nearly all developing countries also guarantee paid maternity leave, with the exception of Papua New Guinea, according to the International Labour Organization.

Paid family leave has been shown to strengthen labor force attachment, reduce turnover and encourage workers to remain in jobs that are well-suited to their education and training. Analysis of the impact of California's first-in-the-nation paid family leave program on women's employment found that mothers of young children worked more hours and had higher earnings as a result of the program. The program was found to be especially beneficial to low-wage mothers because many could not afford to take leave without pay.²¹⁵

<u>Workplace flexibility</u>. Only slightly more than half of workers have access to flexible work arrangements at their job. This flexibility most commonly is in the form of flexible schedules, but may also be arranged as telecommuting or job sharing.²¹⁶ Workplace flexibility gives individuals more control over how, when and where they work. This helps workers better meet family obligations—such as attending a meeting with a child's teacher or taking an elderly parent to the doctor—and remain in the workforce.

The Flexibility for Working Families Act is an example of legislation that could increase flexibility for workers by guaranteeing that workers have the right to request a work schedule that meets their needs.²¹⁷ Putting in place procedures for requesting alternative work arrangements could reduce the stigma

or repercussions some workers fear about making such requests, including the risk of losing their job.²¹⁸

Pro-family policies would also benefit American businesses. Some of the most successful companies in the United States have instituted both paid leave and workplace flexibility in order to attract and retain highly-qualified workers. Yet many other firms are still not aware that family-friendly policies can lower turnover, improve recruitment and increase productivity. Incentivizing companies to adopt pro-family policies would benefit companies and their workers.

Affordable quality child care. Child care expenses are prohibitively expensive for many families, causing some parents to leave the labor force to care for their children. The yearly cost of center-based care for an infant ranges from a low of about \$5,600 in Mississippi to a high of \$22,400 in the District of Columbia. In fact, in 33 states and DC, the annual cost exceeds the average cost of a year of in-state tuition at a four-year public university. 220

As a result of those high costs, many families decide to put one parent's career on hold in order to care for young children. Women, who are often the secondary breadwinner in their household because they earn less, are more likely to make this sacrifice. According to a Pew Research Center survey, mothers are almost three times as likely as fathers to quit a job to care for a child or family member. Mothers are also more likely to reduce their hours, take a significant amount of time off and turn down a promotion. However, although there is still a substantial gap, men's and women's roles are converging, with men and women more evenly participating in paid work and unpaid caregiving. One-in-10 working fathers has left a job to care for a child or family member.

As the *Report* outlines, the President's FY 2017 budget would help make child care affordable for more families by tripling the

maximum child care tax credit to \$3,000 for children under the age of five. Prior research has shown that reducing child care costs increases mothers' employment, with a particularly pronounced effect on single mothers' employment.²²³

The *Report* devotes an entire chapter to the need to address the inequalities faced by many children in their early years. It argues that increasing enrollment in quality child care programs has clear benefits to the economy through boosting labor force participation among parents of young children. By allowing more parents to maintain jobs, it would increase the financial resources parents in lower and middle income families have available to devote to their children. Disparities in family resources have been shown to contribute to gaps in achievement among children from opposite ends of the income distribution.²²⁴

Increasing enrollment in quality child care would also capitalize on the critical time in young children's cognitive development when their brains are developing most rapidly, increasing the returns to investments in children's education when they are older. Moreover, the benefits to investments in children at a young age accrue over a lifetime, including through higher earnings and lower crime rates, and have significant positive benefits for the national economy.²²⁵

Reforming the U.S. sentencing system: There is now a consensus, ranging from the American Civil Liberties Union on the left to the Koch brothers on the right, that incarceration rates are too high and the costs to the United States of incarcerating 2.2 million Americans too great.²²⁶ As economist Joseph Stiglitz has pointed out, a year in prison can cost more than a year at Harvard.²²⁷

Reforming the criminal justice system could lead to higher rates of labor force participation and employment, especially among low-income workers, men and minorities who have been incarcerated at disproportionate rates. As the *Report* notes, in 2014

more than 65 percent of sentenced prisoners were minorities. Polling suggests that roughly one-third of prime working-age men who do not have a job have a criminal record.²²⁸

<u>Incarceration rates are excessively high</u>. From the mid-1980s through the 1990s, the federal government and many states passed legislation that increased the severity of punishments for a wide range of crimes, some of which were nonviolent offenses. These included mandatory minimum sentencing, "three strikes" and life without the possibility of parole laws. These changes led to skyrocketing incarceration rates and longer prison terms.

Since the 1980s, the incarceration rate (now 690 per 100,000) has more than tripled.²²⁹ The United States currently has the highest incarceration rate in the world.²³⁰ With less than 5 percent of the world's population, the United States accounts for 25 percent of the world's prison population.²³¹ As a result, the United States' spending on its prison system has also exploded. The United States spends over \$80 billion annually on its federal and state prisons and local jails—more than four times the amount it spent in 1980.²³²

<u>Long-term effects of incarceration</u>. Too many offenders now remain in prison long after they pose a threat to society. Many are living behind bars well into their 60s. Still others are locked up for non-violent offenses that in previous eras would not have resulted in a prison sentence.

Being incarcerated has lasting economic impacts on offenders and their family members. While time in prison results in time out of the workforce, it also negatively affects employment and earnings prospects for individuals after they have been released from prison. Recent "ban the box" initiatives, which have been adopted by many states and cities to prevent employers from asking job applicants about their criminal histories, may help to reduce the negative impact on employment of having a criminal record. President Obama recently directed federal employers to not ask

about the criminal histories of potential government employees at early stages of the application and hiring process.

Bipartisan legislation in the Senate attempts to reform the system. The Sentencing Reform and Corrections Act of 2015 would reduce mandatory sentences for certain drug crimes including reducing the "three-strike" mandatory life sentence to 25 years, make retroactive the Fair Sentencing Act of 2010, which reduced the disparity in sentencing between crack and powder cocaine, and expand the existing federal "safety valve" that allows judges to impose shorter sentences for non-violent drug offenders.

Reforming the Immigration System

Immigration reform can strengthen the economy by increasing the size of the labor force, by spurring innovation and productivity growth and by reducing the federal budget deficit. A CBO analysis of the bipartisan Border Security, Economic Opportunity, and Immigration Modernization Act passed by the U.S. Senate in 2013 found that immigration reform would boost real GDP by 3.3 percent after 10 years, and by 5.4 percent after 20 years, relative to current law.²³³

One of the most important economic goals of immigration reform would be to counteract the structural challenges of an aging native-born population. In past decades, the growth of the working-age population has been a main driver of GDP growth. However, with the baby boomer generation moving into ages in which people typically retire, and with the U.S. birth rate at record lows, the working-age population (ages 25 to 54) has stagnated and is projected to only grow slowly in the coming decade.²³⁴ Expanding the size of the U.S. population and workforce via increased immigration would strengthen economic growth.

The United States is already benefiting from an influx of legal immigrants, but these benefits could be magnified if immigration were permitted at a higher level. In 2014, 13.3 percent (42.4 million) of the U.S. population was foreign-born; including the

U.S.-born children of immigrants brings that number closer to 80 million.²³⁵ Of the foreign-born population, nearly 60 percent were of prime working age, compared with 37.1 percent of the nativeborn population.²³⁶ In fact, the foreign-born account for more than half of the growth in the U.S. labor force since 2007. Allowing more legal immigrants to enter the United States would further expand the workforce and increase economic growth.

In addition to expanding the size of the workforce, immigrants contribute in several ways to the growth of the economy. They are often entrepreneurial, with over one in 10 immigrants in the workforce owning a business. Among those firms that hire employees, they hire an average of 8 employees, providing jobs both to other immigrants and to the native-born.²³⁷

Immigrants contribute significantly to innovation, a key component of productivity growth. One study estimates that immigration of foreign STEM workers may explain between 30 and 50 percent of aggregate productivity growth between 1990 and 2010.²³⁸ Another study finds that of over 900 respondents to a survey of award-winning innovators and patent applicants, more than a third were foreign-born and an additional 10 percent reported having at least one foreign-born parent.²³⁹ Immigrants also account for over 30 percent of all U.S. Nobel Prize laureates.²⁴⁰

Immigration reform also can boost productivity by offering unauthorized immigrants a path to legalization. This would empower currently unauthorized workers to seek higher-paying jobs that are a better match for their skills. American workers could benefit from those productivity gains through higher wages.

It is sometimes argued that immigrants depress the wages of native-born Americans. This may be partly true for the leastskilled immigrants, especially unauthorized immigrants who work off the books for less than the minimum wage. To the extent that competition from unauthorized workers is holding down the wages, granting these workers a path to legalization and ultimately citizenship could diminish such pressure.

Legal immigrants mostly have a positive effect. Although immigration may reduce wages and employment for particular categories of U.S. born workers in the short run, in the long run there is clear evidence that immigration boosts productivity and average wages for all workers, with no adverse effect on the employment of natives.²⁴¹

There are several different ways by which immigration can boost employment and wages of natives. For example, one study estimates that by boosting demand for locally-provided services, each new immigrant creates 1.2 jobs for local workers, most of whom are natives. ²⁴² Another study finds that increases in foreignborn STEM workers are associated with wage gains for both college-educated and non-college-educated natives. ²⁴³

Immigration reform is also likely to reduce the federal deficit, the growth of which is largely driven by the aging of the U.S. population and the growing costs of Medicare and Social Security. Because immigrants are more likely to be of working age, they contribute to social insurance programs such as Medicare or Social Security. However, they typically won't receive these benefits for a number of years so their contributions help shore up funding streams for these programs.²⁴⁴ Unauthorized immigrants in particular have been shown to shore up funding for the Social Security Trust Fund.²⁴⁵ Moreover, even though many immigrants pay taxes that go into public assistance programs such as Medicaid, they are ineligible to qualify for them for a number of years.²⁴⁶

Immigration also has an indirect effect on the federal deficit, by boosting GDP via a larger labor force and gains in productivity. For example, one study finds that the presence of all immigrant workers (whether legal or unauthorized) in the labor market increases GDP by an estimated 11 percent (\$1.6 trillion) each year.²⁴⁷

Raising Labor Productivity Growth

Given the demographic challenges the economy faces, producing more output per worker will be critical to economic growth in the years ahead. Increasing labor productivity is also effectively a prerequisite for achieving real wage increases and a better quality of life for American workers, even if productivity growth alone is not sufficient to ensure that benefits are shared broadly with workers throughout the economy.

There are myriad ways to raise labor productivity but no silver bullets. As economist Paul Krugman writes, "...nobody knows the secret of raising productivity growth." But keeping in mind the three components of labor productivity growth—capital deepening, labor quality improvements and total factor productivity (TFP) growth—provides a useful framework for thinking about policy approaches. Policies should promote capital investment, enhance workers' education and skills, and boost TFP growth by spurring innovation. Making needed investments in infrastructure is also critical to increasing productivity growth.

Several policy approaches outlined in the *Report* that would help to achieve these goals are described below.

Preparing workers for the jobs of the future: Improving access to high-quality education and training is essential, not only to raise human capital and create the most productive workforce possible, but also to make sure that technological innovations that raise productivity do not leave American workers behind. As the *Report* notes, the decline in prime-age men's labor force participation over the past several decades as the economy has transitioned away from manufacturing and many middle-income jobs have been automated suggests that policy has not been sufficiently supportive of lifelong education and training in the past.²⁴⁹

As the President stated in his State of the Union address earlier this year, "Say a hardworking American loses his job—we shouldn't just make sure he can get unemployment insurance; we should make sure that program encourages him to retrain for a business that's ready to hire him."²⁵⁰ The Workforce Innovation and Opportunity Act (WIOA), enacted in 2014, represents a significant effort to modernize and reform the country's workforce training programs to reorient them toward preparing workers for the jobs of the future. The Obama administration's FY 2017 budget includes a number of additional proposals to train or retrain workers for jobs, for example by increasing funding for apprenticeship programs and creating a program to reach out to the long-term unemployed and those who have dropped out of the labor force to help them connect with training programs.²⁵¹

The President's plan to make two years of community college free-for-all responsible students would further bolster preparation for the jobs of the future. Additional steps to improve the caliber of the U.S. workforce by promoting access to education and training at all levels—from early education to college and beyond—are discussed in other parts of the policy section of this report, since expanding access to education impacts not only productivity but also workforce participation and the distribution of benefits.

Investing in infrastructure: Investing in infrastructure has an upfront cost, and some policymakers resist increasing spending for it despite the long-term benefits, often expressing concerns about the national debt. But as economist Larry Summers has pointed out, not repairing crumbling infrastructure places a serious burden on members of the next generation, forcing them to spend billions in the far off future, while denying them the benefits of increased productivity in the intervening years.²⁵²

The *Report* provides a thorough analysis of the benefits of infrastructure investment for the economy, and it outlines policy approaches to address America's infrastructure needs.

As the *Report* points out, well-functioning infrastructure—from roads and bridges to locks and dams to water systems and high-speed broadband networks—is critical to productivity growth. High-quality infrastructure reduces the amount of time it takes for workers to get to their jobs, for businesses to move their goods to market and for ideas to spread around the world. Improving America's infrastructure is essential to long-term competitiveness. With interest rates currently at very low levels, investing in infrastructure right now is a relative bargain. In addition, it would have the added benefit of stimulating the economy at a time when it is still recovering from the Great Recession.

The private sector cannot provide the country with the level of infrastructure it needs, despite the fact that it is essential for U.S. businesses to survive in the highly competitive global economy. This is because infrastructure is generally considered by economists to be a public good, meaning that its benefits cannot be captured fully by a given firm and it will be undersupplied in the absence of government action. The federal government in particular plays a necessary role in financing infrastructure since networks often cross state and municipal lines.²⁵³

The recently enacted Fixing America's Surface Transportation (FAST) Act provides some measure of stability to surface transportation policy, authorizing about \$306 billion in spending for highways, transit, rail and safety over the next five years.²⁵⁴ However, this level of funding falls well short of what infrastructure experts believe is needed.²⁵⁵ In its FY 2017 budget, the Obama administration proposes to make major investments in modernizing U.S. infrastructure to put it on a par with other major industrialized nations.²⁵⁶ The 21st Century Clean Transportation Plan would increase investments in clean infrastructure by 50 percent, helping to reduce both congestion and carbon pollution.

Public investment in research and development: Innovation is a core driver of productivity growth, and spurring new innovations by investing in research and development is an important function

of government. As described above, government funding for basic research is particularly critical, since there are sizable economic spillovers that private firms cannot fully capture. Private business research and development spending tends to be tilted toward later-stage development of products with more immediate commercial applicability. However, without public investment in early-stage, basic research, the innovation pipeline risks breaking down.

The Bipartisan Budget Act of 2015 modestly increased budget caps in FY 2016, allowing for an increase in federal research and development investment this year. However, the current level remains woefully insufficient—both in comparison to historical levels of spending as a share of GDP and with regard to the challenges the country faces. In its FY 2017 budget, the Obama administration proposes dedicating \$4 billion in mandatory spending to research and development on top of discretionary spending levels. Sequester-level spending caps would return by FY 2018 in the absence of further action, which would constrain research and development spending.

The *Report* and the President's FY 2017 budget highlight two areas in particular where federal research and development investment should be focused: medical research and clean energy. The President's budget proposes funding that would allow for nearly 10,000 new research grants at the National Institutes of Health (NIH), as well as putting clean energy research and development on a path to double over five years.²⁵⁹ These investments would help to save lives and combat the challenges of global climate change while spurring investments that increase the productivity and well-being of American workers.

Promoting entrepreneurship: Startups have long been an engine of innovation for the U.S. economy, making recent trends toward a decline in new firms as a share of all businesses worrisome. The *Report* describes a variety of approaches to spur entrepreneurship, including the administration's "Startup in a Day" initiative, designed to help communities streamline regulatory requirements

for starting a business.²⁶⁰ Improving access to sources of debt and equity capital for startup businesses is particularly important for helping entrepreneurs to turn their ideas into businesses. Small business lending was greatly affected by the financial crisis and has yet to return to levels that prevailed before the downturn.²⁶¹

The *Report* emphasizes the impact that inequality of opportunity can have on entrepreneurship, innovation and productivity by "preventing potential innovators from full economic participation." ²⁶² In addition, it notes that immigrants have been especially entrepreneurial, founding more than half of technology and engineering firms in Silicon Valley between 1995 and 2005 that went on to have more than 1 million dollars in sales in 2006. ²⁶³ Comprehensive immigration reform, therefore, is a promising approach to spurring innovation and entrepreneurship.

Cracking down on abuses of market power: An important theme developed in the *Report* is that "economic rents" may be distorting the economy in ways that detract from productivity growth. As the *Report* describes, rents can occur when, for example, "uncompetitive markets yield monopoly profits or preferential regulation protects entities from competition." Corporate lobbying for regulations that make it difficult for startup firms to compete and an over-proliferation of occupational licensing are forms of barriers to entry for new competitors. Since startups often spur innovation that improves productivity and reduces costs to consumers, overconcentration in industries can be detrimental to growth.

As the *Report* notes, in many cases, antitrust regulations that would prevent market power from leading to unproductive rents already exist—they just need to be enforced more rigorously.²⁶⁵ Reforming the patent system, zoning and land use regulations, and occupational licensing requirements would also help to reduce the power of incumbent firms and pave the way for competition from innovative startups. In some cases, reforming these regulations would require action at the state or local level.

Reforming the business tax code: Corporate tax reform can boost productivity by increasing the quantity and quality of private investment in the United States.²⁶⁶

Under current law, the federal tax a business pays can vary depending on its location, its industry, the composition of its asset base, the particular means it uses to finance investment and its organizational form. Such differences can distort economic decisions, since they can lead businesses to invest in ways that minimize their tax exposure without necessarily maximizing the productive return on their investments. The use of tax planning strategies to avoid paying U.S. taxes may cost the government revenue equal to 30 percent of corporate tax receipts.²⁶⁷ That strains the federal budget and, if not addressed, could lead to higher taxes on domestic businesses that do not pursue tax avoidance strategies as well as families.

It is estimated that large corporations are holding more than \$2 trillion in profits offshore in order to avoid paying taxes on them.²⁶⁸ This keeps this money from being put to productive use in the United States.

By reducing marginal tax rates on corporations while broadening the tax base on which those rates are applied, corporate tax reform could reduce inefficiencies in the current tax system and spur productive investment. While there is considerable disagreement about the details, there is broad bipartisan support for reforming and simplifying the corporate tax code to bolster U.S. competitiveness. The Obama administration has proposed a comprehensive plan for corporate tax reform that would decrease inequities and inefficiencies in the current system.

Promoting Share Prosperity

Income inequality in the United States was at its lowest point in the 1960s and has been rising for several decades. The United States has one of the largest disparities in incomes among advanced countries, according to the OECD.²⁶⁹ Not only that,

income inequality in the United States is worse than in Georgia, Turkey and Iran.²⁷⁰ By one measure of income inequality, the United States ranks below Nigeria.²⁷¹

Since 1980, the average income for the top 1 percent of households has grown more than seven times as fast as it has for the average household.²⁷² The widening gap between the rich and everyone else will not be reversed overnight. However, a sustained policy focus could expand opportunity, reduce income inequality and boost economic growth.

There are a number of actions policymakers can take to ensure that more Americans reap the benefits of future economic growth. The policies discussed in this section target three broad goals: increasing wages; protecting individuals during times of economic hardship; and leveling the playing field from children's earliest years to college. It also includes a special focus on expanding economic opportunity for women, which was highlighted in the *Report*.

Helping low-income workers earn a living: Many American families do not earn enough to pay for the rising costs of housing, education, child care and other necessities. Three million workers earn at or below the federal minimum wage of \$7.25 per hour.²⁷³ That rate has not been increased since 2009 and the real value of the minimum wage is lower today than it was in 1968. A parent who works full time year-round and is paid the federal minimum wage earns approximately \$15,000 a year, \$5,000 lower than the poverty level for a family of three.²⁷⁴ Raising the wage to \$12, as proposed by Democrats in Congress, would help to lift millions out of poverty.²⁷⁵

The Earned Income Tax Credit (EITC) supports the earnings of low-income workers and has been proven to lift people out of poverty and increase labor force participation among single mothers.²⁷⁶ It has also been shown to have long-term positive

effects on children's educational achievement which increase the chances of attending college and leads to higher earnings.²⁷⁷

An overwhelming number of Democrats support the EITC, joined by a significant number of Republicans who back it because it provides strong economic incentives to work. In 2013, the EITC improved the economic position of approximately 27.8 million people, lifting 6.2 million individuals out of poverty and lessening the severity of poverty for an additional 21.6 million, including 7.8 million children.²⁷⁸ One proposal, highlighted in the 2015 ERP, would double the EITC for workers without children to \$1,000 from the current maximum credit of \$500. Presently, the average credit for a family with children is about 10 times the benefit for a family without children.²⁷⁹

Increasing bargaining power for workers: The percentage of American workers belonging to a union has declined significantly over a period of decades. At least one in four workers were union members during the 1950s through 1970s. By 2014, that share had declined precipitously—to less than one in 10 workers.

Historically, unions have played a critical role in helping workers secure higher wages and safe working conditions. Research referenced in the *Report* finds that declining unionization since the 1970s accounts for between one-fifth and one-third of the increase in inequality during this time.²⁸⁰

Further declines are not inevitable. Public policies that encourage higher rates of union membership and support collective bargaining can provide leverage to workers in their wage negotiations, promoting stronger wage growth.

Protecting individuals in times of economic hardship: Millions of Americans will endure a period of unemployment at some time during their working lives. However, unemployment, injury or illness should not be a pathway to poverty.

The longer a worker is unemployed, the harder it is to find the kind of job he or she had previously. Encouraging states to retrain unemployed workers more effectively for in-demand jobs would help shorten unemployment spells and mitigate the lasting effects of long-term unemployment.

The present system could also be modified to increase incentives to work and to hasten workers' return to a full-time job. Currently, when a worker is receiving unemployment insurance income, there is a disincentive for workers who lose their job to accept a new job that pays less. A wage insurance system would support workers who accept a lower-paying job for a period of time, moving them out of unemployment and keeping them attached to the labor force.

Preserving the Affordable Care Act: The ACA represents a major effort to protect Americans from hardship and keep medical costs from bankrupting families and driving up inequality. Nearly 18 million Americans have gained health insurance coverage through the ACA, including more than 3 million young adults who are able to remain on their parents' coverage. Protecting these gains and the additional protections contained in the legislation, such as the ban on lifetime limits, is vital to continued improvement in health care outcomes and to slowing the growth of health care costs.

The ACA also has other important economic benefits. Notably, Americans are no longer forced to stay in their jobs because they are scared of losing their health insurance. This is particularly important for people with "pre-existing" conditions—even if they could get health insurance in a new job they could be prevented from receiving benefits for those illnesses. The ACA bans clauses denying reimbursement for pre-existing conditions.

Reducing what's called "job lock" allows people to take jobs that better match their skills and boosts overall productivity in the economy. By having health care coverage that is portable, individuals are able to start their own businesses, go back to school or pursue new opportunities. This also may make them more productive, furthering economic growth.

The same kind of portability that the ACA has enabled for health insurance coverage can be extended to retirement and other benefits traditionally based on employment. Workers would be able to take their retirement savings with them from one job to the next. This would particularly help the increasing number of Americans engaged in contract or freelance work, because it would enable them to pursue a range of employment opportunities while also saving for retirement and accessing other important benefits and protections. This would ensure that workers are able to pursue opportunities for which they are best suited, making them more productive.

Leveling the playing field from children's earliest years to college: The *Report* devotes considerable attention to the large body of research which demonstrates that government investment in early childhood programs has substantial long-term benefits. These long-term benefits resulting from programs such as Head Start, the Supplemental Nutrition Assistance Program (SNAP), Women, Infants and Children (WIC) and Medicaid, include higher rates of education, higher earnings and lower mortality rates. Public investment in early childhood programs is not merely altruistic, it provides benefits that even the biggest deficit-hawks can appreciate: lower crime rates, lower incarceration rates, and lower reliance on welfare. This also translates into increased national productivity and economic growth.

Universal access to pre-kindergarten education would help to reduce the inequality of opportunity in early years that contributes to significant disparities in employment, income, health and education in later years. Research cited in the *Report* finds that parents in the top income quintile spend seven times as much as families in the bottom quintile on books, camps, lessons and other enrichment activities. Providing early childhood education for all

families will help to provide a common base of educational experience that will serve as a critical platform for learning and development as children age.

All Americans should have a shot at a college education. For years, education has been a gateway to a middle-class life. But, as a college has become even more important for success, the costs of higher education have risen. Many Americans can no longer afford a college education, and student debt levels have exploded. Roughly 70 percent of college seniors graduated with debt in 2014, owing an average of almost \$29,000 per borrower.²⁸²

The federal government, states, colleges, and universities all have a role to play in making higher education more affordable and more accessible. The Obama administration's proposals such as free tuition for students at community colleges, increased investments in Pell Grants and simplifying student aid forms would help to ensure that education is accessible not just to those at the top of the income spectrum.

The Obama administration's proposals such as making two years of community college free for students, strengthening Pell Grants, increasing investments in the nation's Historically Black Colleges and Universities, and simplifying student aid forms would help to ensure that higher education is accessible not just to those at the top of the income spectrum.

Expanding Economic Opportunity for Women

As the *Report* makes clear, addressing economic inequality is critical for economic growth. It also notes that "unequal outcomes that arise from unequal opportunities—barriers that keep some individuals from realizing their full potential—are a detriment to growth and fairness." This is unfortunately true for many U.S. women today—as barriers in the form of outdated workplace policies prevent them from maximizing their economic potential.

The share of women in the labor force has grown dramatically in the last 50 years. In 1963, only 44 percent of prime working-age women (ages 25 to 54) were in the labor force. Today, about 75 percent of prime working-age women are in the labor force. More than two-thirds of mothers with children under the age of 18 are in the labor force.²⁸⁴

However, little accommodation has been made for the fact that a large percentage of women now work and they also remain the primary caregivers for children. For too many women, the lack of policies to support their dual roles keeps them out of the labor force or limits them to working part time, diminishing their earning power. In effect, women are penalized for being mothers.

Measuring the impact on women and their families: One useful measure of the impact on women's earning potential is the "gender pay gap." It compares the median annual earnings of a woman working full time, year-round and her male counterpart. Data show that the typical woman earns only 79 cents for every dollar earned by her male counterpart.²⁸⁵ That leaves a 21-percent difference in earnings, or \$10,800 per year. Over the span of a career, that yearly difference could accumulate to about half a million dollars.²⁸⁶

The gender pay gap typically starts off small for young women at the start of their career, but due in part to career interruptions and part-time work the pay gap becomes substantially larger for older women. The fact that the pay gap increases over time is thought to be due directly to the women interrupting their careers to have children and then getting paid less than their former colleagues when returning to work.

Women even suffer from the perception by employers that they *might* have children. And women who do have children and return to work face a "mommy penalty"—earning less than women without children. Fathers, on the other hand, often benefit from a "daddy bonus,"—and earn more than men without children, which

may reflect concern from their employers that they are supporting a family.²⁸⁷

Lower income over the course of a woman's life also can jeopardize her financial security in retirement. In 2014, the median annual income of women ages 65 and older was just \$17,400—56 percent of men's the same age.²⁸⁸ In other words, women face a 44 percent income gap in retirement—more than twice the overall gender pay gap. Moreover, women are 1.6 times as likely as men to live in poverty once they reach age 65, and nearly twice as likely to live in poverty when they reach age 75.²⁸⁹

Lower pay for women hurts American families: Women's earnings are more crucial than ever for many families because of increased pressures resulting from the rising costs of raising a family. Child care, education and health care costs have increased substantially in the past quarter century, and families increasingly rely on women's earnings to make ends meet. In the typical household with children, women contribute nearly 40 percent of their family's earnings. And of families with a mother working outside the home, than about one-third depend solely on her wages. For these reasons, millions of American families stand to benefit from policies that would help women reach their full economic potential.

In addition, making it easier for more women to work full time in the paid labor force could reduce income inequality and lift many women out of poverty, which would reduce government spending on programs such as Medicaid and the Supplemental Nutrition Assistance Program (SNAP).²⁹⁰

Maximizing women's potential is important for the economy: Women's increasing role in the workforce has had a dramatic effect on economic growth. According to the *Report*, "Our [U.S.] economy is \$2.0 trillion, or 13.5 percent, larger than it would have been without women's increased participation in the labor force and hours worked since 1970."²⁹¹

The Organisation for Economic Co-operation and Development (OECD) finds that reducing the difference between men's and women's labor force participation in the United States by half by 2030 could increase economic growth (per capita GDP) by 0.2 percent. Fully closing the gap could increase growth by 0.5 percent.²⁹²

The United States lags behind other countries in adopting "profamily" policies to lower the barriers that prevent women from achieving their economic potential. For example, the United States is the only advanced country that does not guarantee paid maternity leave and one of just a handful of countries without a national paid sick leave policy. The United States also ranks near the bottom of OECD countries on for public spending on child care and pre-primary education as a share of GDP, contributing to the high out-of-pocket child care costs American families face.

U.S. women would directly benefit from policies which effectively reduce the costs of caregiving. Expanding access to paid family and sick leave, improving workplace flexibility and valuing unpaid caregiving would all allow more women to remain in the paid labor force throughout their prime working years. This would not only boost women's earning potential and strengthen the financial security of American families, but it also would have positive effects on productivity and economic growth.

The economy could benefit by making it easier for women to remain in the workforce after they have children. Drawing more women into the labor force also has the potential to increase productivity by using labor resources more efficiently. Boosting their earnings would put more money into the hands of women and their families who in turn spend it, generating additional consumer demand.

CONCLUSION

The *Report* and this response use extensive data to analyze the state of the economy and to assess the outlook for future growth. It is clear from the data that the economy continued to strengthen in 2015 and is now on much stronger footing than when the Obama administration began seven years ago. Prospects for future growth are bright.

Nevertheless, the economy faces a number of long-term structural challenges such as the aging of the labor force and increased globalization. These challenges emerged long before the Great Recession and have been anticipated by economists for decades. Several policies to address these challenges are detailed in the *Report* and have been discussed in this response. Underpinning these policies is the need to increase the size and productivity of the U.S. labor force.

In his recent letter to shareholders, Warren Buffett wrote, "For 240 years it's been a terrible mistake to bet against America, and now is no time to start." He is right. Most recently, the United States has led the global recovery from the Great Recession. With smart investments and responsible policies, the United States will continue to chart the path forward, driving innovation and economic growth.

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