



Defunding America's Future: The Squeeze on Public Investment in the United States

Ben Ritz
October 2018

Executive Summary

OCTOBER 2018

Ben Ritz

Policymakers who have chosen to slash critical public investments in future generations while simultaneously saddling these generations with a mountain of debt are jeopardizing the long-term economic health of the United States. Failure to correct course could have serious consequences for the economy and the American people, including lower incomes, fewer high-quality jobs, and a reduced ability for future policymakers to address new challenges.

America's deteriorating fiscal condition should be a central issue in the 2018 midterm and the 2020 presidential elections. The goal of this report is to alert the public and policymakers to the problem and highlight the actions our elected leaders must take to avoid fiscal ruin, which include renewing public investments in the foundation of our economy, modernizing federal health and retirement programs to reflect an aging society, and enacting pro-growth tax reform that raises the revenue necessary to support both of these critical government functions.

DEBT AND DEFICITS THREATEN PUBLIC INVESTMENTS (PP. 5-11):

- By 2029, the national debt as a percentage of gross domestic product is projected to surpass the all-time high reached at the end of World War II if current policies remain in place. And on that trajectory, the national debt would grow to more than double the size of the U.S. economy within the next 30 years.
- All this borrowing comes at an enormous cost: if current policies remain in place, annual interest payments would rise from \$316 billion today to nearly \$1 trillion in 2028. At that point, annual interest costs

would be twice the projected federal spending on public investments in education, infrastructure, and scientific research *combined*.

INSTEAD OF ADDRESSING THE PROBLEM, TODAY'S POLICYMAKERS ARE MAKING IT WORSE (PP. 12-17):

- While virtually every other developed country from Germany to Japan is paying down their debts, self-proclaimed “king of debt” Donald Trump and the Republican-controlled Congress have been making ours bigger. In the span of just two months, they enacted \$2 trillion in tax cuts and abandoned spending caps that Republicans demanded be imposed at a time when most economists believed it was far more perilous to cut spending than it is today.
- The last time the national unemployment rate was as low as it was for most of 2018, the Clinton administration was in its fourth consecutive year of budget surpluses. But, thanks to the GOP’s borrow-and-spend policies, the next presidential election in 2020 – and potentially every election thereafter – will occur against the backdrop of an annual budget deficit of over \$1 trillion.

PUBLIC INVESTMENTS ARE BEING STARVED BY BAD BUDGETING (PP. 17-21):

- Between 1965 and 1980, total federal spending on public investments in education, infrastructure, and scientific research regularly equaled about 2.5 percent of GDP (which would have been roughly \$470 billion in 2017). But misguided cuts imposed by policymakers seeking to reduce deficits have taken their toll: Federal spending on public investment was just over \$300 billion in 2017 – less than 1.5 percent of GDP.

- If current policies are continued, public investment spending is projected to fall to its lowest level in modern history as a share of the economy by 2026. Public investment spending is likely to be cut even more in the future if policymakers are unwilling or unable to tackle the main drivers of growing deficits.

SECURING PUBLIC INVESTMENTS REQUIRES FIXING HEALTH CARE AND RETIREMENT PROGRAMS (PP. 21-29):

- While spending on public investments shrinks, spending on Medicare, Medicaid, and Social Security is growing on autopilot due to an aging population. Spending on these programs relative to the size of the economy is projected to grow by half over the next 30 years (from about 10 percent of GDP today to nearly 16 percent of GDP in 2048).
- In 1965, there were 5.4 working-age Americans (those between the ages of 18 and 64) who could pay taxes to finance the health care and retirement benefits of each American aged 65 and older. But by 2050, the U.S. Census Bureau projects the ratio of working-age to retirement-age individuals could be as low as 2.6 to 1 – less than half what it was in 1965.
- There are no easy substitutes for tackling the growth of federal health and retirement spending. The unaffordable tax cuts enacted over the past year can and should be reversed, but even if federal taxes were immediately raised to their highest level since WWII and remained there indefinitely, deficits and debt would still be growing significantly faster than the economy.

THE SHORTSIGHTED STATUS QUO IS SHORTCHANGING YOUNG AMERICANS (PP. 29-31):

- Current policies are unfair to young Americans, who are already starting from a worse financial position than their parents and grandparents did. The federal government is spending nearly six times as much per elderly American (those aged 65 and older) as it is per child, even though children have a poverty rate nearly twice that of the elderly.
- The shift in priorities – from annually appropriated discretionary spending to formula-driven mandatory spending – will leave future politicians with less say over how their constituents' tax dollars are spent. Whereas the Congress of 1968 had the authority to appropriate 66 cents out of every dollar spent by the federal government, the Congress of 2048 will have the same authority over just 18 cents on our current trajectory. This erosion of "fiscal freedom" robs future democratically elected officials of their ability to respond to the changing policy priorities of their taxpaying constituents.
- Growing debt and interest costs also have the potential to make future generations poorer, reducing the size of our economy by up to \$6,000 per person per year in 2048.

The longer we wait to address these problems, the harder they will be to solve. Neither progressives (who want more social spending) nor conservatives (who want lower taxes) will benefit from a federal budget that has no room for either because it is stuck paying for the policies of the past. As Republicans in Congress and the White House abandon any pretense of fiscal responsibility, the time is right for Democrats to offer a new progressivism that invests in our country without leaving the bill to young Americans. Voters must demand our leaders enact the policies necessary to lay the fiscal foundation for a better world tomorrow.

OCTOBER 2018

Ben Ritz

Defunding America's Future: The Squeeze on Public Investment in the United States

INTRODUCTION: TODAY'S POLITICIANS ARE MORTGAGING AMERICA'S TOMORROW

Every year since President Bill Clinton left office in 2001, the federal government has spent more money than it raised in revenue, borrowing from outside investors to make up the difference.

All this borrowing comes at a cost: by the end of the next decade, the federal government is projected to pay out over \$1 trillion annually on interest payments alone if current policies remain in place.¹ That's \$1 trillion every year that we could be investing in America's future by researching promising new technologies, building bridges and railroads, or training a next-generation workforce. Instead, it will be spent paying for yesterday's debts.

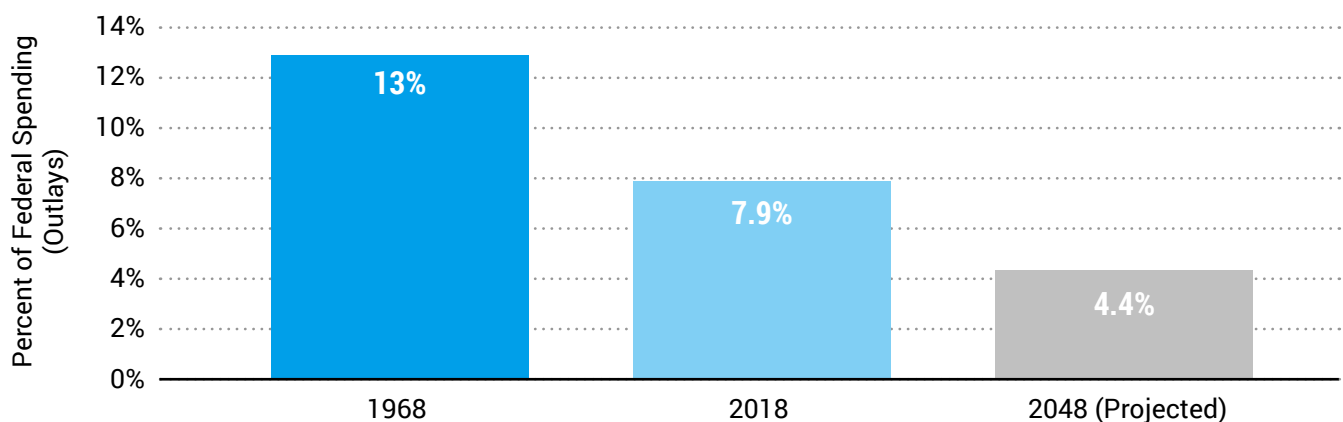
The problem will only get worse in the coming decades, as an aging population increases the costs of expensive federal health and retirement programs – primarily Medicare, Medicaid, and Social Security – while revenues remain low thanks to several rounds of poorly designed and unnecessary tax cuts. The confluence of these trends threatens to crowd out important public investments in our nation's future prosperity, which have already been squeezed to the point where they now represent a smaller share of the U.S. economy than they have for most of the

past 50 years. Failure to correct course could have serious consequences for the economy and the American people, including lower incomes, fewer high-quality jobs, and a reduced ability for future policymakers to address new challenges.

Yet self-proclaimed “king of debt” Donald Trump and the Republican-controlled Congress have been making the nation’s fiscal problems worse, not better.² In the span of just two months, they enacted \$2 trillion in tax cuts and abandoned spending caps that Republicans demanded be imposed under President Obama – even though the case for constraining spending is far stronger today than it was while the economy was recovering from the 2008 financial crisis.³ Thanks to the GOP’s borrow-and-spend policies, the next presidential election in 2020 – and potentially every election thereafter – will occur against the backdrop of an annual budget deficit of over \$1 trillion.⁴ As the Trump administration adds to America’s debt burden, the Trump campaign’s promise to invest in America’s infrastructure has gone unfulfilled.⁵

This blatant hypocrisy gives Democrats a unique opportunity to offer the electorate a compelling alternative that pairs robust public investment in progressive priorities with the fiscal discipline necessary to secure those investments for generations to come. To seize that opportunity, however, Democrats must be prepared to take two difficult steps: restoring federal revenues to adequate levels and adopting reforms that would restrain the growing cost of expensive health and retirement programs. Their longstanding reflexive opposition to considering even modest reforms has contributed to an environment in which tax and spending priorities have shifted from supporting long-term investments to subsidizing short-term consumption. The share of federal spending dedicated to public investments in research, infrastructure, and education has fallen by almost 40 percent in the past 50 years – and it will continue to fall even further if current trends continue (**Fig. 1**). America must change course.

FIGURE 1: Public Investment as a Share of Federal Spending



Note: Public investment includes spending on non-defense research and development, physical capital, and education (see page 17 for more details). The 2048 projection assumes spending on these public investments changes at the same rate as total non-defense discretionary spending and that today’s tax and spending policies remain in place even if they are scheduled to change under current law (for reasons explained on page 10).

Sources: Office of Management and Budget^{6,7}, Congressional Budget Office⁸, Medicare Trustees Report⁹, Committee for a Responsible Federal Budget¹⁰, and PPI calculations

But, instead of holding Republicans accountable for their fiscal mismanagement, some Democrats seem determined to outdo them. Many on the left now propose tens of trillions of dollars in new social spending on top of the unfunded promises the federal government already has made, without offering credible ways to pay for either. This agenda is orders of magnitude more expensive than are the policies enacted over the past year, and if it were tacked onto our already large and growing national debt, young Americans would pay an even steeper price than they will for the Republican borrowing binge.¹¹

America's deteriorating fiscal condition should be a central issue in the 2018 midterm and the 2020 presidential elections. The goal of this report is to alert the public and policymakers to the problem and highlight the actions our elected leaders must take to avoid fiscal ruin, which include renewing public investments in the foundation of our economy, modernizing federal health and retirement programs to reflect an aging society, and enacting pro-growth tax reform that raises the revenue necessary to support both of these critical government functions.

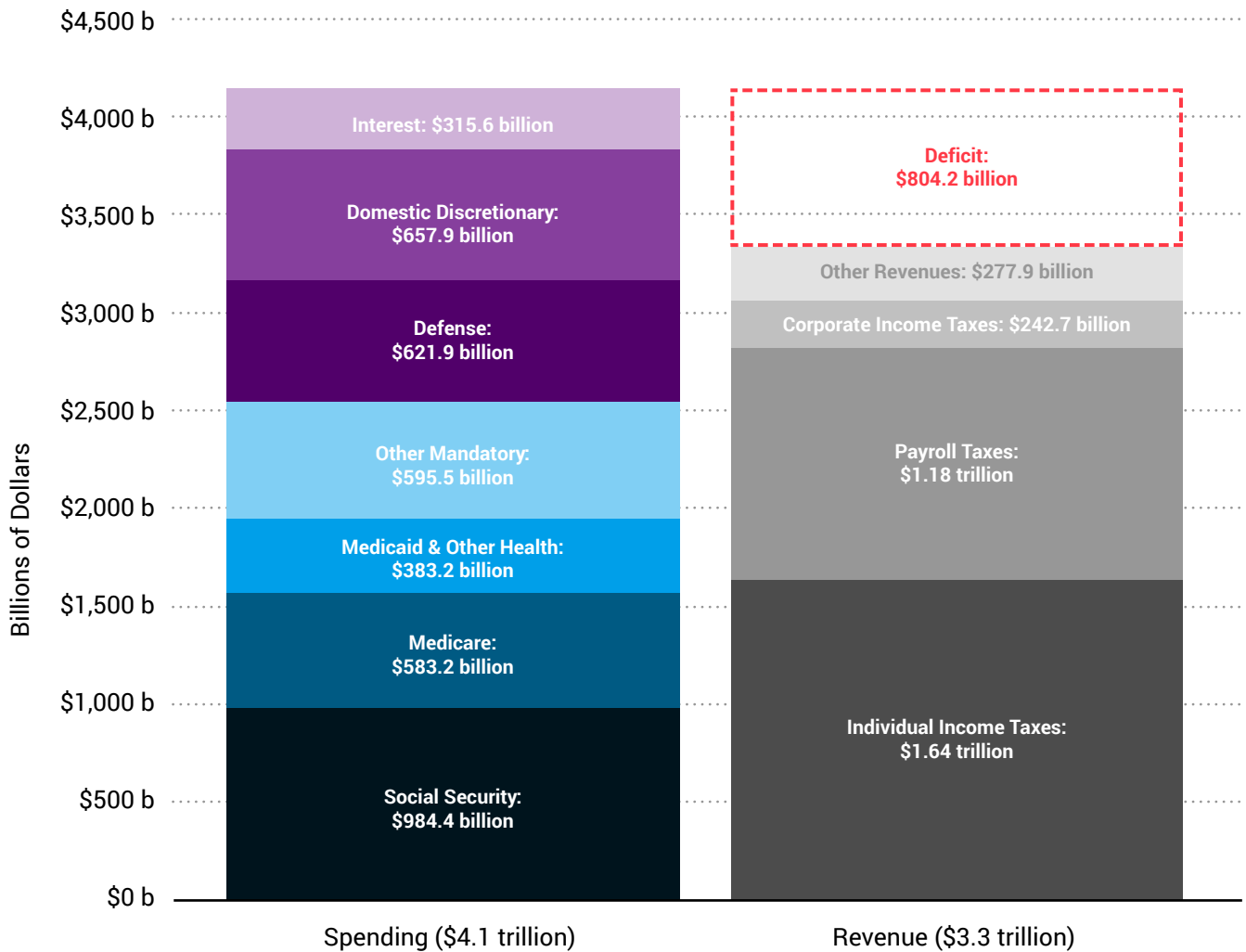
This report has five parts. First, it explains how a growing mismatch between government revenues and spending has become increasingly problematic. Next, the report explores how poor decisions by policymakers in recent years are exacerbating this problem. Third, the report

details the misguided cuts to public investment these decisions have created. Fourth, it discusses the difficult decisions policymakers must make to truly address the drivers of our nation's fiscal challenges. Finally, the report explains the consequences that failure to correct course will have for future generations. In subsequent reports, PPI's Center for Funding America's Future will explore these issues in greater detail and offer concrete proposals for a fiscally responsible public investment agenda that fosters robust and inclusive economic growth.

DEBT AND DEFICITS THREATEN PUBLIC INVESTMENTS

In Fiscal Year 2018, the federal government spent \$4.1 trillion despite raising only \$3.3 trillion in revenue.¹² The resulting \$782 billion gap is the federal budget deficit – and it's growing at an alarming rate (**Fig. 2**). From 2020 onward, the official scorekeepers at the non-partisan Congressional Budget Office project that the federal government will have a deficit greater than \$1 trillion every year if our current laws remain unchanged.¹³ And every year the federal government runs these deficits, it must borrow from investors inside and outside the United States to make up the difference, adding to our growing national debt. The national debt held by those investors – commonly referred to as “the public” – today stands at approximately \$15.8 trillion.¹⁴

FIGURE 2: FY 2018 Federal Budget



Note: Figures are based on CBO's most recent 10-year projection, which was published in April 2018. Preliminary estimates released at the conclusion of FY 2018 show the actual deficit was \$782 billion.

Source: Congressional Budget Office¹⁵

More important than these dollar values are how debt and deficits compare to the size of our economy. A richer country can shoulder a larger debt burden than a poorer one, in the same way that Warren Buffet can comfortably incur a \$10 million debt that would bankrupt most middle-class families. Simply put, debt and deficits can be sustainable as long as they are growing slower than our economy.

That is not the case today. Debt held by the public is equal to 78 percent of gross domestic product (the total value of all goods and services produced by the United States in a given year). This is the highest debt-to-GDP ratio America has seen since the aftermath of World War II, when debt held by the public reached its record high of 106 percent of GDP.¹⁶

There's a big difference between now and then. When WWII ended, federal spending plummeted from over 40 percent of GDP in 1945 to less than 15 percent of GDP just two years later, as the obligation to pay for war came off the government's books.¹⁹ For nearly three decades afterwards, the federal government ran balanced or near-balanced budgets almost every year, thereby limiting the growth of debt. Meanwhile, an unprecedented surge of post-war economic growth caused outstanding debt to fall substantially as a share of GDP. By 1974, publicly held debt had fallen to just 23 percent of GDP.²⁰

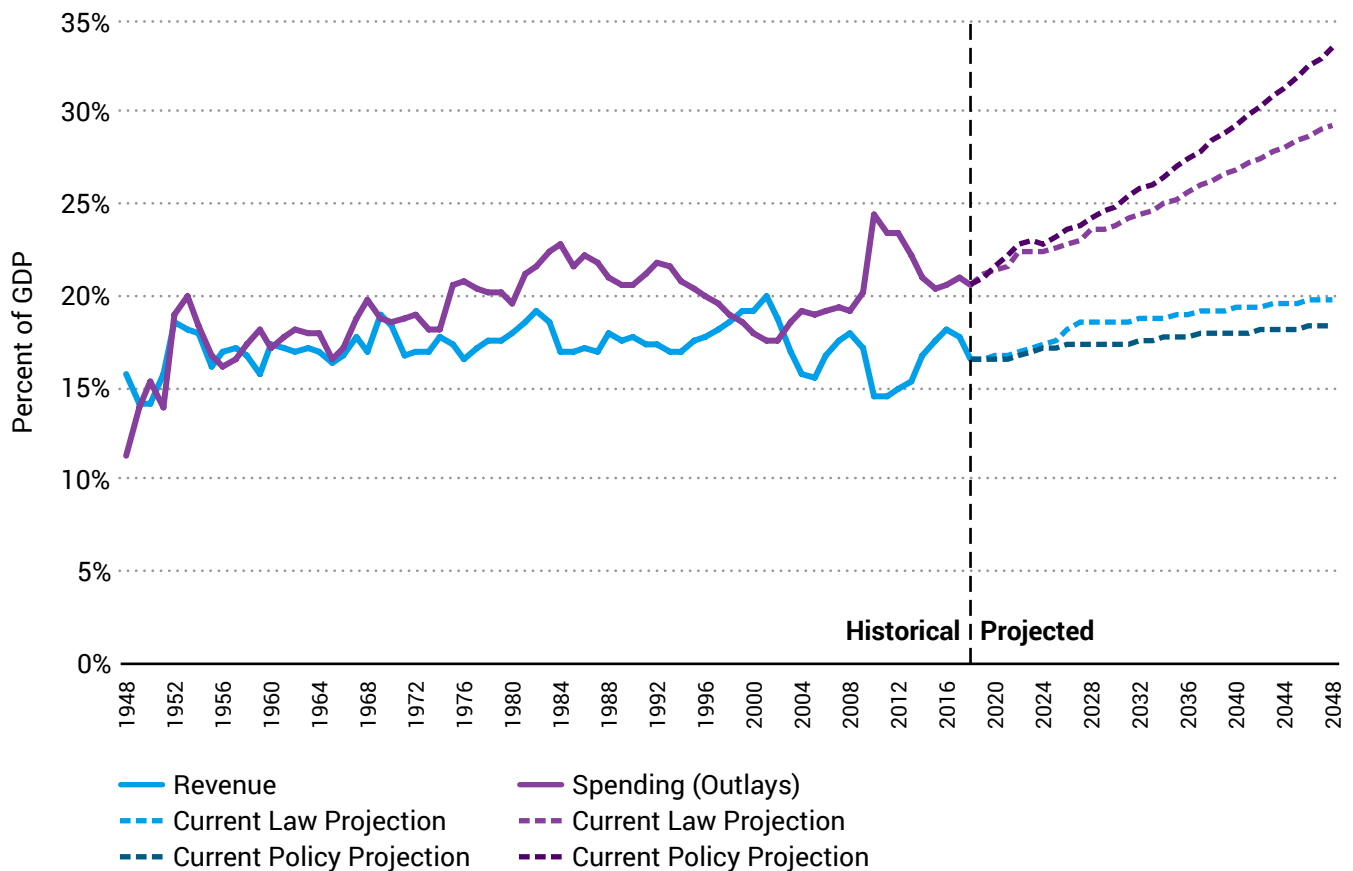
But then a significant shift occurred in federal fiscal policy. Annual budget deficits, which never once exceeded 3 percent of GDP between 1947 and 1974, were consistently higher throughout the late '70s and subsequent decades.²¹ No longer was heavy borrowing by the government seen as a temporary measure to address an imminent economic or national security emergency – it had become the norm. For the first time in history, the national debt began to grow during an era of relative peace and prosperity. The problem will go from bad to worse in the coming years. CBO's baseline projection shows deficits will average almost 5 percent of GDP over the next decade, and America's debt-to-GDP ratio will continue to grow unabated.^{22,23}

WHEN ARE DEFICITS A CAUSE FOR CONCERN?

Whether a budget deficit is problematic or not depends on what caused it. For example, when economic growth slows down or slides into a recession, both incomes and tax revenues fall. Meanwhile, spending on many government safety-net programs rises as reduced incomes make more people eligible for public assistance, such as unemployment insurance or the Supplemental Nutrition Assistance Program (also known as SNAP or food stamps).¹⁷ Deficits caused by these **cyclical factors** are not a major cause for concern – both because they are temporary and because they act as automatic stabilizers that prevent a bad economic environment from getting worse.

But deficits can also be caused by **structural factors**, which are those that persist no matter the state of the economy. Structural deficits represent a fundamental mismatch between tax and spending policies. If structural deficits are sufficiently large that they cause debt to continuously grow more quickly than the economy, these deficits are unsustainable and will eventually inhibit rather than promote economic growth.¹⁸

FIGURE 3: Revenue vs. Spending



Note: Current law projections assume many policies in place today will expire if they are scheduled to in the law as currently written. Current policy projections assume that today's tax and spending policies remain in place even if they are scheduled to change under current law.

Sources: Office of Management and Budget²⁴, Congressional Budget Office^{25,26}, Medicare Trustees Report²⁷, Committee for a Responsible Federal Budget²⁸, and PPI calculations

If anything, CBO's projections are likely to be overly optimistic because the agency is required to use a **current law** baseline, which assumes that many policies in place today will expire if they are scheduled to do so in the law as currently written (Fig. 3).²⁹ The Republican tax bill passed last December, for example, is projected by CBO to add roughly \$2 trillion to the national debt over the next decade.³⁰ But many provisions in the tax bill were given arbitrary expiration dates to reduce the bill's sticker price and ease its passage through Congress. If these and other expiring provisions in the tax

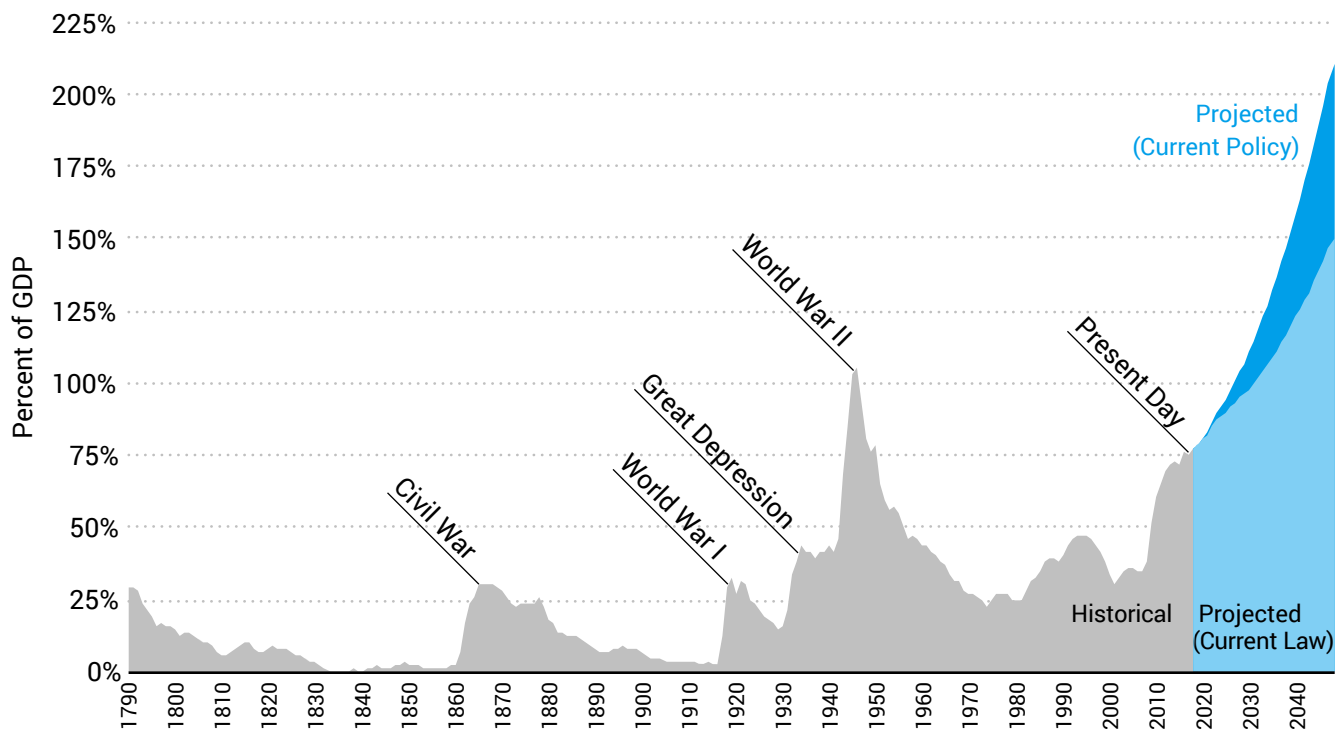
code are either extended or made permanent, deficits would be \$1 trillion higher over the next decade.³¹ The impact of continuing current tax policy is even greater outside this 10-year window (when the tax law as written – with most of its deficit-increasing provisions expiring in 2025 – is not projected to increase the deficit at all).³²

Many analysts believe a **current policy** projection, which assumes that today's tax and spending policies remain in place even if they are arbitrarily scheduled to change under current law, is more realistic because

Congress has routinely overridden scheduled policy changes in the past.³³ This projection shows the government's fiscal policy on an even more unsustainable path. By 2029, the national debt held by the public would surpass the all-time high reached at the end of WWII if

current policies remain in place (**Fig. 4**). Thirty years from now, the debt could be more than double the size of the U.S. economy under this projection. At that point, the annual difference between revenue and spending would be over 15 percent of GDP.³⁴

FIGURE 4: U.S. Debt Held by the Public



Note: Current law projection assumes many policies in place today will expire if they are scheduled to in the law as currently written. Current policy projection assumes that today's tax and spending policies remain in place even if they are scheduled to change under current law.

Sources: Congressional Budget Office^{35,36}, Medicare Trustees Report³⁷, Committee for a Responsible Federal Budget³⁸, and PPI calculations.

All this borrowing comes at a significant cost that threatens America's ability to make important public investments. Like private borrowers, the federal government pays interest on the money it borrows. The annual cost of interest payments is determined by both the size of the nation's debt and the interest rate on that debt charged by lenders. As each of these factors increases in the coming years, annual interest payments will rise from \$316 billion

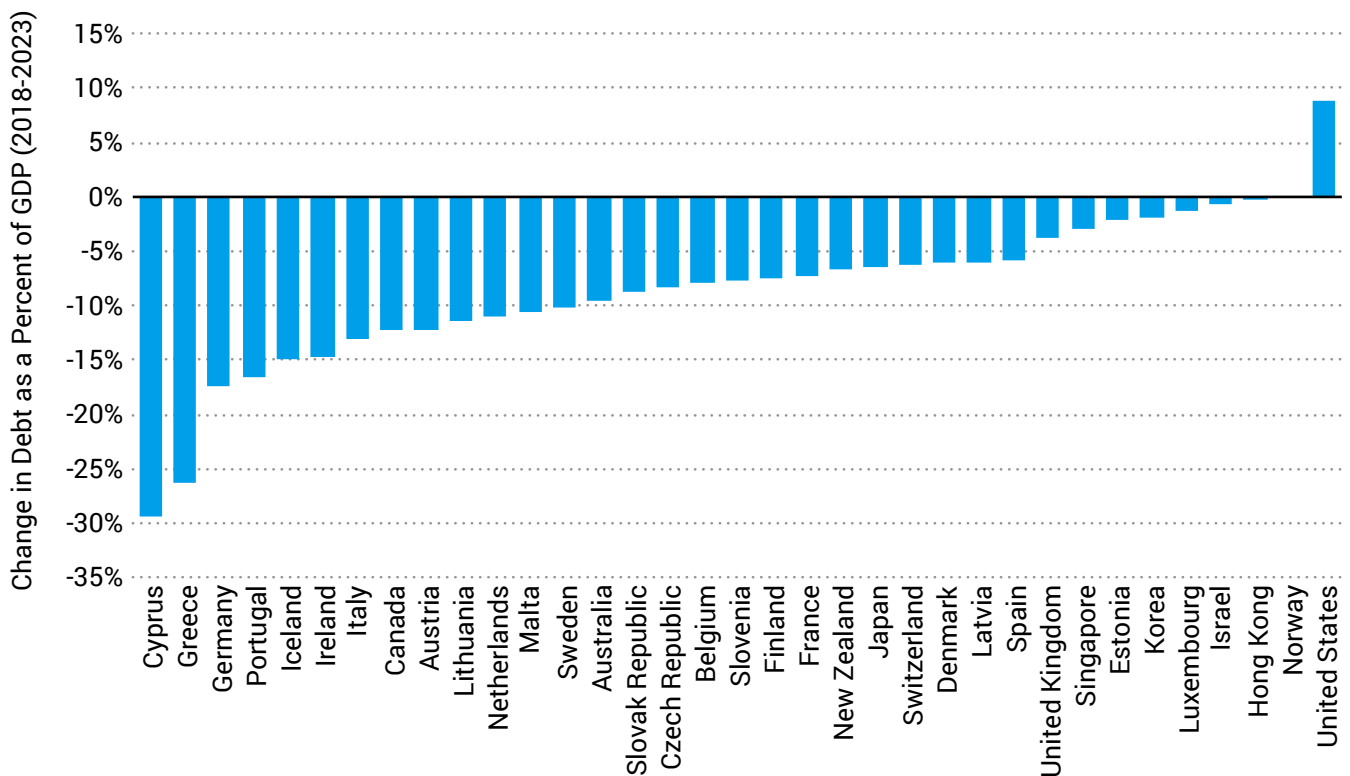
today to nearly \$1 trillion at the end of the next decade.³⁹ At that point, annual interest payments would be double the projected spending on public investments in education, infrastructure, and scientific research *combined*.⁴⁰ Reducing the federal government's debt burden – and the interest paid on it – would thus free up an enormous amount of resources for these and other progressive investments in America's future economic health.

INSTEAD OF ADDRESSING THE PROBLEM, TODAY'S POLICYMAKERS ARE MAKING IT WORSE

Now is the right time for America's leaders to tackle our government's fiscal imbalances. But as other developed countries take advantage of the current global economic boom to reduce

public debt burdens, the United States stands alone in allowing ours to grow unchecked. Out of 35 developed nations analyzed by the International Monetary Fund earlier this year, only the United States is projected to have a rising debt-to-GDP ratio over the next five years (Fig. 5).⁴¹

FIGURE 5: Projected Change in Government Debt Burdens



Note: Projections are based on current law, which means they assume policies in place today will expire if they are scheduled to in the law as currently written.

Source: International Monetary Fund⁴²

This stark contrast is a damning indictment of the current administration's backwards fiscal policies. The last time the national unemployment rate – one of the most important indicators of short-term economic health – was as low as it is was for most of 2018, the Clinton administration was in its fourth consecutive year of budget surpluses and the national debt as a percentage of GDP had been reduced by over

a third from what it was five years earlier.⁴³ The Trump administration's policies, however, are actually increasing the size of budget deficits when many economists believe it is perhaps the worst possible time to do so.⁴⁴

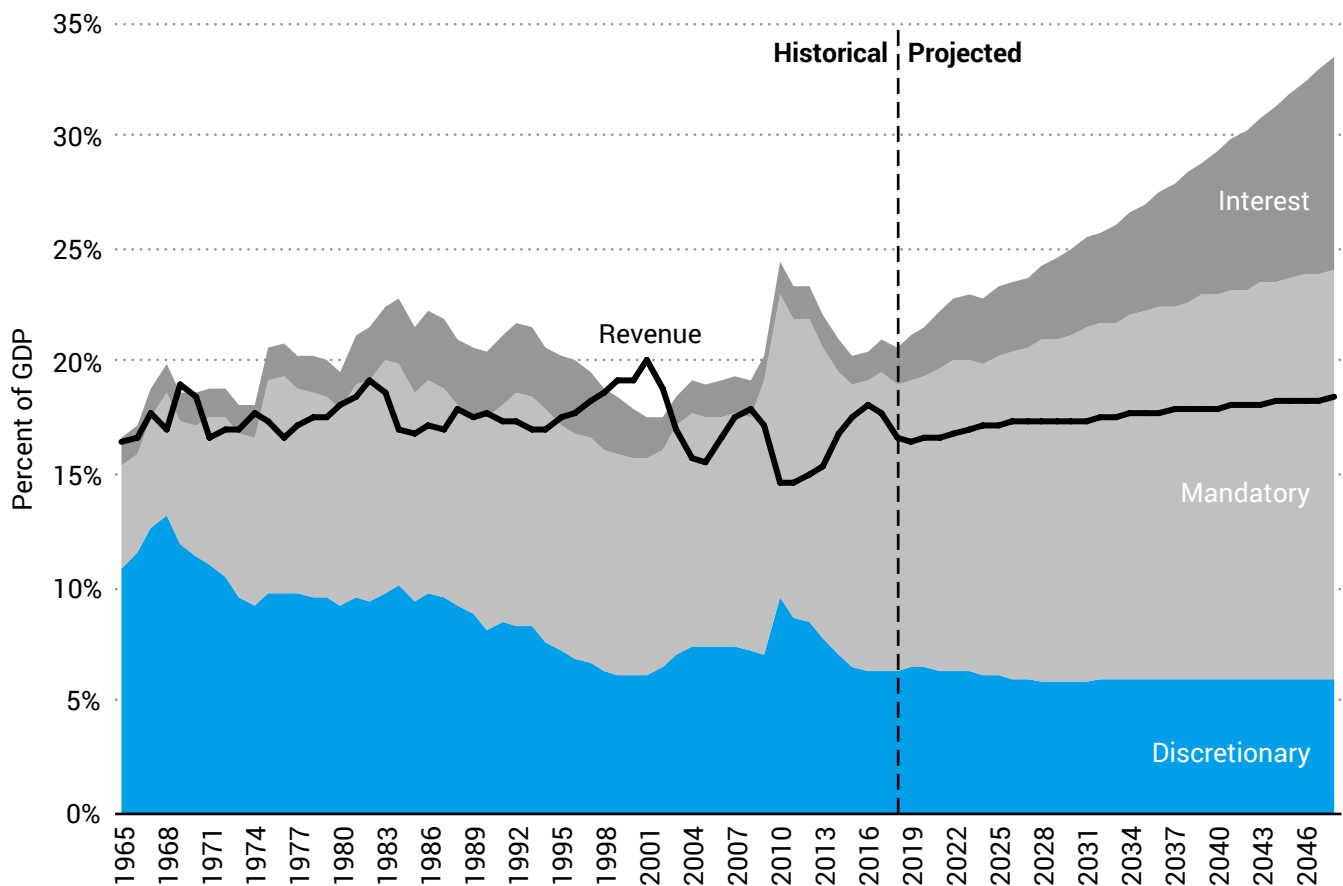
Republican tax cuts have reduced revenue to a full point below its historical average as a percentage of GDP since the end of WWII,

despite the current unemployment rate being lower than it was for almost 90 percent of that period.⁴⁵ Meanwhile, the approach both parties have taken toward federal spending has led to limited budget reforms that were shortsighted and short-lived.

Federal spending overall is growing significantly faster than the economy, but that is not true of every program individually. Over the next 30 years, spending on mandatory programs

is projected to grow from 12.7 percent of GDP today to 18 percent of GDP in 2048 if current policies are continued.⁴⁶ Discretionary spending, meanwhile, is actually projected to shrink as a percentage of GDP to its lowest level in 50 years by 2026 under current policy. In fact, even if policymakers were to eliminate every penny of discretionary spending in that year and beyond, the federal government would still be running chronic and growing budget deficits (Fig. 6).⁴⁷

FIGURE 6: Revenue vs Spending by Type



Note: Projection is based on current policy and thus assumes current tax and spending policies remain in place even if they are scheduled to change or expire under the law as currently written.

Sources: Office of Management and Budget⁴⁸, Congressional Budget Office^{49,50}, Medicare Trustees Report⁵¹, Committee for a Responsible Federal Budget⁵², and PPI calculations

DISCRETIONARY AND MANDATORY SPENDING

Discretionary spending is appropriated annually by Congress and the president. This category of spending covers a wide array of government functions, split roughly in half between defense and non-defense “domestic” discretionary programs.⁵³ The latter contains virtually every non-defense, non-entitlement program in the federal budget, including many core functions of government such as federal law enforcement, environmental protection, and foreign relations that our country could not function without.⁵⁴ Even more importantly, discretionary spending includes funding for critical investments in our future that provide the building blocks for long-term economic growth, such as infrastructure, education, and scientific research. In Fiscal Year 2018, 31 percent of federal spending was discretionary.⁵⁵

Mandatory spending is determined by formulas set into law by previous Congresses.⁵⁶ Most mandatory spending goes toward social insurance programs that provide retirement and health care benefits, with the three largest programs being Social Security, Medicare, and Medicaid.⁵⁷ These programs are often referred to as “entitlements” because individuals are entitled to some benefit from these programs based on those predetermined formulas rather than the judgments of the current Congress. Unless Congress and the president make an active decision to change these formulas, mandatory spending continues on autopilot year after year. In FY 2018, 62 percent of federal spending was dedicated to mandatory programs (or 69 percent, if one includes interest payments that also operate on autopilot).⁵⁸

To control long-term budget deficits, policymakers need to tackle the unsustainable growth of mandatory spending programs. Unfortunately, the few serious attempts they've made at deficit reduction have instead been slashing discretionary spending to the bone. This most recently happened in 2011, when the annual budget deficit surpassed \$1 trillion for the third consecutive year following the 2008 financial crisis.⁵⁹ The causes of these rising deficits were more cyclical than structural, and the weak economy of 2011 was not one in which policymakers should have been rapidly raising taxes or cutting spending (as doing so could have sent the economy back into a recession).⁶⁰

But Congressional Republicans, having just won the control of the U.S. House of Representatives during a campaign in which they pledged to

balance the federal budget, threatened to force a default on the nation's debts unless President Obama agreed to cut one dollar of federal spending for every dollar they raised the federal debt limit.⁶¹ Failing to raise the debt limit could have forced the government to default on some of its obligations, so President Obama negotiated for months with House Speaker John Boehner to avoid this outcome.⁶² At the 11th hour, they agreed on bipartisan legislation to end the standoff: the Budget Control Act of 2011 (BCA).

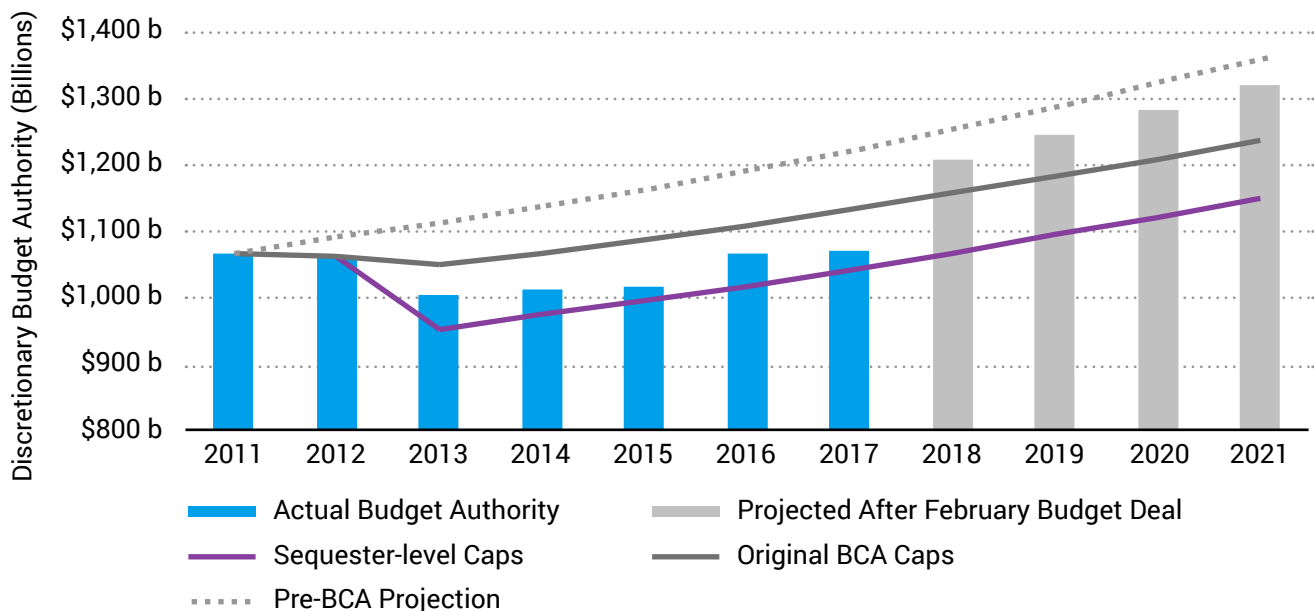
The BCA imposed caps on discretionary spending that were initially set to trim federal budget deficits by \$900 billion over the 10 years following their creation.⁶³ The BCA also created a “Joint Select Committee on Deficit Reduction” (also known as the “super committee”) that was

supposed to identify another \$1.2-1.5 trillion worth of budget cuts. Failure by the committee would trigger an across-the-board spending cut – called “sequestration” – to achieve the required savings, the vast majority of which were applied to discretionary spending programs.⁶⁴ Unfortunately, the super committee did fail and sequestration took effect in March 2013.

These deep cuts to discretionary spending were short lived because the spending caps were so tight as to be politically untenable. Congress subsequently raised the sequester-level spending

caps every year they were in effect, although discretionary spending remained significantly below the levels originally prescribed by the BCA until February 2018.⁶⁵ Once Republicans gained full control of Washington, they (along with many Democrats) supported a two-year budget deal that increased spending above not only sequester levels but also above the higher caps originally imposed by the Budget Control Act (**Fig. 7**).⁶⁶ In other words, the GOP couldn't even stomach having to enforce the spending caps they themselves had demanded.

FIGURE 7: Discretionary Spending Under Recent Frameworks



Note: Chart excludes discretionary spending not subject to BCA caps, such as the Overseas Contingency Operations (OCO) account. Figures shown are for budget authority, which differs from outlays because it reflects the legal authority for federal agencies to spend money rather than the actual funds spent.⁶⁷

Sources: Congressional Budget Office⁶⁸, Congressional Research Service⁶⁹, and PPI calculations

But even if these tight spending caps were politically sustainable, that approach to spending is shortsighted and would leave young Americans and future generations ill-equipped to deal with the challenges of tomorrow. The combination of growing mandatory spending and shrinking discretionary spending will leave

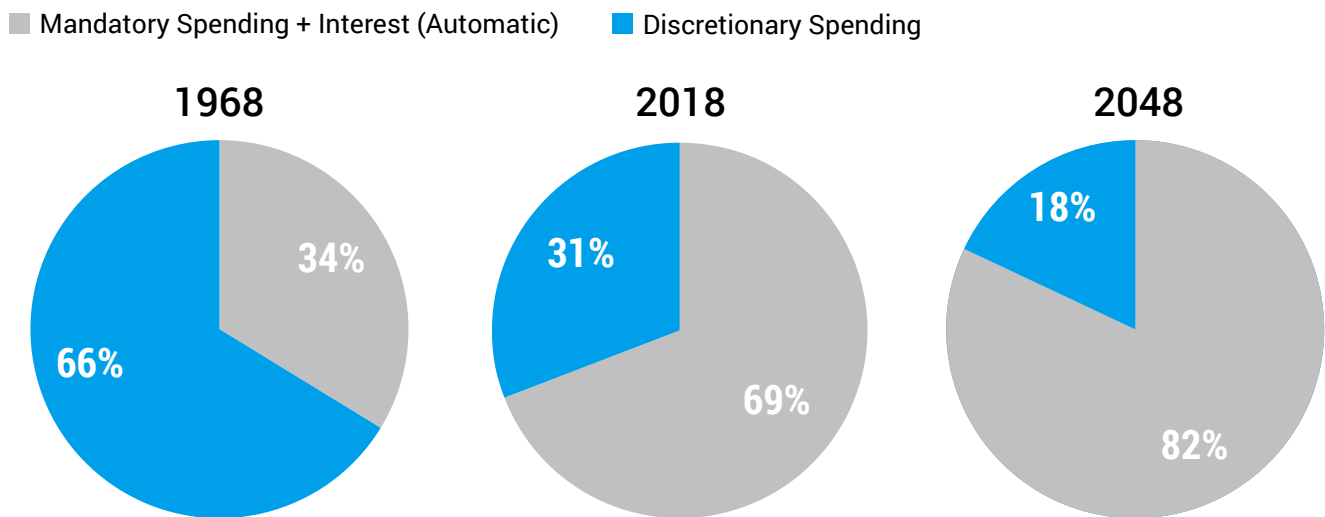
future politicians with less say over how their constituents' tax dollars are spent. Whereas the Congress of 1968 had the authority to appropriate 66 cents out of every dollar spent by the federal government, the Congress of 2048 will have the same authority over just 18 cents on our current trajectory (**Fig. 8**).

In effect, America's lawmakers are wearing fiscal handcuffs slapped on them by previous generations of politicians.

These handcuffs give future policymakers less fiscal flexibility to address unexpected crises, such as natural disasters and economic downturns. When the government is already running large chronic budget deficits, a relatively modest temporary increase will likely be of

limited use in stimulating a moribund economy. Recent research has shown that countries entering a downturn with large debt-to-GDP ratios have had less effective responses and more economic hardship than those that enter a downturn with more fiscal space.⁷⁰ In other words, America's strategic "fiscal reserve" is shrinking and leaving us unprepared to combat the next recession if and when it happens.

FIGURE 8: Mandatory vs. Discretionary Spending Over Time



Note: Projections are based on current policy and thus assume current tax and spending policies remain in place even if they are scheduled to change or expire under the law as currently written.

Sources: Office of Management and Budget⁷¹, Congressional Budget Office^{72,73}, Medicare Trustees Report⁷⁴, Committee for a Responsible Federal Budget⁷⁵, and PPI calculations

Beyond economic constraints, the politics of debt may also hinder the ability of future policymakers to promptly respond to crises. President Obama had difficulty building support for a stimulus plan when the nation's debt was half the size of the economy and his party had large majorities in both houses of Congress.⁷⁶ A president who inherits a national debt that's double the size of the economy is likely to have

even more political constraints responding to an economic downturn, thereby creating a needless amount of additional suffering for future workers. One estimate found that young adults who experienced long-term unemployment in the aftermath of the 2008 financial crisis lost an average of \$22,000 in earnings over the following decade.⁷⁷

Not only do deep cuts to discretionary spending fail to prevent these and other negative outcomes, they actively make those problems worse. Cutting taxes and discretionary spending while allowing mandatory spending to grow on autopilot faster than the economy is a recipe for disaster. Policymakers need to stop doing so and instead address the structural drivers of growing deficits and debt.

PUBLIC INVESTMENTS ARE BEING STARVED BY BAD BUDGETING

Unfortunately, broad-based caps on discretionary spending have become a “path of least resistance” for both parties because they allow policymakers to obscure the impact of their decisions. Whereas tax increases or cuts to entitlement programs have clear direct impacts on taxpayers and beneficiaries, tightening caps on discretionary spending has less tangible effects for the average voter, thereby allowing policymakers to delay or hide decisions about which programs will get cut.

But just because discretionary spending is less visible than mandatory spending doesn't make it any less important. Roughly half of domestic discretionary spending is for public investments that provide the building blocks for long-term economic growth, which can be divided into three categories: intellectual, physical, and human capital.

Intellectual Capital (Research and Development):

The federal government provides support for research and development activities that have societal benefits but are not profitable enough for private actors to do on their own. Just under one third of this funding goes to research conducted by government-run labs, while the remainder takes the form of public-private partnerships or grants to universities,

businesses, and other non-governmental research institutions.⁷⁸ R&D helps develop new technologies that improve our daily lives, maximize worker productivity, and maintain America's position as an international hub of innovation.

Federal R&D funding has contributed to many different technologies that benefit Americans in their everyday lives. Research by the Department of Energy has led to groundbreaking advancements in energy efficiency and renewable energy that save businesses and consumers billions of dollars on energy costs each year.⁷⁹ The National Institutes of Health helped develop MRI technology, modern treatments for cancer, and many other breakthroughs in medical research.⁸⁰ The algorithm powering the Google search engine was developed by students in a National Science Foundation fellowship program.⁸¹ Even R&D by the Department of Defense has contributed to the development of some technologies with domestic applications, including the Internet, GPS, and artificial intelligence.⁸²

These investments have enormous long-term benefits to our economy. An independent review of investments by the Office of Energy Efficiency and Renewable Energy, for example, estimated \$33 in economic benefits were generated for every \$1 spent by the Office on R&D.⁸³ A study of NIH's Human Genome Project found that it generated an astonishing \$178 for every \$1 spent, resulting in nearly \$1 trillion of additional economic growth.⁸⁴ Although not every public R&D project will generate such enormous gains, other analyses have found the return on R&D investment to average at least 30 percent.^{85,86}

Physical Capital (Infrastructure and Government Equipment):

Physical capital investments are assets purchased by the government that have an estimated useful life of greater than two years.⁸⁷ This includes both equipment for government use (such as computers and vehicles) and infrastructure networks that serve the general public (such as surface transportation and public utilities). Physical capital investments also include public buildings such as schools, hospitals, and public housing complexes. Some physical capital spending is done directly by the federal government, but almost two thirds of federal physical capital spending takes the form of grants to state and local governments and private contractors.⁸⁸ These investments support our economy by facilitating the free flow of goods and services.

Independent estimates by the American Society of Civil Engineers and McKinsey both found that the gap between what the United States should be spending on infrastructure and what it's currently projected to spend over the next decade is roughly \$1.4 trillion.^{89,90} ASCE estimated in 2016 that closing America's infrastructure deficit would grow GDP by nearly \$4 trillion, raising incomes for the average family by about \$3,400 per year.⁹¹ A 2014 study by the University of Maryland and the National Association of Manufacturers reached a similar conclusion, estimating that infrastructure investments sustained over time generate almost \$3 of additional economic output for every \$1 spent.⁹²

Investing in infrastructure not only strengthens our economy in the long term – it boosts economic growth by creating well-paying jobs today. Roughly one in ten workers are employed either developing or maintaining infrastructure, with wages for workers at the bottom of the earnings distribution that are approximately

30 percent higher than they would receive in other jobs requiring a comparable level of education (in part because on-the-job training and apprenticeships replace the need for a bachelor's degree).⁹³ Infrastructure investment thus has the added benefit of offering a middle-class lifestyle to millions of workers who may have less access to educational opportunities.

Human Capital (Education and Training):

Government investments at every level of education provide the foundation for a skilled workforce, which helps promote both economic growth and social mobility. The federal government provides critical support for elementary and secondary (K-12) education through grants to state and local governments. A 2015 study by Northwestern University calculated \$3 in economic benefits for every additional dollar invested in K-12 education. These benefits were even more pronounced for children from low-income families, whose schools receive greater federal support. For example, a 10 percent increase in funding for educating low-income children was associated with a 10 percent increase in high-school graduation rates, compared to a statistically insignificant 2 percent increase in graduation rates for children from affluent backgrounds. Additional support for K-12 education also resulted in higher lifetime earnings for students from low-income families, demonstrating that education is a critical factor in promoting economic opportunity for all.⁹⁴

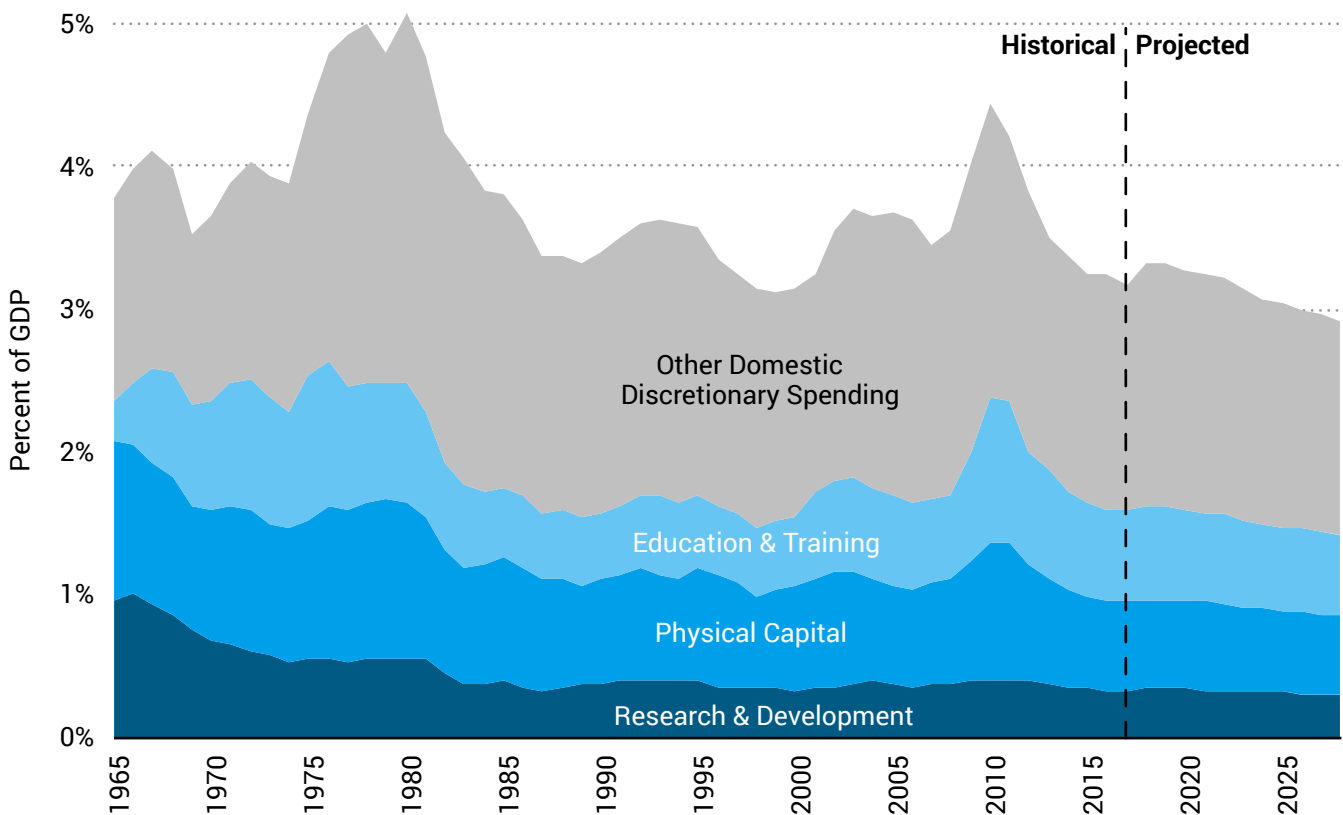
Federal support for higher/post-secondary education, meanwhile, mostly takes the form of loans to students (which must be paid back with interest) and grants (which do not need to be repaid).⁹⁵ Ensuring that talented students from families of all economic circumstances have access to higher education is also essential for

promoting economic mobility and empowering members of our workforce to realize their full potential. A Brookings study found that children from families in the bottom fifth of the income distribution have a 45 percent chance of remaining there during their adult lives if they don't have a college degree. By comparison, the same students had a roughly equal chance of winding up anywhere in the income distribution as adults if they did get a college degree.⁹⁶

Although results vary from student to student based on personal circumstances, research has shown that the lifetime return on investment

for an individual pursuing education beyond high school is double or triple what they would make investing a similar amount of money in the stock market.⁹⁷ There are also public benefits beyond those for the individual who gets the education, including increased worker productivity and higher tax revenue for the government. Investments in education help strengthen the nation's pool of human capital, allowing American workers to maximize their skills and compete for the best-paying jobs.⁹⁸ Federal education funding also includes some money for other worker training programs and social services.

FIGURE 9: Federal Public Investment Spending Over Time



Note: Total area equals non-defense discretionary spending. Education & training includes some mandatory funding for the Pell Grant program (about \$6 billion in 2018⁹⁹) and excludes federal student loan programs, which can be unpredictable and fluctuate from year to year based on repayment rates. Projections assume public investment changes at the same rate as total non-defense discretionary spending and that discretionary spending increases from the February 2018 budget deal are continued.

Sources: Office of Management and Budget^{100,101}, Congressional Budget Office^{102,103}, St. Louis Fed¹⁰⁴, Committee for a Responsible Federal Budget¹⁰⁵, and PPI calculations

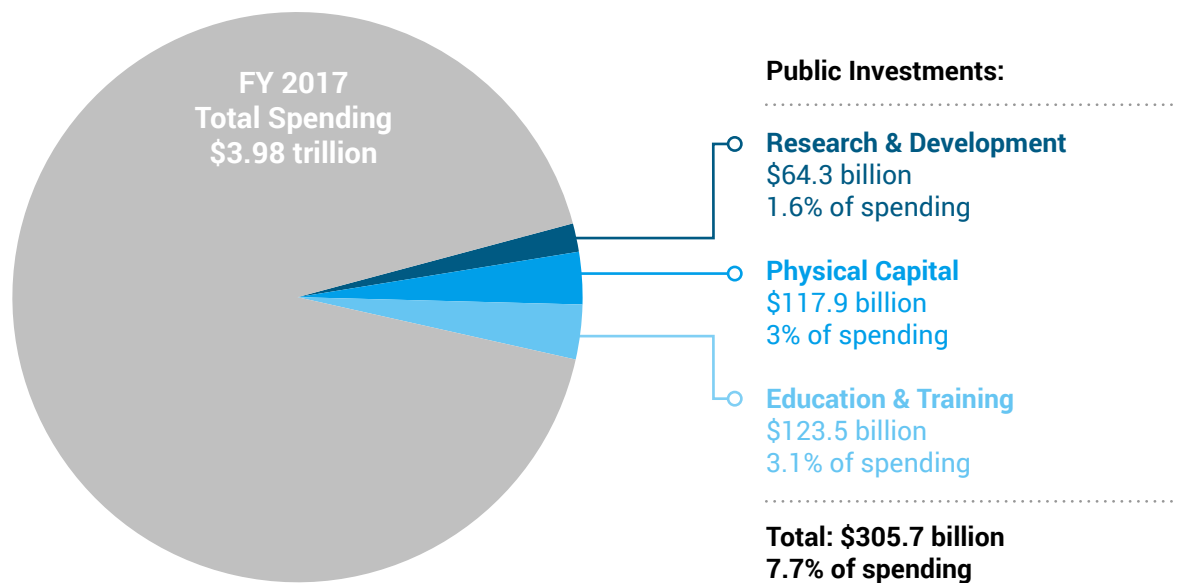
Throughout much of the post-WWII era, the United States maintained a robust commitment to these public investments. Between 1965 and 1980, total federal spending on public investment regularly equaled about 2.5 percent of GDP (which would have been roughly \$470 billion in 2017). But the deep cuts to discretionary spending imposed by policymakers over the past several years have taken their toll: federal spending on public investment was just over \$300 billion in 2017 – less than 1.5 percent of GDP (**Fig. 9**).¹⁰⁶ Excluding education and training (the one category of public investment spending that has increased since 1965), public investment spending is only about half of what it once was.

The prognosis for public investment is worse in the years ahead. Using the same methodology employed by CBO (which assumes public investment spending changes at the same rate total non-defense discretionary spending does under current law), PPI projects public investment spending will fall below its lowest level since the end of WWII in as little as five

years.¹⁰⁷ But even under current policy, which assumes the boost in spending from February's two-year budget deal is extended in perpetuity, public investment spending would still be projected to fall to its lowest level in modern history by 2026. At the same time, spending on annual interest payments – which is solely paying for the borrowing of previous generations – would be almost double the annual spending on all public investment *combined*.¹⁰⁸

Cutting public investment is profoundly shortsighted. The cost of these investments pales in comparison to the rest of the budget: in 2017, total public investment accounted for less than 8 percent of federal spending (**Fig. 10**). To put that in perspective, Social Security benefits alone cost three times as much as all public investment spending combined. Under current policies, the proportion of federal spending going to public investment could fall to less than 5 percent over the next 30 years. Even if policymakers eliminated public investment entirely, it would not be enough to close even a third of projected deficits.¹⁰⁹

FIGURE 10: Public Investment as a Share of Federal Spending



Source: Office of Management and Budget^{110,111}

Although the costs of public investment are comparatively small, the benefits can be enormous. Through public investment, the government can help improve worker productivity by helping them develop more advanced skills, improving and modernizing the infrastructure upon which businesses operate, and developing new technologies that help maximize efficiency. Robust public investment is America's best tool for offsetting the drag on economic growth from a stagnating labor force. By cutting these investments, policymakers are jeopardizing the long-term health of the U.S. economy. America cannot afford to continue down our current fiscal policy path if we want to have a vibrant and prosperous economy for generations to come.

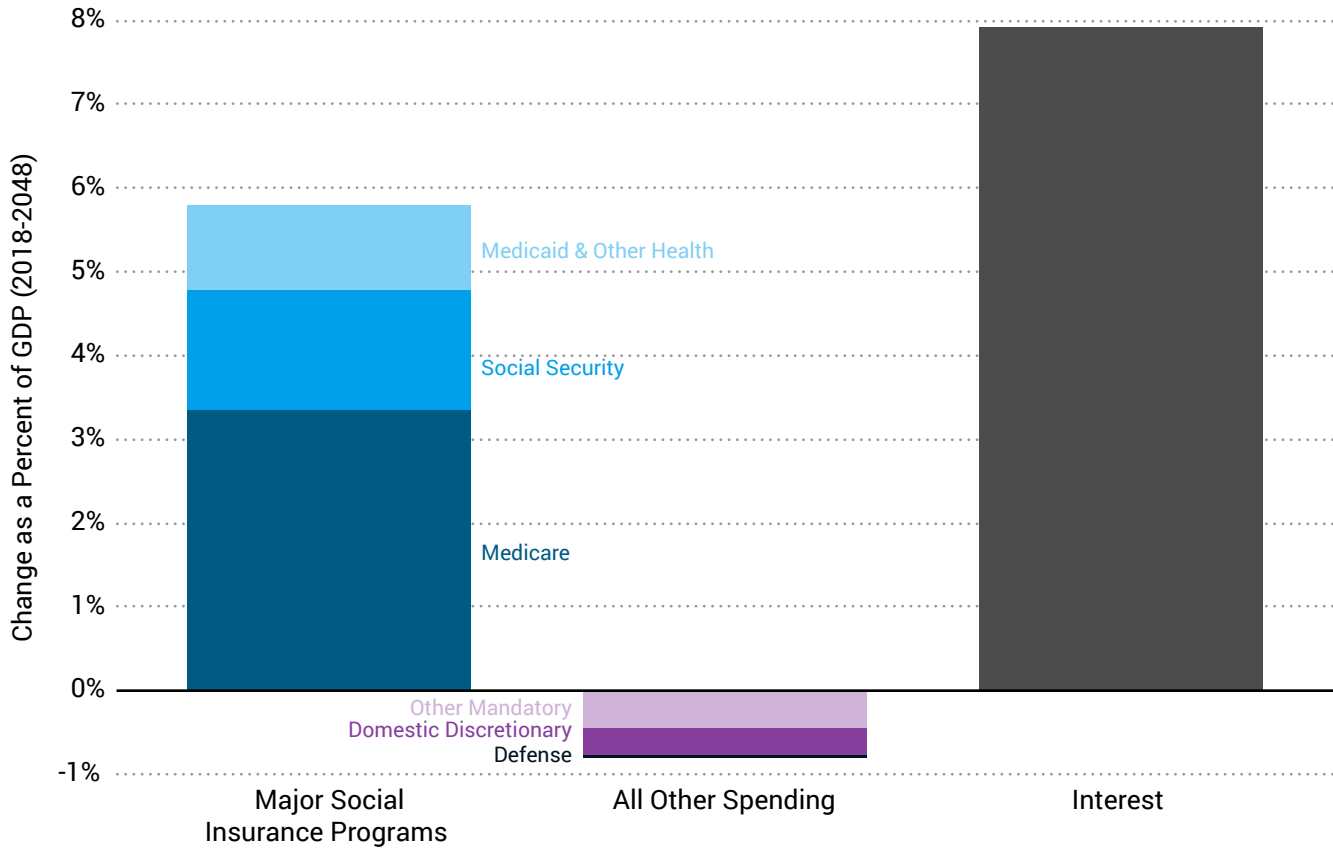
The two-year budget deal in February 2018 may have temporarily relieved the squeeze on public investment imposed by the Budget Control Act, but if policymakers don't tackle the growth of mandatory spending and raise adequate revenue to fund government services, the relief will be short-lived.¹¹² It will only be a matter of time before external pressures force policymakers to address the government's growing structural deficit as they did in 2011, and when that time

comes, the unfortunate reality is that they'll likely once again turn first to cutting discretionary spending and the public investments it funds.

SECURING PUBLIC INVESTMENTS REQUIRES FIXING HEALTH CARE AND RETIREMENT PROGRAMS

Controlling the growth of mandatory spending and preserving fiscal space for public investment requires making changes to the three largest programs in the federal budget: Social Security, Medicare, and Medicaid. Together, these three programs currently comprise over half of all federal spending and roughly 70 percent of mandatory spending.¹¹³ Over the next 30 years, spending on these programs is projected to grow from about 10 percent of GDP today to nearly 16 percent of GDP in 2048 if current policies are continued.¹¹⁴ Meanwhile, spending on other mandatory programs – including supports for lower-income people (such as SNAP) that many on the right are fond of cutting in the name of “welfare reform” – is actually projected to *decrease* relative to GDP, along with both categories of discretionary spending (**Fig. 11**).¹¹⁵

FIGURE 11: Change in Federal Spending Over the Next 30 Years



Note: Projection is based on current policy and thus assumes current tax and spending policies remain in place even if they are scheduled to change or expire under the law as currently written.

Sources: Congressional Budget Office^{116,117}, Medicare Trustees Report¹¹⁸, Committee for a Responsible Federal Budget¹¹⁹, and PPI calculations

The growth in the three largest mandatory spending programs is driven primarily by increasing longevity and the aging population that comes with it. The vast majority of spending on Social Security and Medicare (as well as roughly one sixth of Medicaid spending) goes to Americans aged 65 and older.^{127,128,129} Since 1965, when Social Security was a relatively new program and Medicare and Medicaid had just been created, life expectancy for Americans at age 65 has increased by roughly four years for women and six years for men. Over the next 30 years, it is projected to increase by another two years for each.¹³⁰ This essentially means the average American, if she or he retired at

age 65, would spend 30 to 60 percent longer in retirement than they did in 1965.

As America's population ages, the ratio of potential workers to retirees falls, thus increasing the burden of financing each retiree's benefits shouldered by working-age Americans. In 1965, there were 5.4 working-age Americans (those between the ages of 18 and 64) who could pay taxes to finance the benefits of each American aged 65 and older.¹³¹ But by 2050, the U.S. Census Bureau projects the ratio of working-age to retirement-age individuals could be as low as 2.6 to 1 – less than half what it was in 1965.¹³²

The cost of this demographic imbalance is further exacerbated by the growing cost of health care. The United States spends more on health care per person than almost any other country in the developed world, and our costs are growing rapidly.¹³³ CBO projects that, over the next 30 years, two thirds of the increase in

federal health care spending as a percentage of GDP will be due to rising per-person health costs.¹³⁴ Because older people tend to have more health problems than younger ones, the aging of the population magnifies the cost of our expensive health care system.

THE THREE MAJOR SOCIAL INSURANCE PROGRAMS: A PRIMER

Social Security consists of two components: Old Age and Survivors Insurance (OASI) and Disability Insurance (DI). OASI provides monthly income to old-age beneficiaries who worked in jobs covered by Social Security for 10 years or longer, as well as their spouses and children under the age of 18. Beneficiaries can claim benefits beginning at age 62 but receive a larger monthly benefit the later they wait to claim. DI provides income to eligible workers who experience a disability that prevents them from working for at least one year and the dependents of those beneficiaries. Social Security is funded by a 6.2 percent payroll tax paid both by workers and their employers on wages up to a taxable maximum (currently set at \$128,400).¹²⁰ In 2017, OASI paid \$799 billion in benefits to 51 million beneficiaries, while DI paid \$143 billion in benefits to 10 million beneficiaries.¹²¹

Medicare provides health insurance for Americans aged 65 and older and individuals receiving DI benefits. Medicare Part A (Hospital Insurance), which covers hospital services, nursing facilities, home health assistance, and hospice care, is primarily funded by premiums and a payroll tax of 1.45 percent paid by both workers and their employers. Medicare Part B (Supplemental Medical Insurance), which covers outpatient services and medical equipment, and Part D (Prescription Drug Benefits) together receive about one quarter of their funding from premiums, while the remainder is funded by general revenues. In 2017, Medicare spent \$710 billion on benefits for 58 million beneficiaries.¹²²

Medicaid provides health insurance for low-income individuals and families, as well as long-term care for older Americans with chronic conditions who have exhausted their personal savings. Unlike Medicare and Social Security, the federal government pays only a little over 60 percent of the cost of Medicaid – the remainder is paid by state governments, which are responsible for administering the program.¹²³ In many budget estimates, federal spending on Medicaid is combined with the Children's Health Insurance Program (CHIP), which provides free health insurance for children from low-income families, and subsidies from the Affordable Care Act that help lower- and middle-income individuals and families purchase private health insurance if they aren't provided it by their employer. Together, these programs cost the federal government \$439 billion in 2017 and provided benefits to 82 million beneficiaries.^{124,125,126}

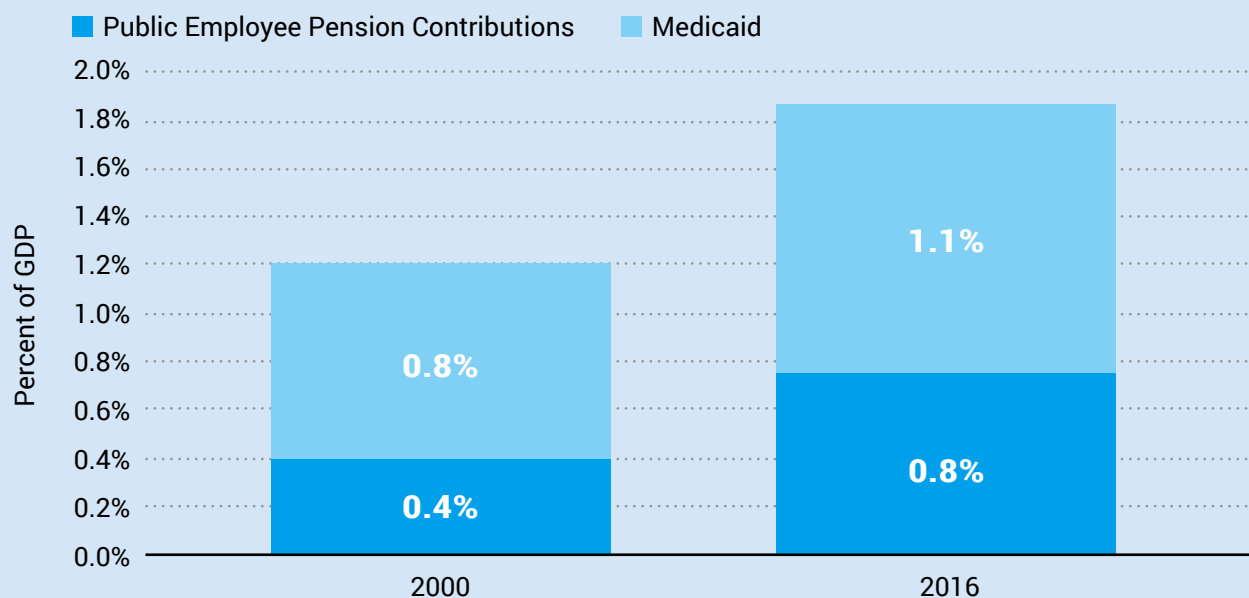
DEMOGRAPHIC CHALLENGES THREATEN PUBLIC INVESTMENT AT ALL LEVELS OF GOVERNMENT

The same demographic challenges that are affecting public investment at the federal level are pressuring state and local government budgets (**Fig. 12**). Many of these governments have growing unfunded pension liabilities: the total shortfall for state and local pensions reached \$1.4 trillion in 2016 after growing by 25 percent in just one year.¹³⁵ Like Social Security, promised benefits exceeded what could be paid with the contributions being put into these pension programs. State and local governments are also suffering from a declining ratio of active workers to retirees, which dropped from more than 2.4 in the early 2000s to just 1.4 today, making it harder to finance these underfunded benefits.¹³⁶

Additionally, state governments have had to contend with the rising cost of health care. States operate and provide roughly 37 percent of the funding for their Medicaid programs.¹³⁷ Medicaid covers older Americans who have exhausted their savings to pay for expensive medical treatment for chronic conditions, so as the country gets older and the costs of this care grow, Medicaid is consuming more state government revenue.¹³⁸

While these spending programs are putting pressure on state and local budgets, some states (such as Kansas and Oklahoma) have compounded the problem by passing large and ill-advised tax cuts. The result is a tightening vise that has squeezed out these state governments' abilities to make critical investments in infrastructure and education. Deep cuts to these programs have jeopardized the states' economic well-being and sparked massive public backlash – perhaps a harbinger of what is to come if federal policymakers continue down the same road.^{139,140}

FIGURE 12: State & Local Spending on Medicaid and Pensions



Note: Figure reflects the use of state and local government revenues only. Federal spending on Medicaid is excluded, as are employee contributions to government pension plans.

Sources: Census Bureau¹⁴¹, Center for Medicare and Medicaid Services¹⁴², and St. Louis Fed¹⁴³

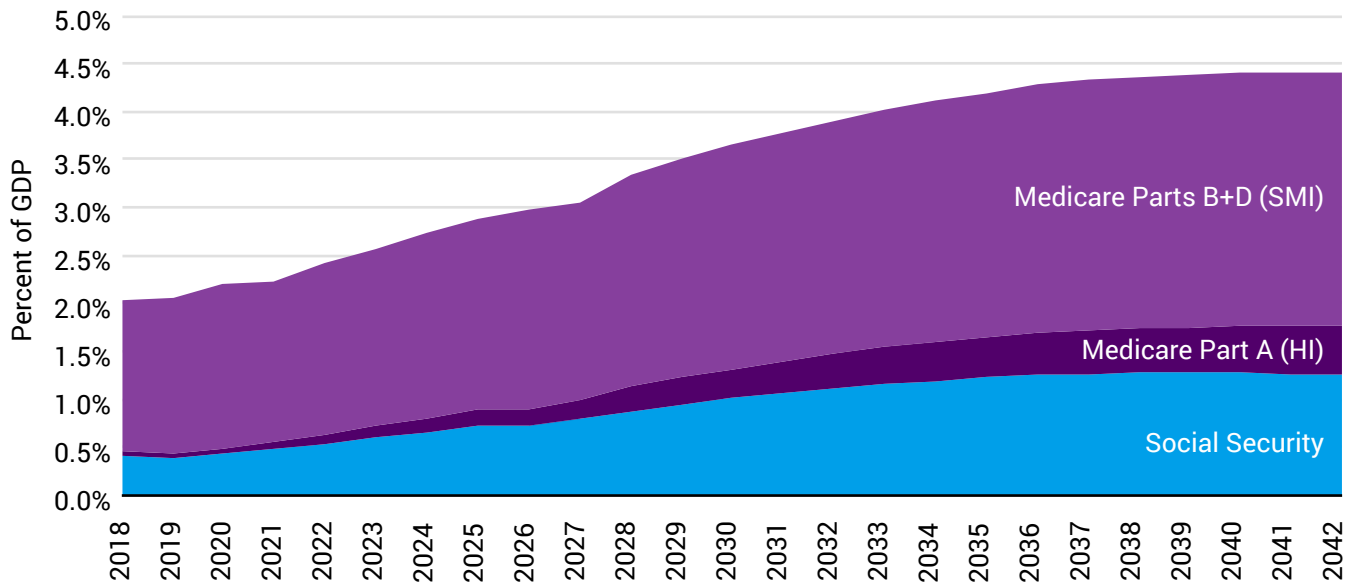
With fewer workers able to pay for the increasingly expensive benefits of each retiree, policymakers have a difficult choice to make: reduce the growth of per-person spending on retirement and health benefits or place a larger tax burden on current and future workers than it did on workers in previous generations. Unfortunately, misconceptions about the mechanism by which these programs are financed have led many (particularly on the left) to believe these tradeoffs can be delayed for decades. This could not be further from the truth.

The Treasury Department tracks dedicated revenues and spending for Social Security and Medicare through a mechanism known as “trust fund accounting.” In years when income from dedicated revenue sources exceeds spending for Social Security and Medicare, the Treasury Department credits the programs’ trust funds with the balance and uses it to finance general government deficits in lieu of borrowing from the private sector. In subsequent years, when program spending exceeds dedicated revenue, they can then draw upon these established surpluses to make up the shortfall with general revenues (taxes and other revenues collected by the government and not earmarked for a specific purpose). The Treasury also credits trust funds with interest on their remaining balance each year, even though their “assets” generate no real return for the government. If one counts the “intragovernmental debt” owed to these trust funds, the national debt stands at \$21.6 trillion – greater than the entire U.S. economy.¹⁴⁴

This form of accounting can be beneficial in programs where revenues and spending are roughly even over the long term but may fluctuate from year to year. Problems arise, however, when policymakers abuse trust fund accounting by structuring a program to run surpluses for several years and then descend into chronic deficits, as is happening with Social Security. Social Security ran \$1.2 trillion of surpluses between 1984 and 2009 and was also credited by the Treasury with over \$2 trillion of interest between 1984 and 2017. Going forward, however, the program is projected to consistently spend more than it takes in through dedicated revenues every year into the foreseeable future. These deficits are projected to total almost \$4 trillion between 2018 and 2034 (when both of Social Security's trust funds will be exhausted).¹⁴⁵

Some will argue there is no cost to these deficits because they come from Social Security's “trust fund” surpluses. But the trust fund's assets are also liabilities for the federal government because the U.S. Treasury borrows trust fund surpluses to finance general government operations. Since the trust fund is now running a cash-flow deficit, Treasury must either divert money from other spending commitments or borrow from the public to “pay back” what it has borrowed from the trust fund. In effect, this means Social Security is now drawing from the same general revenues needed to fund other government programs (**Fig. 13**). When the government abuses trust fund accounting, it's not investing in the future – it's simply borrowing money from itself and growing future budget deficits.

FIGURE 13: Projected Annual General Revenue Transfers to Major Trust Funds



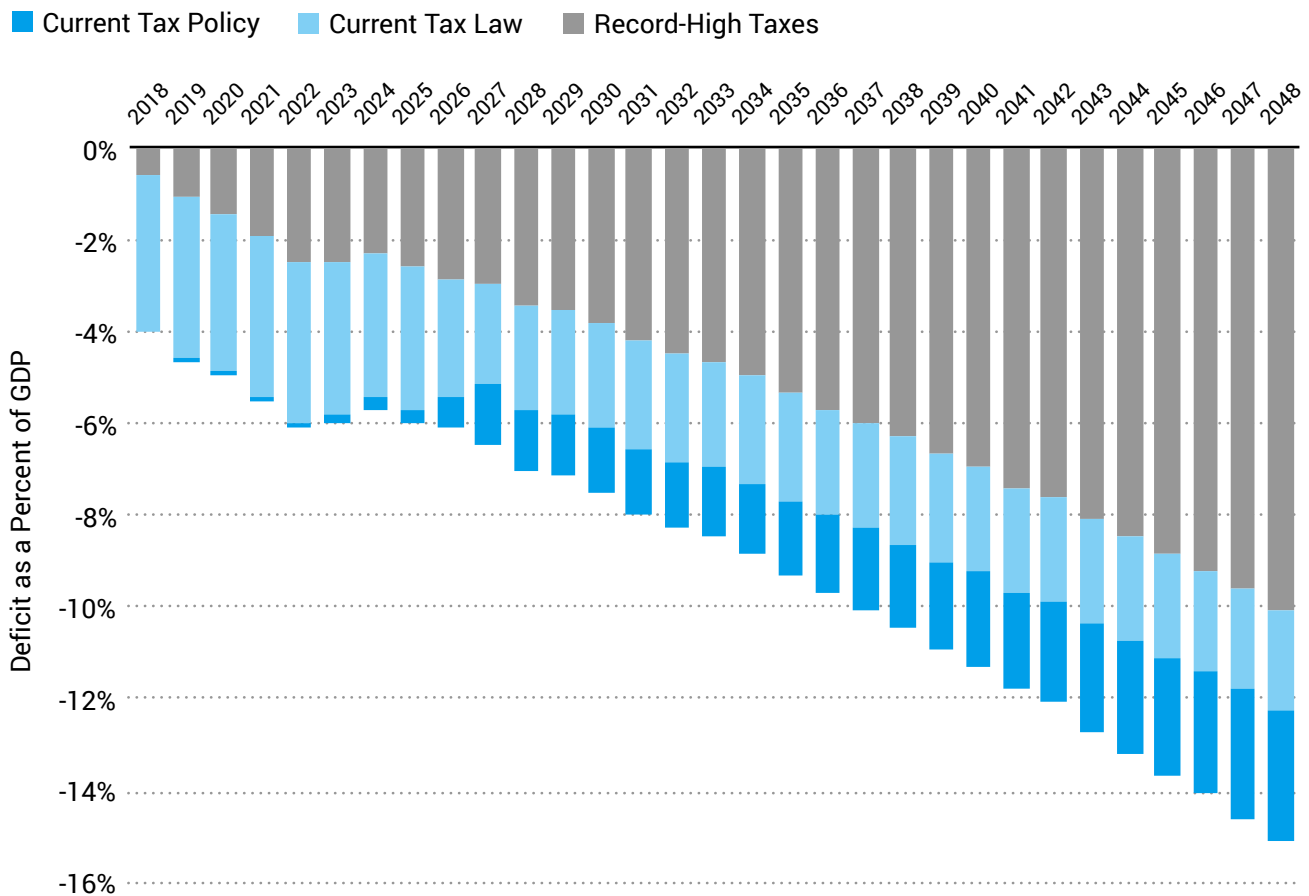
Note: Projections assume scheduled benefits continue to be paid even after associated trust funds are exhausted.

Sources: Social Security and Medicare Trustees Reports¹⁴⁶

The abuse of trust fund accounting doesn't just pose a challenge to taxpayers and policymakers – it also hurts beneficiaries who depend on the programs that utilize it. For example, if Congress fails to close the gap between payroll tax revenues and Social Security benefits, beneficiaries will have their benefits automatically cut by 21 percent under current law when the trust funds are exhausted in just 16 years.¹⁴⁷ The prospect of such a steep and sudden benefit cut makes it incredibly difficult for current workers to plan for retirement and risks throwing many vulnerable seniors who are already retired today into poverty.¹⁴⁸

There are no easy alternatives. The unaffordable tax cuts enacted over the past year can and should be reversed, as an aging society requires more revenue just to maintain current services. But raising taxes alone will not solve America's fiscal challenges. Under current-law projections, which assume most of the tax cuts enacted last year expire by 2025, future revenue is still woefully insufficient to cover the growing cost of mandatory spending programs, let alone the long-term public investments our economy desperately needs.¹⁴⁹ Even if federal taxes were immediately raised to their highest level since WWII (20 percent of GDP in 2000) and remained there indefinitely, deficits and debt would still be growing faster than GDP over the coming decades (**Fig. 14**).

FIGURE 14: Projected Deficits Under Different Revenue Scenarios



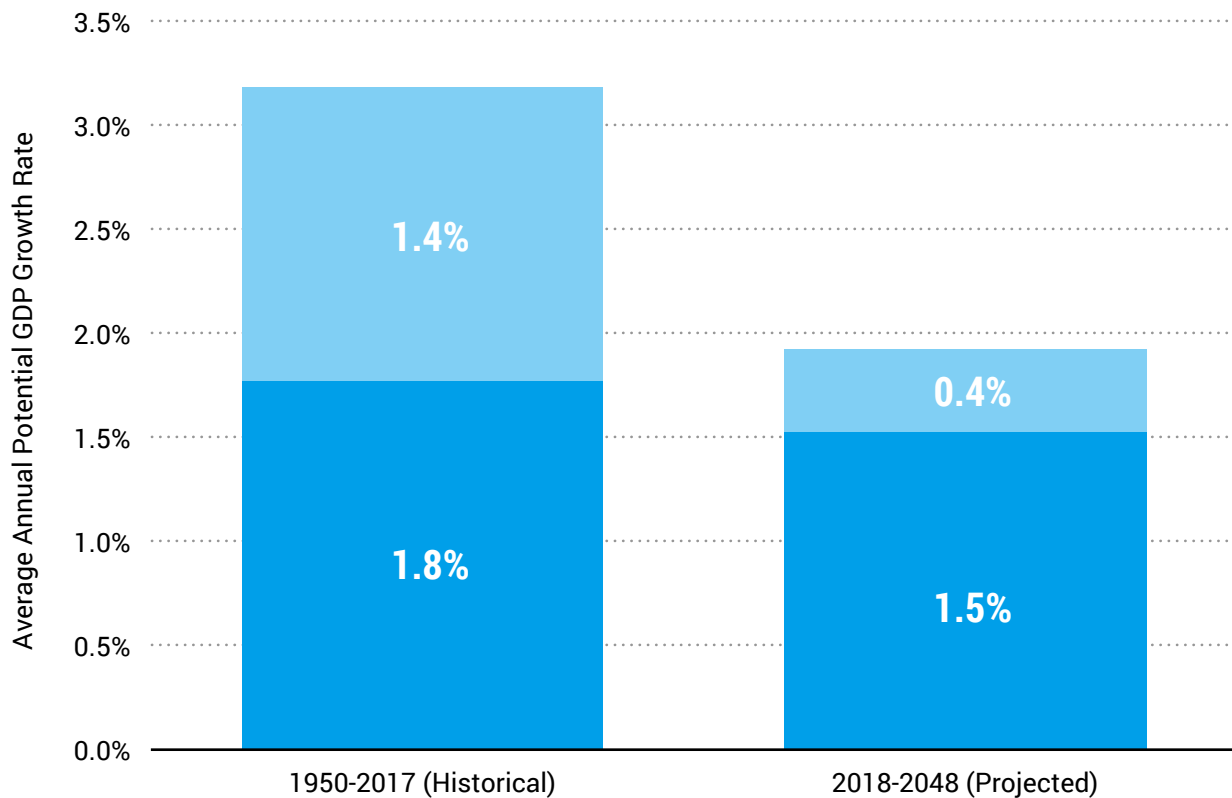
Note: All projections assume current policy spending levels. Current Tax Law assumes tax provisions that are scheduled to expire under the law as currently written are allowed to do so, while Current Tax Policy assumes these provisions are extended. The Record-High Taxes scenario projects what the annual deficit would be if federal revenues were consistently equal to 20 percent of GDP (which was their highest level since World War II) beginning in 2018.

Sources: Office of Management and Budget¹⁵⁰, Congressional Budget Office^{151,152}, Medicare Trustees Report¹⁵³, Committee for a Responsible Federal Budget¹⁵⁴, and PPI calculations

Nor can we hope to grow our way out of this debt dilemma. The same demographic challenges that are driving up the cost of social insurance programs will limit the ability of economic growth to shrink our country's debt-to-GDP ratio in the same way it did following WWII. Growth in potential GDP (the size of our economy when all resources are being most efficiently used) is determined by two factors: the size of the labor force and the productivity

of individual workers within it. Over the next 30 years, productivity growth is projected to be slightly below historical levels. But the potential size of the labor force, which accounted for nearly half of potential GDP growth between 1950 and 2017, will grow at just one third of the historical rate, as the departure of older Americans from the labor force happens at a faster pace than young workers entering it (Fig. 15).¹⁵⁵

FIGURE 15: Components of Potential GDP Growth



Source: Congressional Budget Office¹⁵⁶

Governments have some tools to modestly increase the size of the labor force, but they cannot repeal fundamental demographic trends. For example, they can use social policies (such as the Child Tax Credit) to encourage couples to have children, which creates more future workers down the line. The federal government could liberalize immigration policies to bring in more young workers from abroad. Policymakers could also make changes to retirement programs that give older workers more economic incentives to keep working. However, there is currently strong political opposition to many of these changes, and even implementing optimal public policy across these areas would

be highly unlikely to return the United States to its historical economic growth rate.¹⁵⁷ There's no doubt that higher revenues and increased economic growth would improve our nation's fiscal health, but it would take an extraordinary leap in productivity growth to offset the coming decline in the U.S. labor force. There is no substitute for tackling the growing burden of mandatory spending.

For too long, members of both parties – but particularly Democrats – have reflexively opposed making any changes to social insurance programs for fear of how reforms would impact vulnerable beneficiaries. Fortunately, there are a number of ways to tackle

the growth of social insurance programs that not only maintain but actually improve progressivity. Several bipartisan commissions have offered recommendations that would reduce the growth of overall spending while simultaneously increasing benefits for people who depend on them most.^{158,159,160} These commission proposals have often included recommendations for pro-growth tax reforms that would both increase progressivity and federal revenues. Enacting a balanced package of proposals along these lines would be to the benefit of all Americans.

THE SHORTSIGHTED STATUS QUO IS SHORTCHANGING YOUNG AMERICANS

The baby boomer generation enjoyed unprecedented prosperity during their working lives thanks to the public investments made by previous policymakers in the years following WWII. But instead of following their example and continuing to invest in America's future, this generation cut their own taxes while promising themselves generous retirement benefits paid for by future workers. The shortsighted budgeting of today's policymakers is shortchanging Generation X, millennials, their children, and those who come after them.

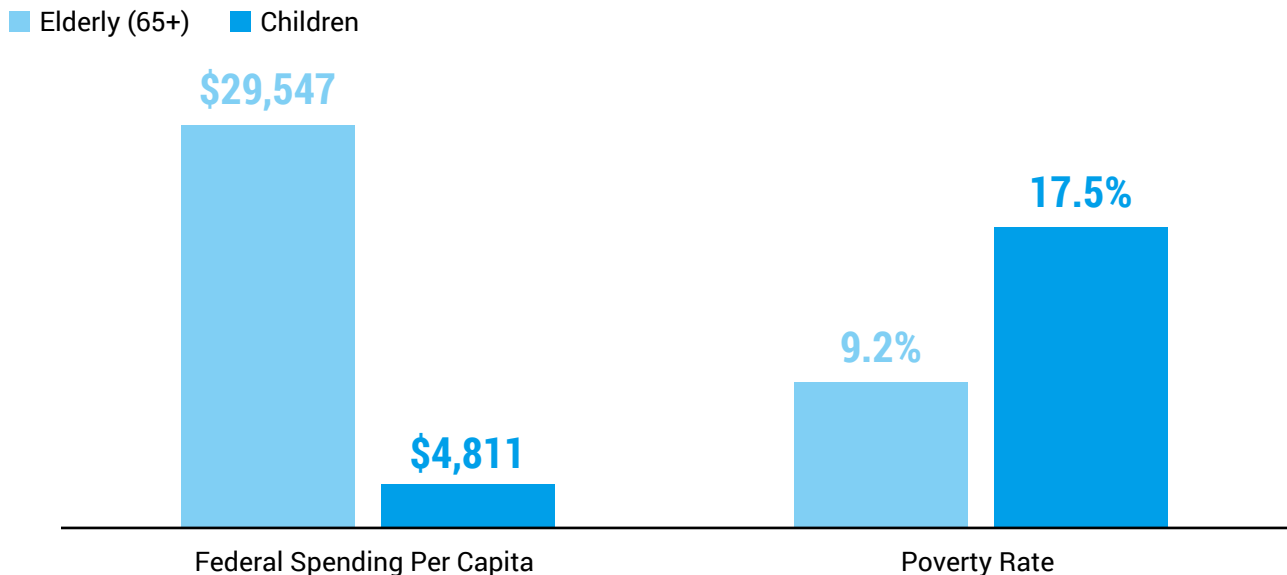
This intergenerational neglect is made worse by the fact that younger Americans today are already starting from a somewhat worse financial position than their parents and grandparents did. Real wages for young American workers today are 20 percent less on average than they were for baby boomers at a comparable point in their careers.¹⁶¹ As a result, the average 30-year-old today has only a 50

percent chance of earning a better living than his or her parents did (compared to 90 percent for those who were born during the baby boom).¹⁶² Millennials have also accumulated only half the net wealth baby boomers had at the same age despite the fact that a greater share of millennials are saving for retirement.¹⁶³

Our current public policy trajectory is set to exacerbate these intergenerational inequities. As the baby boomers move into retirement, the federal government is spending nearly \$30,000 a year per elderly American (those aged 65 and older). Federal spending on children, meanwhile, is less than one sixth of that amount. Even taking into account state and local government spending, which includes public schools and other programs that benefit primarily children, government support for children is still less than half what it is for older Americans.¹⁶⁴

Such a disparity might be justified if older Americans were in more need of assistance than children. Yet the poverty rate for children in the United States today is nearly double what it is for Americans aged 65 and older (**Fig. 16**).¹⁶⁵ Allowing such a high child-poverty rate to persist is particularly shortsighted of today's policymakers because the effects will create a long-term burden for decades to come. Children who grow up in poverty are four times as likely to commit crimes and can have average lifetime earnings up to \$100,000 lower than those who do not.^{166,167} Investing in these children is an investment in the future health of our economy and our society.

FIGURE 16: Federal Spending and Poverty Rates by Age



Note: Spending figures are for 2015 but have been adjusted for inflation to 2017 dollars. Poverty rate is for 2017.

Sources: Urban Institute¹⁶⁸ and Census Bureau¹⁶⁹

But instead of being able to make these and other important investments, policymakers will be constrained by automatic-spending social insurance programs that are pre-committing future revenue to benefits for relatively privileged baby boomers. Interest costs will grow, too, thanks to a refusal by the taxpayers of today and yesterday to adequately pay for these and other public services they demanded of their government. This erosion of “fiscal freedom” robs future democratically elected officials of their ability to respond to the changing policy priorities of their taxpaying constituents. Simply asking those constituents to pay higher taxes, while denying them a say in how those taxes are spent, is fundamentally undemocratic.

Meanwhile, the impact of rising debt could have enormous consequences for the American economy. As the government borrows more money from the public, lenders will be investing a greater share of their savings in government debt. This reduces the pool of loanable funds

available for private borrowers, driving up interest rates across the board as borrowers increasingly compete against the government for capital. Rising interest rates make everything from student loans to mortgages more expensive, thereby limiting the ability of individuals and businesses to invest in their future.¹⁷⁰

What does this mean in real terms for future workers? CBO estimates that allowing our irresponsible fiscal policy to continue as it would under current law could reduce the size of our economy by \$2,500 per person per year come 2048.¹⁷¹ The Committee for a Responsible Federal Budget, meanwhile, estimates this figure could be more than twice that size on our current policy trajectory.¹⁷²

The longer we wait to address the problem, the harder it will be to solve. Rising interest costs widen the gap between spending and revenue, thereby requiring more borrowing – which itself leads to higher interest costs. At some point

this vicious spiral could eventually trigger a crisis if investors lose confidence in the ability of the United States to effectively manage our debt burden. Although the Federal Reserve does have some tools available to keep interest rates low and forestall such a crisis, using them in a normal economic period of relatively low unemployment would likely cause the rate of inflation to spike and eventually lead to the same outcome.¹⁷³ Only through responsible fiscal policy changes can policymakers avert a dismal choice between skyrocketing inflation and interest rates.

CONCLUSION: AMERICA MUST ADOPT A FISCALLY RESPONSIBLE PUBLIC INVESTMENT AGENDA

The United States can't afford to continue down our current path. Doing so would leave today's young people with a national debt more than twice the size of the economy they inherit. Government interest payments alone would cost them trillions of dollars each year, dwarfing spending on important core functions of government. Four out of every five dollars future taxpayers send to Washington would be spent without the input of their elected representatives, whose ability to respond to pressing national needs would be severely limited. Neither progressives (who want more social spending) nor conservatives (who want lower taxes) will benefit from a federal budget that has no room for either because it is stuck paying for the policies of the past.

As Donald Trump and Congressional Republicans abandon any pretense of fiscal responsibility, the time is right for Democrats

to offer a new progressivism that invests in our country without leaving the bill to young Americans. In the coming months, PPI will propose a series of specific policies to put our country on this better and more progressive fiscal path. We can invest in groundbreaking scientific research that will one day lead to advanced technologies we can't even imagine yet. We can build modern infrastructure networks that remove all barriers to commerce and expand economic opportunity to every community in America. We can give every child the education they need to pursue the career of their dreams no matter their background. We can enable future generations to enjoy the same social and economic opportunities afforded to their parents.

This America is within reach, but it requires voters to demand political courage from our leaders today. We must demand they modernize social insurance programs for 21st-century demographics to both strengthen the social safety net and preserve space in the federal budget for other important government programs. We must demand they design a fairer and simpler tax code that raises enough revenue to pay for the services needed by their constituents. And we must demand they renew our nation's commitment to public investment today to lay the groundwork for a better world tomorrow.

America can have a bright and prosperous future – we just need to fund it.

References

- 1 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 44, 77. April 2018. <https://www.cbo.gov/system/files?file=115th-congress-2017-2018/reports/53651-outlook.pdf>
- 2 Nelson, Louis, "Trump: 'I'm the King of Debt'." *Politico*. June 22, 2016. <https://www.politico.com/story/2016/06/trump-king-of-debt-224642>
- 3 Ritz, Ben. "PPI Analysis of CBO's 2018 Budget and Economic Outlook." *Progressive Policy Institute*. April 10, 2018. <https://www.progressivepolicy.org/projects/center-for-funding-americas-future/ppi-analysis-of-cbos-2018-budget-and-economic-outlook/>
- 4 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 81.
- 5 Gardner, Lauren, Brianna Gurciullo, and Jeremy C.F. Lin. "The Winding Road to Trump's Infrastructure Plan." *Politico*. January 30, 2018. <https://www.politico.com/interactives/2018/infrastructure-timeline/>
- 6 "Historical Tables." *Office of Management and Budget*, Tables 8.1, 9.5, 9.6, 9.8, 9.9. <https://www.whitehouse.gov/omb/historical-tables/>.
- 7 "Supplemental Materials: Public Budget Database Outlays." *Office of Management and Budget*. <https://www.whitehouse.gov/omb/supplemental-materials/>.
- 8 "The Long-Term Budget Outlook Under Alternative Scenarios for Fiscal Policy." *Congressional Budget Office*, 3. August 8, 2018. <https://www.cbo.gov/publication/54325>.
- 9 "Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers." *Centers for Medicare & Medicaid Services*, 15. June 5, 2018. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/2018TRAlternativeScenario.pdf>.
- 10 "CBO's 2018 Long-Term Budget Outlook." *Committee for a Responsible Federal Budget*. June 26, 2018. <http://www.crfb.org/papers/cbos-2018-long-term-budget-outlook>. (Underlying data provided by authors.)
- 11 Riedl, Brian. "America might be ready for democratic socialism. It's not ready for the bill." *Vox*. August 7, 2018. <https://www.vox.com/the-big-idea/2018/8/7/17658574/democratic-socialism-cost-medicare-college-sanders-deficits-taxes>
- 12 "Monthly Budget Review for September 2018." *Congressional Budget Office*, 1. October 2018. <https://www.cbo.gov/system/files?file=2018-10/54551-MBR.pdf>
- 13 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 4.
- 14 "The Debt to the Penny and Who Holds It." *TreasuryDirect*. <https://www.treasurydirect.gov/NP/debt/current>.
- 15 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 44, 67. April 2018.
- 16 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, 1. June 2018. <https://www.cbo.gov/system/files?file=2018-06/53919-2018ltbo.pdf>.
- 17 Russek, Frank, Kim Kowalewski. "How CBO Estimates Automatic Stabilizers." *Congressional Budget Office*, 1. November 2015. <https://bit.ly/2NCdHSS>.

- 18 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, 8-10.
- 19 "Historical Tables." *Office of Management and Budget*, Table 1.2.
- 20 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, Figure 3.
- 21 "Historical Tables." *Office of Management and Budget*, Table 1.2.
- 22 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 4.
- 23 *Ibid.*, 2.
- 24 "Historical Tables." *Office of Management and Budget*, Table 1.2.
- 25 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, Figure 2.
- 26 "The Long-Term Budget Outlook Under Alternative Scenarios for Fiscal Policy." *Congressional Budget Office*, 3.
- 27 "Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers." *Centers for Medicare & Medicaid Services*, 15.
- 28 "CBO's 2018 Long-Term Budget Outlook." *Committee for a Responsible Federal Budget*. (Underlying data provided by authors.)
- 29 Hadley, Mark. "How Does CBO Prepare Its Baseline Projections and Cost Estimates?" *Congressional Budget Office*. February 7, 2018. <https://www.cbo.gov/publication/53550>.
- 30 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 106.
- 31 *Ibid.*, 90.
- 32 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, 26.
- 33 Crandall-Hollick, Margot L. "An Overview of the Tax Provisions in the American Taxpayer Relief Act of 2012." *Congressional Research Service*. January 10, 2013. <https://fas.org/sgp/crs/misc/R42894.pdf>
- 34 PPI calculations based on data from the Congressional Budget Office, the Medicare Chief Actuary, and the Committee for a Responsible Federal Budget. PPI's current policy baseline assumes that both the 2017 tax cuts and 2018 discretionary spending increases are made permanent (per the Congressional Budget Office's Alternative Fiscal Scenario) and that health spending grows consistent with the Medicare Chief Actuary's illustrative scenario.
- 35 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, Figure 2.
- 36 "The Long-Term Budget Outlook Under Alternative Scenarios for Fiscal Policy." *Congressional Budget Office*, 3.
- 37 "Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers." *Centers for Medicare & Medicaid Services*, 15.
- 38 "CBO's 2018 Long-Term Budget Outlook." *Committee for a Responsible Federal Budget*. (Underlying data provided by authors.)
- 39 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 62.
- 40 PPI calculations based on the current policy baseline.
- 41 "IMF Fiscal Monitor: Capitalizing on Good Times." *International Monetary Fund*, 113. April 2018. <http://www.imf.org/en/Publications/FM/>

Issues/2018/04/06/fiscal-monitor-april-2018#Methodological%20&%20Statistical%20Appendix.

42 Ibid.

43 "Labor Force Statistics from the Current Population Survey: Unemployment Rate." *Bureau of Labor Statistics*. <https://data.bls.gov/timeseries/LNS14000000>.

44 Blinder, Alan. "Why Now Is the Wrong Time to Increase the Deficit." *Wall Street Journal*. January 30, 2018. <https://www.wsj.com/articles/why-now-is-the-wrong-time-to-increase-the-deficit-1517355559>.

45 "Labor Force Statistics from the Current Population Survey: Unemployment Rate." *Bureau of Labor Statistics*.

46 PPI calculations based on the current policy baseline.

47 "The Budget and Economic Outlook: 2018 to 2028." Historical Data.

48 "Historical Tables." *Office of Management and Budget*, Table 1.2.

49 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, Figure 2.

50 "The Long-Term Budget Outlook Under Alternative Scenarios for Fiscal Policy." *Congressional Budget Office*, 3.

51 "Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers." *Centers for Medicare & Medicaid Services*, 15.

52 "CBO's 2018 Long-Term Budget Outlook." *Committee for a Responsible Federal Budget*. (Underlying data provided by authors.)

53 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 44.

54 "Policy Basics: Non-Defense Discretionary Programs." *Center on Budget and Policy Priorities*. August 14, 2017. <https://www.cbpp.org/research/federal-budget/policy-basics-non-defense-discretionary-programs>.

55 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 81.

56 "What is the difference between mandatory and discretionary spending?" *Congressional Budget Office*. <https://www.cbo.gov/content/what-difference-between-mandatory-and-discretionary-spending>.

57 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 48-49.

58 Ibid, 81.

59 "Historical Tables." *Office of Management and Budget*, Table 1.1.

60 "It's Important to Distinguish Between Short-Term Cyclical Deficits and Long-Term Structural Deficits." *The Concord Coalition*. July 27, 2017. <https://www.concordcoalition.org/blog-post/its-important-distinguish-between-short-term-cyclical-deficits-and-long-term-structural>.

61 Cillizza, Chris and Rachel Weiner. "John Boehner throws down gauntlet on debt limit fight." *The Washington Post*. May 10, 2011. https://www.washingtonpost.com/blogs/the-fix/post/john-boehner-throws-down-gauntlet-on-debt-limit-fight/2011/05/09/AFGRMgG_blog.html?noredirect=on&utm_term=.f9ca00f55377.

62 "The Debt Limit at 100: What you need to know." *Bipartisan Policy Center*. <https://bipartisanpolicy.org/library/the-debt-limit-at-100/>.

- 63 Elmendorf, Douglas W. "Budget Control Act Aug 1." *Congressional Budget Office*, 3. August 1, 2011. <https://www.cbo.gov/sites/default/files/112th-congress-2011-2012/costestimate/budgetcontrolactaug1.pdf>.
- 64 Driessen, Grant A. and Megan S. Lynch. "The Budget Control Act: Frequently Asked Questions." *Congressional Research Service*, 1-2. February 23, 2018. <https://fas.org/sgp/crs/misc/R44874.pdf>.
- 65 Ibid, 11.
- 66 Ibid, 5, 9-11.
- 67 Ibid, 8.
- 68 Elmendorf, Douglas W. "Discretionary Spending Testimony." *Congressional Budget Office*, 18, 23. October 26, 2011. http://www.cbo.gov/sites/default/files/cbofiles/attachments/10-26-DiscretionarySpending_Testimony.pdf.
- 69 Driessen, Grant A. and Megan S. Lynch. "The Budget Control Act: Frequently Asked Questions." *Congressional Research Service*, 11.
- 70 Romer, Christina D. and David H. Romer. "Why some times are different: Macroeconomic policy and the aftermath of financial crises." *University of California, Berkeley*, 39. October 2017. <https://eml.berkeley.edu/~dromer/papers/Romer&RomerCrisesandPolicyRevised.pdf>.
- 71 "Historical Tables." *Office of Management and Budget*, Table 1.2.
- 72 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, Figure 2.
- 73 "The Long-Term Budget Outlook Under Alternative Scenarios for Fiscal Policy." *Congressional Budget Office*, 3.
- 74 "Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers." *Centers for Medicare & Medicaid Services*, 15.
- 75 "CBO's 2018 Long-Term Budget Outlook." *Committee for a Responsible Federal Budget*. (Underlying data provided by authors.)
- 76 Amira, Dan. "Gang of Senate Moderates Roughs Up the Stimulus Bill." *New York Magazine*. February 6, 2009. http://nymag.com/daily/intelligencer/2009/02/post_12.html.
- 77 "National Patterns of R&D Resources: 2015-16 Data Update." National Science Foundation, Table 6. May 21, 2018. <https://www.nsf.gov/statistics/2018/nsf18309/#chp2>.
- 78 "Historical Tables." *Office of Management and Budget*, Table 9.8.
- 79 "From Lab to Market: Examples of Clean Energy R&D." *Department of Energy*. <https://www.energy.gov/R%26D>.
- 80 "Chronology of Events." *National Institutes of Health*. October 27, 2016. <https://www.nih.gov/about-nih/what-we-do/nih-almanac/chronology-events>.
- 81 Hart, David. "On the Origins of Google." *National Science Foundation*. August 17, 2004. https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=100660.
- 82 "DARPA Accomplishments: Seminal Contributions to National Security." *Defense Advanced Research Projects Agency*. October 2015. <https://www.darpa.mil/attachments/DARPAAccomplishmentsSeminalContributionsToNationalSecurity.pdf>.
- 83 Dowd, Jeff. "Aggregate Economic Return on Investment in the U.S. DOE Office of Energy Efficiency and Renewable Energy." *U.S. Department of Energy*, 2. October 2017. <https://www.energy.gov/sites/prod/files/2017/11/f39/Aggregate%20ROI%20impact%20for%20EERE%20RD%20-%202010-31-17.pdf>.

- 84 "The Impact of Genomics on the U.S. Economy." *Battelle Technology Partnership Practice for United for Medical Research*. June 2013. https://web.ornl.gov/sci/techresources/Human_Genome/publicat/2013BattelleReportImpact-of-Genomics-on-the-US-Economy.pdf.
- 85 Jones, Charles I and John C. Williams. "Measuring the Social Return to R&D." *Federal Reserve*. February 1997. <https://www.federalreserve.gov/pubs/feds/1997/199712/199712pap.pdf>.
- 86 "Rates of return to investment in science and innovation." *Frontier Economics*, 25. June 2014. <https://www.frontier-economics.com/documents/2014/07/rates-of-return-to-investment-in-science-and-innovation.pdf>.
- 87 "Federal Investment." *Congressional Budget Office*, 2. December 2013. <http://www.cbo.gov/sites/default/files/cbofiles/attachments/44974-FederalInvestment.pdf>.
- 88 "Historical Tables." *Office of Management and Budget*, Tables 9.5, 9.6.
- 89 "Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future." *American Society of Civil Engineers*, 11. 2016. <https://www.infrastructurereportcard.org/wp-content/uploads/2016/10/ASCE-Failure-to-Act-2016-FINAL.pdf>
- 90 Woetzel, Jonathan, Nicklas Garemo, Jan Mischke, Priyanka Kamra, and Robert Palter. "Bridging infrastructure gaps: Has the world made progress?" *McKinsey & Company*, 5. <https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/bridging-infrastructure-gaps-has-the-world-made-progress>.
- 91 "Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future." *American Society of Civil Engineers*, 26.
- 92 Werling, Jeffrey and Ronald Horst. "Catching Up: Greater Focus Needed to Achieve a More Competitive Infrastructure." *National Association of Manufacturers*, 45. September 2014. <http://www.nam.org/Issues/Infrastructure/Surface-Infrastructure/Infrastructure-Full-Report-2014.pdf>.
- 93 Kane, Joseph and Robert Puentes. "Beyond Shovel-Ready: The Extent and Impact of U.S. Infrastructure Jobs." *The Brookings Institution*, 1. May 9, 2014. <https://www.brookings.edu/interactives/beyond-shovel-ready-the-extent-and-impact-of-u-s-infrastructure-jobs/>.
- 94 Jackson, C. Kirabo, Rucker C. Johnson, and Claudia Persico. "The Effects of School Spending on educational and Economic Outcomes: Evidence from School Finance Reforms." *Oxford Academic*. October 1, 2015. <https://academic.oup.com/qje/article/131/1/157/2461148>.
- 95 "Federal Aid for Postsecondary Students." *Congressional Budget Office*, 8-9. June 2018. <https://www.cbo.gov/system/files?file=2018-06/53736-postsecondarystudentaid.pdf>.
- 96 Haskins, Ron, Harry Holzer, and Robert Lerman. "Promoting Economic Mobility by Increasing Postsecondary Education." *Pew Charitable Trusts*, 10. May 2009. http://www.pewtrusts.org/-/media/legacy/uploadedfiles/pes_assets/2009/pew_emp_promoting_upward_mobility.pdf.
- 97 Greenstone, Michael and Adam Looney. "Where is the Best Place to Invest \$102,000 – In Stocks, Bonds, or a College Degree?" *The Hamilton Project*, 4. June 25, 2011. http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/06_college_value.pdf.
- 98 "Federal Aid for Postsecondary Students." *Congressional Budget Office*, 2-6.
- 99 "Pell Grant Program—CBO's April 2018 Baseline." *Congressional Budget Office*, 3. April 2018. <https://www.cbo.gov/system/files?file=2018-06/51304-2018-04-pellgrant.pdf>.
- 100 "Historical Tables." *Office of Management and Budget*, Tables 8.1, 9.5, 9.6, 9.8, 9.9.
- 101 "Supplemental Materials: Public Budget Database Outlays." *Office of Management and Budget*.
- 102 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, 15-21.

- 103 "The Long-Term Budget Outlook Under Alternative Scenarios for Fiscal Policy." *Congressional Budget Office*, 3.
- 104 "Gross Domestic Product (FYGDP)." *Federal Reserve Economic Data*. March 27, 2018. <https://fred.stlouisfed.org/series/FYGDP>.
- 105 "CBO's 2018 Long-Term Budget Outlook." *Committee for a Responsible Federal Budget*. (Underlying data provided by authors.)
- 106 "Historical Tables." *Office of Management and Budget*, Tables 8.1, 9.5, 9.6, 9.8, 9.9, 10.1.
- 107 "Federal Investment." *Congressional Budget Office*, 11. December 2013. <https://www.cbo.gov/sites/default/files/113th-congress-2013-2014/reports/44974-federalinvestment.pdf>.
- 108 PPI calculations based on the current policy baseline.
- 109 Ibid.
- 110 "Historical Tables." *Office of Management and Budget*, Tables 8.1, 9.5, 9.6, 9.8, 9.9.
- 111 "Supplemental Materials: Public Budget Database Outlays." *Office of Management and Budget*.
- 112 Driessen, Grant A. and Megan S. Lynch. "The Budget Control Act: Frequently Asked Questions." *Congressional Research Service*, 5, 9-11.
- 113 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 48-49, 81.
- 114 "CBO's 2018 Long-Term Budget Outlook." *Committee for a Responsible Federal Budget*. (Underlying data provided by authors.)
- 115 "The Budget and Economic Outlook: 2018 to 2028" *Congressional Budget Office*, 44, 52.
- 116 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, 15-21.
- 117 "The Long-Term Budget Outlook Under Alternative Scenarios for Fiscal Policy." *Congressional Budget Office*, 3.
- 118 "Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers." *Centers for Medicare & Medicaid Services*, 15.
- 119 "CBO's 2018 Long-Term Budget Outlook." *Committee for a Responsible Federal Budget*. (Underlying data provided by authors.)
- 120 "The 2018 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds." *Social Security Administration*, 150. June 5, 2018. <https://www.ssa.gov/oact/tr/2018/tr2018.pdf>.
- 121 Ibid, 2, 7.
- 122 "2018 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds." *Centers for Medicare & Medicaid Services*, 7. June 5, 2018. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/TR2018.pdf>.
- 123 "National Health Expenditure Data: Historical." *Center for Medicare & Medicaid Services*, Table 3. January 8, 2018. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html>.
- 124 "The Budget and Economic Outlook: 2018 to 2028." *Congressional Budget Office*, 48.
- 125 "Total Monthly Medicaid and CHIP Enrollment." *Kaiser Family Foundation*. December 2017. <https://www.kff.org/health-reform/state-indicator/total-monthly-medicare-and-chip-enrollment/?currentTimeframe=4&selectedRows=%7B%22wrapups%22:%7B%22united-states%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>.

- 126 "Trends in Subsidized and Unsubsidized Individual Health Insurance Market Enrollment." *Center for Medicare & Medicaid Services*, 9. July 2, 2018. <https://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Marketplaces/Downloads/2018-07-02-Trends-Report-2.pdf>.
- 127 "Monthly Statistical Snapshot, July 2018." *Social Security Administration*. August 2018. https://www.ssa.gov/policy/docs/quickfacts/stat_snapshot/
- 128 "Health Care Spending and the Medicare Program." *Medicare Payment Advisory Commission*, 22. June 2018. http://www.medpac.gov/docs/default-source/data-book/jun18_databookentirereport_sec.pdf?sfvrsn=0
- 129 Truffer, Christopher J., Christian J. Wolfe, Kathryn E. Rennie. "2016 Actuarial Report on the Financial Outlook for Medicaid." *United States Department of Health and Human Services*, 9. 2016. <https://www.medicare.gov/medicaid/finance/downloads/medicaid-actuarial-report-2016.pdf>
- 130 "Cohort Life Expectancy." *Social Security Administration*, Table V.A5. https://www.ssa.gov/oact/tr/2018/lr_5a5.html.
- 131 "National Intercensal Tables: 1900-1990." *United States Census Bureau*. <https://www.census.gov/data/tables/time-series/demo/popest/pre-1980-national.html>.
- 132 Vespa, Jonathan, David M. Armstrong, and Lauren Medina. "Demographic Turning Points for the United States: Population Projections for 2020 to 2060." *United States Census Bureau*, 4. March 2018. https://www.census.gov/content/dam/Census/library/publications/2018/demo/P25_1144.pdf.
- 133 "Health Expenditure and Financing." *Organisation for Economic Co-operation and Development*. Health Expenditure and Financing. https://stats.oecd.org/index.aspx?DataSetCode=HEALTH_STAT
- 134 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, 20.
- 135 "The State Pension Funding Gap: 2016." *The Pew Charitable Trusts*, 14. April 12, 2018. <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2018/04/the-state-pension-funding-gap-2016#0-overview>.
- 136 "Public Fund Survey." *National Association of State Retirement Administrators*. November 2017. <https://www.nasra.org/publicfundsurvey>.
- 137 "National Health Expenditure Data: Historical." *Center for Medicare & Medicaid Services*, Table 3.
- 138 Reaves, Erica L., MaryBeth Musumeci. "Medicaid and Long-Term Services and Supports: A Primer." *Kaiser Family Foundation*. December 15, 2015. <https://www.kff.org/medicaid/report/medicaid-and-long-term-services-and-supports-a-primer/>
- 139 Gale, William G. "What the Kansas tax cut about-face means." *The Brookings Institution*. June 13, 2017. <https://www.brookings.edu/blog/up-front/2017/06/13/what-the-kansas-tax-cut-about-face-means/>.
- 140 Chang, Alvin. "How tax cuts for the rich led to the Oklahoma teachers strike." *Vox Media*. April 9, 2018. <https://www.vox.com/policy-and-politics/2018/4/9/17214924/oklahoma-teacher-strike-tax-cut-rich-charts>.
- 141 "Annual Survey of Public Pensions." *United States Census Bureau*. 2017. <https://www.census.gov/programs-surveys/aspp/data/tables.html>.
- 142 "National Health Expenditure Data: Historical." *Center for Medicare & Medicaid Services*, Table 3.
- 143 "Gross Domestic Product (GDP)." *Federal Reserve Economic Data*.
- 144 "The Debt to the Penny and Who Holds It." *TreasuryDirect*.

- 145 "Operations Of The Combined OASI And DI Trust Funds, In Current Dollars." *Social Security Administration*, Table VI.G8. <https://www.ssa.gov/oact/tr/2018/lr6g8.html>.
- 146 "Status of the Social Security and Medicare Programs." *Social Security Administration*. April 26, 2018. https://www.ssa.gov/oact/TRSUM/images/LD_ChartD.html.
- 147 The 2018 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds. *Social Security Administration*, 5.
- 148 Ritz, Ben. "Millennials in Retirement: What Will Happen to Social Security." *Bipartisan Policy Center*. April 19, 2016. <https://bipartisanpolicy.org/blog/millennials-in-retirement-social-security-future/>
- 149 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, 3-4.
- 150 "Historical Tables." *Office of Management and Budget*, Table 1.2.
- 151 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, 15-21.
- 152 "The Long-Term Budget Outlook Under Alternative Scenarios for Fiscal Policy." *Congressional Budget Office*, 3.
- 153 "Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers." *Centers for Medicare & Medicaid Services*, 15.
- 154 "CBO's 2018 Long-Term Budget Outlook." *Committee for a Responsible Federal Budget*. (Underlying data provided by authors.)
- 155 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, 12.
- 156 Ibid.
- 157 "Can We Grow Our Way Out of Debt?" *Committee for a Responsible Federal Budget*. August 6, 2015. <http://www.crfb.org/blogs/we-can-grow-our-way-out-debt>.
- 158 "Securing Our Financial Future: Report of the Commission on Retirement Security and Personal Savings." *Bipartisan Policy Center*, 78-103. June 2016. <https://bipartisanpolicy.org/wp-content/uploads/2016/06/BPC-Retirement-Security-Report.pdf>
- 159 "How Simpson and Bowles Protect the Disadvantaged." *Committee for a Responsible Federal Budget*. April 26, 2013. <http://www.crfb.org/blogs/how-simpson-and-bowles-protect-disadvantaged>
- 160 "Restoring America's Future." *Bipartisan Policy Center*, 44-83. November 2010. <https://bipartisanpolicy.org/wp-content/uploads/sites/default/files/files/BPC%20FINAL%20REPORT%20FOR%20PRINTER%2002%2028%2011.pdf>
- 161 "Financial Health of Young America: Measuring Generational Declines between Baby Boomers & Millennials." *Young Invincibles*, 6. January 2017. <https://younginvincibles.org/wp-content/uploads/2017/04/FHYA-Final2017-1-1.pdf>
- 162 Chetty, Raj, David Grusky, Maximilian Hell, Nathaniel Hendren, Robert Manduca, and Jimmy Narang. "The Fading American Dream: Trends in Absolute Income Mobility since 1940." *National Bureau of Economic Research*, 18, 38. December 2016. http://www.equality-of-opportunity.org/papers/abs_mobility_paper.pdf.
- 163 "Financial Health of Young America: Measuring Generational Declines between Baby Boomers & Millennials." *Young Invincibles*, 10-12.
- 164 Isaacs, Julia B., Cary Lou, Heather Hahn, Ashley Hong, Caleb Quakenbush, and C. Eugene Steuerle. "Kids' Share 2018: Report on Federal Expenditures on Children through 2017 and Future Projections." *Urban Institute*, 35. July 2018. https://www.urban.org/sites/default/files/publication/98725/kids_share_2018_0.pdf.

- 165 "Historical Poverty Tables: People and Families – 1959 to 2016." *United States Census Bureau*, Table 3. <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-people.html>.
- 166 Holzer, Harry J., Diane Whitmore Schanzenbach, Greg J. Duncan, and Jens Ludwig. "The Economic Costs of Poverty in the United States: Subsequent Effects of Children Growing Up Poor." *IRP Publications*, 16. April 2007. <https://www.irp.wisc.edu/publications/dps/pdfs/dp132707.pdf>.
- 167 "Economic Costs Of Early Childhood Poverty: Raising Young Children Out of Poverty Can Substantially Improve Their Odds of Economic and Life Success." *Partnership for America's Economic Success*, 3. <http://readynation.s3.amazonaws.com/wp-content/uploads/Economic-Costs-Of-Early-Childhood-Poverty-Brief.pdf>.
- 168 Isaacs, Julia B., Cary Lou, Heather Hahn, Ashley Hong, Caleb Quakenbush, and C. Eugene Steuerle. "Kids' Share 2018: Report on Federal Expenditures on Children through 2017 and Future Projections." *Urban Institute*, 4, 35. July 2018. https://www.urban.org/sites/default/files/publication/98725/kids_share_2018_0.pdf.
- 169 Fontenot, Kayla, Jessica Semega, and Melissa Kollar. "Income and Poverty in the United States: 2017", *United States Census Bureau*, 14. September 2018. <https://www.census.gov/content/dam/Census/library/publications/2018/demo/p60-263.pdf>
- 170 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, 8-10.
- 171 "The 2018 Long-Term Budget Outlook." *Congressional Budget Office*, Supplemental Data Table 9.
- 172 "CBO's 2018 Long-Term Budget Outlook." *Committee for a Responsible Federal Budget*, 5.
- 173 "FAQs." *Board of Governors of the Federal Reserve System*. https://www.federalreserve.gov/faqs/money_12856.htm.

About the Center for Funding America's Future

The PPI Center for Funding America's Future works to promote a fiscally responsible public investment agenda that fosters robust and inclusive economic growth. We tackle issues of public finance in the United States and offer innovative proposals to strengthen the foundation of our economy and build shared prosperity.

About the Author

Ben Ritz is the Director of PPI's Center for Funding America's Future. Ritz earned his Master's of Public Policy Analysis and a Graduate Certificate of Public Finance from American University, where he also previously completed his undergraduate education.

PPI summer 2018 fellows Alex Pasanen and Sam Ungerleider contributed to this report.

This report was made possible in part by a grant from the Peter G. Peterson Foundation. The views expressed here solely reflect those of the author.



The Progressive Policy Institute is a catalyst for policy innovation and political reform based in Washington, D.C. Its mission is to create radically pragmatic ideas for moving America beyond ideological and partisan deadlock.

Founded in 1989, PPI started as the intellectual home of the New Democrats and earned a reputation as President Bill Clinton’s “idea mill.” Many of its mold-breaking ideas have been translated into public policy and law and have influenced international efforts to modernize progressive politics.

Today, PPI is developing fresh proposals for stimulating U.S. economic innovation and growth; equipping all Americans with the skills and assets that social mobility in the knowledge economy requires; modernizing an overly bureaucratic and centralized public sector; and defending liberal democracy in a dangerous world.

© 2018
Progressive Policy Institute
All rights reserved.

Progressive Policy Institute
1200 New Hampshire Ave NW,
Suite 575
Washington, DC 20036

Tel 202.525.3926
Fax 202.525.3941

info@ppionline.org
progressivepolicy.org