# THE 2022 REPORT

OF THE

# JOINT ECONOMIC COMMITTEE
# CONGRESS OF THE UNITED STATES

ON THE

# 2022 ECONOMIC REPORT
# OF THE PRESIDENT

*MINORITY RESPONSE*

JUNE 24, 2022

Ranking Member Mike Lee (R-UT)
Joint Economic Committee Republicans
jec.senate.gov | G-01 Dirksen Senate Office Building Washington, DC 20510 | (202) 224-5171

# CONTENTS

## VIEWS OF RANKING MEMBER MIKE LEE

The *Employment Act of 1946* created the Joint Economic Committee and tasked it with promoting "maximum employment, production, and purchasing power" as the central goals of economic policymaking. Constrained by the limited Government set up by our Constitution and guided by free and competitive enterprise, these goals are the bedrock of a sound economic and fiscal policy—they are essential to the American pursuit of a more prosperous future.

In 2021, President Biden's incoming Administration implemented policies that slowed employment, stalled production, and eroded purchasing power—in short, policies that achieved precisely the opposite of these stated policy goals. The *2022 Economic Report of the President* deflects responsibility for the harm these policies unleashed on American families through rising prices, suppressed employment, and insufficient economic growth. It instead articulates an explicitly political agenda that is at odds with once shared goals for allowing the American economy to thrive. Our *Response to the Economic Report of the President* assesses the state of the economy and reviews the policy choices that shaped the current state of inflation, employment, growth, and related measures of social well-being.

Beginning in 2021, the Biden Administration's excessive and reckless fiscal policy stoked the highest inflation rate the United States has seen in four decades. Inflation gnawed away at Americans' wages, savings, and aspirations as households faced rising costs for groceries, housing, gasoline, and other basic goods. These surging prices did the most harm to poor and middle-class households who spend the greatest share of their income on essentials. As of April 2022, the inflation that has occurred will

cost the average American household more than $6,800 over the next year.

The same policy choices obstructed Americans' reentry into the labor market and slowed the return to full employment following the COVID-19 recession. Expanded benefits across a range of pandemic programs discouraged Americans from reconnecting to work. Vaccine mandates prohibited work for some unvaccinated Americans, school closures made it more difficult for parents to work, and cash transfers enabled non-work. Low-wage workers and historically disadvantaged Americans, who enjoyed unprecedented gains in the pre-pandemic economy, once again fell behind. Measured against the pre-pandemic trend, more than 6 million workers are currently missing from the labor market due to policies that discouraged work.

Policies that expanded the size and scope of Government and its involvement in private sector decision-making held back the pace of economic production. The Administration's agenda of increasingly costly regulations, spending, and taxes stifled new growth, halted investment, and diminished business confidence. These policy choices ignored the lessons of the pre-pandemic economy, where tax cuts and deregulation led to sustained economic growth, record high median income, and record low poverty rates for every race and ethnic group.

Equally concerning, policies that proliferated economic and social restrictions in the wake of the pandemic took a dramatic toll on America's institutions of social capital. Social capital is an often-overlooked foundation for economic growth and strong labor markets, describing the strength of relationships across family, communities, and workplaces. Many Americans lost access to the social support networks that come from schools, churches, volunteer organizations, and community groups. Drug overdose

deaths spiked, violent crime rose, and marriage rates fell. School closures caused learning losses that disproportionately harmed the youngest and lowest-income students.

I have tasked my staff at the Joint Economic Committee with advising Congress on policies to increase social capital through reconnecting Americans to work, improving investment in youth, making it more affordable to raise a family, increasing family stability, and rebuilding civil society. Our *Response* assesses the ways that the Biden Administration's agenda impoverished these dimensions of our economic, social, and institutional life.

The Biden Administration's harmful policy choices highlight an important truth—Americans benefit from a climate of lower taxes, less regulation, and more freedom. The current state of the economy leaves no question that we must rein in the Government spending that erodes Americans' purchasing power, remove the disincentives that discourage Americans from work, reduce the regulatory barriers that slow the pace of growth, and enable more people to reconnect with the social relationships that provide life with meaning and purpose.

I hope the recommendations contained in this *Response* will serve as a starting point for policymakers on how we can remove Government barriers to Americans' freedom, restore full employment, production, and purchasing power, and empower Americans to achieve a future where families of all types prosper.

# CHAPTER 1: THE IMPORTANCE OF DEFINED GOALS FOR SOUND ECONOMIC POLICY

The economic policy of the United States should be grounded in common goals rooted in the American ethos. The Council of Economic Advisers (CEA) and the Joint Economic Committee (JEC) are institutions designed to do just that, promote the once near universally shared goals of maximum employment, production, and purchasing power. Agreement on these goals allows Congress and the President to formulate a coherent fiscal policy for the nation.

To this end, our *Response to the Economic Report of the President* (hereafter "*Response*") assesses progress in achieving each of the goals set forth in the *Employment Act of 1946* (hereafter "Employment Act"). Chapters 2–4 focus on the goals of the Employment Act to promote employment, production, and purchasing power. Chapter 5 highlights recent trends in social capital, a central but often overlooked factor underlying economic growth and general well-being. Social capital describes the strength of relationships across family, communities, and workplaces that are the foundation of prosperous nations.[1]

While economic policy has always been fraught with disagreements on how to achieve a more prosperous future, until recently, debates were bounded by the measurable, shared goals of the Employment Act. After being late in their submission to Congress, the President's Budget and the *Economic Report of the President* (hereafter "*Report*") represent a concerning departure from the Employment Act's defined economic policy goals. By no longer conforming to the consensus goals for economic policy, Congress and the President have very little to guide the budget process and the resulting fiscal policy of the nation.

This chapter outlines the history of JEC's legislative mandate and the important role the Committee plays in the budget process and

informing economic policy more broadly. It then describes how attention to the goals of the Employment Act has diminished in recent decades, contributing to persistent budget deficits, a broken budget process, and incoherent economic policy. Returning to measurable economic policy goals is key to setting up Americans for a future of robust economic growth.

### *The JEC's Legislative Mandate*

In 1946, President Harry S. Truman signed the Employment Act, establishing a national policy focused on promoting employment, production, and purchasing power:

> *The Congress hereby declares that it is the continuing policy and responsibility of the Federal Government...to coordinate and utilize all its plans, functions, and resources for the purpose of creating and maintaining, in a manner calculated to foster and promote free competitive enterprise and the general welfare, conditions under which there will be afforded useful employment opportunities, including self-employment, for those able, willing, and seeking to work, and to promote maximum employment, production, and purchasing power.*[2]

The Employment Act requires the President to transmit to Congress the *Report* each year, reporting on progress in promoting employment, production, purchasing power, and the policies that could further these goals. The Employment Act established two new agencies to carry out this function: The CEA advises the President in drafting the *Report* and in recommending policies that promote the objectives of the Employment Act; the JEC, comprised of members of the Senate and House, evaluates the *Report* and advises Congress on policies that promote the objectives of the Employment Act.[3]

The Employment Act was later amended by the *Full Employment and Balanced Growth Act of 1978* (also known as the Humphrey-Hawkins Act). This act supplements the Employment Act with additional goals, including increasing real income, achieving balanced growth, reducing the Federal deficit, and improving the trade balance by increasing exports through free and fair international trade. The JEC is directed to continue its role in informing Congress, through hearings and reports, and evaluating the policies set forth in the *Report*.[4] This is in addition to the responsibility of the JEC to provide its "views and estimates" of the President's Budget as set forth by the *Congressional Budget Act of 1974*.

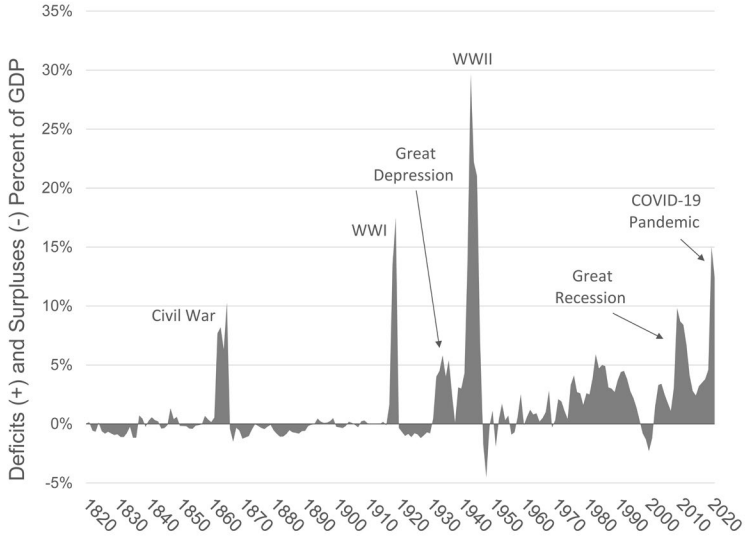
### *The Importance of Defined Goals in Economic and Fiscal Policy*

The Employment Act marked a turning point for U.S. economic and fiscal policymaking. The first 150 years of American budgeting was characterized by balanced budgets. Following the Great Depression and World War II, balanced budgets were replaced with a mandate for macroeconomic management to meet the goals of maximum employment, production, and purchasing power. For more than half a century since the Employment Act was passed in 1946, these defined goals helped guide economic policy and helped constrain the Federal Budget.

The early era of balanced budgets was the product of at least two forces. Throughout the 19th century, U.S. debt was still considered relatively risky and was thus a costly way to finance Government operations.[5] It was also widely believed that Government debt enriched the wealthy who purchased the bonds, at the expense of the taxpayers who have to pay back the debts.[6] In the early 1900s, these two forces began to break down. U.S. debt became a relatively attractive asset in the early 20th century that was then solidified in 1944 as part of the Bretton Woods system.[7] This lowered the cost of Federal borrowing around the same time public opinion became more accepting of Federal debt.

Figure 1-1 shows U.S. budget deficits and surpluses between 1820 and 2021. Before the Great Depression, deficits were rare, occurring in only one-third of years, primarily due to wars. There was a clear shift in the 1930s, after which deficits became increasingly more prevalent and the surpluses necessary to pay down the accumulated debt became less prevalent. After 1930, the Federal Government ran a deficit in 86 percent of years.

Figure 1-1: Federal Deficits and Surpluses as Percent of GDP, 1820-2021




Source: JEC Calculations; Office of Management and Budget, Historical Tables, Table 1.2, Budget of the United States Government: Fiscal Year 2023; Cambridge University Press, Historical Statistics of the United States, Millennial Edition Online, 2006.

Government debt lost some of its taboo as a new school of economic thought advanced by John Maynard Keynes gained popularity in the 1930s. The pre-Keynesian norm was that Government spending should be financed by contemporaneous taxation and that debt was only to be used in extraordinary circumstances. Keynes advocated for more active macroeconomic management. He prescribed running budget deficits during recessions to increase aggregate demand and reduce fluctuations within the business cycle.[8] Beginning in the Great Depression, the

Keynesian economic theory was put into practice. President Franklin D. Roosevelt's 1940 budget explains that he would deliberately use "Government funds and Government credit to energize private enterprise."[9] Embracing Government spending as a tool of economic management further undermined the political consensus against systemic Government debt.

Following the Keynesian revolution, U.S. budgeting became a tool for business cycle management. Widespread fears of mass unemployment following soldiers' return from World War II set the stage for what would become the Employment Act. In committing the Federal Government to managing the economy, the Employment Act officially abandoned the historical constraint on deficit spending but replaced it with agreed upon, measurable goals for fiscal policy: stable prices, full employment, and economic growth. The Employment Act also created two institutions (the JEC and CEA) to help measure, study, and promote these goals. While not as binding as a political preference for balanced budgets, shared economic goals can nonetheless provide some concrete criteria by which to decide which policies the nation should pursue.

*Defined Goals Allow Debate on the Means*

Business cycle management creates competing camps of economic policymaking, with different prescriptions for reaching the defined economic goals. The Employment Act's legislative evolution illustrates how there can be consensus around a goal, like full employment, while disagreeing on the best means to get there: Government guarantees on the one hand, or reliance on the private sector on the other. For example, the original legislative proposal for the Employment Act aimed to establish full employment as a "right" to be guaranteed by the Federal Government.[10] The resulting legislative compromise removed language that committed the Federal Government to providing jobs, focusing instead on meeting the goal of maximum

employment "in a manner calculated to foster and promote free competitive enterprise."[11] The later amendment of the Employment Act by the Humphrey-Hawkins Act shows a similar agreement on the core economic goals while still disagreeing over the means of attaining them.[12] By setting goals rather than describing the means, the legislation allows the debate over how best to reach the goals set out in the Employment Act to become an empirical question, not necessarily one of values or world view.

The history of the JEC itself has also often demonstrated how the debate over the best ways to meet economic policy goals changes over time, as evidence evolves and political preferences shift. In the 1950s, the JEC was known as a "hotbed of Keynesian economics."[13] However, in 1979 and 1980 the JEC released annual reports with all Majority and Minority members signing on to shared economic policy priorities. In the face of high inflation, these reports departed from Keynesian orthodoxy and advanced bipartisan support for supply-side tax cuts, "a steady reduction…of government spending," and a "deemphasis of macroeconomic fine tuning" to meet the Employment Act goals. The Democrat views in the following year's 1981 report (which returned to the norm of separate Majority and Minority sections), were still interpreted as supporting President Ronald Reagan's proposed tax cuts, according to 1983 JEC Executive Director Bruce Bartlett.[14] These episodes illustrate that when guided by concrete and measurable goals, competing economic policy models can coexist, and even shift back and forth as economic conditions, theory, and evidence change.

All of this is not to claim that agreement on the goals of economic policymaking is sufficient on its own to successfully implement policies that promote maximum employment, production, and purchasing power. Countercyclical macroeconomic management to promote full employment and price stability necessarily runs deficits in times of crisis and surpluses in later years to balance the budget over time. Persistent post-1930 budget deficits show that

countercyclical economic management can be difficult to implement successfully because politicians face strong incentives against cutting spending and raising taxes to pay down Government debt, even in times of economic growth.[15] Thus, for policymakers who prize free markets and a limited Federal Government, the Employment Act is a sort of Faustian bargain that traded the system that had previously constrained the growth of Government for one that is biased in favor of a more active and powerful state. However, the concrete goals for economic policy in the Employment Act did provide a new type of constraint that, when followed, can help manage the impulse to deficit spend.

***Lost Economic Consensus in the 2022 Report***

Over the past couple of decades, the economic policy consensus represented in the goals of the Employment Act has slowly eroded. Without shared goals, Congress and the President have very little to guide economic policy and even less to constrain the budget process. Instead, politicians increasingly view economic policy as a cudgel against disfavored activities and a subsidy for things they want to promote. One symptom of this lost consensus can be seen in the quickly ballooning deficits after 2001, what economist and budget historian Paul Winfree calls "the real end to balanced budgets."[16]

The *Report* exemplifies this lost consensus on the economic goals of inflation, employment, and economic growth. For example, the *Report* largely ignores the causes and consequences of the persistently high inflation rate that was apparent a full year before publication (Chapter 2). It does discuss the labor market but in misdiagnosing the key challenges American workers are facing, the *Report* largely ignores the fact that the labor market is not yet back to full employment due to weak labor supply (Chapter 3). On economic growth, the *Report* frames the Administration's overall agenda as one that will "improve U.S. economic outcomes and expand U.S. productive capacity, both now and over generations

to come."[17] However, the *Report* is most focused on goals that are often at odds with, and at best adjacent to, the goals agreed upon in the Employment Act (Chapter 4).

The *Report* focuses largely on metrics of race, gender, equity of outcomes, and environmental indicators. A search of the text reveals that race (95 instances), gender (127 instances), inequality (147 instances), and carbon (105 instances) are each mentioned more often than inflation (86 instances). The *Report's* section on "Progressive and Equitable Tax Policy" considers significantly higher taxes on investment income to meet goals of "racial and ethnic equity in the tax code."[18] Nowhere does it consider the economic consensus that tax increases reduce economic growth.[19] Even more brazenly, the *Report's* section on "Accelerating and Smoothing the Clean Energy Transition" identifies a goal that it explicitly acknowledges will have large and unequal economic costs to communities across the United States from penalizing industries that rely on carbon-based energy sources. The *Report* claims the costs of reaching its goal of decarbonization can be offset by other policies. However, by pursuing a goal that does not enjoy consensus and, more importantly, that would undermine the consensus goals of the Employment Act, the *Report* turns economic policymaking into a political instrument rather than a shared tool for maximizing production, employment, and purchasing power.

In conjunction with veering away from the consensus goals of economic policymaking in the *Report*, the Biden Administration has failed to provide the specific information needed to evaluate the core economic policies in its Budget. The Administration's Build Back Better agenda is conspicuously missing from the President's Budget proposal. Instead, it includes a nondescript deficit-neutral reserve fund that obscures the difficult political, economic, and budgetary decisions involved in detailing specific proposals. Because the Budget does not describe a specific set of policies or the anticipated effects of its proposals on revenues and

outlays, it renders the Budget uninformative for assessing the economic impact of the President's agenda.

Other than a general desire to expand the Federal Government, the Budget and the *Report* present no coherent theory for why the Federal Government should spend $5.8 trillion in 2023 or a limiting principle for why we would not spend an additional $5.8 trillion or more. Until recently, politicians in both parties relied on similar economic goals to provide criteria by which to weigh the costs and benefits of fiscal policy. Without shared goals, the budget and fiscal policymaking process breaks down.

***Breakdown of the Budget Process***

Another symptom of the lost consensus on the shared economic policy goals enumerated in the Employment Act is the breakdown of the Congressional budget process.

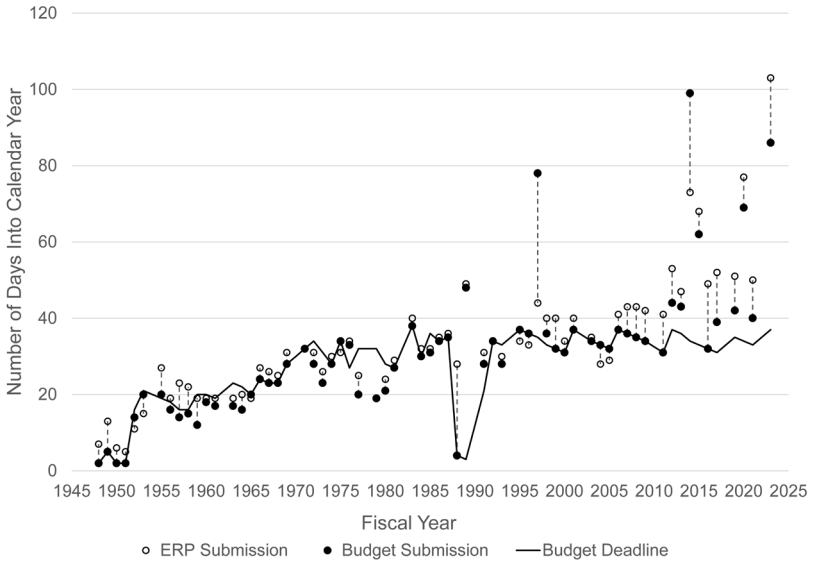
The Constitution delegates the "power of the purse" to Congress but the process by which Congress formulates the annual budget is the product of a long historical evolution of different laws, rules, and customs. Under the *Congressional Budget and Impoundment Control Act of 1974,* the President initiates the budget process by submitting a budget to Congress no later than the first Monday in February.[20] The President's Budget lays out the Administration's priorities but is only a request to Congress, not a binding document. The *Report* is intended to be a supporting document to the President's Budget, explaining how the Budget assures the goals of the Employment Act are met. The *Response* and the JEC's views and estimates of the Budget are intended to inform how Congress proceeds with its budget process.

Following the President's proposal, Congress then adopts a concurrent resolution on the budget to establish the Federal Government's aggregate spending and revenue policies. The Budget and the accompanying *Report* and *Response* are intended to explain the economic policy for the country and provide a

framework for the annual appropriations process, revenue measures, direct spending legislation, and debt management. Unfortunately, the budget process has broken down over the past several decades. Congress has relied on "deeming provisions" to set enforceable spending levels instead of completing the more deliberative traditional budget process.[21]

Missed deadlines are one example of the broken budget process and illustrative of the lost consensus around the need to set a coherent national economic policy. A timely budget is reflective of current economic conditions and affords policymakers and the public the opportunity to evaluate its assumptions and effectiveness at meeting its goals. Before 1989, the budget was late only two times. Since then, late budgets have increased in frequency and length of delay, as shown in Figure 1-2.

Figure 1-2: Budget Deadline, Submission of Budget, and Submission of Economic Report of the President, by Number of Days into Calendar Year, 1948–2023




Source: White House Council of Economic Advisers, Economic Report of the President, 1947-2022; United States Office of Management and Budget. *Budget of the United States Government*, 1947-2022; Congressional Research Service, 2016: "The President's Budget: Overview of Structure and Timing of Submission to Congress."
Notes: ERP is Economic Report of the President. Presidential transition years (Fiscal Years 1954, 1962, 1970, 1978, 1982, 1990, 1994, 2002, 2010, 2018, and 2022) are not shown.

President Biden submitted his Budget for Fiscal Year 2023 on March 28, 2022, nearly two months after it was due. Excluding presidential transition years, the 2023 Budget is the second-latest budget in history. President Biden transmitted his 2022 *Report* on April 14, 2022, delivering the *Report* later in the year than any other. The 17 days between the release of the Budget and the Economic Report also violated statute requiring the President to transmit the Economic Report no more than 10 days after filing the budget (see 15 U.S. Code Section 1022). This was the third time the 10-day deadline for transmitting the *Report* was missed since being imposed starting in Fiscal Year 1992, with deadlines also missed in Fiscal Years 2017 (13 days) and 2016 (17 days).

Economic policy has always been fraught with disagreements on the means of achieving a more prosperous future. The JEC and CEA have played an important and sometimes pivotal role in informing those debates. But increasingly, policymakers have ignored the pursuit of the measurable, agreed upon goals of the past and instead seek to use economic policy to advance more partisan ends. To help refocus Congress on sound economic policymaking, Winfree suggests that the *Report* and the *Response* could be more formally incorporated into the budget process, requiring Congress to agree on its shared economic goals before drafting the budget resolution.[22] Without regaining a consensus on the core goals of economic and fiscal policy, we risk undermining the good faith and credit of the United States Government and the foundation that makes America the strongest and most prosperous economy in the world.

### *Refocusing on Measurable Economic Goals*

In our response to the *Report*, we seek to refocus the economic policy debate around the core goals of the Employment Act: promoting purchasing power, employment, and production. In doing so, we follow the precedent set following the Employment Act's passage in 1946. President Harry Truman organized the very first Economic Report in 1948 around the themes of purchasing power, employment, and production. Later in 1962, President John F. Kennedy reasserted the importance of focusing on these core goals in his first *Report*:

> *The framers of the Employment Act were wise to choose the promotion of "maximum employment, production, and purchasing power" as the keystone of national economic policy. They were confident that these objectives can be effectively promoted "in a manner calculated to foster and promote free competitive enterprise and the general welfare."* [23]

Refocusing on these goals is especially urgent this year given the challenges faced across all dimensions of the U.S. economy. Inflation reached its highest level in over 40 years, the labor market is more than 6 million workers short of the pre-pandemic trend, and economic production is at serious risk of a contraction due to the inflationary consequences of poorly timed fiscal stimulus. The failure of the *Report* to fully acknowledge these challenges or the role of the Biden Administration's policies in fueling them is troubling. Our response analyzes these problems, their causes, and ways to address them.

The *Response* also recognizes a central but often ignored factor underlying economic progress: social capital. Social capital is the strength of relationships across family, communities and workplaces that allow individuals and the economy to thrive. During the pandemic, social capital has taken a major hit, in part due to Government policies. Homicides increased by 27 percent in 2020. During the 12-month period ending October 2021, more than 104,000 people died of a drug overdose, the highest level ever recorded. Children were kept out of schools, and core community institutions have weakened. Because social capital is indispensable to the goals of economic policy, including employment and economic growth, we focus on this often-overlooked factor in the *Response*.

Our *Response* proceeds as follows: Chapter 2 reviews purchasing power. Chapter 3 reviews employment. Chapter 4 reviews production. Chapter 5 reviews social capital.

# CHAPTER 2: PURCHASING POWER

In the first *Response* written in 1948, the JEC warned President Truman and his CEA to consider the inflationary consequences of large Government spending packages. In the JEC's words:

> *It is interesting to us both here and throughout the report the President wholly fails to give any weight to the tremendous impact of Government spending … No account is taken anywhere in the report of the inflationary aspect of such expenditures, for the most part made without any direct increase in the production of goods and services.*[24]

Nearly 75 years later, the JEC has precisely the same concerns.

The *Employment Act of 1946* directed the Federal Government to prioritize the promotion of purchasing power, in addition to employment and production (see Chapter 3 and Chapter 4).[25] Yet in 2021, Congress, the Administration, and the Federal Reserve pursued policies that achieved the opposite, none of which is acknowledged in the *Report*.

First, expansionary fiscal and monetary policy overcorrected for the COVID-19 recession, boosting consumer demand beyond what suppliers could meet. Congress then pursued policies that directly reduced supply by disincentivizing work and threatening future tax increases. Coupled with supply chain challenges in the United States and around the world, these policy missteps stoked an average annual inflation rate of 4.7 percent in 2021 and 8.0 percent in Q1 2022, almost four times the 2000-2019 average inflation rate of 2.2 percent. [26]

Chapter 2 of the *Response* documents these trends and quantifies the costs that inflation (since January 2021) has imposed on American families, estimated to be $569 per household in April

2022 alone.[27] It goes on to identify the policy errors that worsened inflation in the United States relative to other countries, which include a fiscal and monetary overcorrection, regulations that reduced supply chain efficiency, and Congressional legislation that disincentivized work. The Chapter concludes with policy solutions that would restore Americans' purchasing power by lifting barriers to trade, employment, and production.

## *Inflation Trends*

### *Inflation Hits its Highest Level in 40 Years*

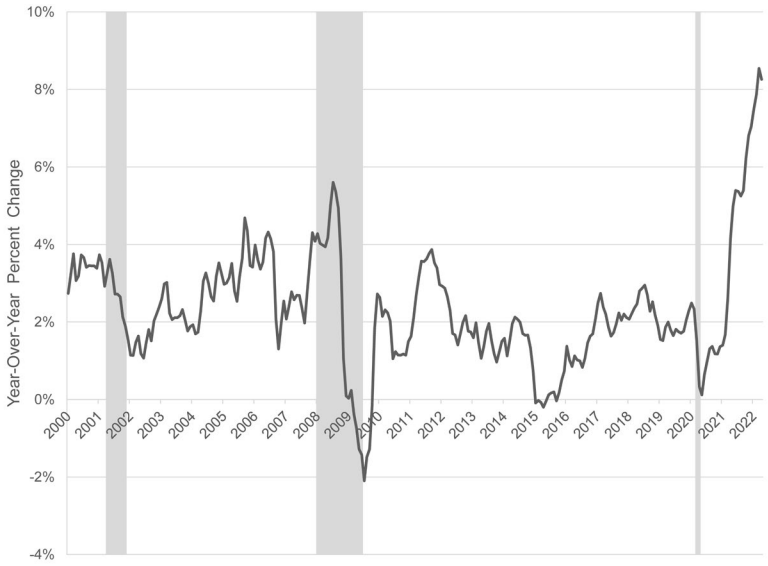
The rapid pace of inflation in 2021 and 2022 was atypical; Americans faced the highest—and fastest climbing—inflation rates in four decades. Inflation measured as the annual percent change in the Consumer Price Index (CPI) averaged 3.4 percent in the first half of 2021 and 6.0 percent in the second half.[28] By March 2022, the annual inflation rate would reach 8.5 percent, its highest level since December 1981 when the Federal Reserve was taking drastic economic measures to battle the Great Inflation. Inflation remained elevated in April 2022 at 8.3 percent, far above historical norms.

To visualize recent inflation trends, Figure 2-1 displays annual CPI growth rates for each month since the turn of the century. The pace of inflation in 2021 and 2022 had a much greater effect on Americans' purchasing power compared to other post-recession expansions. As of April 2022, Americans in the post-COVID expansion (May 2020-April 2022) faced an average annual inflation rate of 4.0 percent compared to 2.7 percent in the post-2001 expansion (December 2001-December 2007) and 1.7 percent in the post-2008/09 expansion (July 2009-February 2020).[29]

The Federal Reserve's preferred inflation measure, the Personal Consumption Expenditures Price Index (PCEPI), was similarly

high. Compared to the 2000-2019 average of 1.7 percent, annual percent changes in the PCEPI averaged 2.8 percent in the first half of 2021, 4.9 percent in the second half, and was 6.3 percent by April 2022.[30] Even the CPI and PCEPI core measures, which exclude volatile items in the food and energy sectors, rose rapidly—increasing 6.2 percent and 4.9 percent annually in April 2022, respectively.[31]

Figure 2-1: Annual Percent Change in the Consumer Price Index, Monthly, January 2000-April 2022




Source: Bureau of Labor Statistics, retrieved from the Federal Reserve Bank of St. Louis
Notes: Annual growth rates in the Consumer Price Index for All Urban Consumers (CPI-U). Grey bars indicate recessions as defined by the National Bureau of Economic Research.

*Markets Expect High Inflation to Persist*

While the *Report* documents the high inflation Americans experienced in 2021, it argues that inflation will be temporary, presenting relatively anchored long-term market and expert

inflation expectations as of November and December 2021.[32] Yet, after inflation continued to accelerate in 2022, forecasters revised up their expectations and market participants began pricing in expectations of sustained inflation.

Based on the same survey cited in the *Report*, professional forecasters' expectations of CPI inflation over the next five years increased from 2.7 percent in the Q1 2022 survey to 3.4 percent in Q2 2022.[33] Market indicators have similarly increased, including the Treasury Inflation-Protected Securities (TIPS) five-year spread shown in Figure 2-2.[34]

The five-year TIPS spread is the difference between the yield on five-year Treasury securities and five-year TIPS. TIPS are considered to be very low-risk investments because the principal is adjusted to account for the cost of inflation; however, their low risk decreases their yields. As such, the difference between these bond yields is an indicator of what markets expect inflation to be on average over the next five years.

From 2010 to 2019, the market's five-year inflation expectations held relatively steady, averaging 1.7 percent. Then, after falling during the COVID-19 recession, inflation expectations began steadily rising. After recovering to 2.0 percent in January 2021, inflation expectations hovered around 2.5 percent during the second and third quarters of 2021 and exceeded 3.5 percent within the first quarter of 2022.[35]

As of May 2022, investors' longer-term inflation expectations over the next ten years remain slightly elevated but still relatively anchored at 2.7 percent, suggesting that investors do not expect the current period of high and rapidly rising inflation to last for a decade.[36] Yet, as revealed in Figure 2-2, investors also do not believe the Federal Reserve will achieve its two percent inflation target within the next five years, indicating that the *Report*

misdiagnosed the threat of elevated inflation over the medium term.

Figure 2-2: Inflation Rate Expected Over the Next Five Years as Indicated by the TIPS Spread, Daily, January 2010-May 2022


Source: Federal Reserve Bank of St. Louis

Notes: The five-year TIPS spread reflects what market participants expect inflation to be in the next five years, on average. It is calculated by taking the difference between the 5-year market yield on U.S. Treasury securities at constant maturity and the 5-year market yield on inflation-indexed U.S. Treasury securities at constant maturity. Grey bars indicate recessions as defined by the National Bureau of Economic Research.

## *The Consequences of Inflation*

### *High Inflation Imposes Significant Costs on American Families*

The *Report* briefly describes the challenge of inflation. However, it makes no attempt to quantify the burdens inflation has imposed on American families, nor does it acknowledge that the United States is experiencing higher inflation rates than most other nations.

This year, the JEC launched a State Inflation Tracker to quantify the added costs American households faced each month due to the high inflationary environment that began in early 2021.[37] Monthly inflation costs are defined as the additional expenditures the average household must make in a given month to attain the same standard of living it did in January 2021, when CPI inflation was still within historical norms at a 1.4 percent annual rate.[38]

The average American household faced a 10.5 percent price increase between January 2021 and April 2022. This implies that the average household would have had to spend an extra $569 in April to afford the same goods and services it purchased in January 2021.[39]

### *Americans Experience Inflation Differently Depending on Where They Live*

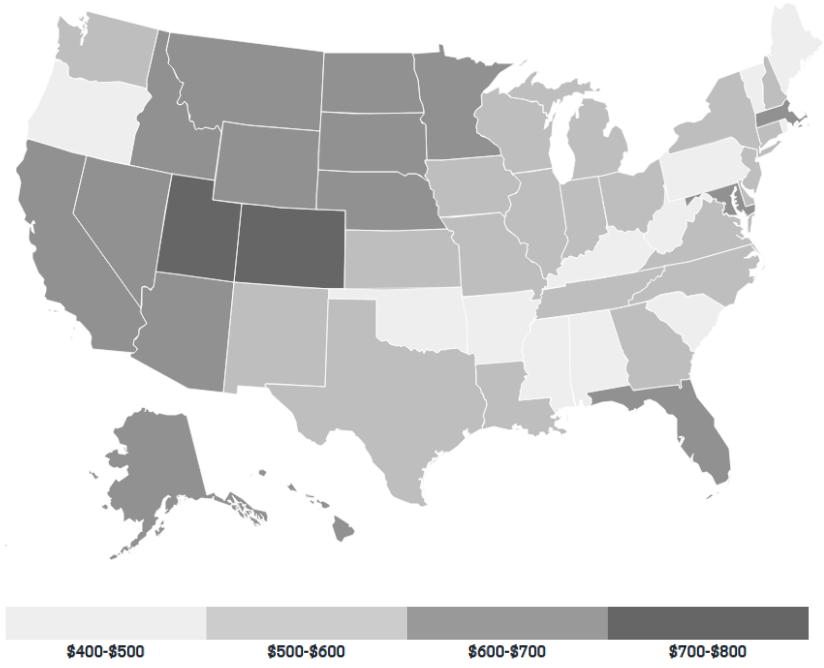
Although inflation was high everywhere in 2021 and 2022, inflation rates were not uniform across the country. Figure 2-3 shows this variation using a map of the United States in which States with higher inflation costs are shaded darker.

Families in the Mountain West (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) faced the highest inflation rates, with prices in April 2022 12.7 percent higher than in January 2021.[40] What set apart inflation in the

Mountain West was rapidly rising home and rent prices as measured by the CPI for shelter, which increased 10.2 percent from January 2021 to April 2022.[41]

Inflation costs in April 2022 were especially high for families in Colorado ($774), Utah ($751), and Arizona ($688).[42] Families in Washington, DC, who have the highest average spending levels in the nation, experienced even greater inflation costs of $806.[43]

Figure 2-3: Average Inflation Costs per State, April 2022, Relative to January 2021 Price Levels




Source: JEC Calculations using: Bureau of Economic Analysis, Personal Consumption Expenditures; Bureau of Labor Statistics, Consumer Expenditure Survey; Census Bureau, American Community Survey.
Notes: Inflation costs reflect how much more the average U.S. household must pay in the current month for the same goods and services it purchased in January 2021. See methodology for a detailed explanation of these calculations; Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: Methodology," U.S. Congress Joint Economic Committee Republicans, April 12, 2022.

Due to lower average household spending, families in West Virginia, Mississippi, and Arkansas faced the lowest inflation costs. However, these costs were still substantial. In April 2022, households in these States would have had to spend an additional $442, $446, and $452, respectively, to afford the same goods and services they purchased in January 2021.[44]

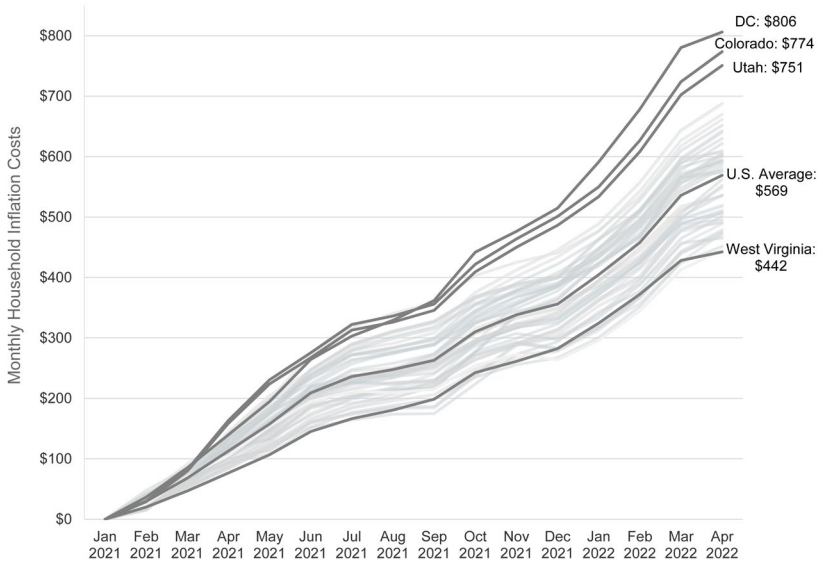
*Inflation Costs Will Remain Even After Inflation Reverts to Normal Levels*

As price levels rose throughout 2021 and the first four months of 2022, so did the monthly costs to American families. Figure 2-4 displays average monthly inflation costs over time for all fifty States and Washington, DC.

For the average U.S. household, inflation costs rose from $0 in January 2021 (the base month) to $356 in December 2021. In April 2022, inflation cost the average American household an extra $569 to purchase the same goods and services it did in January 2021.[45]

American families will face these costs in perpetuity even after inflation returns to normal levels, as the inflation that has already occurred represents a permanent increase in the price level. If prices were to completely stop increasing after April 2022, the price increases that already occurred would cost the average American household $6,829 over the following 12 months.[46]

Figure 2-4: Average Monthly Household Inflation Costs by State, Relative to January 2021 Price Levels, January 2021-April 2022




Source: JEC Calculations using: Bureau of Economic Analysis, Personal Consumption Expenditures; Bureau of Labor Statistics, Consumer Expenditure Survey; Census Bureau, American Community Survey.
Notes: Inflation costs reflect how much more the average U.S. household must pay for the same goods and services it purchased in January 2021. See methodology for a detailed explanation of these calculations; Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: Methodology," U.S. Congress Joint Economic Committee Republicans, April 12, 2022.

These inflation costs act as a regressive tax, disproportionately harming less affluent families. Lower-income households spend a larger portion of their budgets on food, energy, and shelter, which drove price increases in 2021.[47] Research also finds that inflation reduces poor individuals' lifetime consumption opportunities more than that of their wealthier counterparts,[48] and that rising gas prices specifically increase the cost of living for rural Americans significantly more than for wealthier Americans living in urban areas.[49]

### *Drivers of Inflation*

COVID-related challenges set the stage for high inflation in the United States and around the world. Consumers dramatically shifted their demand toward goods, increasing stress on production, transportation, and supply chains. At the same time, producers faced increased costs and shortages of intermediate inputs as global production was slow to recover from the COVID-19 shutdowns.

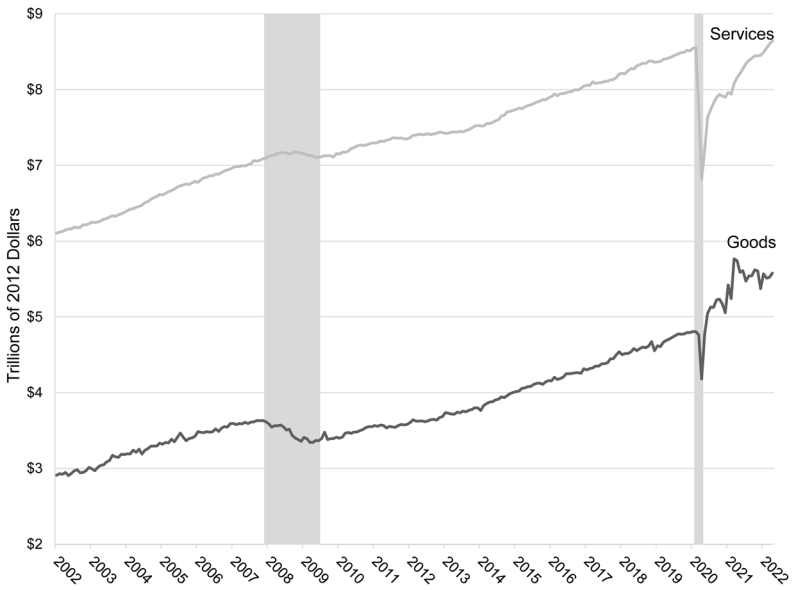
These demand and supply factors interacted with one another to fuel globally-elevated inflation. However, policies enacted by the Administration and other levels of Government created inflation challenges unique to the United States. U.S. policy decisions further boosted already-high demand for goods by incentivizing consumer spending, and further restricted the supply of goods by reducing the size of the workforce and increasing the cost of trade and production. Together, these policy choices worsened U.S. inflation compared to the rest of the world.

#### *Shifting Consumer Preferences and Supply Chain Inefficiencies*

Shifting consumer preferences presented a significant economic challenge during the COVID-19 recovery. Americans, hesitant to engage in in-person interactions, flocked to goods consumption throughout 2021. The result was a 20 percent increase in inflation-adjusted goods consumption by March 2021 relative to pre-COVID levels.[50] Goods consumption remained elevated throughout 2021 and 2022 even in the face of high inflation, with real spending on goods 16 percent higher in April 2022 than in February 2020. [51]

Figure 2-5 shows the stark contrast between goods consumption and services consumption following the COVID-19 recession, which contributed to high inflation for goods.

Figure 2-5: Real Annualized Personal Consumption Expenditures, Goods vs. Services, Monthly, January 2002-April 2022




Source: U.S. Bureau of Economic Analysis via Federal Reserve Bank of St. Louis.
Notes: Grey bars indicate recessions as defined by the National Bureau of Economic Research.

These post-COVID consumption trends were unique. Following the onset of the Great Recession, it took a full 50 months (over four years) for inflation-adjusted goods consumption to recover, compared to just four months after the COVID shock.[52]

The sudden uptick in U.S. consumer demand for goods in early 2021, specifically imports, placed significant stress on supply chains. As the *Report* documents, U.S. imports rose faster than port capacity could process them, leading to unprecedented shipping backlogs.[53] Ports became so backlogged that container ships were forced to sit at anchor for days while they waited for unloading space, a highly unusual occurrence before the pandemic. By the end of the year, it was common for over 100

container ships to be waiting at anchor outside the ports of Los Angeles and Long Beach at once.[54] While the number of ships at anchor has fallen in 2022, reports suggest that container ship backlogs have continued.[55]

Elevated consumer demand coupled with port congestion increased stress on truck and rail cargo shipping and put upward pressure on shipping prices.[56] One measure of shipping costs, the Cass Transportation Index's Inferred Freight Rates, increased 33 percent from December 2020 to December 2021, compared to a 2 percent increase from December 2018 to December 2019.[57]

While ports were struggling to process large cargo volumes and shipping delays were growing, businesses also faced product shortages. The sudden shutdowns in 2020 caused many factories around the world to shut down, scale back production, or retool their production facilities to meet a different need, leading to global commodity shortages and rising prices for items like steel and lumber.[58] In some cases, these shortages are expected to last for years; producers who use foreign-made semiconductor chips in their manufacturing processes expect semiconductor shortages to last into late 2022 or 2023.[59]

A lack of willing transportation workers also worsened supply chain challenges and increased inflationary pressure. Not only did weak labor supply reduce the number of available people working to get goods into consumers' hands,[60] it also put upward pressure on nominal wages for those workers,[61] further increasing employer costs.

*Government Policies Worsen Inflation*

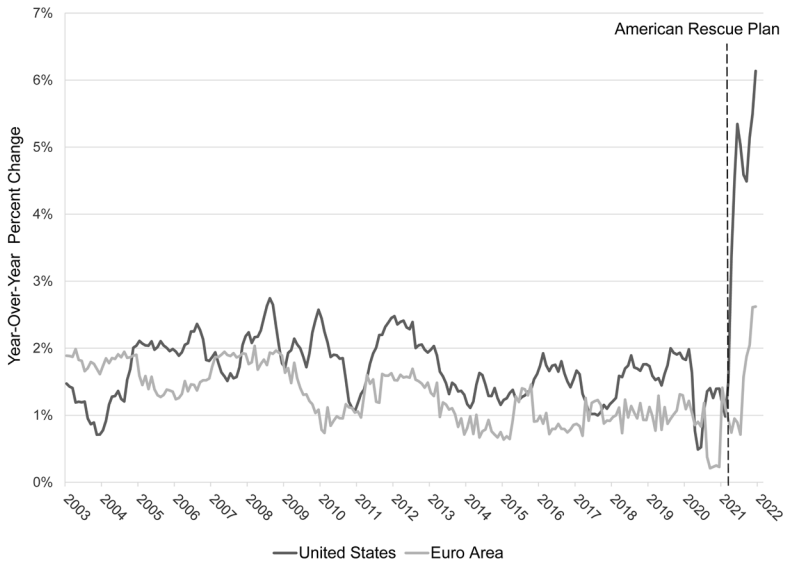
The *Report* asserts that inflation in the United States was strictly a global phenomenon caused by post-COVID reopening interacting with global supply chain challenges. It uses international

comparisons to make this point, suggesting that "the fact that inflation has accelerated in so many countries underscores its common drivers."[62]

The *Report* is partly correct in identifying the global factors that drove inflation in the United States and elsewhere, like shifting consumer preferences. However, global factors alone cannot fully explain the magnitude of U.S. inflation.

To demonstrate, Figure 2-6 compares core price increases in the United States and the Euro area. It reveals that inflation in the United States relative to Euro-using countries sharply increased in March 2021, after decades of largely comparable inflation trends.

Figure 2-6: Annual Percent Change in the Harmonized Index of Core Consumer Prices, Monthly, January 2003-March 2022




Source: U.S. data are retrieved from the Bureau of Labor Statistics via Haver Analytics; Euro Area data are retrieved from Eurostat via Federal Reserve Bank of St. Louis. Notes: Harmonized Index of Core Consumer Prices (HICP) for the United States excludes food and energy; HICP for the Euro Area excludes food, energy, alcohol, and tobacco.

The deviation in inflation trends was largely driven by four U.S. policy decisions: (1) an excessive fiscal response that over-fueled consumer demand, (2) an excessive monetary response that further boosted demand, (3) Government regulations that decreased supply chain efficiency, and (4) work disincentives that reduced the supply of willing workers.

## FISCAL RESPONSE

The *Report* and the President's Budget propose new social spending goals without acknowledging the inflationary effect of prior Government spending. While one could justify the spending packages passed in early 2020 as hedging against the risk of a virus that was going to have unknown consequences on Americans' health and material wellbeing, the *American Rescue Plan Act* (ARP) was a $2 trillion overcorrection made 11 months into the recovery.

In March 2021, Congress passed the ARP, fueling consumer demand far above what the market could supply and even further above its would-be natural level. The ARP's last major round of stimulus was delivered three months after consumer spending had fully returned to pre-COVID levels, and its size equaled almost 300 percent of the estimated output gap over the subsequent three years.[63] As shown in Figure 2-6, this policy choice coincided with a stark divergence in U.S. inflation compared to similar nations.

In total, U.S. COVID spending packages represented the largest fiscal response in the world as a share of Gross Domestic Product (GDP): more than double that of similarly developed countries like the U.K., Norway, and New Zealand, and 80 percent greater than Spain, Poland, and Belgium.[64]

Congress and the Administration enacted policies that over-fueled demand in the face of supply chain challenges. The Advanced

Child Tax Credit (CTC), in effect through the end of 2021, provided parents with direct transfers of up to $300 per child each month and simultaneously eliminated the related work incentives. Likewise, the Administration's decision to extend paused student loan payments, interest, and collections through at least August 2022 incentivized 70 percent of borrowers to move into forbearance as of December 2021, up from 8 percent in December 2019.[65] Disposable-income for these 27 million borrowers increased temporarily, further contributing to inflationary pressures.

These policy choices led to an accumulation of excess savings, detailed on page 58 of the *Report*, which inflated consumer spending. Aggregate personal saving spiked at three distinct times—in April 2020, January 2021, and March 2021—each corresponding to a different round of COVID spending bills and Economic Impact Payments made to households.[66] According to JEC estimates, American households accumulated $2.5 trillion in excess savings by the end of 2021, consistent with other estimates[67] and roughly in line with the *Report's* estimate of $2.7 trillion.[68]

It was not until Q1 2022 that Americans started drawing down on these savings, spending $43 billion more than they earned in the first three months of the year.[69] This level of dissaving, however, represents less than two percent of the total excess savings accumulated in 2021.[70] Assuming this level of dissaving holds constant, it would take 169 months—over 14 years—for Americans to spend the entirety of their excess savings, signifying 14 years of potential elevated consumer demand which could add to inflationary pressures.

Researchers have estimated the inflationary impact of the ARP, finding that the stimulus added 2.5 to 3.0 percentage points to U.S.

inflation in 2021.[71] Researchers from the Federal Reserve Board and the Federal Reserve Bank of St. Louis further estimate that U.S.-driven inflation spilled over to other nations through international trade, increasing inflation in Q4 2021 by 1.5 percentage point in Canada and by 0.5 percentage point in the United Kingdom.[72]

## MONETARY RESPONSE

While Congress was pursuing an excessive COVID fiscal response, the Federal Reserve simultaneously enacted easy money policies to stimulate market demand. In March 2020, the Federal Reserve reduced the federal funds rate to zero percent, began a new round of quantitative easing, and flooded the economy with liquidity by enacting hundreds of billions of dollars of new lending programs.[73]

Since then, the size of the Federal Reserve's balance sheet has more than doubled, with asset holdings increasing from $4.2 trillion in March 2020 to $8.9 trillion in May 2022.[74]

Confronted with elevated inflation rates in mid-2021, the Federal Reserve Open Market Committee (FOMC) stayed committed to the view that inflation was transitory and kept on the path of accommodative monetary policy.[75] By December, annual growth in core PCEPI reached 5.8 percent[76] and the FOMC began scaling back its asset purchases.[77] Yet, the FOMC did not decide to raise the federal funds rate until March 2022, at which time core PCEPI inflation had reached 6.6 percent.[78]

In March, the FOMC increased the target interest rate by 25 basis points, citing Russia's invasion of Ukraine and the threat to global oil prices.[79] The FOMC again raised the target rate in May, this time by 50 basis points,[80] and simultaneously announced that it would begin gradually reducing the size of its balance sheet.[81]

The slow pace of FOMC action to counter inflation may have made inflation worse. The federal funds rate was kept at zero throughout the entirety of 2021, incentivizing additional borrowing and spending while consumers were already accumulating $2.5 trillion of excess saving from Congress's expansionary fiscal policy.[82]

If the federal funds rate was responsive to market conditions instead of FOMC discretion, it would have increased at a much faster pace to stave off inflation. For example, the Taylor Rule—a formula that determines the optimal federal funds rate based on a desired rate of inflation and the gap between real GDP and potential GDP—suggests that the federal funds rate should have been close to six percent in the fourth quarter of 2021.[83]

## GOVERNMENT INTERVENTION IN SUPPLY CHAINS

The *Report* acknowledges the productivity enhancing benefits of international trade, recognizing that "modern supply chains have driven down consumer prices for many goods," and that international trade "can lead to the development of highly specialized and innovative suppliers."[84] Yet, it argues that supply chains failed in 2021, and makes the case that Government intervention is necessary to ensure supply chain resiliency.

The *Report* is correct in identifying the productivity-enhancing benefits of open markets. International trade reduces prices for producers and consumers, results in net job creation, productivity growth, and economic growth, and increases Americans' standard of living.[85] Unfortunately, the *Report* mistakenly blames supply chain challenges on U.S. dependence on imports, and makes no mention of the significant costs imposed by Government intervention in trade and production (detailed in Box 2-1 and Box 4-2).

At the same time, recent supply chain challenges have revealed inefficiencies in the U.S. trade and transportation sectors, largely driven by Government regulations that decrease the efficiency and functionality of U.S. supply chains. But the key to supply chain resiliency is not more Government intervention; it is less.

As detailed in the *Report*, the increase in consumer demand for imported goods in 2021 overwhelmed U.S. ports. There were simply not enough dock workers, unloading space, or warehousing space to process such a substantial increase in imports. More productive ports may have been better able to process higher volumes, but the United States ranks among the lowest in the world for port productivity.[86]

Increased automation would likely help to improve port productivity; however, dockworkers unions supported by the Administration—like the International Longshore and Warehouse Union, which represents most workers on the West Coast—have largely resisted moves toward automation and increased efficiency.[87]

As ports struggled to process large amounts of cargo, reforming Federal and local regulations would also have helped to ease bottlenecks. For example, dual-transaction rules made it harder for truck drivers to pick up cargo by mandating that trucks drop off and pick up containers within the same terminal, as did port rules restricting which types of chassis can be used at which terminals.[88] Similarly, local zoning regulations in Los Angeles worsened supply chain challenges by reducing container storage capacity and forcing ships to sit longer while they waited to drop off their cargo.[89]

**Box 2-1. Misguided Policies That Would Worsen Inflation**

The *Report* argues that fragile supply chains were the leading cause of economic woes in 2021. While it does not recommend many concrete policy solutions beyond information sharing and increasing Government subsidies to manufacturers, it touts prior policies that restricted trade and raised domestic content requirements for Federally-purchased goods.[90]

These proposed trade barriers would not increase supply chain resiliency. Instead, they would reduce U.S. productivity, increase the cost of domestic manufacturing, and further raise prices of consumer goods in an already-high inflationary environment. [91]

Additionally, the *Report* makes no mention of tariffs currently in place on nearly $270 billion of imports from China which are actively increasing producer and consumer costs.[92] While the President did not impose these tariffs, he chose to keep them in place, likely to protect domestic workers from foreign competition. However, tariffs make it costlier to manufacture in America by increasing the cost of inputs, as over 60 percent of imports are used by American manufacturers in domestic production.[93] Instead of protecting U.S. workers, tariffs harm more workers than they help.

Take, for instance, the national security tariffs on steel and aluminum imposed in 2018. By increasing the cost of foreign steel and aluminum relative to U.S.-made products, the national security tariffs were predicted to add roughly 26,000 jobs to the U.S. steel and aluminum manufacturing sectors. Yet by increasing the price of steel and aluminum, either because businesses were forced to pay the tariff or switch to higher-priced U.S.-made products, they were also predicted to eliminate nearly 500,000 jobs in the rest of the economy—harming U.S. manufacturers and

service providers, like construction companies, that utilize imported steel and aluminum in production.[94]

Other studies have confirmed the harm that tariffs impose on domestic manufacturers, finding that the entire cost of U.S. tariffs on steel and aluminum were borne by U.S. importers.[95] When combined with retaliatory tariffs from other nations, these tariffs triggered net decreases in manufacturing employment in the United States.[96]

Perhaps most relevant to current economic challenges, tariffs raise prices for American consumers and producers. Estimates suggest that removing recently imposed tariffs on imports from China, steel and aluminum imports, and Canadian lumber imports could deliver a one-time inflation reduction of 1.3 percentage point.[97]

Congress has also enacted regulations through legislation that decreased the functionality of U.S. supply chains. The *Foreign Dredge Act of 1906* prevents foreign built, owned, or operated boats from dredging in the United States, i.e., the process by which ports are built and expanded. As a result, the United States has access to only 15 hopper dredges—the most efficient dredging vessels available—11 of which are more than 20 years old.[98] These laws discourage the expansion of ports by making dredging more costly, and the prohibitive cost of dredging is a key reason why the ports of Los Angeles and Long Beach are the only ports currently large enough to fit many of the vessels that transport goods to the United States.

Similar to the *Foreign Dredge Act*, the *Merchant Marine Act of 1920*, also known as the Jones Act, prevents any foreign built, owned, operated, or crewed vessel from sailing between U.S. ports. Not only does this legislation make sea-based shipping

unnecessarily expensive—daily operating costs for U.S. owned vessels are 2.7 times greater than for foreign-owned vessels[99]—but it also reduces shipping options during supply chain crises, increasing stress on trucks and trains.

Finally, tariffs imposed on chassis (the metal support structures that trucks use to carry cargo) and semiconductor chips drove up prices and reduced the availability of goods that are essential to the trade and transportation industries. Industry reports suggest that tariffs imposed on chassis from China triggered shortages in the United States as U.S. chassis producers struggled to meet demand.[100] Likewise, tariffs on semiconductor parts likely contributed to U.S. auto shortages in 2021.[101]

## WORK DISINCENTIVES

While Americans were facing rapidly rising prices and shortages, the Administration enacted policies that actively disincentivized work and worsened supply-side issues. In turn, U.S. production significantly lagged consumer demand.

As of Q1 2022, real U.S. industrial production was only 1.9 percent above its pre-pandemic level in Q4 2019, not nearly high enough to meet demand.[102] Inflation-adjusted goods consumption jumped 15.6 percent during the same time frame.[103]

Consumers bridged this gap by turning to imports.[104] However, lagging U.S. production was still problematic, driven in part by the lagging U.S. job recovery. As of May 2022, the U.S. labor force was missing 6.3 million workers measured against pre-pandemic trends.[105]

Chief among the Administration's anti-work policies was the ARP's continuation of Federal Pandemic Unemployment Compensation (FPUC) through September 2021. FPUC disincentivized employment by paying many Americans more

money to stay unemployed than return to work.[106] In turn, removing these perverse incentives was found to reduce the number of Americans filing for unemployment insurance[107] and increase the number moving into employment.[108]

The expanded CTC, another ARP policy, had similar effects. By increasing incomes and eliminating work requirements for recipients, the expanded CTC was predicted to reduce the size of the labor force by 1.5 million workers in the long run.[109]

Looking forward, economic consensus suggests that the tax increases in the *Build Back Better Act*—the Administration's principal policy aim—would likely depress investment and reduce hiring.[110] Further reducing output and labor supply in this way would only add to inflationary pressures.

Chapter 3 of the *Response* provides more information about the Administration's policies that reduced the size of the labor force in 2021.

*Alternate Explanations Fail to Explain the Rise of Inflation*

Aside from the macroeconomic demand shifts that spurred inflation following the COVID-19 shutdowns, and the Government policies that worsened it by boosting consumer demand and restricting the supply of goods, services, and labor, the President has offered alternative theories to explain the high inflationary environment in 2021 and 2022. For example, the President has attributed the rise in inflation to international conflicts, calling it "Putin's price hike." The President has also blamed oil and gas companies, suggesting high gas prices are the product of anti-competitive, greedy behavior.[111] However, these narratives cannot explain a substantial portion of the recent U.S. inflation experience.

First, while the President's budget largely ignores high U.S. inflation, it attributes the "uncertainty" in its inflation assumptions to Russia's invasion of Ukraine[112]—similar to the FOMC in their March 2022 meeting.[113] Yet, inflation in the United States was climbing long before the Russia-Ukraine conflict began in March,[114] and the pace of price increases would have only been modestly slower if Russia had never invaded Ukraine. Assuming that energy prices in March would have increased at the same rate they did in February (by 3.5 percent instead of 11.0 percent), overall prices measured using CPI still would have increased by 7.9 percent year-over-year, instead of their actual rate of 8.5 percent.[115]

The President also has argued that corporate greed and corporate concentration are driving the uptick in gas prices. In November 2021, the President asked the Federal Trade Commission to investigate oil and gas companies for anti-competitive behavior, evidenced by the divergence between gas prices and crude oil prices.[116] Congress followed suit, and in May 2022 the House of Representatives passed legislation that would make it unlawful for wholesale or retail gas providers to sell consumer fuel at "unconscionably excessive" prices during an energy emergency.[117] Aside from distracting from the root causes of inflation, price controls would cause substantial harm to consumers who would face shortages for goods they need.

In reality, the recent divergence in gas and oil price trends is a relatively common occurrence, known in the economics literature as "rockets and feathers," in which prices fall slower than they rise in commodity markets. While there is no definite conclusion for why this phenomenon exists, it occurs across multiple markets—like oil, beef, and pork—and there is no evidence that it is explained by corporate greed.[118] Rising gas prices are also unlikely to be the product of corporate concentration because the

United States has one of the least concentrated oil and gas sectors in the world.[119]

***Policy Solutions to Restore Purchasing Power***

Although Government-enacted policies worsened the inflation situation in 2021 and early 2022, the Government could pursue policy solutions to help alleviate inflation moving forward. First and foremost, the Administration and Congress should not pursue expansionary fiscal policy or additional stimulus while inflation challenges persist. Providing households with more subsidies and cash transfers would elevate consumer demand at a time when production cannot keep up due to weak labor supply and supply chain issues.

As such, the President's Build Back Better plan carries significant inflationary risks. The President's Budget proposes $1.4 trillion in additional spending from 2022 to 2032 along with an estimated $1.6 trillion of new spending to support the Build Back Better agenda.

Not accounting for indirect effects, new Government spending by definition increases GDP. However, economic research has identified a fiscal multiplier range of 0.6 to 1.0, with a multiplier less than one signifying that Government spending raises GDP but does not stimulate additional economic activity in the private sector.[120] Furthermore, the Congressional Budget Office (CBO) estimates that real GDP exceeded potential GDP as of Q3 2021, implying that any additional spending would be inflationary. Therefore, under the conservative assumption of a fiscal multiplier equal to 0.6, the increases in spending proposed in the President's policy agenda can be expected to increase annual inflation by 0.3 percentage point in 2022 and 0.3 percentage point in 2023.[121]

Second, the Federal Reserve's hesitancy to move away from its accommodative monetary stance while inflation was rising at its fastest pace in decades makes the case for a humbler, market-driven monetary authority. The FOMC could combine their dual mandate of price stability and maximum stable employment into a single mandate of Nominal GDP (NGDP) level targeting, which targets a stable growth rate of all spending in the economy.[122]

By targeting the growth rate of NGDP, this approach is easily able to distinguish between demand shocks (in the negative case, where NGDP falls due to decreasing prices and quantities) and supply shocks (in the negative case, where NGDP is stable due to decreasing quantities and increasing prices), setting the appropriate path of monetary policy in each case. Perhaps most importantly, NGDP level targeting would provide markets with stable expectations, reducing the weight of FOMC discretion and lowering the chances of negative market reactions to monetary policy decisions. Indeed, research suggests that NGDP level targeting would have elicited a faster GDP recovery following the Great Recession, albeit with slightly higher short-term inflation levels.[123]

Third, if the United States wants to prepare for potential future supply-driven crises—which may begin at home or abroad—it should seek to diversify its supply of essential goods. The Government should remove barriers to efficient supply chains, including regulations that needlessly drive up the cost of sea transportation and port expansions and hinder the United States' ability to effectively process imports. Similarly, recently imposed tariffs on chassis and semiconductors—inputs that are essential to the trade and transportation industries—should be removed, as they raise costs and worsen shortages.

Fourth, the Government should pursue policy reforms to increase the size and quality of the workforce. Valuable reforms may include: removing barriers to school choice programs, reforming Federal apprenticeship programs, removing regulations that discourage flexible work, and removing labor regulations, such as occupational licensing requirements, that keep would-be willing workers from participating in the labor force.

Fifth, policy reforms should encourage more domestic production. Removing tariffs on lumber from Canada and intermediate and capital goods imports from China may have the most immediate impact by reducing the cost of U.S. manufacturing. Regulatory reform, as detailed further in Chapter 4, would also accomplish this goal by reducing barriers to business creation, spurring investment, and stimulating economic growth. Similarly, removing regulatory barriers to U.S. oil and gas production would spur greater domestic energy supply and put downward pressure on energy prices.

Finally, to bring down the cost of housing, State and local Governments should pursue zoning reform to allow more housing construction and more multifamily housing units in areas of high demand. The Federal Government could also allow State and local Governments to repurpose Federal land in order to expand housing supply and increase affordability. While not comprehensive, enacting these reforms would be a meaningful step toward restoring Americans' purchasing power.

# CHAPTER 3: EMPLOYMENT

The *Employment Act of 1946* charges the Federal Government with promoting "free and competitive enterprise and the general welfare, conditions under which there will be afforded useful employment for those able, willing, and seeking work, and to promote maximum employment,"[124] in addition to its other two goals of promoting production and purchasing power. During the Biden Administration, employment was poised for a full recovery from the pandemic-induced recession but fell short due to policies that held back labor supply.

The COVID-19 pandemic resulted in a historic shock to the labor market in the United States. Between February and April 2020, 22 million workers left the workforce.[125] Unfortunately, Government policies during the Biden Administration have kept the U.S. from returning to full employment. Policies have disincentivized work with the expansion of unemployment compensation and changes to the Child Tax Credit (CTC), threatened to prohibit work with vaccine mandates, made it more difficult to work due to school and childcare closures, and enabled non-work through cash transfers in the form of Economic Impact Payments and student loan forbearance.

Taken together, these policies played a major role in keeping employment 6.3 million workers short of the pre-pandemic trend as of May 2022. Because of misguided policy, the American economy is further away from the Employment Act's goal of full employment.

This chapter documents the current state of the labor market in which weak labor supply is holding back employment. It then describes the role of policies in suppressing labor supply. Finally, it describes how future policies could strengthen labor supply and bring the American economy closer to full employment.

### *The State of the Labor Market*

Prior to the COVID-19 pandemic, the U.S. labor market was especially strong, with increases in the labor force participation rate, employment to population ratio, real wages, and a reduction in poverty, particularly for historically disadvantaged groups. The pandemic disrupted these gains, but the country was in a position, at least early on, to quickly return to its pre-pandemic trend. Unfortunately, following what was initially a rapid jobs recovery through late 2020, the Administration-championed *American Rescue Plan Act* (ARP) became law in March 2021, adding $1.9 trillion in new Federal spending.[126] The ARP extended earlier COVID policies and added new programs that together weakened labor supply, and as a result, stalled the labor market recovery. Consequently, the legislation suppressed labor market gains for American families and held back their economic well-being.

#### *Employment Remains Below its Pre-Pandemic Trend*

Prior to 2015, labor force participation had been declining for nearly two decades, particularly among prime age workers (ages 25 to 54). In October 2013 and again in September 2015, prime age labor force participation fell to 80.6 percent—its lowest rate in 30 years.[127] Labor force participation declines were seen across demographic and gender groups with prime age men in particular seeing significant declines.[128]

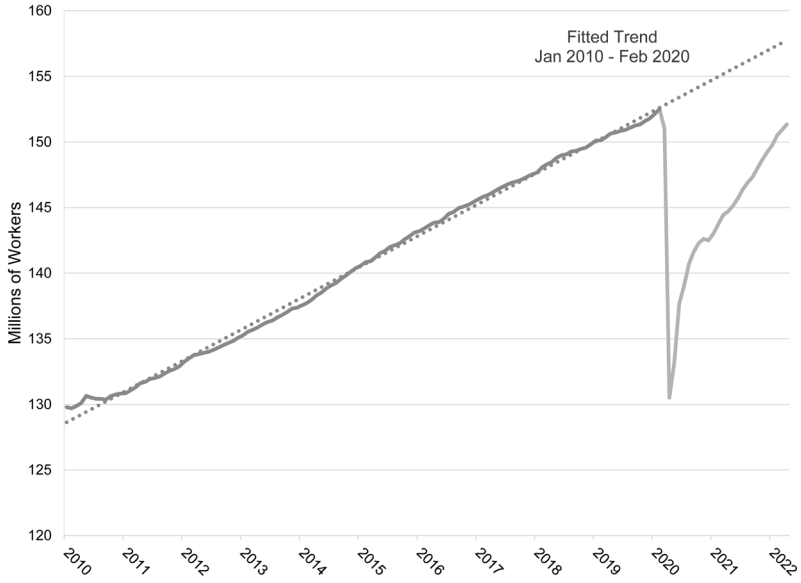
However, pro-growth policies beginning in 2017 and 2018—namely deregulation and lower taxes via the *Tax Cuts and Jobs Act*—strengthened the labor market. These policies helped sustain and further boost labor force participation, with the largest (pre-COVID) annual growth occurring from 2018 to 2019. In January 2020, prime age labor force participation reached 83.1 percent, a 12-year high. This growth was driven not only by new young workers and changes in population, but also by individuals who were previously disconnected from work entering the labor market. The total share of individuals who were working increased

across all major demographic groups. The employment to population ratio for Black Americans, for example, rose 8.4 percentage points from the lowest point after the Great Recession (July 2011) to February 2020.[129]

Pro-growth policies also fueled wage increases by increasing productivity and demand for workers. Starting in Q4 2017, real wages rose every quarter until the start of the pandemic, with larger gains for historically disadvantaged populations and workers at the bottom of the wage distribution.[130]

Unfortunately, the pandemic and subsequent policy response in 2020 and 2021 interrupted the labor market gains for many workers and stood in the way of a return to pre-pandemic trends. As of May 2022, 6.3 million workers remain out of the workforce measured against the pre-pandemic employment trend established in prior years (see Figure 3-1).

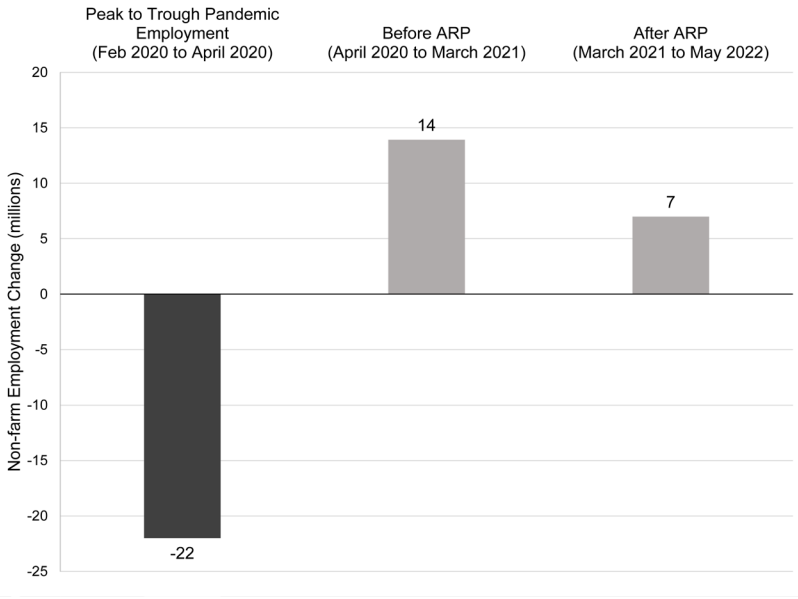
Figure 3-1: Number of Workers by Month, Including Pre-Pandemic Trend, Monthly, January 2010-May 2022




Source: JEC Calculations; Basic Monthly Current Population Survey data; Bureau of Labor Statistics, All Employees, Total Nonfarm.

The introduction and passage of the ARP likely slowed employment growth in 2021 by disincentivizing work. Figure 3-2 compares the employment recovery immediately following the initial pandemic shock with the recovery following the passage of the ARP. Following the initial employment decline of 22 million workers between February 2020 and April 2020, 14 million of those workers returned in the 11-month period through March 2021, the month ARP became law.[131] Rather than allow emergency-era programs to expire, the ARP extended them, continuing the pandemic policies of subsidizing non-work. Only 7 million jobs were added during the 13-month period after the ARP was implemented, between April 2021 and May 2022.

Figure 3-2: Employment Loss and Recovery Pre and Post American Rescue Plan, February 2020-May 2022




Source: Basic Monthly Current Population Survey data; Bureau of Labor Statistics, All Employees, Total Nonfarm.

*Suppressed Employment is Due to Weak Labor Supply*

The cause of suppressed employment levels is not weak labor demand. The workers who are available and looking for work are being hired. As of May 2022, the unemployment rate was 3.6 percent, just slightly higher than the pre-COVID level of 3.5 percent in February 2020.[132] Rather, suppressed employment levels are due to weak labor supply.

Strong labor demand in conjunction with weak labor supply is evidenced by the growing gap between job openings and new hires by employers. By May 2022, there were 4.8 million more job openings than hires (Figure 3-3).

Figure 3-3: Job Openings and Hires, Monthly, January 2016-May 2022, Millions of Jobs


Source: U.S. Bureau of Labor Statistics, Job Openings: Total Nonfarm [JTSJOL], retrieved from FRED, Federal Reserve Bank of St. Louis; U.S. Bureau of Labor Statistics, Hires: Total Nonfarm [JTSHIL], retrieved from FRED, Federal Reserve Bank of St. Louis.

While new jobs are going unfilled at record rates, more workers are also voluntarily leaving their existing jobs, in what has become known as the "Great Resignation."[133] While the *Report* notes that voluntary quits are generally viewed "as a sign of labor market confidence," the record breaking number of quits in 2021 may be less a sign of labor market confidence than an indicator of the high excess savings attained over the pandemic (see more in Chapter 2). Not all of the individuals who left their jobs intend to return, which has held back labor supply.

*Labor Market is Delivering Less to Families*

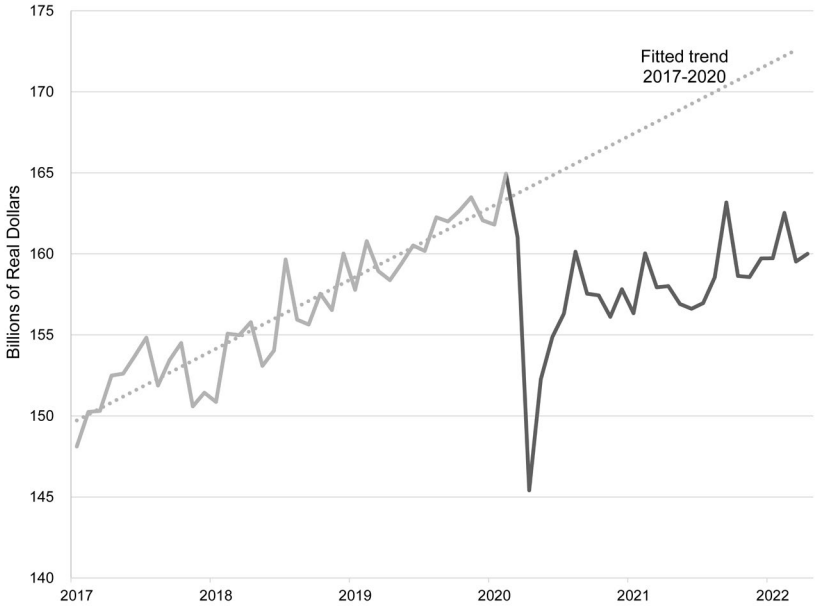
During the years immediately preceding the pandemic, real wages were rising, especially for low-wage workers. Rising wages fueled real median household income growth of a record 6.8 percent to

an all-time high of $69,560 in 2019.[134] Income gains driven by employment and wage growth—particularly for women and minorities—caused poverty to fall to a record low for every racial and ethnic group in 2019.[135]

The labor market has not delivered the same prosperity to families during the Biden Administration. After an initial spike in real median earnings when lower wage workers lost their jobs at the height of the pandemic, real median earnings fell consistently since Q3 2020. The initial decline was largely good news, signaling the return of lower-wage workers to the workforce. However, large real earnings decline since the second half of 2021 was primarily the product of inflation eroding all workers' wages. In real terms, the average weekly earnings of production and non-supervisory employees in April 2022 were 3.1 percent lower than they were a year prior.[136] When looking at all private industry employees, real average weekly earnings in April 2022 were nearly 3.4 percent lower than the year prior.[137]

When factoring in lower overall employment levels relative to the pre-pandemic trend (the 6.3 million missing workers) and reduced real earnings of workers, the recovery of aggregate inflation-adjusted earnings received by all employed Americans fell even further below the pre-pandemic trend. Figure 3-4 shows real aggregated weekly earnings for all workers from January 2017 to April 2022. Compared to the pre-pandemic economy, aggregate real earnings in April 2022 were 7.5 percent below where they should be. Lower total earnings also persisted among most demographic groups, with women and Asian workers the furthest behind.[138] Since earnings make up the majority of market income for most households, below-trend real aggregate earnings suppressed market incomes for American families making them less well off than they should be.

Figure 3-4: Aggregate Real Weekly Earnings for All Workers, Billions of 2022 Dollars, Monthly, January 2017-April 2022




Source: JEC Calculations; Basic Monthly Current Population Survey data; Bureau of Labor Statistics.
Notes: JEC calculations with linear trendline fitted based on data from January 2017 through February 2020. Earnings adjusted to 2022 dollars using the Consumer Price Index–Urban Series.

### *Policies That Have Contributed to Weak Labor Supply*

The 6.3 million worker shortfall as of May 2022 is largely a result of policy choices during the Biden Administration that unnecessarily weakened labor supply. These policies disincentivized work, enabled non-work, made it more difficult to work, and in some cases prohibited work altogether. While some of the policies have expired, their effects continue to shape a labor market that remains far removed from the trends established before the pandemic.

*Disincentives to Work*

Work disincentives make work less rewarding by shrinking the difference between an individual's income when working and when not working. The ARP weakened work incentives through enhanced unemployment compensation and changes to the CTC.

ENHANCED UNEMPLOYMENT COMPENSATION

In 2021, pandemic unemployment programs were extended by the ARP well beyond their early, emergency justification.

Federal Pandemic Unemployment Compensation (FPUC) is the COVID-era program that likely provided the largest work disincentive. In its original form as part of the *Coronavirus Aid, Relief, and Economic Security* (CARES) Act, FPUC provided unemployment claimants with an additional $600 per week on top of regular State unemployment benefits. This created a significant anti-work incentive by paying many people more to remain unemployed than to return to work. Peter Ganong, Pascal Noel, and Joseph S. Vavra from the University of Chicago estimate that unemployment benefits exceeded potential wages for nearly 70 percent of eligible unemployment claimants.[139]

By 2021, the FPUC was paying out $300 per week in additional unemployment compensation on top of regular State benefits. Rather than allow the program to expire in order to facilitate the economic recovery, the ARP extended the FPUC and eligibility to workers who would otherwise not be covered. American Action Forum research found that with $300 in additional weekly benefits, 37 percent of the entire U.S. workforce would receive more from unemployment benefits than from working.[140]

The FPUC expired in September 2021. Some States, however, chose to end the FPUC benefit prior to the Federal deadline. The 24 States that eliminated the $300 FPUC early experienced on average a 14 percent reduction in initial unemployment claims and

a 5 percent reduction in continuing claims.[141] Research from Harry Holzer, Glenn Hubbard, and Michael Strain found that unemployed workers who lost access to supplemental unemployment assistance were more likely to move into employment when benefits were ended.[142] These findings provide additional evidence that enhanced unemployment programs kept individuals out of the workforce in 2021.

## EXPANDED CTC

The ARP made significant changes to the CTC by removing the earnings requirement, making 17-year-old dependents eligible, and increasing the maximum amount of the credit from $2,000 per child to up to $3,600 per child. The prior version of the CTC encouraged parents to participate in the workforce because earnings or taxable income were required to receive it. The prior version of the CTC also encouraged additional hours of work for some parents because of the phase-in design. However, the expanded CTC made all parents eligible for the full CTC amount regardless of work. This incentivized some parents to stay out of the workforce entirely and incentivized other working parents to work fewer hours than they otherwise would.[143]

Kevin Corinth, Bruce D. Meyer, Matthew Stadnicki, and Derek Wu from the University of Chicago estimate that a permanent CTC without an earnings or taxable income requirement would lead 1.5 million workers (or 2.6 percent of all working parents) to leave the workforce.[144] As a result of workforce exits, child poverty would fall by less than advertised and deep child poverty would not fall under the expanded CTC.[145]

### *Enabling Non-Work*

The fiscal response to COVID–19 enabled the subsidization of non-work through excess savings. Expanded unemployment, as mentioned above, played a significant role in keeping individuals from returning to or looking for work, while policies like

Economic Impact Payments and student loan forbearance further increased savings likely prolonging workforce detachment.

During the COVID-19 pandemic the Government issued three Economic Impact Payments: $1,200 (+$500 per eligible child) in April 2020 under the CARES Act, $600 (+$600 per eligible child) in December 2020 as part of the *Tax Relief Act*, and $1,400 (+$1,400 for each qualifying dependent) in March 2021 under the ARP. Typically, single individuals with Adjusted Gross Income below $75,000 and married couples with Adjusted Gross Income below $150,000 were entitled to the full payment amounts.[146]

Across all three rounds of Economic Impact Payments, a single adult with one child could receive up to $5,700, and a married couple with two children could receive up to $11,400, regardless of employment status or need. These direct cash transfers decreased the need to return to work if the individual was not employed or to pursue additional work hours if employed.

Student loan forbearance contributed to the excess savings of Americans as well. Research done by Tom Lee at the American Action Forum explored the effect that student loan forbearance had on borrowers' choice to continue making regular payments. Prior to the pandemic in Q1 2020, nearly 50 percent of borrowers were making regular payments. Following the passage of the CARES Act, which contained the original loan forbearance provision, the percent of borrowers making regular payments dropped sharply. Since Q3 2020, the percent of borrowers making regular payments has remained relatively stable at 1.1 percent.[147] By continuing to extend loan forbearance, individuals retained as savings what they would have been spending on their regular payments. Pre-pandemic data show that the average required monthly payment was between $200 and $300 per month. For the average individual who stopped making regular payments on their student loans starting in April 2020, following the passage of the CARES Act, by the end of May 2022 they would have

accumulated $5,200 to $7,800 in excess funds that they otherwise would have put toward loan repayment.

*Making it More Difficult to Work*

Child care closures and the switch from in-person to virtual schooling made work more difficult for parents. Parents who typically worked outside the home had to make the choice to leave their children by themselves or not work.

Child care costs rose significantly during the COVID pandemic and access to child care options became even more challenging due to the high number of center closures that occurred following the steep drop in demand in the early days of the pandemic. According to the National Association for the Education of Young Children and the Early Care and Education Consortium, daily child care attendance initially dropped by more than 70 percent leading over 35 percent of providers to remain closed as of April 2021.[148]

Compounding the problem of child care closures, schools turned to virtual schooling. The Centers for Disease Control (CDC) did not declare it safe to open schools until February 2021. Even then, CDC guidance recommended masking indoors, maintaining distance, and limiting supplementary activities like fully reopening cafeterias or extra-curriculars. Despite reduced severity of infection among children, some States and localities decided to extend or implement regulations on schools and child care centers even after the CDC recommendation for reopening. Washington DC, for example, limited class size in schools until March 2021, and restrictions on the number of children in child care centers were still in place in May 2021.[149]

*Prohibitions on Work*

Beginning in 2021, the Federal Government attempted to impose sweeping vaccine mandates on workers. Universal vaccine

mandates would have effectively prohibited the 45 million Americans (or 30 percent of the civilian labor force) who remained unvaccinated as of December 2021 from working.[150] The JEC estimates that at the time, between 2.1 and 6.8 million workers would have been at risk of leaving their jobs under a Federal vaccine mandate.[151]

While the mandate imposed by the Biden Administration was struck down in court, around 40 percent of employers (as of March 2022) chose to require vaccination or regular testing, in some cases in anticipation of being subject to the Biden Administration's Federal mandate.[152] These private mandates, along with the Federal vaccine mandate on hospital workers and Federal workers, forced some people who did not get the vaccine to leave their jobs.[153]

***Policies to Promote Full Employment***

The *Report* fails to recognize that suppressed labor supply is holding back the labor market, due in large part to the Biden Administration's policies. Future policies intended to promote full employment must focus on increasing labor supply.

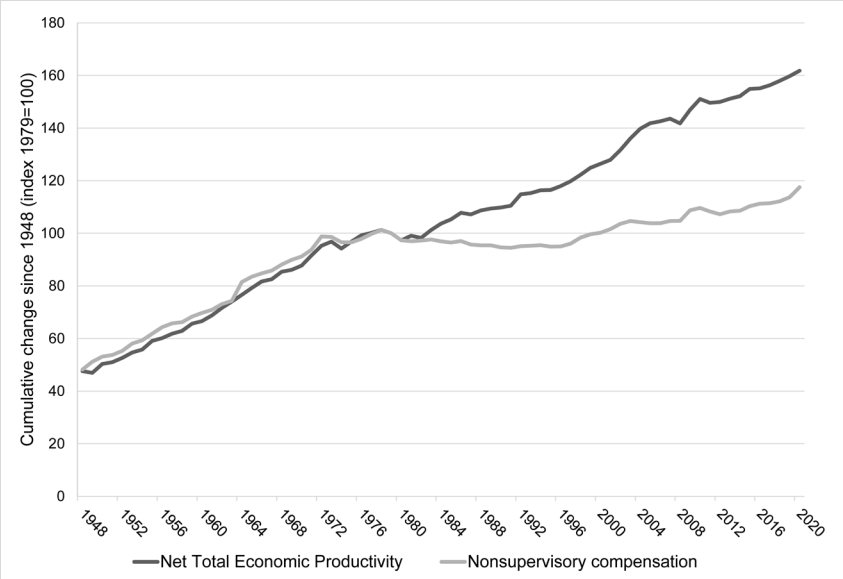
First and foremost, future policies should not add or expand disincentives to work. Cancelling any portion of student loans, and pushing through provisions of the proposed *Build Back Better Act* including the expanded CTC, national paid leave, and vague promises to address climate change by requiring union labor would ultimately do more harm to the already distorted labor market. Such policies would further weaken labor supply and should be avoided.

In addition to avoiding further harm, policymakers can also take proactive steps to boost labor supply.

**Box 3-1. The Productivity-Pay Gap Myth**

In an attempt to highlight inequities in the U.S. economy, the *Report* points to the oft-cited "productivity-pay gap," shown below in Figure 3-5.[154]

Figure 3-5: Productivity Pay Gap Myth




Source: *Report* 159.

The premise of this argument is that over time the value that workers provide to the economy (productivity) disassociates with what workers receive from the economy in wages. This seemingly troubling phenomenon, according to the *Report*, lends itself to interventionist solutions including increasing the Federal minimum wage and pushing more workers (regardless of their preferences) into unions.

The purported productivity-pay gap has faced significant and compelling criticism.[155] The methodology underlying Figure 3-5 has been discredited and research indicates the opposite is true. Productivity growth remains closely related to wage growth.

Economist James Sherk finds that key methodological differences between the productivity and compensation series in Figure 3-5 account for nearly 80 percent of the alleged gap.[156] Chief among these differences being that the productivity and compensation series use different inflation adjustments.[157] The Implicit Price Deflator (IPD) is used for productivity series and the Consumer Price Index (CPI) is used for the compensation series. Comparing wages and productivity measures when each is adjusted using different deflators will not lead to accurate conclusions.

In fact, rigorous research identifies a strong relationship between increased productivity and higher wages. Productivity growth is correlated with wage gains for workers in both high and low skill industries. Edward Lazear found that between 1989 and 2017, industries with significant concentrations of high skilled workers saw productivity rise 40 percent and wages rise 29 percent. Over the same time period, lower skilled industries saw a 22 percent increase in productivity and a 27 percent increase in wages.[158] Not only do these and other studies show that productivity and wages are still connected, but they show that differences in wage growth are likely the result of different levels of productivity. Wage inequality is not mainly a result of direct discrimination as the *Report* claims.

Federal policymakers could consider fixing the myriad of disincentives to work that exist across the large and complex means-tested welfare system. Many welfare programs undermine work by providing assistance without requiring employment or work preparation for those who are working age and non-disabled. These programs make non-work a viable alternative to work for some Americans. Congress could pursue reforms to Temporary Assistance for Needy Families, the Supplemental Nutrition Assistance Program, Medicaid, rental housing assistance programs, Social Security Disability Insurance, Supplemental Security Income, and a number of other social safety net programs to more effectively promote work.[159]

State and local occupational licensing reforms would also enable individuals to more easily enter new professions or industries and pivot within the labor market, a point the *Report* similarly highlights.[160] Currently, occupational licensing regulations require workers to receive permission from State and local Governments to legally receive pay for their services. These requirements force animal breeders, auctioneers, dance instructors, hair braiders, bartenders, florists, contractors, cosmetologists, landscapers, and even fortune tellers to pay fees (which can be several thousands of dollars) to do a requisite amount of training (which can take anywhere between a few hours to over a year) before being able to legally work.[161]

The frequently voiced justification behind occupational licensing is that it protects consumers. Much like a doctor requires a degree before he or she can practice medicine, many licensing requirements are purportedly put in place to ensure that safety standards are upheld. The reality, however, is that many of these licensing processes have no obvious safety-related need and instead act solely as barriers to entry that discourage labor mobility. The Federal Reserve Bank of Minneapolis finds interstate migration rates for workers in jobs requiring an occupational license are 36 percent lower than for workers with unlicensed jobs.[162] The evidence shows that licensing requirements likely play a role in restricting individuals' inter-state movement and consequently keep them from new opportunities.

The heavy regulatory burdens of occupational licensing tend to fall hardest on military spouses, who typically live in several States throughout their working lives, and the formerly incarcerated, who are typically ineligible to receive occupational licenses to work.

Making it easier for Americans to access work without jumping through unnecessary hoops would make the goal of full employment more attainable. While reform is challenging given

that each State has its own regulations for different jobs and industries, the potential gains for workers make occupational licensing reform a worthwhile pursuit.

### *Conclusion*

In the pre-pandemic economy, both employment and labor force participation were on the rise. Americans came off the sidelines to join the workforce, wages rose, and unemployment fell. Workers with low wages and those from historically disadvantaged groups experienced some of the largest gains, enjoying record high incomes and record low poverty rates.

Following the initial pandemic shock in early 2020, employment started to recover rapidly, but then began to slow as a result of work disincentives like enhanced unemployment compensation, an expanded CTC, cash transfers, and vaccine mandates. The ARP continued or increased many of the policies that held back labor supply. The policy-induced suppression of the labor supply contributed to a 6.3 million worker shortfall relative to the pre-pandemic trend. While nominal wages rose in some industries, high inflation reversed those gains.

The strong pre-pandemic economy demonstrated what works for improving the labor market outcomes for American families, especially those with low wages and from historically disadvantaged groups—a labor market where workers and employers alike are free from burdensome regulation and work is rewarded more than non-work.

To achieve full employment, the root causes of the slow labor market recovery must be addressed. Increasing labor supply by refraining from additional Federal spending and by proactively engaging in occupational licensing reform is the first step to increasing productivity, raising wages, and boosting the living standards of American families.

# CHAPTER 4: PRODUCTION

The Employment Act identifies the promotion of maximum production as one of three key goals of economic policymaking, along with stable prices and maximum employment.[163] Economic growth, driven by American enterprise and ingenuity, has served as a powerful force for improving living standards throughout our nation's history.

While the concept of economic growth and increased production can seem abstract and removed from the daily lives of Americans, the benefits of economic growth show up across various dimensions of well-being. Americans at all income levels have access to a greater quality and quantity of food than ever before, have more leisure time, and work fewer hours for higher incomes than at any other point in history.[164] They live in higher quality homes with modern appliances and less overcrowding. Advances in medical technology have helped increase the average life expectancy from 47 years in 1900 to 79 years today.[165]

These gains in well-being are why the trend of slowing growth rates highlighted in the *Report* presents a pressing policy concern. The *Report* argues that economic growth has slowed in recent decades as a result of the Government retreating from its core responsibility of intervening in markets to keep them from failing. However, there is very little evidence that Government has withdrawn or that market failures are the cause of slowing economic growth.

This chapter will document the opposite—how the growth of Government and the regulatory state is an important cause of lower growth rates over the last half-century, and why pro-growth policies that rely on the private sector remain the best way to maximize long-run economic production and economic well-being for all Americans.

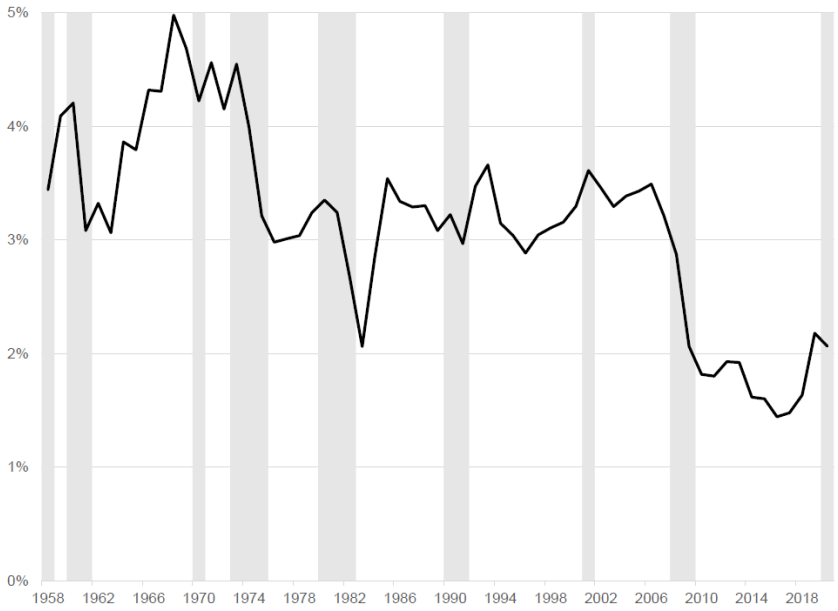
***Is Economic Growth Slowing?***

Economic growth has historically served as a powerful force for improving the material well-being and living standards of Americans. Yet, rates of economic growth in the United States and other developed countries have slowed somewhat in recent decades. Following the goals set out in the Employment Act, the *Report* rightly focuses on the importance of maximizing economic growth for improving the well-being of all Americans, and it accurately notes that gross domestic product (GDP) growth rates have slowed somewhat since the 1970s. However, the *Report* ignores cause for future optimism.

The average annual real GDP growth rate between 1948 and 1978 in the United States was 3.8 percent. In the years following 1978 the average GDP growth rate slowed by 1.1 percentage points to 2.7 percent.

To more clearly show this trend, Figure 4-1 presents a 10-year rolling average of annual growth rates. The figure shows three distinct periods. Growth rates were initially high, averaging 3.9 percent up to 1975, fell to an average of 3.3 percent between 1975 and 2000, and fell again to 2.0 percent over the past two decades (2000-2021). Some of this decline is due to slower population growth and other demographic factors, but growth in GDP per capita has similarly fallen from an average annual growth rate of 2.4 percent between 1948-1975, to an average annual growth rate of 1.7 percent from 1975-2021.

Figure 4-1: Real Gross Domestic Product, Rolling 10 Year Average Annual Growth Rate, 1958-2021



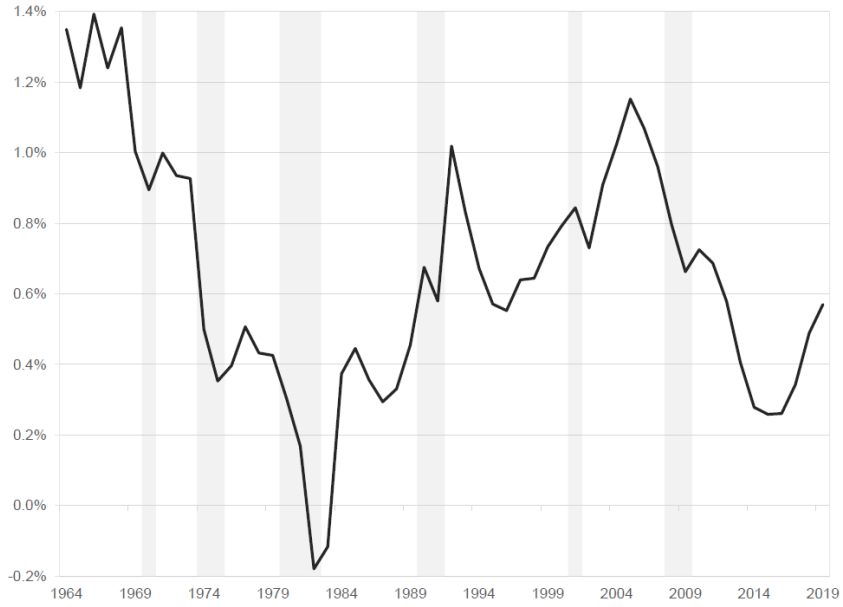

Source: JEC Calculations; U.S. Bureau of Economic Analysis, National Bureau of Economic Research.
Notes: Grey bars indicate recessions as defined by the National Bureau of Economic Research.

Small changes in growth rates can have a large impact on the future size of the economy and relatedly, the well-being of Americans. If the United States had maintained its pre-1970s average growth rate, the economy would have been more than twice as large in real terms at the end of 2021. Ensuring strong growth in economic output over the long-run is the most powerful tool we have to ensure future generations will continue to be better off than their parents.

A related measure of economic progress, productivity growth, tells a more complicated story. Figure 4-2 presents a measure of total factor productivity (TFP), which represents how efficiently an economy uses its inputs.[166] Economic growth depends on inputs

of labor, capital, and the effectiveness with which these inputs are combined and utilized. The economy can grow by expanding the number of workers, hours worked, new investments in tools and infrastructure, or increasing TFP. Figure 4-2 displays 10-year average productivity growth rates. The trend shows that TFP was growing at historically low rates through the 1970s and early-1980s, falling from a ten-year average annual growth rate of 1.3 percent in 1964 to -0.2 percent in 1982. TFP growth rates then picked up following the information technology booms of the late 1980s and early-1990s, grew again with the advent of smartphones in the early-2000s, and declined following the 2008-09 Great Recession. Productivity growth has since slowly recovered and the ten-year average was roughly at its historical average in 2019.[167]

Figure 4-2: Total Factor Productivity, Rolling 10 Year Average Annual Growth Rate, 1964-2019




Source: JEC Calculations; Bureau of Labor Statistics.
Notes: Grey bars indicate recessions as defined by the National Bureau of Economic Research.

Although productivity is only one factor that influences future growth, there is some cause for optimism if recent trends continue. Major breakthroughs in medical technology, artificial intelligence, and building materials, to name a few examples, have the potential to support stronger future productivity growth.[168] New technologies can take years to penetrate industries, but they frequently lead to rapid acceleration in productivity growth following widespread adoption. The *Report's* presentation of these economic trends and subsequent proposals of Government intervention as a necessary remedy are too pessimistic and likely counterproductive. Pre-pandemic trends in productivity could mark a departure from the slower economic growth of previous decades, especially if productivity growth is accompanied by growth in the labor force and capital stock.[169]

The *Report* blames slow economic growth on a "retreat of the U.S. public sector" beginning in the 1970s. The next section will show that instead of retreating, Government has steadily grown over time.

***Growth of the Public Sector***

The *Report* misdiagnoses the primary cause of slower economic growth, attributing it to a "depleted public sector" that has retreated from its core responsibility of "partnering" with the market. To the contrary, this section of the *Response* documents how the size and scope of Government has grown steadily since the 1930s, with no discernable retreat or shrinkage following the 1970s.

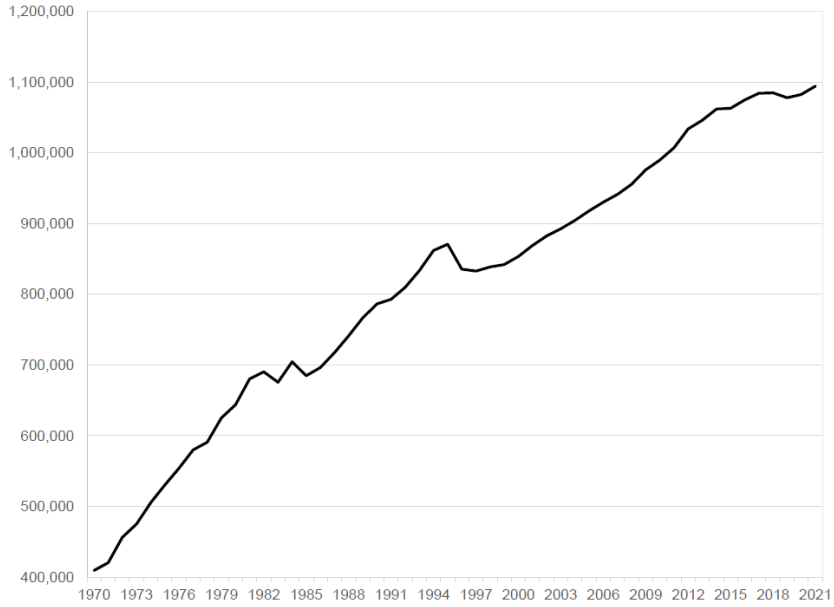
Figure 4-3 shows the steady increase in total Government spending (Federal, State, and local) over the past four decades. Adjusted for inflation, annual Government spending per person amounted to $24,508 in January 2022, up from $11,928 in January 1970, a 105 percent real increase. Government spending as a share of GDP has also increased, rising steadily through the 1970s and 1980s, before leveling off.

Figure 4-3: Annualized Government Spending Per Person, 2022 Dollars, Monthly, 1962-2022


Source: Bureau of Economic Analysis.
Note: Series includes total dollars of Federal, State, and local Government spending. Monthly values shown are annualized and seasonally adjusted.

In addition to spending, Government intervention in the private sector via regulatory activity has grown dramatically since the 1970s. The number of restrictions—defined here as words or phrases in the Code of Federal Regulations that indicate an obligation to comply, such as "must" or "shall,"—has nearly tripled in the last 50 years. Figure 4-4 shows that regulatory restrictions increased from just over 400,000 in 1970 to 1.1 million in 2021.[170] Between 1970 and 1980 the number of restrictions increased by 57 percent, growing faster than in any other decade.

Figure 4-4: Code of Federal Regulations, Restriction Count, 1970-2021




Source: QuantGov.
Note: A restriction is defined as words or phrases in the Code of Federal Regulations that indicate an obligation to comply.

Rather than representing a period of deregulation, the 1970s represented an era of dramatic growth in the regulatory burden imposed by the public sector. This period of expanding public sector involvement in economic activity is reflected in books such as *The Population Bomb* (1968) and *Silent Spring* (1962) that sought to limit economic growth and impose population controls as a means to protect the environment. Laws such as the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) made it harder to build new public or private infrastructure. These laws, NEPA in particular, set up a process that is intended to protect the natural and built environment, but instead creates a system ripe for abuse by special interest groups who use the process to block new infrastructure,

electricity generation, redevelopment projects, and other economically significant investments.[171] Similarly, a series of court cases, including *Citizens to Protect Overton Park v. Volpe,* further built the legal framework by which special interests can engage in litigation to block new development.[172] With expanding control over economic activity, State and Federal regulatory agencies can stand in the way of economic progress by simply moving too slowly or not approving private sector proposals.

Even as overall regulation grew, some industries benefited from modest deregulation in the 1970s. Deregulation of airlines, trucking, and railroads allowed the industries to increase capacity and reduce fares. As a result, airfare, trucking, and railroad transportation costs fell by between 33 percent and 75 percent and have remained lower in the following decades. Lower costs in these three industries represent annual savings to consumers of $67 billion annually in 2022 dollars.[173] Likewise, while reforms in the 1980s implemented cost benefit analyses in agency rulemaking and the elimination of some price controls, regulatory accumulation continued throughout the decade, slowing temporarily before returning to the previous trend.[174]

**Box 4-1. Private Versus Public Sector Research and Development**

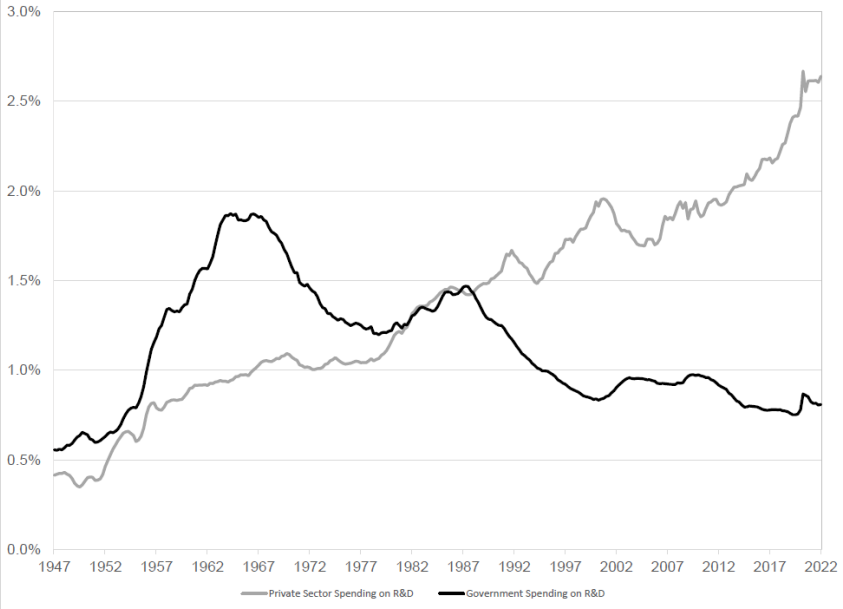
One area where Government growth has not outpaced the private sector is research and development (R&D). Total R&D spending increased from 2.7 percent of GDP in 1970 to 3.5 percent of GDP in Q1 2022, driven primarily by the private sector. Figure 4-5 shows that inflation adjusted private sector spending on R&D increased 654 percent ($558 billion) between Q1 1970 and Q1 2022 while Government spending on R&D only increased 56 percent ($71 billion). Over this period, private sector spending on R&D as a share of GDP increased from 1.1 percent to 2.6 percent

while Government spending on R&D as a share of GDP decreased from 1.6 percent to 0.8 percent.

The fact that total R&D spending has increased in real terms and as a share of GDP belies the *Report's* claim that the past several decades have seen "inadequate investment" in research. While it is true that Government spending on R&D as a share of GDP has fallen, there is limited evidence that additional Government spending is needed or would mark a substantial improvement over the heavy investment already present from the private sector.[175]

In fact, Government R&D spending has often been criticized as less efficient than private spending. For example, a large portion of the elevated Government R&D spending in the 1960s and 1980s represented spending related to Cold War competition with the Soviet Union. The research leaned heavily on military uses and has been criticized in the academic literature, including by a National Academy of Sciences roundtable, as feeding a "redundant and perhaps wasteful" research industry that was driven primarily by incentives to chase funding.[176] While Government spending on R&D as a share of GDP fell in the decades following the Cold War, it has been more than offset by growth in private sector spending.

Figure 4-5: Private versus Public Sector Spending on Research and Development as Share of GDP, 1947–2022




Source: Bureau of Economic Analysis.

There is little evidence that any period in recent history has represented a broad retreat of the public sector. Instead, the past several decades have represented an acceleration in the growth of Government by multiple different metrics. In the limited cases where Government has relaxed some of its onerous rules, namely deregulation of airlines, trucking, and railroads, consumers have experienced broad-based benefits in the form of significant cost savings and a greater variety of options.

***Consequences of an Expanding Public Sector***

Where the *Report* blames slower economic growth on a depleted public sector, this *Response* argues that the opposite is more likely to be true, that burdensome growth of the public sector has been a major driver of the slowing growth trends in recent decades. This section documents evidence that growth in Government since the 1970s—in terms of regulation, spending, and taxes—is a major cause of muted economic growth in the United States.

Regulations can create excessive burdens for individuals and businesses alike. These rules and mandates can disincentivize firms from growing larger to take advantage of economies of scale, entering new markets, bringing new products to consumers, or investing in talent development. As these costs accumulate, the burden weighs on overall economic growth and productivity.

The American Action Forum reports that since 2005 the cumulative economic impact of Federal rulemaking as estimated by Federal agencies amounts to $1.3 trillion.[177] These economic impact estimates are calculated by agencies over a limited time frame (e.g. 10 years) and fail to account for all of the possible ways that regulation can prove detrimental to economic growth, including ways in which regulations may interact to worsen growth. Additionally, the latest available OMB Information Collection Budget (2018) found that the annual paperwork burden imposed by Federal Government regulation since the passage of the *Paperwork Reduction Act* (1980) amounted to 11.5 billion hours annually.[178] Without including the more than 480 million additional annual paperwork hours imposed by agencies since the release of the latest OMB report, at the average private sector wage as of April 2022, this paperwork burden would amount to more than $360 billion in wages spent on unproductive economic activity, with the actual cost likely much higher as compliance staff are typically lawyers and other highly paid professionals.[179]

Economists estimate that the true cumulative cost of regulations is far larger than that reported by Federal agencies.[180] Federal economic impact estimates fail to account for a majority of regulations and often miss many of the ways that the rules could prove detrimental to economic growth. Bentley Coffey, Patrick McLaughlin, and Pietro Petro find that the U.S. economy would have been 25 percent larger in 2012 if regulation had been held constant at 1980 levels, implying that regulatory growth since 1980 reduced 2012 GDP by $4 trillion.[181] In 2012, this amounted to approximately $13,000 per capita in lost output.

Using a different method and time period, John Dawson and John Seater estimate an even larger impact of regulation on economic growth. They find that regulation reduced economic growth between 1949 and 2005 by 2 percent annually, implying the 2005 economy was 28 percent of the size it could have been had regulation remained constant at 1949 levels.[182] Dawson and Seater also find that changes in regulation likely contributed to the productivity slowdown in the 1970s.[183] Dustin Chambers, McLaughlin, and Oliver Sherouse find that regulatory growth depresses new firm startups and job creation rates by between 4 percent and 20 percent annually across industries.[184] German Gutiérrez and Thomas Philippon find that, in comparison to other possible explanations such as returns to scale or changes in technology, regulation and taxation can effectively explain the recently observed declined in new firm startup rates and dynamism within industries.[185]

Government spending, and the taxation needed to finance it, also imposes costs that depress economic growth. While some studies find that Government spending on the protection of property rights and certain types of physical infrastructure investments can support growth, the benefits of Government spending decline as the public sector expands relative to the private sector.[186] Too

much Government spending on unproductive ends can inflate prices in markets, crowd out private investments that face competition with Government, encourage corruption and rent-seeking for Government-granted privileges, and reduce economic mobility by subsidizing non-work through income transfer programs and other benefits.

Any benefit from Government spending is offset by the costs of the taxes necessary to finance the expenditures. The negative effects of taxation in suppressing economic growth are well supported in a range of academic research. Taxes on labor income reduce incentives to work and innovate and taxes on capital and investment income discourage the private investment necessary for sustained economic growth. Former Chair of the Council of Economic Advisers for President Obama, Christina D. Romer, and coauthor David H. Romer find that a one percent increase in taxation as a share of GDP leads to a decrease of almost three percent in real GDP.[187] Valerie Ramey corroborates that tax increases reduce GDP by between two and three times the revenue raised.[188] William McBride likewise concludes that "nearly every empirical study of taxes and economic growth published in a peer-reviewed academic journal finds that tax increases harm economic growth."[189]

The U.S. Government has not retreated since the 1970s, but instead has expanded significantly as measured by regulations and spending. These Government activities reduce rather than enhance the goal of promoting economic production set forth in the Employment Act.

**Box 4-2. Costs of Industrial Policy**

The *Report* argues that a lack of Government involvement in industrial production and trade worsened economic turmoil in 2021. To remedy this, it recommends a more active Federally directed industrial policy that restricts trade to promote domestic industries and subsidizes politically popular domestic manufacturers. The *Report* admits in Chapter 7 that industrial policy has had a mixed track record in the United States and in other countries. But it goes on to suggest that "many failed efforts might have been avoided with better processes for strategically targeting industrial policy opportunities."[190]

Unfortunately, the *Report* stops there, making no mention of the *costs* of industrial policy. Not only does Government intervention in domestic manufacturing impose opportunity costs by discouraging private investment, but the projects themselves often cost more than initial projections and the benefits are almost always overstated.[191] It is also likely that any industrial policy efforts would no longer offer the needed innovation by the time they are completed, as Government projects often take ten years or more to complete[192] and as politicians are rarely suited to predict future market needs.[193] The relative inefficiency of Government planning and the disconnect between Government and market priorities are some of the unavoidable reasons why past industrial policy efforts have failed and why "better processes" are unlikely to make a difference.

The *Report* praises Japanese industrial policy in the 1980s, claiming that Government intervention helped Japan to increase its international competitiveness.[194] Yet, Japanese industrial policy missed the mark on strategic investment and resulted in multiple planning failures, corruption, and an economic collapse that launched Japan into its lost decade.[195]

***Pursuing a Pro-Growth Agenda***

To support growth and prosperity, policymakers should limit the size and involvement of Government in the affairs and decision-making of the private sector. Government should seek to reduce the regulatory, spending, and tax burdens it imposes on its citizens. The pro-growth policies of deregulation and tax cuts implemented in the pre-pandemic economy benefited low-income and otherwise disadvantaged Americans the most through a strong labor market and a healthy, growing economy. The President's agenda outlined in the *Report* and the Fiscal Year 2023 Budget ignore these lessons by raising taxes, increasing spending, and advancing an agenda of increasingly costly regulations.

For example, the Budget plans to raise about $954 billion in tax revenue by increasing the corporate income tax rate by 7 percentage points from 21 percent to 28 percent.[196] Such an action would leave American businesses paying the highest combined corporate tax rates in the developed world. President Biden's other tax proposals could raise total combined top marginal personal income tax rates by 14.4 percentage points (from 42.9 percent to 57.3 percent) and capital gains tax rates by 19.7 percentage points (from 29.2 percent to 48.9 percent).[197] These tax increases would put American personal and businesses tax rates well above the international norm. The result would be less private investment, slower economic growth, and weaker income gains for American families.

The Biden Administration has also implemented an aggressive and costly regulatory agenda, repealing the Trump Administration's two-for-one regulatory budget and beginning to rollback other major regulatory reforms that took place between 2017 and 2020. In 2021, major new regulations by the Biden Administration are estimated by Federal agencies to impose at least $201 billion in regulatory costs on the American economy.[198] Looking forward,

the Biden Administration's 2022 regulatory agenda, relative to the prior administration, reflects a 35 percent increase in regulatory actions and a 186 percent increase in economically significant rulemakings—those that have an annual effect on the economy of $100 million or more.[199] These actions increase policy uncertainty, actively discourage investment and production, and increase costs for American families.

The *Report's* proposals may lead to what appear to be small decreases in economic growth rates, but even small changes can have large long-term effects. Thus, policies that reduce levels of inequality—a key focus of the *Report*—at the expense of overall growth would ultimately do more harm than good to the long-term living standards of the very individuals these policies are designed to support. Given that taxation and spending are the primary mechanisms by which the Government would address inequality, the policies proposed in the *Report* are likely to be counterproductive to their stated goals of raising long term growth and improving the well-being of all Americans.

Congress and the President should instead cut regulations, reduce Federal outlays, and keep taxes low to help return our economy to one of low inflation, full employment, and sustainable long-term growth. These types of pro-growth reforms that *actually* allow the Government to retreat are the best path toward reversing the worrying economic trends identified by the *Report.* Following pro-growth reforms under the Trump Administration, GDP growth in 2017, 2018, and 2019 surpassed forecasters' expectations and resulted in gains for American families.[200] In 2019, unemployment fell to 3.5 percent, its lowest level since 1969, and real median household income grew by a record 6.8 percent to an all-time high of $68,700.[201] These income gains and historic levels of job growth—particularly for women and minorities—caused poverty to fall to a record low for every race and ethnic group, with Black

and Hispanic poverty falling the most. The four years before the pandemic also marked the reversal of a 20-year decline in prime-age labor force participation, rising in January 2020 to 83.1 percent, a level not seen since 2008.[202] Private nonresidential fixed investment rose to more than 9 percent above trend, increasing long run potential output by as much as 3 percent.[203]

To reduce the burdens of regulation, Congress and the President could reinstate a regulatory budget, implement standard sunset requirements for new regulations, require Congress to authorize economically significant regulations and set up regular ex-post reviews of rulemaking. These reforms would help increase accountability of Federal agencies and reinsert Congress in the process of ensuring regulations meet the statutory intent of the authorizing legislation. Additionally, given the worsening of the national housing affordability crisis, policies that Constitutionally address the effect of local land use restrictions on housing supply can have a large positive effect on economic growth by expanding access to economic opportunity and more productive labor markets.[204]

**Box 4-3. Regulatory Budgeting and Review**

In 1979, the first *Response* endorsed by both the Majority and Minority members unanimously recommended a regulatory budget, stating that "the current regulatory process fails to recognize the goals of regulatory programs must be balanced with other national objectives."[205] The report called for Congress to amend the *Congressional Budget and Impoundment Control Act of 1974* to establish a regulatory budget that would limit the costs of compliance imposed by each agency, stating that such a budget would better quantify the economic burden that the Federal Government imposes on the economy.

While this proposal was not ultimately implemented, examples of effective regulatory budgeting and review systems can be found in Canada as well as in other Organisation for Economic Co-operation and Development (OECD) countries including Australia, the United Kingdom, and Portugal. Canada has implemented both targeted regulatory reviews and a regulatory budget.[206] This approach is modeled after the red-tape reduction success of British Columbia, encouraging agencies to reduce red-tape and review and modernize regulations with support and involvement from the private sector.[207] Within three years of implementing its regulatory reforms, British Columbia reduced its regulatory burden by 37 percent. Following the reforms, GDP growth in British Columbia accelerated from an average annual growth rate 0.7 percent below the Canadian average in the decade prior to implementing regulatory reform, to outpacing broader economic growth in Canada annually by nearly a full percentage point through 2020.[208] Similarly, Portugal implemented a one-for-one regulatory budget and the United Kingdom has established requirements for agencies to identify simplification measures and offsets for all major proposals.[209]

To reduce spending and the commensurate tax burden the Government imposes on its citizens,[210] Congress will need to act in the immediate future to keep taxes from increasing automatically following the expiration of the *Tax Cuts and Jobs Act* after 2025. Beyond keeping taxes from rising, Congress and the President should pursue additional reforms that bring spending in line with tax revenues and continue to lower the tax burden for all Americans.

Economic growth is critical for supporting the long-term prosperity, fiscal stability, and material wellbeing of all Americans. As a central goal of the Employment Act, promoting maximum production should continue to be a key goal of the

Government. The *Report* does well to focus on this important goal, but misdiagnoses key economic events and provides policy proposals that will undermine, rather than promote economic growth and production. Reducing Federal outlays to keep taxes low, cutting unnecessary regulations, and removing disincentives to work would go a long way towards returning our economy to one of low inflation, full employment, and long-term growth.

# CHAPTER 5: SOCIAL CAPITAL

This final chapter of the *Response* covers social capital, which refers to the relationships within families, workplaces and communities that enable a healthy society and are a crucial ingredient for economic growth. The three main goals of the *Employment Act of 1946* are addressed in Chapter 2 through Chapter 4. Here, we supplement our chapters on employment and production by investigating trends that have been particularly battered during the pandemic and represent foundational structures on which employment and production are ultimately based.

The *Response* highlights trends in social capital for two reasons. First, social capital is a central but often overlooked factor underlying economic growth and general well-being, key goals of the Employment Act which directs public policy to "foster and promote…the general welfare" and maximize employment and production.[211] Second, declines in social capital in recent decades, accentuated by Government policies during the COVID-19 pandemic, make social capital an especially important topic today as policymakers seek to advance economic prosperity through increased employment and growth.

In recognition of the importance of social capital in fostering a strong society and economy, Ranking Member Mike Lee introduced the Social Capital Project in 2017 to document trends in social capital and develop a policy agenda to strengthen the social fabric of the nation. The Project focuses on five areas: increasing family stability, making it more affordable to raise a family, reconnecting Americans to work, improving investment in youth, and rebuilding civil society.

This chapter discusses the current state of several trends related to social capital, many of which were affected by economic and

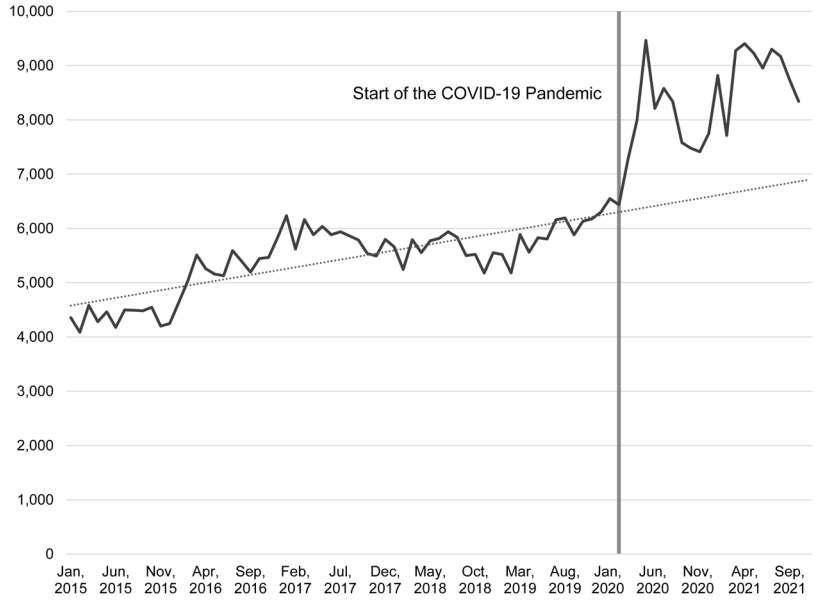
social restrictions during the COVID-19 pandemic. These include drug overdose deaths, homicides and violent crime, learning loss among children, poor teen mental health, and declining family formation. Each of these trends are in part the product of social isolation and disconnection from community, key components of social capital.

The *Report* largely neglects these topics, despite their large economic costs and implications for achieving the Employment Act's economic goals. For example, we estimate that the 170,000 drug overdose deaths over the 20-month period since the pandemic began carried an economic cost of almost $2.0 trillion. The *Report* fails to discuss this surging epidemic, mentioning the words "opioid" or "drug" only a total of three times in the context of drug abuse. In contrast, the *Report* uses the word "equity" nearly 40 times. The *Report* also fails to address costs of skyrocketing homicides or the policy mistake of shutting down schools. The *Response* highlights these issues as a means of informing policymakers on some of the most pressing threats to societal and economic strength today.

***Drug Overdose Deaths***

The U.S. has been facing an epidemic of drug abuse for decades that became much worse during the COVID-19 pandemic.[212] After rising steadily since the early 2000s, drug overdose deaths began to level off in January 2017 at just over 6,000 deaths per month, picking up to about 6,400 deaths by February 2020 just before the pandemic emerged (see Figure 5-1). Drug overdose deaths then spiked to 7,268 in March 2020 and jumped even higher to 9,463 in May 2020. During the 12-month period ending in October 2021, overdose deaths reached almost 104,000—nearly the highest 12-month total ever recorded.[213]

Figure 5-1: Drug Overdose Deaths by Month, January 2015-October 2021




Source: Centers for Disease Control and Prevention. National Center for Health Statistics. National Vital Statistics System. Mortality 1999-2020 on CDC WONDER Online Database, released in 2021.[214]
Notes: JEC calculations with linear trendline fitted based on data from January 2015 through February 2020.

The pandemic, and policies implemented in response to the pandemic, likely caused the major growth in drug overdose deaths since early 2020. Of the nearly 170,000 drug overdose deaths between March 2020 and October 2021, approximately 37,000 were in excess of the number of deaths that would have been expected if deaths evolved along their pre-pandemic trend (a death toll approximately 28 percent higher than expected). Consistent with these results, Casey Mulligan estimates the pandemic and related recession were associated with a 10 percent to 60 percent increase in "deaths of despair" more broadly (deaths from drug overdose, suicide, and alcohol) in 2020.[215]

The cost of the loss of life due to overdose deaths in 2020 and 2021 is staggering. We estimate the economic cost of drug overdose deaths by applying a value of statistical life (VSL) to each life lost. The VSL is used by Federal agencies to evaluate the costs and benefits of policies that involve mortality risks. A VSL of $11.8 million is the preferred estimate used by the Department of Transportation as of 2021. Applying the VSL to drug overdose deaths, the economic cost of the 37,000 excess deaths during the pandemic (between March 2020 and October 2021) was approximately $437 billion.[216] This is 22 percent of the nearly $2.0 trillion cost of all overdose deaths during this period.[217]

Nonfatal effects of drug abuse have major costs as well. Jeremy Greenwood, Nezih Guner, and Karen Kopecky estimate that increased substance use explains between 9 percent and 26 percent of the reduction in labor force participation among prime-age adults (aged 25 to 54) during the first 17 months of the pandemic.[218] Prime-age adults disproportionately suffer from substance abuse, reflected by the fact that almost 70 percent of overdose deaths between March 2020 and December 2020 were people of prime working age.[219]

The rise in drug abuse and its attendant costs were likely fueled by a combination of pandemic-related policies that began in 2020 and continued into 2021, including Federal policies that boosted incomes while discouraging work, making it easier to afford drugs and reducing the opportunity cost of abusing them. Casey Mulligan finds that elevated overdose deaths during the early months of the pandemic only began to fall when supplemental Unemployment Insurance payments were reduced.[220] Jon E. Sprague et al., using data from the Ohio Department of Health, find that economic impact payments during the pandemic were associated with higher rates of opioid overdoses.[221]

Social distancing and restrictions on gatherings likely also contributed to increased drug overdose deaths during the pandemic. Social isolation can contribute to worsened mental health and subsequent increased drug use among users.[222] The pandemic and social distancing policies also reduced the availability of drug treatment services and likely dampened people's desire to seek out treatment. A survey by the National Association of Addiction Treatment Providers administered in August 2020 and September 2020 found that 43 percent of treatment providers decreased their patient capacity due to COVID-19.[223] In another study using data from California's Outcomes Measurement System, Tami L. Mark et al. find that initiation of drug treatment services decreased by 28 percent between March 2020 and October 2020, compared to pre-COVID-19 levels.[224]

Less policing of drug offenses during the pandemic may have also increased accessibility of illegal drugs. Even as drug overdoses climbed, the rate of people convicted for drug offenses (manufacturing, selling, or possession of illicit drugs) declined for most of 2020 and at least through the first quarter of 2021.[225]

Unfortunately, the Biden Administration has failed to fully recognize the severity of the drug epidemic, the role of its policies in fueling the problem, and the most productive ways of addressing it. In April 2022, the Biden Administration released a drug control strategy that heavily focuses on harm reduction.[226] Harm reduction attempts to make drug use safer by providing clean needles and supervised sites for drug use, among other provisions. However, a harm reduction approach not only fails to promote recovery from addiction, it fails to prevent people from becoming addicted in the first place.[227]

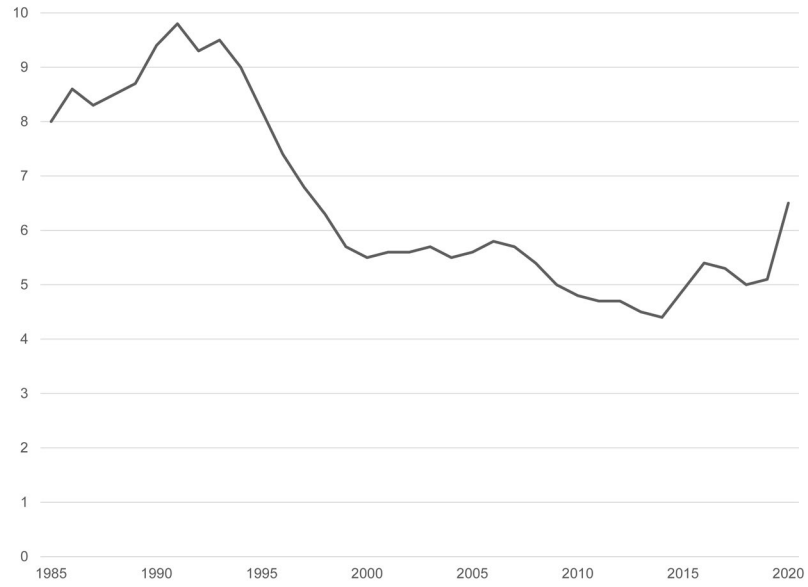
Countering the drug epidemic requires addressing the factors that cause and exacerbate it. Government policies that subsidize non-work should not be reintroduced. Shutdowns that unnecessarily limit Americans' ability to receive treatment, work, or socialize should be avoided. The Federal Government could also block the influx of illicit drugs into the country through ports of entry at the southern border and through the mail from factories in China. But as a first step, the Biden Administration should recognize the record scale of the surging drug epidemic. The fact that the *Report* dedicates almost no attention to the problem—mentioning the words "drug" or "opioid" a total of three times in the context of drug abuse—demonstrates the Administration is falling short even on this first step.

***Homicide and Violent Crime***

After the U.S. homicide rate fell by almost half from 1991 to 2019, it spiked by 27 percent in 2020, rising from a rate of 5.1 to 6.5 victims per 100,000 people (see Figure 5-2). Rising violent crime imposes high social and economic costs on affected communities; in addition to direct costs to victims, it threatens the ability to work and consume safely, reducing economic activity and the well-being of citizens.

According to the Centers for Disease Control and Prevention, there were 24,576 homicide deaths in 2020. [228] These homicides represent an economic cost of almost $290 billion, assuming a VSL of $11.8 million. These costs were borne in large part by majority Black and Hispanic neighborhoods that saw the largest annual increases in homicides in 2020.[229] Provisional data from the CDC show homicides remained elevated in the first two quarters of 2021. Relative to its Q1 2020 rate, the homicide rate was 20 percent higher in the Q1 2021 and 36 percent higher in Q2 2021.[230]

Figure 5-2: Homicides Per 100,000 Population by Year, 1985-2020




Source: Federal Bureau of Investigation. Crime Data Explorer. https://crime-data-explorer.app.cloud.gov/pages/explorer/crime/crime-trend.

Richard Rosenfeld of the University of Missouri suggests the increased homicide rate could be attributed to a variety of factors: economic challenges associated with the pandemic, social unrest surrounding the killing of George Floyd, reduced policing as a result of the pandemic, political pressure against policing, law enforcement staffing shortages, increased drug use, and greater access to guns.[231] Julia P. Schleimer et al. find that unemployment in the early months of the pandemic was associated with higher rates of gun violence and homicide, although not with acquisitive crime (e.g., theft, burglary, robbery) or aggravated assault.[232]

In spite of the alarming increase in homicides and the substantial costs it imposes on families and communities, the *Report* overlooks the problem. Given the link between violent crime and

unemployment, addressing the spike in homicides can begin with not reintroducing policies that discourage work. In addition, local Governments should support law enforcement in protecting communities against violent crime.

### *Learning Loss and Mental Health among Children and Youth*

In 2021, the majority of children in the United States continued to experience disruptions in their schooling due to persisting school closures that began in 2020 at the onset of the pandemic. In the spring of 2021, only 18 percent of schools were operating fully in person, 24 percent remained fully remote, and 51 percent were operating under a hybrid model.[233] One year later, in the spring of 2022, schools have mostly returned to in-person learning, with 92 percent fully in person and only 0.5 percent fully remote.[234]

School closures not only pushed children into less productive virtual learning environments, they also led some children to stay out of school altogether. Total public school enrollment for all grade levels decreased three percent between the 2019-2020 and 2020-2021 school years, with pre-kindergarten and kindergarten enrollment down by 13 percent.[235] Declining public school enrollment, particularly among young children, may reflect some families shifting to non-public schooling options, such as private or home schooling, but it likely also includes some children not enrolling in any type of formal education.

Disruptions in schooling that persisted into the first half of 2021 imposed significant learning loss on children. According to the Penn Wharton Budget Model, school disruption led to learning loss equivalent to 0.42 fewer years of reading and 0.43 fewer years of math during the 2020-2021 school year.[236] In another study examining school testing data among students in the first through eighth grades, researchers found that fewer students were prepared for grade-level reading or math in the spring of 2021 compared to

previous years.[237] Younger students were particularly ill-prepared for grade level reading or math.[238]

Learning loss was greater among disadvantaged students, as children in disadvantaged communities typically experienced fewer days of in-person schooling during the pandemic.[239] These students are less likely to have a high-quality learning environment at home free of distractions, less likely to have access to their own devices dedicated to remote instruction, and less likely to engage in online school with the same consistency as students from higher-income families.[240]

Learning loss from prolonged school closures will have long-lasting economic consequences. A McKinsey & Company report by Emma Dorn et al., estimates that learning loss from the pandemic could cost the average K-12 student in the United States $61,000 to $82,000 (in constant 2020 dollars) in lifetime earnings.[241] The Penn Wharton Budget Model estimates learning loss during the 2020-2021 school year will lead to a drop in labor productivity of 0.45 percent in the year 2031 and an even further decline of 1.12 percent in 2051 as the age cohorts affected by the pandemic come to make up a larger share of the labor force and enter their peak earning years.[242] Declining labor force productivity due to pandemic learning loss is projected to decrease GDP by 1.4 percent in 2051.[243]

Given the *Report's* focus on equity, learning loss due to school closures should be an area of major concern to the Administration. While the *Report* discusses pandemic learning loss and the particular impacts of school disruptions for disadvantaged students, it should also have pointed out that the months-long Government shutdowns of largely Government-run schools that caused the learning loss were mostly unnecessary.

By the end of the fall 2020 semester, several studies had been conducted on school transmission of COVID-19, with most finding K-12 schools generally did not contribute significantly to community spread of the virus.[244] In early February 2021, Dr. Rochelle Walensky, Director of the Centers for Disease Control and Prevention, said schools were safe to reopen even if teachers had not yet been vaccinated.[245] While the Biden Administration issued an executive order in January 2021 to support the reopening of schools, the Administration allowed teachers unions to influence CDC policy for school reopening.[246] The Administration's heed to the political interests of teachers unions over social and educational interests of children likely kept many schools shuttered or in hybrid mode longer than necessary, exacerbating learning loss.[247]

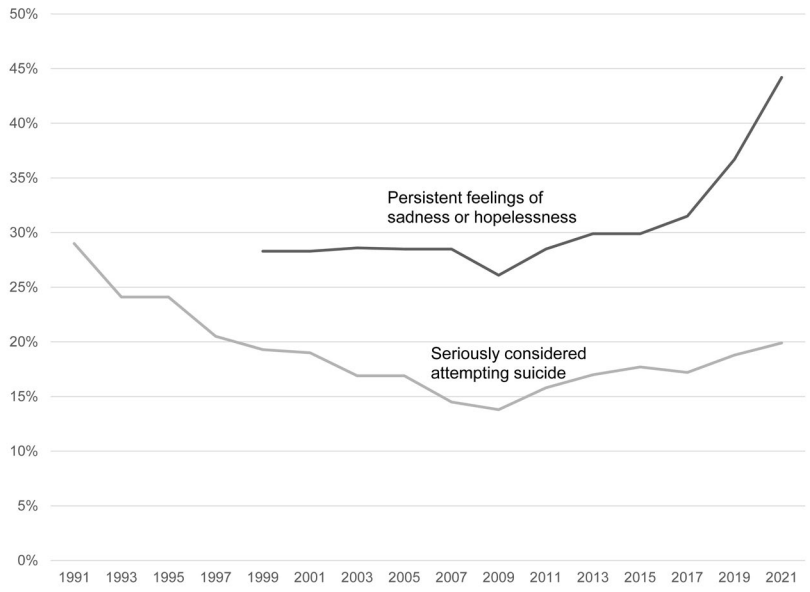
The lack of educational options for families during the pandemic has underscored the importance of educational choice for families. Instead of families being limited to their neighborhood public schools, policies that provide parents with the ability to choose from a variety of education options can help families better meet their children's educational needs. Educational choice could have provided more options for families where public schools were closed unnecessarily. Educational choice policies also could have helped reduce contentious public debates surrounding school closures and reopening by allowing families to decide what type of school environment works best for them.

*Teen Mental Health*

In addition to learning loss, some measures of mental health among youth worsened in 2021, continuing an already troubling trend of deteriorating mental health among American teens.[248] Teen mental health in the United States has worsened steadily during roughly the past decade, with increases in the rates of

depression, suicidal thoughts, and suicide among teens.[249] In the spring of 2021, 44 percent of U.S. teenagers reported feeling persistently sad or hopeless during the past year, up from 37 percent in 2019 (see Figure 5-3). The share of high school students seriously considering suicide increased slightly from 19 percent to 20 percent between 2019 and 2021 (see Figure 5-3).

Figure 5-3. Share of High School Students Reporting Mental Health Conditions, 1991–2021

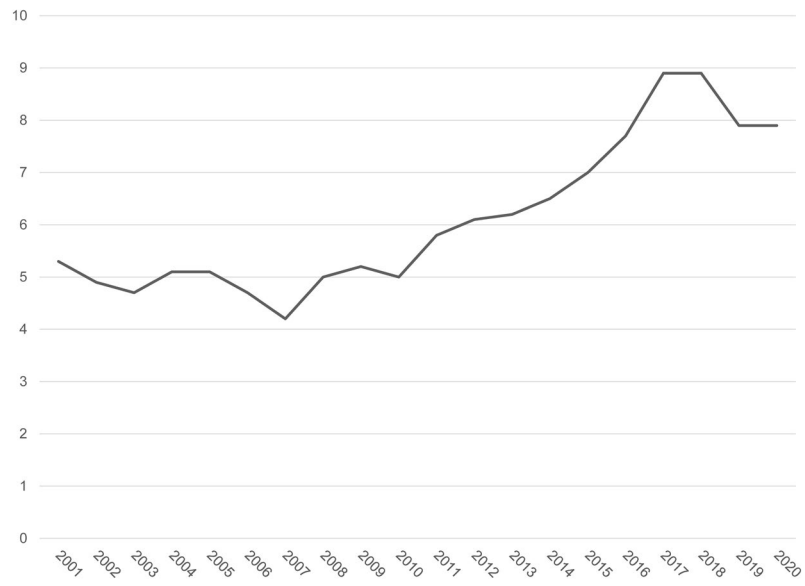



Source: Centers for Disease Control and Prevention. Youth Risk Behavior Survey. https://www.cdc.gov/healthyyouth/data/yrbs/data.htm, data documentation various years; Trends in the Prevalence of Suicide-Related Behaviors National YRBS: 1991-2019. https://www.cdc.gov/healthyyouth/data/yrbs/factsheets/2019_suicide_trend_yrbs.htm; and Morbidity and Mortality Weekly Report *(MMWR)*, Table 2. https://www.cdc.gov/mmwr/volumes/71/su/su7103a3.htm.

Whether school closures or other challenges related to the pandemic negatively affected teens' mental health is unclear, given that teen mental health was already worsening prior to the pandemic. In addition, actual suicide rates among high school-age

students stayed relatively flat between 2019 and 2020, after rising steadily between 2008 and 2017 and declining somewhat in 2018 (see Figure 5-4).[250] Increased parental supervision during the pandemic, due to teens being at home more, may have helped keep teen suicide rates from increasing. Parents may have been able to recognize signs of suicide risks earlier and intervene, including taking their children to the hospital. Data on teen suicide are not yet available for 2021, so time will tell whether the leveling off of suicide among teens continued, or whether re-opening of schools in combination with further erosion of underlying mental health will drive a renewed increase in teen suicides.[251]

Figure 5-4: Number of Suicides Among Youth Ages 14 to 17 per 100,000 Population, 2001-2020




Source: Centers for Disease Control and Prevention. https://wisqars.cdc.gov/data/explore-data/home.

Addressing declining teen mental health is challenging, particularly since the causes are not fully understood. Still, civic

institutions like schools, churches, and other community organizations could help inform families about trends in teen mental health, familiarize parents with the symptoms of depression and suicidal behavior, and connect families with mental health services. Because researchers have identified connections between increased social media use and declining teen mental health, Federal policymakers could redirect some current funding to research the effects of social media on youth mental health.[252]

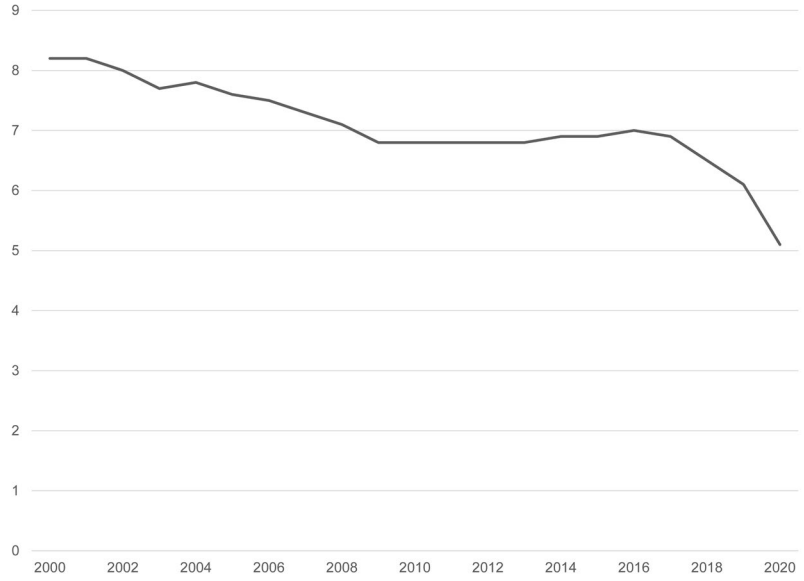
### *Declining Family Formation*

Another concerning long-term trend that has worsened in recent years is family formation, specifically falling marriage and birth rates. The most intimate and central form of social capital is the family—an institution with primary responsibility for nurturing and transmitting societal values to the next generation of children. Strong families enable investment in the human capital of children that increases their skills and productivity as adults, leading to increased long-run economic growth.

#### *Declining Marriage Rate*

While the marriage rate in the U.S. has declined for years, it dropped by 16 percent between 2019 and 2020 (see Figure 5-5).[253] The steep drop was expected, given many weddings were postponed due to the COVID-19 restrictions on social gatherings. Marriages picked up again in 2021, according to provisional data in some States, as postponed weddings from 2020 took place.[254] Still, severe limits on socializing during the pandemic have decreased opportunities for people to meet and date, potentially leading to fewer marriages in coming years than otherwise would have occurred, possibly exacerbating the downward trend in marriage rates.

Figure 5-5: Marriages Per 1,000 Population, 2000-2020



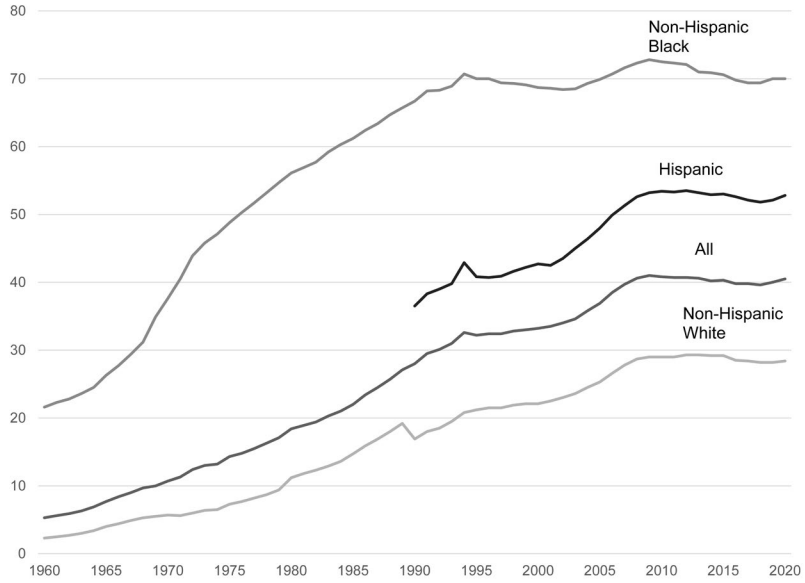

Source: Centers for Disease Control and Prevention. National Center for Health Statistics. https://www.cdc.gov/nchs/data/dvs/national-marriage-divorce-rates-00-20.pdf.

The decline in marriage has negative consequences for children, as more children are born outside of marriage. Children in married-parent homes are substantially less likely to experience poverty, have higher educational achievement, and have better physical and emotional health.[255] Stable two-parent families also impart benefits beyond the immediate family; children raised in communities with a greater share of fathers present achieve greater social mobility, according to research by Harvard economist Raj Chetty.[256] As the Joint Economic Committee has written previously: "As sources of valuable social capital, few relationships are as important as the family ties between parents and children."[257]

While most college-educated adults marry and raise their children in married-parent homes, the majority of children born to non-

college-educated mothers are born outside of marriage.[258] The racial divide in unwed childbearing is also stark. In 2020, more than two-thirds of Black children, more than half of Hispanic children, and more than a quarter of White children were born to unwed mothers.[259] The share of births to unmarried women in the U.S. increased slightly in 2020 after decreasing for several years, with increases among all racial groups, but the biggest increase was among Hispanic women (see Figure 5-6).[260]

Figure 5-6: Share of Births to Unwed Mothers, by Race and Ethnicity, 1970–2020

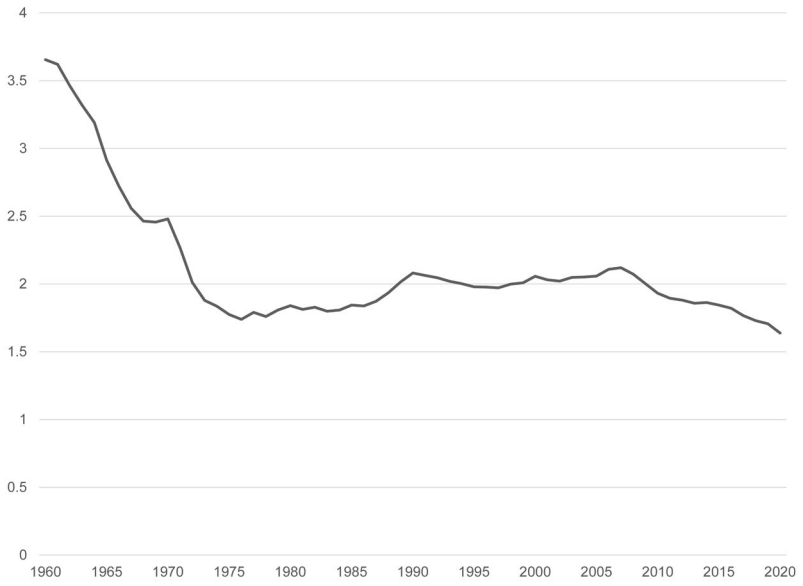



Source: U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. National Center for Health Statistics, various reports.[261]

*Declining Fertility Rate*

Declining marriage rates are linked with declining fertility.[262] As seen in Figure 5-7, in most years since the early 1970s, the total fertility rate in the United States (the number of children a woman is projected to have in her lifetime) has been below the replacement level of 2.1 (the number of children born per woman needed to replace the current population).[263] After remaining fairly stable for several decades, the fertility rate began to decline starting with the 2008 recession, and in 2020 reached an all-time low of 1.6.[264] Provisional data for 2021 show the total fertility rate ticked up slightly to 1.7, the first increase in years, yet total fertility is still well below replacement level.[265]

Figure 5-7: Total Fertility Rate, United States, 1960-2020




Source: Federal Reserve Bank of St. Louis. Federal Reserve Economic Data. Fertility Rate, Total for the United States. https://fred.stlouisfed.org/series/SPDYNTFRTINUSA
Note: Total fertility rate is defined as the number of children a woman is projected to have in her lifetime

Declining fertility has detrimental economic effects by shrinking the workforce, reducing innovation due to fewer people coming up with new ideas, and weakening overall economic growth. Fewer working-age adults also means a smaller share of people contributing to Government social programs upon which a large number of older adults rely. Fewer siblings means fewer people with whom to share the responsibility of caring for aging parents, making it more challenging for prime-age adults to balance work and family responsibility.

Marriage can be strengthened by local and community efforts to promote the benefits of healthy marriages. States can provide marriage education to help couples form and maintain stable relationships. And Federal policymakers can reduce marriage penalties in means-tested social programs and the tax code.[266] Fertility can be bolstered by strengthening the families, religious organizations, and communities that support families.

### *Conclusion*

Over the past year, several problems related to social capital have worsened, many of which were affected by Government policies and social restrictions during the COVID-19 pandemic. Rising drug overdose deaths, rising homicides, learning loss among children, poor teen mental health, and declining family formation all pose a threat to the social and economic well-being of the United States. Some of these problems are a continuation of a decades-long trend and were made worse during the pandemic. For years, Americans have experienced weakening family stability, declining connection to the labor force, decreasing participation in community organizations, and greater fissures in our civic life.

During the last five years, the Joint Economic Committee's Social Capital Project has proposed a variety of policy options designed

to help strengthen individuals, families, and communities.[267] These policies include those that would help couples build and maintain healthy marriages, give families greater educational opportunity, remove barriers to work, and encourage philanthropic giving. Policies that strengthen social capital will help rebuild civil society and in so doing, bolster economic prosperity.

# ENDNOTES

[1] U.S. Congress, Senate, "The Wealth of Relations Expanding Opportunity by Strengthening Families, Communities, and Civil Society," Social Capital Project, Joint Economic Committee, Report No. 3-19, April 2019, https://www.jec.senate.gov/public/_cache/files/3b9f335e-06dc-47eb-9edb-c718ed337cfa/jec-report-wealth-of-relations-final.pdf.
[2] *An Act to Declare a National Policy on Employment, Production, and Purchasing Power, and For Other Purposes*, Public Law 79-304, https://budgetcounsel.files.wordpress.com/2016/10/employment-act-of-1946-as-enacted.pdf.
[3] The Employment Act refers to JEC as the "Joint Committee on the Economic Report."
[4] The Humphrey-Hawkins Act also provided more specific directives to CEA, including the submission of an "Annual Report of the Council of Economic Advisers" alongside the Economic Report, and more specific directives on forecasts and numerical goals to achieve in terms of unemployment and economic growth.
[5] George Hall, Jonathan Payne, Thomas J. Sargent, and Bálint Szőke, "Costs of Financing US Federal Debt: 1791-1933," Working Paper, Princeton University, September 10, 2021, https://bcf.princeton.edu/working-papers/costs-of-financing-us-federal-debt-1791-1933/.
[6] Paul Winfree, *A History (and Future) of the Budget Process in the United States*. Palgrave Macmillan, 2019.
[7] Sandra Kollen Ghizoni, "Creation of the Bretton Woods System," Federal Reserve Bank of St. Louis, November 22, 2013, https://www.federalreservehistory.org/essays/bretton-woods-created.
[8] John Maynard Keynes, *The General Theory of Employment, Interest and Money,* 1936.
[9] Paul Winfree, *A History (and Future) of the Budget Process in the United States*, 120.
[10] J. Bradford De Long, "Keynesianism, Pennsylvania Avenue Style: Some Economic Consequences of the Employment Act of 1946," *The Journal of Economic Perspectives*, Vol. 10, No. 3, Summer, 1996, 41-53, http://www-personal.umich.edu/~kathrynd/JEP.DeLong.pdf; U.S. Congress, Senate, The 2016 Joint Economic Report: Chapter 7, 114th Congress, 2nd Session, Report 114-218, 2016, https://www.jec.senate.gov/public/_cache/files/4efd4d98-44db-495c-9a15-ca612bdfe7d2/crpt-114srpt218.pdf.
[11] Public Law 79-304.
[12] The *2016 Response* notes that the final legislation "reflected a number of compromises between those in Congress who were interventionist and those who were concerned about fiscal responsibility and maintaining the primary role of the private sector in maximizing employment." The Humphrey-

Hawkins Act expanded some of the goals for economic management but remained primarily focused on the Employment Act's three positive, measurable goals. U.S. Congress, Senate, The 2016 Joint Economic Report: Chapter 7, 114th Congress, 2nd Session, Report 114-218, 2016.

[13] Bruce Bartlett, "The Joint Economic Committee in the Early 1980s: Keynesians versus Supply-Siders," *Journal of Policy History* 27, no. 1, 2015: 184–95, https://www.cambridge.org/core/journals/journal-of-policy-history/article/abs/joint-economic-committee-in-the-early-1980s-keynesians-versus-supplysiders/8AFBC6126043E7D5B8EED88FF53F23A8.

[14] Bruce Bartlett, "The Joint Economic Committee in the Early 1980s: Keynesians versus Supply-Siders."

[15] James M. Buchanan and Richard E. Wagner, *Democracy in Deficit: The Political Legacy of Lord Keynes,* Indianapolis: Liberty Fund, 1977, https://www.econlib.org/library/Buchanan/buchCv8.html.

[16] Paul Winfree, *A History (and Future) of the Budget Process in the United States*, 187.

[17] Council of Economic Advisers, *Economic Report of the President*, April 2022, Washington, DC, GPO, 43, https://www.whitehouse.gov/wp-content/uploads/2022/04/ERP-2022.pdf.

[18] *Report,* 189.

[19] William McBride concludes that "nearly every empirical study of taxes and economic growth published in a peer-reviewed academic journal finds that tax increases harm economic growth." Valerie Ramey also finds that tax increases reduce GDP by two to three times the increase in revenue.
William McBride, "What Is the Evidence on Taxes and Growth?" Tax Foundation Special Report No. 207, December 18, 2012, https://taxfoundation.org/what-evidence-taxes-and-growth/; William McBride, "Empirical Evidence on Taxes and Growth: A Response to CBPP," Tax Foundation, February 21, 2014, https://taxfoundation.org/empirical-evidence-taxes-and-growth-response-cbpp/; Valerie A. Ramey, "Ten Years After the Financial Crisis: What Have We Learned from the Renaissance in Fiscal Research?" *Journal of Economic Perspectives*, Vol. 33, No. 2, Spring 2019, https://pubs.aeaweb.org/doi/pdf/10.1257/jep.33.2.89.

[20] 31 U.S.C. §1105(a)

[21] Congressional Research Service, "Introduction to the Federal Budget Process," R46240, February 26, 2020, https://crsreports.congress.gov/product/pdf/R/R46240.

[22] Paul Winfree, *A History (and Future) of the Budget Process in the United States*, 211.

[23] Council of Economic Advisers, *Economic Report of the President*, January 1962, Washington, DC, GPO, 3, https://fraser.stlouisfed.org/title/economic-report-president-45/1962-8133.

[24] U.S. Joint Economic Committee, *Report of the Joint Committee on the Economic Report on the January 1948 Economic Report of the President,* 80th Congress, 2nd Session, May 18, 1948, https://www.jec.senate.gov/reports/80th%20Congress/Joint%20Economic%20Report%20on%20the%20January%201948%20Economic%20Report%20of%20the%20President%20(10).pdf.
[25] U.S. Congress, *Employment Act of 1946,* S 380, 79th Congress, 2nd Session, https://fraser.stlouisfed.org/title/employment-act-1946-1099; U.S. Congress, *Full Employment and Balanced Growth Act of 1978*, 95th Congress, introduced in House January 1, 1977, https://fraser.stlouisfed.org/files/docs/historical/congressional/full-employment-balanced-growth-1978.pdf.
[26] JEC Calculations; U.S. Bureau of Labor Statistics, Databases, Tables & Calculators by Subject, Prices – Consumer, All Urban Consumers (Current Series), https://www.bls.gov/data/home.htm.
[27] Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: April 2022," U.S. Joint Economic Committee Republicans, May 11, 2022, https://www.jec.senate.gov/public/_cache/files/56b3a79b-eaa3-4a65-8428-9faa23a863c3/state-inflation-tracker-april-2022.pdf.
[28] U.S. Bureau of Labor Statistics, Databases, Tables & Calculators by Subject, Prices – Consumer, All Urban Consumers (Current Series), https://www.bls.gov/data/home.htm.
[29] JEC Calculations; U.S. Bureau of Labor Statistics, Databases, Tables & Calculators by Subject, Prices – Consumer, All Urban Consumers (Current Series), https://www.bls.gov/data/home.htm.
Expansion dates are taken from: National Bureau of Economic Research, US Business Cycle Expansions and Contractions, https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions.
[30] JEC Calculations; U.S. Bureau of Economic Analysis, Personal Consumption Expenditures: Chain-type Price Index. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PCEPI.
[31] U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items Less Food and Energy in U.S. City Average. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/CPILFENS; U.S. Bureau of Economic Analysis, Personal Consumption Expenditures Excluding Food and Energy (Chain-type Price Index). Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PCEPILFE.
[32] *Report*, 69-71.
[33] Federal Reserve Bank of Philadelphia, "Second Quarter 2022 Survey of Professional Forecasters," May 13, 2022,

https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/spf-q2-2022.
[34] Federal Reserve Bank of St. Louis, 5-Year Breakeven Inflation Rate, https://fred.stlouisfed.org/series/T5YIE.
[35] Federal Reserve Bank of St. Louis, 5-Year Breakeven Inflation Rate, https://fred.stlouisfed.org/series/T5YIE.
[36] Federal Reserve Bank of St. Louis, 10-Year Breakeven Inflation Rate, https://fred.stlouisfed.org/series/T10YIE.
[37] Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: April 2022," U.S. Joint Economic Committee Republicans, May 11, 2022, https://www.jec.senate.gov/public/index.cfm/republicans/state-inflation-tracker.
[38] U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in U.S. City Average. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/CPIAUCNS.
[39] Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: April 2022," U.S. Joint Economic Committee Republicans, May 11, 2022, https://www.jec.senate.gov/public/_cache/files/56b3a79b-eaa3-4a65-8428-9faa23a863c3/state-inflation-tracker-april-2022.pdf.
[40] Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: April 2022," U.S. Joint Economic Committee Republicans, May 11, 2022, https://www.jec.senate.gov/public/_cache/files/56b3a79b-eaa3-4a65-8428-9faa23a863c3/state-inflation-tracker-april-2022.pdf.
[41] JEC Calculations; U.S. Bureau of Labor Statistics, Databases, Tables & Calculators by Subject, Prices – Consumer, All Urban Consumers (Current Series), https://www.bls.gov/data/home.htm.
[42] Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: April 2022," U.S. Joint Economic Committee Republicans, May 11, 2022, https://www.jec.senate.gov/public/_cache/files/56b3a79b-eaa3-4a65-8428-9faa23a863c3/state-inflation-tracker-april-2022.pdf.
[43] Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: April 2022," U.S. Joint Economic Committee Republicans, May 11, 2022, https://www.jec.senate.gov/public/_cache/files/56b3a79b-eaa3-4a65-8428-9faa23a863c3/state-inflation-tracker-april-2022.pdf.
[44] Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: April 2022," U.S. Joint Economic Committee Republicans, May 11, 2022, https://www.jec.senate.gov/public/_cache/files/56b3a79b-eaa3-4a65-8428-9faa23a863c3/state-inflation-tracker-april-2022.pdf.
[45] Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: April 2022," U.S. Joint Economic Committee Republicans, May 11, 2022, https://www.jec.senate.gov/public/_cache/files/56b3a79b-eaa3-4a65-8428-9faa23a863c3/state-inflation-tracker-april-2022.pdf.

[46] Jackie Benson, Kevin Corinth, and Kole Nichols, "State Inflation Tracker: April 2022," U.S. Joint Economic Committee Republicans, May 11, 2022, https://www.jec.senate.gov/public/_cache/files/56b3a79b-eaa3-4a65-8428-9faa23a863c3/state-inflation-tracker-april-2022.pdf.
[47] Efriam Berkovich, Zheli He, and Xiaoyue Sun, "Impact of Inflation by Household Income," Penn Wharton Budget Model, December 15, 2021, https://budgetmodel.wharton.upenn.edu/issues/2021/12/15/consumption-under-inflation-costs.
[48] David Altig, "An Ebbing Tide Lowers All Boats: Monetary Policy, Inflation, and Social Justice," Federal Reserve Bank of St. Louis, 1992 Quarter 2, https://fraser.stlouisfed.org/files/docs/publications/frbclevreview/pages/1990-1994/68581_1990-1994.pdf.
[49]Bart Hobijn and David Lagakos, "Inflation Inequality in the United States," Federal Reserve Bank of New York, October 2003, https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr173.pdf.
[50] JEC Calculations; U.S. Bureau of Economic Analysis, Real Personal Consumption Expenditures: Goods. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/DGDSRX1.
[51] JEC Calculations; U.S. Bureau of Economic Analysis, Real Personal Consumption Expenditures: Goods. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/DGDSRX1.
[52] JEC Calculations; U.S. Bureau of Economic Analysis, Real Personal Consumption Expenditures: Goods. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/DGDSRX1; U.S. Bureau of Economic Analysis, Real Personal Consumption Expenditures: Services. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PCESC96.
[53] *Report,* 66.
[54] Jackie Benson, "How to Fix Broken Supply Chains and Lower Inflation," U.S. Joint Economic Committee Republicans, December 16, 2021, https://www.jec.senate.gov/public/index.cfm/republicans/2021/12/how-to-fix-broken-supply-chains-and-lower-inflation.
[55] Greg Miller, "As transport socks sink, Los Angeles port volumes soar," American Shipper, April 12, 2022, https://www.freightwaves.com/news/as-transport-stocks-sink-los-angeles-port-volumes-soar.
[56] U.S. Bureau of Labor Statistics, Producer Price Index by Commodity: Transportation Services: Truck Transportation of Freight. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/WPU3012.

[57] Cass Transportation Index Report, Inferred Freight Rates Historical Data, Cass Information Systems, Inc., https://www.cassinfo.com/freight-audit-payment/cass-transportation-indexes/march-2022.
[58] Jackie Benson, "How to Fix Broken Supply Chains and Lower Inflation," U.S. Joint Economic Committee Republicans, December 16, 2021, https://www.jec.senate.gov/public/index.cfm/republicans/2021/12/how-to-fix-broken-supply-chains-and-lower-inflation.
[59] "Volkswagen Expects Chip Shortage to Ease Later in 2022," Reuters, February 16, 2022, https://money.usnews.com/investing/news/articles/2022-02-16/volkswagen-expects-chip-shortage-to-ease-later-in-2022; Bogdan Popa, "General Motors Has Chip Shortage Updates, Pretty Bad News," autoevolution, May 4, 2022, https://www.autoevolution.com/news/general-motors-has-chip-shortage-updates-pretty-bad-news-188153.html.
[60] Jackie Benson, "How to Fix Broken Supply Chains and Lower Inflation," U.S. Joint Economic Committee Republicans, December 16, 2021, https://www.jec.senate.gov/public/index.cfm/republicans/2021/12/how-to-fix-broken-supply-chains-and-lower-inflation.
[61] U.S. Bureau of Labor Statistics, Average Hourly Earnings of All Employees, Transportation and Warehousing. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/CES4300000003.
[62] *Report,* 102.
[63] U.S. Bureau of Economic Analysis, Personal Consumption Expenditures (PCE). Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PCE; Committee for a Responsible Federal Budget, "How Much Would the American Rescue Plan Overshoot the Output Gap?" February 2021, https://www.crfb.org/blogs/how-much-would-american-rescue-plan-overshoot-output-gap.
[64] JEC calculations; Ceyhun Elgin, and Abdullah Yalaman, "COVID-19 Economic Stimulus Packages Database," Centre for Economic Policy Research, May 2021, http://web.boun.edu.tr/elgin/COVID.htm.
[65] JEC calculations; U.S. Department of Education Federal Student Aid, Service Portfolio by Loan Status, https://studentaid.gov/data-center/student/portfolio.
[66] U.S. Bureau of Economic Analysis, Personal Saving, Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PMSAVE.
[67] For example, see: Mitchell Barnes, Wendy Edelberg, Sara Estep, and Moriah Macklin, "Bolstered balance sheets: Assessing household finances since 2019," Brookings, March 22, 2022, https://www.brookings.edu/research/bolstered-balance-sheets-assessing-household-finances-since-2019/; "Quick shot: Consumers' cup runneth over," J.P. Morgan Wealth Management, October 7, 2021, https://www.chase.com/personal/investments/learning-and-insights/article/tmt-october-seven-twenty-one-daily; Joseph Politano,

"Understanding Americans' Excess Savings," Apricitas Economics, January 15, 2022, https://apricitas.substack.com/p/understanding-americans-excess-savings?s=r.

[68] Figure 2-11 of the *Report* on page 58 mistakenly suggests an accumulation of $1.7 trillion in excess savings by the end of 2021. Page 60 presents the accurate figure, estimated by CEA to be $2.7 trillion.

JEC's value of excess savings is estimated by first finding the differences between actual personal savings and a linear forecast of personal savings each month from March 2020 to December 2021. Those differences are then divided by 12 to convert annualized excess savings into monthly excess savings, and added together to find the cumulative value of excess savings over the time period. The linear forecast was created based on monthly personal savings data from January 2015 to February 2020, which show a relatively flat trend.

[69] JEC Calculations; U.S. Bureau of Economic Analysis, Personal Consumption Expenditures (PCE), Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PCE.

[70] JEC calculations; U.S. Bureau of Economic Analysis, Personal Consumption Expenditures (PCE), Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PCE.

[71] Francois de Soyres, Ana Maria Santacreu, and Henry Young, "Demand-supply imbalance during the COVID-19 pandemic: the role of fiscal policy," Centre for Economic Policy Research, March 1, 2022, https://voxeu.org/article/demand-supply-imbalance-during-covid-19-pandemic; Òscar Jordà, Celeste Liu, Fernanda Nechio, and Fabián Rivera-Reyes, "Why is U.S. Inflation Higher than in Other Countries?" Federal Reserve Bank of San Francisco, March 28, 2022, https://www.frbsf.org/economic-research/publications/economic-letter/2022/march/why-is-us-inflation-higher-than-in-other-countries/; Michael R. Strain, "Yes, the Biden Stimulus Made Inflation Worse," National Review, February 10, 2022, https://www.nationalreview.com/corner/yes-the-biden-stimulus-made-inflation-worse/.

[72] Francois de Soyres, Ana Maria Santacreu, and Henry Young, "Demand-supply imbalance during the COVID-19 pandemic: the role of fiscal policy," Centre for Economic Policy Research, March 1, 2022, https://voxeu.org/article/demand-supply-imbalance-during-covid-19-pandemic.

[73] Eric Milstein and David Wessel, "What did the Fed do in response to the COVID-19 crisis?" Brookings, December 17, 2021, https://www.brookings.edu/research/fed-response-to-covid19/.

[74] Board of Governors of the Federal Reserve System, "Credit and Liquidity Programs and the Balance Sheet," May 2022, https://www.federalreserve.gov/monetarypolicy/bst_recenttrends.htm.

[75] Board of Governors of the Federal Reserve System, "Federal Reserve issues FOMC statement," July 28, 2021, https://www.federalreserve.gov/newsevents/pressreleases/monetary20210728a.htm.
[76] U.S. Bureau of Economic Analysis, Personal Consumption Expenditures Excluding Food and Energy (Chain-type Price Index), Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PCEPILFE.
[77] Board of Governors of the Federal Reserve System, "Federal Reserve issues FOMC statement," December 15, 2021, https://www.federalreserve.gov/newsevents/pressreleases/monetary20211215a.htm.
[78] U.S. Bureau of Economic Analysis, Personal Consumption Expenditures Excluding Food and Energy (Chain-type Price Index), Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PCEPILFE.
[79] Board of Governors of the Federal Reserve System, "Federal Reserve issues FOMC statement," March 16, 2022, https://www.federalreserve.gov/newsevents/pressreleases/monetary20220316a.htm.
[80] Board of Governors of the Federal Reserve System, "Federal Reserve issues FOMC statement," May 5, 2022, https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504a.htm.
[81] Board of Governors of the Federal Reserve System, "Plan for Reducing the Size of the Federal Reserve's Balance Sheet," May 4, 2022, https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504b.htm.
[82] JEC Calculations. See endnote 68.
[83] Federal Reserve Bank of Atlanta, "Taylor Rule Utility," https://www.atlantafed.org/cqer/research/taylor-rule.
[84] *Report,* 191, 204.
[85] Scott C. Bradford, Paul L. E. Grieco, and Garry Clyde Hufbauer, "The Payoff to America from Global Integration," *The United States and the World Economy,* (Peterson Institute for International Economics Jan 2005), 65-109; Jacqueline Varas, "The Impact of U.S. Imports on Manufacturing Employment," American Action Forum, May 11, 2020, https://www.americanactionforum.org/research/the-impact-of-u-s-imports-manufacturing-employment/.
[86] The World Bank, "Asian Ports Dominate Global Container Port Performance Index," May 5, 2021, https://www.worldbank.org/en/news/press-release/2021/05/05/asian-ports-dominate-global-container-port-performance-index.

[87] Jackie Benson, "How to Fix Broken Supply Chains and Lower Inflation," U.S. Joint Economic Committee Republicans, December 16, 2021, https://www.jec.senate.gov/public/index.cfm/republicans/analysis?id=362E7DC9-BA5D-408E-900E-EB6DB5E9A6D7.
[88] Jackie Benson, "How to Fix Broken Supply Chains and Lower Inflation," U.S. Joint Economic Committee Republicans, December 16, 2021, https://www.jec.senate.gov/public/index.cfm/republicans/analysis?id=362E7DC9-BA5D-408E-900E-EB6DB5E9A6D7.
[89] Eric Boehm, "Restrictive Zoning Laws Worsened the Supply Chain Crisis," Reason, October 25, 2021, https://reason.com/2021/10/25/how-restrictive-zoning-laws-worsened-the-supply-chain-crisis/.
[90] *Report,* 218.
[91] For example, see: Scott Lincicome and Huan Zhu, "Questioning Industrial Policy: Why Government Manufacturing Plans are Ineffective and Unnecessary," June 16, 2021, https://www.cato.org/sites/cato.org/files/2021-06/working-paper-63-updated-2.pdf; Tori Smith, "Buy American" Laws: A Costly Policy Mistake That Hurts Americans," The Heritage Foundation, May 18, 2017, https://www.heritage.org/trade/report/buy-american-laws-costly-policy-mistake-hurts-americans; Davide Furceri, Swarnali A. Hannan, Jonathan David Ostry, and Andrew K. Rose, "Macroeconomic Consequences of Tariffs," International Monetary Fund, January 5, 2019, https://www.imf.org/en/Publications/WP/Issues/2019/01/15/Macroeconomic-Consequences-of-Tariffs-46469.
[92] Tom Lee and Jacqueline Varas, "The Total Cost of U.S. Tariffs," American Action Forum, May 10, 2022, https://www.americanactionforum.org/research/the-total-cost-of-tariffs/.
[93] Jacqueline Varas and Jonathan DeDomenico, "The Impact of the President's Tariffs on Consumer Goods," American Action Forum, July 29, 2019, https://www.americanactionforum.org/research/the-impact-of-the-presidents-tariffs-on-consumer-goods/.
[94] Dr. Joseph Francois and Laura M. Baughman, "Round 2: Trading Partners Respond, The Estimated Impacts of Tariffs on Steel and Aluminum," Trade Partnership LLC/The Trade Partnership, March 13, 2018, https://tradepartnership.com/wp-content/uploads/2018/03/232RetaliationPolicyBrief.pdf.
[95] For example, see: Mary Amiti, Stephen J. Redding, and David Weinstein, "The Impact of the 2018 Trade War on U.S. Prices and Welfare," National Bureau of Economic Research, March 2019, https://www.nber.org/papers/w25672; Mary Amiti, Stephen J. Redding, and David E. Weinstein, "Who's Paying for the US Tariffs? A Longer-Term Perspective," National Bureau of Economic Research, January 2020, https://www.nber.org/papers/w26610; Pablo D. Fajgelbaum, Pinelopi K. Goldberg, Patrick J. Kennedy, and Amit K. Khandelwal, "The Return to

Protectionism," National Bureau of Economic Research, October 2019, https://www.nber.org/papers/w25638.
[96] Aaron Flaaen and Justin Pierce, "Disentangling the Effects of the 2018-2019 Tariffs on a Globally Connected U.S. Manufacturing Sector," Federal Reserve Board, December 23, 2019, https://www.federalreserve.gov/econres/feds/files/2019086pap.pdf; Alessandro Barattieri and Matteo Cacciatore, "Self-Harming Trade Policy? Protectionism and Production Networks," National Bureau of Economic Research, July 2020, https://www.nber.org/papers/w27630.
[97] Gary Clyde Hufbauer, Megan Hogan, and Yilin Wang, "For inflation relief, the United States should look to trade liberalization," Peterson Institute for International Economics, March 2022, https://www.piie.com/publications/policy-briefs/inflation-relief-united-states-should-look-trade-liberalization.
[98] John Frittelli, "Harbor Dredging: Issues and Historical Funding," Congressional Research Service, IN11133, November 6, 2019, https://crsreports.congress.gov/product/pdf/IN/IN11133.
[99] Colin Grabow, Inu Manak, and Daniel J. Ikenson, "The Jones Act: A Burden America Can No Longer Bear," Cato Institute, https://www.cato.org/publications/policy-analysis/jones-act-burden-america-can-no-longer-bear.
[100] Ari Ashe, "US chassis orders may not be fulfilled until late 2022," The Journal of Commerce Online, November 4, 2021, https://www.joc.com/trucking-logistics/trucking-equipment/us-chassis-orders-may-not-be-fulfilled-until-late-2022_20211104.html.
[101] "The Global Chip Shortage: A Timeline of Unfortunate Events," Fusion Worldwide, October 11, 2021, https://info.fusionww.com/blog/the-global-chip-shortage-a-timeline-of-unfortunate-events.
[102] JEC Calculations; Board of Governors of the Federal Reserve System, Industrial Production: Total Index, Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/INDPRO.
[103] JEC Calculations; U.S. Bureau of Economic Analysis, Real Personal Consumption Expenditures: Goods, Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/DGDSRX1.
[104] Inflation adjusted goods imports increased 19.7 percent from Q4 2019 to Q1 2022. U.S. Bureau of Economic Analysis, Real imports of goods, Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/A255RX1Q020SBEA.
[105] JEC calculations using a linear trendline fitted from the trough of the 2008 recession through February 2020; U.S. Bureau of Economic Analysis, All Employees, Total Nonfarm (PAYEMS), Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PAYEMS.

[106] Peter Ganong, Pascal Noel, and Joseph S. Vavra, "US Unemployment Insurance Replacement Rates during the Pandemic," Becker Friedman Institute for Economics at the University of Chicago, August 2020, https://bfi.uchicago.edu/working-paper/2020-62/.
[107] Isabel Soto, "Ending Federal Pandemic Unemployment Compensation and its Effect on Unemployment Claims," American Action Forum, September 7, 2021, https://www.americanactionforum.org/research/ending-federal-pandemic-unemployment-compensation-and-its-effect-on-unemployment-claims/.
[108] Harry Holzer, R. Glenn Hubbard, and Michael R. Strain, "Did Pandemic Unemployment Benefits Reduce Employment? Evidence from Early State-Level Expirations in June 2021," National Bureau of Economic Research, December 2021, https://www.nber.org/papers/w29575.
[109] Kevin Corinth, Bruce D. Meyer, Matthew Stadnicki, and Derek Wu, "The Anti-Poverty, Targeting, and Labor Supply Effects of the Proposed Child Tax Credit Expansion," National Bureau of Economic Research, March 2022, https://www.nber.org/papers/w29366.
[110] Jon Huntley, Maddison Erbabian, and John Ricco, "H.R. 5376, Build Back Better Act: Budget and Macroeconomic Effects," Penn Wharton, University of Pennsylvania, November 2021, https://budgetmodel.wharton.upenn.edu/issues/2021/11/15/hr-5376-build-back-better-budget-macro; Alex Durante, Cody Kallen, Huaqun Li, and William McBride, "Details and Analysis of President Biden's American Jobs Plan," Tax Foundation, June 2021, https://taxfoundation.org/american-jobs-plan/; Gordon Gray and Douglas Holtz-Eakin, "Assessing the Biden Promises: Infrastructure, Taxes, and Growth," American Action Forum, April 2021, https://www.americanactionforum.org/insight/assessing-the-biden-promises-infrastructure-taxes-and-growth/; John W. Diamond, "Macroeconomic Effects of H.R. 5376: The Build Back Better Act," American Action Forum, May 6, 2022, https://www.americanactionforum.org/wp-content/uploads/2022/05/1.5-Diamond-Macro-Effects-of-HR-5367-05-09-2022-CLEAN28.pdf.
[111] White House Briefing Room, "Remarks by President Biden on Lowering Energy Costs for Working Families," delivered at Menlo, Iowa, April 12, 2022, https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/04/12/remarks-by-president-biden-on-lowering-energy-costs-for-working-families/; Jeff Stein and Cat Zakrzewski, "White House takes aim at oil industry as gas prices create economic and politics rifts," *Washington Post*, November 17, 2021, https://www.washingtonpost.com/business/2021/11/17/biden-ftc-gas-prices/.
[112] Budget of the U.S. Government, Fiscal Year 2023, *Analytical Perspectives*, 23, https://www.whitehouse.gov/wp-content/uploads/2022/03/ap_2_assumptions_fy2023.pdf.

[113] Board of Governors of the Federal Reserve System, "Federal Reserve issues FOMC statement," March 16, 2022, https://www.federalreserve.gov/newsevents/pressreleases/monetary20220316a.htm.

[114] Russia invaded Ukraine on February 24, however, oil prices (measured by the price of WTI crude) did not spike until the beginning of March. It is unlikely that the Russian invasion had any significant impact on U.S. CPI in February. Oilprice.com, WTI crude, https://oilprice.com/oil-price-charts/#WTI-Crude.

[115] JEC estimates; Consumer Price Index - March 2022, Table 6. Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by expenditure category, March 2022, 1-month analysis table, Bureau of Labor Statistics, April 12, 2022, https://www.bls.gov/news.release/archives/cpi_04122022.pdf.
The counterfactual annual CPI growth rate, which assumes 3.5 percent growth in energy prices from February to March, is calculated using the following three step formula:

1. Counterfactual Seasonally Adjusted Effect of Energy on All Items in March 2022 = [Counterfactual Monthly Growth Rate in Energy Prices / Actual Monthly Growth Rate in Energy Prices] x Seasonally Adjusted Effect of Energy on All Items in March 2022
2. Counterfactual Monthly CPI Growth Rate, February 2022 to March 2022 = Actual March 2022 CPI + [Counterfactual Seasonally Adjusted Effect of Energy on All Items in March 2022 - Seasonally Adjusted Effect of Energy on All Items in March 2022]
3. Counterfactual CPI Level, March 2022 = February CPI x [1 + (Counterfactual Monthly CPI Growth Rate/100)]
4. Counterfactual Annual CPI Growth Rate, March 2021 to March 2022 = Counterfactual March 2022 CPI/Actual March 2021 CPI – 1

[116] Jeff Stein and Cat Zakrzewski, "White House takes aim at oil industry as gas prices create economic and politics rifts," *Washington Post*, November 17, 2021, https://www.washingtonpost.com/business/2021/11/17/biden-ftc-gas-prices/.

[117] U.S. Congress, House, *Consumer Fuel Price Gouging Prevention Act,* HR 7688, 117th Congress, 2nd Session, introduced in House May 6, 2022, https://www.congress.gov/117/bills/hr7688/BILLS-117hr7688ih.pdf.

[118] For example, see: Sam Peltzman, "Prices Rise Faster Than They Fall," *Journal of Political Economy* 83, no. 3, August 2001: 466-502; Barry K. Goodwin and Matthew T. Holt, "Price Transmission and Asymmetric Adjustment in the U.S. Beef Sector," *American Journal of Agricultural Economics* 81, no. 3, August 1999: 630-637; and Douglas J. Miller and Marvin L. Hayenga, "Price Cycles and Asymmetric Price Transmission in the

U.S. Pork Market," *American Journal of Agricultural Economics* 83, no. 3. August 2001: 551-562.

[119] Kartick Gupta, "Oil price shocks, competition, and oil & gas stock returns – Global evidence," *Energy Economics* 57, (June 2016): 140-153, https://www.sciencedirect.com/science/article/pii/S0140988316300998.

[120] Valerie A. Ramey, "Ten Years After the Financial Crisis: What Have We Learned from the Renaissance in Fiscal Research?," *Journal of Economic Perspectives* 33, no. 2, Spring 2019: 89-114, https://pubs.aeaweb.org/doi/pdf/10.1257/jep.33.2.89.

[121] JEC calculations; Inflation is measured as the annual percent change in the GDP Price Deflator, defined as Nominal GDP/Real GDP x 100. Nominal and real GDP projections are retrieved from CBO's 10-Year Economic Projections published in July 2021. The added inflation from the Budget and BBB in 2022 and 2023 is the difference between two inflation estimates: one real-world estimate for each year based on GDP deflators derived from actual CBO projections, and a counterfactual rate for each year based a nominal GDP estimate that adds together CBO's nominal GDP projection, proposed increases in outlays in the budget, and CBO's estimate of total estimated outlays triggered by BBB. Because there is no output gap (consistent with CBO's 10-Year Economic Projections) we assume 100 percent of the increase in nominal GDP will translate into price increases via a larger GDP Price Deflator. Our assumption relies on the additional spending not increasing real GDP because the economy is already at its short-run productive capacity. Bureau of Economic Analysis, National Income and Product Accounts, Table 1.1.4 Price Indexes for Gross Domestic Product, https://apps.bea.gov/iTable/index_nipa.cfm; Congressional Budget Office, "10-Year Economic Projections," July 2021, https://www.cbo.gov/data/budget-economic-data; Congressional Budget Office, "Summary of Cost Estimate for H.R. 5378, the Build Back Better Act," November 18, 2021, https://www.cbo.gov/publication/57627.

[122] Alan Cole, "Stable Monetary Policy to Connect More Americans to Work," U.S. Joint Economic Committee Republicans, September 14, 2020, https://www.jec.senate.gov/public/index.cfm/republicans/2020/9/stable-monetary-policy-to-connect-more-americans-to-work.

[123] David Beckworth, "Facts, Fears, and Functionality of NGDP Level Targeting: A Guide to a Popular Framework for Monetary Policy," Mercatus Center at George Mason University, September 2019, https://www.mercatus.org/system/files/beckworth-ngdp-targeting-mercatus-special-study-v2.pdf.

[124] Aaron Steelman, "Employment Act of 1946 | Federal Reserve History," https://www.federalreservehistory.org/essays/employment-act-of-1946.

[125] U.S. Bureau of Labor Statistics, All Employees, Total Nonfarm [PAYEMS]. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PAYEMS.
[126] U.S. Bureau of Labor Statistics, All Employees, Total Nonfarm [PAYEMS]. Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PAYEMS;
"Estimated Budgetary Effects of H.R. 1319, American Rescue Plan Act of 2021," March 10, 2021, https://www.cbo.gov/system/files/2021-03/Estimated_Budgetary_Effects_of_HR_1319_as_passed_0.pdf.
[127] U.S. Bureau of Labor Statistics, Labor Force Participation Rate - 25-54 Yrs. [LNS11300060], Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/LNS11300060.
[128] U.S. Congress, Senate, "Inactive, Disconnected, and Ailing: A Portrait of Prime-Age Men out of the Labor Force," Social Capital Project, Joint Economic Committee, Report No. 3-18, September 2018, www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=D72FFEAB-DE2D-4F2C-9BCD-670B9B1BE9C3.
[129] U.S. Bureau of Labor Statistics, Employment-Population Ratio - Black or African American, Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/LNS12300006;
U.S. Bureau of Labor Statistics, Employment Population Ratio – Asian, Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/LNU02332183;
U.S. Bureau of Labor Statistics, Employment-Population Ratio – White, Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/LNS12300003;
U.S. Bureau of Labor Statistics, Employment-Population Ratio - Hispanic or Latino, Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/LNS12300009.
[130] U.S. Bureau of Labor Statistics, Median usual weekly earnings - in constant (1982-84) dollars, [LES1252881600];
Richard V. Burkhauser, Kevin C. Corinth, and Douglas Hotlz-Eakin. "Policies to Help the Working Class in the Aftermath of COVID-19: Lessons from the Great Recession," *The Annals of the American Academy of Political and Social Science*, 695(1), 2021, https://journals.sagepub.com/doi/abs/10.1177/00027162211031772.
[131] Figure 3-2 Non-farm employment numbers include the month of March because the majority of days in the reference week for March 2021 data (week ending March 12, 2021) occurred before the passage of the ARP.
U.S. Bureau of Labor Statistics, All Employees, Total Nonfarm [PAYEMS], Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/PAYEMS.

[132] U.S. Bureau of Labor Statistics, Unemployment Rate [UNRATE], Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/UNRATE.
[133] Abhinav Chugh, "What Is the 'Great Resignation?' an Expert Explains," World Economic Forum, November 29, 2021, http://www.weforum.org/agenda/2021/11/what-is-the-great-resignation-and-what-can-we-learn-from-it/.
[134] U.S. Census Bureau, Income and Poverty in the United States: 2020, October 8, 2021, https://www.census.gov/data/tables/2021/demo/income-poverty/p60-273.html.
[135] U.S. Congress, Senate, "Ranking Member Mike Lee: Views and Estimates of the President's FY2023 Budget," Joint Economic Committee, May 13, 2022, https://www.jec.senate.gov/public/index.cfm/republicans/2022/5/ranking-member-mike-lee-views-and-estimates-of-the-president-s-fy2023-budget.
[136] U.S. Bureau of Labor Statistics, Table A-2, Current and Real (Constant 1982-1984 Dollars) Earnings for production and nonsupervisory employees on Private Nonfarm Payrolls, Seasonally Adjusted, https://www.bls.gov/news.release/realer.t01.htm;
U.S. Bureau of Labor Statistics, Real Earnings Summary, May 11, 2022, https://www.bls.gov/news.release/realer.nr0.htm.
[137] U.S. Bureau of Labor Statistics, Table A-1. Current and Real (Constant 1982-1984 Dollars) Earnings for All Employees on Private Nonfarm Payrolls, Seasonally Adjusted, https://www.bls.gov/news.release/realer.t01.htm;
U.S. Bureau of Labor Statistics, Real Earnings Summary, May 11, 2022, https://www.bls.gov/news.release/realer.nr0.htm.
[138] U.S. Congress, Senate, "Ranking Member Mike Lee: Views and Estimates of the President's FY2023 Budget," Joint Economic Committee, May 13, 2022, https://www.jec.senate.gov/public/index.cfm/republicans/2022/5/ranking-member-mike-lee-views-and-estimates-of-the-president-s-fy2023-budget.
[139] Peter Ganong, Pascal Noel, and Joseph Vavra, "US Unemployment Insurance Replacement Rates during the Pandemic," *Journal of Public Economics*, 191, 2020, https://www.sciencedirect.com/science/article/pii/S0047272720301377.
[140] Isabel Soto, "Revisiting Federal Pandemic Unemployment Compensation under the Biden Administration," American Action Forum, February 8, 2021, http://www.americanactionforum.org/research/revisiting-federal-pandemic-unemployment-compensation-under-the-biden-administration/.
[141] Isabel Soto, "Ending Federal Pandemic Unemployment Compensation and Its Effect on Unemployment Claims," American Action Forum, September 7 2021, www.americanactionforum.org/research/ending-federal-pandemic-unemployment-compensation-and-its-effect-on-unemployment-claims/.

[142] Harry J. Holzer, R. Glenn Hubbard, and Michael R. Strain, "Did Pandemic Unemployment Benefits Reduce Employment? Evidence from Early State-Level Expirations in June 2021," National Bureau of Economic Research, December 1, 2021, https://www.nber.org/papers/w29575.
[143] Scott Winship, "New Evidence on the Benefits and Costs of an Expanded Child Tax Credit," American Enterprise Institute, October 7, 2021, https://www.aei.org/poverty-studies/new-evidence-on-the-benefits-and-costs-of-an-expanded-child-tax-credit/.
[144] Kevin Corinth, Bruce D. Meyer, Matthew Stadnicki, and Derek Wu, "The Anti-Poverty, Targeting, and Labor Supply Effects of the Proposed Child Tax Credit Expansion," National Bureau of Economic Research, March 2022, https://www.nber.org/papers/w29366.
[145] Kevin Corinth, Bruce D. Meyer, Matthew Stadnicki, and Derek Wu, "The Anti-Poverty, Targeting, and Labor Supply Effects of the Proposed Child Tax Credit Expansion," National Bureau of Economic Research, March 2022, https://www.nber.org/papers/w29366.
[146] U.S. Department of the Treasury, "Economic Impact Payments," https://home.treasury.gov/policy-issues/coronavirus/assistance-for-american-families-and-workers/economic-impact-payments.
[147] Tom Lee, "Potential Consequences of Continued Student Loan Forbearance, and Blanket Loan Forgiveness," American Action Forum, March 29, 2022, https://www.americanactionforum.org/insight/potential-consequences-of-continued-student-loan-forbearance-and-blanket-loan-forgiveness/.
[148] "Without Immediate Relief, More than Half of Licensed Child Care Will Close in the next Week," NAEYC, http://www.naeyc.org/about-us/news/press-releases/without-immediate-relief;
Emma K. Lee, and Zachary Parolin, "The Care Burden during COVID-19: A National Database of Child Care Closures in the United States," Socius: Sociological Research for a Dynamic World 7, January 2021: 237802312110320, https://doi.org/10.1177/23780231211032028.
[149] Debbie Truong, "Child Care Providers Say D.C. Should Lift Caps on Class Sizes to Match Public Schools," NPR.org, May 10, 2021, https://www.npr.org/local/305/2021/05/10/995422004/child-care-providers-say-d-c-should-lift-caps-on-class-sizes-to-match-public-schools.
[150] JEC Calculations; U.S. Bureau of Labor Statistics, "State Employment and Unemployment – December 2021," https://www.bls.gov/news.release/archives/laus_01252022.pdf.
The share of workers who are not fully vaccinated in each state is calculated by dividing the number of 18-64 year-old individuals who are not fully vaccinated by the state's 18-64 year-old population. To calculate the number of unvaccinated workers, the share of the working age population that is not fully vaccinated is multiplied by the total number of employees in each state

as of December 2021, under the assumption that vaccination rates among the employed population in each state and the overall state working age population are the same.

[151] To gauge how many more adults might be separated from work under a future universal mandate, it is necessary to first adjust the proportion of unvaccinated Americans who have reported leaving their jobs by the proportion of workers who are already covered by mandates. As of November 2021, 4 percent of unvaccinated Americans had left their jobs due to a vaccine mandate but only 29 percent of all workers were under a mandate. Therefore, it stands to reason that 13.8 percent of unvaccinated Americans might leave their jobs under a future, universal mandate (4 percent divided by 29 percent). Applying 13.8 percent to the total unvaccinated population (70 million) gives an estimate of 9.6 million unvaccinated Americans that are at risk of job separation. The upper bound estimate of future potential job loss, 6.8 million, is found by subtracting the number of unvaccinated adults that have already left their jobs due to a mandate, 2.8 million, from the total number of unvaccinated adults that would leave their jobs under a universal mandate, 9.6 million.

The JEC estimate of 70 million unvaccinated adults was found using the November KFF survey, and is roughly the same as what current CDC data suggest. As of February 1, 2022, CDC reports that 191.5 million adults are fully vaccinated. With a total U.S. adult population of 258.3 million in 2021, this in turn suggests that 66.8 million adults are unvaccinated.

Liz Hamel, Lunna Lopes, Grace Sparks, Ashley Kirzinger, Audrey Kearney, Mellisha Stokes, and Mollyann Brodie, "KFF COVID-19 Vaccine Monitor: November 2021," KFF Polling. Kaiser Family Foundation, December 2, 2021, https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-november-2021/;

Centers for Disease Control and Prevention, "Rates of Covid-19 Cases or Deaths by Age Group and Vaccination Status," October 19, 2021, https://data.cdc.gov/Public-Health-Surveillance/Rates-of-COVID-19-Cases-or-Deaths-by-Age-Group-and/3rge-nu2a/data.

[152] "The Littler Annual Employer Survey 2022," Littler Mendelson P.C. April 26, 2022, https://www.littler.com/publication-press/publication/littler-employer-survey-report-2022.

[153] Liz Hamel, Lunna Lopes, Grace Sparks, Ashley Kirzinger, Audrey Kearney, Mellisha Stokes, and Mollyann Brodie, "KFF COVID-19 Vaccine Monitor: October 2021," KFF Polling. Kaiser Family Foundation, October 28, 2021, https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-october-2021/.

[154] *Report,* 159.

[155] Edward P Lazear, "Performance Pay and Productivity," *American Economic Review*, vol. 90, no. 5, 2000, pp. 1346–1361, http://www.jstor.org/stable/2677854?seq=1;
Edward Lazear, "Productivity and Wages: Common Factors and Idiosyncrasies across Countries and Industries." National Bureau of Economic Research, November 2019, http://www.nber.org/papers/w26428;
James Pethokoukis, "The Productivity-Pay 'Gap': A Pernicious Economic Myth," American Enterprise Institute, February 10, 2022, http://www.aei.org/articles/the-productivity-pay-gap-a-pernicious-economic-myth/;
Anna, Stansbury and Lawrence H. Summers, "Productivity and Pay: Is the Link Broken?" SSRN Electronic Journal, 2018, 10.2139/ssrn.3192609.
[156] James Sherk, "Productivity and Compensation: Growing Together," The Heritage Foundation, July 13, 2013, www.heritage.org/jobs-and-labor/report/productivity-and-compensation-growing-together.
[157] James Sherk, "Productivity and Compensation: Growing Together," The Heritage Foundation, July 13, 2013, www.heritage.org/jobs-and-labor/report/productivity-and-compensation-growing-together.
[158] Edward Lazear, "Productivity and Wages: Common Factors and Idiosyncrasies across Countries and Industries," National Bureau of Economic Research, November 2019, http://www.nber.org/papers/w26428.
Lazear's findings were presented as change in log points. JEC calculations converted log point differences to percent change using the formula found in: Christopher Palmer, "Interpretation of β in Log-Linear Models," 2011, https://faculty.haas.berkeley.edu/palmer/beta_in_log-linear_regression.pdf.
[159] Christina King, Scott Winship, and Adam Michel, "Reconnecting Americans to the Benefits of Work," U.S. Joint Economic Committee Republicans, October 27, 2021, https://www.jec.senate.gov/public/index.cfm/republicans/2021/10/reconnecting-americans-to-the-benefits-of-work.
[160] *Report*, 152.
[161] Adam Michel and Christina King, "Occupational Licensing Stands in the Way of Recovery," U.S. Joint Economic Committee Republicans, July 28, 2021, www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=57751C45-03AE-439F-8CA7-4433368AA7E1;
Dick M. Carpenter, Lisa Knepper, Kyle Sweetland, and Jennifer McDonald, "License to Work," Institute for Justice, November 13, 2017, https://ij.org/report/license-to-work-2/.
[162] Janna E. Johnson and Morris M. Kleiner, "Is Occupational Licensing a Barrier to Interstate Migration?" *American Economic Journal: Economic Policy*, 12 (3): 347-73, 2020, https://www.aeaweb.org/articles?id=10.1257/pol.20170704.

[163] U.S. Congress, *Employment Act of 1946,* S 380, 79th Congress, 2nd Session, https://fraser.stlouisfed.org/title/employment-act-1946-1099.
[164] Robert Fogel, *The Escape from Hunger and Premature Death, 1700–2100: Europe, America, and the Third World*, Cambridge Studies in Population, Economy and Society in Past Time, Cambridge: Cambridge University Press, 2004, doi:10.1017/CBO9780511817649; Charlie Giattino and Esteban Ortiz-Ospina, "Are We Working More than Ever?" Our World in Data, December 16, 2020, https://ourworldindata.org/working-more-than-ever.
[165] Elizabeth Arias and Jiaquan Xu, "United States Life Tables, 2019," National Vital Statistics Reports, Volume 20, Number 19, National Center for Health Statistics, National Vital Statistics Program, 2022.
[166] Elizabeth Arias and Jiaquan Xu, "United States Life Tables, 2019," National Vital Statistics Reports, Volume 20, Number 19, National Center for Health Statistics, National Vital Statistics Program, 2022.
[166] Bureau of Labor Statistics, Total Factor Productivity - 2021, https://www.bls.gov/news.release/pdf/prod3.pdf.
[167] "Technology Timeline," Weber State University, Accessed May 26, 2022, https://www.weber.edu/digitalhistory/timeline.html.
[168] James Pethokoukis, "Is the Great Stagnation over?" American Enterprise Institute, Accessed May 23, 2022, https://www.aei.org/articles/is-the-great-stagnation-over/; Anne Trafton, "New Lightweight Material Is Stronger than Steel," MIT News | Massachusetts Institute of Technology, Accessed May 23, 2022, https://news.mit.edu/2022/polymer-lightweight-material-2d-0202.
[169] Reka Juhász, Mara P. Squicciarini, and Nico Voigtländer, "Technology Adoption and Productivity Growth: Evidence from Industrialization in France," National Bureau of Economic Research, 2020, https://doi.org/10.3386/w27503.
[170] Patrick McLaughlin, Jonathan Nelson, Thurston Powers, Walter Stover, and Stephen Strosko, RegData US 4.0 Annual (dataset), QuantGov, Mercatus Center at George Mason University, 2021.
[171] Lettie McSpadden Wenner, "The Misuse and Abuse of NEPA." *Environmental Review*: vol. 7, no. 3, 1983: 229–54, https://doi.org/10.2307/3984482.
[172] *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402; Alan Cole, "A conversation with Jim Pethokoukis on anti-growth politics," Full Stack Economics, April 20, 2022, https://fullstackeconomics.com/a-conversation-with-jim-pethokoukis-on-anti-growth-politics/.
[173] Adjusted to 2022 dollars by applying CPI-U All US Cities to annual cost savings figure in Robert W. Crandall, "Extending Deregulation: Make the U.S. Economy More Efficient," Brookings, July 28, 2007, https://www.brookings.edu/wp-content/uploads/2016/06/pb_deregulation_crandall.pdf.

[174] "Executive Order 12291--Federal Regulation," National Archives and Records Administration, Accessed May 24, 2022, https://www.archives.gov/federal-register/codification/executive-order/12291.html; Hershey, Robert D., "President Abolishes Last Price Controls on U.S.-Produced Oil," *The New York Times*, January 29, 1981, https://www.nytimes.com/1981/01/29/us/president-abolishes-last-price-controls-on-us-produced-oil.html.
[175] Tea Petrin, "A literature review on the impact and effectiveness of government support for R&D and innovation," 2018.
[176] John A. Douglas, "The Cold War, Technology and the American University," 1999, UC Berkeley: Center for Studies in Higher Education, Retrieved from https://escholarship.org/uc/item/9db970dq; Committee on Assessing the Value of Research in Advancing National Goals, Division of Behavioral and Social Sciences and Education, National Research Council, Richard F. Celeste, Ann Griswold, and Miron Straf, editors, *Furthering America's Research Enterprise*, Washington, DC: National Academies Press, Oct 28 2014, https://www.ncbi.nlm.nih.gov/books/NBK253889/.
[177] "Regulation Rodeo by the American Action Forum," American Action Forum Regulation Rodeo, Accessed May 31, 2022, regrodeo.com.
[178] "Information Collection Budget - Whitehouse.gov," Accessed May 24, 2022, https://www.whitehouse.gov/wp-content/uploads/2020/12/2018-ICB-Report-Final.pdf.
[179] U.S. Bureau of Labor Statistics, Table B-3. Average Hourly and Weekly Earnings of All Employees on Private Nonfarm Payrolls by Industry Sector, Seasonally Adjusted - 2022 M04 Results. May 6, 2022, https://www.bls.gov/news.release/empsit.t19.htm; U.S. Bureau of Labor Statistics, "13-1041 Compliance Officers," March 31, 2022, https://www.bls.gov/oes/current/oes131041.htm; "Regulation Rodeo by the American Action Forum," Data reported for 2018-2022, American Action Forum Regulation Rodeo, Accessed May 31, 2022, regrodeo.com.
[180] James Broughel and Robert Hahn, "The Impact of Economic Regulation on Growth: Survey and Synthesis," Accessed May 11, 2022, https://onlinelibrary.wiley.com/doi/abs/10.1111/rego.12376.
[181] Bentley Coffey, Patrick A. McLaughlin, and Pietro Peretto, "The cumulative cost of regulations," *Review of Economic Dynamics*, Volume 38, 2020, pp. 1-21, https://doi.org/10.1016/j.red.2020.03.004.
[182] John W. Dawson and John J. Seater, "Federal regulation and aggregate economic growth," *Journal of Economic Growth* 18, 137–177, 2013, https://doi.org/10.1007/s10887-013-9088-y.
[183] John W. Dawson and John J. Seater, "Federal regulation and aggregate economic growth," *Journal of Economic Growth* 18, 137–177, 2013, https://doi.org/10.1007/s10887-013-9088-y.

[184] Dustin Chambers, Patrick A. McLaughlin, and Oliver Sherouse, "Regulation, Entrepreneurship, and Dynamism," Mercatus Working Paper, Mercatus Center at George Mason University, October 2020.
[185]Germán Gutiérrez and Thomas Philippon, "The Failure of Free Entry," National Bureau of Economic Research, June 2019, https:\www.nber.org\papers\w26001.
[186] Robert J. Barro, 1990, "Government spending in a simple model of endogeneous growth," *Journal of Political Economy* 98(S5): 103-125; Di Matteo Livio, "Measuring Government in the 21st Century - Fraser Institute," Accessed May 12, 2022, https://www.fraserinstitute.org/sites/default/files/measuring-government-in-the-21st-century.pdf.
[187] Christina D. Romer and David H. Romer, 2010, "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks," *American Economic Review*, 100 (3): 763-801.
[188] Valerie A. Ramey, "Ten Years After the Financial Crisis: What Have We Learned from the Renaissance in Fiscal Research?" *Journal of Economic Perspectives*, Vol. 33, No. 2, Spring 2019, https://pubs.aeaweb.org/doi/pdf/10.1257/jep.33.2.89.
[189] William McBride, "What Is the Evidence on Taxes and Growth?" and William McBride, "Empirical Evidence on Taxes and Growth: A Response to CBPP," Tax Foundation, February 21, 2014, https://taxfoundation.org/empirical-evidence-taxes-and-growth-response-cbpp/.
[190] *Report*, 238-239.
[191] Scott Lincicome and Huan Zhu, "Questioning Industrial Policy: Why Government Manufacturing Plans are Ineffective and Unnecessary," June 16, 2021, https://www.cato.org/sites/cato.org/files/2021-06/working-paper-63-updated-2.pdf.
[192] For example, the Congressional Budget Office estimates that it would take 10 years for Congress to spend the funds authorized by the U.S. Innovation and Competition Act (USICA) and the America Creating Opportunities for Manufacturing Pre-Eminence in Technology and Economic Strength (America COMPETES):
Congressional Budget Office, "Estimated Budgetary Effects of H.R. 4521, the America COMPETES Act of 2022, as Passed by the House of Representatives on February 4, 2022," March 2022, https://www.cbo.gov/system/files/2022-03/hr4521.pdf; Congressional Budget Office, "At a Glance: S. 1260, Endless Frontier Act, with an Amendment in the Nature of a Substitute, the United States Innovation and Competition Act of 2021," May 2021, https://www.cbo.gov/system/files/2021-10/s1260.pdf.
[193] Scott Lincicome and Huan Zhu, "Questioning Industrial Policy: Why Government Manufacturing Plans are Ineffective and Unnecessary," June 16,

2021, https://www.cato.org/sites/cato.org/files/2021-06/working-paper-63-updated-2.pdf; Juan Londoño, "The Return of Industrial Policy Means Bad News for Emerging Technology Sectors," American Action Forum, July 15, 2021, https://www.americanactionforum.org/insight/the-return-of-industrial-policy-means-bad-news-for-emerging-technology-sectors/.

[194] *Report,* 239.

[195] Adam Thierer, "'Japan Inc' and Other Tales of Industrial Policy Apocalypse," Discourse Magazine, June 28, 2021, https://www.discoursemagazine.com/culture-and-society/2021/06/28/japan-inc-and-other-tales-of-industrial-policy-apocalypse/.

[196] William McBride and Alex Durante, "Biden Budget Would Raise Income Tax Rates to Highest in Developed World." Tax Foundation, May 23, 2022, https://taxfoundation.org/biden-budget-tax/.

[197] William McBride and Alex Durante, "Biden Budget Would Raise Income Tax Rates to Highest in Developed World," Tax Foundation, March 2022, https://taxfoundation.org/biden-budget-tax/.

[198] "Regulation Rodeo by the American Action Forum." Data reported for 2018-2022 American Action Forum Regulation Rodeo, Accessed May 31, 2022, regrodeo.com.

[199] Diane Katz, "The Biden Administration's Radical Regulatory Agenda." The Heritage Foundation, Accessed May 31, 2022, https://www.heritage.org/government-regulation/report/the-biden-administrations-radical-regulatory-agenda.

[200] Council of Economic Advisers, "Chapter 1: The Great Expansion," in *2020 Economic Report of the President*, February 2020, https://www.govinfo.gov/content/pkg/ERP-2020/pdf/ERP-2020.pdf.

[201] Council of Economic Advisers, "Incomes Hit a Record High and Poverty Reached a Record Low in 2019 – the White House," Trump White House Archives, September 2020, Accessed April 15, 2022, https://trumpwhitehouse.archives.gov/articles/incomes-hit-record-high-poverty-reached-record-low-2019/.

[202] U.S. Bureau of Labor Statistics, "Labor Force Participation Rate - 25-54 Yrs.," Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/LNS11300060.

[203] "Testimony of Dr. Tyler Goodspeed before the U.S. Congress Joint Economic Committee," Joint Economic Committee, Accessed May 13, 2022, https://www.jec.senate.gov/public/_cache/files/9cda6fc1-6933-48c0-b276-8995b6fff437/goodspeed-final-jec-testimony-4.27.2022.pdf.

[204] "Sen. Lee Introduces Bill to Increase Utah Housing Supply," Mike Lee US Senator for Utah, April 8, 2022, https://www.lee.senate.gov/2022/4/sen-lee-introduces-bill-to-increase-utah-housing-supply#:~:text=Senator%20Mike%20Lee%20(R%2DUT,of%20the%20land%20in%20Utah.

[205] U.S. Joint Economic Committee, *1979 Annual Joint Economic Committee Report,* 96th Congress, 2nd Session, September 4, 1980, https://www.jec.senate.gov/reports/96th%20Congress/The%20Global%202000%20Report%20(998).pdf.
[206] Secretariat, Treasury Board of Canada, "Targeted Regulatory Review," Canada.ca, Gouvernement du Canada, January 25, 2021, https://www.canada.ca/en/government/system/laws/developing-improving-federal-regulations/modernizing-regulations/targeted-regulatory-reviews.html; Secretariat, Treasury Board of Canada. "One-For-One Rule." Canada.ca, Gouvernement du Canada, July 8, 2016, https://www.canada.ca/en/government/system/laws/developing-improving-federal-regulations/requirements-developing-managing-reviewing-regulations/one-for-one-rule.html.
[207] Laura Jones, "Cutting Red Tape in Canada: A Regulatory Reform Model for the United States?" Mercatus Center, September 15, 2019, https://www.mercatus.org/publications/regulation/cutting-red-tape-canada-regulatory-reform-model-united-states.
[208] "B.C. Economic Accounts & Gross Domestic Product," Province of British Columbia, Province of British Columbia, November 17, 2021, https://www2.gov.bc.ca/gov/content/data/statistics/economy/bc-economic-accounts-gdp.
[209] Nick Malyshev, "A Primer on Regulatory Budgets," OECD, Accessed May 24, 2022, https://www.oecd.org/gov/budgeting/.
[210] Ergete Ferede and Bev Dahlby, "The Impact of Tax Cuts on Economic Growth: Evidence from the Canadian Provinces," *National Tax Journal* 65, no. 3, 2012: 563–594.
[211] U.S. Congress, *Employment Act of 1946,* S 380, 79th Congress, 2nd Session, https://fraser.stlouisfed.org/title/employment-act-1946-1099.
[212] U.S. Congress, Senate, "Long Term Trends in Deaths of Despair," Social Capital Project, Joint Economic Committee, Report No. 4-19, September 2019, https://www.jec.senate.gov/public/index.cfm/republicans/2019/9/long-term-trends-in-deaths-of-despair.
[213] Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Rapid Release. "Provisional Drug Overdose Death Counts," Accessed April 26, 2022, https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm.
[214] Data are from the Multiple Cause of Death Files, 1999-2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed May 10, 2022, http://wonder.cdc.gov/ucd-icd10.html; Centers for Disease Control and Prevention, National Center for Health Statistics, Monthly Provisional Counts of Deaths by Select Causes, 2020-2022, Accessed May 11, 2022, https://data.cdc.gov/d/9dzk-mvmi.

[215] Casey Mulligan, "Deaths of Despair and the Incidence of Excess Mortality in 2020," National Bureau of Economic Research, December 2020, http://www.nber.org/papers/w28303.pdf.
[216] U.S. Department of Transportation, "Departmental Guidance on Valuation of a Statistical Life in Economic Analysis," March 23, 2021, https://www.transportation.gov/office-policy/transportation-policy/revised-departmental-guidance-on-valuation-of-a-statistical-life-in-economic-analysis.
[217] The Value of a Statistical Life ($11.8 million) multiplied by the 168,996 total number of overdose deaths since March 2020.
[218] Jeremy Greenwood, Nezih Guner, and Karen Kopecky, "Substance Abuse during the Pandemic: Implications for Labor-Force Participation," National Bureau of Economic Research, April 2022, http://www.nber.org/papers/w29932.pdf.
[219] Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Mortality 1999-2020 on CDC WONDER Online Database, released in 2021. Data are from the Multiple Cause of Death Files, 1999-2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed May 10, 2022, http://wonder.cdc.gov/ucd-icd10.html.
[220] Casey B. Mulligan, "Lethal Unemployment Bonuses? Substitution and Income Effects on Substance Abuse, 2020-21," National Bureau of Economic Research, February 2022, https://www.nber.org/system/files/working_papers/w29719/w29719.pdf.
[221] Jon E. Sprague, Arthur B. Yeh, Qizhen Lan, Jamie Vieson, and Maggie McCorkle, "COVID-19 economic impact payments and opioid overdose deaths," *International Journal of Drug Policy* 102, April 2022: Article 103608, Accessed April 27, 2022, https://europepmc.org/article/med/35131687.
[222] See Janna Ataiants, Alexis M. Roth, Silvana Mazzella, and Stephen E. Lankenau, "Circumstances of overdose among street-involved, opioid-injecting women: Drug, set, and setting," *International Journal of Drug Policy* 78, April 2020, https://pubmed.ncbi.nlm.nih.gov/32086154/.
[223] National Association of Addiction Treatment Providers, "Treatment Provider COVID-19 Impact Survey," Accessed May 12, 2022, https://www.naatp.org/sites/naatp.org/files/COVID-19%20Impact%20Survey%20Results.pdf.
[224] Tami L. Mark, Brent Gibbons, and Alan Barnosky, "Changes in Admissions to Specialty Addiction Treatment Facilities in California During the COVID-19 Pandemic," *JAMA Network Open* 4, no. 7, July 14, 2021, https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2781940.
[225] Richard Rosenfeld and Ernesto Lopez, "Pandemic, Social Unrest, and Crime in U.S. Cities: March 2021 Update," National Commission on COVID-19 and Criminal Justice. May 2022, https://councilonj.org/wp-

content/uploads/2021/11/Pandemic_Social_Unrest_and_Crime_in_US_Cities_-_March_2021_Update.pdf.

[226] The White House, "FACT SHEET: White House Releases 2022 National Drug Control Strategy that Outlines Comprehensive Path Forward to Address Addiction and the Overdose Epidemic," April 21, 2022, https://www.whitehouse.gov/briefing-room/statements-releases/2022/04/21/fact-sheet-white-house-releases-2022-national-drug-control-strategy-that-outlines-comprehensive-path-forward-to-address-addiction-and-the-overdose-epidemic/.

[227] See Christopher F. Rufo, "The Harm in 'Harm Reduction'," *City Journal*, Spring 2020, https://www.city-journal.org/vancouver-harm-reduction.

[228] Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Homicide 2020, Underlying Causes of Death, 1999-2020, Deaths Occurring through 2020, Accessed June 3, 2022. Note: CDC homicide numbers differ from FBI calculations, which estimate total homicides at 21,570 in 2020. See https://www.pewresearch.org/fact-tank/2021/10/27/what-we-know-about-the-increase-in-u-s-murders-in-2020/.

[229] Weihua Li and Beth Schwartzapfel, "Murder Rose Last Year. Black and Hispanic Neighborhoods Were Hit the Hardest," The Marshall Project, April 8, 2021, https://www.themarshallproject.org/2021/04/08/murders-rose-last-year-black-and-hispanic-neighborhoods-were-hit-hardest; Scott R. Kegler, Thomas R. Simon, Marissa L. Zwald, May S. Chen, James A. Mercy, Christopher M. Jones, Melissa C. Merado-Crespo, Janet M. Blair, Deborah M. Stone, Phyllis G, Ottley, and Jennifer Dills, "*Vital Signs*: Changes in Firearm Homicide and Suicide Rates—United States, 2019-2020," https://www.cdc.gov/mmwr/volumes/71/wr/mm7119e1.htm

[230] Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Rapid Release, Mortality Dashboard, Accessed May 31, 2022, https://www.cdc.gov/nchs/nvss/vsrr/mortality-dashboard.htm.

[231] Marisa Lagos, "Violent Crime Soared During the Pandemic. But Does the Political Debate Reflect the Data?" *KQED*. March 2, 2022, Accessed April 29, 2022, https://www.kqed.org/news/11906253/violent-crime-soared-during-the-pandemic-but-does-the-political-debate-reflect-the-data.

[232] Julia P. Schleimer, Veronica A. Pear, Christopher D. McCort, Aaron B. Shev, Alaina De Biasi, Elizabeth Tomsich, Shani Buggs, Hannah S. Laqueur, and Garen J. Wintemute, "Unemployment and Crime in U.S. Cities During the Coronavirus Pandemic," *Journal of Urban Health* 99, January 2022: 82-91, https://link.springer.com/article/10.1007/s11524-021-00605-3.

[233] Jacqueline Varas, Vijay Menon, and Robert Bellafiore, "What's Next for Schools: Balancing the Costs of School Closures Against COVID-19 Health Risks," Joint Economic Committee Republicans, February 2, 2021,

https://www.jec.senate.gov/public/index.cfm/republicans/analysis?id=33BC87AF-9E6A-4EAD-BAD0-F15B83990663#_edn1.

[234] MCH Strategic Data, "COVID-19 IMPACT: School District Operational Status Updates for Spring 2022," Accessed April 29, 2022, https://www.mchdata.com/covid19/schoolclosings.

[235] Institute of Education Sciences, "New Data Reveal Public School Enrollment Decreased 3 Percent in 2020-21 School Year," NCES Blog, July 26, 2021, Accessed May 10, 2022, https://nces.ed.gov/blogs/nces/post/new-data-reveal-public-school-enrollment-decreased-3-percent-in-2020-21-school-year.

[236] Penn Wharton, University of Pennsylvania, "COVID-19 Learning Loss: Long-run Macroeconomic Effects Update," October 27, 2021, Accessed April 28, 2022, https://budgetmodel.wharton.upenn.edu/issues/2021/10/27/covid-19-learning-loss-long-run-macro-effects.

[237] i-Ready, "Academic Achievement at the End of the 2020-2021 School Year." June 2021, https://www.curriculumassociates.com/-/media/mainsite/files/i-ready/iready-understanding-student-needs-paper-spring-results-2021.pdf.

[238] Ibid.

[239] Dan Goldhaber, Thomas J. Kane, Andrew McEachin, Emily Morton, Tyler Patterson, and Douglas O. Staiger, "The Consequences of Remote and Hybrid Instruction During the Pandemic," Harvard University Center for Education Policy Research, 10. May 2022, https://cepr.harvard.edu/files/cepr/files/5-4.pdf?m=1651690491.

[240] Emma Dorn, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg, "COVID-19 and student learning in the United States: The hurt could last a lifetime," McKinsey & Company, June 1, 2020, https://www.mckinsey.com/industries/education/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime.

[241] Emma Dorn, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg, "COVID-19 and student learning in the United States: The hurt could last a lifetime," McKinsey & Company, June 1, 2020, https://www.mckinsey.com/industries/education/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime.

[242] Penn Wharton, University of Pennsylvania, "COVID-19 Learning Loss: Long-run Macroeconomic Effects Update."

[243] Ibid.

[244] Margaret A. Honein, Lisa C. Barrios, and John T. Brooks, "Data and Policy to Guide Opening Schools Safely to Limit the Spread of SARS-CoV-2 Infection," *JAMA* 325, no. 9, January 26, 2021: 823-824, https://jamanetwork.com/journals/jama/fullarticle/2775875.

[245] Berkeley Lovelace Jr., "CDC director says schools can safely reopen without vaccinating teachers," *CNBC*, February 3, 2021,

https://www.cnbc.com/2021/02/03/cdc-director-says-schools-can-safely-reopen-without-vaccinating-teachers.html.

[246] The White House, "Executive Order on Supporting the Reopening and Continuing Operation of Schools and Early Childhood Education Providers," January 21, 2021, https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/21/executive-order-supporting-the-reopening-and-continuing-operation-of-schools-and-early-childhood-education-providers/; U.S. House of Representatives, Select Subcommittee on the Coronavirus Crisis, "Interim Findings: Union Officials Wrote Key Portions of the Biden Administration's School Reopening Guidance," March 30, 2022; Katelyn Caralle, "Republicans released damning report claiming teachers union WROTE part of the Biden Administration's guidance on reopening schools, received millions in donations and had 'uncommon' links to CDC," *Daily Mail*, March 30, 2022, Accessed May 16, 2022, https://www.dailymail.co.uk/news/article-10667987/Republicans-expose-cozy-relationship-CDC-teachers-union-school-reopenings.html.

[247] Ibid.

[248] Marie Elizabeth Loades, Eleanor Chatburn, Nina Higson-Sweeney, Shirley Reynolds, Roz Shafran, Amberly Brigden, Catherine Linney, Megan Niamh McManus, Catherine Borwick, and Esther Crawley, "Rapid Systematic Review: The Impact of Social Isolation and Loneliness on the Mental Health of Children and Adolescents in the Context of COVID-19," *Journal of the American Academy of Child and Adolescent Psychiatry* 59 no. 11, November 2020: 1218-1239, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7267797/; Jean Twenge, "How Much Is Social Media to Blame for Teens' Declining Mental Health?" Institute for Family Studies, April 11, 2022, https://ifstudies.org/blog/how-much-is-social-media-to-blame-for-teens-declining-mental-health.

[249] Centers for Disease Control and Prevention, "Youth Risk Behavior Survey Data Summary & Trends Report 2009-2019," https://www.cdc.gov/healthyyouth/data/yrbs/pdf/YRBSDataSummaryTrendsReport2019-508.pdf; Jean Twenge, "How Much Is Social Media to Blame for Teens' Declining Mental Health?" April 11, 2022, https://ifstudies.org/blog/how-much-is-social-media-to-blame-for-teens-declining-mental-health.

[250] Centers for Disease Control and Prevention, WISQARS, Explore Fatal Injury Data Visualization Tool, Select "Suicide," "Age Range 14-17," Accessed May 12, 2022, https://wisqars.cdc.gov/data/explore-data/home.

[251] Jean Twenge, "How Much Is Social Media to Blame for Teens' Declining Mental Health?" April 11, 2022, https://ifstudies.org/blog/how-much-is-social-media-to-blame-for-teens-declining-mental-health.

[252] Rachel Sheffield and Catherine Francois, "Is Instagram Causing Poorer Mental Health Among Teen Girls?" U.S. Joint Economic Committee

Republicans, December 1, 2021, https://www.jec.senate.gov/public/index.cfm/republicans/analysis?id=3CA0231D-4C1F-45DD-8CC7-40320817C55B.

[253] See Centers for Disease Control and Prevention, National Vital Statistics System, "Provisional number of marriages and marriage rate: United States, 2000-2020." Accessed April 29, 2022, https://www.cdc.gov/nchs/data/dvs/national-marriage-divorce-rates-00-20.pdf.

[254] See Florida Department of Health Bureau of Vital Statistics, Table 9: Marriages Performed by Month, by County of Issuance, various years, Accessed April 29, 2022, http://www.flpublichealth.com/VSprov/rdPage.aspx?rdReport=ProvReports&radReport=T10&drpYear=2020; Iowa Department of Public Health, Accessed April 29, 2022, https://idph.iowa.gov/health-statistics/data/preliminary-data#birth.

[255] Rachel Sheffield and Scott Winship, "The Demise of the Happy Two-Parent Home," Joint Economic Committee Republicans, July 23, 2020, https://www.jec.senate.gov/public/index.cfm/republicans/2020/7/the-demise-of-the-happy-two-parent-home.

[256] Ibid.

[257] Rachel Sheffield and Scott Winship, "The Demise of the Happy Two-Parent Home," Joint Economic Committee Republicans. July 23, 2020.

[258] Ibid.

[259] Michelle J.K. Osterman, Brady E. Hamilton, Joyce A. Martin, Anne K. Driscoll, and Claudia Valenzuela, "Births: Final Data for 2020," U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, February 7, 2022, https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-17.pdf.

[260] See Rachel Sheffield and Scott Winship, "The Demise of the Happy Two-Parent Home," Table 11; Joyce A. Martin, Brady E. Hamilton, Michelle J. K. Osterman, and Anne K. Driscoll, "Births: Final Data for 2019," U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Table 10, March 23, 2021, Accessed May 10, 2022, https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-02-508.pdf; Michelle J.K. Osterman, Brady E. Hamilton, Joyce A. Martin, Anne K. Driscoll, and Claudia P. Valenzuela, "Births: Final Data for 2020," U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, February 7, 2022, Accessed May 10, 2022, https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-17.pdf.

[261] Data for 1970 – 1995: Stephanie J. Ventura and Christine A. Bacharach, "Nonmarital Childbearing in the United States, 1940-99," U.S. Department of

Health and Human Services, Centers for Disease Control and Prevention. National Center for Health Statistics, October 18, 2000, Table 4, Accessed May 12, 2022, https://www.cdc.gov/nchs/data/nvsr/nvsr48/nvs48_16.pdf; Estimates for 1995-2020 are available from various National Vital Statistics Reports. Note: Data for Hispanics are not reported until 1990, and only for Hispanic and non-Hispanic white. Data for non-Hispanic black are reported beginning in 1995.

[262] Lyman Stone, "Declining Fertility in America," American Enterprise Institute, December 2018, Accessed May 13, 2022, https://www.aei.org/wp-content/uploads/2018/12/Declining-Fertility-in-America.pdf.

[263] The total fertility rate is projected based on "the prevailing age-specific fertility rates" and "is calculated by totaling the age-specific fertility rate as defined over five-year intervals." See OECD Data, Fertility rates, Accessed May 13, 2022, https://data.oecd.org/pop/fertility-rates.htm; Brady E. Hamilton, Joyce A. Martin, and Michelle J. K. Osterman, "Births: Provisional Data for 2021," U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, May 2022, Accessed June 2, 2022, https://www.cdc.gov/nchs/data/vsrr/vsrr020.pdf.

[264] World Bank, "Fertility Rate, Total for the United States," Retrieved from the Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/SPDYNTFRTINUSA; Michelle J.K. Osterman, Brady E. Hamilton, Joyce A. Martin, Anne K. Driscoll, and Claudia P. Valenzuela, "Births: Final Data for 2020."

[265] Brady E. Hamilton, Joyce A. Martin, and Michelle J. K. Osterman, "Births: Provisional Data for 2021," U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, May 2022, Accessed June 2, 2022, https://www.cdc.gov/nchs/data/vsrr/vsrr020.pdf.

[266] Rachel Sheffield and Scott Winship, "The Demise of the Happy Two-Parent Home."

[267] Joint Economic Committee Republicans. Social Capital Project.