



The Path to Higher, More Inclusive Economic Growth and Good Jobs

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Introduction and summary

Congress has passed massive COVID-19 relief legislation. Most of the economic discussion surrounding President Joe Biden’s American Rescue Plan (ARP) focuses on its delivery of urgently needed help to struggling families, businesses, and state and local governments. The primary impact of this legislation is thus on the demand side of the economy.¹ People, businesses, and state and local governments will get more income and therefore raise their spending—easy enough. But the ARP should also be seen as an important first step in tackling the lackluster supply side of the economy. An economy can only enjoy healthy, stable growth that generates sufficient jobs and resources for broadly shared prosperity if both supply and demand go up.

The recently announced American Jobs Plan (AJP) is an important second step.² It proposes a series of large strategic investments that will increase productivity growth and the kind of economic growth that will create high-quality jobs and foster a transition to a 100 percent clean energy future. Boosting productivity growth—the main ingredient into faster supply-side expansion—will, among other things, require reducing excessive income and wealth inequality. This inequality has left many Americans without the necessary resources to weather an emergency and, more impactful for growth, without the means to invest in their own future by starting a business, moving where better job opportunities may be, and expanding their education. Less inequality will thus give workers more peace of mind and more opportunities to fully contribute their talents and skills. It will also provide more incentive for companies to invest. Faster productivity growth will require more public investments in infrastructure and innovation to ensure that the country has a stronger capital base.

Even before the coronavirus pandemic caused the recession, economic growth in the United States was modest in large part because productivity growth, also known as innovation and technological advance, has been very low for more than a decade.

Productivity growth is the key measure of the expansion of the supply side of an economy. With lackluster productivity growth, companies and governments expand their ability to produce more goods and services with limited resources at a slow pace. Alternatively, faster productivity growth means that companies and governments can do more with the same inputs—capital, materials, and people.

Stretching limited resources further, to spur productivity growth, offers several critical benefits. First, it provides the resources for larger increases in incomes for all, if the gains from productivity growth are equitably shared. Second, faster productivity—and the faster economic growth that is likely to result from it—makes it easier to address the looming challenges of an aging society, climate change, increased caregiving demands, and so on. Society will have more economic resources available than it could, in theory, invest in these priorities, assuming the political will for these investments exists. Third, faster productivity growth makes it easier for the economy to absorb a larger increase in demand without seeing a pronounced bump in inflation. Companies can meet that additional demand, even if it increases at a faster pace than in the past, through faster innovation that allows them to stretch their existing resources further without raising prices.

Congress should thus consider additional measures to build on the recently passed relief legislation to boost longer-term growth and the job creation that comes with it. The AJP fits the bill as a robust step.

This report argues that slow economic growth has marred the U.S. economy for two decades before the pandemic. Several factors, including massive income and wealth inequality, have contributed to low business investment, which has resulted in a marked slowdown of productivity growth for more than a decade.

This report goes on to recommend policies to support workers and expand productivity and America's capital base as key measures to boost economic growth in a sustainable and equitable manner for the future. Recent economic history shows that productivity acceleration, even in an advanced economy such as the United States, is possible. The United States experienced a sharp increase in productivity growth from about 1995 to 2004, before declining investment and a widening income chasm took their toll. With the right mix of policies, there is no reason why the country could not see a return to faster productivity growth. Some of these policies are contained in the recently passed ARP, and many are incorporated in the AJP, but numerous remaining policy initiatives outlined in this report need to be addressed in new legislative packages that lift up investments in people, businesses, and innovation in an explicit, ambitious, and equitable manner.

The problem of slow growth

Economic growth has been very slow throughout much of the past two decades, after first slowing down in the wake of the 2001 recession.³ Meager, subpar productivity growth has been a key factor in this poor performance of the economy. Productivity growth measures how much an economy produces with its given inputs, including people's work, capital such as manufacturing plants, office buildings, computers, trucks, and people's ingenuity. Faster productivity growth means that people and businesses are learning faster to do more with less.

With higher productivity, scarce economic resources are used more efficiently, and this efficiency translates into more economic resources for more people. It lays the foundation for higher standards of living for everyone, if the new resources are equitably shared, and it makes it easier for society to find the money to invest in its future. Investing in physical infrastructure and sustainability; supporting an aging society; building a 21st-century caregiving infrastructure; making health care affordable and accessible to all; and finding cures for existing and novel diseases all become easier with faster productivity growth. What's more, faster productivity growth makes it easier to keep inflation in check. The Federal Reserve, for example, experimented with keeping interest rates low and letting unemployment rates fall below previously unthinkable levels in the late 1990s because faster productivity growth provided the necessary flexibility in monetary policy.⁴ Yet productivity growth has been sluggish for more than a decade, as the data in the next section show, ultimately putting the economy and people into a precarious situation.

In today's economy, high inequality, widely shared income volatility, and subpar business investment all contribute to lower productivity growth. These factors are also interconnected. Corporations lower workers' pay and benefits by holding off wage increases, reducing hazard pay amid an ongoing pandemic, cutting health and retirement benefits, and increasingly relying on precarious work arrangements such as gig work, to name the most important trends.

Importantly, these measures by corporations keep incomes and wealth for most Americans down. Americans, on average, also face daily uncertainties such as unpredictable schedules, layoffs, long-term unemployment, and unexpected medical bills.

These events only worsen wealth inequality as workers with less stable incomes need to dip into their savings more often to cover unexpected shortfalls in their paychecks.⁵ With regard to productivity growth, these regular occurrences make it difficult for households to plan and invest in their own future—giving families fewer opportunities to put all of their talents and skills to use. In the end, society suffers from missed innovation and inventions, and productivity growth falls below its potential levels.

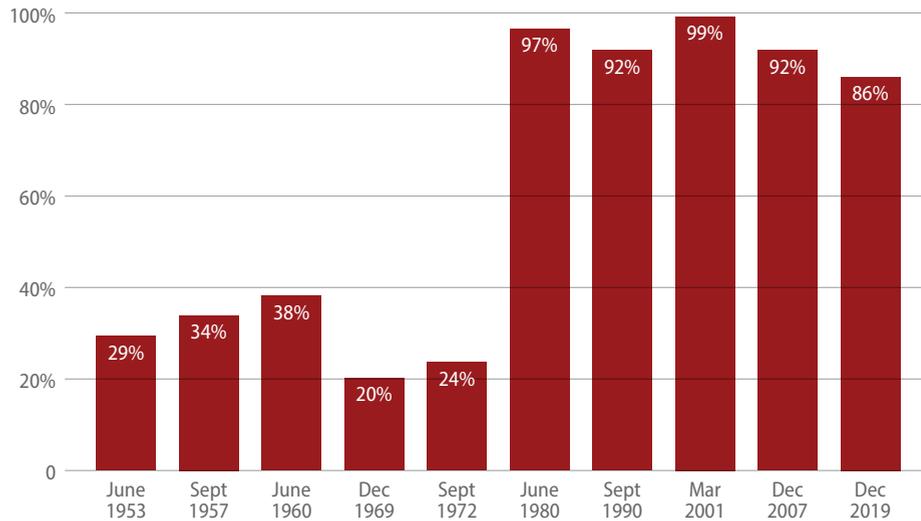
High income and wealth inequality and widespread income volatility are further exacerbated by persistent and frequent discrimination. Outright discrimination and more subtle biases against people of color, women, members of the LGBTQ community, older workers, and those with disabilities, for example, reduce people's pay, benefits, and savings, worsening already existing trends toward more inequality. These systemic obstacles to people's economic security also make it more difficult for people to pursue their careers, get an education, and start and maintain a business. They cannot fully contribute their skills and talents to the economy. This phenomenon of “lost Einsteins,” as economist Alex Bell and his co-authors dubbed it, means that persistent discrimination and inequality dampen innovation and productivity growth.⁶

At the same time, reducing workers' pay in many different ways boosts corporate profits. So far during this recession, profits have been high and, importantly, have recovered much faster than they have in previous recessions.⁷ For example, inflation-adjusted profits for nonfinancial corporations were \$140 billion higher in the second half of 2020 than in the second half of 2019, before the pandemic struck.⁸ Major nonfinancial corporations experienced similarly quick turnarounds in their fortunes during the Great Recession and during the 2001 recession.⁹ In all three cases, profits recovered well before job growth and unemployment did.

Most if not all of the corporate profits go to shareholders in the form of share repurchases, which raise share prices, and dividend payouts.¹⁰ For example, during the last business cycle—the time from the start of one recession to the beginning of the next recession—which lasted from the first quarter of 2008 through the fourth quarter of 2019, nonfinancial corporations used 91.8 percent of all of their after-tax profits for share repurchases and dividend payouts. (see Figure 1) This is less than the percentage from the previous business cycle, 99.2 percent, but in line with all business cycles since the 1980s. Corporations have prioritized and continue to prioritize their shareholders over investing in their workers and in new capital, as the data in the next section show.¹¹ Yet less spending on business investments means that the capital base of the U.S. economy is not expanding as fast, making it harder for people and businesses to innovate. And less pay and fewer benefits for workers have hollowed out the American middle class.

FIGURE 1
Corporations have spent almost all of their money on keeping shareholders happy since the 1980s

Average share of after-tax profits for nonfinancial corporations going to share repurchases and dividend payouts during each business cycle that started in the indicated quarter, 1953–2007



Source: Authors' calculations based on Board of Governors of the Federal Reserve System, "Financial Accounts of the United States Z.1, Table F.103: Nonfinancial Corporate Businesses," Press release, March 11, 2021, available at <https://www.federalreserve.gov/releases/z1/default.htm>.

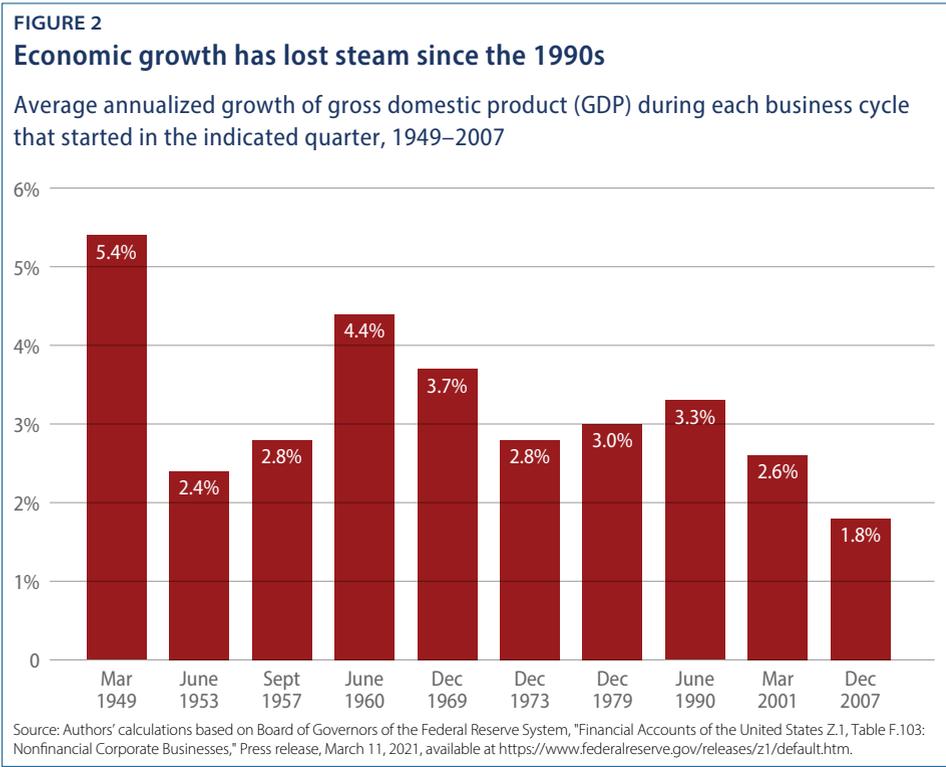
The diminished and uncertain financial prospects of workers due to lower wages, less stable jobs, and fewer benefits translate into depressed demand for new products and services, making corporations less willing to invest to expand capacity. Less pay clearly results in lower demand. Greater instability also makes people more reluctant to spend money, as they may try to wait out income fluctuations—in the form of a layoff or cut hours, for instance—and thus save some liquid assets for eventual emergencies.¹² Fewer benefits, especially no or insufficient health insurance benefits, also contribute to this problem, as they lead to increased spending on health care, leaving less money for other items.¹³ Moreover, households cover any increases in necessary spending such as health care and education with more debt since they have neither sufficient income nor wealth.¹⁴ As a result, private sector firms can easily meet any modest growth of demand for their products by gradually expanding their capacity without accelerating hiring and investing. The same workers who are financially harmed by firms' drive to boost profits are drowning in debt and can hardly afford to increase their spending.

At the same time, the very factors that leave workers with less pay, less wealth, and greater economic uncertainty mean that workers need to constantly invest in their own skills to be able to move to new jobs. But workers have less income and wealth, which makes it more difficult to pay for more training. Education and training, therefore, take a back seat to people’s need to pay their bills in the present.

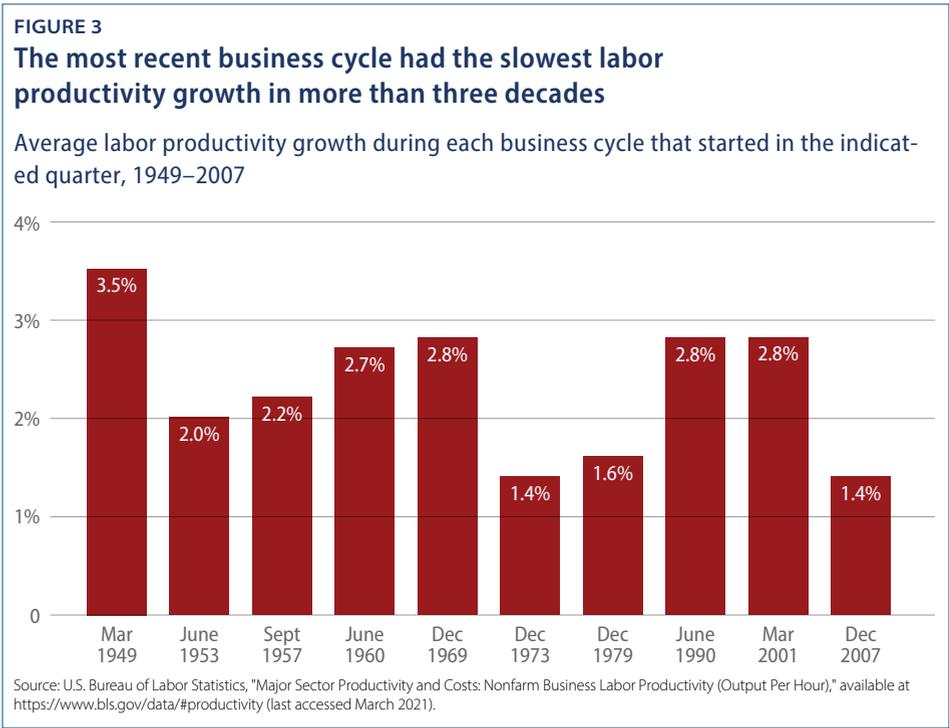
In the end, high inequality and widespread income uncertainty beget low investments and slow productivity growth.¹⁵ At the same time, public investments in infrastructure, education, and innovation, among other key items, has been woefully inadequate and thus has not counteracted these private sector trends.

Growth has been subpar in the years leading up to the pandemic

Economic growth over the past two decades has been modest at best. Figure 2 shows inflation-adjusted gross domestic product (GDP) growth by business cycle, from the start of one recession to the start of the next recession. Growth averaged an annualized 1.8 percent from the end of 2007 to the end of 2019, before the pandemic started. In comparison, inflation-adjusted economic growth averaged 3.3 percent during the 1990s. (see Figure 2) Growth has now decelerated so much that prior to the pandemic, it fell to the lowest rate of any business cycle since World War II.



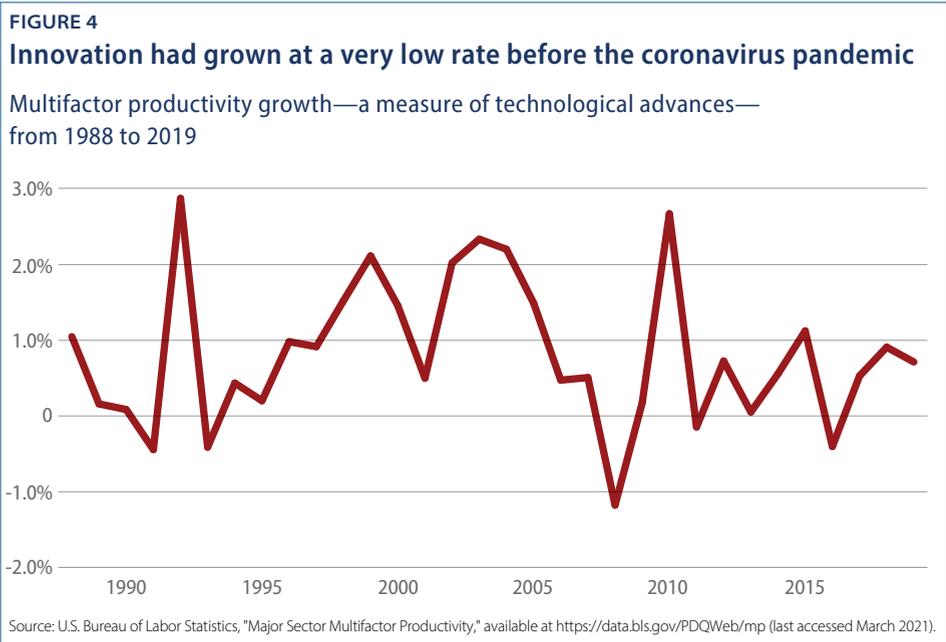
A deceleration in productivity growth contributed to the decline in economic growth during the past two business cycles. Figure 3 shows the annual rate of productivity growth during past business cycles and how much more people can produce in a given hour. During the last business cycle, labor productivity growth averaged 1.4 percent, or half of what it was during the preceding two business cycles. (see Figure 3) This was also the slowest productivity growth of any business cycle since the late 1970s. Not shown in these averages is the fact that productivity growth accelerated in the 1990s but decelerated in the years leading up to the Great Recession from 2007 to 2009.



Multifactor productivity is another key measure of productivity growth. It captures the gains in economic output that cannot be explained by better-skilled workers or newer capital—offices, manufacturing plants, computers, cars and trucks, and other structures and equipment. It is thus a useful measure of economywide ingenuity, innovation, or technological advances.

It is important to consider multifactor productivity growth outside the upheaval of a recession since the rapid changes during a downturn boost productivity growth in the short term but typically do not represent longer-term trends. Figure 4 shows the annual multifactor productivity growth from 1988, the earliest year these data are available, to 2019. For much of the business cycle leading up to the pandemic,

multifactor productivity growth was well below 1 percent and even declined during three years. It only once exceeded 1 percent after the Great Recession, in 2015—and only barely, with 1.1 percent. In comparison, multifactor productivity—innovation—was significantly more than 1 percent and even exceeded 2 percent in one of the last five years of the 1990s business cycle from 1996 to 2000, when productivity growth amid the rapid explosion of the internet accelerated. The productivity and economic growth rates of the late 1990s represent a remarkable acceleration in innovation that was followed by an equally remarkable slowdown after the recession of 2001, especially during the decade leading up to the pandemic.

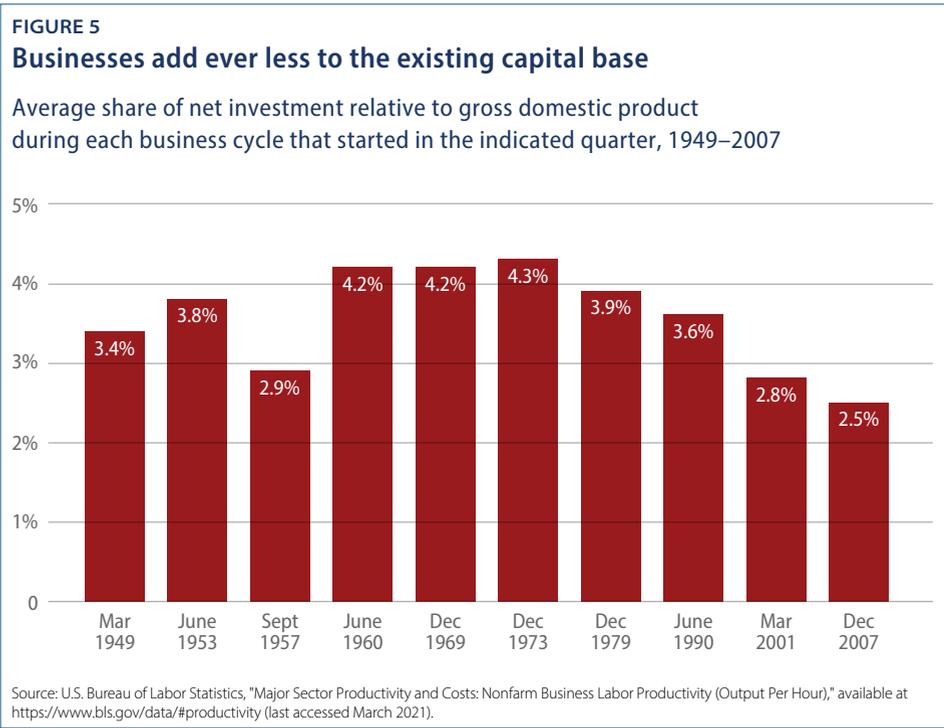


The capital stock of U.S. businesses grew at the slowest rate since World War II before the pandemic

Three trends underlie the slowdown in productivity: less investment, high inequality, and widespread income uncertainty. First, highly profitable companies pulled back on investments that would expand productive capacity. Second, income and wealth inequality soared to record highs during the years before the recession of 2020.¹⁶ Third, income volatility for households increased, destabilizing lower-income and middle-income households' fortunes, all as discussed below.¹⁷ These trends became the hallmarks of the American economy that contributed to low productivity and modest economic growth.

Corporations hoarded profits but did not invest them in new productive capacity. Businesses typically spend money on investments both to replace obsolete and depreciated equipment—computers, trucks, and factories, for instance—and to expand their capital base for new and better products and services. Adding new capital can boost productivity, while replacing obsolete and depreciated supplies does not. New capital—new computers, more reliable and efficient transportation, better ventilated office space, and more efficient manufacturing platforms—makes it easier for businesses to produce more and better-quality products and services with the same inputs. The key metric relevant for productivity growth then is net investment—total private business investment minus the costs of replacing depreciated investment goods—relative to GDP.

Figure 5 shows average net investment relative to GDP by business cycle. During the last business cycle, which ended with the last quarter of 2019, net investment averaged 2.5 percent. In the late 1990s, when capital already depreciated quickly due to greater use of computers and software, net investment was 46.4 percent higher with an average share of 3.6 percent of GDP—and even that was significantly below the high of well above 4 percent in the 1970s. (see Figure 5) The years before the current pandemic saw the lowest average net investment rate to GDP of any business cycle since World War II. Notably, the large corporate tax cuts provided by the 2017 Tax Cuts and Jobs Act did not seem to have a strong response in business investment.¹⁸



High income inequality and widespread income insecurity leave households financially stressed

Persistently high income and wealth inequality is another key trend that holds back productivity growth. High-income earners have seen their fortunes soar in large part because corporate profits sharply increased over time, and corporations used most or all of their profits to keep shareholders happy. Boosting share prices and dividends mainly helps top income earners as stock holdings are heavily concentrated among the richest American households.¹⁹

Lower-income and middle-income earners, on the other hand, have seen their economic fortunes erode over the past few decades. Wage growth has been modest since the recession of 2001, and the federal minimum wage was been stuck at \$7.25 since 2009. The median inflation-adjusted household income of \$62,090 in 2007, before the Great Recession started, was slightly below that of \$62,512 of 2000, before the previous recession got underway.²⁰ Household income subsequently took a hit during the Great Recession from 2007 to 2009 and fell precipitously to a low of \$56,912 in 2012.²¹ Median household income only exceeded its 2007 level by 2016.²² By 2019, median income had grown to \$68,703, which meant that incomes for the typical American family had grown by 0.5 percent each year from 2000 to 2019. This increase was clearly not enough for the typical family to handle sharply higher costs for education, health care, and housing, or to save money for the future.

The picture is even more dire for many people of color. The 2019 median income for Black Americans was \$58,518, and it was \$60,927 for Hispanic families. In comparison, Asian families had a median family income of \$112,226 in 2019, and white families had a median income of \$89,663 then.²³ Moreover, income inequality has been high for many racial and ethnic population groups. It is especially pronounced among Asian Americans.²⁴ For example, old-age poverty is more widespread among Asian Americans, with 9.3 percent of households 65 and older living in poverty compared to 7.6 percent of white households in this age group living in poverty in 2019.²⁵ Income inequality along the lines of race and ethnicity has remained high and even worsened more in some population groups than in others. As a result, a large percentage of low-income and moderate-income households struggle on a daily basis to pay their bills.

Workers not only saw few income gains over this period but also did not get expanded access to employer-provided benefits, especially retirement savings and health insurance, even though firms had been very profitable during the past two decades. Yet access to employer-sponsored benefits is critical for households' current and future economic security. Better benefits in the present can mean fewer out-of-pocket

expenses and can make it easier for people to save for their own future—for instance, if employers offer a matching contribution to their employees’ contribution to retirement accounts. Yet access to employer-sponsored benefits, especially retirement benefits, has stayed relatively low and even declined somewhat after the 2001 recession.²⁶ Typically, less than half of all private sector wage and salary workers participate in a retirement benefits plan at work.

As a result of low income growth, lack of universal benefits, and high costs for key items, Americans in the bottom half of the country’s wealth distribution on average had barely recovered by September 2020 to the level of wealth they had at the end of 2000. After the stock market soared for much of the summer and fall of 2020, the average amount of household wealth for the bottom half of the wealth distribution amounted to \$36,412, virtually the same as at the end of 2000. But households 20 years earlier faced fewer risks and costs than households do today; their wealth now needs to go further in providing economic security and supporting economic mobility than it did two decades earlier. The bottom line is that households are much less secure financially than they were 20 years ago.

The problem is again worse for many people of color. African American and Latino households tend to have a fraction of the wealth of white households.²⁷ The median wealth of Black families, for example, amounted to \$24,100, or 12.7 percent of the \$189,100 of the median wealth of white families.²⁸ Furthermore, recent data from the Federal Reserve shows that the already high wealth gap between white households, on the one hand, and Black and Latino households further widened during the pandemic.²⁹ For example, the average wealth for African Americans in September 2020 was 0.7 percent lower than it was in December 2019, before the pandemic started. Average wealth for Latino households had dropped by 3.3 percent during that same time. In comparison, the average wealth for white households had grown by 3.4 percent during those nine months.³⁰

Households face a number of economic risks, against which wealth should offer a buffer. Data from 2017 to 2019—before the pandemic started—show how widespread a number of economic risks are, even among higher-income earners. Table 1 shows the share of households that live with irregular incomes, rely on gig work, cannot come up with \$400 in an emergency, cannot pay all of their bills, and ended up with medical debt after unexpected large medical expenses. Risks go down as income goes up, but even among households with incomes greater than \$85,000, all risks are still substantial. For instance, 20.9 percent of households in this income group cannot afford to pay \$400 dollars in an emergency. (see Table 1) That is much smaller than the 70.3 percent of households with incomes below \$30,000 that lack this financial backing, but it still means that 1 in 5 higher-income households will struggle financially in an emergency.

Also, 26.5 percent of households with incomes higher than \$85,000 ended up with medical debt, compared to 54.2 percent for households with incomes of less than \$30,000. (see Table 1) Households across the income spectrum regularly face myriad economic risks for which they are ill-prepared because wealth has remained low in the years before the pandemic.

TABLE 1
Measures of economic uncertainty by income level, 2017–2019

Income level	Share with uncertain incomes	Share earning money with gig work	Can't come up with \$400 in an emergency	Share that can't pay all of their bills	Share with medical debt after unexpected medical expenses
Less than \$30,000	32.9%	20.6%	70.3%	34.5%	54.2%
\$30,000 to \$40,000	28.7%	16.8%	53.3%	24.9%	48.4%
\$40,000 to \$85,000	30.5%	16.3%	42.0%	18.7%	44.3%
More than \$85,000	24.8%	11.9%	20.9%	9.9%	26.5%

Notes: The share of households with medical debt was calculated only for households with unexpected medical expenses. Annual data were combined from 2017 to 2019 to ensure robust sample sizes. Source: Board of Governors of the Federal Reserve, "Survey of Household Economics and Decisionmaking," available at <https://www.federalreserve.gov/consumerscommunities/shed.htm> (last accessed March 2021).

Both income and wealth inequality are highly correlated and result in less productivity growth. There are several mechanisms that connect households' lack of financial security to slow productivity growth. First, people have few resources to invest in their own training, but that training has become increasingly important as companies often do not provide their workers with the requisite training.³¹ Second, workers, even higher-income ones, face a lot of psychological stress from widespread financial insecurity. Any number of financial shocks—from a loss of overtime pay to a layoff, or from a medical emergency to a car breaking down—can wreak financial havoc since workers often have very little savings for emergencies. Workers then worry a lot about their current finances, which makes it harder to concentrate on their jobs and careers.³² Their productivity suffers as a result. Third, many hard-hit working families often do not have enough food to eat, live in unstable housing situations, and sometimes experience homelessness. The resulting hunger and sleep deprivation make it difficult for people to keep and succeed in their jobs. Addressing income and wealth inequality is an integral part to laying the foundation for faster productivity growth.

The effect of the coronavirus crisis on the U.S. economy

The COVID-19 pandemic that started in 2020 likely worsened supply-side problems for the U.S. economy. Unlike in other recessions, when less productive businesses tend to be replaced by more productive ones, a lot of productive businesses permanently closed this time because their industries shut down due to public health restrictions. The U.S. economy lost productive capacity without meaningful replacements.

Moreover, businesses pulled back on investments amid a severe recession and massive uncertainty about the future shape of the economy. In the summer and fall of 2020, business investment after accounting for capital depreciation fell well below 2 percent of GDP—its lowest levels since the first half of 2011.³³

Furthermore, corporate governance pressures still led corporations to prioritize shareholder rewards over productive investments. Profits recovered quickly after taking a hit in the second quarter of 2020. By the third quarter, the ratio of after-tax profits to total corporate assets for nonfinancial corporations stood at 2.7 percent, its highest level since the second quarter of 2017.³⁴ Yet nonfinancial corporations used more than two thirds—68.2 percent—of their after-tax profits in the second and third quarter of 2020 to buy back their own shares and pay out dividends to shareholders.³⁵

State and local governments, which own and operate almost all infrastructure assets, may not be able to fill the void left by falling private investment without assistance from the federal government. Many infrastructure repair and construction projects that were funded and got underway as the pandemic hit are now wrapping up. The drop in tax collections over the past year in most states, especially as sales, business taxes, public transit receipts, and other sources of revenue fell sharply during the initial shutdowns and ongoing recession, may limit the ability of state and local governments to begin new projects, sapping demand for construction work and undermining long-term recovery.³⁶ Yet state and local governments faced financial crunches as the pandemic required additional spending for public health and substantially cut all types of tax revenues.³⁷

This leaves less money for infrastructure spending, most notably operations, as well as other services.³⁸ These public spending weaknesses further lower the chance for a strong growing recovery. And all this has taken place against a backdrop of chronic underinvestment in infrastructure prior to the onset of the pandemic, including in critical areas such as public transportation, roads, and schools. Some of these concerns motivated the Biden administration to provide in the ARP \$362 billion in general fiscal aid to states and localities, helping to alleviate these problems.

The pandemic and recession also created many obstacles for workers who were worried about their own future and wanted to update their skills or support their children's education. First, many workers, particularly women, have been forced to reduce their work hours or leave the labor force entirely to manage the increased demands of caring for sick family members or caring for children home due to virtual schooling or closed child care providers.³⁹ This disruption in work may result in declining skills and difficulty in returning to the workforce later.

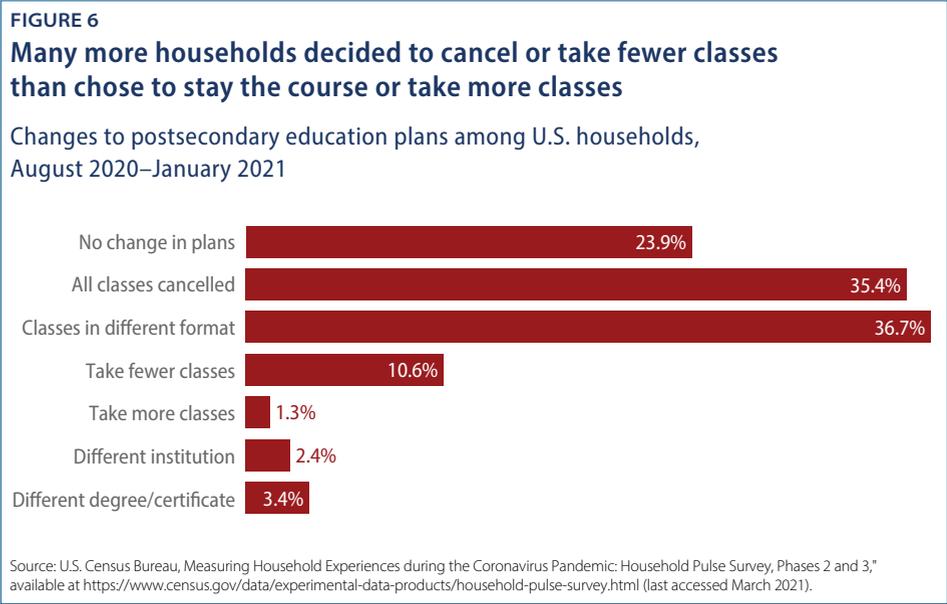
Additionally, workers often do not have the money to pursue more training and education. Temporary layoffs turned into permanent ones, emergency savings dwindled, and health care emergencies increased amid a raging global pandemic.

The pandemic has also created a lot of uncertainty about the future direction of the economy. Workers and students often have to worry whether they will need any additional skills by the time they are done with their education and training. Following the pandemic, that worry is even greater. Entire industries, such as restaurants, hotels, transportation, and entertainment venues, among others, could undergo wholesale changes that could require new, to-be-determined skills as the industries seek to rebound.

Finally, schools, colleges and universities, and trade schools faced their own financial challenges and uncertainty. They had to retool from in-person to remote learning, while addressing the financial fallout of less financial government support, dwindling enrollments, and increased spending on public health measures as well as digital support for remote learning. Funding cuts to education during and after past economic downturns, such as the Great Recession, have been associated with lower student achievement.⁴⁰

Workers and their families may not have been able to find the education and training opportunities they wanted and needed in the pandemic. Data from the U.S. Census Bureau are very instructive on people's plans for postsecondary education. Before the pandemic, more than one-quarter of households, or 26.9 percent, had someone who planned on taking postsecondary classes. More than one-third of these households,

35.7 percent, canceled all of these plans from August 2020 to January 2021. (see Figure 6) Another 10.6 percent decided to take fewer classes. Only 1.3 percent of households with postsecondary education plans wanted to take more classes, and for 23.9 percent of households, postsecondary education plans did not change during the pandemic. Significantly more people decided to cancel or cut back on their postsecondary education during the pandemic than chose to stay the course or even add more classes.



In the end, there were fewer opportunities to boost workers’ skills than in past economic downturns. These training shortcomings eventually translate into fewer opportunities for those affected as well as a less prepared workforce, which negatively affects economic growth.

Recommendations to boost economic growth

Relief efforts, such as President Biden's American Rescue Plan, primarily support the demand side of the economy. The federal funds going to households, businesses, and state and local governments are desperately needed to support all parts of the economy that are struggling from an unprecedented onslaught on their financial health. These payments are an important first step to lift the economy back up to its previous levels, reducing unemployment, stabilizing economic growth, and improving financial stability.

More is needed, though, to return the economy to much faster growth and build a sustainable economy that works for everybody. The goal is to raise economic capacity by emphasizing the economy's supply side. Faster productivity growth, and thus faster economic growth, will create even more opportunities for employment and wage gains. It will also make it easier to address the country's looming challenges of massive economic inequality, climate change, lackluster caregiving support, and crumbling public health and other infrastructure, to name a few. The ARP already includes some measures, such as financial support for higher education, that would have positive supply-side effects.

Importantly, public policies can break the interconnected trends of high inequality, widespread insecurity, and low investment that underlie low productivity growth. First, policies can reduce income inequality by strengthening workers' wages and benefits. Second, a number of policies can substantially reduce income uncertainty and volatility for households. Most notably, social insurance programs, such as unemployment insurance, health insurance, and Social Security, are critical tools to give working families some peace of mind. Third, more federal funding for research and development, a green infrastructure, and more support for education—all purviews of the public sector—can lift up productivity growth.

All three types of policies will boost productivity growth. Higher incomes due to increased pay and better benefits, such as paid family and medical leave, make it less likely that workers leave an employer. Less turnover boosts workers' on-the-job experience and their productivity, while more income stability reduces financial, psychological,

and health stress for workers. This makes it easier for workers to concentrate on their work since they are typically worrying less about how to pay their bills. Less income uncertainty also makes it easier for workers to plan for, save for, and invest in their own future—for example, by moving to a new location when better opportunities arise, starting a business, or supporting their children’s education. All of these steps mean that households will have more skills and be able to better use those skills, thereby increasing productivity across the economy. Moreover, large-scale public investments will create new technologies for companies and reduce the financial risks associated with new ventures. In the end, businesses and people will be better positioned to use scarce resources.

Supporting workers both present and future

Support for workers includes providing help for people to pursue the careers they want. This can be done in several ways, mainly by Congress through legislation and the administration through regulatory and executive actions:

1. **Expand social insurance spending.** Improved unemployment insurance, Social Security, and health insurance will put a higher floor underneath people’s financial security. More families will be protected from sharp income declines. This will give them peace of mind and allow them to better plan for their future. In some cases, peace of mind and stability can enable people to take risks, invest in the future, and start new businesses. The ARP is an important step in this direction, as it increases weekly unemployment insurance checks by \$300 through September 6, 2021.⁴¹ But American families will ultimately need a more enduring social safety net, which Congress can make happen, when a crisis hits.
2. **Expand and enforce anti-discrimination and anti-harassment legislation.** This would help ensure that all people in the labor market receive equitable opportunities, especially groups that have traditionally encountered discrimination due to race, ethnicity, gender, disability, LGBTQ status, national origin, and religion, allowing businesses to take advantage of all of the country’s talent. President Biden has already signed an executive order establishing far-reaching anti-discrimination protections for LGBTQ people.⁴² To pursue additional measures, the federal government will need to invest in more data collection in gender identity and sexual orientation to better assess, among other things, how LGBTQ workers are doing, as well as additional resources to enforce the new executive order and other laws that protect workers against discrimination, harassment, and retaliation.⁴³

3. **Build a comprehensive care infrastructure.** Workers need more support to manage caring for children and other family members in order to participate fully in the labor market.⁴⁴ This requires creating a permanent paid family and medical leave program; financially supporting child care centers; making the monthly child allowance, established by the ARP's child tax credit expansions, permanent and successful in reaching all low- and middle-income families; improving the wages and benefits of the care workforce, for example, through higher Medicaid reimbursements; and providing direct payments for family caregivers. People, especially women of color, should not have to choose between their family's financial security and caring for their loved ones. And in the short to medium term, ensuring access to reliable, affordable child care will be crucial to reconnecting millions of parents, especially mothers, with the paid labor force. According to analysis of 2014 data, women's labor contributes \$7.6 billion to the U.S. GDP each year.⁴⁵ But women's labor force participation is at a level commensurate with the late 1980s; any persistence of this phenomenon will hamper economic growth.⁴⁶
4. **Build a fair, humane, and workable immigration system.** This would give millions of undocumented immigrants opportunities to contribute their skills and experience to the American economy. It would also boost entrepreneurship and innovation, as immigrants are more likely to start new companies.⁴⁷
5. **Provide health security for all Americans.** Households will need more affordable health insurance that no longer leaves them with medical debt after unexpected health events. It will also include investments in health care infrastructure so that people living in currently underserved areas and neighborhoods will have equal access to high-quality care. These investments will pay off in the form of a healthier workforce, less debt, and thus fewer financial and physical worries among workers, allowing them to better plan and focus on their future and careers. A substantial share of the ARP will go to COVID-19 testing and vaccinations, with some additional funds for expanding the public health workforce. The federal government will need to make more sustained efforts to give currently underserved communities, for instance, communities of color and rural communities, greater access to quality health care.⁴⁸
6. **Support food security and other policies that help individuals and families with low incomes meet basic needs.**⁴⁹ This is especially important for children: 1 in 6 children live in families with incomes below the federal poverty level. Policies such as the monthly distribution of the child tax credit, as expanded by ARP, can have many positive effects.⁵⁰ They can potentially reduce child poverty by half and enhance

children's future economic mobility and productivity.⁵¹ Other measures included in ARP, such as enhanced Supplemental Nutrition Assistant Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) benefits and a boost in earned income tax credit, will help to reinforce this positive effect. Improvements in health status, nutrition, and immediate educational attainment can lead to future educational success, higher career trajectories, and more productivity.⁵² These programs are investments in a healthier and more educated and better prepared workforce. Numerous studies show that the earned income tax credit program increases labor force attachment, increasing employment stability and therefore economic growth.⁵³

7. Avoid state-level funding cuts and invest in K-12 education. Investments in public education tend to generate positive outcomes in the labor market, such as higher earnings for children in the future.⁵⁴ State-level financial problems often result in funding cuts to public education, reducing educational attainment and hampering the future workforce and economic growth that it generates. The ARP will make substantial down payments toward avoiding such cuts and enhancing key public services at the state and local government levels. For instance, a pre-COVID-19 analysis by the Government Accountability Office concludes that 54 percent of school districts need to make updates to buildings to ensure safe and healthy environments.⁵⁵ There are pressing needs in providing historically marginalized communities with expanded access to broadband, building a more racially diverse educator workforce, and establishing a strong continuum from cradle to career. Other needs include providing neglected communities with clean water and making neighborhoods more resilient to climate change, among other challenges. The post-pandemic needs of state and local governments are large.⁵⁶ Addressing these needs will provide more opportunities and lower costs for households and businesses, thus boosting economic growth.

8. Boost public support for formal training, including but not limited to higher education. Not all high school students want to go to college. Public support will mean making higher education more affordable so that people do not drown in debt when they graduate as well as expanding and improving a continuing training infrastructure so that those who do not attend college also enjoy rewarding and family-sustaining careers. These urgent needs are apparent in the number of people who are postponing or canceling postsecondary education plans. The ARP offers an estimated \$40 billion in support to colleges and universities. Supporting expanded and equitable access to other training opportunities also deserves attention in subsequent investment legislation.⁵⁷

9. **Create policies that help reduce inequality in order to boost growth.** Most of the measures in the ARP are designed to support the most affected populations, helping to reduce inequality—particularly as inequality has worsened during the COVID-19 crisis—and boosting future growth. For instance, increasing the federal minimum wage, which should be enacted in legislation even though it did not make it into the final version of ARP, will reduce inequality and may even help small businesses.⁵⁸

Expanding the capital base and innovation

Future legislative initiatives, such as an infrastructure and jobs package, need to make additional, explicit pro-growth investments to expand the capital base, boost innovation, and create more jobs. In particular, the weak economic position of many businesses and households means that the economic slowdown could last a long time. Such a package should:

1. **Include robust, comprehensive investments in infrastructure that boost national competitiveness, raise household incomes, and reduce greenhouse gas emissions.** The final package should include transportation, water, clean energy, schools, caregiving, rural broadband, and affordable housing, among investments in other sectors.
2. **Target those communities facing sustained economic hardship.** Equitable infrastructure investments are an essential component of achieving inclusive prosperity. Black Americans and other people of color have often been left out of public funding—or have seen their communities divided by highways and harmed by polluting facilities, including waste disposal. Any renewed efforts to boost productivity growth need to be race conscious and include, among other things, added funds for historically Black colleges and universities and other minority-serving institutions. Greater inclusion of all people will ensure that the country will benefit from the largest talent pool and the widest range of new ideas.
3. **Support new environmentally sustainable technologies, advanced manufacturing, the care economy, and education.** All of these investments would pay long-term dividends. When infrastructure investments are done right, they can lower household transportation costs by reducing auto dependence; increase access to employment and educational opportunities; and redress past discriminatory policies and projects that disproportionately burden low-income communities and people of color.

4. **Use regulatory tools to create incentives for private firms.** Regulations that emphasize climate change, racial equity, inequality, and worker power will provide a level playing field for all businesses. Firms will no longer gain an advantage by being better at exploiting workers and the environment. The government can only lay the foundation for faster growth. In the end, private businesses need to leverage their vast resources toward tackling the challenges ahead. The corporate tax system should incentivize investment in the United States rather than abroad.⁵⁹

5. **Include a suite of long-term tax incentives that promote sustained economy recovery through the transition to a 100 percent clean energy future.**⁶⁰ The combination of regulations and targeted federal investments in areas such as renewable energy can drive rapid decarbonization in the economy and significantly reduce toxic levels of pollution.⁶¹ Clean energy tax incentives would spur good, domestic job creation in one of the fastest-growing sectors of the economy and should support prevailing wage standards and workers' rights to unionization. Forty percent of the benefits of these investments should also be directed toward disadvantaged and environmental justice communities, which have been disproportionately affected by fossil fuel pollution.⁶² By including stable, predictable, and long-term clean energy tax incentives, the government can drive innovation and deployment, while securing a healthier and more stable climate.

6. **Significantly boost federal government support for research and development.** This will help scientists, innovators, and inventors address the looming and emerging challenges of tomorrow. In addition to more spending on research and development,⁶³ this requires greater attention to equal access for communities of color to such funds.⁶⁴ This dual effort of expanded and more equitable research and development funding will lay the foundation for faster productivity growth by helping all researchers, innovators, and inventors take on longer-term risks in promising and necessary growth areas such as fighting climate change and improving public health. There is also an opportunity to reconfigure and expand the existing Manufacturing Extension Partnership program and redirect federal demand for manufactured goods to high-performing domestic firms. These measures should be coupled with an expansion of the Manufacturing USA institutes, an accompanying program of labor force training.⁶⁵

Conclusion

Strengthening economic growth in the United States is both a short-term and long-term challenge. In the short term, policymakers needed to boost economic growth through the American Rescue Plan to jump-start a strong and broadly shared recovery. The economy shrank by 3.5 percent in 2020, the largest drop since World War II.⁶⁶ This sharp decline came after a decade of modest economic growth. In the long term, Congress will need to make sure that strong growth and job creation will continue for the long haul, which will make it easier to address looming economic challenges, from climate change to an aging society.

Pursuing the combination of the various policy steps laid out in this report will break the vicious cycle of low business investments, low productivity growth, high income uncertainty, and massive economic inequality that has kept economic growth below its potential over the past two decades. Faster innovation and more rapid growth will make it easier to address the myriad known challenges such as the transition to a 100 percent clean energy future, educational inequity, and an aging society. It will also better prepare the country to tackle any new and yet-unknown challenges.

Through a series of executive orders and proposed legislation, President Biden has signaled that he understands and will address the intertwined challenges of low investment, meager productivity growth, massive inequality, and widespread economic insecurity. The president's ARP is a strong start in the right direction. It boosts economic demand among businesses, households, and state and local governments hardest hit by the pandemic. It also starts to make investments in people, businesses, and communities. Given the past two decades of lackluster productivity growth, the federal government will need to do more to tackle this challenge.

The American Jobs Plan is a promising second step. It includes direct investments that expand the capital base: investment in infrastructure such as ports, roads, water, electric, and internet infrastructure. It will also raise demand and boost private investment in manufacturing and other sectors where business investment has been weak for more

than a decade. And it supports workers who care for their loved ones who are elderly or have disabilities. While infrastructure investment is about accelerating long-term growth, it will also speed recovery in crucial sectors and get people back to work to prevent the skill loss that poses real threats to productivity and GDP for decades to come.

Overcoming decades of lackluster and unequally shared economic growth requires large investments. The AJP delivers a series of investments that enables a transition to an economy that may grow at higher levels, delivering high-quality jobs and more broadly distributed economic benefits.

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As progressives, we believe America should be a land of boundless opportunity, where people can climb the ladder of economic mobility. We believe we owe it to future generations to protect the planet and promote peace and shared global prosperity.

And we believe an effective government can earn the trust of the American people, champion the common good over narrow self-interest, and harness the strength of our diversity.

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We develop new policy ideas, challenge the media to cover the issues that truly matter, and shape the national debate. With policy teams in major issue areas, American Progress can think creatively at the cross-section of traditional boundaries to develop ideas for policymakers that lead to real change. By employing an extensive communications and outreach effort that we adapt to a rapidly changing media landscape, we move our ideas aggressively in the national policy debate.

