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The Macroeconomic Consequences of the American Families Plan and the Build Back Better Agenda

INTRODUCTION

President Biden has unveiled the American Families Plan, the second part of his Build Back Better agenda focused on investing in the nation's labor force. We assess the macroeconomic consequences of the AFP in this white paper, and find that while its near-term impacts are small, it provides meaningful longer-term economic benefits by increasing labor force participation and the educational attainment of the population. When combined with the American Jobs Plan, the first part of the Build Back Better agenda focused on expanding the nation's public infrastructure, and which we assessed recently, the economy's long-term growth prospects are brighter. Moreover, the financial benefits of that added growth largely accrue to hard-pressed lower-income and less-wealthy Americans.

The Macroeconomic Consequences of the American Families Plan and the Build Back Better Agenda

BY MARK ZANDI AND BERNARD YAROS

President Biden has unveiled the American Families Plan, the second part of his Build Back Better agenda focused on investing in the nation's labor force. We assess the macroeconomic consequences of the AFP in this white paper, and find that while its near-term impacts are small, it provides meaningful longer-term economic benefits by increasing labor force participation and the educational attainment of the population. When combined with the American Jobs Plan, the first part of the Build Back Better agenda focused on expanding the nation's public infrastructure, and which we assessed recently, the economy's long-term growth prospects are brighter. Moreover, the financial benefits of that added growth largely accrue to hard-pressed lower-income and less-wealthy Americans.

What is in the American Families Plan

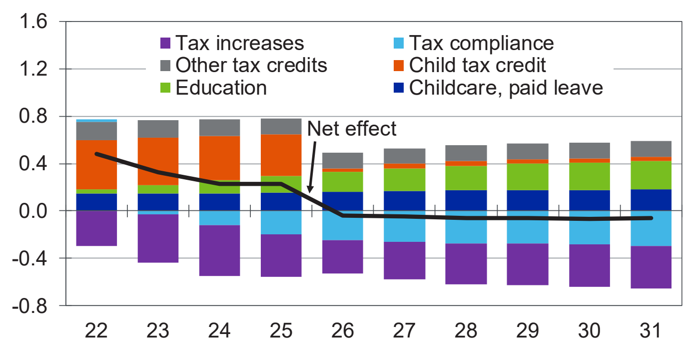
Biden's American Families Plan, his proposal to expand investments that support the labor force, is similar to what he proposed in the presidential campaign. It includes $1.1 trillion in increased government spending over the 10-year budget horizon from 2022 to 2031, and almost $900 billion in tax credits (see Table 1). Taxes paid by high-income and wealthy households increase by more than $1.7 trillion, equal to the bulk of the cost of the plan. The nation's budget deficits thus increase by just over $200 billion cumulatively over the decade on a static basis—that is, before accounting for the economic benefit of the plan on the government's finances (see Chart 1). This is a small increase in the nation's deficits, but the plan calls for the expiration of the expanded child tax credit in 2026, saving the federal government about $100 billion per annum. The political reality is that it will be difficult for future policymakers to let the tax credit expire. If they do not, the AFP will result in future deficits that are meaningfully larger than currently budgeted.

Childcare support receives the most funds under the AFP. Families earning less than 150% of their state's median income would pay no more than 7% of their income on childcare, and the hardest-pressed working families would have their costs fully covered. Moreover, the expanded child tax credit, which was part of the American Rescue Plan for this year only, would be extended through 2025. Education is also a significant beneficiary of the AFP. Biden proposes universal pre-K for 3- and 4-year-olds, two years of free community college, increased Pell Grants for low-income students, and other grants to help with tuition, retention and completion rates at community colleges and other colleges and universities that serve low-income students and minorities.

The AFP also provides monies for a national paid family and medical leave that in a decade would provide 12 weeks of paid leave. The paid leave will provide workers up to $4,000 a month, with a minimum of two-thirds of average weekly wages replaced, rising to 80% for the lowest-wage workers.

Chart 1: Budget Impact of the AFP

Static deficit effect, % of U.S. GDP



Sources: CBO, CRFB, Tax Foundation, TPC, Treasury, White House, Moody's Analytics

Table 1: Budget Cost of American Families Plan

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	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2022-2024	2022-2031
Static deficit effect	**117.1**	**83.6**	**60.9**	**64.6**	**-10.5**	**-13.6**	**-19.7**	**-19.6**	**-22.5**	**-22.3**	**261.6**	**218.2**
Spending provisions	**51.7**	**63.8**	**76.9**	**91.4**	**105.2**	**117.5**	**129.6**	**139.1**	**146.8**	**159.0**	**192.5**	**1,081.0**
Childcare	29.0	22.0	20.3	20.6	21.0	21.5	21.9	22.4	22.9	23.4	71.3	225.0
Paid family and medical leave	3.9	11.1	15.3	18.7	22.2	25.8	29.2	31.3	32.5	35.0	30.4	225.0
Universal pre-K	1.9	6.7	12.7	18.5	22.9	26.2	28.6	28.9	27.0	26.6	21.3	200.0
Other education	1.2	3.4	5.2	7.3	9.5	11.5	14.2	17.5	21.2	25.9	9.9	117.0
Free community college	1.2	3.2	4.9	6.8	8.8	10.8	13.3	16.3	19.8	24.1	9.2	109.0
Pell Grants	3.6	6.1	6.8	7.6	8.4	9.1	9.4	9.5	9.6	9.8	16.6	80.0
Expansion to IRS budget	7.2	7.4	7.6	7.7	7.9	8.1	8.3	8.4	8.6	8.8	22.2	80.0
Nutrition	3.7	3.9	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.3	11.6	45.0
Tax credits	**138.8**	**138.9**	**138.3**	**137.2**	**46.8**	**52.6**	**54.0**	**55.6**	**57.3**	**59.1**	**416.0**	**878.7**
Expanded Child Tax Credit through 2025	101.6	101.1	100.2	98.8	0.0	0.0	0.0	0.0	0.0	0.0	302.9	401.7
Expanded ACA Premium Tax Credits made permanent	17.1	17.4	17.6	17.8	18.3	19.4	20.7	22.2	23.8	25.5	52.1	200.0
EITC expansion to childless workers made permanent	12.3	12.6	12.6	12.6	12.3	12.2	12.3	12.5	12.7	12.8	37.5	125.0
Expanded Child and Dependent Care Tax Credit made permanent	7.8	7.8	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.2	23.5	80.0
Full refundability of Child Tax Credit preserved beyond 2025	0.0	0.0	0.0	0.0	8.1	13.0	12.9	12.8	12.7	12.5	0.0	72.0
Tax increases	**-73.4**	**-119.1**	**-154.3**	**-163.9**	**-162.5**	**-183.7**	**-203.3**	**-214.3**	**-226.6**	**-240.4**	**-346.8**	**-1,741.5**
Stricter tax compliance by wealthiest taxpayers	-1.4	-14.6	-39.8	-64.2	-79.6	-88.4	-94.8	-99.6	-105.4	-112.2	-55.9	-700.0
Tax capital gains/dividends as ordinary income for households earning >$1 mil	-17.9	-39.0	-45.9	-43.7	-40.5	-41.8	-44.9	-48.4	-52.1	-56.1	-102.8	-430.3
Consistently apply 3.8% Medicare tax on high-income workers and investors	-24.3	-29.2	-30.5	-31.8	-33.2	-34.7	-36.3	-37.9	-39.6	-41.4	-83.9	-338.9
Restore pre-TCJA rates above $400,000 of income	-24.8	-31.1	-33.0	-19.0	-3.8	0.0	0.0	0.0	0.0	0.0	-88.9	-111.8
Permanent extension of limitation on large, excess business losses	0.0	0.0	0.0	0.0	0.0	-13.3	-21.8	-22.8	-23.8	-24.8	0.0	-106.5
Limited deferral of gain on like-kind exchanges	-3.8	-3.7	-3.8	-3.9	-3.9	-4.0	-4.1	-4.2	-4.3	-4.4	-11.2	-40.1
Tax carried interest as ordinary income	-1.2	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-4.0	-14.0

Sources: CBO, CRFB, JCT, Tax Foundation, Tax Policy Center, Treasury, White House, Moody's Analytics

The AFP makes permanent tax credits for Affordable Care Act healthcare premiums and the Earned Income Tax Credit for childless workers that were funded for one year in the American Rescue Plan. Various nutritional programs also receive more funds.

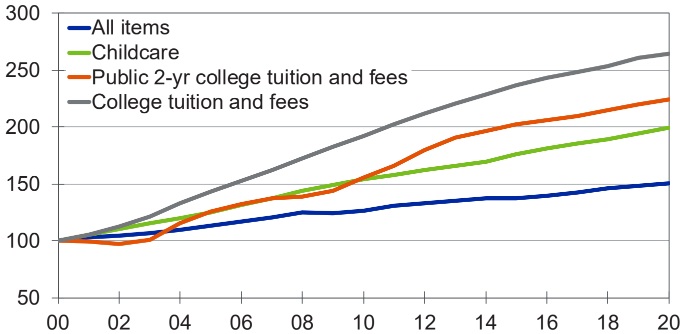
To help pay for the AFP, Biden proposes to increase taxes on high-income and wealthy households. The tax cuts provided by President Trump in the Tax Cut and Jobs Act for households earning more than $400,000 annually would be rolled back. Capital gains and dividends would be taxed at the ordinary income tax rate for those making more than $1 million annually. Owners of private equity firms would also pay more in taxes, as carried interest would be done away with. Also, real estate owners would no longer be able to defer paying taxes on like-kind exchanges of bigger properties. Finally, the IRS would receive substantially more funds in the AFP to beef up enforcement of tax compliance by wealthy taxpayers, which recent research suggests could provide a significant boost to the Treasury.

The needs are great

Families are in desperate need of high-quality, affordable childcare. Fifty years ago, approximately half of all women stayed

Chart 2: Soaring Childcare, Higher Ed Costs

Consumer prices, 2000=100



Sources: BLS, College Board, Moody's Analytics

home to take care of their children. As female participation in the workforce increased rapidly in the 1970s and 1980s, stay-at-home moms became much less common. Today, only about one-fourth of moms are at home with their kids.

Spending on childcare has risen commensurately. Some 4.9 million American households spend almost $36 billion on daycare centers, nurseries and preschools.[1] The typical household that has childcare expenses spends $7,200 per year, equal to approximately 10% of their income.[2] Given this significant expense, only about one-third of families with the nearly 20 million kids under the age of 5 use childcare services; the rest rely on relatives or informal and often unreliable arrangements. The cost of childcare varies considerably across the country. Nationwide, the average cost of putting a child younger than 5 into full-time formal care was close to $10,000. But costs range from more than $20,000 a year for center-based infant care in Massachusetts and Washington DC to closer to $5,000 a year for family-based childcare for a 4-year old in Alabama or Texas.[3]

The cost of childcare has also risen quickly to substantially outpace overall inflation. Over the past 20 years, the cost of daycare has doubled, while prices for all goods and services are up only about 50% (see Chart 2). The high and quickly rising cost of childcare has weighed heavily on female labor force participation. Indeed, participation by women in their 20s, 30s and early 40s peaked in the late 1990s.

The cost of a college education has risen even more quickly over the past 20 years, increasing by more than 2½ times. At the same time, Pell Grants, the largest source of postsecondary education grant aid that helps fund higher education for at-need students, has lagged significantly. The maximum Pell Grant has increased only half as much as the cost of a private four-year college and one-third as much as that of a public four-year college. The AFP would increase the maximum Pell Grant by just enough to almost close this shortfall with private schools.[4]

The need for more early childhood education is especially compelling, since it will ultimately reap substantial economic benefits. According to the best known study on the issue, the benefits, including greater lifetime earnings, the non-earnings benefits of reduced transfer payments and remedial education expenditures, and savings from less demand on the criminal justice system, are substantial.[5] Studies conducted on a variety of other preschool programs find similarly large increases in earnings and societal benefits.[6]

Increasing educational attainment is critical to lifting the financial fortunes of lower-income Americans, because most jobs require more than a high school degree. And the jobs of the future are sure to require workers to be more highly educated and skilled. Biden's plan to provide two years of free community college is designed to lift educational attainment through institutions already located in most communities across the country. Free tuition would increase enrollment at two-year institutions by an estimated nearly 25%.

Macroeconomic impacts

The American Families Plan would provide both a near-term boost to the macroeconomy, as spending on the various social programs in the plan gears up, and several important long-term economic benefits. First, it would increase the labor force participation and hours worked of mostly lower-income women, by making childcare more affordable, providing for paid family and medical leave, and expanding the Earned Income Tax Credit that encourages low-income households to work. The AFP makes it more cost effective for more parents to work, and the extra time and scheduling flexibility created by childcare allows them to work more hours.

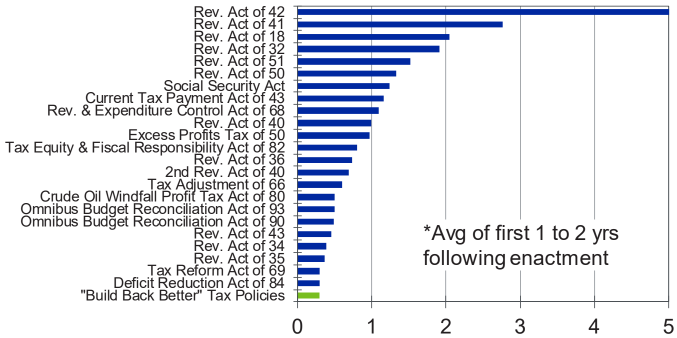
Research on the labor supply impact of lower childcare costs shows there are meaningful impacts, and our own research is consistent with this.[7] Accessible childcare facilitated by federal support to childcare providers has especially strong employment effects for single mothers, moms with young children, and lower-income mothers.[8] Moreover, the personal financial costs to parents who leave the workforce to care for a young child because of the high cost of childcare are high. They accumulate fewer skills, and their productivity is diminished, resulting in lower wages when the parent eventually returns to the workforce. The effect tends to fade only after several decades. Further, a woman's career progression is reduced even more if she has more than three children, and the penalty to wages is never made up. Even when women remain engaged through part-time work, their career progress is reduced.

A second important macroeconomic impact of the AFP is that it would increase labor productivity by raising the educational attainment of the workforce via universal pre-K, two years of free community college, expanded Pell Grants, and funds to help keep college students in school. The impact on educational attainment and productivity would of course play out over many years—well beyond the 10-year budget horizon considered in this analysis.

The AFP also addresses the wide and growing disparity in the nation's income and wealth by taxing the well-to-do to pay for the childcare, education and other benefits that go to lower-income households. The impact on the economy from the higher taxes on high-income and wealthy households in the AFP is small, in part because the tax increases are modest. While the tax policies under the AFP and AJP would be the first major tax hike since 1993, from a historical perspective they are, on net, modest, ranking 24th as a percent of GDP since WWI (see Chart 3). Moreover, the well-to-do have arguably never been in a better financial position given the long-running skewing of the income and

Chart 3: BBB Tax Hikes in Context

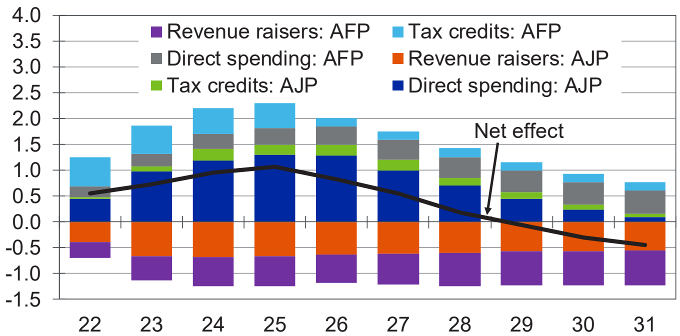
Annual revenue raised from major tax bills since WWI, % of GDP*



Sources: Romer & Romer, Tax Policy Center, Treasury, White House, Moody's Analytics

Chart 4: Budget Impact of Build Back Better

Static deficit effect, % of U.S. GDP



Sources: CBO, CRFB, Tax Foundation, TPC, Treasury, White House, Moody's Analytics

wealth distribution and the surge in asset values during the pandemic. They are not likely to appreciably change their spending and saving behavior because of the tax increases in the AFP.

Quantifying the impact of the AFP

We use the Moody's Analytics model of the U.S. and global economies to determine the impact on the economy of the AFP.[9] To provide context, four scenarios are considered. The first scenario assumes that Biden was unable to enact any major fiscal policy changes, including the American Rescue Plan that was passed into law in March. The second scenario is that only the ARP was passed into law, while the third scenario is that both the ARP and the American Jobs Plan are passed into law. And finally, the fourth scenario assumes that Biden gets everything he has asked for from Congress, including the ARP, AJP, and the American Families Plan.

The Moody's Analytics model is similar in theory and empirics to those used by the Federal Reserve Board and Congressional Budget Office for forecasting, budgeting and policy analysis. The model has been used to evaluate the plethora of fiscal and monetary policies implemented during the COVID-19 pandemic.

To determine the long-term economic impact of the AFP, the Moody's Analytics model is simulated over the decade through 2030. This is consistent with the Congressional Budget Office's horizon for the federal government's budget and policy analysis. The assumption is that the plan will become law later this year under budget reconciliation rules and implemented beginning in 2022. That is, no other significant fiscal policy changes are legislated.

Monetary policy is determined in the model based on the Federal Reserve Board's newly announced framework for conducting monetary policy in which the Fed has committed not to begin normalizing interest rates until the economy is at full employment and inflation has been consistently above the Fed's 2% inflation target. All the scenarios assume that the worst of the COVID-19 crisis and its economic fallout are over, and that the pandemic will wind down this summer.

The American Families Plan results in a modestly stronger economy over the coming decade, with higher GDP, more jobs and lower unemployment (see Table 2). The plan provides a boost to economic growth and jobs in 2022, when it is first implemented, but its principal benefits take longer to develop. The increase in labor force participation from the childcare support and paid family and medical leave is most significant in the middle of the decade. The impact of increased college enrollment and graduation rates does not materialize until later in the decade, and the universal pre-K education does not reap meaningful benefits until the children grow up and are working 20-odd years from now. The expiration of the child tax credit in 2026 also diminishes the macroeconomic benefits.

By 2030, the AFP increases real GDP by approximately $100 billion and employment by 840,000 jobs. Labor force participation is 0.3 percentage point higher, providing the labor supply needed to meet the increase in labor demand, and the unemployment rate remains just below 4%, consistent with an economy at full employment. The plan does not have a significant impact on the federal budget deficit and debt. Deficits are a bit larger in the first four years of the plan, but smaller after that, and if the AFP and AJP are adopted as proposed, then they will be more-or-less paid for in approximately 15 years. However, the budget cost of the plan is reduced by the expiration in 2026 of the child tax credit, which would be politically difficult to do away with.

Assessment of Build Back Better

With the unveiling of the American Families Plan last week and the American Jobs plan several weeks ago, we can evaluate Biden's Build Back Better plan in its entirety. The BBB is big. It includes $4.5 trillion in increased government spending and tax credits over the next decade. Of that total, almost $2.6 trillion is for investment in infrastructure, and more than $1.9 trillion is for investment in the labor force. There is $3.5 trillion in tax increases, about half of which comes from higher taxes on mostly large multinational corporations and the other half on high-income and wealthy households. Since the infrastructure spending is onetime and some of the tax credits expire, but the tax increases remain in place, the Build Back Better plan is paid for over about a 15-year period (see Chart 4).

The BBB plan is focused on lifting the economy's long-term growth rate. The increased infrastructure spending on everything from traditional transportation projects to broadband and basic research and development supports businesses' competitiveness and labor productivity growth. The increased investment in education, childcare, paid family and medical leave, and healthcare supports productivity growth and labor force participation. U.S. female participation is among the lowest for developed economies given the prohibitively high cost of taking care of children and other needy family members. We estimate that if the president's plan were fully adopted next year, labor force participation would increase by nearly a full percentage point and the economy's real potential GDP growth would be lifted by 10 to 15 basis points a decade from now. This boost to growth is not a lot each year, but over a generation or two, it results in a much bigger and wealthier economy.

The BBB plan also works to ensure that the benefits of the bigger economy go to lower-income households, and thus addresses the long-developing and now serious problem of income and wealth inequality. It does not solve the problem, not by a long stretch. But it turns the dial in the right direction. Most of the jobs created by the plan, including an estimated 2.7 million a decade from now from the infrastructure investment and 840,000 from labor force investment, go to those with lesser skills and education and lower incomes. More important in the long run, the plan lifts incomes and wealth of lower-income Americans by helping them increase their educational attainment, go to work, own homes, and live closer to their jobs.

The most substantial pushback against the plan is the higher taxes on corporations and the well-to-do. The worry is that this will reduce business investment and expansion plans and reduce the work and saving of high-income taxpayers. Indeed, all else being equal and on the margin, this will happen. But very much on the margin. The tax increases in the Biden plan are largely about rolling back the tax cuts in President Trump's 2017 Tax Cuts and Jobs Act. However, there is little evidence that the TCJA meaningfully increased underlying investment. Instead much of the tax windfall went into share repurchases and bigger dividends. If the tax cuts did not lift economic growth, it is tough to argue that increasing them will appreciably hurt growth. Biden is proposing some additional tax increases, such as taxing capital gains and dividends like income for those making more than $1 million a year, but it is hard to see how this will have a significant impact on the way uber-wealthy households work and save. Of all the tax increases, increasing the top marginal rate on corporations is likely to have the most significant negative fallout, all else equal. But that is likely why he is proposing to roll back the Trump corporate tax rate cut only partway and has signaled a willingness to negotiate how far.

Conclusions

There is a lot to like in the president's Build Back Better plan. The plan would increase the economy's long-run growth by increasing productivity growth, labor force participation, and hours worked. It also directs the benefits of the stronger economy to lower-income Americans and away from corporations and the well-to-do, helping to address the long-running skewing of the nation's income and wealth distribution.

The biggest concern is around execution risk. That is, the Build Back Better plan is complex, with lots of massive moving parts. Successfully organizing them would be difficult even among the best-managed private companies. On paper, the plan is largely paid for and does not add meaningfully to the nation's deficits and debt, at least over a 15-year horizon. But there is a risk that spending and tax credits in the plan that are slated to ultimately expire will not—the politics of ending any government program are vexed. Heightened tax enforcement may also not raise as much additional revenue as anticipated from wealthy taxpayers. The result would be larger federal budget deficits and debt. Running large deficits makes a lot of sense during the pandemic, so those hit hard can manage through, and as the pandemic winds down, to get the economy back to full employment. But once the economy has returned to full employment, addressing our long-term fiscal problems will become critical.

The Build Back Better plan is a bold effort to invest in the nation's infrastructure and labor force. While the plan will not get through Congress as the president has proposed it, we do expect a significant part of it will become law late this year and take effect in 2022. If so, it would positively touch nearly every community in America.[10]

Table 2: Macroeconomic Impact of President Biden's Fiscal Policy

Real GDP

	No additional support		American Rescue Plan		ARP & American Jobs Plan		ARP, AJP, and American Familes Plan	
	2012$ bil	Ann. growth, %	2012$ bil	Ann. growth, %	2012$ bil	Ann. growth, %	2012$ bil	Ann. growth, %
2019Q1	18,950		18,950		18,950		18,950	
2019Q2	19,021	1.5	19,021	1.5	19,021	1.5	19,021	1.5
2019Q3	19,142	2.6	19,142	2.6	19,142	2.6	19,142	2.6
2019Q4	19,254	2.4	19,254	2.4	19,254	2.4	19,254	2.4
2020Q1	19,011	(5.0)	19,011	(5.0)	19,011	(5.0)	19,011	(5.0)
2020Q2	17,303	(31.4)	17,303	(31.4)	17,303	(31.4)	17,303	(31.4)
2020Q3	18,597	33.4	18,597	33.4	18,597	33.4	18,597	33.4
2020Q4	18,794	4.3	18,794	4.3	18,794	4.3	18,794	4.3
2021Q1	18,881	1.9	19,088	6.4	19,088	6.4	19,088	6.4
2021Q2	19,067	4.0	19,621	11.6	19,621	11.6	19,621	11.6
2021Q3	19,308	5.1	20,064	9.3	20,064	9.3	20,064	9.3
2021Q4	19,575	5.7	20,368	6.2	20,368	6.2	20,368	6.2
2022Q1	19,874	6.2	20,519	3.0	20,511	2.8	20,585	4.3
2022Q2	20,080	4.2	20,541	0.4	20,528	0.3	20,616	0.6
2022Q3	20,268	3.8	20,547	0.1	20,535	0.1	20,623	0.1
2022Q4	20,433	3.3	20,626	1.5	20,623	1.7	20,713	1.8
2023Q1	20,581	2.9	20,761	2.6	20,767	2.8	20,853	2.7
2023Q2	20,724	2.8	20,883	2.4	20,923	3.0	21,006	3.0
2023Q3	20,867	2.8	21,006	2.4	21,098	3.4	21,179	3.3
2023Q4	20,995	2.5	21,145	2.7	21,304	4.0	21,385	3.9
2024Q1	21,109	2.2	21,266	2.3	21,528	4.3	21,610	4.3
2024Q2	21,210	1.9	21,363	1.8	21,725	3.7	21,808	3.7
2024Q3	21,322	2.1	21,462	1.9	21,913	3.5	21,997	3.5
2024Q4	21,440	2.2	21,569	2.0	22,093	3.3	22,177	3.3
2025Q1	21,553	2.1	21,666	1.8	22,250	2.9	22,344	3.0
2025Q2	21,657	1.9	21,757	1.7	22,381	2.4	22,484	2.5
2025Q3	21,759	1.9	21,851	1.7	22,504	2.2	22,617	2.4
2025Q4	21,862	1.9	21,946	1.7	22,615	2.0	22,737	2.2
2026Q1	21,965	1.9	22,043	1.8	22,717	1.8	22,771	0.6
2026Q2	22,071	1.9	22,144	1.8	22,813	1.7	22,877	1.9
2026Q3	22,175	1.9	22,246	1.9	22,903	1.6	22,977	1.8
2026Q4	22,284	2.0	22,352	1.9	22,986	1.5	23,069	1.6
2027Q1	22,396	2.0	22,463	2.0	23,072	1.5	23,154	1.5
2027Q2	22,517	2.2	22,580	2.1	23,172	1.7	23,254	1.7
2027Q3	22,640	2.2	22,702	2.2	23,277	1.8	23,359	1.8
2027Q4	22,764	2.2	22,824	2.2	23,385	1.9	23,466	1.8
2028Q1	22,886	2.2	22,946	2.2	23,504	2.1	23,589	2.1
2028Q2	23,007	2.1	23,067	2.1	23,631	2.2	23,718	2.2
2028Q3	23,130	2.1	23,188	2.1	23,757	2.2	23,847	2.2
2028Q4	23,249	2.1	23,307	2.1	23,886	2.2	23,977	2.2
2029Q1	23,369	2.1	23,427	2.1	24,022	2.3	24,115	2.3
2029Q2	23,488	2.1	23,547	2.1	24,155	2.2	24,250	2.3
2029Q3	23,605	2.0	23,666	2.0	24,290	2.3	24,387	2.3
2029Q4	23,724	2.0	23,787	2.1	24,425	2.2	24,523	2.3
2030Q1	23,846	2.1	23,909	2.1	24,560	2.2	24,660	2.2
2030Q2	23,968	2.1	24,031	2.1	24,697	2.2	24,797	2.3
2030Q3	24,090	2.1	24,154	2.1	24,834	2.2	24,936	2.3
2030Q4	24,214	2.1	24,279	2.1	24,972	2.2	25,075	2.3
2020	18,426	-3.5	18,426	-3.5	18,426	-3.5	18,426	-3.5
2021	19,208	4.2	19,785	7.4	19,785	7.4	19,785	7.4
2022	20,164	5.0	20,558	3.9	20,549	3.9	20,634	4.3
2023	20,792	3.1	20,949	1.9	21,023	2.3	21,106	2.3
2024	21,270	2.3	21,415	2.2	21,815	3.8	21,898	3.8
2025	21,708	2.1	21,805	1.8	22,438	2.9	22,546	3.0
2026	22,124	1.9	22,196	1.8	22,855	1.9	22,923	1.7
2027	22,579	2.1	22,642	2.0	23,227	1.6	23,308	1.7
2028	23,068	2.2	23,127	2.1	23,695	2.0	23,783	2.0
2029	23,547	2.1	23,607	2.1	24,223	2.2	24,318	2.3
2030	24,029	2.1	24,093	2.1	24,766	2.2	24,867	2.3

Table 2: Macroeconomic Impact of President Biden's Fiscal Policy

	Nonfarm employment, #							
	No additional support		American Rescue Plan		ARP & American Jobs Plan		ARP, AJP, and American Families Plan	
	Mil	Change, ths	Mil	Change, ths	Mil	Change, ths	Mil	Change, ths
2019Q1	150.2		150.2		150.2		150.2	
2019Q2	150.6	430	150.6	426	150.6	426	150.6	426
2019Q3	151.2	550	151.2	551	151.2	551	151.2	551
2019Q4	151.8	630	151.8	628	151.8	628	151.8	628
2020Q1	151.9	130	151.9	133	151.9	133	151.9	133
2020Q2	133.7	(18,210)	133.7	(18,208)	133.7	(18,208)	133.7	(18,208)
2020Q3	140.8	7,090	140.8	7,089	140.8	7,089	140.8	7,089
2020Q4	142.6	1,817	142.6	1,817	142.6	1,817	142.6	1,817
2021Q1	143.0	386	143.4	731	143.4	731	143.4	731
2021Q2	143.5	480	145.7	2,399	145.7	2,399	145.7	2,399
2021Q3	144.3	810	147.8	2,041	147.8	2,041	147.8	2,041
2021Q4	145.2	950	149.4	1,592	149.4	1,592	149.4	1,592
2022Q1	146.3	1,060	150.5	1,079	150.4	1,038	150.5	1,165
2022Q2	147.3	970	151.0	536	151.0	543	151.3	753
2022Q3	148.2	900	151.3	341	151.3	361	151.8	501
2022Q4	149.1	890	151.7	313	151.6	325	152.2	422
2023Q1	149.9	840	152.1	425	152.0	355	152.6	415
2023Q2	150.7	770	152.5	426	152.4	399	153.0	403
2023Q3	151.4	690	152.9	369	152.8	411	153.5	432
2023Q4	151.9	510	153.1	275	153.5	640	154.1	648
2024Q1	152.3	410	153.4	294	154.3	801	154.9	818
2024Q2	152.6	300	153.8	335	155.0	788	155.8	815
2024Q3	152.8	260	154.0	239	155.7	690	156.5	700
2024Q4	153.1	240	154.2	228	156.3	594	157.1	605
2025Q1	153.3	200	154.4	132	156.7	370	157.4	390
2025Q2	153.4	160	154.5	132	157.0	275	157.7	286
2025Q3	153.6	160	154.6	140	157.2	253	158.0	264
2025Q4	153.8	210	154.8	141	157.5	249	158.3	259
2026Q1	154.0	220	155.0	166	157.7	233	158.5	240
2026Q2	154.3	220	155.1	169	157.9	222	158.7	226
2026Q3	154.4	170	155.3	163	158.1	200	158.9	206
2026Q4	154.6	190	155.5	173	158.3	190	159.1	192
2027Q1	154.8	190	155.6	176	158.5	185	159.3	187
2027Q2	155.0	200	155.8	194	158.7	190	159.5	191
2027Q3	155.2	190	156.0	201	158.9	201	159.7	202
2027Q4	155.4	210	156.2	210	159.1	210	159.9	212
2028Q1	155.6	210	156.5	224	159.3	224	160.1	226
2028Q2	155.8	230	156.7	240	159.6	223	160.4	225
2028Q3	156.1	230	156.9	238	159.8	223	160.6	225
2028Q4	156.3	230	157.2	236	160.0	221	160.8	225
2029Q1	156.6	250	157.4	236	160.2	221	161.0	224
2029Q2	156.8	240	157.7	238	160.4	222	161.3	224
2029Q3	157.0	240	157.9	238	160.7	223	161.5	225
2029Q4	157.3	240	158.1	238	160.9	223	161.7	224
2030Q1	157.5	250	158.4	251	161.1	223	161.9	225
2030Q2	157.8	240	158.6	249	161.3	222	162.2	225
2030Q3	158.0	240	158.9	246	161.6	222	162.4	225
2030Q4	158.2	240	159.1	246	161.8	223	162.6	225
2020	142.3	(8,672.2)	142.3	(8,671.3)	142.3	(8,671.3)	142.3	(8,671.3)
2021	144.0	1,744.7	146.6	4,303.7	146.6	4,303.7	146.6	4,303.7
2022	147.7	3,697.5	151.1	4,544.2	151.1	4,521.2	151.5	4,899.9
2023	151.0	3,250.0	152.6	1,537.9	152.7	1,579.6	153.3	1,850.3
2024	152.7	1,745.0	153.9	1,218.6	155.3	2,671.4	156.1	2,733.9
2025	153.5	837.5	154.6	710.6	157.1	1,753.1	157.9	1,809.4
2026	154.3	795.0	155.2	625.9	158.0	929.6	158.8	958.8
2027	155.1	770.0	155.9	727.8	158.8	778.7	159.6	788.0
2028	156.0	857.5	156.8	888.9	159.7	863.3	160.5	870.6
2029	156.9	955.0	157.8	949.7	160.6	886.9	161.4	890.9
2030	157.9	970.0	158.8	979.6	161.4	889.8	162.3	889.8

Table 2: Macroeconomic Impact of President Biden's Fiscal Policy

	Unemployment rate, %			
	No additional support	American Rescue Plan	ARP & American Jobs Plan	ARP, AJP & American Families Plan
2019Q1	3.9	3.9	3.9	3.9
2019Q2	3.6	3.6	3.6	3.6
2019Q3	3.6	3.6	3.6	3.6
2019Q4	3.5	3.5	3.5	3.5
2020Q1	3.8	3.8	3.8	3.8
2020Q2	13.0	13.0	13.0	13.0
2020Q3	8.8	8.8	8.8	8.8
2020Q4	6.8	6.8	6.8	6.8
2021Q1	6.3	6.2	6.2	6.2
2021Q2	6.4	5.9	5.9	5.9
2021Q3	6.5	5.4	5.4	5.4
2021Q4	6.3	4.8	4.8	4.8
2022Q1	6.0	4.5	4.5	4.5
2022Q2	5.7	4.4	4.4	4.2
2022Q3	5.4	4.4	4.4	4.1
2022Q4	5.1	4.4	4.4	4.0
2023Q1	4.8	4.4	4.4	4.0
2023Q2	4.6	4.4	4.4	4.0
2023Q3	4.5	4.4	4.4	4.0
2023Q4	4.5	4.4	4.4	4.0
2024Q1	4.4	4.3	4.1	3.9
2024Q2	4.4	4.3	3.8	3.7
2024Q3	4.4	4.3	3.7	3.6
2024Q4	4.4	4.3	3.5	3.5
2025Q1	4.4	4.3	3.6	3.5
2025Q2	4.4	4.3	3.6	3.6
2025Q3	4.4	4.4	3.7	3.6
2025Q4	4.5	4.4	3.7	3.6
2026Q1	4.5	4.5	3.7	3.7
2026Q2	4.5	4.5	3.7	3.7
2026Q3	4.6	4.5	3.7	3.7
2026Q4	4.6	4.5	3.7	3.7
2027Q1	4.6	4.5	3.7	3.7
2027Q2	4.6	4.5	3.8	3.8
2027Q3	4.6	4.5	3.8	3.8
2027Q4	4.5	4.5	3.8	3.8
2028Q1	4.5	4.5	3.8	3.8
2028Q2	4.5	4.5	3.8	3.8
2028Q3	4.5	4.5	3.8	3.8
2028Q4	4.5	4.5	3.8	3.8
2029Q1	4.5	4.5	3.8	3.8
2029Q2	4.5	4.4	3.8	3.8
2029Q3	4.5	4.4	3.8	3.8
2029Q4	4.5	4.4	3.8	3.8
2030Q1	4.5	4.4	3.8	3.8
2030Q2	4.5	4.4	3.8	3.8
2030Q3	4.5	4.4	3.8	3.8
2030Q4	4.5	4.4	3.8	3.8
2020	8.1	8.1	8.1	8.1
2021	6.4	5.6	5.6	5.6
2022	5.5	4.4	4.4	4.2
2023	4.6	4.4	4.4	4.0
2024	4.4	4.3	3.8	3.7
2025	4.4	4.4	3.6	3.6
2026	4.5	4.5	3.7	3.7
2027	4.6	4.5	3.8	3.8
2028	4.5	4.5	3.8	3.8
2029	4.5	4.4	3.8	3.8
2030	4.5	4.4	3.8	3.8

Table 2: Macroeconomic Impact of President Biden's Fiscal Policy

	Labor force participation rate, %			
	No additional support	American Rescue Plan	ARP & American Jobs Plan	ARP, AJP & American Families Plan
2019Q1	63.1	63.1	63.1	63.1
2019Q2	62.9	62.9	62.9	62.9
2019Q3	63.1	63.1	63.1	63.1
2019Q4	63.2	63.2	63.2	63.2
2020Q1	63.2	63.2	63.2	63.2
2020Q2	60.8	60.8	60.8	60.8
2020Q3	61.5	61.5	61.5	61.5
2020Q4	61.5	61.5	61.5	61.5
2021Q1	61.4	61.4	61.4	61.4
2021Q2	61.6	61.8	61.8	61.8
2021Q3	61.8	62.1	62.1	62.1
2021Q4	61.9	62.3	62.3	62.3
2022Q1	62.0	62.5	62.5	62.5
2022Q2	62.1	62.6	62.6	62.6
2022Q3	62.1	62.6	62.6	62.6
2022Q4	62.1	62.6	62.6	62.7
2023Q1	62.1	62.7	62.7	62.7
2023Q2	62.1	62.7	62.7	62.7
2023Q3	62.1	62.7	62.7	62.8
2023Q4	62.2	62.7	62.7	62.8
2024Q1	62.2	62.7	62.7	62.8
2024Q2	62.3	62.7	62.7	62.8
2024Q3	62.3	62.7	62.8	62.9
2024Q4	62.3	62.7	62.8	62.9
2025Q1	62.3	62.7	62.8	62.9
2025Q2	62.3	62.7	62.8	63.0
2025Q3	62.3	62.7	62.9	63.0
2025Q4	62.3	62.7	62.9	63.1
2026Q1	62.3	62.7	62.9	63.1
2026Q2	62.3	62.7	62.9	63.1
2026Q3	62.3	62.7	62.9	63.1
2026Q4	62.3	62.7	62.9	63.2
2027Q1	62.3	62.7	62.9	63.2
2027Q2	62.3	62.6	62.9	63.2
2027Q3	62.3	62.6	62.9	63.1
2027Q4	62.2	62.6	62.9	63.1
2028Q1	62.2	62.6	63.0	63.3
2028Q2	62.2	62.6	63.0	63.3
2028Q3	62.2	62.6	63.0	63.3
2028Q4	62.2	62.5	63.0	63.3
2029Q1	62.2	62.5	63.0	63.3
2029Q2	62.1	62.5	63.0	63.3
2029Q3	62.1	62.5	63.1	63.3
2029Q4	62.1	62.5	63.0	63.3
2030Q1	62.1	62.5	63.1	63.3
2030Q2	62.1	62.4	63.0	63.3
2030Q3	62.1	62.4	63.0	63.3
2030Q4	62.1	62.4	63.0	63.3
2020	61.8	61.8	61.8	61.8
2021	61.7	61.9	61.9	61.9
2022	62.1	62.6	62.6	62.6
2023	62.1	62.7	62.7	62.8
2024	62.3	62.7	62.8	62.9
2025	62.3	62.7	62.8	63.0
2026	62.3	62.7	62.9	63.1
2027	62.3	62.6	62.9	63.1
2028	62.2	62.6	63.0	63.3
2029	62.1	62.5	63.0	63.3
2030	62.1	62.4	63.0	63.3

Sources: BEA, BLS, Moody's Analytics

Endnotes

1 This is based on data from the Bureau of Labor Statistics' Consumer Expenditure Survey.

2 Households in the top decile of the income distribution, with annual income of more than $155,000, spend almost $12,000 per annum on childcare, while those in the bottom decile, making less than $13,000 per annum, spend close to $3,600.

3 These costs are determined by a survey conducted by ChildCare Aware of America. Respondents were asked to provide cost data for infants, toddlers, 4-year-old children, and school-age children in childcare centers and family childcare homes that are licensed programs or are legally exempt from licensing.

4 This is according to the Urban Institute's Pell Grant simulator.

5 James J. Heckman, Seong Hyeok Moon, Rodrigo Pinto, Peter A. Savelyev, and Adam Yavitz, The Rate of Return to the High/Scope Perry Preschool Program, Journal of Public Economics Vol. 94.1 (2010): 114-128.

6 Leonard N. Masse and W. Steven Barnett, Comparative Benefit-Cost Analysis of the Abecedarian Program and Its Policy Implications, Economics of Education Review Vol. 26.1 (2007): 113-125. Arthur J. Reynolds, Judy A. Temple, Suh-Ruu Ou, Irma A. Arteaga, and Barry A.B. White. 2011, School-Based Early Childhood Education and Age-28 Well-Being: Effects by Timing, Dosage, and Subgroups Science Vol. 333.6040 (2011): 360-364.

7 For more information on the labor force participation rate impacts, a literature review is available in L. J. Bettendorf, E. L. Jongen, and P. Muller, Child Care Subsidies and Labour Supply—Evidence From a Large Dutch Reform, Labour Economics (2015).

8 Kimberly Burgess, Nina Chien, Maria Enchautegui, "The Effects of Child Care Subsidies on Maternal Labor Force Participation in the United States," Department of Health and Human Services, ASPE Issue Brief, 1-6 (2016).

9 A detailed description of the Moody's Analytics model of the U.S. economy is available here. More detailed validation documentation is available on request.

10 The plan that becomes legislation is expected to cost some $3 trillion over 10 years, of which $2 trillion will be on infrastructure and $1 trillion on social programs. And there will be $2 trillion in tax increases, half from higher taxes on corporations and the other half on the well-to-do.

About the Authors

Mark Zandi is chief economist of Moody's Analytics, where he directs economic research. Moody's Analytics, a subsidiary of Moody's Corp., is a leading provider of economic research, data and analytical tools. Dr. Zandi is a cofounder of Economy.com, which Moody's purchased in 2005.

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