Methodology

Calculating the effect of fiscal policy on GDP requires an assessment of how each policy increases spending by the recipient or otherwise directly affects GDP and an assessment of the fiscal multiplier. An increase in spending for each dollar of money received is called a marginal propensity to consume (MPC). In our assessment, MPCs and fiscal multipliers are affected by social distancing. For example, during periods of social distancing, households are more likely to postpone spending their rebate checks. Relatedly, fiscal multipliers are also expected to be attenuated during periods of social distancing. Under the assumption that the additional support for COVID-19 containment and vaccination in the package is enacted, thus lessening the need for social distancing, our expectation is that social distancing attenuates over the next three quarters; by October of 2021, it is no longer a factor.

Estimates of the fiscal multiplier from the literature vary widely. We follow CBO in examining the economic effects of a range of multipliers and presenting the average of those paths. At the upper end of the range the fiscal multiplier is 2.5, affecting the level of GDP over four quarters when there is no social distancing. At the lower end of the range the multiplier is 0.5, affecting the level of GDP in one quarter when there is no social distancing. We use a weighted average of those multipliers, with 60 percent weight on the low multiplier and 40 percent weight on the high multiplier. That stems from our judgment that supply constraints will lead more downward pressure on real economic activity from inflation than is typical when the economy responds to fiscal stimulus during periods of very accommodating monetary policy. Those multipliers are higher than they would otherwise be because the economy is projected to be weak enough over the next several years that the Federal Reserve would not raise interest rates in response to stronger economic growth and some inflationary pressure. The effect of social distancing through the middle of 2021 is estimated to attenuate the effects of the fiscal multiplier over three quarters. (In other words, the modest amount of social distancing that we project for the second quarter of 2021 implies that the fiscal multiplier from spending in the second quarter affects GDP through the middle of next year.)

Biden Fiscal Package

We group policies proposed in the Biden fiscal package into four categories: (1) COVID-19 containment and vaccination, aid to state and local governments, and federal spending; (2) direct aid to families; (3) aid to financially vulnerable families; and (4) aid to businesses. Below are details on the components of the categories and the methodology for determining the GDP effects.

COVID-19 Containment and Vaccination; Aid to State and Local Governments; Federal Spending. Grants to state and local governments—including $350 billion to help states contend with fiscal shortfalls and
$130 billion to help states to reopen schools safely—represent the largest component of aid in this category. The category also includes money for COVID containment and vaccination, grants to tribal governments, and federal IT spending. States have already received about $400 billion in aid since the pandemic began which, according to recent estimates, is probably a bit larger than the revenue losses they are likely to experience as a result of the pandemic. But many state and local government budgets may still be under strain because of the higher demands on spending from COVID and because revenue losses are particularly large in some states. Nevertheless, we expect increases in spending stemming from this category of aid to be slow, with about 20% of the increase over the next three quarters (mostly related to COVID containment, vaccination and school reopening) and an additional 40% spent through the end of 2023. We expect the remaining funds to result in greater spending gradually in the remaining two years.

Direct Aid to Families: The largest component in this category is the $1,400 checks to most Americans. In our assessment, all aid in this category (including aid for child care costs and expansions of the EITC and child tax credit) has the same MPC—equal to the MPC we estimate for temporary tax rebates. The literature examining the MPCs out of the rebates authorized by the CARES Act found that, for each dollar of rebate received, spending increased roughly 30 cents to 50 cents over the following two weeks or so. In our assessment, households likely continued to spend out of their rebate payments over the following months. For our calculations, we use an MPC of 0.65, roughly the middle of the 50 cents to 90 cents range found by Parker et al. (2013) for the MPCs out of the 2001 and 2008 tax rebates. Under normal conditions, half of that effect comes within two quarters and the remainder comes over the following six quarters. However, there are a number of reasons to expect the spending response to be much slower than normal: social distancing is likely to continue for some time, household are already flush with savings, and consumers will likely face capacity constraints and temporary price surges in sectors such as restaurants, entertainment, and travel when the pandemic is over. As a result, we expect just 25% of the induced spending to occur in 2021, and the remainder spread out over the following two years.

Aid to Financially Vulnerable Families: The largest component of this category of aid is an increase in unemployment insurance (an additional $400 per week above regular benefits and an extension of the pandemic unemployment insurance programs, both through September 30, 2021.) We estimate that the household spending response to other types of aid in this category (increases in SNAP, WIC, TANF, housing assistance and health insurance subsidies) is the same as the response to unemployment benefits.

Research from the JPMorgan Chase Institute found that spending out of the CARES Act’s additional $600 unemployment insurance payment was consistent with an MPC of approximately 0.7, moderately below the estimates from pre-pandemic literature. Spending out of the additional $600 may have been muted for three reasons. First, for many unemployed workers, the benefits constituted more than 100% of their previous wages, meaning that spending the entire benefit would require adjusting consumption patterns. Second, workers understood the extra $600 was temporary. And, third, spending was muted in general because of heightened social distancing in the spring and early summer. Given that the policy analyzed here incorporates a smaller additional UI payment, that it is assumed to last longer, and that social distancing is projected to diminish, we use an MPC more in line with pre-pandemic estimates of 0.9. Under normal conditions, two-thirds of that effect is estimated to occur within two quarters, with the remainder over the following year. Social distancing slows down the near-term increase in spending.
Aid to Business: This category includes grants and loans to small businesses, paid sick leave, and money to support child care providers. We expect the increase in spending from this aid to occur gradually, with every dollar of aid associated with a roughly 25 cent increase in spending over the next three years. This spending response is about in line with our assessment of the spend-out from the Paycheck Protection Program.