REVERSING THE RECOVERY
HOW PRESIDENT BIDEN’S “BUILD BACK BETTER” PLAN RAISES TAXES, KILLS JOBS, AND PUNISHES THE MIDDLE CLASS
October 2021
by E. J. Antoni, PhD
Vance Ginn, PhD
Steve Moore
Texas Public Policy Foundation
Committee to Unleash Prosperity

Table of Contents

Executive Summary ........................................... 3
Introduction ..................................................... 4
Tax Elements of the Build Back Better Plan ................ 5
Aggregate Effects of the Tax Changes in the Build Back Better Plan .......................................... 15
Government Spending and Other Provisions in the Build Back Better Plan .................. 16
Conclusion: Effects of the Build Back Better Plan .......... 16
Appendix: Proportional Effects on States of Build Back Better Plan .................................. 17
References ....................................................... 18
Reversing the Recovery: How President Biden’s “Build Back Better” Plan Raises Taxes, Kills Jobs, and Punishes the Middle Class

E. J. Antoni, Vance Ginn, Steve Moore

Executive Summary
This study forecasts the dynamic effects of recent fiscal policy proposals by the Biden administration and congressional Democrats in the “Build Back Better” plan on the nation’s economic output, capital stock, real wages, income, jobs, and tax revenue. We have considered many proposals in the Build Back Better plan which include but are not limited to the $1.2 trillion American Jobs Plan (called the “infrastructure” bill) and the $5 trillion American Families Plan (called the “human infrastructure” bill). Each policy is described in detail, followed by its estimated effects where possible, given the availability of data. In each case, private investment is discouraged, which hamstrings the growth of employment, real wages, and economic output. Total economic harm exceeds total additional revenue, resulting in a net economic loss. The estimates in this paper have been made as conservative as reasonable. The appendix includes state-level effects of increased debt and lost jobs proportionate to each state’s share of the nation’s population.

The ten major tax proposals considered in the Build Back Better Plan are the following:

1. Increase top marginal income tax rate to 39.6%, add 3% tax on income over $2.5 million for single filers
2. Increase corporate tax rate to 26.5%
3. Impose additional 3.8% tax on business income over $400,000 and phase out deductions
4. Increase statutory top marginal capital gains and dividend tax rate to 25%, lower top bracket threshold, eliminate the step-up basis, tax unrealized capital gains at death, and treat large amount of capital gains as ordinary income
5. Institute a 15% minimum tax rate on book income
6. Increase tax rate on global intangible low tax income (GILTI) to 21% and reduce foreign-derived intangible income (FDII) tax deduction while limiting expensing
7. Institute a 12.4% payroll tax on all income over $400,000
8. Replace 401k tax deduction with a tax credit
9. Reduce estate tax exemption to $3.5 million and increase the top marginal tax rate to 65%
10. Cap itemized deductions at 28%, instead of the income tax rate, for incomes above $400,000

Key Points
• President Biden and congressional Democrats seek to spend another $6.2 trillion over the next decade, spread across at least two bills that comprise their “Build Back Better” plan.
• This plan includes heavy taxing, spending, and debt, which contributes to reducing growth rates for GDP, employment, income, and capital stock.
• Compared to baseline growth over the next decade, this plan will result in estimated dynamic economic effects of 5.3 million fewer jobs, $3.7 trillion less in GDP, $1.2 trillion less in income, and $4.5 trillion in new debt.
• These taxes threaten to reverse the economic recovery, with families having less income and more debt.

1 It is important to note that “capital gains” used throughout this study references long-term capital gains.
In the aggregate, the first six tax changes which we include in our estimate, along with the $6.2 trillion increase in government spending considered in the current Build Back Better plan, will have the following conservatively estimated effects over the next decade compared to baseline growth:

**Effects on Economy, Families, and Businesses of the Build Back Better Plan**

- Reduce full-time equivalent employment by 5.3 million (-4.3%)
- Reduce long-run gross domestic product (GDP) by $3.7 trillion, including $663 billion loss in investment
- Reduce income by $1.2 trillion, over $9,000 per household
- Increase the national debt by $4.5 trillion (+15.7%), or over $35,000 per household,
- Impose severe marriage penalty, up to $130,200 annually
- Reduce wage growth by 23.1% for employees, due to corporate tax increases
- Reduce U.S. tax competitiveness from 21st to 30th
- Reduce median family’s income by $12,000
- Increase taxes on family farms and businesses when original owner dies

Given these negative effects, Congress should reject the Build Back Better plan.

**Introduction**

As the U.S. economy recovers from the government-imposed shutdowns, the nation is poised to repeat the rapid economic expansion of the 1920s, exactly one century ago. Pent-up demand, people’s desire to return to work, and a tremendous surge of investment in technology, coupled with several years of pro-growth policies of deregulation and tax cuts, support an economy primed for robust growth. Indeed, the third quarter of 2020 saw record-high U.S. economic growth as most states ended much of their shutdowns of businesses and economic activity, and the economy grew by 33.8% on an annualized basis, doubling the previous record of 16.7% set in the first quarter of 1950.

Conversely, the fiscal policies contained in the Build Back Better plan could instead cause a repeat of the 1930s, not the 1920s. This plan comprises policies proposed in the American Jobs Plan and American Families Plan—but not only—with just these two bills containing $6.2 trillion in new government spending and $1.7 trillion in new taxes, leaving an increase in the national debt of $4.5 trillion.

Burdensome regulation, high marginal tax rates, and disincentives on investment were key factors in the economic malaise at the heart of the Great Depression. A large body of empirical evidence points to higher tax rates contributing to lower economic growth (McBride, 2012; Durante, 2021b). All 10 of the aforementioned tax proposals are increases that discourage business investment. The implementation of at least three of them will also entail cumbersome regulation to implement and enforce the changes. Although the economy is poised for impressive growth, the fledgling recovery can quickly be derailed by anti-growth and anti-investment fiscal policy.

**Figure 1** shows private investment (e.g., non-residential investment, residential investment, and change in private inventories) has led the way out of every recession in the post-WWII period. Each recession ended with a spike in investment. The obvious mathematical reason is that investment adds to gross domestic product (GDP) at a one-to-one rate. However, these sharp increases in investment...
provide a lingering effect for years thereafter in the form of faster economic growth due to improved output stemming directly from that investment. Not once in the post-war period has consumption led the way out of a recession. Rather, the increase in investment has always been larger. Furthermore, Figure 2 illustrates how declines in net investment have been a reliable predictor of economic slowdowns, with every recession in the post-war period being preceded by such a decline. In short, there are significant historical data behind the economic theory that investment drives growth. Interestingly, the recession in early 2020—which set a record for brevity—was preceded by a slight decline in investment at the end of 2019, although the markets had no widespread knowledge of the then-novel coronavirus. The economy may well have been poised for a brief recession even without COVID-19 and the subsequent government-imposed shutdowns of the economy. Particularly worrisome, then, is the recent decline in real gross private domestic investment for the first half of 2021. This key contributor to GDP has now fallen below its Q2:2019 level, signaling either a recession or, at least, anemic economic growth. These declines can be attributed in part to supply chain disruptions caused by continuing government-imposed restrictions (Powell, 2021) and fear of the coronavirus. The potential for punitive tax changes also looms large and is dampening the desire to invest. One of the provisions of the Tax Cuts and Jobs Act (TCJA) of 2017, better known as the “Trump tax cuts,” was a reduction of the top marginal income tax rate from 39.6% to 37% for single individual filers earning over $523,601 per year in taxable income, while those earning between $209,426 and $523,600 (inclusive) per year were placed in the sixth top marginal income tax bracket with a 35% rate (El-Sibaie, 2020). The Build Back Better plan would lower the threshold for the top marginal income tax bracket to $400,000, drastically shrinking the income range of the sixth bracket. This would affect both those whose top marginal income tax rate was previously lowered to 37% and those whose rate was lowered to 35%. Thus, some would see a tax rate increase and others would see the elimination of a tax discount. The potential for punitive tax changes also looms large and is dampening the desire to invest.

Tax Elements of the Build Back Better Plan

The conservatively estimated economic effects listed in the following sections are long-run effects expected to occur over the coming decade compared to baseline growth.

The following six tax proposals are included in our aggregate effects from what is currently or has been proposed in the American Jobs Plan or American Families Plan.

1. Increase top marginal income tax rate to 39.6%, add 3% surcharge on income over $2.5 million for single filers

One of the provisions of the Tax Cuts and Jobs Act (TCJA) of 2017, better known as the “Trump tax cuts,” was a reduction of the top marginal income tax rate from 39.6% to 37% for single individual filers earning over $523,601 per year in taxable income, while those earning between $209,426 and $523,600 (inclusive) per year were placed in the sixth top marginal income tax bracket with a 35% rate (El-Sibaie, 2020). The Build Back Better plan would lower the threshold for the top marginal income tax bracket to $400,000, drastically shrinking the income range of the sixth bracket. This would affect both those whose top marginal income tax rate was previously lowered to 37% and those whose rate was lowered to 35%. Thus, some would see a tax

---

2 These figures have been adjusted for inflation, which was a provision of the TCJA, to reflect current 2021 figures. As such, they were not the original bracket thresholds in 2018.
rate increase of 2.6 percentage points, or 7.4%, and those earning between $400,001 and $523,600 (inclusive) would see an increase of 4.6 percentage points, or 13.1%. Because it is a marginal income tax rate, it would only affect income above $400,000. However, it is not the average tax rate but the marginal tax rate that helps determine if an individual will earn, invest, and spend an additional dollar. Reductions in the top marginal income tax rate have increased tax revenue from the top 1% of income earners. The explanation for this phenomenon is that a lower marginal tax rate restores the incentive to earn more, and the increase in income is proportionally greater than the decrease in the tax rate. The new resultant product is larger than under the older, higher marginal tax rate. These data can help inform policymakers as to where the nation’s top marginal income tax rate is on the Laffer curve.

A significant marriage penalty is also added in the proposed tax structure. A marriage penalty occurs when tax liability for a couple increases post-nuptials because of differences in tax bracket thresholds, deduction limitations, and other aspects of the tax code. Because the bracket threshold is so close for married and unmarried individuals, couples near the margin could find nearly all of one spouse’s income now subject to the highest tax rate. Marriage penalties in the proposed structure can total $130,200 annually in higher taxes.

Lastly, a 3% surtax on adjusted gross incomes over $2,500,000 for single filers will likely function as an additional tax bracket, with a tax rate of 42.6%. Section 3 outlines the proposed payroll tax increases that bring this top marginal income tax rate to 51.45% paid by the employee, with an additional 7.65% tax paid by the employer, yielding an implicit combined top marginal income tax rate of 59.1%—before adding any state and local income taxes.

Estimated long-run effects of these tax changes (Durante et al., 2021b, and authors’ calculations):

- Full-time equivalent (FTE) jobs decrease 96,000
- GDP decreases 0.1%
- Capital stock decrease 0.1%
- Tax revenue increases $124 billion

2. **Increase corporate tax rate to 26.5%**

The name of the corporate income tax rate is somewhat of a misnomer because while the tax is levied on corporate income, corporations do not actually pay taxes. People pay taxes. Corporate income taxes are paid either by the corporation’s employees through lower compensation or fewer hours or jobs, shareholders through lower dividends, or customers through higher prices, or a combination thereof. Tax incidence informs which group is most likely to pay for a tax increase, and conversely, which group would likely benefit from a tax decrease. For example, an increase of 10 percentage points in the corporate tax rate decreases wage growth by 7% for corporations’ employees, including employees earning substantially less than $400,000 a year (Felix, 2007). This distinction between de facto and de jure tax incidence is often ignored to the detriment of specific workers, such as the young, those with low skills, and women—groups that disproportionately bear the de facto cost of the corporate income tax (Tax Foundation, n.d.-b).

![Figure 3 Combined Federal and State Corporate Tax Rates Under a 26.5% Top Federal Corporate Income Tax](https://taxfoundation.org/house-democrats-corporate-income-tax-rates/)

Note: Figure reproduced from Corporations in Most States Would Face Income Tax Rate Exceeding 30 Percent Under Ways and Means Proposal by A. Muresianu and E. York, 2021a, Tax Foundation (https://taxfoundation.org/house-democrats-corporate-income-tax-rates/).
The Trump tax cuts reduced the corporate income tax rate from 35%, which was, at the time, the highest in the developed world, to 21%. The Build Back Better plan would raise the tax rate by 5.5 percentage points, a 26.2% increase. Most states would have combined corporate income tax rates over 30% (Figure 3), while the national average would be the third highest of all Organization for Economic Co-operation and Development (OECD) countries (Figure 4). Tax increases on corporate income are particularly burdensome because the income is already being taxed twice\(^4\) and because they are indirect taxes. Such a tax increase would also reduce America’s competitiveness in the world, encouraging corporations to leave for other countries and discouraging corporations from coming to America. Corporate income tax increases also discourage investment, both from domestic and foreign sources. Corporate income tax rate increases would play a major role in reducing America’s international tax competitiveness, which, as Figure 5 shows, would drop to below where it was before the passage of the Trump tax cuts (Bunn, 2020).

Estimated long-run effects of these tax changes (Durante et al., 2021b):

- FTE jobs decrease 107,000
- GDP decreases 0.6%
- Capital stock decreases 1.1%
- Wages decrease 0.5%

3. Impose additional 3.8% tax on business income over $400,000, and phase out deductions\(^5\)

Over 90% of businesses in the U.S. are pass-through businesses, not C corporations (Tax Foundation, n.d.-a). With a pass-through business, income is reported on the individual income tax return(s) of the owner(s), not on the corporate income tax return like for a C corporation. Pass-through income is taxed at personal income tax rates. Therefore, raising marginal income tax rates affects taxes paid by small businesses, which are usually pass-through businesses, and not large corporations, which are C corporations.

One provision in the Build Back Better plan phases out deductions specific to pass-through income, starting at $400,000 and completely phased out at $500,000 (Durante, 2021-a). Excess business losses (IRS, n.d.-a) and like-kind exchanges (IRS, n.d.-b) would also be limited (Watson et al., 2021). Additionally, the 3.8% net investment income tax (NIIT) would be levied on income over $400,000.

Since pass-through income is business income, these tax increases should be viewed as taxes on business, capital, and investment. Small business owners are disincentivized from investing their own labor and capital into a business when the marginal returns are diminished, which is precisely the result of raising the marginal income tax rate on these earners. Even without the other negative effects mentioned above, the top marginal income tax rate alone will increase 13.1% for some small-business owners. Figure 6 shows that once state tax rates are considered, pass-through businesses in

---

\(^4\) Corporate income is first taxed at the corporate level and then again when that income is paid to shareholders in dividends.

\(^5\) Among these are excess business losses, 1031 like-kind exchanges, and carried interest.
A major advantage of income derived from capital gains and dividends is that it is taxed at a lower and, more importantly, predictable rate than ordinary earned income. The tax rate varies from 0% when an individual filer’s income is $39,375 or less, up to 20% when that income is over $434,550. The Build Back Better plan seeks to raise that rate to 25% for those earning over $400,000, but that rate does not include the net investment income tax (NIIT) and 3% millionaire surcharge, which together combine to yield a top marginal capital gains tax rate of 31.8%—before state and local rates. Figure 7 shows that the average combined tax rate on capital gains in the country would be almost 37%. If Congress were to tax capital gains for high-income earners at regular tax rates as part of the American Families Plan, the national average tax rate would climb to almost 50% (Watson et al., 2021).

Capital gains are currently taxed only when realized. That is to say that the owner of an investment is only taxed when the investment is sold, and only if there is a profit. Since the investor’s liquidity is tied up in the investment until it is sold, taxing profits before they are realized would require selling part of the investment to pay those taxes, lowering investment overall. Profit is calculated by subtracting the cost basis from the price sold. When the cost basis is greater than the price at the time of sale, selling at a loss results in a tax deduction. Finally, any exposé on capital gains and dividends would be remiss not to mention that these are already taxed twice, first at the corporate income tax rate, and then at the individual's capital gains rate, as seen in Figure 8. Higher rates on both corporate income and on capital gains and dividends will make this even more detrimental. In conjunction with the most recent proposal of raising the corporate income tax rate to 26.5%, the effective federal tax rate would be as high as 55%, while the average state corporate income tax rate would push the total effective tax rate to over 58.5%.

When an asset is inherited, the basis is “stepped up” to the market value at the time of inheritance. This mechanism allows investment to be passed from one generation to the next without being subject to capital gains taxes when the owner dies. Should the next owner sell that investment, the capital gains tax would apply to the

---

**Figure 5**

*International Tax Competitiveness Index Score for 2020 with the U.S. Ranks for 2017, 2020, and the Biden Tax Plan*

Note. Figure reproduced from *How Would Biden's Tax Plan Change the Competitiveness of the U.S. Tax Code?* by D. Bunn, 2020, Tax Foundation (https://taxfoundation.org/biden-tax-plan-us-competitiveness/).

---

4. **Increase statutory top marginal capital gains and dividend tax rate to 25%, lower top bracket threshold, eliminate the step-up basis, tax unrealized capital gains at death, and treat large amount of capital gains as ordinary income**

---

most states would be confronting top marginal income tax rates over 50%.

Estimated long-run effects of these tax changes (Durante, 2021a; Watson et al., 2021, and author’s calculations):

- FTE jobs decrease 30,500
- GDP decreases 0.3%
- Capital stock decreases 0.4%
- Wages decrease 0.4%
Figure 6
Combined Federal and State Top Marginal Tax Rates by State for Pass-Through Firms, Under House Ways and Means Proposal, 2022

Note. Figure reproduced from Top Tax Rate on Pass-Through Business Income Would Exceed 50 Percent in Most States Under House Dems’ Plan by W. McBride and A. Durante, 2021, Tax Foundation (https://taxfoundation.org/house-democrats-pass-through-business-tax/).

Figure 7
Top Marginal Combined Capital Gains Tax Rate by State Under House Ways and Means Proposal, 2022

Note. Figure reproduced from Top Combined Capital Gains Tax Rates Would Average Nearly 37 Percent Under House Dems’ Plan by E. York and A. Muresianu, 2021, Tax Foundation (https://taxfoundation.org/house-democrats-capital-gains-tax-rates/).
difference between the stepped-up basis and the value at the time of sale. The end results are significantly higher intergenerational savings, higher levels of investment, and a larger capital stock. The step-up basis also serves an important function in reducing capital gains that are merely the result of inflation and not an increase in the real value of an asset. Given the Federal Reserve's average target of 2% inflation a year, prices will double every 36 years or so. An inherited asset that was purchased 36 years ago and has experienced a 100% price increase would therefore not have appreciated in real terms. Its nominally higher valuation is not indicative of a real gain. But the step-up basis was not designed to combat the menace of taxes levied on inflated assets, nor is it a particularly accurate way of dealing with the problem. Instead, the step-up basis preserves the value of intergenerational savings and investment by ensuring that a person can only be taxed on an asset that appreciates during the owner's lifetime.

Eliminating this mechanism would therefore decrease the nation's capital stock, investment, and intergenerational savings levels. It would also create a logistical nightmare that would impose significant compliance costs on inheritors. When an asset is eventually sold, the owner must be able to verify the cost basis to determine how much of the sale price is subject to capital gains. This would be particularly difficult if the deceased did not keep meticulous records of all investment purchases, from stocks to real estate, as well as equally detailed records on all inheritances. More recent transactions potentially have digital records to ease accessibility, but this likely is not the case for other assets that may have been passed between more than two generations. This is not difficult to imagine: An individual may bequeath a property to their child, and that child may, in turn, bequeath the same property to a grandchild of the original owner. Without records, the inheritors are left trying to determine what the asset was worth on the day of its original purchase, if that date is even known. If the cost basis cannot be definitively ascertained, then it is assumed to be zero (Gabriel Antoni, CFP, personal communication, July 21, 2021). That means that the seller of the asset must pay the capital gains tax on the entire current value, including all the inflation that has occurred over the years but does not represent an increase in real value or purchasing power. Removing the step-up basis in 1979 and 2010 resulted in such an accounting nightmare that the step-up basis was quickly reintroduced.

This also creates the specter of the possibility that the value of an asset after taxes could be less from one generation to the next. Periods of inflation would provide an incentive for people to sell investments so as not to owe capital gains on future inflated valuations. Lastly, it is worth noting that the estate exemption does not protect inheritors on this issue because it deals with income realized at the time of sale of the assets in question.

Capital gains are currently taxed only after they are realized, meaning the asset in question has been sold. Unrealized capital gains are not taxed. If an individual has purchased or inherited a stock, bond, article of jewelry, collectible, real estate, etc., and the value has since increased, that is an unrealized capital gain.

The Build Back Better proposal plans to tax unrealized capital gains at death. Currently, unrealized capital gains at death remain unrealized in the hands of an inheritor until realized, and only if capital gains remain after the step-up basis, as outlined previously. In conjunction with the removal of the step-up basis, taxing unrealized capital gains would equate to a kind of estate tax, but this one has no defined exemption. As one accredited asset management specialist put it, “Out of all of Biden’s proposals, this is likely what scares the financial industry the most” (Michael Antoni, AAMS, personal communication, July 21, 2021).

Figure 8
Total Tax on Corporate Income Distributed as a Qualifying Dividend in the United States, 2020

Note. Figure reproduced from Double Taxation of Corporate Income in the United States and the OECD by T. LaJoie and E. Asen, 2021, Tax Foundation (https://taxfoundation.org/double-taxation-of-corporate-income/).
There would be a stronger incentive to dissave in retirement and weaker incentive to save for retirement.

While other proposals floated within the Biden administration seek to tax unrealized gains at points other than death, such as on an annual basis, these schemes seem highly unlikely to ever materialize due to the extremely complex accounting that would be involved, and the costs of those schemes would be just as difficult to estimate. To tax unrealized gains annually would involve every single asset subject to the tax being appraised every single year and, as anyone who has ever had a house appraised knows, an appraisal is not a guaranteed accurate assessment of an item's worth. Rather, everything is worth what its purchaser will pay for it, but that cannot be ascertained until the point of sale. (The very act of putting an asset, particularly a fungible one, up for sale can diminish the asset's value. This is most observable when a relatively large volume of a particular stock is all at once posted for sale on a stock exchange.) Since one's death is a singular occurrence, taxing unrealized gains only at death means that the ensuing difficulty of ascertaining all unrealized capital gains need happen only once per individual.

Estimated long-run effects of these tax changes (Evangelakis et al., 2021, and authors’ calculations):

- FTE jobs decrease 5 million
- GDP decreases $1 trillion, including $600 billion less investment
- Personal income decreases $1 trillion, about $8,000 per household

5. Create a 15% minimum tax rate on book income

Book income differs from taxable income. Book income serves to inform investors of the financial health of a corporation, while taxable income determines tax liability. A corporation may simultaneously report a profit to shareholders according to book income and report a loss to the IRS according to taxable income. Tax-exempt interest (like municipal bonds) or unrealized capital gains from trading securities would be included in book income but not taxable income. However, when those same capital gains are realized, they are included in taxable income but not book income. Likewise, prepaid interest is taxable income but not book income. Some deductions also affect taxable income but not book income, and some expenses affect book income but not taxable income. Book income also includes all foreign profits, while taxable income includes only 50% of global intangible low-tax income, which will be addressed in the next section.

The American Jobs Plan would effectively create a corporate alternative minimum tax for businesses with book profits of $100 million or greater. This could result in corporations making alterations to precisely how book income is calculated or how much information they disclose to shareholders, in order to minimize book income as they do with taxable income, as opposed to the current situation in which corporations maximize book income. If this 15% minimum tax is effectively imposed on corporations, however, the problem once again arises that corporations do not pay taxes—employees, shareholders, and customers do. Nevertheless, taxing book income is once again a tax on investment since book income depreciates assets much more slowly and does not include the tax credits many corporations receive from research and development.

A tax on book income would also increase corporate planning to avoid higher tax rates. When a business expects to be subject to the book income tax this year but the regular corporate tax next year, or vice versa, that provides an incentive to alter the timing of investment. A corporation subject to the corporate income tax that anticipates being subject to the book income tax that anticipates being subject to the corporate income tax will invest less for now. Investment would be distorted not just in time, but by type as well, as tax-haven investments would be incentivized (Pomerleau, 2020).

Estimated long-run effects of these tax changes (Durante et al., 2021a, and authors’ calculations):

- FTE jobs decrease 16,000
- GDP decreases 0.1%
- Capital stock decreases 0.2%
- Wages decrease 0.1%
- Tax revenue increases $103 billion

6. Increase tax rate on global intangible low tax income (GILTI) to 21% and reduce foreign-derived intangible income (FDII) tax deduction while limiting expensing

Global intangible low tax income (GILTI) is defined as "the income earned by foreign affiliates of US companies from intangible assets such as patents, trademarks, and copyrights" (Tax Policy Center, 2020). It was designed as a kind of minimum income tax that also discouraged corporate inversion, but it unintentionally

---

The authors are grateful to Michael and Gabriel Antoni, cousins of one of the authors, for their professional expertise and insight in the financial field which aided in this research.
functions as a surtax on U.S. corporations doing business overseas (Tax Foundation, n.d.-c). There is currently an effective 10.5% tax on GILTI, of a foreign affiliate of a U.S. company over 10% of the company’s depreciable tangible property, but a company can then deduct 50% of the GILTI and claim a tax credit of 80% of foreign taxes on their GILTI. Thus, the current 21% tax rate has only a 10.5% effective rate because of the 50% deduction. This rather complicated process was constructed with the hope of preventing U.S. companies from shifting profits to low-tax jurisdictions in other countries. The proposed tax plan would double the effective GILTI tax rate to 21% by eliminating the 50% deduction. This could be an attempt to reduce the number of anticipated corporate inversions resulting from increasing the corporate income tax rate to 28%.

Foreign-derived intangible income (FDII) comes from the export sale of nonphysical assets, like intellectual property, to foreign customers (Tax Foundation, n.d.-d). Similar to GILTI, businesses can deduct 37.5% of their FDII, yielding an effective tax rate of 13.125%. The tax plan currently proposed seeks to repeal this deduction, which would encourage corporate inversion since total tax burden would be lower with an overseas headquarters. Lastly, limiting expensing rules for corporations that do business around the world only exacerbates this effect.

Estimated long-run effects of these tax changes (Durante et al., 2021a, and authors’ calculations):

- FTE jobs decrease 12,000
- GDP decreases 0.1%
- Capital stock decreases 0.2%
- Wages decrease 0.1%
- Tax revenue increases $577 billion

The following four tax proposals are part of the Build Back Better plan but are not included in our aggregate effects.

7. **Institute a 12.4% payroll tax on all income over $400,000**

The payroll tax comprises a 6.2% Social Security (officially named the federal Old-Age, Survivors, and Disability Insurance [OASDI] program) tax and a 1.45% Medicare tax, each paid by both the employer and employee. Thus, there is a total tax of 12.4% for Social Security and 2.9% for Medicare, creating a total payroll tax rate of 15.3%. Since the implementation of the Patient Protection and Affordable Care Act (ACA), better known as Obamacare, a single filer has paid an additional 0.9% Medicare tax on all income over $200,000 (IRS, n.d.-c). However, the 12.4% Social Security tax only applies on the first $142,800 of income in 2021 (Social Security Administration, n.d.). The Biden administration’s proposal would create a “valley” effect with no Social Security taxes from $142,801 to $400,000. It is unclear if the employer would be responsible for half of the new taxes, as is the case currently on the first $142,800 of income, or if the employee would pay the entire 12.4%. However, in terms of the total cost of employment for an individual, it is a distinction without a difference. Income over $400,000 would therefore be subject to the 12.4% Social Security tax, the 2.9% Medicare tax, and the 0.9% additional Medicare tax, for a total tax rate of 16.2%. One important note is that the $400,001 threshold would not be indexed to inflation. In other words, the $142,800 cap on payroll taxes will continue to rise with inflation, shrinking the valley between it and $400,001. When that gap is closed, all income will be subject to Social Security taxes.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Proposed Payroll Tax Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCOME</td>
<td>EMPLOYEE TAX RATE</td>
</tr>
<tr>
<td>Up to $142,800</td>
<td>7.65%</td>
</tr>
<tr>
<td>$142,801 – $200,000</td>
<td>1.45%</td>
</tr>
<tr>
<td>$200,001 – $400,000</td>
<td>2.35%</td>
</tr>
<tr>
<td>$400,001 and Up</td>
<td>8.55%</td>
</tr>
</tbody>
</table>

*Note. Authors’ calculations.*

Estimated long-run effects of these tax changes (Watson et al., 2020, and authors’ calculations):

- GDP decreases 0.18%
- Tax revenue increases $684 billion

8. **Replace 401(k) tax deduction with a tax credit**

401(k) contributions are currently tax-deductible, so that the annual amount of an individual’s contribution is deductible from their taxable income. The tax savings on each invested dollar, therefore, increase with higher marginal income tax rate brackets. Additionally, those in higher income brackets also tend to save a larger portion of their income, further increasing the value of the deduction. These contributions are typically not withdrawn until retirement, preserving their status as long-term investment and providing funding for capital in the economy. When funds are finally withdrawn by the individual, they are taxed according to the individual’s income at the time of withdrawal. Thus, if the individual’s income is lower in retirement by enough to be in a lower tax bracket, then there is not just a tax deferral but a tax savings. This is true even though...
the individual’s investment will almost assuredly have grown larger and can result in higher lifetime taxes paid.

The Build Back Better plan is to replace the tax deduction with a refundable tax credit of 26%, but there is a catch. Ordinarily, a refundable tax credit works as a negative income tax, creating the possibility that an individual can receive a net payment from the IRS instead of a net payment to the IRS. In this case, however, the individual is still taxed on the actual contributions to a 401(k) but then receives money back equal to 26% of the contribution as a match in the 401(k) account. This means if the taxpayer is in the first two income tax brackets, which would be a single filer earning only up to $40,125 a year, then this change would be a net benefit since the government match would be greater than the reduction in contributions resulting from the need to pay taxes on contributions. A single filer earning more than $40,125 a year will face a net loss from this change.

This change would provide a greater incentive to invest among those with relatively little income. It also provides a disincentive to invest among those in the middle and upper segments of the income distribution, which is precisely where nearly all investment emanates from (Watson, 2020). For those in the new tax plan’s proposed highest marginal income tax bracket, there would effectively be a 19.1 percentage point loss on their 401(k) contributions, as compared to the current tax structure.

While this change would reduce investment through lower savings in traditional 401(k)s, which would lower investment nationwide, there would also be a considerable shift to Roth 401(k)s. These retirement plans can only be financed with post-tax dollars, but the returns are not taxed. The currently proposed tax plan would drastically change the incentives surrounding the choice of plans and make the Roth a better choice than the traditional 401(k) for more investors than currently. That shift will mitigate the effect of this tax increase but will not eliminate it entirely.

The estimated long-run net effect of these changes will result in lower levels of savings and investment for the country, but it is unclear precisely how the hundreds of millions of current investors who use these two different retirement savings plans will change their investing in response to a complex new treatment of traditional 401(k)s. What is known is that the new allocation will be suboptimal relative to the old allocation, since if the new allocation were preferred, it would have been chosen already. Thus, while the direction of the effect is known, the magnitude is not estimated at this time. Considering this, the estimated aggregate effects should be viewed as more conservative.

9. **Reduce estate tax exemption to $3.5 million and increase the top marginal estate tax rate to 65%**

Estate taxes are paid out of the assets of an estate before the remaining amount is given to a beneficiary, as opposed to an inheritance tax, which the inheritor pays after receiving the assets. Like taxes on capital gains, estate taxes are effectively double taxation because they tax assets that have already been taxed, using remaining money after an individual has already paid income taxes. The federal estate tax, also known as the death tax, currently applies only to estates valued over $11.7 million and has 12 brackets, with the top marginal rate being 40% (IRS, n.d.-d). The currently proposed plan would lower the exemption by $8.2 million and increase the top marginal rate to 65%. Aside from the issue of double (or even triple) taxation, the estate tax also reduces intergenerational savings, which in turn reduces investment and the nation’s capital stock. An estate valued at $11.7 million would currently have zero tax liability. The same estate under the plan currently before Congress would owe $5,095,800. That is an effective tax rate of 44%, compared to 0% currently. An estate valued at $20 million would currently have a tax liability of $2,920,000 for an effective tax rate of 15%. The same estate under the plan would owe $9,245,800. That is an effective tax rate of 46%, more than 3 times the current tax. The estimated long-run net effect of these changes will result in lower levels of savings and investment for the country, but it is unclear precisely how the hundreds of millions of current investors who use these two different retirement savings plans will change their investing in response to a complex new treatment of traditional 401(k)s. What is known is that the new allocation will be suboptimal relative to the old allocation, since if

---

7 Only 13.67% of taxpayers in the first income tax bracket contribute to a 401(k)-style plan, while 82.77% of taxpayers in the top income tax bracket contribute to those accounts. Those in the upper-income tax brackets also contribute more, both in absolute terms and relative to their larger incomes.
Estimated long-run effects of these tax changes (Watson et al., 2020, and authors’ calculations):

- GDP decreases 0.15%
- Revenue increases $234 billion

10. Cap itemized deductions at 28%, instead of the income tax rate, for incomes above $400,000

Since the Trump tax cuts, which increased standard deductions, itemized deductions have been used disproportionately by those at the upper end of the income distribution. With a proposed tax rate of 39.6%, itemized deductions provide a substantial cost savings. Capping these deductions at 28% of income limits savings for itemizing past that point.

Taxing previously untaxed income or investment substantially reduces the incentive to consume or invest, whether that consumption or investment benefits the individual who earned the income or someone else. With an elasticity of -1.0, the economic activity being taxed will decline proportional to the

---

**Table 2**

*Current and Proposed Estate Tax Schedules*

<table>
<thead>
<tr>
<th>CURRENT TAX RATE</th>
<th>CURRENT TAX BRACKETS</th>
<th>CURRENT TAX OWED</th>
</tr>
</thead>
<tbody>
<tr>
<td>18%</td>
<td>$0 -$10,000</td>
<td>18% of taxable amount</td>
</tr>
<tr>
<td>20%</td>
<td>$10,001 - $20,000</td>
<td>$1,800 plus 20% of the amount over $10,000</td>
</tr>
<tr>
<td>22%</td>
<td>$20,001 - $40,000</td>
<td>$3,800 plus 23% of the amount over $20,000</td>
</tr>
<tr>
<td>24%</td>
<td>$40,001 - $60,000</td>
<td>$8,200 plus 24% of the amount over $40,000</td>
</tr>
<tr>
<td>26%</td>
<td>$60,001 - $80,000</td>
<td>$13,000 plus 26% of the amount over $60,000</td>
</tr>
<tr>
<td>28%</td>
<td>$80,001 to $100,000</td>
<td>$18,200 plus 28% of the amount over $80,000</td>
</tr>
<tr>
<td>30%</td>
<td>$100,001 - $150,000</td>
<td>$23,800 plus 30% of the amount over $100,000</td>
</tr>
<tr>
<td>32%</td>
<td>$150,001 - $250,000</td>
<td>$38,800 plus 32% of the amount over $150,000</td>
</tr>
<tr>
<td>34%</td>
<td>$250,001 to $500,000</td>
<td>$70,800 plus 34% of the amount over $250,000</td>
</tr>
<tr>
<td>37%</td>
<td>$500,001 - $750,000</td>
<td>$155,800 plus 37% of the amount over $500,000</td>
</tr>
<tr>
<td>39%</td>
<td>$750,001 - $1,000,000</td>
<td>$248,300 plus 39% of the amount over $750,000</td>
</tr>
<tr>
<td>40%</td>
<td>$1,000,001 and Up</td>
<td>$345,800 plus 40% of the amount over $1,000,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROPOSED TAX RATE</th>
<th>PROPOSED TAX BRACKETS</th>
<th>PROPOSED TAX OWED</th>
</tr>
</thead>
<tbody>
<tr>
<td>18%</td>
<td>$0 -$10,000</td>
<td>18% of taxable amount</td>
</tr>
<tr>
<td>20%</td>
<td>$10,001 - $20,000</td>
<td>$1,800 plus 20% of the amount over $10,000</td>
</tr>
<tr>
<td>22%</td>
<td>$20,001 - $40,000</td>
<td>$3,800 plus 23% of the amount over $20,000</td>
</tr>
<tr>
<td>24%</td>
<td>$40,001 - $60,000</td>
<td>$8,200 plus 24% of the amount over $40,000</td>
</tr>
<tr>
<td>26%</td>
<td>$60,001 - $80,000</td>
<td>$13,000 plus 26% of the amount over $60,000</td>
</tr>
<tr>
<td>28%</td>
<td>$80,001 to $100,000</td>
<td>$18,200 plus 28% of the amount over $80,000</td>
</tr>
<tr>
<td>30%</td>
<td>$100,001 - $150,000</td>
<td>$23,800 plus 30% of the amount over $100,000</td>
</tr>
<tr>
<td>32%</td>
<td>$150,001 - $250,000</td>
<td>$38,800 plus 32% of the amount over $150,000</td>
</tr>
<tr>
<td>34%</td>
<td>$250,001 to $500,000</td>
<td>$70,800 plus 34% of the amount over $250,000</td>
</tr>
<tr>
<td>37%</td>
<td>$500,001 - $750,000</td>
<td>$155,800 plus 37% of the amount over $500,000</td>
</tr>
<tr>
<td>39%</td>
<td>$750,001 - $3,500,000</td>
<td>$248,300 plus 39% of the amount over $750,000</td>
</tr>
<tr>
<td>45%</td>
<td>$3,500,001 - $10,000,000</td>
<td>$1,320,800 plus 45% of the amount over $3,500,000</td>
</tr>
<tr>
<td>50%</td>
<td>$10,000,001 - $50,000,000</td>
<td>$4,245,800 plus 50% of the amount over $10,000,000</td>
</tr>
<tr>
<td>55%</td>
<td>$50,000,001 - $1,000,000,000</td>
<td>$24,245,800 plus 55% of the amount over $50,000,000</td>
</tr>
<tr>
<td>65%</td>
<td>$1,000,000,001 and Up</td>
<td>$546,745,800 plus 65% of the amount over $1,000,000,000</td>
</tr>
</tbody>
</table>


---

8 These estimates do not include the 65% tax on billion-dollar estates, which would increase the magnitude of these effects.
increase in tax rate. Formerly itemized deductions in excess of 28% of income would be subject to a 39.6% tax rate and would therefore decline by that same rate of 39.6%.

This 10th proposal provides a perfect illustration of the unintended—and often unaccounted—effects of tax increases. Static estimations ignore the incentives altered by tax rate changes. Dynamic estimations, however, factor in these effects before calculating tax revenue. Consequently, this tax proposal will yield approximately 39.6% less revenue than anticipated. Similarly, all the tax increases outlined in this paper suffer from negative elasticities in relation to tax rate increases.

Estimated long-run effects of these tax changes (Watson et al., 2020, and authors’ calculations):

- GDP decreases 0.09%
- Tax revenue increases $237 billion

### Aggregate Effects of the Tax Changes in the Build Back Better Plan

There are at least five decidedly negative effects from this decalogue of proposed tax increases.

First and foremost, these 10 proposed tax increases raise the cost of investment. They discourage saving and investing. Lower levels of investment yield lower long-term growth, lower real wages, a lower standard of living in the future, and even recession in extreme cases. The commercial bond market as we know it could cease to exist (Michael Antoni, AAMS, personal communication, July 21, 2021). This is because the unprecedented new or higher taxes will drive up the yields demanded by investors, making such borrowing prohibitively expensive. Businesses will have no alternative but to turn to commercial banks for loans as a source of capital. Furthermore, the tax benefits of municipal bonds will become increasingly attractive to investors. This will drive down municipal bond yields and encourage borrowing by state and local governments to finance existing and additional spending.

In conjunction with artificially low interest rates, these changes also encourage consumer debt. To consume a relatively large amount at once, perhaps purchasing a vehicle, one can either save over time, or borrow and pay a penalty in the form of interest. If savings are going to be taxed more, that provides a disincentive to save and makes borrowing more attractive.

Third, these policies will encourage dissaving via dissipation, particularly in the twilight years. Intergenerational savings allow for long-term capital projects to be more easily funded, which keeps down real interest rates by increasing the supply of loanable funds. Intergenerational savings can be viewed as an investment in the next generation. Like any investment, if one taxes it more, one will diminish it. A person has little incentive to try and pass an inheritance to his or her children if a relatively large portion of that inheritance will be seized in taxes.

Fourth, the reduction in investment will drastically reduce the capital stock. A lower capital stock means a lower marginal product of labor (once again, lower real wages), slower technological advancement, fewer breakthroughs in medicine, clean energy, agriculture, telecommunications, and more, with overall less efficiency in the economy.

Finally, these proposals will cause tremendous shifts within nonresidential capital investment, with four distinct reallocations of investment taking place in the future. First, it could remain as nonresidential capital investment if the current net return is higher than the increase in taxes. A second option would be a shift toward residential capital investment. In fact, “a likely result will be the purchasing of more hard assets instead of investing in stocks and bonds” (Gabriel Antoni, CFP, personal communication, July 21, 2021), and larger real estate purchases would be a prime example of that behavioral change. Third, the nonresidential capital investment could simply be used to consume more today, increasing consumption spending. Lastly, some amount of nonresidential capital investment will be taken in taxes.
In aggregate, these proposals have severe negative effects on the economy. They are relatively inefficient methods of raising revenue, decreasing output by more than twice the amount of new tax revenue raised (Watson, 2021). They also penalize investment by increasing the cost of capital. This decreases investment, real wages, and economic growth. Since economic activity decreases, the tax base is also decreased, and these proposals will yield less tax revenue than anticipated. The bills containing these tax increases also contain trillions of dollars in spending, which will increase the national debt by $4.5 trillion. Other tax increases not detailed here, but part of Democrats’ current legislative agenda and included in our aggregate effects, are higher taxes on tobacco and nicotine products (21,000 lost jobs), reduced employee compensation deductibility (9,000 lost jobs), and higher taxes on imported petroleum (10,000 lost jobs; Durante et al., 2021b). And other tax proposals considered but not included in our aggregate effects include taxing cryptocurrency, capping individual retirement account (IRA) contributions while increasing minimum distributions, and eliminating the cap on state and local tax (SALT) deductions. Including these proposals would increase our negative aggregate effects, indicating that our aggregate estimates are highly conservative.

Despite his repeated promise not to raise taxes on those earning less than $400,000 a year, the president has proposed many implicit and even explicit tax increases on that group. Aside from the bottom quintile—those who earn under roughly $20,000 a year—all income groups will see their real after-tax incomes decline as a result of the proposed tax agenda, through a combination of direct and indirect taxation, as well as reduced income from lower economic growth (Watson, 2021).

**Government Spending and Other Provisions in the Build Back Better Plan**

In calculating total GDP losses, a conservatively estimated government spending multiplier of 0.6 was used to determine the addition to GDP by government spending while accounting for much of the crowding-out effect of the private sector (Ramey, 2019; Ginn, 2021). Government spending of $6.2 trillion, therefore, adds just $3.7 trillion to GDP. Accommodative monetary policy and corporate tax rate increases are assumed to offset each other. The total amount of government spending is conservatively estimated to be the sum of the $5 trillion American Families Plan (Committee for a Responsible Federal Budget, 2021) and the $1.2 trillion American Jobs Plan (Committee for a Responsible Federal Budget, 2019), totaling $6.2 trillion. This surpasses the OMB estimate of $5 trillion in new spending (Office of Management and Budget, 2021), which relies on questionable assumptions, such as specific welfare programs ending.

Wherever possible, general equilibrium models with dynamic revenue estimates are used that factor in changes in tax bases from elasticities and changes to GDP. In calculating total private investment losses, a capital stock to investment ratio of 0.045 was used. This is a conservative estimate since the most recent year for which there is data (2019) had a ratio of 0.051, continuing a 70-year-long trend of an increasing ratio (Federal Reserve Bank of St. Louis, 2021a, 2021b). Although the ratio decreases during recessions and will have declined for 2020, it is assumed to return to the 2019 level quickly and to average at least 0.045, the level we used, over the coming decade.

There are many regulatory changes and transfer payments in current legislation whose effects have not been included in this paper but are worth mentioning in closing since they will have many of the same effects as the tax increases discussed in this paper. Extending or expanding the enhanced Child Tax Credit, Earned Income Tax Credit, Child and Dependent Care Tax Credit, and more, disincentivizes working, reducing incomes, investment, and GDP. Just the changes to these three tax credits alone are expected to cause a loss of 15,000 jobs (Durante et al., 2021b). Permanently expanding the health insurance premium tax credits would similarly have a negative effect (Mulligan et al., 2021). Regulatory changes subsidizing so-called green energy while increasing tax and regulatory burdens on fossil fuels also result in a less efficient allocation of resources. These misguided policies only add to the negative effects induced by the tax increases outlined in this paper, many of which contribute to economic activity being taxed more than once and at effective rates exceeding 50%.

**Conclusion: Effects of the Build Back Better Plan**

President Biden and congressional Democrats seek to spend an additional $6.2 trillion over the next decade, spread across the American Jobs Plan and American Families Plan that comprise their Build Back Better plan. This Build Back Better plan includes large quantities of taxes, spending, and debt, which contributes to reducing growth rates for GDP, employment, income, and the capital stock. Over the next decade, this plan will result in conservatively estimated dynamic economic effects compared to baseline growth of 5.3 million fewer jobs, $3.7 trillion less in GDP, $1.2 trillion less in income, and $4.5 trillion in new debt. Given these negative outcomes, Congress should reject the Build Back Better plan. 🌟
## Appendix: Proportional Effects on States of Build Back Better Plan

<table>
<thead>
<tr>
<th>STATE</th>
<th>SHARE OF NEW DEBT ($ BILLIONS)</th>
<th>STATE JOB LOSSES (THOUSANDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>68</td>
<td>81</td>
</tr>
<tr>
<td>Alaska</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Arizona</td>
<td>97</td>
<td>115</td>
</tr>
<tr>
<td>Arkansas</td>
<td>41</td>
<td>48</td>
</tr>
<tr>
<td>California</td>
<td>534</td>
<td>634</td>
</tr>
<tr>
<td>Colorado</td>
<td>78</td>
<td>93</td>
</tr>
<tr>
<td>Connecticut</td>
<td>49</td>
<td>58</td>
</tr>
<tr>
<td>Delaware</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Florida</td>
<td>291</td>
<td>345</td>
</tr>
<tr>
<td>Georgia</td>
<td>145</td>
<td>172</td>
</tr>
<tr>
<td>Hawaii</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>Idaho</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td>Illinois</td>
<td>173</td>
<td>205</td>
</tr>
<tr>
<td>Indiana</td>
<td>92</td>
<td>109</td>
</tr>
<tr>
<td>Iowa</td>
<td>43</td>
<td>51</td>
</tr>
<tr>
<td>Kansas</td>
<td>40</td>
<td>47</td>
</tr>
<tr>
<td>Kentucky</td>
<td>61</td>
<td>72</td>
</tr>
<tr>
<td>Louisiana</td>
<td>63</td>
<td>75</td>
</tr>
<tr>
<td>Maine</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Maryland</td>
<td>83</td>
<td>99</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>95</td>
<td>113</td>
</tr>
<tr>
<td>Michigan</td>
<td>136</td>
<td>162</td>
</tr>
<tr>
<td>Minnesota</td>
<td>77</td>
<td>91</td>
</tr>
<tr>
<td>Mississippi</td>
<td>40</td>
<td>47</td>
</tr>
<tr>
<td>Missouri</td>
<td>83</td>
<td>99</td>
</tr>
<tr>
<td>Montana</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Nebraska</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>Nevada</td>
<td>42</td>
<td>50</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>New Jersey</td>
<td>125</td>
<td>149</td>
</tr>
<tr>
<td>New Mexico</td>
<td>29</td>
<td>34</td>
</tr>
<tr>
<td>New York</td>
<td>273</td>
<td>324</td>
</tr>
<tr>
<td>North Carolina</td>
<td>141</td>
<td>167</td>
</tr>
<tr>
<td>North Dakota</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Ohio</td>
<td>159</td>
<td>189</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>53</td>
<td>63</td>
</tr>
<tr>
<td>Oregon</td>
<td>57</td>
<td>68</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>176</td>
<td>208</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>South Carolina</td>
<td>69</td>
<td>82</td>
</tr>
<tr>
<td>South Dakota</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Tennessee</td>
<td>93</td>
<td>111</td>
</tr>
<tr>
<td>Texas</td>
<td>394</td>
<td>467</td>
</tr>
<tr>
<td>Utah</td>
<td>44</td>
<td>52</td>
</tr>
<tr>
<td>Vermont</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Virginia</td>
<td>117</td>
<td>138</td>
</tr>
<tr>
<td>Washington</td>
<td>104</td>
<td>124</td>
</tr>
<tr>
<td>West Virginia</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>80</td>
<td>94</td>
</tr>
<tr>
<td>Wyoming</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Note. Authors’ calculations based on aggregate estimates.
References


Federal Reserve Bank of St. Louis. (2021b). Real gross private domestic investment. https://fred.stlouisfed.org/series/GPDIC1#0


ABOUT THE AUTHORS

E. J. Antoni, PhD, is an economist for the Foundation. Antoni’s research has been featured with the Daily Caller, Fox Business, the Wall Street Journal, National Review, the Show-Me Institute, the Heartland Institute, the Arizona Chamber Foundation, FreedomWorks, and the Committee to Unleash Prosperity, where he is a visiting fellow. He has taught courses ranging from labor economics to money and banking.

Antoni earned his master's and doctorate in economics from Northern Illinois University.

Vance Ginn, PhD, is chief economist at the Texas Public Policy Foundation. He is the former associate director of economic policy for the Office of Management and Budget at the Executive Office of the President, former university lecturer, and an expert on economic and fiscal issues with research that seeks opportunities to let people prosper in Texas, D.C., and beyond. His work has been featured in the Washington Post, Fox News, Forbes, the Federalist, RealClear Policy, The Hill, Washington Examiner, and more.

Ginn earned his doctorate in economics at Texas Tech University.

Stephen Moore is co-founder of the Committee to Unleash Prosperity and an economic contributor to FreedomWorks. Author of more than half a dozen books, he previously served as president of the Club for Growth, chief economist of the Heritage Foundation, senior economist of the U.S. Congress Joint Economic Committee, and as a member of the Wall Street Journal editorial board.
About Texas Public Policy Foundation
The Texas Public Policy Foundation is a 501(c)3 nonprofit, nonpartisan research institute. The Foundation promotes and defends liberty, personal responsibility, and free enterprise in Texas and the nation by educating and affecting policymakers and the Texas public policy debate with academically sound research and outreach.

Funded by thousands of individuals, foundations, and corporations, the Foundation does not accept government funds or contributions to influence the outcomes of its research.

The public is demanding a different direction for their government, and the Texas Public Policy Foundation is providing the ideas that enable policymakers to chart that new course.

About the Committee to Unleash Prosperity
The Committee to Unleash Prosperity is a 501(c)(3) organization dedicated to educating the public on the pillars of supply-side economics.