The Macroeconomic E ects of Business Tax Cuts

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Summary of Findings

In 2017, Congress passed the Tax Cuts and Jobs Act, a tax reform that included a permanent cut in the income tax rate for corporations from 35 percent to 21 percent, and a smaller temporary cut in the income tax rate for pass-through businesses. More recently, in the President's Budget for scal year 2023, President Biden proposed that Congress partially reverse the corporate tax cut, raising the corporate tax rate to 28 percent. These are all examples of changes in business income tax rates. What are the macroeconomic e ects of such changes?

Estimating the macroeconomic e ects of business taxes is challenging because taxes a ect investment through several channels. The most important channel is that taxes distort business decisions and discourage investment. However, the tax system allows the deductibility of interest expenses from taxable income as well as various forms of accelerated depreciation of capital (bonus depreciation of investment, double declining balance method) and these tax shields mitigate the tax distortion. Furthermore, any initial change in investment has general-equilibrium e ects on interest rates, wages, labor, and the aggregate economy, which in turn have feedback e ects on investment.

I study the various channels through which business taxes a ect the aggregate economy using a macroeconomic model that incorporates debt and equity nancing, interest deductibility, and accelerated depreciation of capital. All these features are crucial to estimate327(a)-37(tly)8(of)-359c.TJ 0 359c.0 3669 Td[(J 0 -21esemit)26(57no)5 /F1 1Ac7

labor and stimulates the labor demand. As the real wage rate increases, labor and output increase. The effect on output is small in the initial year, only 0.05 percent, although it increases over time. The interest rate rises to encourage saving and finance the increase in investment. As a result of the permanent tax cut, the business tax liability decreases persistently. The tax cut reduces the tax advantage of debt, so businesses substitute equity-financing for debt-financing, decreasing the debt share of financial capital by 0.25 percentage points. All these effects are shown by the solid line of Figure 1 in the paper.

As I have just described, the model predicts that a 1 percentage point permanent cut in the business income tax rate raises business investment and output by, respectively, 0.25 percent and 0.05 percent in the initial year. The size of these effects is somewhat small. The reason is that interest deductibility and accelerated depreciation provide tax shields that reduce the tax distortion on investment. When the tax distortion is smaller, a tax cut reduces the distortion by less and has a smaller effect on investment and output.

The model also highlights how the macroeconomic effects of a tax cut depend on various features of the tax system. When businesses finance a larger share of their investment expenses through debt, the macroeconomic effects of the tax cut are smaller. The reason is that, when investment is financed through debt, interest deductibility provides a tax shield, so the tax distortion on investment is smaller and the tax cut has a smaller effect on the distortion and on investment. Similarly, accelerated depreciation of capital reduces the tax distortion on investment, so the macroeconomic effects of a tax cut are smaller when businesses can depreciate their capital faster. Furthermore, permanent tax cuts stimulate investment more than temporary tax cuts. The reason is that, when tax cuts are temporary, tax rates are higher in the future than today, so tax shields are higher in the future as well and businesses have an incentive to delay investment to take advantage of the higher future tax shields.

Finally, the model compares the macroeconomic e ects of a tax cut to two alternative policy changes: an increase in the bonus depreciation of investment (the fraction of investment expenses that can be immediately deducted from taxable income); and an increase in the investment tax credit. Both an increase in the bonus depreciation and an increase in the tax credit are more stimulative than a tax cut: They can generate a larger increase in investment with the same increase in the business tax liability.