Commentary

"What Would Be the Macroeconomic Effects of a Corporate Tax Hike?"

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Last March, in the 2023 President's Budget, President Biden proposed that Congress raise the corporate tax rate from 21 percent to 28 percent.[1] Then, last August, Congress introduced a new 15 percent corporate alternative minimum tax on large corporations in the Inflation Reduction Act.[2] What are the effects of such corporate tax hikes on aggregate economic activity?

There are two methods to compute the effects of a corporate tax change. First, we can use statistics and econometrics to estimate the effects from the history of past tax changes. Alas, this method is not perfect, as history often rhymes but does not repeat itself. Second, we can use macroeconomic models that replicate how the economy works and how households and businesses respond to economic incentives.

In this commentary, first, I explain the advantages of using macroeconomic models, and then, I use one such model to predict the effects of a corporate tax hike.

The Advantages of Using a Macroeconomic Model.

Using a macroeconomic model to predict the effects of a corporate tax change has two main advantages over using econometrics. The first advantage has to do with the interaction between tax changes and economic conditions. Past changes in the corporate tax rate often were driven by changes in economic conditions. In technical jargon, changes in the corporate tax rate were endogenous. With econometrics, it is difficult to distinguish whether the changes in economic conditions were caused by the changes in the corporate tax rate or vice versa. In contrast, macroeconomic models can clearly distinguish the two effects.

The 2017 tax reform is a good example of why it is difficult to determine whether a tax change was driven by economic conditions or not. In 2017, Congress passed the Tax Cuts and Jobs Act, a tax reform that included a cut in the corporate tax rate from 35 percent to 21 percent. On the one hand, the tax cut may have been exogenous, the ultimate result of a political election that had little to do with economic conditions. On the other hand, the tax cut may have been endogenous, as it was partly made possible by the low levels of interest rates, which relaxed the fiscal constraint and allowed cutting taxes and raising government debt. In this latter case, causality would have run both directions—the tax cut would have affected economic conditions and vice versa—and it would be difficult for econometrics to distinguish the effects.

The second advantage of using macroeconomic models rather than econometrics has to do with how often the specific tax change that we are interested in occurred in the past. Past changes in the corporate tax rate were often accompanied by changes in other policy tools, for instance, changes in depreciation allowances and investment tax credits. The details about the policy changes happened in the past. We will consider one such policy change

The working of the model sheds light on the economic intuition behind the effects. The tax hike raises the marginal effective tax rate, which distorts investment decisions and discourages investment demand. As investment demand by the corporate sector decreases, the real interest rate decreases and stimulates investment demand by the noncorporate business sector. In aggregate, however, business investment decreases. The lower level of investment reduces the stock of capital over time. With a lower capital stock, the marginal product of labor decreases, reducing the business demand for labor and the real wage rate. As the real wage rate decreases, employment decreases and leads to a lower level of output.

The size of the effects on output, investment, and employment, although not negligible, are not large. The reason is that the distortion generated by the tax are mitigated by the presence of two tax shields that reduce taxable income, one associated with the deductibility of interest expenses and one associated with the accelerated depreciation of capital. As the tax rate increases, be analyzed empirically with real world data and econometric techniques). Bonus depreciation increases by 5 percentage points in the initial year and then by an additional 1 percentage point per year over the next 5 years. As a result, from the sixth year on, the total increase in bonus depreciation is 10 percentage points. As shown in Table 3, the gradual increase in bonus depreciation decreases