High corporate taxes incentivize corporate debt

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Multinational American companies with significant operations in countries with low corporate taxes take on less debt than companies that face higher taxes, according to a new study from the University of Maryland's Robert H. Smith School of Business. The finding helps to solve an academic mystery: A link between higher corporate taxes and debt levels is predicted by economic theory, but some recent studies have either failed to find such a connection or found it to be weaker than expected.

The paper, by the Smith School finance professor Michael Faulkender and Jason Smith, of Utah State University—and accepted at the *Journal of Financial Economics*—provides yet more evidence that varying corporate-tax rates across countries distort economic activity.

Taking on debt can be one way for a corporation to reduce its corporate tax bill, because the interest paid to debtholders is deducted before the corporate tax is calculated. So it stands to reason that a corporation that does most of its business in the United States, with its unusually high rate of 35 percent, would take on more debt than a company whose revenues come from Ireland, where the corporate tax is 12.5 percent. But not all empirical studies have identified such a cause-and-effect relationship.

Faulkender and Smith argue that the failure to find the expected pattern occurred because other researchers have made faulty assumptions about when foreign profits are "repatriated" to the United States. If profits are brought back immediately, the companies face a total tax of 35 percent,

because the U.S. Treasury demands payment equal to the difference between the foreign tax and the American tax. But many companies do not bring profits home in that way, preferring to keep the money abroad as long as possible. "You should have very little debt when the money is overseas," he says. "You should only take on the debt when you bring the money back, because that's when the income would be subject to the high tax rate."

Faulkender notes that some companies may plan on keeping the cash abroad indefinitely, waiting either for corporate tax reform in the United States or for a corporate-tax "holiday" in which it is temporarily reduced. (The last one was in 2004.)

Faulkender and Smith therefore assume that money earned abroad stays abroad, and they calculate the corporate tax rate faced by multinational corporations as a weighted average of the rates in the different countries in which the company's subsidiaries operate. They drew the information on how much each company made in each nation —it is not available in public filings—from a proprietary survey conducted by the Bureau of Economic Analysis. The BEA survey covered the years 1994 to 2011.

Once that adjustment was made (positing that companies pay the tax rate only where the money is earned, not the American rate, too) the companies facing higher taxes indeed had more debt. For instance, a company facing an overall tax of 25 percent had, on average, a leverage ratio of 31.8 percent. In contrast, a company facing a 35 percent tax had a 33.8 leverage ratio. That's not just a statistically significant effect: It's one that's large enough that tax rates should be considered a "first order" driver of debt levels, Faulkender and Smith say.

Cause and effect could conceivably work the other way around. Firms could choose their capital structure and then seek out tax regimes that suit their structure. But Faulkender and Smith concluded that that

hypothesis could not explain the entire effect identified in the paper.

Ideally, companies should take on debt for business reasons, not tax avoidance. So the study offers grist for people who argue that the American and European corporate taxes ought to be brought into line—namely, by lowering the American tax and raising tax in outliers such as Ireland. "When there is corporate tax reform, should this phenomenon be part of the discussion?" Faulkender asks. "Yes. Will reform happen under this President, and this Congress? No."

More information: "Taxes and Leverage at Multinational Corporations," by Michael Faulkender and Jason Smith, is forthcoming from the *Journal of Financial Economics*.

Provided by University of Maryland