In this paper, we show that the notion that debt-financed spending has a low fiscal cost is misleading. We review econometric studies of OECD countries that show that the growth rate declines, interest rates increase, and the $r - g$ differential increases as a country’s public debt ratio increases. We also estimate a simple regression model of the $r - g$ gap in Canada based on the annual data from 1991 to 2019. Consistent with the findings of other more elaborate econometric studies, the regression results indicate that the $r - g$ gap in Canada is affected by international financial and economic conditions, as reflected by the $r - g$ gap in the United States, but also by the public debt to GDP ratio. In particular, a one percentage point increase in the debt to GDP ratio of the federal, provincial, territorial, and local government sector is associated with a 6.7 basis point increase in the Canadian $r - g$ gap.

Accordingly, an increase in the government debt ratio by raising the $r - g$ gap means that the primary deficit has to be reduced to stabilize the debt ratio. As a result, the average fiscal cost increases. As every first-year student of economics knows, when average cost increases, marginal cost is greater than average cost. This means that the increase in taxes needed to stabilize a government’s debt can exceed the increase in program spending. In other words, the marginal fiscal cost of debt-financed spending can be greater than one if the difference between the real interest rate on government debt and the economy’s growth rate increases with the public sector debt ratio.

We use a model of government debt dynamics that incorporates the link between higher government debt ratios and the $r - g$ gap to calculate the average and marginal fiscal cost of a debt-financed increase in government program spending.
spending. The model indicates that if the spending increase results in a five percentage point increase in the debt ratio, an additional $1.00 of program spending means that taxes have to increase by $1.19 to stabilize the debt ratio. This demonstrates that there is no free lunch with debt-financed increased government spending even though the real interest rate on government debt is less than the economy’s growth rate.

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An additional reason for exercising fiscal prudence in the current low real interest rate environment is that international conditions may quickly change and the gap between the interest rate and the growth rates could be reversed. Such a reversal would require a large fiscal adjustment to stabilize the public debt ratio at its current level.

Finally, while the focus of this paper is on the fiscal cost of debt-financed government spending, it is important to recognize that there is an economic cost of debt-financed government spending in terms of the loss of private sector incomes when government borrowing crowds out private investment and lowers the economy’s productive potential.