by Bev Dahlby and Ergete Ferede

Prior to the pandemic, the federal government's fiscal anchor was to maintain its debt-to-GDP ratio at 30%. But then, with federal borrowing to finance the massive increase in pandemic-related spending, the debt ratio shot up to 47.5% in 2021. Rather than adopt the fiscal restraints necessary to return the debt ratio to its previous target, the federal government has embraced a new fiscal anchor—gradually reducing the federal debt-to-GDP ratio over the medium term—with no explicit target ratio or timetable. Although it has adopted a very accommodating goal, the federal government argues that a declining debt ratio will provide the "fiscal room" to deal with future fiscal challenges arising from recessions, new pandemics, and geopolitical risks.

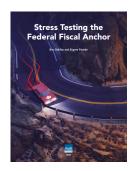
To demonstrate its commitment to its new fiscal anchor, the federal government has projected a steadily declining debt-to-GDP ratio over the next 45 years, assuming a constant annual economic growth rate of 1.6%. However, the assumption that the economy will grow at a constant rate ignores our historical experience—that the Canadian economy will experience one or more recessions in the coming decades.

It is important to evaluate how major economic downturns could affect the public debt. Negative economic shocks increase public debt directly, because government revenues decline and some public expenditures may increase, leading to larger budget deficits (or reduced surpluses), and indirectly over time through higher real interest rates on government debt and slower economic growth rates as public-sector debt increases. The direct and indirect effects of a recession could set off a debt "doom loop", with the debt ratio spiraling upward if the government does not quickly respond by reducing its post-recession budget deficits.

In order to provide a realistic assessment of the federal government's multi-year fiscal plan, we use a Monte Carlo simulation model to investigate how the federal government's debt ratio might evolve if the Canadian economy is subject to random growth-rate shocks similar to those experienced over the last 40 years. The model generates 1,000 episodes of the evolution of the federal net-debt ratio over a 20-year time horizon when the economy is subject to annual growthrate shocks. It indicates that there is a 30% chance that the federal debt-to-GDP ratio will be higher over a 10-year time horizon and a 53% chance that it will be higher over a 20year time horizon. The likelihood of no recessions occurring over a 20-year time horizon is only 15%. This means that it is very unlikely that the federal projected debt ratios will be realized. In other words, taking the federal government's projected primary surpluses at face value, but with random shocks to the growth rate that mimic past experience, the federal fiscal anchor will most likely be violated. The probabilities of one, two, and three or more recessions over a 20-year time horizon are 32%, 28%, and 25%, respectively. When two recessions occur, there is a 60% chance that the debt ratio will increase.

What are the policy implications of taking the likelihood of future recessions seriously? Clearly, a government's fiscal policy should not be so restrictive that it entirely eliminates the possibility of an increase in the debt ratio after a downturn in the economy. Nonetheless, we argue that the federal government should adopt a more restrictive fiscal policy to reduce the likelihood that the federal debt ratio will increase in the future. Our model indicates that, if the federal government increased its projected primary budget surplus to 2% of GDP, the probability of an increasing debt ratio would drop to around 20%. As demonstrated in our recent publication, *An Evaluation of Three Alternative Fiscal Anchors for Canada* and consistent with the conclusion

reached by Alesina, Favero, and Giavazzi in their pioneering book, *Austerity: When It Works and When It Doesn't*, the best way to lower budget deficits and public debt is through restraint of public-sector expenditures.



Stress Testing the Federal Fiscal Anchor

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