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A FISCAL ANCHOR FOR ALBERTA

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ALBERTA FUTURES PROJECT PRE-PUBLICATION SERIES

Alberta has a long history of facing serious challenges to its economy, including shocks in the form of resource price instability, market access constraints, and federal energy policies. However, the recent and current challenges seem more threatening. It seems that this time is truly different.

The collapse of oil and gas prices in 2014 combined with the rapid growth of U.S. oil production, difficulties in obtaining approval for infrastructure to reach new markets and uncertainty regarding the impacts of climate change policies world-wide have proven to be strong headwinds for the province's key energy sector. Together, the negative effects on employment, incomes and provincial government revenues have been substantial. To make matters worse, in early 2020 the Covid-19 pandemic struck a major blow to the lives and health of segments of the population and to livelihoods in many sectors. The result has been further employment and income losses, more reductions in government revenues and huge increases in government expenditures and debt. These events, combined with lagging productivity, rapid technological shifts, significant climate policy impacts and demographic trends, call for great wisdom, innovation, collective action and leadership to put the province on the path of sustainable prosperity.

It is in this context that we commissioned a series of papers from a wide range of authors to discuss Alberta's economic future, its fiscal future and the future of health care. The plan is that these papers will ultimately be chapters in three e-books published by the School of Public Policy. However, in the interest of timeliness and encouraging discussion, we are releasing selected chapters as pre-publications.

1. INTRODUCTION

In his Budget 2021 Address, the Honorable Travis Toews, President of Treasury Board and Minister of Finance, announced that the Government of Alberta (GOA) has adopted the following fiscal anchors:

- bringing spending in line with that of other provinces;
- keeping Alberta's net debt to GDP ratio below 30 per cent; and,
- adopting, post-pandemic, a "clear path and timeline for balancing the budget". (Budget Address 2021, 11).

In this chapter, we will evaluate the GOA's set of fiscal anchors within a general framework for evaluating the choice of fiscal anchors and then consider their application within the Alberta context.

A fiscal anchor is a policy that imposes a constraint on a government's fiscal choices affecting debt, deficits, expenditures, or interest payments. The terms "fiscal anchor" and "fiscal rules" will be used interchangeably. Why should Alberta adopt a fiscal anchor? After the economic and fiscal shocks caused by low oil prices and the pandemic, in the absence of a fiscal anchor the future direction of Alberta's fiscal policies would be highly uncertain, making private sector investment and savings decision more challenging. In addition, foreign lenders and bond rating agencies might lose confidence in the GOA's fiscal policies, especially because of the structural fiscal imbalance, thereby lowering the Alberta's credit rating and increasing interest payments on debt.¹

According to Lledó et al. (2017), 96 governments around the world have adopted fiscal rules. Why do governments adopt rules that restrict their fiscal policies? One rationale is to remove a perceived fiscal policy bias towards deficit financing, which can threaten the long-term sustainability of a government's finances. A second reason is to prevent the adoption of pro-cyclical fiscal policies that can exacerbate the economic fluctuations caused by, for example, a commodity price shock. A third rationale for a fiscal anchor in some jurisdictions is to limit the size of government to overcome a perceived political bias that leads to "excessive" spending and taxation. A fiscal anchor may help a finance minister impose fiscal discipline on spending ministries.

Since 1992, the GOA has adopted seven different sets of fiscal rules. Given that the GOA has changed its fiscal rules when they became binding or imposed difficult fiscal choices, skepticism regarding the usefulness of adopting another set of rules is warranted. However, studies have shown that fiscal rules can work.² In its overall assessment of the efficacy of fiscal anchors, Eyraud et al. (2018c) concluded that fiscal rules are "correlated with stronger fiscal positions and more stabilizing policies" (p.12) and that "even though fiscal rules are not a panacea, they can make a dent into the deficit bias depending on country circumstances and design features." (p. 16)

² See Simpson and Wesley (2012) and Tapp (2013) on the impact of fiscal rules in Canada.

¹ See Eyraud et al. (2018c, 15) for a review of studies of the impact of fiscal rules on sovereign bond rates.

According to the IMF, fiscal rules should have the following characteristics:

- promote long-term fiscal sustainability;
- help stabilize economic activity by restricting pro-cyclical fiscal policies;
- apply to fiscal variables that are under the control of the fiscal authority;
- provide a government with reasonable options for addressing the fiscal situation when the rule is binding; and,
- be transparent so that they can be understood by the public, are not subject to manipulation or creative accounting, are coherent, and are applied to broad components of the budget.³

Above all, Eyraud et al. (2018c, 4) stresses that fiscal rules should be simple, flexible, and enforceable.

While these are all desirable characteristics, there may be tradeoffs among them. For example, simplicity may be sacrificed in adopting fiscal rules that allow a government to adjust its fiscal policies in the event of a major downturn in the economy to avoid cutting spending or raising taxes in a recession. Measures that would strengthen enforceability, such as adopting the fiscal rules in a constitution as Morton (2018) has advocated for Alberta, would limit flexibility. Establishing public support for fiscal rules and their ultimate objectives is essential for long-term compliance and adherence to the rules. Alberta's abandonment of the savings rules for Heritage Fund in the 1980s was in large part due to the lack of public acceptance and commitment to saving resource revenues. Adherence to fiscal rules may also be strengthened through institutional changes, such as the establishment of an independent fiscal council that assesses the government's fiscal performance and its adherence to the fiscal rules.

2. THE CHOICE AND CALIBRATION OF FISCAL ANCHORS

In this section we discuss three fiscal anchors that are commonly adopted by governments, but noting that governments generally adopt a combination of these anchors.

2.1 A CEILING ON A PUBLIC SECTOR DEBT RATIO

The most common fiscal anchor is a government's debt ratio, with over 70 countries adopting a ceiling on public debt. In Canada, prior to the pandemic, the federal government's fiscal anchor was maintaining a debt to GDP ratio of 30 per cent. Several issues arise in defining the debt ratio ceiling and the adjustment mechanism or rules that would be adopted if the ceiling is exceeded. One issue is whether the debt ratio is based on the government's gross debt or net debt, where net debt is gross debt minus the government's financial assets. The IMF fiscal rules data base indicates that most countries define their rule in terms of gross debt. However, as noted by the Eyraud et al. (2018c, 31) when governments have acquired financial assets that are

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See Eyraud et al. (2018b) for a comprehensive discussion of the selection of fiscal rules.

liquid and can be sold in a timely manner at market values, net debt is an appropriate target. Conventionally, the denominator in the debt ratio is the economy's Gross Domestic Product (GDP) because GDP is generally considered a broad measure of a government's ability to raise revenues. In Section 3, we will return to the question of whether the appropriate fiscal anchor for Alberta is its debt to GDP ratio.

A third issue is the choice of the debt ratio ceiling. Internationally, most national governments' fiscal debt anchors, prior to the pandemic, were in the range of 60 to 70 per cent of GDP. For subnational governments, ceilings for debt ratios might be lower than for national governments because they lack controls over monetary policy and have more limited tax powers. In his review of Alberta's infrastructure policies, Dodge (2015) considered a debt ratio of 25 per cent of GDP for Alberta as reasonable and comparable to the debt ratios in Quebec and Ontario. However, the validity of such interprovincial comparisons of debt ratios is questionable because the Alberta economy, and by extension the GOA's revenues, are much more volatile than those of the other provinces.

If a ceiling on the debt ratio is adopted as a fiscal anchor, a numerical value for the target has to be specified. One approach to determining a debt ratio ceiling has been developed in an IMF report by Ostry et al. (2010) and is based on the notion of a government's *fiscal space*. Fiscal space is defined as the difference between a government's current debt ratio and its debt limit, where the latter is the level of debt at which a government's fiscal policy becomes unsustainable, i.e., when its projected debt ratio rises without bound and the government will eventually default on its debt. The lower the current debt ratio the greater a government's fiscal space and the lower the probability that future fiscal shocks will cause a government to default and precipitate the economic upheaval that accompanies a sovereign debt default.⁴ Using the IMF methodology for calculating fiscal space, which is based on the Canadian government's previous fiscal responses to shocks, Zandi (2019) estimates that Canada's fiscal space was about 275 percentage points of GDP in 2018. This suggests that Canada's debt ratio could increase by a substantial amount without precipitating a fiscal crisis.

Conceptually, determining the optimal debt ratio ceiling should be based on a costbenefit analysis that considers the gain from lowering the probability of default by running budget surpluses and lowering the debt ratio against the welfare loss from the higher taxes or lower spending on public services that would be required to generate those surpluses.⁵ The cost of implementing a reduction in the debt ratio depends on how rapidly the debt ratio is brought down to the target level, and whether the fiscal adjustment is through a tax increase, a cut in a government's current spending or capital spending or some combination of these adjustments.

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An econometric analysis of countries that have experienced debt crises by Furceri and Zdzienicka (2012) indicated that output declines by 10 per cent eight years after the debt crisis. See also Borensztein and Panizza (2008) on the cost of a sovereign debt default.

See Ostry, Ghosh, and Espinoza (2015) on the benefits and costs of paying down a government's debt.

In summary, the IMF's notion of fiscal space provides an analytical framework for thinking about the appropriate debt anchor. However, there are significant obstacles with its practical application in estimating the optimal debt ratio targets, given the uncertainties about the probabilities of sovereign debt default at different debt ratios, the cost of a sovereign debt default, and the forgone benefits from running fiscal surpluses.

Another issue that should be mentioned in passing is that while a debt ceiling is not meant to be a target debt ratio, in practice it could, and in many cases has, become a target with governments allowing their debt ratios to drift up to the ceiling. See Eyraud et al. (2018c, 14-15). This suggests that a rather conservative approach should be adopted in choosing the value of the ceiling for the debt ratio.

Another limitation of a debt ratio as a fiscal anchor is that a government cannot directly control either its debt level or GDP in the short run. Other fiscal rules, such as balanced budget rules or expenditure rules, must be combined with a debt ratio ceiling to specify how the government will respond to situations where the debt ceiling is violated. Below we consider the budget balance rules that could be adopted to support the implementation of a debt ratio ceiling.

2.2 BALANCED BUDGET RULES

"Balancing the budget and eliminating deficits" is an oft-stated policy objective. However, it is not clear which concept of fiscal balance proponents of "balancing the budget" have in mind. In many countries, such as Brazil and Mexico, balancing the budget means a zero primary deficit, i.e., revenues equal current and capital program spending. Interest payments on the debt are not included in the calculation of the primary deficit. In Canada, since the adoption of accrual accounting by the public sector, "balancing the budget" means balancing the operating budget, such that revenues equal current program spending, amortization of capital assets, and interest payments on debt, i.e., capital expenditures are not included in the operating deficit calculation. Finally, for some, "balancing the budget" means an overall fiscal balance such that revenues equal current and capital expenditures as well as interest payments. Each of these concepts of a balanced budget has different implications for fiscal policies and the trajectory of the public debt ratio.

2.2.1 Primary Balance

A government's primary balance determines the size of its steady state debt ratio and it is a key determinant of whether its fiscal policy is sustainable. To be more precise, a government's debt ratio will converge over time to **d** based on the following equation:

$$d = \frac{pb}{(1+i) \cdot (r-g)}$$

where pb is the primary balance ratio, i is the rate of inflation, r is the real (inflationadjusted) rate of interest on the government's debt, and g is the growth rate of real GDP. This condition also implies that a government has to run a primary surplus to maintain any positive debt ratio if the real interest rate exceeds the growth rate. When r exceeds g, a larger primary surplus is required the higher is the debt ratio in the steady state. Conversely, if the growth rate exceeds the real interest rate on the public debt, a government can maintain a given debt ratio by running a primary deficit ratio, *pd*, equal to:

$pd = (1+i) \cdot (g-r) \cdot d$

Finally, if a government maintains a primary balance of zero, its debt ratio will increase without limits if r is greater than g, or ultimately decline to zero if g is greater than r.

Clearly, the size and sign of (r – g) are critical in determining the trend in the debt ratio and whether a government has to maintain a primary surplus or can run a primary deficit to keep its debt ratio at or below some ceiling. Since World War II, growth rates in Canada have exceeded for extended periods the interest rate on Canadian government debt. The IMF data base indicates that g exceeded r for the Canadian government in 56 per cent of the years between 1945 and 2015, especially between 1945 and 1980 and since 2004.⁶ Very low interest rates in recent years have led some prominent economists, such as Olivier Blanchard and Lawrence Summers (2019), to question the wisdom of restrictive fiscal policies that limit the use of deficits to finance government spending. However, even if debt to GDP ratios decline because the interest rate on public debt is less than the growth rate of the economy, an increase in government spending financed by debt can crowd out private sector investment if the economy is operating at capacity. The cost of the deficit-financed government spending is the loss of future income-generating opportunities if government borrowing crowds out private investment.

2.2.2 Operating Balance

As previously noted, the federal and provincial governments in Canada have adopted accrual accounting as the framework for presenting their annual budgets. Accordingly, a balanced budget typically means that revenues equal current program spending, interest payments on debt, and amortization of capital assets, inventory consumption, and losses on disposals of assets.⁷ A balanced operating budget means that expenditures on public infrastructure and other capital goods are debt financed. The government's debt ratio will then depend not only on its operating balance, but also on the public sector investment rate and the amortization rate. If the amortization rate is equal to the economic rate of depreciation of the stock of public capital and if the government's investment rate maintains a constant ratio of the capital to GDP, k, the operating balance, **ob**, required to maintain a given debt ratio is determined by the following condition:

 $ob = g \cdot (k - d)$

⁶ I am grateful to Paulo Mauro for providing the IMF data base.

Amortization, inventory consumption, and loss on disposal of assets are non-cash items. Amortization is meant to reflect the annual depreciation of public capital stock.

Maintaining a balanced operating budget means that the debt ratio will equal the steady state public sector capital stock ratio. If the government wants to maintain a capital stock ratio that is higher than the debt ratio, it will have to maintain an operating surplus. Alternatively, it could run an operating deficit if it maintains a capital stock ratio that is less than its target debt ratio.

In summary, a government's debt ratio under a balanced operating budget rule will depend on its investment rate and the steady state public sector capital stock ratio. A debt ratio ceiling combined with a commitment to maintain a balanced operating budget means that the public sector capital stock ratio is determined by the debt ceiling. Whether or not a given debt ratio and the implicit steady state capital stock ratio is optimal or sustainable is not apparent under a balanced operating budget rule. For this reason, the Eyraud et al. (2018c, 17) advises governments to base their fiscal rules on their overall fiscal balance rather than their operating budget balance.

2.2.3 Fiscal Balance

If a government maintains an overall fiscal balance, its revenues equal its current and capital expenditures and interest payments on its debt. Consequently, its debt in nominal terms remains constant. But in most situations nominal GDP grows because of inflation and increases in output. Therefore, a fiscal balance implies that the debt ratio declines at the rate n/(1+n) where n is the rate of increase in nominal GDP. To maintain a given debt ratio, a government must run a fiscal deficit ratio, *fd*, equal to:

$fd = n \cdot d$

In other words, to keep the debt ratio constant, government borrowing, as a percentage of its debt, has to equal the growth rate of nominal GDP

As noted above, adopting a ceiling on a debt ratio means that a government has to adopt a fiscal rule for reducing its debt ratio to or below the ceiling in the event of an adverse fiscal shock. Restoring fiscal balance by increasing taxes or lowering expenditures will reduce the debt ratio over time to, or below, its ceiling. However, a rapid return to fiscal balance while the economy is operating below capacity could exacerbate an economic downturn. Accordingly, fiscal rules for restoring fiscal balance are often based on the notion of a cyclically-adjusted deficit, where an adjustment is made for the impact of an economic downturn on government revenues and expenditures to avoid a pro-cyclical fiscal policy. Calibrating the fiscal balance to fluctuations in the economy is a complex technical exercise, and the experience in the EU has meant in practice that the cyclical adjustments to the fiscal balance have resulted in excessive deficits. See Eyraud (2018c, 23) The IMF also notes that governments that derive significant revenues from resource industries are particularly challenged in adopting fiscal balance adjustment rules because resource prices may not follow simple cyclical patterns, and it is difficult to distinguish temporary from permanent or long-lasting price shocks. For these reasons, the IMF advises governments to adopt an expenditure rule, rather than a cyclically-adjusted fiscal balance rule, to restore the debt ratio in the event of an adverse shock and maintain sustainable fiscal policies over time.

2.3 AN EXPENDITURE RULE

An expenditure rule could limit government expenditures as a percentage of GDP or place a ceiling on the growth rate of expenditures. For example, Brazil adopted a constitutional amendment in 2016 that limits the increase in the federal government's primary expenditures, net of transfers to the states and municipalities, to the rate of inflation over the previous year. Obviously, this ceiling was violated in 2020 because the government had to implement a basic transfer payment to shelter the poor from a steep income decline caused by COVID-19. The Brazilian experience shows that the expenditure growth rate ceiling should be based on a moving average for a recent period to avoid procyclical increases or decreases in the expenditure ceiling. There should also be some well-defined "escape" clauses or mechanisms. The range of expenditures to be covered by the ceiling should be broad, covering those that the government can control, at least in the medium term, and not closely associated with economic fluctuations. These considerations suggest that the expenditure ceiling should apply to most current and capital expenditures, but not include interest payments on debt or transfer programs such as unemployment insurance or social assistance payments that have a cyclical component.

3. A FISCAL ANCHOR FOR ALBERTA

Given this general background on fiscal anchors and fiscal rules, we now consider Alberta's recently adopted fiscal anchor. It should be said, at the outset, that establishing a fiscal anchor for Alberta is challenging because of the economy's volatility and the consequent fluctuations in provincial government revenues. Given that GOA had a structural fiscal imbalance heading into the pandemic and that it incurred large deficits in 2020-21 because of revenue reductions and implementing programs to shelter Albertans from severe hardship during pandemic, setting and then sticking to a new fiscal anchor will be especially challenging.

In Budget 2021 the GOA announced the adoption of the following fiscal anchors:

- bringing spending in line with that of other provinces;
- keeping Alberta's net debt to GDP ratio below 30 per cent; and,
- adopting, after the economy has recovered from the pandemic downturn, a timetable for balancing the budget.

We will discuss each of these components of the government's fiscal anchor strategy and then recommend an alternative set of fiscal rules.

In justifying the expenditure anchor, the Minister of Finance referred to the Blue Ribbon Panel Report which found that "Alberta has spent more per capita than comparable provinces without achieving better outcomes." (Budget 2021, 11). In particular, the Blue Ribbon Panel Report (2019, 26) found that Alberta's per capita expenditures in 2017 of \$13,819 exceeded those of the comparator provinces, British Columbia at \$10,285, Ontario \$10,281, and Quebec \$13,539. Lowering Alberta's per capita spending to the average of the three comparator provinces in 2017 would have required a \$10.4 billion reduction in spending. As is well known, tax rates in Alberta are significantly lower than in other provinces. Budget 2021 reported that if Alberta imposed the same tax rates as British Columbia, it would raise an additional \$14.3 billion in 2021-22. With Ontario's tax structure, Alberta would raise an additional \$13.3 billion. With Quebec's, Alberta would raise an additional \$19.5 billion. While these calculations indicate that Alberta could address its structural deficit by raising taxes, about 60 per cent of Alberta's tax gap with the comparator provinces is due to the absence of a provincial sales tax. A recent public opinion survey indicated that over 60 per cent of the respondents were opposed to the introduction of a provincial sales tax. See Thomas (2021). Therefore, it not surprising that the government has focused on expenditure restraint for eliminating its structural deficit. Whether expenditure restraint will achieve this result, once pandemic-related spending has been wound down, is yet to be determined. The goal of lowering per capita spending to the average of the comparator provinces should be regarded as a medium term target. If successful, it should be replaced by another fiscal anchor for expenditures. This will be described in greater detail later in this section.

The GOA's second fiscal anchor is a 30 per cent ceiling on its net debt to GDP ratio. We will begin by discussing whether this is an appropriate way of defining a debt ratio for the province, and then we will consider whether the 30 per cent figure is appropriate.

First, although the debt ratios are normally based on a government's gross debt, the IMF acknowledges that when governments have acquired financial assets that are liquid and can be sold in a timely manner at market values, net debt is a more appropriate target. Accordingly, net debt is an appropriate target for Alberta, given that financial assets that are held in the Alberta Heritage Savings Trust Fund and in other government funds are regularly reported based on their market values.

Second, while it is conventional to measure public sector debt relative to GDP, McMillan (2019, 17-22) has argued that a debt to GDP ratio is not appropriate for Alberta because the composition of Alberta's GDP is substantially different from other provinces. The Alberta economy is much more capital intensive, and gross capital formation is a much larger component of Alberta's GDP. Private sector investment (as opposed to the business profits and wages and salaries that it generates) is not part of the GOA's tax base. McMillan argues that in the Alberta context a more appropriate metric for measuring the provincial debt burden is the ratio of the net debt to provincial government revenues. A related alternative debt anchor, the ratio of interest payments to revenues, has been proposed by Dodge (2020) for the federal government. Below, we will consider a debt service to revenue ratio as an alternative way of defining the fiscal anchor.

We can now briefly consider how the 30 per cent net debt ceiling could constrain the Alberta government's fiscal policies. Budget 2021 indicates that the government expects that net debt to GDP ratio to increase from 13 per cent in 2019-20 to 25 per cent in 2023-24. We consider the following scenario for fiscal policy after 2023-24 to illustrate the fiscal restraint that the government would have to exercise to maintain the net debt ratio at 25 per cent. Budget 2021 projects that nominal GDP growth rate will decline from 8.8 per cent in 2021 to 6.8 per cent in 2024. Accordingly, we optimistically assume a growth rate of 6.0 per cent in 2025 and then 5.0 per cent in the following years.⁸ The green line in Figure 1 shows our estimates of the fiscal deficits for the 2021 to 2024 period based on the Budget 2021's projected increases in the Alberta's net debt. (To be clear, we are showing the estimated fiscal deficits, not the government's budget deficits.) The fiscal deficits decrease from \$22.3 billion in 2020-21 to \$8.0 billion in 2023-24, when the net debt to GDP ratio reaches 25 per cent. The blue line shows the fiscal deficits that would be consistent with maintaining a net debt to GDP ratio of 25 per cent assuming nominal GDP growth rates of 6.0 per cent in 2025 and 5.0 per cent thereafter. This scenario shows that the government would have to reduce its fiscal deficit to \$6.1 billion in 2024-2025 and to \$5.4 billion in 2025-26 before allowing it to slowly increase. Consistent with the model in Section 2.2.3, fiscal deficits along this path would equal 1.25 per cent of nominal GDP.⁹ This fiscal deficit ratio is sufficient to keep the net debt ratio at 25 per cent given a nominal GDP growth rate of 5.0 per cent.

This scenario illustrates two points. First, maintaining the debt ratio below the 30 per cent ceiling seems feasible if the nominal GDP grows at the projected 5.0 per cent rate and the government carries through with its fiscal plan to 2023-24. Second, a series of economic shocks that adversely affect provincial revenues could drive the debt ratio to the ceiling and beyond. Economic models provide little guidance on whether the 30 per cent ceiling is "optimal" and would provide an adequate safety margin for preventing a serious debt crisis during an economic downturn. Simulations with random shocks to Alberta's GDP and the provincial government revenues might help to gauge the probability that a 30 per cent ceiling would be breeched if the government tried to maintain fiscal deficits consistent with a 25 per cent net debt ratio.

⁸ Assuming a 2.0 per cent inflation rate and a 1.4 per cent population growth rate, a 5.0 growth rate for nominal GDP implies a productivity growth rate of about 1.6 per cent.

In the spread sheet calculations used to generate the fiscal deficits, the ratio is 0.25* (0.05/(1+0.05)) = 0.0119 because of a lag between the calculated deficit and the nominal GDP estimate used to calculate the ratio.



Figure 1 Fiscal Deficits Under a 25 Per cent Net Debt Ratio

As previously noted, gauging the size of Alberta's debt relative to GDP has been critiqued by McMillan (2019) who has argued that a more appropriate measure is the ratio of debt to provincial government revenues. Dodge (2020) has proposed a similar approach to establishing a fiscal anchor for the federal government. He has advised the federal government to conduct its fiscal policy to keep the ratio interest payments on debt to government revenues below 10 per cent. Based on the GOA Budget 2021 estimates and targets, the ratio of interest payment to revenues is set to increase from 4.8 per cent in 2019-20 to 6.6 per cent in 2023-24, and therefore remain well below the Dodge threshold. As with the debt ratios, economic modelling provides little guidance in setting a ceiling on the interest payment ratio and policy makers rely on comparisons with other jurisdictions for guidance. At the international level, the average interest payment ratio is around 3.3 per cent for advanced economies, but over 10 per cent for emerging economies, such as India, South Africa, Mexico, and Brazil. See Wheatley (2021).

There are other concerns about using an interest payment ratio as a fiscal anchor, especially in the Alberta context. One is that the GOA's revenues fluctuate from year to year, which could result in wide swings in the ratio of interest payments to revenues. Potentially, revenue fluctuations could push the ratio above some ceiling, such as 10 per cent. A natural policy response to a prolonged breach in the ceiling would be to increase the denominator in the ratio, i.e., revenues, because the numerator, interest payments, are largely beyond the control of a government in the short to medium term. An interest payment ratio rule would bias fiscal policy adjustments in favour of tax increases, rather than expenditure restraint. For these reasons, an interest payment ceiling is not an appropriate fiscal anchor for most governments, and it is especially unsuited in the Alberta context. The third strand of the Alberta's announced fiscal anchor is balancing the budget. As noted in Section 2.2.2, if a government maintains a balanced budget its debt ratio is determined by its investment ratio and ultimately the debt ratio will approach the public sector's capital stock ratio. A balanced budget does not mean that the government's debt is manageable or even sustainable. In keeping with the IMF's advice, the GOA should not use budget balances as part of its suite of fiscal anchors. The rule should be based on the government's fiscal balance, such as maintaining a fiscal deficit ratio that is needed to achieve a given debt ratio over time. However, as previously noted, it is difficult to specify a fiscal rule that avoids destabilizing pro-cyclical fiscal adjustments.

An alternative would be to supplement the debt ratio rule with an expenditure rule. There are different ways of setting an expenditure rule. Limiting spending increases to the growth rate of GDP, or population and inflation, are possible candidates. The Blue Ribbon Panel (2019, 68) considered these alternatives and recommended that "the provincial government adopt a fiscal rule that limits the annual increase in total program spending to the projected rate of increase in total household incomes in Alberta." Blue Ribbon Panel (2019, Recommendation 21, 68). It noted that:

This type of fiscal rule... is based on a fiscal variable that the government can control—its program expenditures. It is a limitation on what the government can spend. The government always has the option of spending less than the permitted increase. It is a simple rule that applies to a key fiscal variable, total program expenditures. And it would prevent Alberta from repeating its past history of ratcheting up spending when resource revenues are high. It also says to taxpayers that when their household incomes go up, it's reasonable and responsible for government spending to increase at about the same rate.

The GOA should reconsider its set of fiscal rules by adopting an expenditure rule that limits the increase in capital and operating expenditures to a moving average rate of increase in household primary incomes in Alberta.¹⁰

4. **RECOMMENDATIONS**

Based on the above analysis, we recommend that the GOA:

- supplement the debt ratio anchor with an operational fiscal rule that limits the increase in total expenditures to a moving average of the increase in household primary income in Alberta;
- report its primary balance and fiscal balance along with the budget balance in its quarterly updates and annual budget;
- conduct every four years a review of the sustainability of its fiscal policies; and
- re-evaluate and re-calibrate its fiscal anchor and other fiscal rules based on the results of the fiscal sustainability review.

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By way of a full disclosure, the author was a member of the Blue Ribbon Panel.

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About the Author

Bev Dahlby was a Professor of Economics at the University of Alberta from 1978 to 2012 and Research Director of the School of Public Policy at the University of Calgary from 2012 to 2020. He has published extensively on tax policy and fiscal federalism and served as a policy advisor to the federal and provincial governments and international agencies. Bev was a member of the Expert Panel on Federal Support to Research and Development (Jenkins Panel). In 2016, he was Chair of the British Columbia Commission on Tax Competitiveness. In 2019, Bev was a member of the Blue Ribbon Panel which reported on the Government of Alberta's finances.

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