# FRASER BULLETIN



February 2024



#### Summary

- The Alberta government projects a \$5.5 billion budget surplus in 2023/24, fuelled by historically high resource revenue. However, Alberta's surplus could quickly spiral into a deficit when resource revenue declines.
- This fiscal risk is the result of a familiar pattern. During periods of relatively high resource revenue the provincial government increases spending, but does not commensurately reduce spending when that revenue declines. This leads to a structural problem wherein ongoing government spending exceeds stable and ongoing levels of provincial government revenue.
- To better understand the risk Alberta currently faces, this research bulletin estimates the province's budgetary balance if the government were to rely on stable ongoing levels of revenue for the budget, namely stable resource revenue. This bulletin does this by calculating Alberta's budgetary

- balance from 2023/24 to 2025/26 if resource revenue sat at the average of the last two decades (\$9.3 billion) in 2023/24 and was inflation-adjusted each year after.
- In this scenario, Alberta's \$5.5 billion projected budget surplus turns to a \$4.8 billion deficit in 2023/24. In 2024/25, Alberta's projected budget surplus (\$2.1 billion) turns to a \$5.8 billion deficit, and in 2025/26, Alberta's projected budget surplus (\$2.8 billion) turns to a \$4.8 billion deficit. Moreover, Alberta would accumulate an additional \$25.9 billion in net debt by 2025/26. In other words, provincial net debt in real (\$2023) terms would be \$12,166 per Albertan, compared to \$7,166 per Albertan under the provincial government's projections—an increase of 69.8 percent.
- To avoid deficits and debt accumulation, the provincial government must more closely align spending to ongoing, stable levels of revenue.

#### Introduction

The Alberta government currently projects a \$5.5 billion budget surplus in 2023/24, fuelled by historically high resource revenue (Alberta, 2023a). However, the province faces a serious risk of returning to large budget deficits when relatively high resource revenue declines. This is due to a familiar pattern: during periods of relatively high resource revenue the provincial government increases spending but does not commensurately reduce spending when that resource revenue declines. This creates a structural problem in which provincial government spending routinely exceeds stable and ongoing levels of provincial government revenue. In other words, while Alberta's budgetary balance improves during periods of relatively high resource revenue as the province is currently experiencing—it immediately deteriorates when commodity prices fall and resource revenue declines.

The intention of this bulletin is to help Albertans better understand this issue, and the current fiscal risk, by taking a closer look at the true state of Alberta's finances based on ongoing, stable levels of resource revenue.

#### Alberta's structural fiscal problem

Resource revenue is an oftentimes significant but volatile component of Alberta's budget, which has created instability in provincial finances for decades. Though other sources of revenue such as corporate income tax are highly variable, resource revenue is by far the most volatile source of government revenue (Landon and Smith, 2010). Figure 1 shows provincial resource revenue in real terms (\$2021) since 1970/71. As shown, inflation-adjusted resource revenue has varied significantly throughout Alberta's history, ranging from a low of \$1.7 billion in

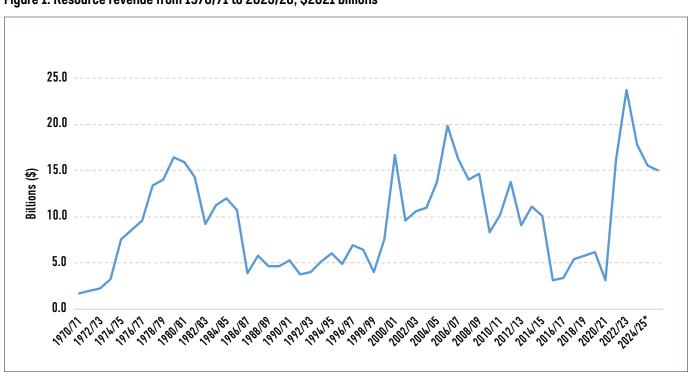


Figure 1: Resource revenue from 1970/71 to 2025/26, \$2021 billions

Sources: Statistics Canada, 2023a; Alberta, 2023a; 2023b; calculations by authors.

\*Projections from 2023/24 onwards.

1970/71 to a high of \$23.7 billion in 2022/23. Over the next three years, real resource revenue is projected to remain relatively high in historical terms at an estimated \$17.9 billion in 2023/24, \$15.5 billion in 2024/25, and \$15.1 billion in 2025/26.

There is also significant variability in resource revenue as a share of total provincial government revenue. As illustrated in Figure 2, resource revenue has accounted for as much as 77.4% of total revenues in 1979/80 to as little as 6.5% of total revenues in 2015/16. On average, over the next three years, resource revenue is projected to account for approximately a quarter (24.6%) of all provincial government revenues.

Resource revenue has an important impact on Alberta' budgetary balance. Figure 3 shows the province's actual budget balance from 1970/71 to 2021/22 in real terms (\$2021), compared to what the budget balance would have been without resource revenue. As shown, Alberta experienced several periods of budget surpluses, including a string of surpluses beginning in the early 1970s and another beginning in the mid-1990s. Critically, however, the province would have incurred a deficit in every year had it not been for resource revenue. Alberta's reliance on resource revenue is particularly marked in certain years. For instance, in real terms, Alberta ran a \$12.2 billion surplus in 2005/06, which would have been a \$7.6 billion deficit without resource revenue—a difference of \$19.8 billion.

Resource revenue volatility is not in and of itself a problem. The problem is the province has fallen into a pattern of financing spending increases with this unpredictable source of revenue. Figure 4 shows real (\$2021) resource revenue and per-person program spending (total spending minus interest costs) since 1970/71. As illustrated, increases in real resource revenue tend to be accompanied by increases in real per-person program spending.



Figure 2: Resource revenue as a Share (%) of Total Government Revenues from 1970/71 to 2025/26

Sources: Alberta, 2023a; 2023b; calculations by authors.

\*Projections from 2023/24 onwards

Budgetary balance

Budgetary balance without resource revenue

15.0

10.0

5.0

0.0

-5.0

-10.0

-15.0

-20.0

-25.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-27.0

-2

Figure 3: Actual budget balance & budget balance without resource revenue from 1970/71 to 2021/22, \$2021 billion

Sources: Finances of the Nation, 2023; Statistics Canada, 2023a; Alberta, 2023b; calculations by authors.

Note: This figure uses FON data for budgetary balance, which is based on Statistics Canada's Government Financial Statistics (GFS) and differs slightly from public accounts data. FON was used mainly because it provides data over a longer time period and makes adjustments

For instance, real resource revenue increased markedly in the 1970s, from \$1.7 billion in 1970/71 to \$16.4 billion in 1979/80. Within that period, Alberta enjoyed routine budget surpluses (see figure 3) while the provincial government more than doubled real program spending from \$5,778 per person (1970/71) to \$11,772 (1979/80). Despite a general decline in resource revenue in the 1980s, real per-person spending continued to increase. It reached \$13,455 per person by 1982/83 and remained elevated for several years after. Similarly, when resource revenue increased in the early 2000s, Alberta enjoyed routine budget surpluses while real per-person program spending rose significantly. Despite a marked decline, particularly after 2015/16, per-person spending was not reduced commensurately with lower resource revenue. In both these periods, the fall in resource revenue paired with high spending-led to a string of

budget deficits (1986/87–1993/94 and 2009/10–2021/22¹)(see figure 3).

Overall, in Alberta, it is estimated that a \$1 increase in real per person resource revenue is associated with a 56-cent increase in program spending in the following fiscal year, but a decline in resource revenue is not similarly associated with a reduction in program spending (Ferede, 2018). This pattern has contributed to historically high levels of government spending. In fact, the single highest year of real (\$2020) per-person program spending on record between 1965 and 2020 was under Premier Rachel Notley in 2017 at \$13,719 per person (Hill, Fuss, and Emes, 2022). The second highest year of real per-person spending (\$13,649) occurred in 2020 during COVID-19 (non-COVID-related spending was \$12,347 per person that year) (IbidHill, Fuss, and Emes, 2022). Despite some efforts to

to allow for comparability over time.

<sup>1</sup> Excluding a surplus in 2013/14.

Program spending per person Resource revenue 20,000 20.0 18,000 18.0 16,000 16.0 Resource revenue (\$2021 billions) 14,000 14.0 Spending per person (\$2021) 12,000 10,000 10.0 8,000 6.0 6,000 4,000 2,000 2.0

Figure 4: Real (\$2021) program spending per person (\$) and resource revenue (\$billions) from 1970/71 to 2021/22

Sources: Finances of the Nation, 2023; Statistics Canada, 2023a; 2023b; Alberta, 2023b.

**Note:** This figure uses FON data for program spending, which is based on Statistics Canada's Government Financial Statistics (GFS) and differs slightly from public accounts data. FON was used mainly because it provides data over a longer time period and makes adjustments to allow for comparability over time.

reduce government spending, it still exceeds ongoing and stable levels of total government revenues, including resource revenue. This presents a significant risk to provincial finances. When resource revenue inevitably declines, the province could quickly turn to a budget deficit, as has occurred in Alberta's past. The following section will take a closer look at this risk.

# Current fiscal projections vs the underlying deficit

Alberta's finances will continue on the boom-andbust cycle if government spending is not more closely aligned with stable ongoing government revenue. While this paper is limited to illustrating Alberta's fiscal problem, it is worth noting that there has been significant research done on the potential to save a share of resource revenue in the Heritage Fund (Tombe, 2022), and/or creating a rainy-day account (Hill and Palacios, 2023) to help mitigate volatility in the budget and improve Alberta's fiscal situation over the long-term.<sup>2</sup> Now, to understand the implications of the underlying problem, it is necessary to first review the province's projected fiscal position.

Table 1 shows a summary of Alberta's projected nominal fiscal position from 2023/24 to 2025/26. As shown, Alberta's total nominal revenue is projected to be \$74.3 billion in 2023/24, \$73.2 billion in 2024/25, and \$75.0 billion in 2025/26. Over this period, Alberta's total nominal revenue includes relatively high resource revenue (in historical terms) at \$19.7 billion in 2023/24, \$17.6 billion in 2024/25, and \$17.4 billion in 2025/26. Total nominal revenue also includes "other revenue" such as personal and corporate income tax.

<sup>2</sup> For more information on a potential fiscal framework to save resource revenue, see Hill, Emes, and Clemens (2021).

Table 1: Alberta's projected fiscal summary, budget, nominal (\$) millions

	2023/24	2024/25	2025/26
Revenue			
Resource Revenue	19,667	17,553	17,383
Other Revenue	54,638	55,604	57,573
Total Revenue	74,305	73,157	74,956
Spending			
Program Spending	65,627	67,767	68,742
Debt Interest Costs	3,157	3,253	3,398
Total Spending	68,784	71,020	72,140
Fiscal Balance	5,521	2,137	2,816

Source: Alberta, 2023a.

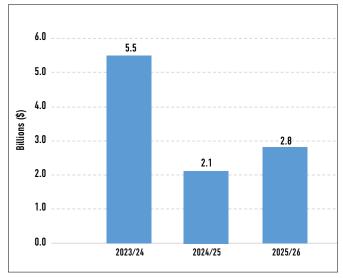
On the other side of the ledger, projected total nominal spending is \$68.8 billion in 2023/24, \$71.0 billion in 2024/25, and \$72.1 billion in 2025/26. Total nominal spending includes debt interest costs

(ranging from \$3.2 billion to \$3.4 billion annually) and program spending, which is projected to be \$65.6 billion in 2023/24, \$67.8 billion in 2024/25, and \$68.7 billion in 2025/26.

Overall, total nominal revenue is projected to exceed total nominal spending in each year. Correspondingly, Alberta is projected to run budget surpluses over the forecast horizon. As illustrated in Figure 5, Alberta's projected budget surplus is \$5.5 billion in 2023/24, \$2.1 billion in 2024/25, and \$2.8 billion in 2025/26.

However, Alberta's budget surpluses could quickly spiral into deficits if resource revenues decline. To better understand the province's underlying fiscal position—and the risk Alberta currently faces—it is useful to estimate Alberta's budgetary balance if the government relied on stable ongoing revenue for the budget, namely, stable resource revenue.

Figure 5: Projected budgetary balance 2023/24 to 2025/26, nominal (\$) billions



Source: Alberta, 2023a.

One reasonable way to do this is to calculate Alberta's budgetary balance if resource revenue was at its average over the last two decades. This serves as a useful approximation for the stable amount of resource revenue the province could expect annually over the long-term.

To be clear, due to the important role the energy industry plays in Alberta's economy, other sources of government revenue, such as corporate income tax, fluctuate along with resource revenue. However, empirical analysis finds that the impact is mainly related to an increase in resource revenue. More specifically, when resource revenue increases by \$1, corporate income tax revenue increases by approximately \$0.14. However, when resource revenue declines, corporate income tax revenue does not decline by a statistically significant amount (Ferede, 2018). Similarly, other budget components are not shown to have a statistically significant response to a decline in resource revenue (Ferede, 2018). For this reason, and for simplicity, no changes are made to other sources of provincial government revenue in this calculation. It is important to note, however,

Resource revenue Average resource revenue 27 5 25.0 22.5 20.0 17.5 Billions (\$) 15.0 12.5 10.0 7.5 5.0 2.5 2013/14 0.0 2011/12 2010/11 2 2012/13

Figure 6: Resource revenue from 2003/04 to 2022/23, nominal (\$) billions

Sources: Alberta, 2023b; calculations by authors.

that as a result of this assumption the following projection for Alberta's underlying budget deficit may be understated.

Figure 6 shows nominal resource revenue over the last 20 years (i.e. since 2003/04), including average resource revenue over the period. As shown, nominal resource revenue ranged from \$2.8 billion in 2015/16 to \$25.2 billion in 2022/23. Overall, it averaged \$9.3 billion from 2003/04 to 2022/23, which represents the stable annual amount of resource revenue the province could reasonably expect over the long-term.

Table 2 shows a summary of Alberta's alternative nominal fiscal position from 2023/24 to 2025/26 based on the stable amount of resource revenue. More specifically, resource revenue is assumed to be \$9.3 billion in 2023/24, and after adjusting for inflation, \$9.6 billion in 2024/25 and \$9.8 billion in 2025/26. As shown, in this alternative scenario, Alberta's total nominal revenue is projected to be

Table 2: Alberta's projected fiscal summary, fiscal framework, nominal (\$) millions

	2023/24	2024/25	2025/26		
Revenue					
Resource Revenue	9,342	9,575	9,786		
Other Revenue	54,638	55,604	57,573		
Total Revenue	63,980	65,179	67,359		
Spending					
Program Spending	65,627	67,767	68,742		
Debt Interest Costs	3,157	3,253	3,398		
Total Spending	68,784	71,020	72,140		
Fiscal Balance	-4,804	-5,841	-4,781		

Sources: Alberta, 2023a; 2023b; calculations by authors.

\$64.0 billion in 2023/24, \$65.2 billion in 2024/25, and \$67.4 billion in 2025/26. Compared to current government projections, based on the stable level of

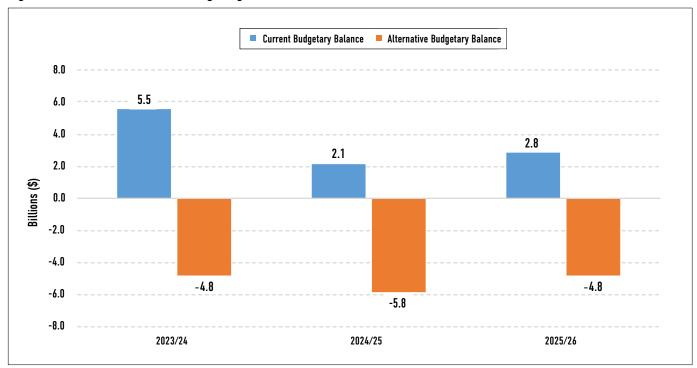


Figure 7: Current vs. alternative budgetary balance 2023/24 to 2025/26, nominal (\$) billions

Sources: Alberta, 2023a; 2023b; calculations by authors.

resource revenue, that is a reduction of \$10.3 billion in 2023/24, \$8.0 billion in 2024/25, and \$7.6 billion in 2025/26. Recall, there are no changes made to other sources of government revenue or spending. As a result, total nominal spending remains at \$68.8 billion in 2023/24, \$71.0 billion in 2024/25, and \$72.1 billion in 2025/26.

Figure 7 compares Alberta's projected budgetary balance to the budgetary balance under the alternative scenario. As shown, Alberta's \$5.5 billion projected budget surplus turns to a \$4.8 billion deficit in 2023/24. In 2024/25, Alberta's projected budget surplus (\$2.1 billion) turns to a \$5.8 billion deficit, and in 2025/26, Alberta's projected budget surplus (\$2.8 billion) turns to a \$4.8 billion deficit.

Put simply, if the provincial government relied only on stable, ongoing revenue (i.e. stable resource revenue), Alberta's projected budget surpluses would immediately flip to deficits. More specifically, if the province's relatively high resource revenue fell to the average level over the last two decades, Alberta would incur a budget deficit in each year from 2023/24 to 2025/26.

#### The underlying deficit in perspective

Deficits fuel debt accumulation, which Albertans are ultimately responsible for financing through taxes. To better understand the potential risk of budget deficits, Figure 8 contrasts Alberta's current projected net debt (total debt minus financial assets) with net debt accumulation if resource revenue returned to its average over the last two decades (i.e. under the alternative scenario presented in the previous section). For simplicity, no adjustments are made to debt interest costs. Moreover, this calculation assumes no change in financial assets. The alternative net debt scenario is simply calculated

Alternative debt accumulation Current debt accumulation 80.0 70.0 60.0 50.0 Billions \$ 40.0 30.0 20.0 10.0 0.0 2022/23 2024/25 2023/24 2025/26

Figure 8: Projected debt accumulation, 2022/23 to 2025/26

Sources: Alberta, 2023a; 2023b; calculations by authors.

as the difference in the accumulated deficit/surplus from 2023/24 to 2025/26.

As shown in Figure 8, due largely to Alberta's projected budget surpluses, the province is expected to reduce its total net debt from \$45.6 billion in 2022/23 to \$37.1 billion in 2025/26. In contrast, if resource revenue returned to its average since 2003/04, Alberta's net debt would reach an estimated \$63.0 billion by 2025/26, equal to an additional \$25.9 billion in net debt accumulation. Put differently, by 2025/26, provincial net debt would be \$12,166 per Albertan (in 2023\$), compared to \$7,166 per Albertan under the provincial government's current projections—an increase of 69.8 percent.

In short, there is a real risk that the province could fall back into budget deficits and accumulate significant debt. To avoid this, the provincial government must more closely align spending to ongoing, stable levels of revenue.

#### **Conclusion**

Despite Alberta's current projected budget surplus, there is work to do to ensure fiscal stability into the future. If the provincial government does not more closely align spending with ongoing and stable levels of resource revenue (in the absence of tax increases), the province will be at serious risk of incurring a budget deficit when relatively high resource revenue declines, which means more debt accumulation for Albertans.

#### References

Alberta (2015a). Alberta Looks Ahead. Online video clip. Government of Alberta. <a href="https://www.youtube.com/">https://www.youtube.com/</a> watch?v=9r2dH9eb5c4>, as of November 2, 2023.

Alberta (2015b). Putting Things Right: A Responsible, Strategic Plan to Secure Alberta's Future. Government of Alberta. <a href="https://open.alberta.ca/dataset/e6984484-357a-46cc-b84d-4f6e51629933/resource/521e4d27-acc6-b84d-4f6e51629934-acc6-b84d-4f6e51629934-acc6-b84d-4f6e51629934-acc6-b84d-4f6e51629934-acc6-b84d-4f6e51629934-acc6-b84d-4f6e51629934-acc6-b84d-4f6e51629934-acc6-b84d-4f6e51629934-acc6-b84d-4f6e51629934-acc6-b84d-4f6e5162994-acc6-b84d-4f6e5162994-acc6-b84d-4f6e5162994-acc6-b84d-4f6e5162994-acc6-b84d-4f6e5162994-acc6-b84d-4f6e516294-acc6-b84d-4f6e516294-acc6-b84d-4f6e516294-acc6-b84d-4f6e516294-acc6-b84d-4f6e516294-acc6-b84d-4f6e516294-acc6-b84d-4f6e516294-acc6-b84d-4f6e51649-acc6-b84d-4f6e5164-acc6-b84d-4f6e516 42fd-a965-9ca02d78e671/download/goa-10-year-strategic-plan-march.pdf>, as of October 24, 2023.

Alberta (2023a). 2023-24 Mid-year Fiscal Update and Economic Statement. Government of Alberta. <a href="https://www. alberta.ca/budget-documents>, as of December 3, 2023.

Alberta (2023b). Royalty Summary Revenue Workbook 2021/22. Historical Royalty Revenue. Government of Alberta. <a href="https://open.alberta.ca/opendata/historical-royalty-revenue">https://open.alberta.ca/opendata/historical-royalty-revenue</a>, as of August 26, 2023.

Bazel, Philip and Jack M. Mintz (2013). Enhancing the Alberta Tax Advantage with a Harmonized Sales Tax. The School of Public Policy. <a href="https://www.policyschool.ca/wp-content/uploads/2016/03/alberta-hst-final.pdf">https://www.policyschool.ca/wp-content/uploads/2016/03/alberta-hst-final.pdf</a>, as of October 24, 2023.

Ferede, Ergete (2018). Alberta's Fiscal Responses to Fluctuations in Non-Renewable-Resource Revenue. SPP Briefing Paper, 11, 24. School of Public Policy, University of Calgary. <a href="https://www.policyschool.ca/wp-content/up-">https://www.policyschool.ca/wp-content/uploads/2018/09/NRR-Ferede.pdf>, as of October 10, 2023.

Finances of the Nation (2023). Government Revenue and Expenditure. <a href="https://financesofthenation.ca/real-fed-">https://financesofthenation.ca/real-fed-</a> prov/>, as of October 11, 2023.

Hill, Tegan, Joel Emes, and Jason Clemens (2021). A New (Old) Fiscal Rule for Non-renewable Resource Revenue in Alberta. Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/new-old-fiscal-rule-for-non-renew-">https://www.fraserinstitute.org/sites/default/files/new-old-fiscal-rule-for-non-renew-</a> able-resource-revenue-in-alberta.pdf>, as of October 24, 2023.

Hill, Tegan, Jake Fuss, and Joel Emes (2022). Alberta Premiers and Government Spending. Fraser Institute. <a href="https://">https:// www.fraserinstitute.org/sites/default/files/ab-premiers-and-government-spending.pdf>, as of October 10, 2023.

Hill, Tegan and Milagros Palacios (2023). It's Time to Get Off the Resource Revenue Rollercoaster: Re-establishing the Alberta Sustainability Fund. Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/re-establishing-">https://www.fraserinstitute.org/sites/default/files/re-establishingthe-alberta-sustainability-fund.pdf>, as of October 24, 2023.

Landon, Stuart and Constance Smith (2010). Energy Prices and Alberta Government Revenue Volatility. C.D. Howe Institute Commentary. Fiscal and Tax Competitiveness. No. 313, November 2010. <a href="https://www.cdhowe.org/">https://www.cdhowe.org/</a> sites/default/files/attachments/research\_papers/mixed//Commentary\_313.pdf>, as of October 6, 2023.

Statistics Canada (2023a). Table: 18-10-0005-01 (formerly CANSIM 326-0021), Consumer Price Index, annual average, not seasonally adjusted, Annual. Retrieved October 1, 2023. <a href="https://www150.statcan.gc.ca/t1/tbl1/en/">https://www150.statcan.gc.ca/t1/tbl1/en/</a> tv.action?pid=1810000501>, retrieved October 1, 2023.

Statistics Canada (2023b). Table 17-10-0005-01, Population estimates only July 1st, by age and sex. <a href="https://">https://</a> www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000501>, retrieved October 1, 2023.

Tombe, Trevor (2022). A Plan to Secure Alberta's Fiscal Future. C.D. Howe Institute. <a href="https://www.cdhowe.org/">https://www.cdhowe.org/</a> sites/default/files/2022-06/IM\_Tombe\_2022\_0603.pdf>, as of October 24, 2023.

#### Tegan Hill



Tegan Hill is Associate Director, Alberta Policy at the Fraser Institute. She holds a Bachelor of Economics and a Master's Degree in Public Policy from the University of Calgary. Ms. Hill's articles have appeared in major Canadian newspapers including the Globe and Mail, National Post, and Ottawa Citizen. She specializes in government

spending, taxation, and debt.

### **Milagros Palacios**



Milagros Palacios is the Director for the Addington Centre for Measurement at the Fraser Institute. She holds a B.S. in Industrial Engineering from the Pontifical Catholic University of Peru and a M.Sc. in Economics from the University of Concepcion, Chile. Ms. Palacios has studied public policy involving taxation, government

finances, investment, productivity, labour markets, and charitable giving, for nearly 10 years. Since joining the Institute, Ms. Palacios has authored or coauthored over 150 comprehensive research studies, 150 commentaries and four books. Her recent commentaries have appeared in major Canadian newspapers such as the National Post, Toronto Sun, Windsor Star, and Vancouver Sun.

Copyright © 2024 Fraser Institute. All rights reserved. Without written permission, only brief passages may be quoted in critical articles and reviews.

#### ISSN 2291-8620

Media queries: For media enquiries, please contact our communications department via e-mail: communications@fraserinstitute.org; telephone: 604.714.4582.

**Support** the Institute: call 1.800.665.3558, ext. 574 or e-mail: development@fraserinstitute.orgVisit our website: www.fraserinstitute.org

#### **Acknowledgments**

The authors would like to express appreciation to the anonymous reviewers of this paper. Any remaining errors or omissions are the sole responsibility of the authors. As the researchers have worked independently, the views and conclusions expressed in this paper do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, or supporters.