

# Government of Alberta Budget & Public Finance Analysis

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## Abstract

This project involves an interactive analysis of Alberta's provincial budget (2018-2023). This project tracks spending, deficits and debt trends to assess the sustainability of public finances and develop data-driven recommendations. The project utilizes time-series budget tracking to visualize annual spending, revenue, deficits, and debt levels (2018-2023). Calculate and monitor debt-to-GDP and debt service cost – to – revenue ratios. The project also compares Alberta's fiscal policies against peer provinces to identify best practices and generate cost-saving strategies and debt-management guidelines-based n quantitative findings

## Keywords

- **Principal:** The original amount of money borrowed.
- **Interest:** The cost of borrowing the money, expressed as a percentage of the principal
- **Debt Service:** The sum of principal and interest payments due within a specific period, such as monthly or annually.

## Findings

The line graph below depicts how the debt amount has been increasing as time has been passing the data begins in 2018 up to 2023 and as can be seen below the debt amount has been rising. What we can also notice is that the rate does reduce, the graph is a lot steeper between 2018 and 2021, compared 2021 to 2023, this is an indication that the rate of borrowed money is reducing and therefore we can forecast future debt to be at a lower rate.

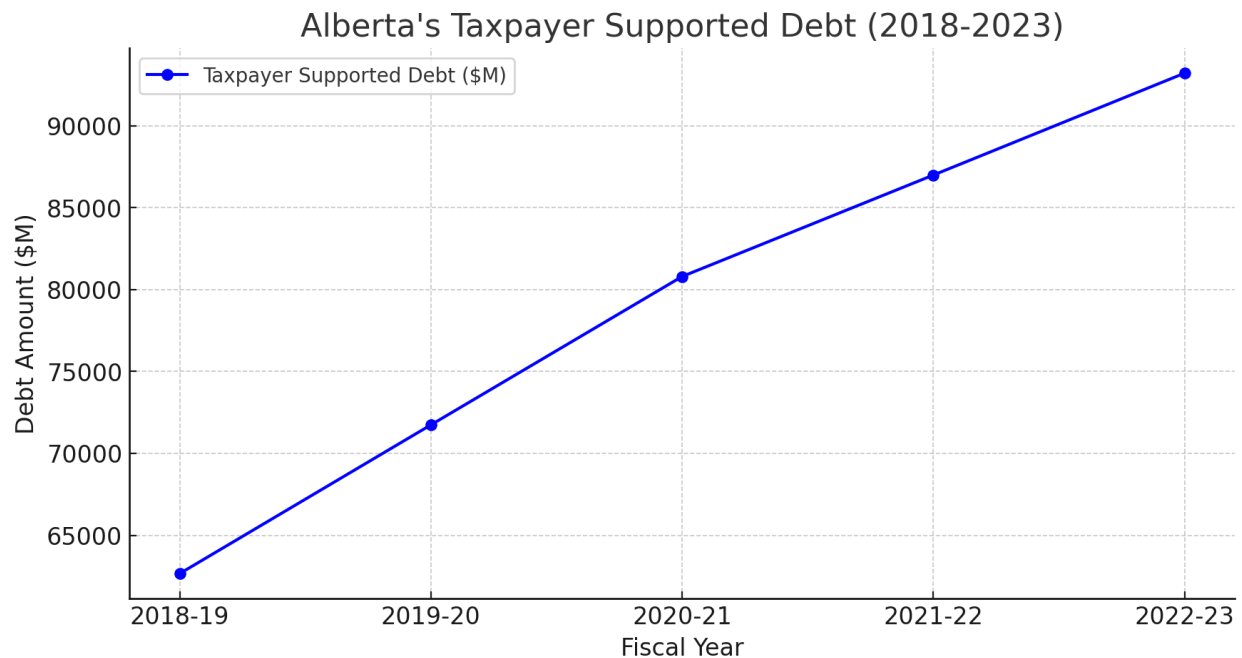


Fig 1.1 Alberta Debt 2018 - 2023

Another factor we have to take into account when talking about debt is the debt service cost. Debt service cost refers to the total amount of money required to cover the repayment of a loan's principal and interest over a specific period, typically a year. It represents the cash flow needed to service outstanding debt obligations. This includes both interest payments and the repayment of the original loan amount. The plot below shows Alberta debt service cost.

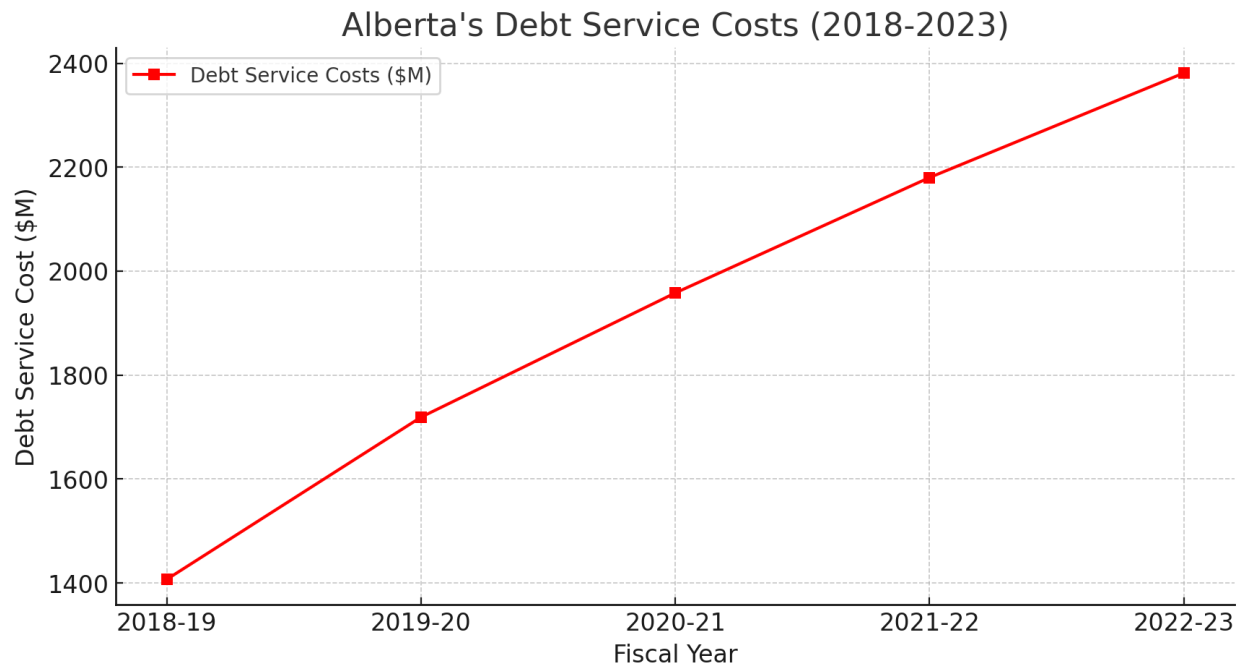


Fig 1.2 Alberta Debt Service cost.

As we can see above the line graph is increasing meaning that the financial burden associated with borrowing the debt that Alberta has is also increasing. This doesn't in any way assess how far Alberta has reached to paying its debt it is a key factor in assessing Alberta's ability to manage their debt obligations and can be used to evaluate Alberta's capacity to meet these payments. If we wish to see how far off the Albertan government is to pay these debts we can have a better look at Alberta's debt to revenue ratio.

**243.92%**  
Debt\_to\_Revenue

Fig 1.3 Alberta's Debt to Revenue ratio.

The debt to revenue ratio is 243% what does this number actually mean. Well debt to revenue ratio is a financial metric that compares an organisations total debt to its total revenue. It is a key indicator of a company's ability to manage its debt obligations relative to its earnings. A lower DTR generally suggests a stronger financial position, while a higher DTR may indicate a

greater risk of financial distress. In this scenario it is 243% which is quite a high number, this indicates that Alberta is not making enough revenue to be able to cover their increasing debt. In order to tackle this many economic reforms including the extraction of fossil fuel, which is Alberta main source of income should be optimized in a better and more profitable manner.

## Conclusion

Alberta does have an increasing amount of debt even though the rate has seen a fall, in order to be able to tackle this situation Alberta has to increase revenue by more production and increasing earning efficiency.

## References

Government of Alberta

## Tools and Technologies

- Excel – Data cleaning, visualisation & formatting
- Power Bi – Data Visualisation