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FISCAL ANALYSIS OF PROPOSED PREMIUM REDUCTION FOR MORTGAGE INSURANCE

OFFICE OF THE PARLIAMENTARY BUDGET OFFICER
BUREAU DU DIRECTEUR PARLEMENTAIRE DU BUDGET

The Parliamentary Budget Officer (PBO) supports Parliament by providing economic and financial analysis for the purposes of raising the quality of parliamentary debate and promoting greater budget transparency and accountability.

This note provides fiscal analysis of the Government's proposal to reduce mortgage insurance premiums collected by the Canada Mortgage and Housing Corporation (CMHC).

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Executive Summary

On September 1, 2021, the Liberal Party unveiled its election platform in which it proposed to reduce the monthly cost of mortgage payments. Parliamentarians have expressed interest in such a measure. The Parliamentary Budget Officer (PBO) conducted a fiscal analysis of the proposal and estimated the cost of the measure.

In concrete terms, the measure has two components:

- A 25% reduction in the mortgage insurance premium required by the Canadian Housing Corporation (hereafter CMHC); and
- An increase in the insured mortgage cut-off from $1 million to $1.25 million (indexed to inflation).

PBO projects that a 25% decrease in the mortgage insurance premium will result in a net cost of $1,366 million between fiscal years 2022-2023 and 2026-2027.

Summary Table S-1 Impact of Mortgage Insurance Premium Decrease on CMHC's Financials

Total Cost ($ millions)	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	Total
Earned Fees and Premiums	85	166	242	307	359	1,159
Investment Income	13	25	40	56	73	207
Total	98	191	282	363	432	1,366

Source: PBO calculations.

Notes: Totals may not add due to rounding. Figures represented in nominal (then-year) dollars.
Positive numbers subtract from the budgetary balance, negative numbers contribute to the budget balance.

PBO also estimates that Canadian households will save an average of $5,341 in 2022-2023, increasing to $5,863 for households with a secured mortgage in 2026-2027.

This estimate is based on a static approach that assumes that the rates charged by other participants in the mortgage insurance market will reflect their instantaneous response to the proposed measure. CMHC's market share will therefore remain unchanged.

Summary Table S-2 Decrease in the Average Mortgage Insurance Premium per Household Impacted

Savings ($)	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Average savings per household	5,341	5,476	5,604	5,736	5,863

Source: PBO calculations.

Notes: Totals may not add due to rounding. Figures represented in nominal (then-year) dollars.

1. Introduction

Canadian households wishing to purchase a home can provide a down payment of less than 20% of the value of their home through CMHC's mortgage insurance program. The financial institution granting the mortgage must obtain mortgage loan insurance from CMHC. In return, lenders assume the cost of the insurance by paying a premium that depends on the initial down payment and the amount of the loan. Currently, households can expect to pay between 0.60% and 4.00%, depending on a loan-to-value ratio of between 0-65% and 90-95%. Homes costing $1 million or more are not eligible for the current program.

In its election platform, the Liberal Party states that Canadian families pay an average of $30,000 in premiums over the life of their mortgage. In an effort to ease this financial burden, the party is proposing a 25% reduction in the mortgage insurance premium charged by CMHC. In addition, it commits to increasing the insured mortgage cut-off from $1 million to $1.25 million.

PBO has produced a cost estimate of these proposals. In this regard, PBO requested and received information from CMHC on its mortgage insurance activities.[1]

2. Parameters and Assumptions

PBO uses the parameters of the proposed change as well as those used by CMHC in its financial modeling. Several assumptions were also required to estimate the cost of the policy change.

2.1. Parameters

In its 2021 election platform, the Liberal Party proposes two changes to CMHC's mortgage insurance program:

- a 25% reduction in the mortgage insurance premium required by CMHC; and
- an increase in the insured mortgage cut-off to $1.25 million.

Since fees and premiums are collected over time, gains are realized over time according to a chart provided to PBO by CMHC. It shows the percentage of fees and premiums earned annually by the Crown corporation over the maximum 25-year term of a mortgage. These rates are used as parameters for financial modeling.

2.2. Assumptions

A number of assumptions are required to estimate the cost of the proposed changes.

To start, the changes are not expected to significantly affect the number of homes insured by CMHC. This is because demand for mortgage insurance is inelastic with respect to price, so consumers will not purchase more mortgage insurance because of lower premiums. In this sense, there will be little increase in demand as a result of a decrease in price.

Homes with a market value of $1 million or more represent a small fraction of the Crown corporation's mortgage portfolio. Although the insured mortgage cut-off will be $1.25 million, the increase in the volume of homes insured in this niche of the housing market is not expected to be substantial. CMHC's historical data show that homes worth $800 K or more currently represent 0.6% of its insured mortgage portfolio.

Furthermore, CMHC's market share is expected to remain steady. We assume that other market participants will respond immediately to the proposed measure by adjusting their own mortgage insurance premium rate.

The historical decomposition of the number of homes in the various loan-to-value categories is a good predictor of the future decomposition. This is a necessary working assumption to model the rate that CMHC will charge to insure future mortgages.

PBO assumes that the Crown corporation will incur the same claim costs, resulting in no impact by the proposed changes. This assumes no behavioural response from the federal guarantor.

As for investment income, it is modeled on CMHC's past performance, i.e., its historical investment returns. This assumes that these are good predictors of future returns.

Finally, PBO assumes that the proposed changes will take effect on April 1, 2022.

3. Financial analysis

Decreasing the mortgage insurance premium that CMHC charges will impact the Government's finances in two ways. It will result in a decrease in the earned premiums and fees and a decrease in investment income. When combined these components provide an estimate of the financial cost to the Government of decreasing the mortgage insurance premium rate that CMHC charges. To determine the cost of the policy PBO estimated these components both before and after incorporating the policy change.

3.1. Earned fees and premiums

CMHC charges fees and premiums to provide mortgage insurance. The magnitude of the fees is determined by the sale price of the home, and what percentage of the sale price is made as a down payment. The percent of the mortgage remaining after the down payment is its "Loan-to-Value" (LTV) and determines what premium CMHC will charge to insure it. The greater the LTV the higher the premium that will be charged.

To estimate the decline in fees and premiums that results following the policy change, PBO constructed a representative mortgage and its associated premiums.[2] The number of homes that CMHC will insure in each year was then estimated. The total value of the premiums was obtained by multiplying the representative mortgage's premium by the number of homes that CMHC will insure. These premiums were then realized by CMHC over the following years according to historic trends in the rate of realization.[3]

3.2. Investment income

CMHC also receives revenue from investing the fees and premiums that it earns. To estimate the impact of the policy PBO assumed that the returns on investment would remain the same, but that the flow of new capital to invest would be impacted by the decrease in fees and premiums that the policy would prompt.

4. Results

PBO estimates that a 25% decrease in the mortgage insurance premiums charged by CMHC will cost the Government $1,366 million over 5 years. PBO also estimates that the average savings per household requiring mortgage insurance will be a one-time savings of $5,341 for mortgages insured in 2022-2023, increasing to a one-time savings of $5,863 in 2026-2027.

Table 4-1 presents how the decrease in premiums is expected to effect CMHC's financial position and the resultant impact on the Government's finances. The year-over-year increase in costs is driven by two factors. The first is that CMHC will be collecting a lower amount of fees each year as a result of lower mortgage insurance premiums on each transaction. This translates to fewer resources being available for investment, resulting in a decrease in total returns. The second factor is that CMHC does not realize mortgage insurance premiums all at once, but rather over the course of several years. As time passes, the mortgages insured after the policy change reduces premiums will represent a greater portion of CMHC's portfolio of mortgages, further decreasing their revenues until these new mortgages comprise their entire portfolio.

Table 4-1 Impact of Mortgage Insurance Premium Decrease on CMHC's Financials

Total Cost ($ millions)	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	Total
Earned Fees and Premiums	85	166	242	307	359	1,159
Investment Income	13	25	40	56	73	207
Total	98	191	282	363	432	1,366

Source: PBO calculations

Notes: Totals may not add due to rounding. Figures represented in nominal (then-year) dollars.

Positive numbers subtract from the budgetary balance, negative numbers contribute to the budget balance.

Table 4-2 presents the average household savings that are anticipated to occur after the policy change is implemented.[4] The increase over time is driven by expected increases in home prices resulting in larger mortgages, which in turn translates to greater savings relative to the current set of mortgage insurance premiums.

Table 4-2 Decrease in the Average Mortgage Insurance Premium per Household Impacted

Savings ($)	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Average Savings per Household	5,341	5,476	5,604	5,736	5,863

Source: PBO calculations

Notes: Totals may not add due to rounding. Figures represented in nominal (then-year) dollars.

4.1. Sensitivity Analysis

PBO conducted sensitivity analysis to determine under what conditions the policy change could be revenue neutral. Relative to a baseline model, CMHC would need to insure 37.62% more homes or increase its market share by 11.51% relative to what CMHC is currently predicting to ensure that the policy change would be revenue neutral over a 5-year period.[5] Table 4-3 provides a breakdown of the yearly changes in CMHC's profits when each of these different scenarios are considered. Any household savings that would result from this policy change would not be impacted in either of these scenarios.

Table 4-3 Impact of Mortgage Insurance Premium Decrease on CMHC's Financials

Total Cost ($ millions)	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	Total
Total after a 37.62% increase in homes insured	0	-4	-4	3	6	0
Total after a 11.51% increase in CMHC's market share	-5	-11	-8	5	18	0

Source: PBO calculations

Notes: Totals may not add due to rounding. Figures represented in nominal (then-year) dollars.
Positive numbers subtract from the budgetary balance, negative numbers contribute to the budget balance.

PBO does not anticipate that CMHC will be able to achieve a 37.62% increase in the number of homes that it insures after the policy change. This is due to demand for mortgage insurance being inelastic with respect to price as well as the increase in the maximum amount insurable not being expected to have a significant effect. As noted earlier mortgages with a value exceeding $800 K represent only 0.6% of CMHC's portfolio of insured mortgages. Both the decrease in price and the increase in the maximum sale price that can be insured places upward pressure on the number of homes that CMHC will insure relative to the status quo. However, it is not anticipated that this will be sufficient to obtain the 37.62% increase necessary to obtain revenue neutrality.[6]

PBO does not expect that CMHC will be able to capture an additional 11.51% of the mortgage insurance market after the policy change goes into effect. When CMHC has changed its rates in the past private mortgage insurance providers have quicky responded such that no significant change in market share occurred.

Notes

1. "Information Request - IR0610." Office of the Parliamentary Budget Officer. https://www.pbo-dpb.gc.ca/en/information-requests--demandes-information?ir=IR0610
2. The representative mortgage was constructed using estimates of average home sale price and a weighted average of the down payments and resulting LTVs which were calculated using historic information provided by CMHC.
3. CMHC operates on an accrual basis. This means that they do not immediately recognize the full value of the transaction. They instead recognize the transaction over its economic lifespan, that is the time it will be an asset or liability on CMHC's balance sheet. In this case the transaction is recognized over the amortization period of the mortgage insurance contract. The rate at which these payments are recognized was estimated using information provided by CMHC.
4. It is important to note that these savings are not recurrent, but rather represent one-time average savings for new mortgages insured in that year.
5. CMHC provided a forecast of its expected market share in future years in its response to PBO's information request. PBO viewed this forecast as being credible and used it in subsequent analysis.
6. A 37.62% increase exceeds the largest year-over-year percentage change, both in positive or negative terms, that CMHC has realized in the historical data to which PBO has access.