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REVENUE ESTIMATES OF M-68: ONE-TIME TAX ON EXTREME WEALTH



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Executive Summary

This report is in response to a request by Member of Parliament Nathaniel Erskine-Smith (Beaches–East York) to estimate the revenues from implementing a one-time tax on extreme wealth outlined in Motion M-68 placed on notice on February 11, 2021.¹

Specifically, it presents PBO's revenue estimates for imposing a one-time tax on net wealth accumulated up to the end of April 2021 by Canadian resident economic families. The proposed tax rate is 3% on net wealth over \$10 million and 5% on net wealth over \$20 million. The tax liability is to be paid over a period of five years.

Summary Table 1 presents the estimated net revenues (gross revenues minus administrative costs) of the proposed one-time tax on net wealth. The table includes estimated revenues under different behavioural assumptions. The first estimate in Summary Table 1 uses the consistent assumption of behavioural response to annual wealth taxes in PBO's previously published reports.² Under this assumption, the total estimated net revenues is \$44 billion over 5 years. The second estimate introduces new behavioural assumptions considering the proposed measure would be a one-time tax on wealth already accumulated. Using this model, PBO finds that the total estimated net revenues is \$60.7 billion over five years.

Summary Table 1 Estimated net revenues of the one-time wealth tax, by fiscal years and behavioural assumptions.

\$ Billions	2021- 2022	2022- 2023	2023- 2024	2024- 2025	2025- 2026	Total
35 per cent net wealth reduction						
Net revenues	8.8	8.8	8.8	8.8	8.8	44.0
New behavioural assumption (15 and 20 per cent net wealth reduction)						
Net revenues	12.1	12.1	12.1	12.1	12.1	60.7

Sources: PBO calculations; PBO High-net-worth Family Database

Note: Totals may not add due to rounding.

1. Introduction

This report is in response to a request by Member of Parliament Nathaniel Erskine-Smith (Beaches-East York) to estimate the revenues from implementing a one-time tax on extreme wealth outlined in Motion M-68 placed on notice on February 11, 2021.³ The proposed tax has the following features:

- A 3% tax on net wealth over \$10 million and a 5% on net wealth over \$20 million that has been accumulated up to the end of April 2021 by Canadian resident economic families;
- Net wealth is defined as financial and non-financial assets minus total liabilities;
- There are no exemptions for specific assets; and
- The amount of tax owed is to be paid in five equal payments over a period of 5 years with no interest.

This report describes the PBO's estimation of the tax revenues. First, the PBO's *High-net-worth Family Database* (HFD) is updated to reflect the latest information available. The behavioural response to annual wealth taxes used in the previously published reports is considered; in addition, a model is developed to derive the behavioural response to the one-time wealth tax. The tax revenues are then estimated incorporating the behavioural responses and divided equally over a period of 5 fiscal years.

2. Revenue Estimates

2.1. Updating the High-net-worth Family Database

To construct the tax base for the proposed tax on accumulated net wealth, the PBO's HFD had to be projected to April 2021. PBO proceeded with the projection in the same way as in the previous wealth tax reports, but modified how it grows the top tail of the wealth distribution. The small change in methodology, made to account for recent increases of wealth at the very top, incorporated information from the Forbes World's Billionaires List.⁴

The net wealth of individuals/families found in both the 2016's Canadian Business Rich List (CB) and in the Forbes lists was updated using the growth

in net wealth in Forbes from 2017 and 2021.⁵ For the entries that are not in both publications, the average growth of net wealth from Canadian residents present in the both lists was used. The final adjustment made to the top tail is to incorporate new entrants from the Forbes 2021 list. The net wealth of the new top tail is then divided in its components of financial assets, non-financial assets, and total liabilities as in the original construction of the HFD.

The rest of the wealth distribution is updated by increasing the population using growth rates from Statistics Canada's Quarterly Demographic Estimates up to Q1 2021, adjusted for the number of families in the top tail. Financial assets, non-financial assets, and liabilities of each family were increased proportionally and brought in line with the growth rates of their aggregate totals in (a) the National Balance Sheet Accounts up to Q4 2020 and (b) PBO's Economic Model for Q1 2021. Adjustments are made to exclude the growth stemming from the top tail of the distribution to avoid double counting.

2.2. Deriving a behavioural response

Previous PBO evaluations of a wealth tax were based on the assumption that families would reduce their reported wealth by 35% in response to the imposition of a 1% annual tax on wealth, including future wealth. The proposed tax measure considered in this report, by contrast, targets already accumulated wealth and applies only once (even if it is to be paid over 5 years). Any future dynamic effects resulting from the imposition of the tax will not affect its revenues. The only behavioural impact on tax revenues is avoidance and evasion. This distinction required a change to the previously used behavioural assumption that included dynamic considerations.

To capture the main behavioural responses to the one-time wealth tax, PBO used a stylized model of wealth tax avoidance and evasion.⁶ Informed by the observed avoidance/evasion behaviour with respect to the US estate tax and the stylized model, PBO obtained a behavioural response that is a function of the tax rate. The results of this back-of-the-envelope calculation implies that for families facing a 3% tax rate, 15% of their wealth is likely to be avoided/evaded. For those facing a 5% tax rate, the share of wealth avoided/evaded will be 19.8%.⁷ For families with net wealth between \$23.5 million and \$24.9 million, just enough will be avoided/evaded to stay at the \$20 million threshold. The details of the stylized model and how the PBO derived the key parameter of the model can be found in Appendix A.

2.3. Results

This report presents two estimates of the revenues from the proposed one-time tax on net wealth. One of the estimates uses the same behavioural response assumed in previously published reports where there is a 35% reduction of reported wealth due to the imposition of the tax; the second estimate uses the modeled behavioural response as highlighted above. Note that we present the scenario of no behavioural response as a benchmark to highlight the importance of the behavioural response of families, but is not considered to be plausible.

To complete the estimates, administrative costs of collecting the tax must be considered. PBO assumes administrative costs to be 2% of the gross revenues collected.⁸

Estimates shown in Table 2-1 are the revenues that will be collected over five years as well the number of families that will face the wealth tax. These estimates are broken down by gross revenues and administrative costs as well as by behavioural assumptions.

Table 2-1 Estimated Revenues of one-time wealth tax, under different behavioural responses

	Behavioural response assumptions		
	No behavioural response	35% net wealth reduction	New modeled behavioural response
Number of families	87,149	46,805	68,686
Tax base (\$ Billions)	1,892	1,008	1,403
Gross tax revenues (A) (\$ Billions)	84.2	44.9	62.0
Administrative costs (B) (\$ Billions)	1.7	0.9	1.2
Net revenues (A-B) (\$ Billions)	82.5	44.0	60.7

Sources: PBO calculations; PBO High-net-worth Family Database

Note: Totals may not add due to rounding.

Table 2-1 also illustrates the change to the tax base, i.e. net wealth above \$10 million, based on different behavioural response assumptions. Note that due to the high wealth threshold and the unequal nature of the wealth distribution, the reduction in reported wealth will lead to an even greater reduction in the tax base.

M-68 proposes that the tax obligations be paid over 5 years. The annual profile of revenues and administrative costs are assumed to be equally divided over 5 fiscal years from 2021-2022 to 2025-2026.

2.4. Sources of Uncertainty

This report includes two sets of estimates of the revenues from the proposed one-time tax on accumulated net wealth, using two different modelling approaches to behavioural responses. This highlights the high uncertainty about the true response to the imposition of this tax. Supplementary details of the policy design and the enforcement of tax compliance will be crucial in determining the true response of families facing the wealth tax. The absence of robust information on assets and liabilities of taxpayers by the Canada Revenue Agency is an additional source of uncertainty with respect to the estimate, as it would complicate compliance and enforcement. Furthermore, the asset valuation techniques prescribed by the legislation and the related administrative cost can increase the uncertainty of the estimation.

In addition to behavioural responses, the true distribution of wealth above \$10 million remains uncertain. Caveats that applied to the creation of the HFD remain valid, but how most of the database is brought forward from 2016 to 2021 may lead to an overstatement of wealth concentration. At the same time, updating the very top of the net wealth distribution using Forbes adds further uncertainty. As was the case in 2016, the Forbes list may be undercounting the number of wealthy Canadian families, which would reduce the amount of wealth at the top. However, there is substantial volatility in the valuation of wealth at the top. The use of an average growth rate for the missing entries in the Forbes 2021 found in Canadian Business Rich list of 2016 may overestimate the wealth at the top.

Finally, the collection of the tax revenues may be constrained by liquidity issues. For families with high levels of wealth, much of this wealth tends to be tied to business ownerships that can't easily be sold to pay wealth tax liabilities. Although the payment of tax owed is spread over five years, it may not solve all issues stemming from liquidity constraints. Further provisions may be necessary to fully address this problem. These considerations are not taken into account in this report and may lead to further uncertainty with respect to revenues raised by the tax.

Appendix A: Wealth tax avoidance model

A.1 Basic model

Because a one-time tax on wealth would tax already accumulated wealth, PBO considers a model where wealth W is taken as given and the only decision made by the individual is the amount of wealth A being avoided/evaded in response to the tax rate τ . Let the problem of the individual be

$$\max_{A \leq W} W - \tau[(W - A) - \widehat{W}] - C(A, W),$$

where $W - A$ is reported wealth and \widehat{W} is the wealth threshold for which wealth starts being taxed. The cost function $C(A, W)$ measures the cost of avoiding taxes, and for simplicity we use the following iso-elastic functional form

$$C(A, W) = \left(\frac{A}{W}\right)^{\frac{1}{\gamma}} \cdot \frac{A}{1 + \frac{1}{\gamma}},$$

where γ is parameter that can represent cost of tax planning, penalties, fines or other costs related to avoidance and evasion. The interior solution to the problem is

$$A^* = \tau^\gamma \cdot W,$$

which leads to reported wealth $W - A^* = (1 - \tau^\gamma) \cdot W$, and the share of avoided taxes on wealth to be

$$s \equiv \frac{A^*}{W} = \tau^\gamma. \text{ }^{910}$$

A.2 Back-of-the envelope calculation

It is possible to infer the parameter γ from observed reactions to wealth taxes by using the assumed share of missing wealth s and the level of taxation. Using the above derivations, with some manipulation it is possible to obtain

$$\hat{\gamma} = \frac{\ln s}{\ln \tau}$$

where $\hat{\gamma}$ is the inferred behavioural parameter.

For the US estate tax, there are important deductions that can lower the effective tax rate paid on the estate at death. To take this into consideration in a simple manner, it is possible to modify the model by introducing a constant α in front of reported wealth in the above problem. This constant keeps the problem similar but now the tax rate is applied to the net-of-deduction wealth. The share of the wealth being deducted is taken as given. Solving the individual's problem yields $s = (\alpha\tau)^{\gamma}$.

The PBO used Saez and Zucman's (2019) estimate of 33% avoidance/evasion rate of the US estate tax at the top of the wealth distribution, the maximum tax rate of 40% and total deductions of 67.9% of the net estate for gross estates above \$50 million to obtain parameter $\hat{\gamma}$.¹¹

The inferred behavioural parameter of wealth avoidance is

$$\hat{\gamma} = \ln 0.33 / \ln[(1 - 0.679) \times 0.40] \approx 0.54.$$

This implies that for a tax rate of 5% the reduction in reported wealth will be $s = 19.8\%$ ($s = 15\%$ for a tax rate of 3%).

References

Saez, E., and G. Zucman. 2019. "Progressive wealth taxation". BPEA Conference Draft, Fall.

Seim, D. 2017. "Behavioural Responses to Wealth Taxes: Evidence from Sweden". *American Economic Journal: Economic Policy*, 395-421.

Slemrod, J. 2001 "A General Model of the Behavioral Response to Taxation". *International Tax and Finance*, 8:119-128.

Notes

1. Motion M-68. Retrieved from: [https://www.ourcommons.ca/members/en/nathaniel-erskine-smith\(88687\)/motions/11102201](https://www.ourcommons.ca/members/en/nathaniel-erskine-smith(88687)/motions/11102201)
2. For information on the previous methodology see PBO costing note: Net wealth tax on Canadian resident families. <https://pbo-dpb.gc.ca/en/blog/news/RP-2021-017-M--net-wealth-tax-canadian-resident-economic-families--impot-patrimoine-net-familles-economiques-residant-au-canada>
3. Ibid, Note 1.
4. Ibid, Note 2.
5. This assumes that the valuation from CB is the correct valuation and that if there is a difference in the valuation between the two publications, the error is proportional and stays the same.
6. The simple model of tax avoidance was proposed by Slemrod (2001) and was applied to wealth taxation evasion in Seim (2017). For PBO's purposes the model captures both avoidance, a variety of tax planning activities whose goal is to directly reduce tax liability, and evasion responses in a reduced-form manner.
7. Note that some families will evade enough such that they will not be paying any wealth taxes.
8. Inspectorate General of Finances. 2014. "Relatif à la rationalisation du coût de gestion des prélèvements obligatoires." Retrieved from <http://www.igf.finances.gouv.fr/files/live/sites/igf/files/contributed/IGF%20internet/2.RapportsPublics/2014/2014-M-021.pdf>. [in French only]
9. For those close to threshold \widehat{W} , the interior solution may lead to more avoidance than needed. Therefore, many individuals would choose a level of avoidance A just enough to reduce their wealth such that it is no longer taxed. If the wealth tax also features different rates, then you will see similar "bunching" behaviour around the thresholds.
10. Note that γ is the elasticity with respect to the tax rate, i.e.

$$\frac{\partial s}{\partial \tau} \tau = \gamma$$

and that the elasticity of taxable wealth is

$$\frac{\partial(W - A)}{\partial(1 - \tau)} \frac{1 - \tau}{W - A} = \gamma \frac{\tau^{\gamma-1}(1 - \tau)}{1 - \tau^\gamma}.$$

11. The avoidance/evasion rate from the US estate tax incorporates dynamic considerations, so the inferred parameter maybe considered as an upper bound.