



Analysis of Changes to the Taxation of Corporate Passive Investment Income

> Ottawa, Canada 23 November 2017 www.pbo-dpb.gc.ca

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

On July 18, 2017, the Minister of Finance announced consultations on tax planning strategies involving the use of private corporations. This report analyzes potential changes to the taxation of corporate passive investment income, one of the policy proposals put forth as part of the consultations.

This report was written by: Tim Scholz, Economic Advisor-Analyst Govindadeva Bernier, Financial Analyst

With comments from: Mostafa Askari, Deputy Parliamentary Budget Officer Jason Jacques, Senior Director

Nancy Beauchamp and Jocelyne Scrim assisted with the preparation of the report for publication.

Please contact pbo-dpb@parl.gc.ca for further information.

Jean-Denis Fréchette Parliamentary Budget Officer

Table of Contents

Executive Sur	1			
1. Context	1. Context			
2. Revenue Ir	8			
3. Distributio	onal Analysis	10		
Appendix A:	Methodology	15		
A.1	Data and Definitions	15		
A.2	Modeling Passive Investments	16		
A.3	Revenue Impact	17		
A.4	Behavioural Response Impact	18		
References		20		
Notes		21		

Executive Summary

On July 18, 2017, the Minister of Finance announced consultations on tax planning strategies involving the use of private corporations. These consultations included proposed policy changes to the taxation of corporate passive investment income, such as interest or dividends. The Government has signaled that it will release draft legislation for these changes as part of Budget 2018.

The Parliamentary Budget Officer (PBO) has estimated the potential fiscal magnitude of changes to passive income taxation based on the principles and preferred policy options outlined in Finance Canada's July 18, 2017, consultation document and subsequent details announced in October. Our estimate is based on the following changes to the current corporate tax system for Canadian Controlled Private Corporations (CCPCs):

- 1. Refundable taxes on property income, portfolio dividends and capital gains would no longer be refundable where the source of funds for these investments benefited from low corporate tax rates;
- Capital gains dividends, which are currently distributed to shareholders tax-free via the Capital Dividend Account, would now be taxed as dividends; and,
- 3. Existing passive investment portfolios as defined by their nominal dollar value per firm² would not be affected by the changes. Rather, the policy changes would apply only to passive investment income on new investments exceeding an income threshold of \$50,000.

PBO estimates that these changes could increase annual federal revenues by up to \$1 billion in the short term (one to two years after implementation), \$3 to \$4 billion over the medium term (five to ten years after implementation) and up to \$6 billion over the long term (Summary Table 1).

Our analysis suggests that the proposed policy changes could take over 20 years to reach full maturity. We estimate that about 47,000 (2.5 per cent) of CCPCs would be affected by these changes.

Summary Table 1

Primary annual federal revenue impacts of proposed changes to passive income taxation

Medium term	Long term
(5-10 years)	(20+ years)

Up to \$1 billion \$3 to \$4 billion Up to \$6 billion

Note: Figures are in 2017 dollars based on the 2014 tax reference year

Sources: Parliamentary Budget Officer, Statistics Canada T2-LEAP Database

The primary revenue estimates in Summary Table 1 are subject to the following caveats:

- They do not account for behavioural changes. The incidence of these policy changes is concentrated on a relatively small percentage of large firms. The owners of these firms may change their tax strategies to minimize tax payments, which represents a **downside** risk to our estimates. Using an elasticity of 0.38, we estimate that behavioural impacts could reduce our primary revenue estimates in Summary Table 1 by 10 to 15 per cent (See Appendix A.4).
- They are based on the 2014 tax reference year and adjusted up by about 10 per cent based on PBO's estimated growth of the corporate tax base from 2014 to 2017. This implies slower growth in passive investment income than observed over 2010 to 2014; this represents an **upside** risk to our estimates.

The Government has not yet provided detailed legislation concerning the design and timing of this policy proposal. As a result, PBO made a number of assumptions regarding the policy design; these are detailed in Appendix A.

PBO estimates that provincial revenues would also increase as a result of these policy changes, but by a much smaller amount. Overall, we estimate that 90 per cent of the revenue gains will accrue to the federal government, assuming no behavioural changes.

In terms of distribution, the impact of these changes is likely to be highly concentrated on a relatively small share of CCPCs, which hold the vast majority of passive investment assets. PBO found that in 2014, 2.5 per cent CCPCs earned 88 per cent of all taxable passive income (Summary Table 2).

Furthermore, CCPCs with passive income above \$1 million (which represent less than 0.1 per cent of all CCPCs) earned almost half of all taxable passive income.

Summary Table 2 Distribution of private passive investment income (2014)

		_	Share of to	otal (%)
Taxable Passive Income Range	Taxable Passive Income (\$M)	No. of CCPCs	Taxable Passive Income	No. of CCPCs
\$0	0	1,610,541	0.0	86.0
\$0.01 to 10K	432	138,817	2.4	7.4
\$10K to 25K	762	46,896	4.1	2.5
\$25K to 50K	1,052	29,590	5.7	1.6
\$50K to 75K	830	13,578	4.5	0.7
\$75K to 100K	665	7,678	3.6	0.4
\$100K to 250K	2,378	15,406	12.9	0.8
\$250K to 500K	1,897	5,435	10.3	0.3
\$500K to 1M	1,866	2,690	10.2	0.1
> \$1M	8,485	2,285	46.2	0.1
Total	18.366	1.872.916	100.0	100.0

Sources: Parliamentary Budget Officer, Statistics Canada, T2-LEAP database

Note: Excludes firms that may not have benefitted from a tax deferral advantage.

CCPCs with high passive investment income are also disproportionately large in size. We estimate that 32 per cent of passive investment income in 2014 is earned by firms with more than \$15 million in taxable capital, while they only represent 2.3 per cent of CCPCs.

We also find that 60 per cent of all passive income is earned by CCPCs with no active business income, suggesting they were set up solely for the purpose of generating passive income.

In terms of sectors, the following three sectors together earned close to 50 per cent of all taxable passive income:

- Finance and insurance (NAICS code 52);
- Real estate and rental and leasing (NAICS code 53); and
- Management of companies and enterprises (NAICS code 55).

They are also the three sectors with the highest share of corporations earning passive income above the proposed \$50,000 threshold (Summary Table 3). CCPCs in the Management sector (NAICS code 55) are likely to be holding corporations, which again suggests they were set up for the purpose of generating passive income.

Summary Table 3 Distribution of CCPCs with investment income and those above the \$50,000 threshold, by industry (2014)

					No. of CCPCs	
				No. of	above	
		No. of	No. of	CCPCs with	threshold as	No. of
		CCPCs	CCPCs	invest.	a share of	CCPCs above
		with	above	income as a	CCPCs with	threshold as
	No. of	invest.	\$50K	share of	invest.	a share of
Industry	CCPCs	income	threshold	CCPCs (%)	income (%)	CCPCs (%)
Agriculture	57,428	12,636	1,618	22.0	12.8	2.8
Construction	176,481	14,992	2,220	8.5	14.8	1.3
Wholesale and Retail	163,595	15,682	2,069	9.6	13.2	1.3
Professionals	85,575	28,140	3,674	32.9	13.1	4.3
Finance + Insurance	61,171	18,209	5,480	29.8	30.1	9.0
Real Estate + Rental	101,150	19,530	6,674	19.3	34.2	6.6
Management of co. Accommodation +	61,471	20,620	6,385	33.5	31.0	10.4
Food serv.	66,600	4,002	544	6.0	13.6	0.8
Other	518,495	56,673	6,113	10.9	10.8	1.2
Missing	580,950	71,891	12,295	12.4	17.1	2.1
Total	1,872,916	262,375	47,072	14.0	17.9	2.5

Sources: Parliamentary Budget Officer, Statistics Canada, T2-LEAP database

Note: Excludes firms that may not have benefitted from a tax deferral advantage.

1. Context

On July 18, 2017, the Minister of Finance announced consultations on three policy proposals developed to address tax planning strategies involving the use of private corporations.³

These strategies included "sprinkling" corporate dividend income to family members; pursuing long-term "passive" investments within a corporation; and methods to convert regular corporate earnings into capital gains.⁴

On October 18, 2017, the Minister of Finance announced that the July 18 proposed changes to passive income taxation would not apply to existing assets, future income arising from existing assets, or investment income below a threshold of \$50,000.⁵ The Government also signaled that it will release draft legislation for these changes as part of Budget 2018.

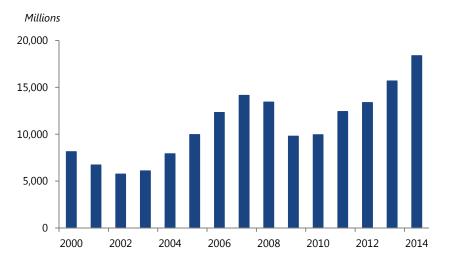
This report analyzes the proposed changes to the taxation of corporate passive investment income. Passive income – such as property income, interest or dividends – consists of earnings derived from activities in which a corporation is not materially involved. They are typically proceeds from invested "active" income that has been retained inside a corporation.

The proposed changes will primarily affect three types of passive investment income:

- Interest income and rental income which is taxed at 38⅓ per cent at
 the federal level and the provincial general corporate taxation rate.
 A portion of the federal tax component 30⅓ percentage points is
 refundable upon payment of taxable dividends;
- **Capital gains,** which are subject to the same taxation as interest and rental income. However, only one-half of the gain is taxed with the remainder set aside in a capital dividend account where it can be distributed tax free to shareholders; and.
- Portfolio dividends, which are taxable dividends paid from non-connected corporations and are subject to a fully refundable tax of 38½ per cent.

PBO estimates that the amount of passive investment income earned by CCPCs that have benefited from low corporate tax rates increased from \$5.8 billion in 2002 to \$18.4 billion in 2014 (Figure 1-1).

Figure 1-1 Passive investment income earned by CCPCs



Sources: Parliamentary Budget Officer, Statistics Canada, T2-LEAP database

Note: Excludes firms that may not have benefitted from a tax deferral advantage.

According to Finance Canada, the new rules aim to improve the neutrality and fairness of the Canadian tax system. For example, owners of a business should be indifferent (from a tax perspective) between earning income through a corporation or directly as an individual. However, the consultation documents outline that such neutrality does not hold under current tax rules with respect to passive income taxation.

Finance Canada identifies three features of Canada's corporate tax system that could favour passive investing within a corporation rather than withdrawing the funds and investing at an individual level.⁶

- Corporate owners undertaking passive investments within their corporations can begin with a larger initial investment portfolio than would be the case at the individual level because corporate income is generally taxed at lower rates than personal income. The magnitude of this advantage depends on whether the income was taxed at the preferential small business rate or general corporate tax rate;
- Corporate investment income is currently subject to refundable and non-refundable taxes at the federal level (Table 1-1). The refundable portion is credited once income is paid out to shareholders and taxed at the personal level.⁷ However, these dividend payouts are triggered regardless of whether the dividend is sourced from active or passive income; and,
- 3. Only one-half of capital gains realized by corporations are taxable and the other half can be distributed tax-free to shareholders via the capital dividend account.

Table 1-1 Federal tax rate on passive investment income

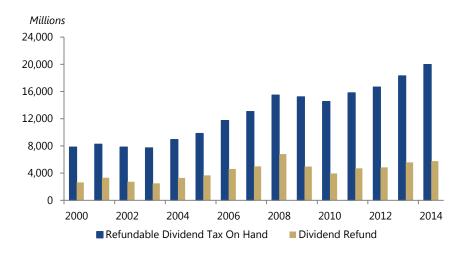
Per cent	Property income	Portfolio Dividends	Capital Gains (½ inclusion)
Federal Non-refundable	8	n/a	8
Federal Refundable	303/3	381/3	303/3
Provincial	General CIT rate	n/a	General CIT rate

Sources: Finance Canada, Parliamentary Budget Officer

Note: Tax and refund apply to the taxable one-half of the capital gain

Refundable taxes accumulate in an account called the Refundable Dividend Tax on Hand (RDTOH). Funds from this account can be withdrawn through a Dividend Refund when dividends are paid out to shareholders. PBO estimates that the stock of funds in RDTOH accounts increased from \$8 billion in 2002 to \$20 billion in 2014, while the annual dividend refund more than doubled from \$2.7 billion to \$5.8 billion during the same period (Figure 1-2).

Figure 1-2 CCPCs Refundable Dividend Tax on Hand and Dividend Refund



Sources: Parliamentary Budget Officer, Statistics Canada, T2-LEAP database

Note: Excludes firms that may not have benefitted from a tax deferral advantage.

The dividend refund directly reduces annual federal corporate income tax revenues, while the stock of unused RDTOH represents a contingent liability against future corporate tax revenues.

Finance Canada proposes removing the refundability of taxes on corporate investment income to equalize after-tax saving outcomes at the personal level. Such a policy would significantly reduce the size of the dividend refund and RDTOH, thereby increasing federal corporate income tax receipts.

2. Revenue Impact

PBO estimated the potential fiscal magnitude of policy changes to taxation of passive investment income outlined in the July 18, 2017 consultation document and the October 18, 2017 follow-up announcement. PBO's methodology and assumptions are detailed in Appendix A.

Our revenue estimate is based on the following changes to the current corporate tax system:

- Refundable taxes on property income, portfolio dividends and capital gains would no longer be refundable where the source of funds for these investments benefited from low corporate tax rates;
- Capital gains dividends, which are currently distributed to shareholders tax free via the Capital Dividend Account, would now be taxed as dividends; and,
- 3. Existing portfolios as defined by their nominal dollar value per firm would not be affected by the changes. Rather, the policy changes would apply only to passive investment income on new investments exceeding an annual income threshold of \$50,000 per CCPC.

We assume that the proposed changes will result in each Canadiancontrolled private corporation (CCPC) having two potential pools of passive investment assets for tax purposes:

- Existing assets, assumed to be the nominal dollar value of a CCPC's
 passive investment portfolio at the time the new rules come into force;
 and,
- New assets, which are acquired after the new rules come into force including those from re-investing income from grandfathered assets.⁹
 Income from this pool would generally not be eligible for refundable taxes, and capital dividends would be taxed as a dividend.

The revenue impacts rise gradually as new passive income – on which the new rules would apply – increases as a share of total passive investment income.

PBO estimates the proposed changes to passive income taxation could increase annual federal revenues by up to \$1 billion in the short term (one to two years after implementation), \$3 to \$4 billion over the medium term (five to ten years after implementation) and up to \$6 billion over the long term (Table 2-1). Our analysis suggests that the proposed policy changes could take over 20 years to reach maturity.¹⁰

Table 2-1 Primary annual federal revenue impacts of proposed changes to passive income taxation

Annual	Short term	Medium term	Long term	
	(1-2 years)	(5-10 years)	(20+ years)	

Up to \$1 billion \$3 to \$4 billion Up to \$6 billion

Note: Figures are in 2017 dollars based on the 2014 tax reference year

Source: Parliamentary Budget Officer, Statistics Canada T2-LEAP Database

These estimates are sensitive to the final policy design and implementation time frame. In particular, the impact on revenue could be significantly affected by the following factors:

- 1. The degree to which passive income trends differ over 2015 to 2017, compared to PBO's baseline tax reference year of 2014. We have adjusted our estimate to account for 10 per cent higher corporate profits in 2017 compared to 2014. This implies slower growth in passive investment income than observed over 2010 to 2014:
- 2. These primary revenue estimates do not account for behavioural changes. The incidence of these policy changes is concentrated on a relatively small percentage of large firms. The owners of these firms may change their tax strategies to minimize tax payments, representing a downside risk to our estimates. Using an elasticity of 0.38, we estimate that behavioural impacts could reduce the primary revenue impacts in Table 2-1 by 10 per cent to 15 per cent (See Appendix A.4);
- The uncertainty over policy and timing regarding how the new regime for passive investment taxation is phased in alongside the old system.
 All else equal, less generous protection for existing assets would result in higher immediate federal revenues; and,
- 4. The potential for additional thresholds, eligibility requirements and other mechanisms, which would narrow the scope of the policy. 11

We will provide a more detailed fiscal profile once additional information is provided.

3. Distributional Analysis

Table 3-1 shows the distribution of taxable passive income by passive income amounts for 2014. The majority of the CCPCs (86 per cent) do not earn any income from passive investment. At the other end of the spectrum, less than 1.5 per cent of CCPCs earn 80 per cent of all passive investment income.

Table 3-1 Distribution of CCPC taxable passive income (2014)

			Share of to	otal (%)
Taxable Passive Income Range	Taxable Passive Income	No. of	Taxable Passive	No. of
(\$)	(\$M)	CCPCs	Income	CCPCs
0	0	1,610,541	0.0	86.0
0.01 to 10K	432	138,817	2.4	7.4
10K to 25K	762	46,896	4.1	2.5
25K to 50K	1,052	29,590	5.7	1.6
50K to 75K	830	13,578	4.5	0.7
75K to 100K	665	7,678	3.6	0.4
100K to 250K	2,378	15,406	12.9	0.8
250K to 500K	1,897	5,435	10.3	0.3
500K to 1M	1,866	2,690	10.2	0.1
> 1M	8,485	2,285	46.2	0.1
Total	18,366	1,872,916	100.0	100.0

Sources: Parliamentary Budget Officer, Statistics Canada, T2-LEAP database

Note: Excludes firms that may not have benefitted from a tax deferral advantage.

In the latter subsample, firms with investment income above \$1 million earn almost half of all investment income. PBO estimates that the proposed threshold of \$50,000 of passive income would likely affect only 2.5 per cent of all CCPCs, which represent 18 per cent of the CCPCs with investment income. The affected CCPCs earned nearly 88 per cent of all taxable passive income in 2014, but only 75 per cent of all taxable passive income earned would be above the threshold.

The distribution is quite different in terms of active business income. ¹³ As shown in Table 3-2, 60 per cent (roughly \$11 billion) of all passive investment income is earned by corporations with no active business income. This figure goes up to 64 per cent if we include corporations with less than \$10,000 in active business income. It is likely that many of these CCPCs are holding companies set up for the sole purpose of passively investing income.

Another 9 per cent of passive income is earned within corporations that have between \$10,000 and \$100,000 of active business income and is spread relatively evenly over this income range. Corporations with active business income between \$100,000 and \$500,000 earned slightly more than 12% of passive income.

Table 3-2 Distribution of CCPC taxable passive income by active business income (2014)

			_		Share of t	otal (%)	
Active Business	Taxable Passive	No. of CCPCs with		Taxable	No. of CCPCs with		CCPCs in range with
Income Range	Income	Investment	No. of	Passive	Investment	No. of	Investment
(\$)	(\$M)	Income	CCPCs	Income	Income	CCPCs	Income
0	10,972	107,313	931,852	59.7	40.9	49.8	11.5
0.01 to 10K	850	19,007	236,419	4.6	7.2	12.6	8.0
10K to 25K	450	14,424	144,303	2.4	5.5	7.7	10.0
25K to 50K	540	17,356	136,999	2.9	6.6	7.3	12.7
50K to 75K	369	13,114	85,284	2.0	5.0	4.6	15.4
75K to 100K	276	10,583	59,744	1.5	4.0	3.2	17.7
100K to 250K	1,221	38,507	158,639	6.6	14.7	8.5	24.3
250K to 500K	1,105	27,901	78,492	6.0	10.6	4.2	35.5
500K to 1M	785	8,935	25,255	4.3	3.4	1.3	35.4
> \$1M	1,798	5,235	15,929	9.8	2.0	0.9	32.9
Total	18,366	262,375	1,872,916	100.0	100.0	100.0	14.0

Sources: Parliamentary Budget Officer, Statistics Canada, T2-LEAP database

Note: Excludes firms that may not have benefited from a tax deferral advantage.

Finally, the last 14 per cent is earned within corporations that have more than \$500,000 of active business income. These CCPCs are subject to the general CIT rate of 15 per cent for their income above \$500,000. However, it is possible that many of the firms with no active business income are passively investing funds that are sourced from connected CCPCs that generate more than \$500,000 of active business income.

We can also see that 1 out of 3 corporations with active business income above \$250,000 have earned investment income. If we look at firms with less than \$100,000 in active business income, it drops to 1 out of 6 firms and to 1 out of 10 firms for those with less than \$25,000 in active business income.

PBO also looked at the distribution of passive income by firm size (Table 3-3). We observe that firms with less than \$10 million in taxable capital earned 63 per cent of all passive investment income. These firms would be eligible for the small business deduction on their first \$500,000 of active business income. Note that 97 per cent of all CCPCs have less than \$10 million in taxable capital.

Firms with taxable capital from \$10 million to \$15 million earned 5 per cent of passive income. These firms are still eligible for part of the small business deduction, as it phases out linearly from \$10 million to \$15 million.

Lastly, CCPCs with taxable capital above \$15 million accounted for 32 per cent of all passive investment income, while they only represent 2.5 per cent of all the CCPCs. These firms are not eligible for the small business deduction. Thus, while they have a lower deferral benefit than those taxed at the small business rate, they can still benefit from a larger initial portfolio investment than those investing in personal accounts.

Table 3-3 Distribution of CCPC taxable passive income by taxable capital (2014)

				Share of total (%)				
Taxable Capital Range (\$)	Taxable Passive Income (\$M)	No. of CCPCs with Investment Income	No. of CCPCs	Taxable Passive Income	No. of CCPCs with Investment Income	No. of CCPCs	CCPCs in range with Investment Income	
10M or less	11,548	249,086	1,814,582	62.9	94.9	96.9	13.7	
10M to 15M	886	4,032	15,459	4.8	1.5	0.8	26.1	
Above 15M	5,932	9,257	42,875	32.3	3.5	2.3	21.6	
Total	18,366	262,375	1,872,916	100.0	100.0	100.0	14.0	

Sources: Parliamentary Budget Officer, Statistics Canada, T2-LEAP database

Note: Excludes firms that may not have benefited from a tax deferral advantage.

Table 3-4 looks at the distribution of passive income by industry (based on the NAICS code reported by the CCPC in its tax return). It shows the three following industries together each earned close to or more than 15 per cent of all passive investment income.¹⁴

- Finance and insurance (NAICS code 52);
- Real estate and rental and leasing (NAICS code 53); and
- Management of companies and enterprises (NAICS code 55).

It is likely that many of the firms under NAICS code 55 are corporations that are established solely for the purpose of earning passive income.

The professional sector accounts for less than 4 per cent of all passive income. However, 32.9 per cent of corporations in this sector earned passive investment income, which is the second highest ratio after the management of companies sector with 33.5%. Also, according to Table 1 of the Finance Canada Backgrounder this group witnessed the largest growth in total taxable passive income between 2001 and 2015.

Table 3-4 Distribution of CCPC taxable passive income by industry (2014)

				Share of total (%)			
Industry	Taxable No. of Passive CCPCs with Income Investment No. of (\$M) Income CCPCs		No. of CCPCs Taxable with Passive Invest. No. of Income Income CCPCs			CCPCs in industry with Invest. Income	
Agriculture	470	12,636	57,428	2.6	4.8	3.1	22.0
Construction	708	14,992	176,481	3.9	5.7	9.4	8.5
Wholesale and Retail	657	15,682	163,595	3.6	6.0	8.7	9.6
Professionals	705	28,140	85,575	3.8	10.7	4.6	32.9
Finance + Insurance	2,654	18,209	61,171	14.5	6.9	3.3	29.8
Real Estate + Rental	2,842	19,530	101,150	15.5	7.4	5.4	19.3
Management of co. Accommodation +	3,479	20,620	61,471	18.9	7.9	3.3	33.5
Food service	188	4,002	66,600	1.0	1.5	3.6	6.0
Other	1,978	56,673	518,495	10.8	21.6	27.7	10.9
Missing	4,683	71,891	580,950	25.5	27.4	31.0	12.4
Total	18,366	262,375	1,872,916	100.0	100.0	100.0	14.0

Sources: Parliamentary Budget Officer, Statistics Canada, T2-LEAP database

Note: Excludes firms that may not have benefited from a tax deferral advantage.

Lastly, table 3-5 presents the distribution of CCPCs with investment income and those above the \$50,000 threshold by industry. As can be seen, the three industries mentioned previously for earning most of the passive income are also the only industries where more than 30 per cent of the firms earning passive income will be affected by the threshold.

Apart from professionals, there are less than 3 per cent of corporations earning more than \$50,000 of passive income in all the remaining sectors. As for professionals, 33 per cent of corporations in that sector earned investment income in 2014. Out of these firms with investment income, only 13 per cent earned investment income above the \$50,000 threshold. These affected firms represented only 4.3 per cent of the corporations in the professional sector.

Table 3-5 Distribution of CCPCs with investment income and those above the \$50,000 threshold, by industry (2014)

Industry	No. of CCPCs	No. of CCPCs with invest. income	No. of CCPCs above \$50K threshold	No. of CCPCs with invest. income as a share of CCPCs (%)	No. of CCPCs above threshold as a share of CCPCs with invest. income (%)	No. of CCPCs above threshold as a share of CCPCs (%)
Agriculture	57,428	12,636	1,618	22.0	12.8	2.8
Construction	176,481	14,992	2,220	8.5	14.8	1.3
Wholesale and Retail	163,595	15,682	2,069	9.6	13.2	1.3
Professionals	85,575	28,140	3,674	32.9	13.1	4.3
Finance + Insurance	61,171	18,209	5,480	29.8	30.1	9.0
Real Estate + Rental	101,150	19,530	6,674	19.3	34.2	6.6
Management of co. Accommodation +	61,471	20,620	6,385	33.5	31.0	10.4
Food serv.	66,600	4,002	544	6.0	13.6	0.8
Other	518,495	56,673	6,113	10.9	10.8	1.2
Missing	580,950	71,891	12,295	12.4	17.1	2.1
Total	1,872,916	262,375	47,072	14.0	17.9	2.5

Sources: Parliamentary Budget Officer, Statistics Canada, T2-LEAP database

Note: Excludes firms that may not have benefited from a tax deferral advantage.

Appendix A: Methodology

A.1 Data and Definitions

PBO accesses Canadian T2 returns data through Statistics Canada's Canadian Centre for Data Development and Economic Research (CDER) program under a Memorandum of Understanding.

Numbers, figures and tables in this report containing analytical results produced using the T2-LEAP database are explicitly sourced as such. They have been vetted for confidentiality by Statistics Canada officials.

PBO's general approach to corporate tax analysis is detailed in the January 2017 report on our Corporate Tax Model. ¹⁷

PBO considers three types of passive investment income in this analysis:

- 1. **Interest income and rental income** calculated using schedules 7 and 200 of the T2 return. This income is taxed at 38½ per cent at the federal level and the provincial general corporate taxation rate. A portion of the federal tax component 30½ percentage points is refundable upon payment of taxable dividends;
- Capital gains calculated using schedules 6, 7 and 200 of the T2 return.
 Capital gains are subject to the same taxation as interest and rental income. However, only one-half of the gain is taxed; the remainder is set aside in a capital dividend account where it can be distributed tax free to shareholders; and,
- 3. **Portfolio dividends** calculated using schedule 3 of the T2 return. These are taxable dividends paid from non-connected corporations and are subject to a fully refundable tax of $38\frac{1}{3}$ per cent.

Whereas annual passive investment income flows are generally computable using firm-level T2 returns data, a corporation's passive investment portfolio is not directly observable.

In particular, firms are not required to provide key balance sheet data, such as long-term investments, when filing their returns. PBO uses CCPCs' retained earnings – a mandatory field – as a proxy for a corporation's passive investment portfolio.¹⁸

A.2 Modeling Passive Investments

PBO constructed a longitudinal database of T2 returns data using a corporation's business number as a unique identifier. We then replicated the stock and flow of passive investment income over 2000 to 2014 using the definitions outlined in A.1 and with 2017 T2 tax parameters.

This approach allows for the tracking of each corporation's passive investment portfolios and income flows, dividends payable and taxes, as well as special pools, such as the capital dividend account and refundable dividend tax on hand.

PBO then simulated each corporation's accumulation of investment assets over 2000 to 2014 (Figure A-1). Each year observed investment income flows and net new investments are added to the portfolio. Investment income flows are tracked by type of investment for taxation purposes.

Figure A-1 Passive investment portfolio accumulation

 $Portfolio_t = Porfolio_{t-1} + NetNewInvest_t + InvestmentIncome_t$

Source: Parliamentary Budget Officer

A corporation's year-end investment portfolio is set to equal a corporation's retained earnings (GIFI line 3849), so the variable for net new investments acts as a residual. ¹⁹

PBO is also able to track cumulative taxes and dividends to estimate personal income taxes and the after-tax income of corporate shareholders. ²⁰ This approach allows us to estimate of the impact on corporate and personal income tax revenues.

There are some caveats to PBO's approach to modelling corporate investment stocks and flows:

- The year-end stock of retained earnings likely represents an upper limit of passive investment portfolios for most firms. Although revenue impacts are determined off observed passive investment income and dividend payouts, this assumption could accelerate the phase in of the new investment pools;²¹ and,
- PBO's analysis of changes to passive income taxation utilized T2 corporate returns data. We did not link corporate tax data with personal tax returns to determine the income profiles of CCPC owners affected.
 PBO is in the process of obtaining access to such a database, drawn from the work of Wolfson and Legree (2015), but these data were not available in time for this analysis.

A.3 Revenue Impact

To estimate the revenue implications of potential passive income tax changes, we simulated the following policy changes relative to the baseline corporate tax code in 2017 (Table A-1):

- 1. Removing the refundability of taxes on property income, portfolio dividends and capital gains, where the source of funds for these investments benefited from low corporate tax rates; and,
- 2. Capital gains dividends, which are currently distributed to shareholders tax free via the Capital Dividend Account, would now be taxable.

Table A-1 Refundable tax rates on passive income

Per cent	Property income	Portfolio Dividends	Capital Gains (½ inclusion)
Baseline	303/3	381/3	303/3
Policy changes	0	0	0

Source: Parliamentary Budget Officer

We also make the following assumptions:

- The nominal stock of passive investment assets from the first year of simulation remains in a "grandfathered" pool; income from these assets remains subject to current tax rules;
- Passive investment income on new investments below a threshold of \$50,000 per year for each CCPC remains subject to current tax rules.²² In contrast, passive investment income on new investments exceeding \$50,000 is subject to the new rules;
- New investments including re-invested passive investment income are added to the new pool each year;
- CCPCs that are deemed not to have benefited from low corporate tax rates over 2000 to 2014 remain subject to the old rules.²³ We estimate this to be over 47,000 firms receiving \$5.2 billion in passive investment income in 2014;
- Dividends paid to CCPC owners are assumed to be non-eligible dividends if the CCPC income is eligible for the small business deduction. They are assumed to be eligible dividends if the CCPC's income is taxed at the general rate. Such eligibility is determined by a CCPC's access to the small business deduction at the time of the dividend payout;²⁴
- Dividends paid to shareholders are assumed to face the top combined federal-provincial personal tax rate, which is adjusted for the applicable dividend tax credit;²⁵ and,
- We do not include any adjustments for behavioural assumptions.

The revenue impacts from removing the refundability of taxes on passive investment income arise from the change in corporate and personal taxes upon the payment of dividends. There are two key effects:

- Loss of refundability of certain federal taxes results in higher federal corporate tax revenue, but lower federal and provincial personal tax revenues (as the taxable dividend is now smaller after losing the cumulative refundable tax portion); and,
- 2. Classification of previously non-taxable capital gains as taxable dividends increases federal and provincial personal income tax revenues.

PBO estimates that the net impact on revenues is positive for both jurisdictions, but that federal government would realize roughly 90 per cent of new revenue from these changes.

A.4 Behavioural Response Impact

PBO's methodology for assessing behavioural responses to tax changes can be found in Annex B of the "The Fiscal and Distributional Impact of Changes to the Federal Personal Income Tax Regime" (PBO, 2016).

PBO uses an elasticity of taxable income (ETI) to account for the behavioural response of taxpayers to a change in their marginal effective tax rate (METR). This is because changes in taxes may induce individuals to change their behaviour by altering their hours worked, changing the composition of potential income sources or changing their tax strategies.

The proposed changes to the taxation of CCPC passive investment income will change the METR on investment within a CCPC. As such, we would expect individuals to change the amount they invest or to undertake different tax strategies to reduce their tax burden.

Finance Canada's analysis suggests that the changes to METRs resulting from the proposed changes to passive investment income will be highest for higher-income individuals. ²⁶ The literature suggests that this group has a relatively high degree of responsiveness to changes in their respective METRs.

For example, Milligan & Smart (2014) and Finance Canada (2010) estimate the ETI is over 0.6 for higher income individuals. But these included interprovincial tax shifting and would likely be higher than the ETI at the federal level. In PBO's analysis of the new tax bracket that applies to individuals with income above \$200,000, we used an elasticity of 0.38.

We use that same elasticity of 0.38 to assess the sensitivity of our revenue estimates to potential behavioural response. We do so by calculating the change in the METR on a marginal dollar of income that has been invested passively within a CCPC and then distributed as a dividend. We shock our

model to add \$1,000 in investment income to each CCPC in the final year of the simulation. Most CCPCs are estimated to have a METR of close to 50 per cent under current policies; it rises to around 70 per cent for some CCPCs under the new policies.

We estimate that the potential behavioural response to changes to the taxation of passive investment income could reduce the revenue impacts shown in Table 2-1 by 10 to 15 per cent. These effects compound over time as each year less income is invested inside CCPCs.

References

Department of Finance Canada. (2010). Tax Expenditures and Evaluations 2010. Ottawa: Retrieved from: http://www.fin.gc.ca/taxexp-depfisc/2010/taxexp1003-eng.asp.

Finance Canada (2017). Tax Planning Using Private Corporations. Retrieved from: https://www.fin.gc.ca/activty/consult/tppc-pfsp-eng.asp

Finance Canada (2017). Backgrounder: Support for Small Business and Fairness for the Middle Class. Retrieved from: http://www.fin.gc.ca/n17/data/17-0973-eng.asp

Milligan, Kevin & Smart, Michael (2014). Taxation and top incomes in Canada. Retrieved from: http://faculty.arts.ubc.ca/kmilligan/research/papers/cje-5.0.pdf

Parliamentary Budget Officer (2017). Corporate Tax Model. Retrieved from: http://www.pbo-dpb.gc.ca/en/blog/news/CIT

Parliamentary Budget Officer (2016). Fiscal and Economic Impacts of Curtailing the Planned Tax Cut for Small Businesses. Retrieved from: http://www.pbo-dpb.gc.ca/en/blog/news/Small%20Business%20Tax%20Rate

Parliamentary Budget Officer (2016). The Fiscal and Distributional Impact of Changes to the Federal Personal Income Tax Regime. Retrieved from: http://www.pbo-

dpb.gc.ca/web/default/files/Documents/Reports/2016/PIT/PIT_EN.pdf

Wolfson and Legree (2015). Private Companies, Professionals, and Income Splitting—Recent Canadian Experience. Canadian Tax Journal, Volume 63, Issue 3. Retrieved from:

 $\frac{https://www.ctf.ca/ctfweb/CMDownload.aspx?ContentKey=cd00aa06-98e3-4c5c-a3af-68395a23e90a\&ContentItemKey=e6749e0f-aa60-4a8f-8cdc-cccdc2eb220.$

Wolfson, Veall, Brooks and Murphy (2016). Piercing the Veil: Private Corporations and the Income of the Affluent. Canadian Tax Journal, Volume 64, Issue 1. Retrieved from:

 $\frac{\text{http://www.ctf.ca/ctfweb/Custom/CMDownload.aspx?ContentKey=14151034-8af2-41f6-8f57-3f4da1e9c13e\&ContentItemKey=4347208f-fe38-4b39-8777-119c5b5a4b30}$

Notes

- 1. See: https://www.fin.gc.ca/n17/17-066-eng.asp
- We use a firm's retained earnings as a proxy for its passive investment asset portfolio. As the new policy is phased in, the ratio of old vs. new retained earnings determines the amount of investment income subject to the new rules. There are pros and cons to this approach discussed in Annex A.
- 3. See: https://www.fin.gc.ca/n17/17-066-eng.asp
- On October 19, 2017, the Minister of Finance announced that the government would not be moving forward with the proposed changes to limit the conversion of income into capital gains.
- 5. See: http://www.fin.gc.ca/n17/data/17-099 1-eng.asp
- According to Finance Canada, for high-income individuals, these advantages can exceed gains from personal savings vehicles such as the Registered Retirement Savings Plan and Tax Free Savings Account.
- 7. This mechanism, along with the dividend tax credit, ensures income is not subject to double-taxation. For further discussion see: http://www.pbo-dpb.gc.ca/en/blog/news/Small%20Business%20Tax%20Rate
- 8. Note however that amounts in the RDTOH account are refundable to the corporation upon the payment of taxable dividends, at the effective rate of $38\frac{1}{3}\%$ of taxable dividends paid.
- 9. We assume that second generation investment income from grandfathered assets would be subject to the new rules.
- To estimate the revenue impact of the policy at full maturity, PBO simulated a one year costing of the policy changes with no grandfathering of existing assets.
- 11. For example, the October 18th announcement suggested that venture capital and angel investors could receive additional protections. See: http://www.fin.gc.ca/n17/data/17-099 1-eng.asp
- 12. Only 14 per cent of all CCPCs have earned passive investment income in 2014. If only 2.5 per cent of all CCPCs are affected by the threshold, then 2.5/14 = 17.9 per cent.
- 13. This is taken from line 400 of the T2 schedule 200.
- 14. Slightly more than 30 per cent of CCPCs did not report a NAICS code and earned 25 per cent of investment income. Furthermore, the CRA doesn't validate the NAICS code reported by corporations, so it is possible that it does not portray accurately a corporation's main sector of activity. Another caveat from using the NAICS code reported is that it only represents the

- main activity of the corporation. Therefore, a CCPC could be active in multiple different sectors.
- 15. For comparison purposes, we defined professionals similarly to how they are defined in Table 1 of Finance Canada's Backgrounder (see next note for a link to the paper). We thus included: lawyers and notaries (NAICS 5411), accountants (NAICS 5412), veterinarians (NAICS 54194), physicians (NAICS 6211), dentists (NAICS 6212) and chiropractors (NAICS 62131).
- 16. See: http://www.fin.gc.ca/n17/data/17-097_3-eng.asp
- 17. See: http://www.pbo-dpb.gc.ca/en/blog/news/CIT
- 18. Retained earnings allow us to limit our portfolio estimates to those financed out of earnings taxed at lower corporate tax rates. CCPCs with negative retained earnings, for example, would not be included in our policy analysis because we would assume that any passive investment income was sourced from shareholder's contributed surplus.
- 19. This variable is effectively the net change in new net income less dividends paid out to shareholders so it can be positive or negative.
- 20. Corporation-level results are imputed or adjusted, if necessary, to ensure they match observed data in a given tax year and that the sum of model estimates lines up with T2 aggregates.
- For example, some CCPCs may keep a portion of retained earnings in cash or invest in connected corporations. This could contribute to upward bias in our revenue estimates in the short-term.
- 22. PBO applied the \$50,000 threshold on a per CCPC basis. It is possible that the eventual policy design will not allow for multiplication of this threshold among connected or associated CCPCs. This would be consistent with the treatment of the small business deduction limit. Alternatively, it could be applied on per shareholder basis.
- 23. These are CCPCs that have not received the small business, manufacturing or general rate reduction over 2000 to 2014, nor received intercorporate dividends. Thus they did not benefit from a tax deferral advantage.
- 24. For a discussion on how the dividend tax credit relates to the small business deduction see: http://www.pbo-dpb.gc.ca/en/blog/news/Small%20Business%20Tax%20Rate
- 25. We did not include the possible use of the Lifetime Capital Gains Exemption in this analysis.
- 26. Finance Canada estimates that 83 per cent of taxable passive income is held by individuals in the top one per cent income range. See: http://www.fin.gc.ca/n17/data/17-099 1-eng.asp