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Canada: Provincial Bond Purchase Program¹

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Yale Program on Financial Stability Case Study
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Abstract

In the beginning of 2020, the outbreak of the novel coronavirus placed significant strain on financial markets and especially affected commodity-producing countries like Canada. As the broad economy contracted, oil-exports fell, and the government imposed public health restrictions to contain coronavirus, the Bank of Canada (BoC) announced emergency measures to ensure functioning of financial markets and to “reach companies and households and foster a robust recovery” (Poloz 2020, 1). One market that faced acute strain was the Canadian provincial bond market. The BoC announced the Provincial Bond Purchase Program (PBPP) through a notice published on April 15, 2020. The stated aim of the PBPP was “to maintain well-functioning provincial funding markets in the face of significant demands for funding as governments implement their emergency measures, and businesses and households seek to bridge this difficult period” (BoC 2020g). The PBPP was authorized to purchase up to CAD 50 billion of provincial bonds in the secondary market through primary dealers. The program was funded through settlement balances and the Government of Canada indemnified the program, along with other COVID-19 facilities. The PBPP’s portfolio of provincial bonds reached a peak market value of CAD 17.6 billion on May 26, 2021. The PBPP had a minor impact on the overall size of the BoC balance sheet, but the announcement of the creation of the PBPP on April 15 had an immediate impact on provincial bond yields, which fell on average 21 basis points that day.

Keywords: Bank of Canada, COVID-19, market liquidity, provincial bonds

¹ This case study is part of the Yale Program on Financial Stability (YPFS) selection of New Bagehot Project modules considering market support programs in response to COVID-19. Cases are available from the *Journal of Financial Crises* at <https://elischolar.library.yale.edu/journal-of-financial-crises/>.

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Overview

In the beginning of 2020, the outbreak of the novel coronavirus placed significant strain on financial markets and especially affected commodity-producing countries like Canada (Poloz 2020). As the broad economy contracted, oil exports fell, and the government imposed public health restrictions to contain coronavirus, the Bank of Canada (BoC) announced emergency measures to ensure functioning of financial markets and to “reach companies and households and foster a robust recovery” (Poloz 2020). One market that faced acute strain was the Canadian provincial bond market.

Three features of provincial debt in Canada make the market particularly critical: (1) provincial governments face large, open-ended expenditures (on healthcare for example); (2) revenue streams are highly cyclical; (3) provincial governments don’t face balanced-budget or indebtedness constraints like in the United States. These features have made the subnational bond market in Canada much larger than other countries and, since the Global Financial Crisis, its interest payments a larger burden than the interest on national debt (Hanniman 2020b). (See Figure 1.)

As the COVID-19 pandemic increased provinces’ expected costs, provincial bond markets deteriorated as investors rushed to liquidity. In the first two weeks of April 2020, Canadian provinces issued more than CAD 20 billion in bonds, far exceeding previous monthly records; they issued CAD 8 billion on April 14 alone (Hanniman 2020a). At the same time, the sector saw unprecedented interest rate hikes. On March 6, 2020, 10-year provincial bond spreads rose between 18 and 27 basis points, far higher than the largest increases during the financial crisis. High issuance and high yields coincided; Hanniman accounts for this by noting that almost all issuance went to a few large investors, with very little activity in secondary markets (Hanniman 2020a).

The BoC announced the Provincial Bond Purchase Program (PBPP) on April 15, 2020, stating that it would supplement the previously announced Provincial Money Market Purchase Program (PMMPP) (BoC 2020g; BoC 2020f). The aim of both the PBPP and the

Key Terms

Purpose: To “support the liquidity and efficiency of provincial government funding markets” by purchasing bonds in the secondary market (BoC 2020b).

Launch dates	Authorized: 1991 Announced: April 15, 2020
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Operational Date:	May 7, 2020
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End Date:	May 7, 2021 (BoC 2020b)
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Legal Authority:	Section 18(c) of the <i>Bank of Canada Act</i>
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Source of Funding:	Settlement balances
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Administrators:	BMO Global Asset Management
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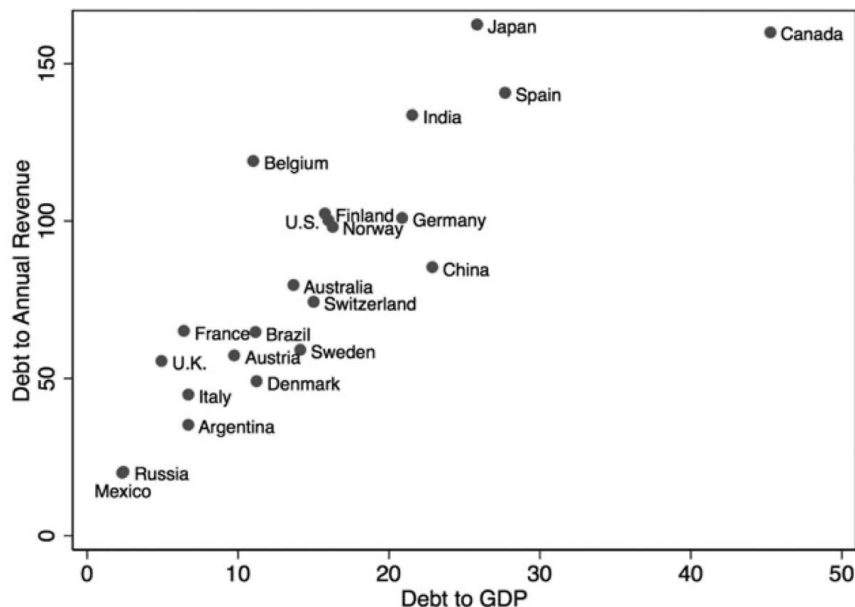
Overall Size:	CAD 50 billion
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Purchased Assets:	CAD-denominated bonds issued by or guaranteed by a provincial or territorial government
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Peak Utilization:	CAD 17.558 billion on May 6, 2021
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PMMPP was “to maintain well-functioning provincial funding markets in the face of significant demands for funding as governments implement their emergency measures, and businesses and households seek to bridge this difficult period” (BoC 2020g).

Figure 1: Subnational Debt to GDP/Annual Revenue

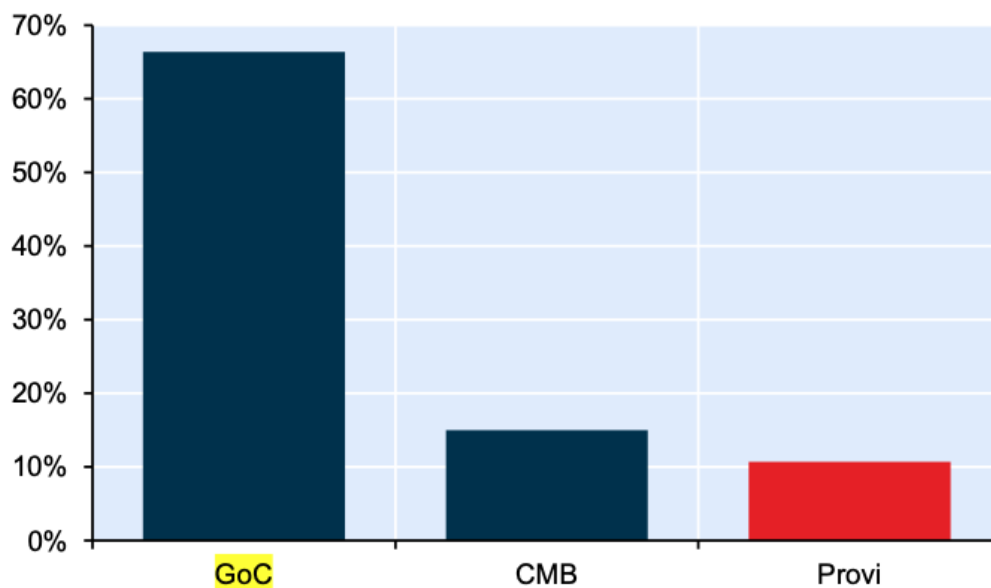


Source: Hanniman 2020b.

The PBPP was to purchase up to CAD 50 billion worth of provincial bonds in the secondary market through reverse auctions with primary dealers (BoC, n.d.a; BoC 2020b). The program was funded through settlement balances and indemnified by the Government of Canada (Beaudry 2020; BoC 2021a). The BoC imposed individual limits: it would not purchase more than 20% of an eligible issuer’s outstanding provincial bonds (BoC, n.d.a). The facility retained BMO Global Asset Management as asset manager for the program (BoC 2020b).

The PBPP began purchasing provincial bonds the week of May 7, 2020, and continued through May 6, 2021, at an average pace of CAD 400 million per week (Lovely and Schleich 2021). From May 7, 2020, through year-end, the PBPP purchased approximately 10% of gross bond supply, smaller than the 15% absorption of the Canada Mortgage Bond Purchase Program and nearly 70% absorption of the Government of Canada Bond Purchase Program (See Figure 2). This makes the BoC’s share of total domestic bonds in circulation at most 2% (Lovely and Schleich 2021).

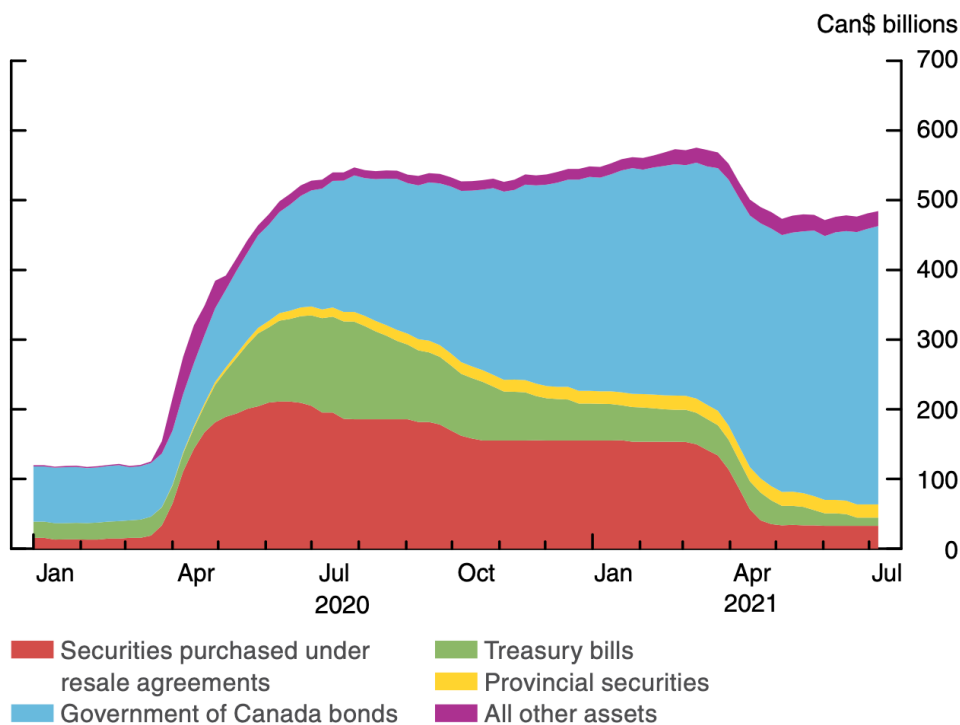
Figure 2: Share of Gross Bond Supply Absorbed by BoC (since March 1, 2020)



Source: Lovely and Schleich 2021.

The PBPP’s portfolio of provincial bonds reached a peak market value of CAD 17.6 billion on May 6, 2021 (BoC, n.d.b). The PBPP had a minor impact on the overall size of the BoC balance sheet (See Figure 3).

Figure 3: The BoC’s Total Assets as of July 7, 2021, CAD billions

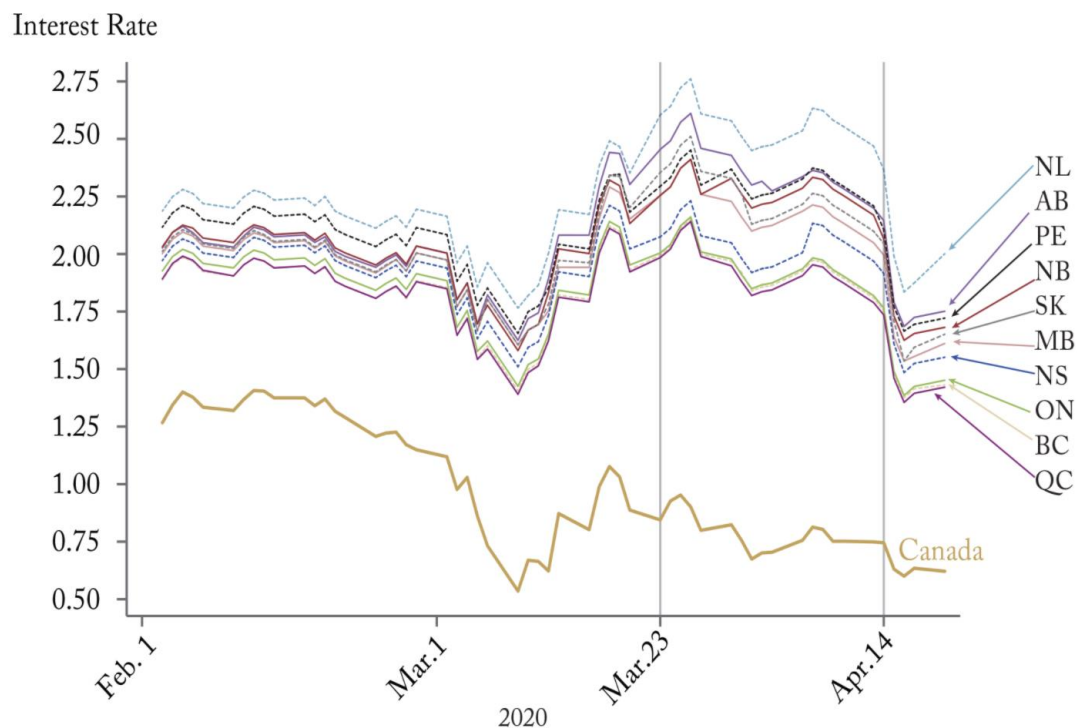


Source: BoC 2021d, 24.

Summary Evaluation

Provincial yields began to flatten following the announcement of the Provincial Money Market Purchase Program (PMMPP) on March 24, 2020 (Hanniman 2020a). The PMMPP became operational on March 25, 2020, purchasing 40% of provincial short-term debt offerings (See Figure 4).

Figure 4: Ten-Year Yields (%) on Provincial and Federal Bonds



Note: provinces and territories: Alberta – AB; British Columbia – BC; Manitoba – MB; New Brunswick – NB; Newfoundland and Labrador – NL; Northwest Territories – NT; Nova Scotia – NS; Nunavut – NU; Ontario – ON; Prince Edward Island – PE; Quebec – QC; Saskatchewan – SK; Yukon – YT

Source: Hanniman 2020a.

The announcement of the PBPP had a strong impact on provincial yields. Hanniman (2020a) finds that on April 15 provincial bond yields fell on average 21 basis points.

Context: Canada 2019–2020	
GDP (SAAR, Nominal GDP in LCU converted to USD)	\$1.8 trillion in 2019 \$1.8 trillion in 2020
GDP per capita (SAAR, Nominal GDP in LCU converted to USD)	\$46,327 in 2019 \$43,258 in 2020
Sovereign credit rating (five-year senior debt)	Data for 2019: Moody's: Aaa S&P: AAA Fitch: AAA Data for 2020: Moody's: Aaa S&P: AAA Fitch: AA+
Size of banking system	Data not available for 2019 Data not available for 2020
Size of banking system as a percentage of GDP	Data not available for 2019 Data not available for 2020
Size of banking system as a percentage of financial system	Data not available for 2019 Data not available for 2020
Five-bank concentration of banking system	84.2% in 2019 84.5% in 2020
Foreign involvement in banking system	Data not available for 2019 Data not available for 2020
Government ownership of banking system	Data not available for 2019 Data not available for 2020
Existence of deposit insurance	Yes, in 2019 Yes, in 2020
<i>Sources: Bloomberg; FRED; World Bank Global Financial Development Database; World Bank Deposit Insurance Dataset.</i>	

Key Design Decisions

- 1. Purpose: The purpose of the Provincial Bond Purchase Program (PBPP) was to maintain well-functioning provincial funding markets through the economic stress caused by the pandemic.**

The BoC announced the Provincial Bond Purchase Program (PBPP) through a notice published April 15, 2020 (BoC 2020g). The BoC stated in the first press release that the PBPP would supplement the newly created Provincial Money Market Purchase Program (PMMPP), which had been announced on March 24, 2020 (BoC 2020f).

The first press release stated the aim of both the PBPP and the PMMPP: “to maintain well-functioning provincial funding markets in the face of significant demands for funding as governments implement their emergency measures, and businesses and households seek to bridge this difficult period” (BoC 2020g).

- 2. Part of a Package: The PBPP was announced alongside a number of emergency COVID-19 programs, and supplemented the Provincial Money Market Purchase Program (PMMPP).**

The PBPP was one of a number of liquidity programs announced in response to market stress caused by the COVID-19 pandemic (BoC, n.d.c). The BoC stated in the first press release that the PBPP would supplement the newly created Provincial Money Market Purchase Program (PMMPP), which had been announced on March 24, 2020 (BoC 2020f). The PMMPP supported liquidity in short-term provincial money markets through the primary market (BoC 2020a).

- 3. Legal Authority: The PBPP drew its legal authority from Section 18(c) of the Bank of Canada Act.**

Section 18(c) of the Bank of Canada Act established the BoC’s right to buy and sell securities issued or guaranteed by Canada or any province (Bank of Canada Act 1985).

- 4. Governance: Sections 28 and 29 of the Bank of Canada Act specify the auditing and reporting process of bank affairs. Pursuant to section 29, the BoC published aggregate holdings through the PBPP on its website every Friday.**

Section 28 of the Bank of Canada Act (1985) enables the Minister of Finance to appoint auditors of the BoC and to require that those auditors report on bank affairs to the Minister “from time to time.”

5. Administration: On April 23, 2020, the BoC announced that BMO Global Asset Management would serve as asset manager for the PBPP.

On April 23, 2020, the BoC announced that BMO Global Asset Management (BMO GAM) would serve as asset manager for the PBPP, which was “selected following a competitive procurement process” (BoC 2020h). BMO Global Asset Management was selected for “their capacity to quickly and effectively establish and manage this program, and their robust conflict of interest policies and processes” (BoC 2020h). The BoC retained BlackRock Financial Markets Advisory to advise the BoC and CIBC Mellon to serve as custodian (BoC 2020g).

Eligible participants—primary dealers for Government marketable bonds—could access the program by contacting BMO GAM (BoC 2020b).

6. Communication: The BoC framed the PBPP as one of many responses to the COVID-19-induced crisis. The BoC continued to discuss the program as providing support to the broad economy by ensuring financial market functionality.

When it first announced the program on April 15, 2020, the BoC framed the PBPP as critical “to maintain[ing] well-functioning provincial funding markets in the face of significant demands for funding as governments implement their emergency measures, and businesses and households seek to bridge this difficult period” (BoC 2020g). A day later, on April 16, the governor of the BoC, Stephen Poloz, addressed the House of Commons Standing Committee on Finance and explained that the PBPP would help to “ensure proper functioning of provincial debt markets” (Poloz 2020).

7. Disclosure: The BoC voluntarily published transaction-level data after the facility closed.

Section 29 requires that the BoC report weekly, on Fridays, its assets and liabilities (Bank of Canada Act 1985). Pursuant to Section 29, the BoC reported on its aggregate holdings of provincial bonds every Friday (BoC 2020b). However, it did not report individual transactions while the program was operating. While not required by law, the BoC published transaction-level data on June 29, 2021 (BoC 2021c).

A March 23, 2021, press release which announced that the PBPP would be discontinued on May 7, 2021, further stated that the BoC would publish transaction-level data for its asset purchase programs (BoC 2021b).

8. Size: The PBPP was authorized to hold up to CAD 50 billion par value of eligible assets.

The PBPP was authorized to hold up to CAD 50 billion par value of eligible assets (BoC 2020b). The BoC instituted individual participating limits: the BoC would not purchase more than 20% of an eligible issuer's outstanding eligible assets (BoC, n.d.a).³

9. Source of Funding: The BoC funded its PBPP asset purchases through settlement balances. The Government of Canada indemnified the BoC in the event of losses on provincial bond sales.

An explanatory note from Deputy Governor Paul Beaudry explained that the BoC funded its acquisition of provincial bonds through settlement balances—by crediting primary dealers upon purchase “with a deposit of settlement balances in” BoC accounts paying the policy interest rate of 25bps (Beaudry 2020).

The Government of Canada entered into indemnity agreements with the Bank of Canada covering the PBPP, as well as other COVID-19 asset purchase programs. Under these agreements, realized losses would be indemnified by the Government of Canada, and realized gains would be remitted (BoC 2021a, 21).

10. Eligible institutions: Eligible participants were primary dealers for Government of Canada marketable bonds.

Eligible participants were primary dealers for Government of Canada marketable bonds (BoC 2020e). See Figure 5 for a complete list of eligible primary dealers.

11. Auction or Standing Facility: The BoC purchased provincial bonds through reverse auction. Prior to February 22, 2021, auctions were held twice a week. After February 22, 2021, the BoC held weekly auctions.

The BoC purchased provincial bonds through reverse auction. Prior to February 22, 2021, auctions were to be held twice a week, though published operations data indicates that auctions were occasionally held three times a week. After February 22, 2021, the BoC held weekly auctions (BoC, n.d.b). A BoC spokesperson said that the change was “consistent with the gradual reduction approach” that the BoC favored with other programs (Gordon 2021).

12. Loans or Purchase: The PBPP operated as a direct asset purchase program within which it purchased assets from eligible issuers through primary dealers.

The BoC purchased provincial bonds through primary dealers from provinces and territories (BoC 2020b).

³ Section 18(j) of the Bank of Canada Act states that the BoC may extend loans to provincial governments but that outstanding loans must not exceed: 1) one-third of the Government of Canada's annual revenue and 2) one-fourth of the borrowing provincial government's revenue. All loans must be repaid by the first quarter of the following year (BoC 2020d, sec. 18[j]).

13. Eligible Assets: Eligible assets were CAD-denominated bonds that matured on or before April 15, 2031, issued or guaranteed by a provincial or territorial government that met criteria as determined by the BoC.

Eligible assets were CAD-denominated bonds with maturation dates on or before April 15, 2031, issued or guaranteed by a provincial or territorial government and sold in the secondary market. Non-guaranteed agency bonds, municipal bonds, real return bonds, FRNs, strip/residuals, T-Bills, and promissory notes were not eligible for the program (BoC 2020b). A full list is presented in Figure 5.

Figure 5: Eligible Issuers

Provincial/Territorial issuers
Alberta
British Columbia
Manitoba
New Brunswick
Newfoundland and Labrador
Northwest Territories
Nova Scotia
Nunavut
Ontario
PEI
Quebec
Saskatchewan
Yukon
Bond primary dealers
BMO Nesbitt Burns Inc.
Casgrain & Company Limited
CIBC World Markets Inc.
Desjardins Securities Inc.
HSBC Securities (Canada) Inc.
Merrill Lynch Canada Inc.
Laurentian Bank Securities Inc.
National Bank Financial Inc.

RBC Dominion Securities Inc.
Scotia Capital Inc.
The Toronto-Dominion Bank

Source: BoC 2020c.

The BoC instituted individual participating limits: the BoC would not purchase more than 20% of an eligible issuer's outstanding eligible assets. The facility did not impose a minimum rating requirement (BoC, n.d.a).

The BoC aimed to create a portfolio of assets "based in equal weight on each province or territory's share of eligible bonds outstanding and their share of Canadian GDP" (BoC, n.d.a, 2). This weighting was recalculated on a monthly basis. Figure 6 contains the portfolio by issuer as of May 10, 2021.

Figure 6: Target Portfolio and Actual Portfolio, as of May 10, 2021

Province or Territory	Portfolio	Actual Portfolio	Actual Amount
Alberta	12.76%	12.77%	\$2242.8
British Columbia	10.37%	10.42%	\$1828.8
Manitoba	4.21%	4.39%	\$771.3
New Brunswick	1.96%	1.90%	\$333.4
Newfoundland and Labrador	1.87%	1.88%	\$330.1
Northwest Territories	0.02%	0.03%	\$5.0
Nova Scotia	1.79%	1.78%	\$313.4
Nunavut	0.01%	0.00%	\$0.0
Ontario	42.56%	42.65%	\$7488.7
Prince Edward Island	0.20%	0.18%	\$31.6
Quebec	21.30%	21.48%	\$3770.9
Saskatchewan	2.95%	2.52%	\$442.1
Total	100%	100%	\$17558.0

Source: BoC, n.d.a.

14. Purchase Price: Pricing was informed by market conditions and executed through a tender offer process.

The BoC determined pricing through a tender offer process, informed by market conditions. The BoC "reserved the right to adjust its pricing and portfolio requirements and objectives to meet policy objectives" (BoC 2020b).

15. Other Restrictions on Eligible Participants: Research did not reveal other restrictions on participants.

Research did not reveal other restrictions on participants.

16. The PBPP ended on May 7, 2021, consistent with the BoC's intentions to operate the program for one year.

The BoC announced on March 23, 2021, that it would discontinue the PBPP on May 7, 2021, consistent with the BoC's intentions to operate the program for one year (BoC 2021b).

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