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HOW THE BANK OF CANADA CREATES MONEY THROUGH ITS ASSET PURCHASES

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How the Bank of Canada Creates Money Through its Asset Purchases (HillStudies)

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EXECUTIVE SUMMARY

Money is created in the Canadian economy in two main ways: through private commercial bank loans or asset purchases, and through the Bank of Canada's asset purchases. The majority of money in the economy is created by commercial banks when they extend new loans, such as mortgages. However, with the Bank of Canada's unprecedented asset purchases to reduce the negative impacts of the COVID-19 pandemic on the Canadian economy and to bring inflation back up to target, greater attention has been paid to the Bank of Canada's money creation and its impact on inflation. An examination of the differences between these two methods shows that money creation through asset purchases by the Bank of Canada is essentially an internal government process, mostly limited by inflation. The examination concludes that external factors, like financial market dysfunction, cannot cause the federal government to run out of money.

HOW THE BANK OF CANADA CREATES MONEY THROUGH ITS ASSET PURCHASES

"The process by which money is created is so simple that the mind is repelled."

– John Kenneth Galbraith

1 INTRODUCTION

This paper explores the operational and legal aspects of how the Bank of Canada creates money by buying newly issued federal government bonds and Treasury bills.¹ It also discusses how private commercial banks create money.

To soften the negative impact of the COVID-19 pandemic on the Canadian economy and to bring inflation back up to its target rate,² the Bank of Canada recently injected the largest amount of money in its history into the financial system. Through various asset purchase programs, the Bank of Canada has bought federal, provincial and corporate bonds, commercial paper, bankers' acceptances, Canada Mortgage Bonds, Treasury bills and short-term provincial securities. These asset purchases increased the size of the Bank of Canada's balance sheet from \$120 billion on 11 March 2020 to a peak of \$575 billion on 10 March 2021. After winding down some of its asset purchase programs, the Bank of Canada reduced its balance sheet to \$478 billion on 12 May 2021.³

Although these measures were taken in the most extraordinary circumstances of a global pandemic, the Bank of Canada also purchases financial assets as part of the regular management of its balance sheet to offset its liabilities, which consist mainly of bank notes in circulation and government deposits.⁴

2 THE BANK OF CANADA'S PROCESS FOR CREATING MONEY THROUGH ASSET PURCHASES

The Bank of Canada helps the Government of Canada borrow money by holding auctions throughout the year at which new federal securities (bonds and Treasury bills) are sold to government securities distributors, such as banks, brokers and investment dealers. However, the Bank of Canada itself typically purchases some of the newly issued bonds and a sufficient number of Treasury bills to meet its needs at the time of each auction.⁵ These purchases are made on a non-competitive basis, meaning that the Bank of Canada does not compete with the government securities distributors at auctions. Rather, the Bank of Canada is allotted a specific number of securities to buy at each auction.⁶

In practical terms, when the Bank of Canada purchases government securities at auction, it means that the Bank records the value of the securities, each of which has a unique International Securities Identification Number, as a new asset on its balance sheet. It simultaneously records the proceeds from the sale of the securities as a deposit in the Government of Canada's account at the Bank – a liability on the Bank's balance sheet (see Appendix, Table 1).

Since the Bank of Canada is a Crown corporation – wholly owned by the federal government, yet independent of it in the conduct of its monetary policy – the Bank's purchase of a newly issued security from the federal government can essentially be considered an internal transaction. It records new and equal amounts on the asset and liability sides of its balance sheet, creating money through digital accounting entries.⁷ The federal government can then spend that newly created money in the Canadian economy as it sees fit, subject to Parliament's approval.

The creation of money by the Bank of Canada through the purchase of assets like Government of Canada securities has fundamentally the same financial impact as the Bank making loans to the federal government,⁸ yet the Bank's governing law, the *Bank of Canada Act*,⁹ does not explicitly empower it to make loans of this nature.¹⁰ Rather, this Act gives the Bank the power to "buy and sell securities issued or guaranteed by Canada or any province" (section 18(c)), as well as the power to "accept deposits from the Government of Canada and pay interest on those deposits" (section 18(1)). Taken together, these two provisions appear to empower the Bank to create money through the direct purchase of Government of Canada securities at debt auctions.

As the Bank of Canada explains, its purchases of Government of Canada securities are not a way of financing the government's spending and debt at no cost; the federal government has to repay the securities when they become due. Moreover, the Bank of Canada does not believe that its asset purchases since the beginning of the pandemic will generate high inflation rates, because the Canadian economy is currently facing low inflation. Its decision on when and how to scale back these purchases will be tied to the outlook for inflation.¹¹

MONEY CREATION IN THE PRIVATE BANKING SYSTEM

Private commercial banks also create money when they purchase newly issued government securities as primary dealers at auctions. They do so by making digital accounting entries on their own balance sheets: the asset side is augmented to reflect the purchase of new securities, and the liability side is augmented to reflect a new deposit in the federal government's account with the bank. However, it is important to note that the majority of money in the Canadian economy is created within the private banking system every time banks extend new loans like mortgages, consumer loans and business loans. Whenever a bank makes a loan, it simultaneously creates a matching deposit in the borrower's bank account, thereby creating new money (see Appendix, Table 2).

One key similarity between money creation in the private banking system and money creation by the Bank of Canada is that both are realized by simultaneously increasing the asset and liability sides of a balance sheet.

One notable difference between the two types of money creation is that there is no external limit to the total amount of money the Bank of Canada may create through its asset purchases, other than the impact the additional money created has on inflation.¹² In contrast, the amount of money that a private commercial bank is permitted to create depends on the amount of the bank's equity relative to its assets. The limiting rules, known as capital constraints, are established by Canada's banking regulator in a set of guidelines.¹³ Another significant difference is that the key factor in a private commercial bank's decision to give a loan to a private entity is the creditworthiness of the borrower, whereas the key factor in the Bank of Canada's decision to purchase assets is its ability to achieve its inflation target.

4 CONCLUSION

Both the Bank of Canada and private commercial banks create money by making asset purchases or making loans. However, money creation by the Bank of Canada through purchases of Government of Canada securities is essentially an internal government process; this means that external factors, such as financial market dysfunction, cannot cause the federal government to run out of money.¹⁴

Inflation is the main limit to the amount of money the Bank of Canada can create through asset purchases.

NOTES

^{1.} In this publication, "money" means bank deposits in Canadian dollars.

^{2.} The Bank of Canada defines inflation as "a persistent rise in the average level of prices over time." See Bank of Canada, <u>Understanding inflation</u>, 13 August 2020.

Bank of Canada, "<u>Bank of Canada assets and liabilities: Weekly (formerly B2)</u>," Database, accessed 18 May 2021.

Bank of Canada, <u>Modification to the Operational Details for the Bank of Canada's Primary Market</u> <u>Purchases of Canada Mortgage Bonds for Balance Sheet Management Purposes</u>, 27 January 2020.

^{5.} Bank of Canada, <u>Statement of Policy Governing the Acquisition and Management of Financial Assets for</u> the Bank of Canada's Balance Sheet, 8 April 2021.

- Bank of Canada, <u>Modification to the Operational Details for the Bank of Canada's Primary Market</u> Purchases of Canada Mortgage Bonds for Balance Sheet Management Purposes, 27 January 2020.
- 7. Conversely, money is destroyed when the federal government repays its debt to the Bank of Canada.
- 8. Government of Canada bonds and Treasury bills are fixed-income instruments that represent loans made by an investor (e.g., the Bank of Canada) to the Government of Canada.
- 9. Bank of Canada Act, R.S.C. 1985, c. B-2.
- 10. Ibid., ss. 18(i) and 18(j).

Although these two provisions address loan-making – and both require a loan repayment within a specific and relatively short time frame – it appears that neither provides authority for the type of loans the Bank of Canada makes to the federal government by buying a portion of all new federal government securities and holding these securities until maturity.

- 11. Paul Beaudry, Bank of Canada, <u>How quantitative easing works</u>, Speech, 10 December 2020.
- 12. Internal government constraints may be placed on the Bank of Canada through laws passed by Parliament that regulate the Government of Canada's borrowing. Practical constraints, such as inflation, are also a factor. For example, large amounts of new money, if spent in the Canadian economy, could lead to inflation if the aggregate demand for goods and services exceeded the aggregate supply as a result.
- In Canada, the banking regulator is the Office of the Superintendent of Financial Institutions (OSFI). Although capital constraints are set out in guidelines rather than in law or regulation, the guidelines are effectively mandatory for banks. See OSFI, <u>Table of Guidelines</u>.
- 14. Although the federal government cannot run out of Canadian dollars, it could run out of foreign currencies. All other things being equal, if the Bank of Canada or private banks were to create too many Canadian dollars relative to the size of the Canadian economy, the value of the Canadian dollar could fall against foreign currencies.

APPENDIX - MONEY CREATION

Table 1 illustrates how the balance sheets of the Bank of Canada and the Government of Canada are affected when the Government of Canada issues new securities and the Bank of Canada purchases these securities directly.

| Balance Sheet | Type of Entry | | |
|----------------------|---|--|--|
| Balance Sheet | Asset | Liability | |
| Bank of Canada | New Government of Canada securities purchased | New deposit from the Government of Canada | |
| Government of Canada | New deposit at the Bank of Canada | New Government of Canada securities issued | |

Table 1 – Money Creation Through the Bank of Canada's Purchases of Government of Canada Securities

Note: When the Bank of Canada purchases new Government of Canada securities, it simultaneously records the value of the securities as a new asset on its balance sheet and records the new deposit from the Government of Canada as a liability on its balance sheet. On the balance sheet of the Government of Canada, the new deposit at the Bank of Canada is recorded as an asset and the new securities issued are recorded as a liability.

Source: Table prepared by the Library of Parliament.

Table 2 illustrates how the balance sheets of a private commercial bank and a private entity are affected when that bank gives a new loan to the private entity.

| Delenes Chest | Type of Entry | | |
|-------------------------|---------------------------------|---|--|
| Balance Sheet | Asset | Liability | |
| Private commercial bank | Loan to the private entity | Deposits created for the private entity | |
| Private entity | Deposits at the commercial bank | Loan from the commercial bank | |

Table 2 – Money Creation in the Private Banking System

Note: When a private commercial bank provides a new loan to a private entity, it simultaneously records the value of the loan as an asset on its balance sheet and records the deposits created for the private entity as a liability on its balance sheet. On the balance sheet of the private entity, the deposits at the commercial bank are recorded as an asset and the loan from the commercial bank is recorded as a liability.

Source: Table prepared by the Library of Parliament.