Latest Developments in the Canadian Economic Accounts

Enhancing Canada's statistics on securities



Release date: April 16, 2019



Statistics Canada Statistique Canada



How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, www.statcan.gc.ca.

You can also contact us by

Email at STATCAN.infostats-infostats.STATCAN@canada.ca

Telephone, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following numbers:

•	Statistical Information Service	1-800-263-1136
•	National telecommunications device for the hearing impaired	1-800-363-7629
•	Fax line	1-514-283-9350

Depository Services Program

Inquiries line
 Fax line
 1-800-635-7943
 1-800-565-7757

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "Contact us" > "Standards of service to the public".

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

Published by authority of the Minister responsible for Statistics Canada

© Her Majesty the Queen in Right of Canada as represented by the Minister of Industry, 2019

All rights reserved. Use of this publication is governed by the Statistics Canada Open Licence Agreement.

An HTML version is also available.

Cette publication est aussi disponible en français.

Enhancing Canada's statistics on securities

Introduction

Over the past decade, particularly in the wake of the global financial crisis, there has been increasing pressure for national statistical offices and central banks to enhance their financial statistics. The last global financial crisis revealed some important data gaps in countries' statistics to properly assess the build-up of risk and the interconnectedness in financial markets.

These gaps have led to the development of a series of initiatives at the international level¹ with clear deliverables to enhance the quality of the information produced by countries in the area of financial investment statistics, including statistics on securities which cover information on transactions and holdings of negotiable equity and debt instruments (bonds and money market instruments).

One of the key enhancements required to better understand risk related to the issuance and holding of securities is the production of more detailed information on the nature of these securities. Traditionally, statistics included in programs such as the financial and wealth accounts and international accounts, are presented at a fairly high level of aggregation and do not provide the granularity required to meet the increasing needs of policy-makers and other users.

This augmented detail includes additional information on the sector of the issuer and holder of securities as well as additional information on the characteristics of these securities.

Another important enhancement is the production of debt securities statistics in a from-whom-to-whom framework where sectors of the economy issuing debt securities are put into relation with sectors that are investing in these instruments. For example, under this framework, it is possible to know how much of the outstanding amount of federal government debt securities is held by the different sectors of the Canadian economy, including the other levels of government, financial corporations (banks, insurance companies, mutual funds, pension plans, etc.), non-financial corporations and households, as well as the non-resident sector.

To reach the goals set at the international level, Statistics Canada has sought to better leverage and integrate data collected from existing survey sources, administrative and external data sources and the agency's Centralized Business Register (CBR). The end product is a more complete, expanded and integrated set of information on securities organized in a centralized database available to data users.

Towards a more complete, integrated and relevant securities statistics program

The issuer/debtor dimension

The first phase of the initiative consisted of the development of a more complete and integrated set of statistics on Canadian issuers of debt securities as well as the characteristics of the instruments they issue.

Until recently, only limited details on this activity were disseminated. For example, traditional statistics essentially provided information on the total value of Canadian debt securities outstanding, without providing further details on which particular sectors of the Canadian economy were issuing these securities. There was also insufficient information on the characteristics of these instruments to properly asses their risk.

The expanded securities statistics program addressed these data gaps. For example, information on the currency of issue and remaining maturity of Canadian bonds outstanding, by sector of Canadian issuer, has been made available and published since the end of 2018. One of the key findings is the large exposure of Canadian private

^{1.} This includes the G20-Data Gap Initiative (G20-DGI) and the International Monetary Fund's Special Data Dissemination Plus (SDDS Plus) initiative.

corporations to foreign currencies in their borrowing activities in comparison to the central government, as well as the corresponding impact of currency fluctuations on the value of this debt.

Users now have access to very granular information on Canadian issuers of debt securities along with the characteristics of the instruments they issue. The more complete dataset includes numerous dimensions including sector, currency, original maturity, type of interest rate and market of issuance. Sectors covered include the non-financial corporations (with a breakdown of several industries), the financial corporations (central bank, other depository corporations, insurance corporations and pensions funds), the general government (with a breakdown by level of government), and households and non-profit institutions serving households.

Expanded statistics on equity securities issuances, currently under development, will also be available in the near future and will complement the already available information on debt securities. Equity securities, commonly called shares, include listed or unlisted shares and can be ordinary or preferred shares. Some investment fund shares or units, such as exchange traded funds will also be included in the database.

The holder/creditor dimension

In addition to statistics on issuances, it was equally important to enhance the information produced on who the holders (also referred to as creditors) of these securities issued are. Enhancements to the coverage of this activity as well as to better profile these holders were required.

In order to achieve this goal, improved coverage was achieved through better and more complete data sources. The securities database was also fully integrated to the CBR in order to provide a creditor perspective on risk and return profile of securities.

The expanded securities program enabled Statistics Canada to produce more timely, frequent and accurate estimates of Canadian holdings of foreign securities. Beginning with the third quarter of 2015, data on the value of foreign securities held by Canadian investors by country of issuer of these securities have been made available on a quarterly basis as opposed to annual. The increased frequency and timeliness of these estimates enables to better track changes in the composition and value of these assets held by Canadians and to better assess the impact of fluctuations in global stock and credit markets on the wealth of Canadians in more or less real time. Additional details on the currency composition of these instruments and on the sector of issuers of these securities were also released in the subsequent quarters.

Another deliverable was related to statistics on foreign holdings of Canadian securities. The non-resident sector is an important creditor for Canadian issuers borrowing funds on stock and debt markets. Further details on the nature of Canadian securities held by foreign investors have been made available to users. This includes additional details on the characteristics of Canadian debt securities held by non-residents as well as new data series on the nature of Canadian equities acquired by foreign investors, such as the industrial breakdown of these instruments.

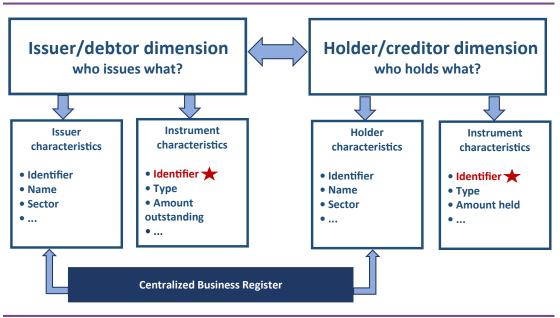
Work is underway to improve estimates and the level of details related to Canadian holders of domestic securities. These new estimates should be finalized and available to users by 2021. The end goal is to produce a complete set of statistics on Canadian holders of domestic and foreign securities as well as foreign holders of Canadian securities.

The integration of issuer and holder dimensions to create the from-whom-to-whom framework

The additional information on issuer and holder of securities provides important insight into financial risk. However, there is a need to integrate both dimensions in order to generate a more complete picture of interconnectedness between sectors of issuers and holders. This framework, referred to as the "from-whom-to-whom" framework, provides information on who is financing whom in the economy, the extent of this financing and in which type of securities this financing is taking place.

The creation of this broader framework consists in integrating the two dimensions of the database to generate a unique and integrated set of securities data. Information for the two dimensions is largely collected on a security by security basis. It is therefore possible, for each instrument, to assign who the holders are, with characteristics of both holders and issuers derived from the CBR.

Figure 1 Integration of issuer and holder dimensions



Source: Statistics Canada.

The process of integrating issuer and holder information is underway and will enable the production of securities statistics in a from-whom-to-whom framework, a deliverable Statistics Canada plans to meet by 2021. Table 1 shows an example of this framework including data already available and cells to be populated in the future. These statistics will ultimately be integrated in the Canadian Financial and Wealth Accounts, also presented on a from-whom-to-whom basis. These data will help shed light on the risk profile of investors. For example, it will be possible to see the type of instruments and sectors that Canadians have invested in, how much in foreign instruments, how much has been invested in bonds or equities, etc.

Table 1
Issues and holdings of debt securities in a from-whom-to-whom framework, by sector

	Holders						
	Residents						
	All sectors	Non-financial corporations	Financial corporations	General government	Households and NPISH ¹	Non-residents	All holders
Issuers							
Residents	Data available	To be populated	To be populated	To be populated	To be populated	Data available	Data available
Non-financial corporations	Data available	To be populated	To be populated	To be populated	To be populated	Data available	Data available
Financial corporations	Data available	To be populated	To be populated	To be populated	To be populated	Data available	Data available
General government	Data available	To be populated	To be populated	To be populated	To be populated	Data available	Data available
Households and NPISH1	Data available	To be populated	To be populated	To be populated	To be populated	Data available	Data available
Non-residents	Data available	To be populated	To be populated	To be populated	To be populated		
All issuers	Data available	To be populated	To be populated	To be populated	To be populated		

... not applicable

1. Non-profit institutions serving households.

Source: Statistics Canada.

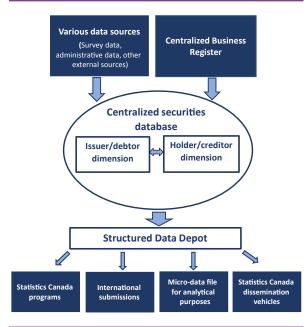
The centralized nature of the securities database and its benefits

As the CBR is a centralized source of business information at Statistics Canada, the securities database is a centralized source of securities data incorporating data from various sources, including survey data, details from the CBR and information from administrative data sources and other external sources.

The centralized securities database is used in the compilation of a number of programs within the agency, such as the national and international economic accounts. The centralized securities database can also feed users with more specific demands in aggregated form and could be made available to researchers at a more detailed level. The database is updated regularly with rich information about the value and the nature of securities held and issued by Canadians.

The integrated nature of the securities database with the CBR could provide additional insights into the nature of the borrowers and holders of securities, for example the extent to which these entities are domestically- or foreign-owned, their level of employment, etc. It also provides additional analytical capacity by leveraging existing information collected from other survey activities of the agency in the context of the securities data, such as the possibility to link businesses financing activity with their real or investment activity.

Figure 2 Statistics Canada securities statistics programs



Source: Statistics Canada.

A new quarterly product

All the development work undertaken in recent years resulted in an increased set of statistics on securities which has been made available to users. This work culminated with the launch of a new quarterly product called "Securities Statistics", available approximately 70 days after the reference period and for which the first release took place at the end of 2018.

The initial product includes very detailed information on debt securities issues and more limited details for holders of securities and securities statistics in a from-whom-to-whom framework, for which additional data will become available in the coming years.

Furthermore, a new data visualization tool is now accessible online. This tool includes a dynamic cross-table that enables users to look at the dataset from a variety of dimensions as well as other visualization layers that illustrate different aspects of the data.

Conclusion

It became evident after the last global financial crisis that additional information was required by policy-makers to properly assess the build-up of risk and the interconnectedness in financial markets.

The initiative undertaken at Statistics Canada to enhance securities statistics has produced many benefits with important expansions in terms of additional characteristics of instruments issued and held by Canadians, additional sector details as well as increased frequency and timeliness.

Forthcoming developments include the production of more detailed information on holder of securities and statistics in a from-whom-to-whom framework that will be released by 2021. In the meantime, additional tables on securities statistics will be added to the new quarterly release as they become available.