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# An overview of the revisions to the Financial and Wealth Accounts, 2020 to 2024

## Overview

The Canadian System of Macroeconomic Accounts (CSMA) is a source of invaluable information for businesses, governments and citizens. These accounts provide users with important insights into the inner-workings of the economy, current economic trends and interactions between the various sectors of the economy. In order for these accounts to remain relevant, the underlying concepts, methods, classification systems and data sources need to be periodically updated.

Statistical revisions are carried out regularly in the CSMA to incorporate the most current information available. Generally, these revisions are limited to the months or quarters within a given reference year, or, on an annual basis, to the preceding two to three years.

Periodically, comprehensive revisions are conducted, which generally entail revisions beyond the scope of the standard revision window. These provide an opportunity to enhance estimation methods and incorporate improved data sources and concepts.

This paper presents an overview of recent changes to the Financial and Wealth Accounts (FWA) for the third quarter of 2024. The FWA represents an integrated set of accounts within the larger CSMA and is comprised of the National Balance Sheet Accounts (NBSA), the Financial Flow Accounts (FFA), and the Other Changes in Assets Account (OCAA). Notable changes are presented below, but more minor revisions due to the incorporation of benchmark source data and other data improvements were also implemented.

A primary objective of these revisions was to increase the interpretability and consistency of estimates while better aligning to international guidelines.<sup>1</sup> A secondary goal was to align estimates across different programs to ensure coherence among concepts and statistical outputs.

## Deposits and short-term investments of non-residents

Non-residents play a significant role in Canada's economy, engaging frequently in transactions with Canadian businesses and banks. These entities hold a considerable amount of foreign-currency denominated deposits (38.5% of all foreign currency deposits at the end of 2023). The International Investment Position (IIP) program compiles data on non-resident deposit assets, using the [Geographic Assets and Liabilities booked in Canada](#) regulatory returns provided to the Bank of Canada by chartered banks. However, within these forms, banks may classify certain securities, such as covered bonds and bearer deposit notes, as deposits, whereas national accounting requires clearer distinctions between negotiable securities and non-negotiable instruments, such as demand and fixed-term deposits.

Recently, several regulatory banking returns were updated to better differentiate securities from deposits, prompting the IIP program to revisit and revise non-resident deposit asset data starting from the first quarter of 2021. The FWA and IIP programs, aware of this classification issue, had previously adjusted non-resident sector data by reducing deposits and increasing paper assets based on information available at the time. Now, with the more detailed information, the split between deposit and short-term paper assets have been further refined (Chart 1).

To align with the total international investment position, the FWA revised both currency and deposits and short-term paper asset categories for a more accurate representation. Users may see additional revisions in the future as new information from regulatory filings is reviewed.

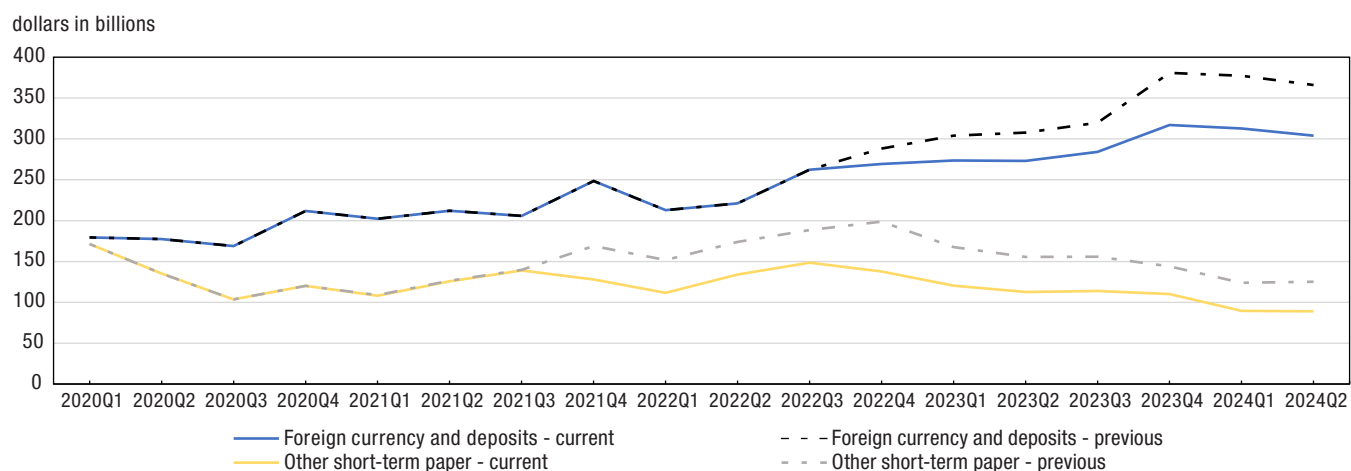
Holdings of assets and liabilities must be balanced by instrument in the FWA; for example, deposit liabilities of chartered banks must be held as deposit assets by other sectors of the economy. The newly released estimates

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1. For specifics on the current national accounting guidelines: [System of National Accounts](#)

now provide a more precise allocation of domestic deposits held by non-residents, which improved the allocation among domestic sectors. As a result, private non-financial corporation deposit assets have been revised to better align with source data, reflecting an overall improvement in data accuracy across sectors.

**Chart 1**  
**Revision to deposits and other short-term paper**



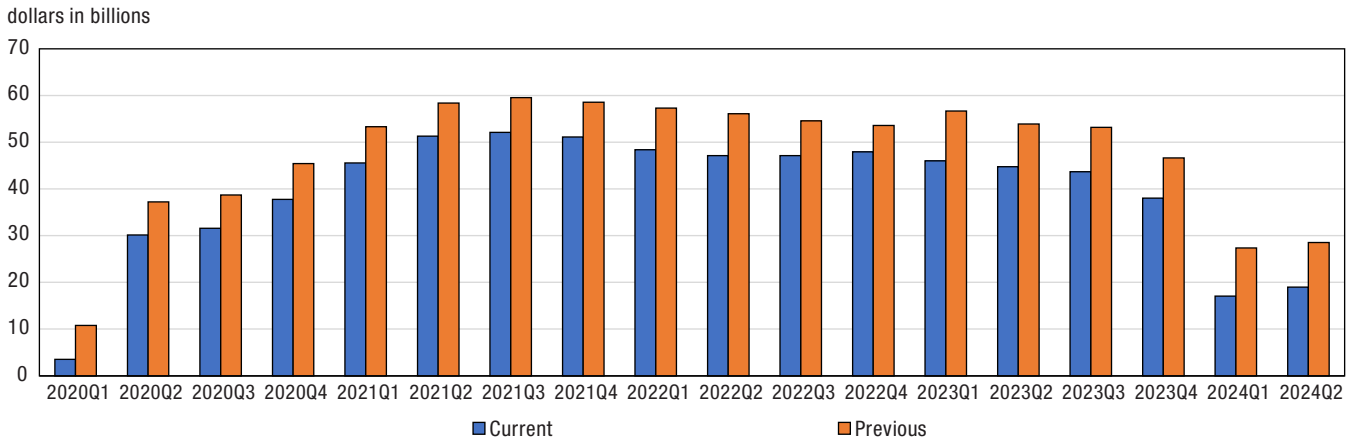
Source: Statistics Canada, "An overview of the revisions to the Financial and Wealth Accounts, 2020 to 2024", *Latest Developments in the Canadian Economic Accounts* (13-605-X), 2024.

## Federal government loans to corporations

Although the federal government does not frequently issue loans to Canadian businesses, during the pandemic, it introduced the Canadian Emergency Business Account (CEBA) program, providing nearly \$50 billion of loans to businesses. While this program began to wind down starting in early 2024, an in-depth analysis was undertaken to identify the remaining source of federal government lending to corporations. This revealed an overestimation among federal government loan assets. Certain International Monetary Fund subscriptions and other loan programs were recorded under both the monetary authority and federal government sectors. This discrepancy has been corrected going back to the first quarter of 2020. However, there remains a data break between the fourth quarter of 2019 and the first quarter of 2020, which will be addressed when data revisions are open for this period.

Additionally, in some cases loans made to non-resident organizations by the federal government were misclassified as loans made to Canadian corporations, which impacted the counterparty allocations contained within the [from-whom-to-whom](#) presentation of the FWA. As a result, the reported loans from the federal government to Canadian businesses have been revised down (Chart 2).

## Chart 2 Federal government loans to Canadian non-financial corporations



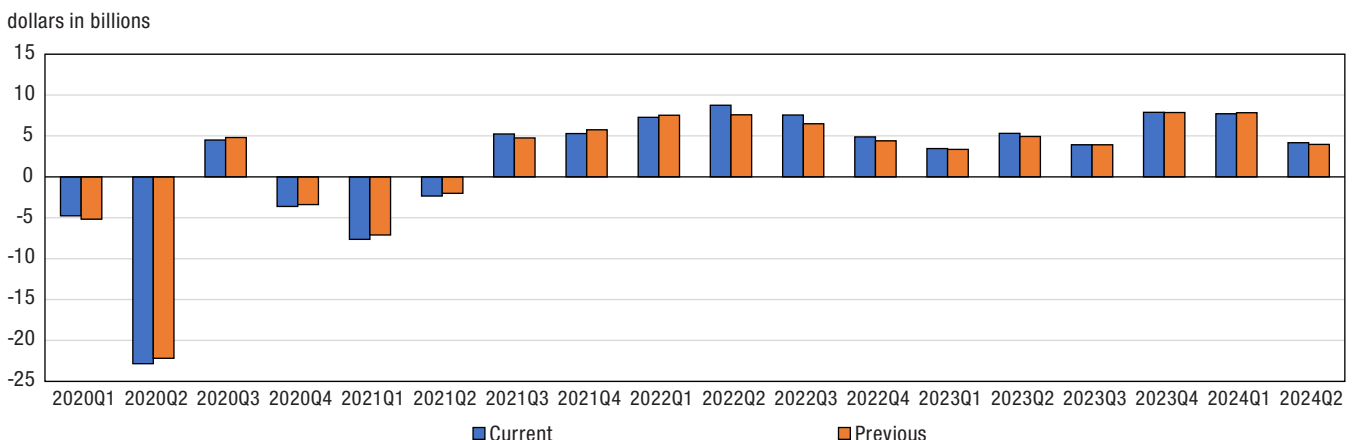
Source: Statistics Canada, "An overview of the revisions to the Financial and Wealth Accounts, 2020 to 2024", *Latest Developments in the Canadian Economic Accounts* (13-605-X), 2024.

## Annual update to seasonal models

Seasonal adjustment is a common technique applied to sub-annual estimates within the Canadian System of Macroeconomic Accounts that aims to identify, estimate, and remove seasonal variations in a time series. These variations result from the effects of institutional and climatic factors and are expected to reoccur at the same time of the year with similar intensities. Initial [efforts to introduce seasonally adjusted credit statistics](#) within the Financial and Wealth Accounts resulted in the publication of [seasonally adjusted estimates of household borrowing on a quarterly basis](#). The impetus for this work was to address seasonal variation in borrowing and the related financial indicators that masked important quarter-to-quarter trends. This seasonal adjustment framework was extended to additional credit statistics with the publication of the Monthly Credit Aggregates (MCA), which present [seasonally adjusted household credit liabilities by credit product and by lending sector on a monthly basis](#).

For seasonal adjustment, regular maintenance is undertaken in the form of periodic reviews of the underlying models and specifications used to produce estimates using the X-12 ARIMA method. Methodological experts in time series and seasonal adjustment analyze the outputs of this methodology and update the specifications to capture outliers, address residual seasonality, and adjust models to reflect shifting timing or intensity of seasonal variations. Overall, the seasonally adjusted credit data were revised due to updates from this methodological review and from revisions to the unadjusted source data.

## Chart 3 Seasonally adjusted household transactions in consumer credit



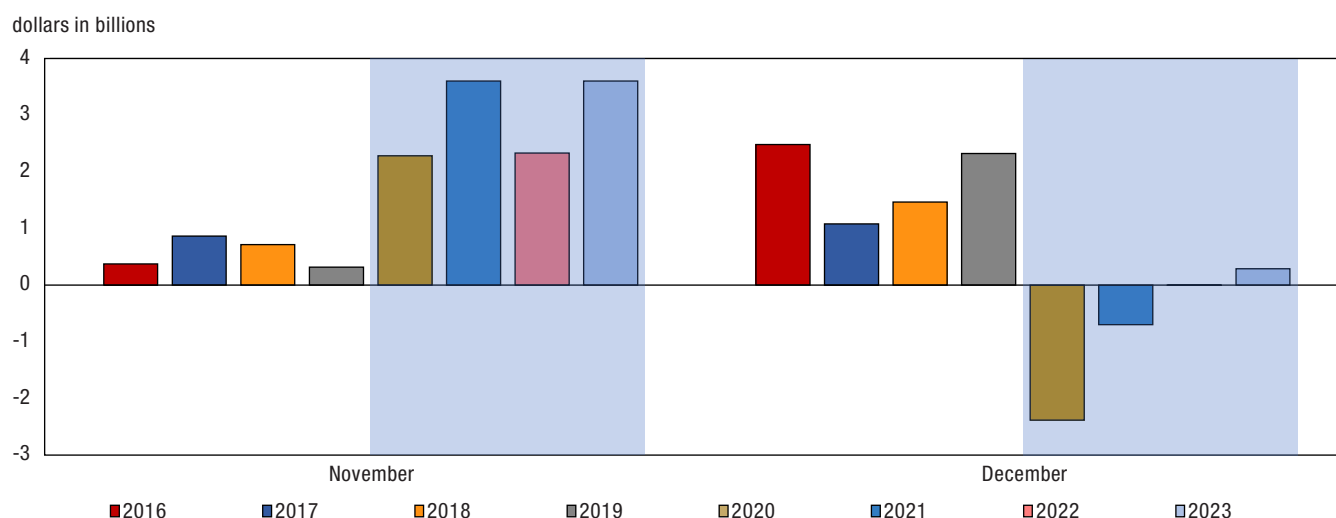
Source: Statistics Canada, "An overview of the revisions to the Financial and Wealth Accounts, 2020 to 2024", *Latest Developments in the Canadian Economic Accounts* (13-605-X), 2024.

While the quarterly and monthly seasonally adjusted credit statistics are produced independently, both sources are compared to ensure consistency in their trends. For example, the growth in seasonally adjusted mortgage debt for any given quarter is consistent between each approach.

This review also identified changing seasonal trends within the monthly estimates of household credit card balances with chartered banks from the MCA. Since the onset of the pandemic, consumers added greater amounts to their credit card balances in November instead of December, which was the traditional month when credit card balances would rise (see Chart 4.). Pandemic-related health restrictions and supply chain challenges at the end of the year may have explained some of this change in behaviour, but it has persisted in years where these events were not present. To more accurately capture this evolution in the observed seasonal pattern, the seasonal adjustment methodology has been updated for the credit card debt series. Impacts from current and future events, such as the GST holiday scheduled to start December 14, 2024, will continue to be assessed.

#### Chart 4

##### Month-to-month first differences in credit card balances, not seasonally adjusted



**Note:** The last four years in the chart are shaded to highlight the change in seasonal pattern.

**Source:** Statistics Canada, "An overview of the revisions to the Financial and Wealth Accounts, 2020 to 2024", *Latest Developments in the Canadian Economic Accounts* (13-605-X), 2024.

## Residential real estate

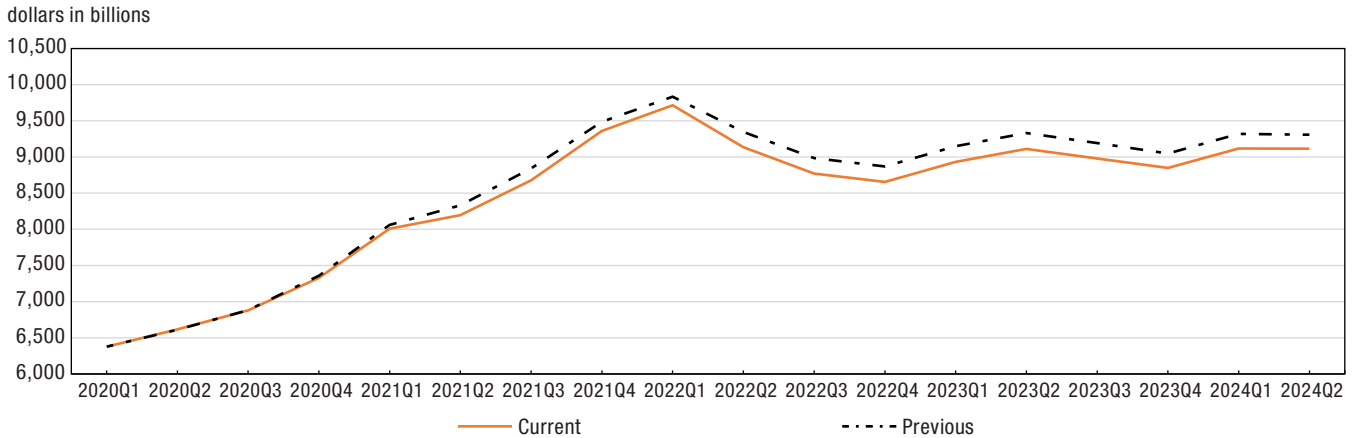
In the National Balance Sheet Account, residential real estate is comprised of both 'Dwellings' and 'Land underlying dwellings'. When calculating these estimates, there are two main benchmarks, Statistics Canada's [Property Values Program](#) and the [Survey of Financial Security](#) (SFS). The Property value estimates represent an aggregate of assessment values of all taxable residential properties in Canada. This information is provided by each province either on a detailed or aggregate basis and is adjusted such that the price and volume of all the combined assessments represent the desired reference period. These annual data are typically available with a roughly two and a half year lag; for example, for the current release of the FWA, data from reference year 2022 are now incorporated (Chart 5). For quarters outside of this benchmark period, estimates are based on quarterly price and volume data. SFS is used to determine the component of the estimate owned by households and to ensure consistency with the estimates from the Property Values program. The SFS is usually conducted every three years.

**Table 1**  
**Residential real estate program comparison**

National balance sheet accounts	Property values program	Survey of financial security
Measures the market value of all residential real estate excluding vacant land. Available by economic sector on a quarterly basis.	Assessment data are collected from provincial, territorial and municipal assessment entities and are based on municipal assessment rolls. The value of residential real estate includes vacant land. Aims to align prices as of July 1 and include all properties up to the end of the reference year.	A periodic household survey asking respondents to value all their real estate assets, including real estate owned outside of Canada, vacant land, commercial properties and other real estate investments, such as timeshares.

Source: Statistics Canada, "An overview of the revisions to the Financial and Wealth Accounts, 2020 to 2024", *Latest Developments in the Canadian Economic Accounts* (13-605-X), 2024.

**Chart 5**  
**Residential real estate**



Source: Statistics Canada, "An overview of the revisions to the Financial and Wealth Accounts, 2020 to 2024", *Latest Developments in the Canadian Economic Accounts* (13-605-X), 2024.

**Table 2**  
**Other changes to be incorporated into the Financial and Wealth Accounts (FWA) time series**

Revision	Description of change
Treatment of bankers' acceptances	The prior treatment for bankers' acceptances assumed a direct relationship between banks and non-financial corporations as one of lender and borrower with the latter having a loan liability with banks, who possess the corresponding loan asset and who issue securities in the form of bankers' acceptances. After the <a href="#">cessation of the Canadian Dollar Offered Rate's publication in June 2024</a> the sharp decline in outstanding bankers' acceptances and the rotation to other forms of borrowing by non-financial corporations revealed that financial corporations were also making use of bankers' acceptances as a means of borrowing. The result has been an overstatement of non-financial corporate borrowing and an understatement of financial corporate borrowing from chartered banks. In this release, the trends in borrowing have been adjusted between these two debtor sectors to more accurately reflect the impact of the discontinuation of Banker's acceptances and future work will aim to refine the time series.
Natural resources	The value of natural resources, a key component of Canada's wealth, was revised due to updated benchmark information on the output of resource industries and their related extraction costs. This information is used to arrive at a measure of resource rent, which forms the basis of natural resource valuation in the National Balance Sheet Accounts (NBSA). Because the method for estimating natural resources considers this resource rent over the entire reserve life of a given commodity, small revisions to revenues and expenses can result in much larger revisions to the market value asset shown on the balance sheet. For more information on the methodology used to estimate natural resource wealth in the NBSA please see <a href="#">Natural resource wealth statistics in the National Balance Sheet Accounts</a> .
Household debt security assets	The NBSA is a balanced matrix, meaning all financial assets must equal all financial liabilities by instrument. As all sectors' source data are loaded, imbalances help determine the level of household bond assets. During this revision, it was determined through balancing that households held more bonds than previously published.

Source: Statistics Canada, "An overview of the revisions to the Financial and Wealth Accounts, 2020 to 2024", *Latest Developments in the Canadian Economic Accounts* (13-605-X), 2024.



## Appendix A: Taxonomy of revisions

CSMA comprehensive revisions normally encompass six types of revisions: conceptual revisions, methodological revisions, classification revisions, statistical revisions, presentational revisions and content revisions.

- **Conceptual revisions** reflect changes in what is being measured. For example, key concepts in the macroeconomic accounts include the concept of a production boundary, consumption, institutional units, etc. Any change to these definitions or the addition of a new concept would be considered a conceptual revision.
- **Methodological revisions** reflect changes in how things are measured or the methods used to compile the accounts. For example, methods often used in macroeconomic accounting include deflation, seasonal adjustment, benchmarking and modeling. Any change to these techniques or the development of new techniques would be considered a methodological revision.
- **Classification revisions** occur when the classification systems (assets, industries, products, consumption, etc.) underlying the macroeconomic accounts are updated. Classification revisions are required to ensure that the presentation of the macroeconomic accounts reflect the current economic and social structure.
- **Statistical revisions** occur when new (generally higher quality) source data are integrated into the macroeconomic accounts.
- **Presentational revisions** occur when the way data are presented or the terms used to describe the data are updated, or additional data are provided. These revisions are generally made to align with international terminology or to make the data more intuitive for the users.
- **Content revisions** reflect changes in the amount of detail presented for a given account or set of macroeconomic statistics.