

Tracking the Canadian Economy through COVID-19: Insights from customer transactions – February 4, 2021

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Overview

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- 2. COVID-19, the Canadian Economy and Scotiabank's Transactions Data
- 3. Business Transactions Data Details
- 4. Retail Transactions Data Details
- 5. Other High-Frequency Indicators of Activity
- 6. Caveats



1. Key Insights from Canadian Customer Transactions

This presentation is part of the weekly series intended to draw insights about the state of the Canadian economy from the flow of Scotiabank's retail and non-retail transactions data.

Key takeaways from the payments data in this week's publication:

- Updated to January 30th, growth in business sector transactions remained resilient throughout January:
 - o Growth in incoming payments picked up since mid-January, with a slowdown in retail flow being offset by a pickup in the wholesale, health and financial industries. The second half of January was also the first time when manufacturing firms saw incoming transactions consistently in line with last year's levels, which is a sign of improving conditions in the industry. This follows a relatively strong December, when Canadian manufacturing sales rose +0.6% m/m according to preliminary estimates from Statistics Canada.
 - Outgoing payments were slightly weaker in y/y terms on average in January compared to December, despite picking up towards the end of the month. Cumulative monthly total for rent payments climbed to the level of a year ago, while payroll deposits remained relatively strong.
- Growth in consumer card spending remained in negative territory for all of January (data to February 1st), as restrictions hit spending in several sectors, including clothing, dining and entertainment.
 - o Growth in spending on digital products (music, movies, videogames) has risen further in January, while large online retailers saw a significant spike in purchases since the lockdowns were imposed in various provinces.
 - Provincial spending data was mixed, with volatile growth in Atlantic provinces that remained resilient for most of January, in contrast with Ontario, Quebec, and the Western provinces, where spending remained weak relative to last year's levels. In contrast, the Prairie provinces showed a tentative improvement in spending totals in the second half of January.



2. COVID-19 and the Canadian Economy: Scotiabank Transactions Data

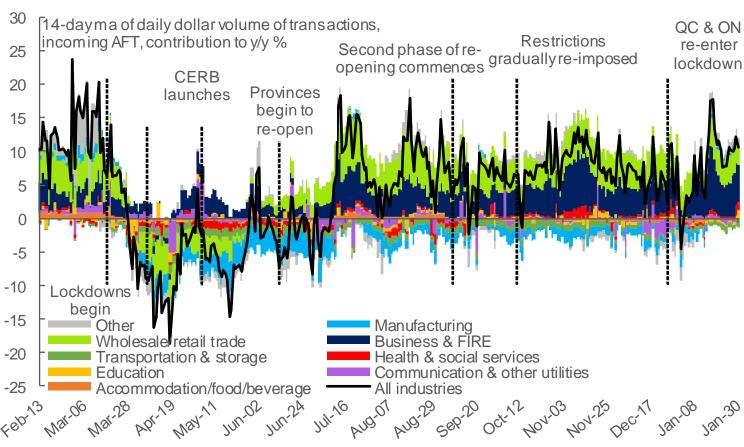
- We present data on retail and non-retail transactions, which capture distinct but related aspects of economic activity in Canada.
- The data comprises actual observed daily transactions going through debit or credit card payment networks in the retail space, and automated funds transfers (AFTs) in the non-retail space.
 - The transactions are anonymized and aggregated to protect the privacy of Scotiabank's clients.
- The AFT payments show bill payments to/from companies in Canada.
 - o Incoming payments can be associated with company revenue, and outgoing payments can be associated with costs.
- Debit and credit card payments can be used to measure the evolution of retail spending at various types of establishments.
 - The transactions can serve as a measure of economy-wide retail spending, and of the extent to which households are resuming pre-COVID levels of activity.
 - Note that the use of electronic payments has increased because of COVID-19, so comparisons to year-ago levels can be
 misleading. These data are best used to observe directional movements rather than to make specific assessments on the level
 of activity.
- In the current circumstances, comparing the dollar volumes of transactions in the current year to its level of a year ago should help track growth through the re-opening phase.



3. Business Transactions Data: Growth in Payments Resilient, Picks Up Recently

- Updated to January 30th, growth in business sector transactions remained resilient throughout January:
 - The incoming payments picked up in the last two weeks of the month (Chart 1).
 - A slowdown in retail transaction flow was offset by a pickup in the wholesale and financial industry.
 - The second half of January saw transactions to manufacturing firms consistently in line with last year's levels, which is a sign of improving conditions in the industry (charts 2-6).
- Note: Automated Funds Transfers (AFT) are used for:
 - rent and mortgage payments;
 - payroll deposits; and
 - o other bills.

Chart 1

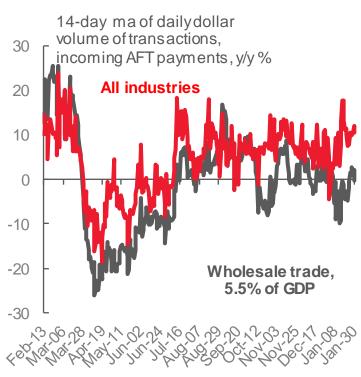


Sources: Scotiabank Economics, Data Science and Analytics.



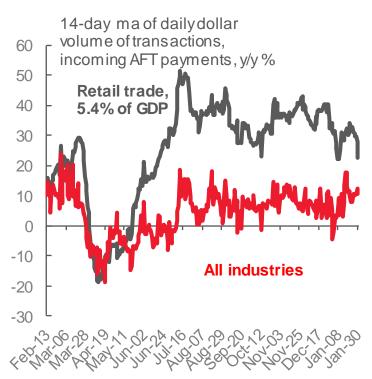
3. Business Transactions Data: Weaker Retail Payments Partly Offset by Wholesale

Chart 2



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 3

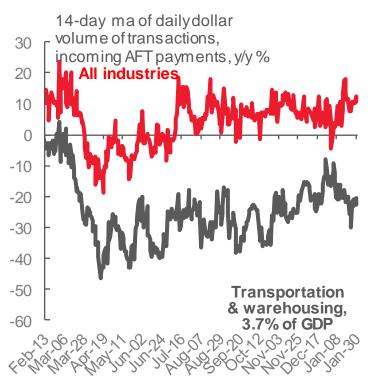


Sources: Scotiabank Economics, Data Science and Analytics.



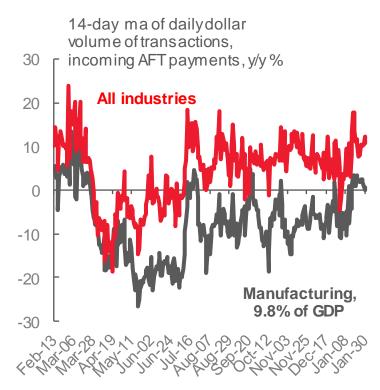
3. Business Transactions Data: Manufacturing In Line with the Level of a Year Ago

Chart 4



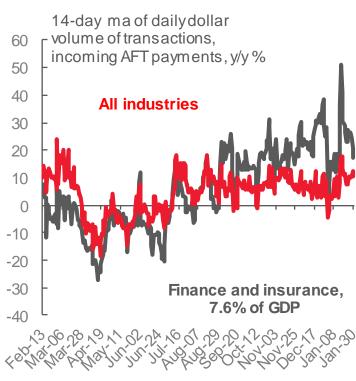
Sources: Scotiabank Economics, Data Science and Analytics.

Chart 5



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 6



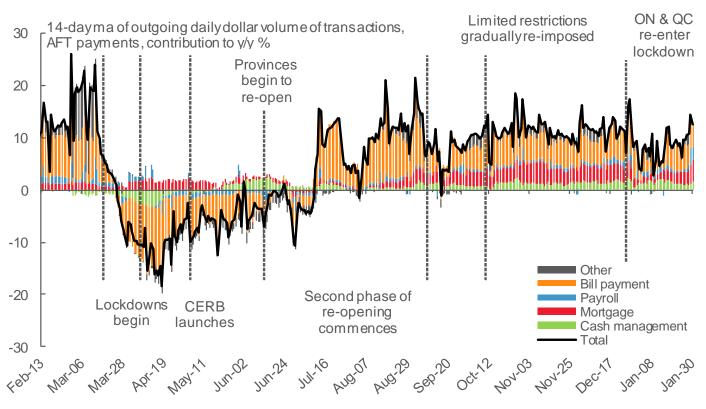
Sources: Scotiabank Economics, Data Science and Analytics.



3. Business Transactions Data: Growth in Bill Payments Weaker On Average In January

- Outgoing payments were slightly weaker in y/y terms on average in January compared to December, despite picking up towards the end of the month (Chart 7).
- Cumulative monthly total for rent payments climbed to the level of a year ago, while payroll deposits remained relatively strong (Charts 8 and 9).

Chart 7



Sources: Scotiabank Economics, Data Science and Analytics.



3. Business Transactions Data: Rent Payments Climbed To the Level of a Year Ago

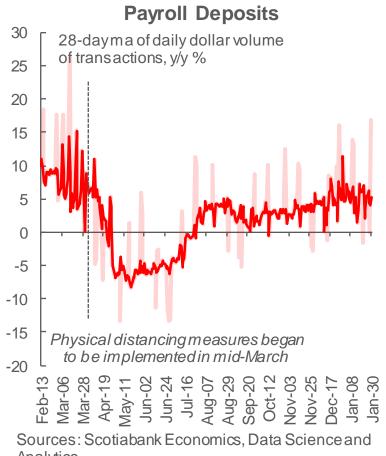
Chart 8 **Rent Payments** 50 dollar volume, cumulative daily total for each month, y/y % 40 30 20 10 0 -10 -20 Physical distancing -30 measures began to be

Apr-19 May-11 Jun-02 Jul-16 Aug-07 Aug-29 Sep-20 Sources: Scotiabank Economics, Data Science and Analytics.

implemented in mid-March

-40





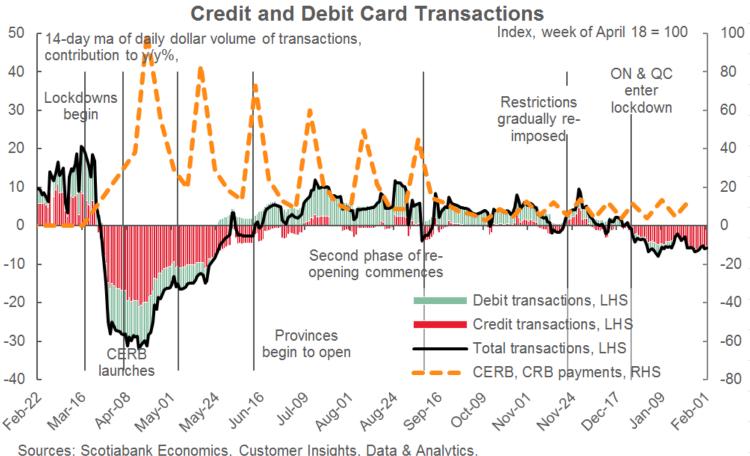
Analytics.



4. Retail Transactions Data: Spending Growth Negative Throughout January

- Growth in consumer card spending remained in negative territory for all of January (data to February 1st), as restrictions hit card spending following the implementation of lockdowns in several provinces (Chart 10).
- The disbursement of funds under the Canada Recovery Benefit (CRB) remained stable through January, despite the impact of restrictions on retail spending.

Chart 10





4. Retail Transactions Data: Card Spending Mixed Across Provinces

- Provincial spending data is mixed, with volatile growth in Atlantic provinces that remained resilient for most of January, in contrast to Ontario, Quebec, and the Western provinces where spending remained weak relative to last year's levels (Charts 11-14).
- In contrast, the Prairie provinces show a tentative rise in spending totals in the second half of January.

Chart 11

Atlantic Provinces

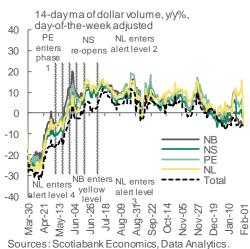
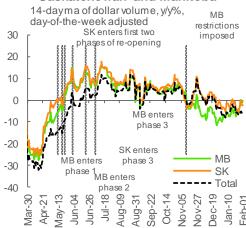


Chart 13

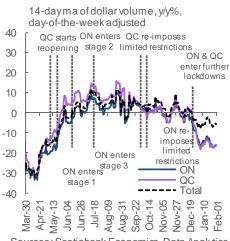
Saskatchewan and Manitoba



Sources: Scotiabank Economics, Data Analytics.

Chart 12

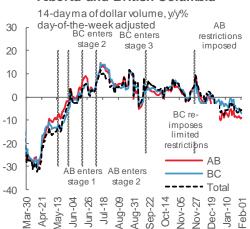
Ontario and Quebec



Sources: Scotiabank Economics, Data Analytics

Chart 14

Alberta and British Columbia



Sources: Scotiabank Economics, Data Analytics.



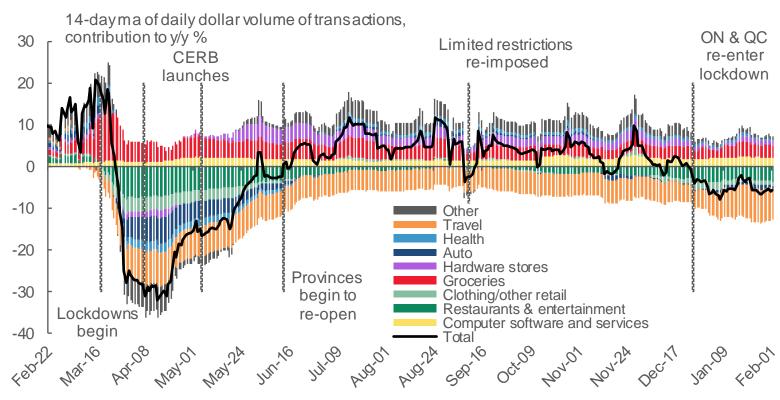
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4. Retail Transactions Data: Weakness Persists Across Categories

 Chart 15 shows that the slowdown in total purchases is driven mostly by weaker spending in the sectors that were at the epicentre of the most recent lockdowns, such as nonessential retail, restaurants, entertainment and travel.

Chart 15



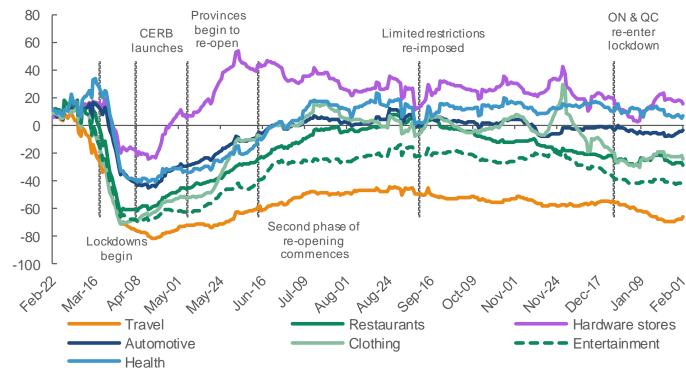


4. Retail Transactions Data: Widespread Weakness, but Hardware Spending Strong

- Growth shifted down in several hardhit sectors, including clothing, restaurants and travel.
- In contrast, hardware purchases expanded throughout January, a testament to continuing strength in home renovations as people spend more time at home, or prepare their houses for sale to take advantage of a very strong housing market (Chart 16).

Chart 16



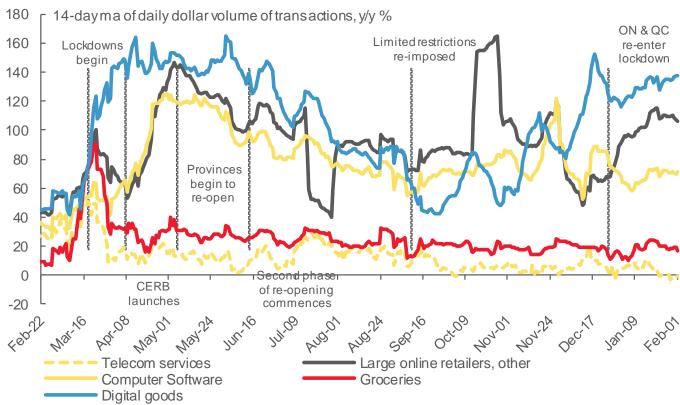




4. Retail Transactions Data: Purchases of Digital Media Rise, Online Spending Strong

 Growth in spending on digital products (music, movies, videogames) has risen further in January, while large online retailers saw a significant spike in purchases since the lockdowns were imposed in various provinces (Chart 17).

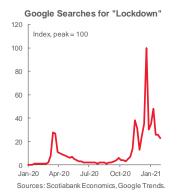
Chart 17

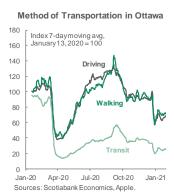




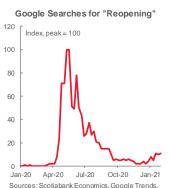
5. Other High-Frequency Indicators Of Activity

Charts 18-31 Google Searches, Various Keywords, Dining and Transportation Data



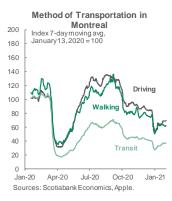






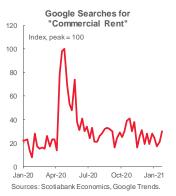




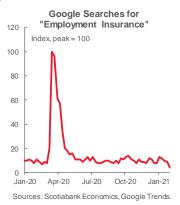




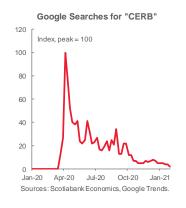
















6. Caveats

- Note that the mapping from the volume of transactions to measures of economic activity (e.g. GDP) is imperfect, and so care must be taken when drawing the implications.
- The data is observed at daily frequency and embeds different types of seasonal patterns.
 - o For retail payments, the volume and types of payments are different depending on the day of the week and the season.
 - o For non-retail payments, both the day of the week and the season are important. In addition, some payments are tied to the calendar date (e.g. rent payments are made on the first day of each month), some payments have a bi-weekly schedule, etc.
 - To smooth out most of the day-to-day seasonality we use a 14-day moving average of the dollar volume of transactions, taking a y/y% change to remove any remaining seasonal patterns related to the calendar date.
- In addition to seasonality, there is normal payment volatility related to the random nature of the transactions process and the impact of regional and economy-wide events (weather, labour strikes, etc.).
 - The volatility of this nature may or may not be related to economic activity as measured by GDP and so, as mentioned above, care must be taken in drawing inference.
- For business transactions, which are inherently more lumpy compared to retail spending, data towards the end of the sample can be revised as some AFT payments are recorded with a lag. As a result we exclude the last few days of data of business transactions only.



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We analyzed anonymized automated funds transfers (ATFs) by businesses through the Automated Clearing Settlement System where Scotiabank is one of the parties. The analysis was based on 22 Transaction Codes (see Payments Canada for more information on transaction types) across 20 industries. We also analyzed anonymized retail transactions (debit and credit card payments) through Scotiabank, with 18 broad spending categories based on 264 merchant types. Finally, we used aggregated totals for deposits related to the Canada Emergency Response Benefit made into customer accounts in chart 12, indexing the series to 100 at the maximum weekly total.

For each type of transaction (retail and ATF), we calculated a 14-day moving average daily in 2020 through early May and compared to a corresponding average for the same month and day in 2019.

