



# Tracking the Canadian Economy through COVID-19: Insights from customer transactions – January 15, 2021

---

Nikita Perevalov\* (Scotiabank Economics)

Taha Jaffer, Jason Liang (Data Science and Analytics)

Roland Merbis, Artur Motruk (Customer Insights & Analytics)

\* Director of Economic Forecasting, 437.775.5137, [nikita.perevalov@scotiabank.com](mailto:nikita.perevalov@scotiabank.com)

1. Key Insights from Customer Transactions
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 9<sup>th</sup>, y/y growth in business sector transactions has remained relatively stable through late December, but the tentative signs of restrictions started to show in early January:
  - Growth in the wholesale and retail incoming payment flow slowed at the start of 2021, in line with stricter public health measures announced in several provinces. The financial industry saw a strong rise in y/y growth in incoming payments at the end of December, before a sharp slowdown in January.
  - In addition, growth in overall outgoing payments slowed somewhat in the first week of 2021, with rent payments suffering a particularly sharp y/y decline.
- A consistent picture is seen in consumer transactions, updated through January 11<sup>th</sup>, which ended up below year-ago levels in late December and early January. However, over the past few days the daily spending was closer to the levels seen a year ago, pulling up the average spending over the past 2 weeks and helping to reduce the rate of y/y contraction.
  - Overall average growth in December slowed somewhat compared to previous months, but the deceleration in late December and around the New Year was relatively sharp and coincided with restrictions implemented in various provinces during the Boxing Day shopping season. Spending declined significantly in Ontario, Quebec and Alberta, but other provinces saw varying degrees of growth deceleration.
  - Growth in clothing, restaurants, entertainment, hardware and travel spending slowed or declined relative to last year. In contrast, online spending picked up as consumers turned to alternatives to in-person shopping.

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

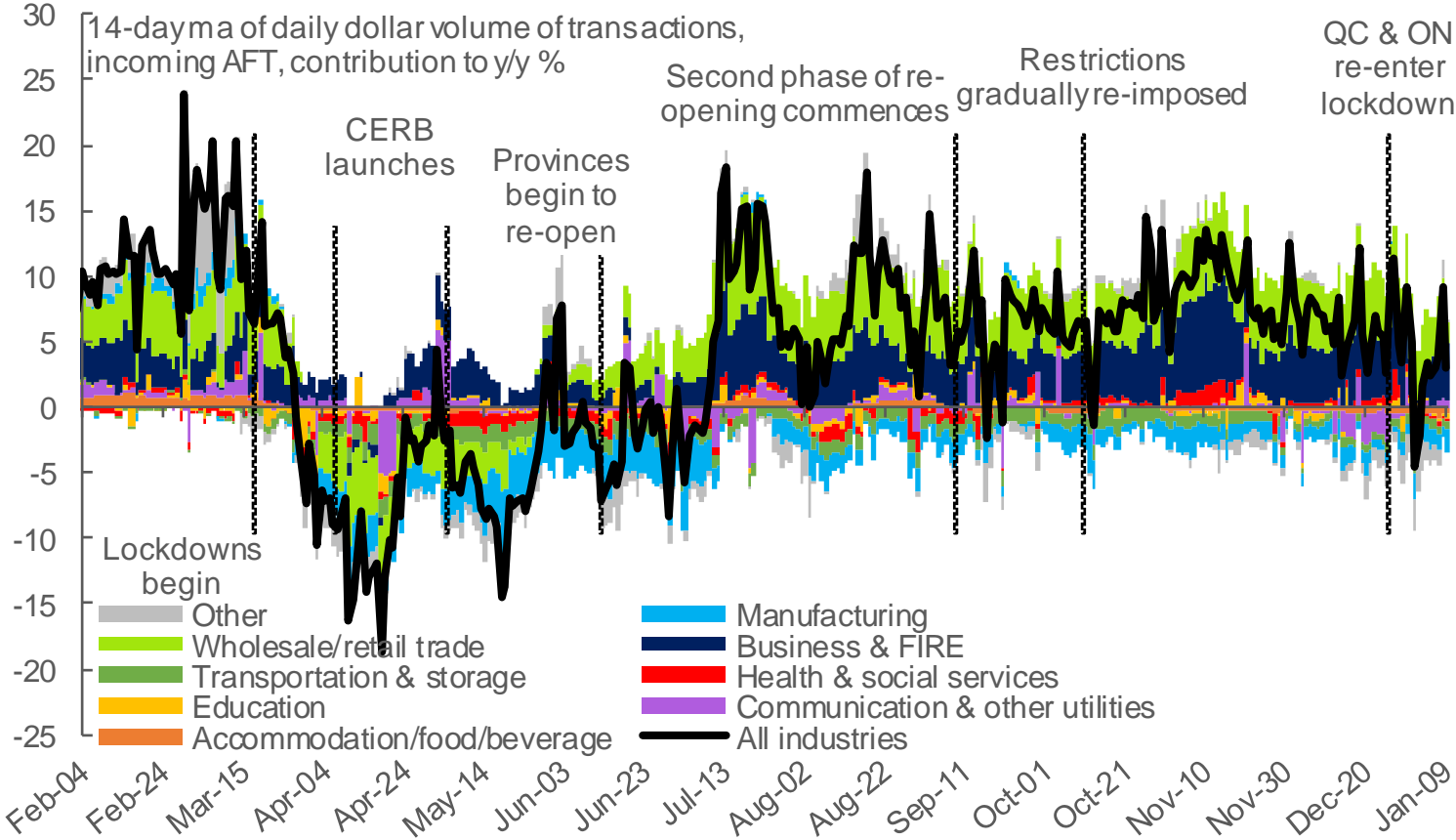
---

- 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.
  - 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: Payments Slowing in Late December/Early January

- Updated to January 9<sup>th</sup>, y/y growth in business sector transactions has remained relatively stable through late December, but the tentative signs of restrictions started to show in early January (chart 1):
  - Growth in incoming payments in the wholesale and retail industries slowed at the start of 2021, while the financial industry saw a strong rise in y/y growth in incoming payments at the end of December, before a sharp slowdown in January (charts 2-6).
- Automated Funds Transfers (AFT) are used for:
  - rent and mortgage payments;
  - payroll deposits; and
  - other bills.

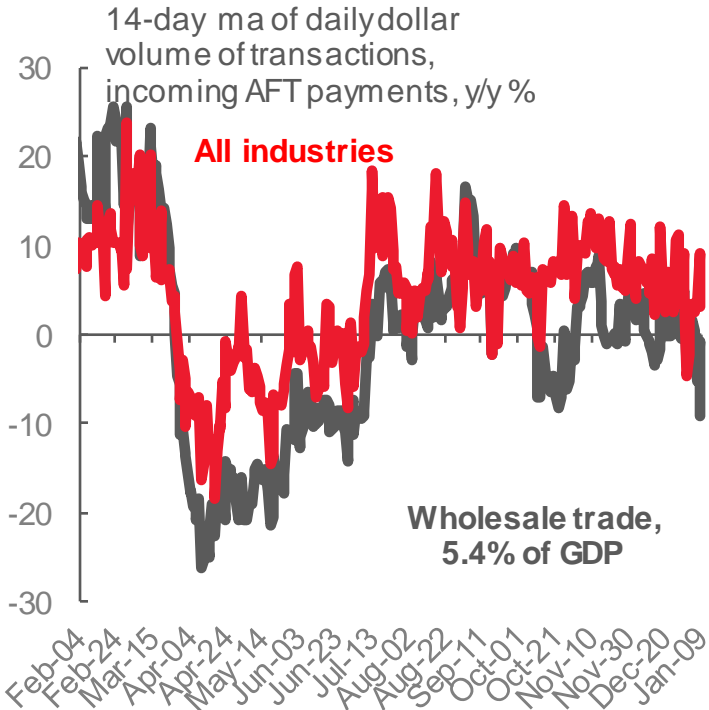
Chart 1



Sources: Scotiabank Economics, Data Science and Analytics.

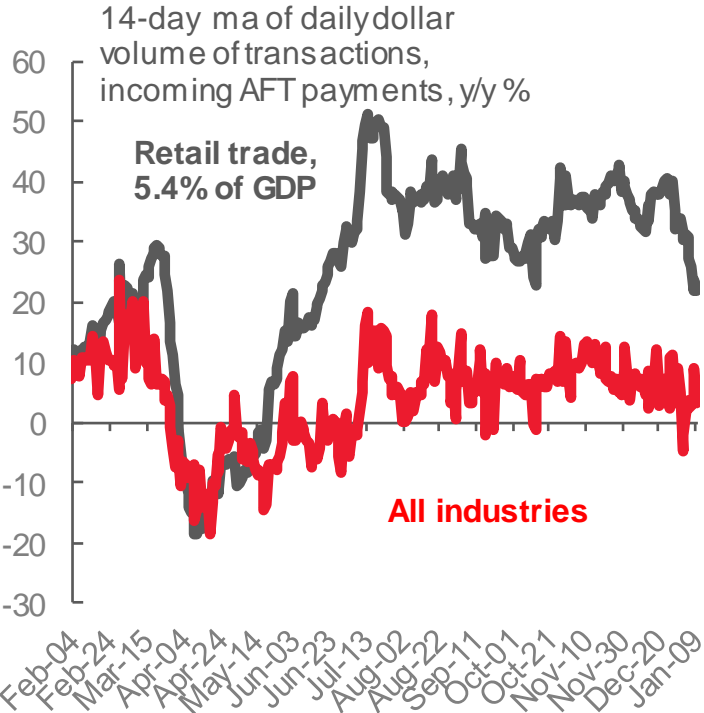
# 3. Business Transactions Data: Retail and Wholesale Payments Ease Further

Chart 2



Sources: Scotiabank Economics, Data Science and Analytics.

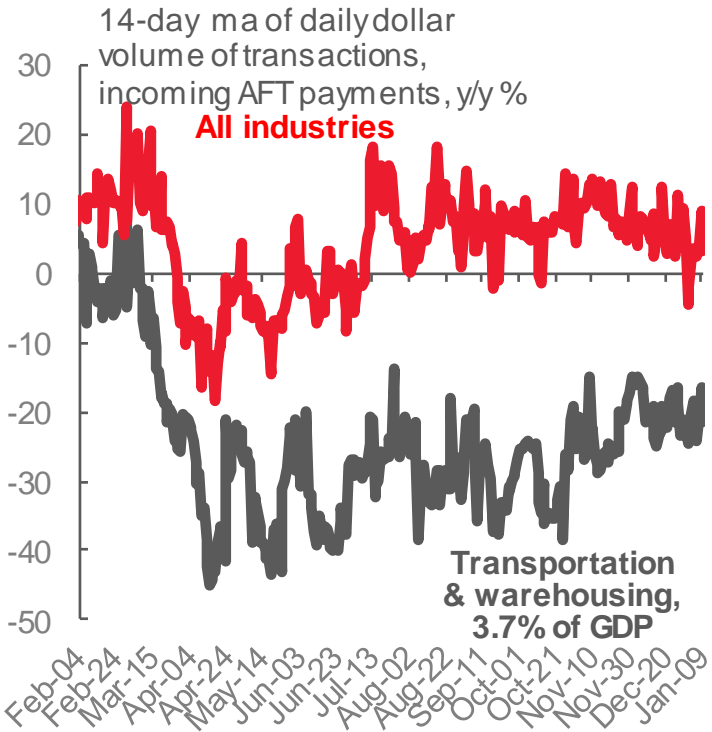
Chart 3



Sources: Scotiabank Economics, Data Science and Analytics.

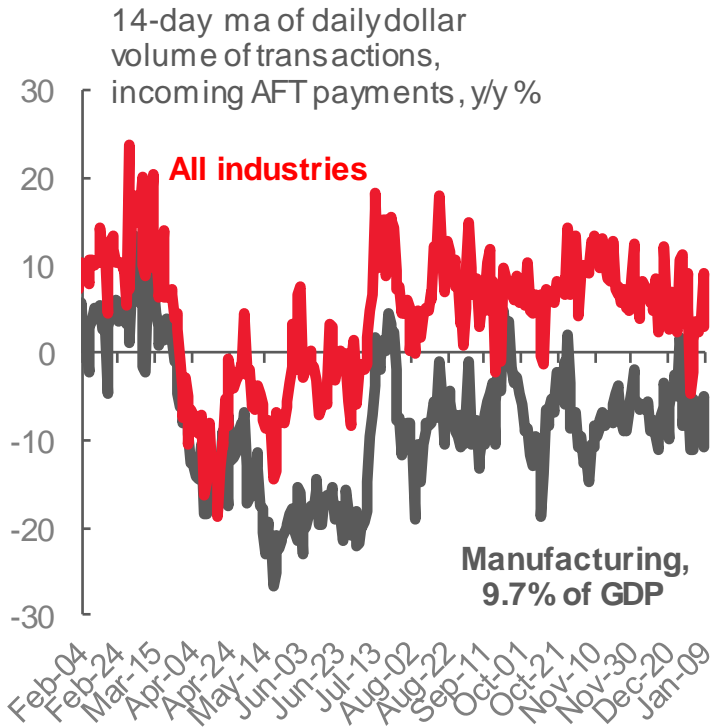
# 3. Business Transactions Data: Manufacturing/Transportation – No Sign of Recovery

Chart 4



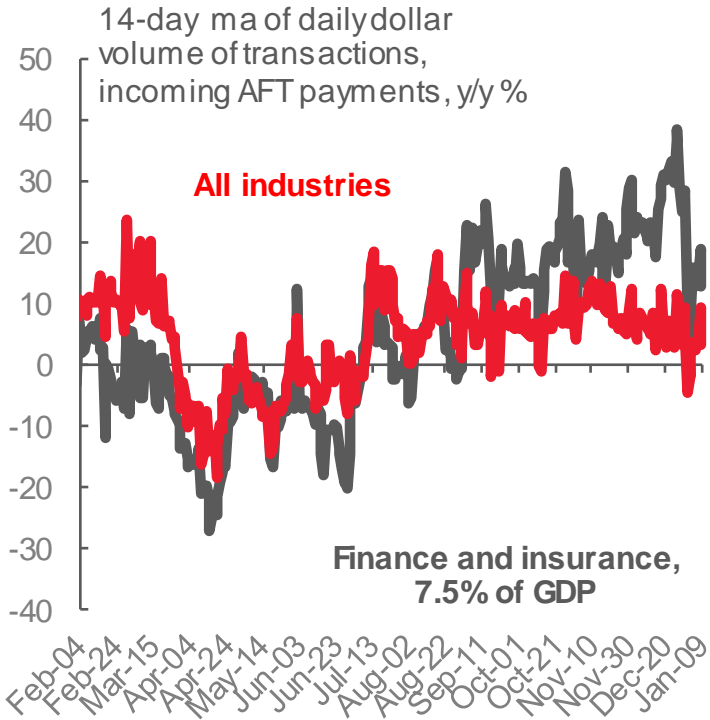
Sources: Scotiabank Economics, Data Science and Analytics.

Chart 5



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 6

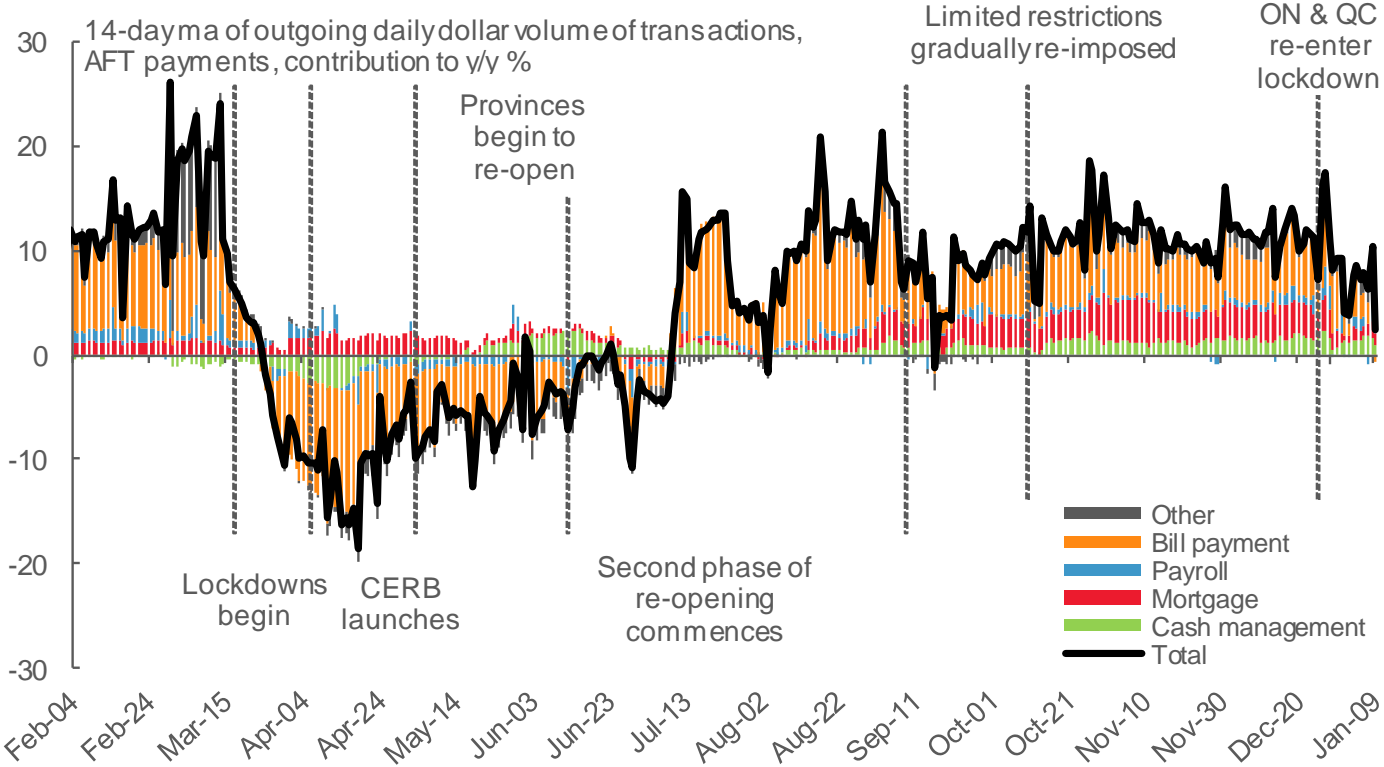


Sources: Scotiabank Economics, Data Science and Analytics.

# 3. Business Transactions Data: Growth in Bill Payments Weaker in the New Year

- Growth in overall outgoing payments slowed somewhat in the first week of 2021, with rent payments suffering a particularly sharp y/y decline (Chart 7 and 8).
- Payroll deposits have been running above last year's levels in early January, despite the slowdown seen in other areas of business and household payments (Chart 9).

Chart 7

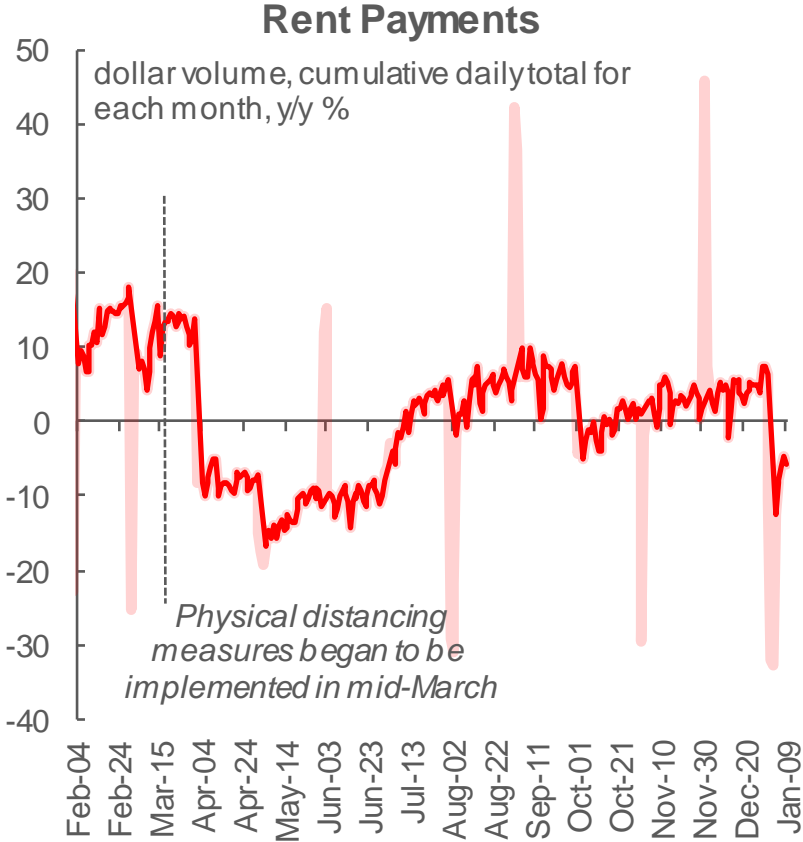


Sources: Scotiabank Economics, Data Science and Analytics.



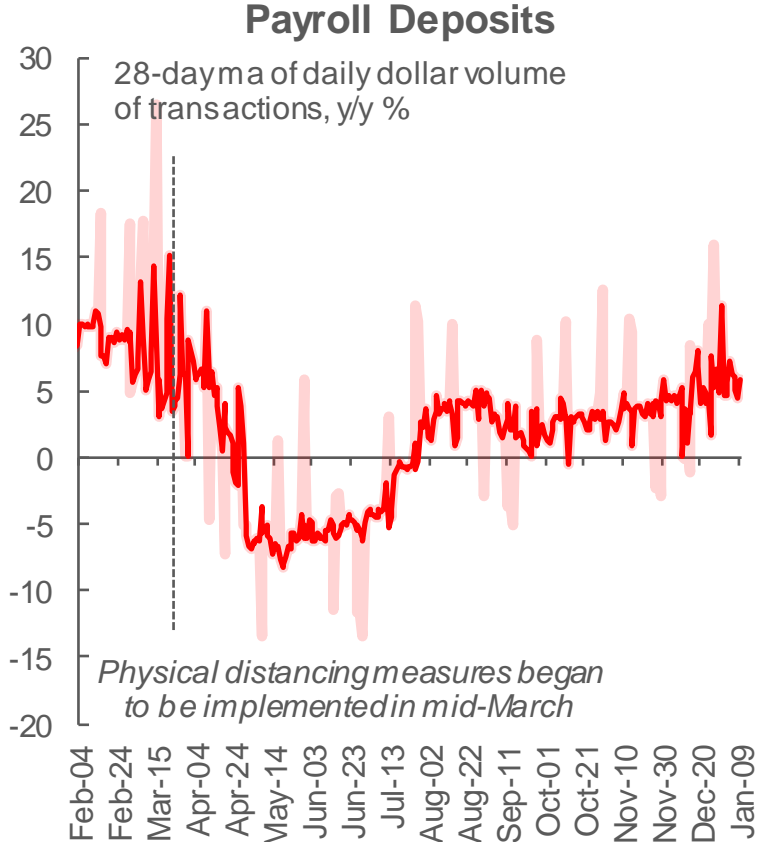
# 3. Business Transactions Data: Rent Payments Decline Abruptly

Chart 8



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 9

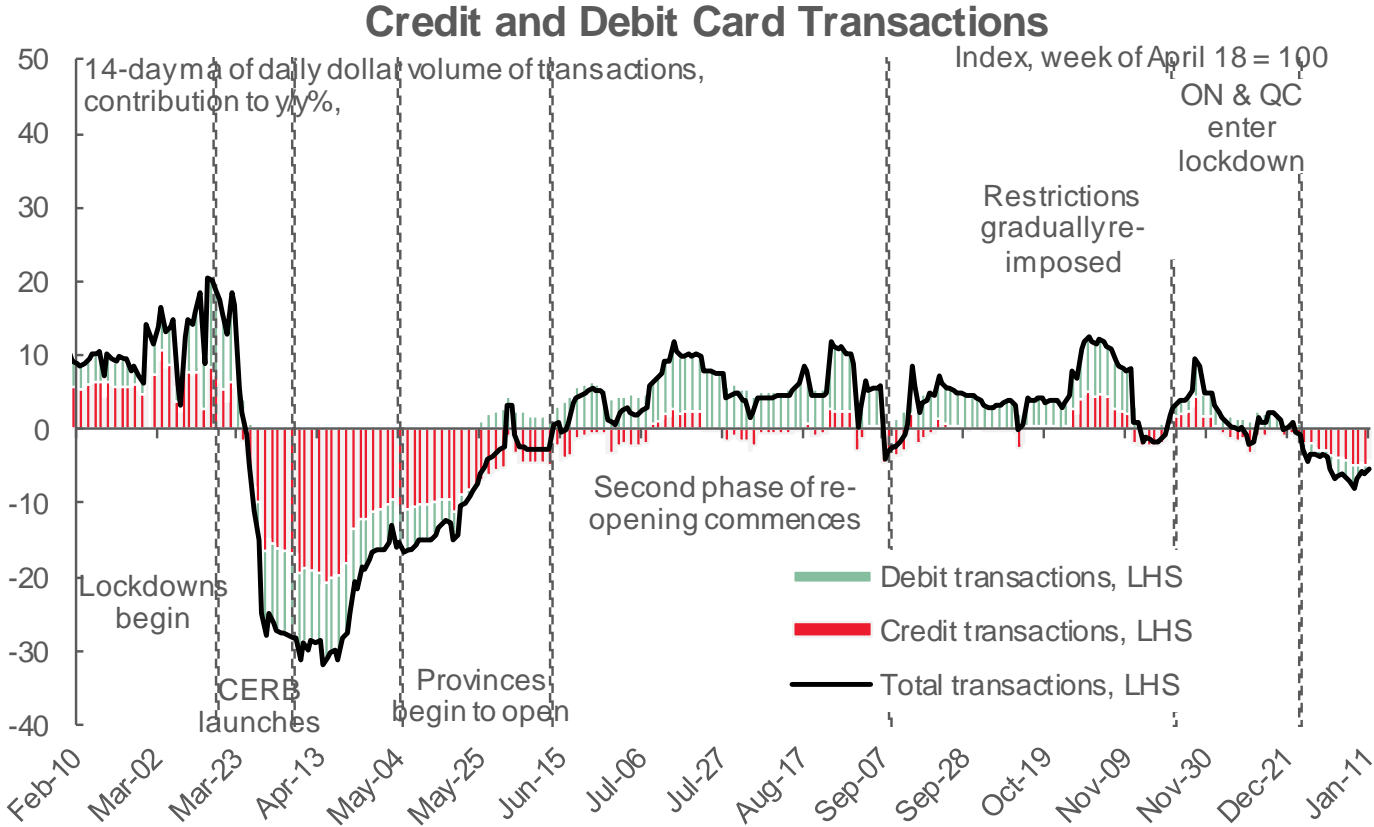


Sources: Scotiabank Economics, Data Science and Analytics.

# 4. Retail Transactions Data: Y/Y Decline During Holidays, Slight Improvement Recently

- Consumer transactions updated through January 11<sup>th</sup> ended up below year-ago levels in late December and around New Year holidays. However, over the past few days the daily spending was closer to the levels seen a year ago, which helped to stabilize and reduce the rate of y/y contraction (Chart 10).
  - Average y/y growth in December slowed somewhat compared to previous months, but after Christmas holidays an overall y/y contraction was seen in both debit and credit card spending.
  - More recently, spending stabilized and began to improve slowly compared to the levels of a year ago.

Chart 10

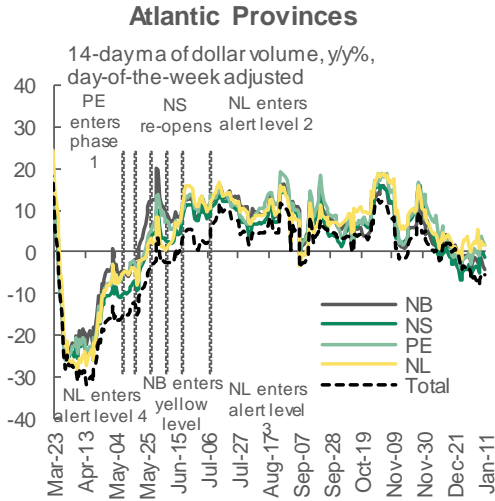


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 4. Retail Transactions Data: Card Spending Weaker in Ontario/Quebec/Alberta/Manitoba

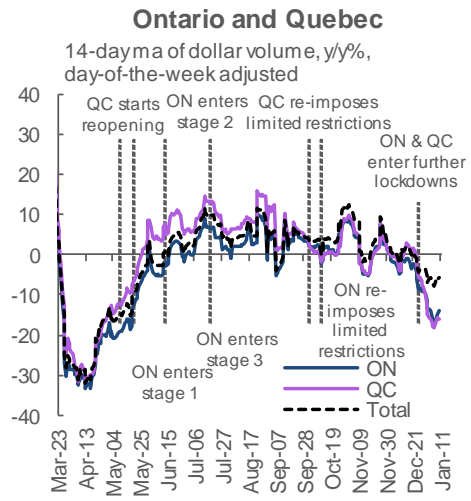
- Spending around holidays declined the most in provinces that imposed stricter lockdown measures at the end of December, with Ontario, Quebec, Manitoba and Alberta driving overall spending down (Charts 11-14).
- Growth in the Atlantic provinces continued to outperform the national average in the last few weeks.

Chart 11



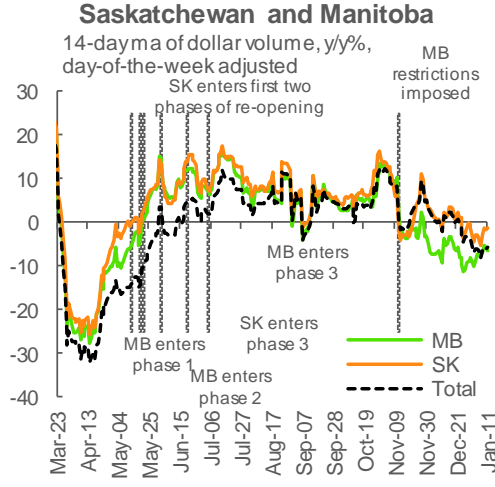
Sources: Scotiabank Economics, Data Analytics.

Chart 12



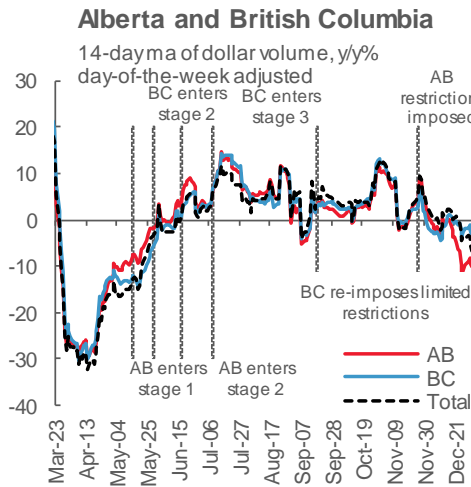
Sources: Scotiabank Economics, Data Analytics.

Chart 13



Sources: Scotiabank Economics, Data Analytics.

Chart 14

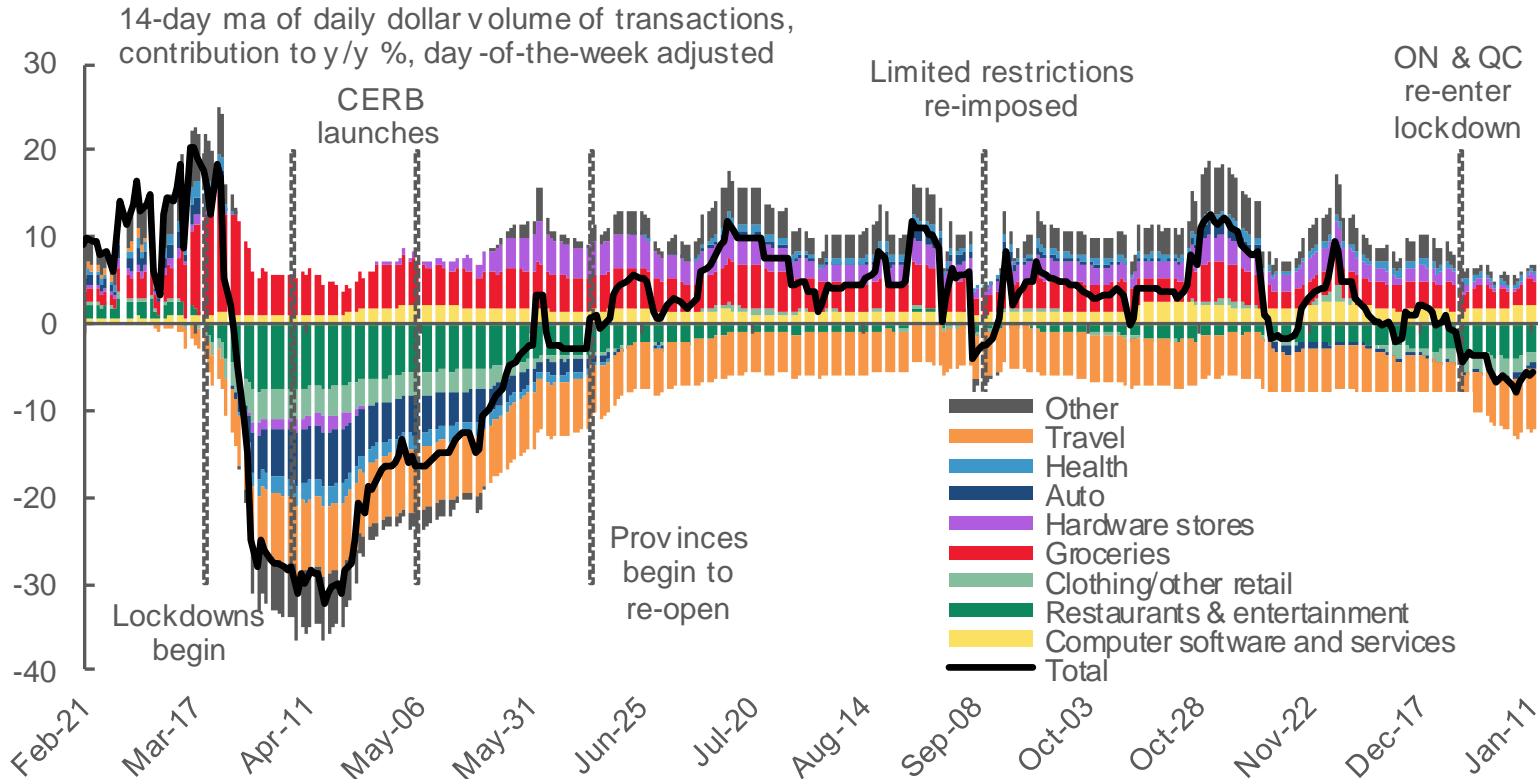


Sources: Scotiabank Economics, Data Analytics.

# 4. Retail Transactions Data: Most Sectors Deeper In the Negative Territory

- Overall y/y decline in spending can be seen across most of the categories, but especially those that were most negatively impacted by the pandemic (Chart 15).

Chart 15

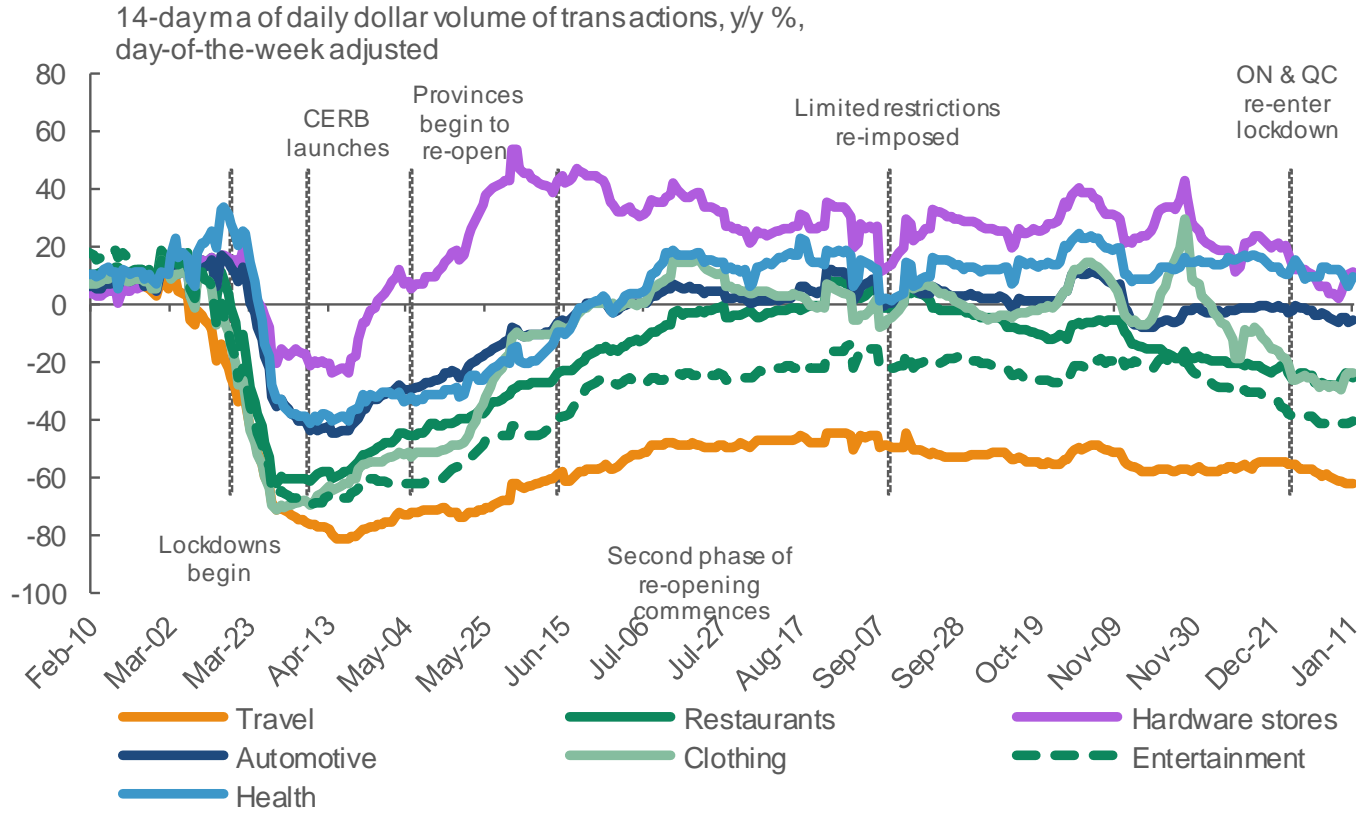


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 4. Retail Transactions Data: Healthcare/Automotive Spending Relatively Stable

- Growth in clothing, restaurants, entertainment, hardware and travel spending slowed or declined relative to last year (Chart 16).
- The only two sectors that saw relatively stable spending growth were healthcare and automotive. The latter suggests that spending in that sector (which includes gas stations and repair shops) remained resilient through late December and early-January. In contrast, separate industry data shows that sales of motor vehicles declined for the second month in December.

Chart 16

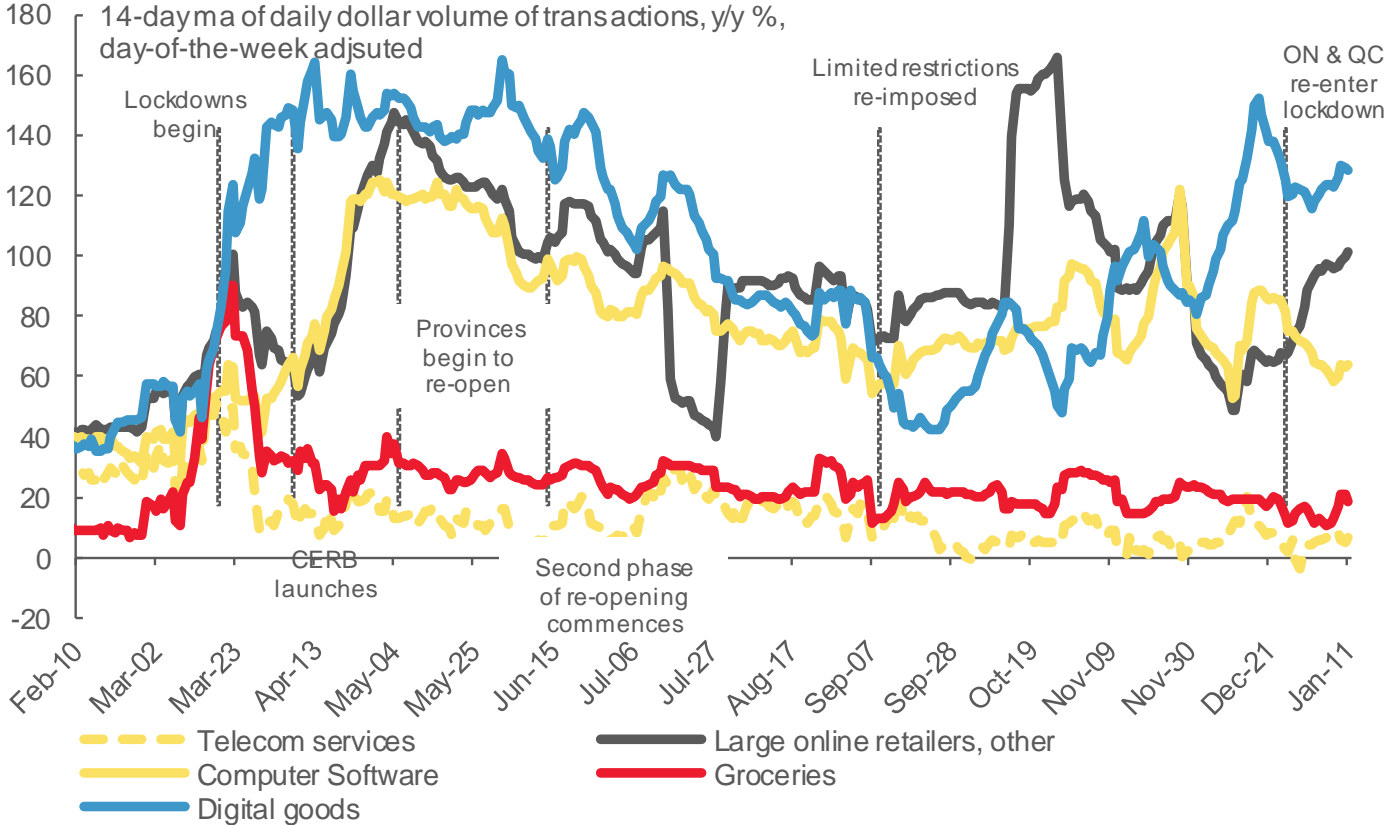


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 4. Retail Transactions Data: Online Spending Picks Up During the Holidays

- Online spending picked up at the end of 2020 as consumers turned to alternatives to in-person shopping during the post-Christmas shopping season (Chart 17).

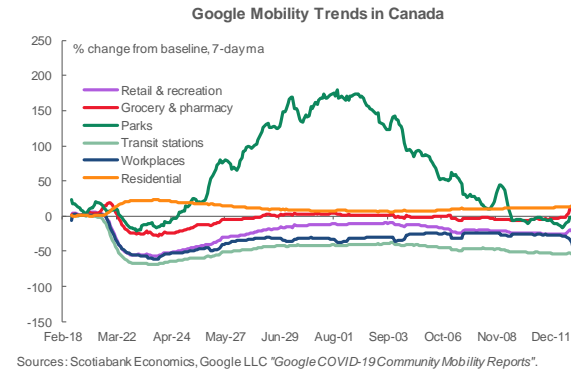
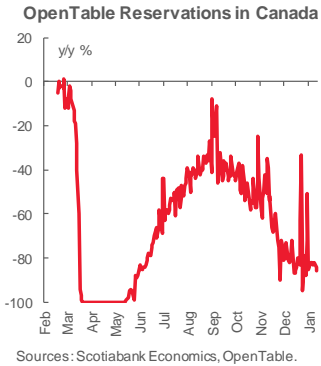
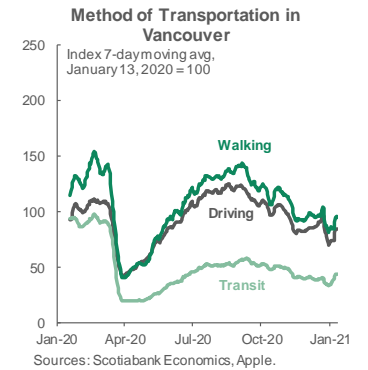
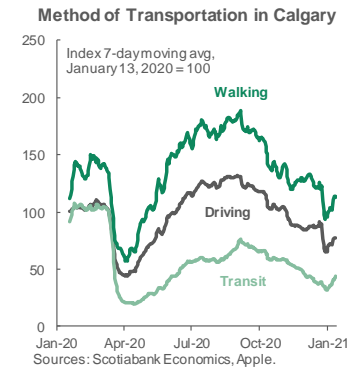
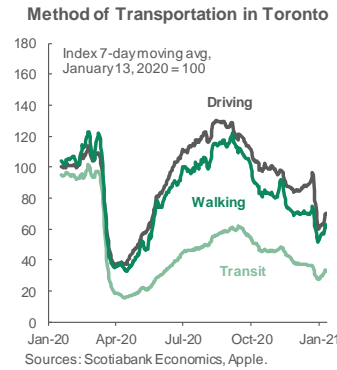
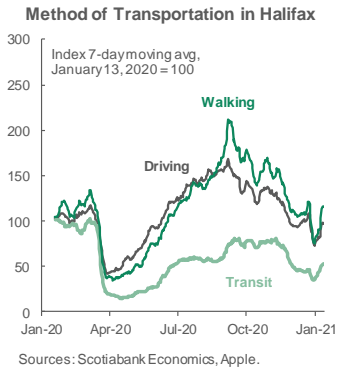
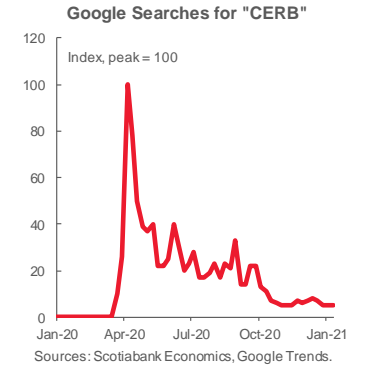
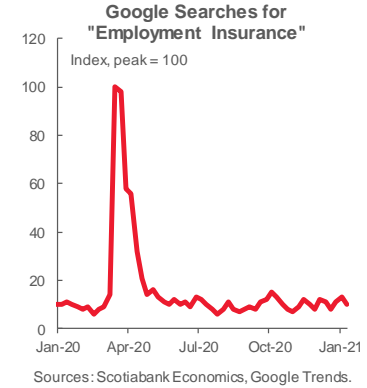
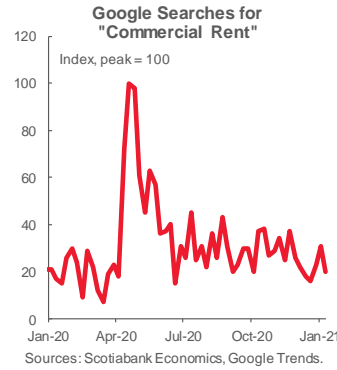
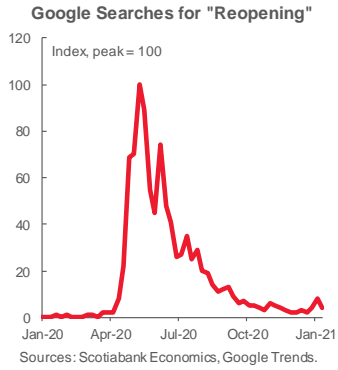
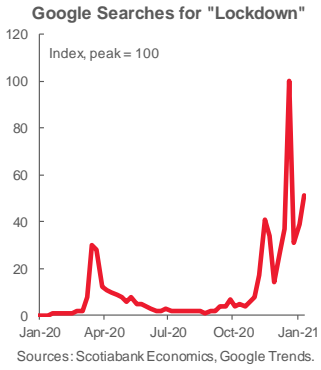
Chart 17



Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 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.
  - For retail payments, the volume and types of payments are different depending on the day of the week and the season.
  - 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.



This report has been prepared by Scotiabank Economics as a resource for the clients of Scotiabank. Opinions, estimates and projections contained herein are our own as of the date hereof and are subject to change without notice. The information and opinions contained herein have been compiled or arrived at from sources believed reliable but no representation or warranty, express or implied, is made as to their accuracy or completeness. Neither Scotiabank nor any of its officers, directors, partners, employees or affiliates accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents. These reports are provided to you for informational purposes only. This report is not, and is not constructed as, an offer to sell or solicitation of any offer to buy any financial instrument, nor shall this report be construed as an opinion as to whether you should enter into any swap or trading strategy involving a swap or any other transaction. The information contained in this report is not intended to be, and does not constitute, a recommendation of a swap or trading strategy involving a swap within the meaning of U.S. Commodity Futures Trading Commission Regulation 23.434 and Appendix A thereto. This material is not intended to be individually tailored to your needs or characteristics and should not be viewed as a “call to action” or suggestion that you enter into a swap or trading strategy involving a swap or any other transaction. Scotiabank may engage in transactions in a manner inconsistent with the views discussed in this report and may have positions, or be in the process of acquiring or disposing of positions, referred to in this report.

Scotiabank, its affiliates and any of their respective officers, directors and employees may from time to time take positions in currencies, act as managers, co-managers or underwriters of a public offering or act as principals or agents, deal in, own or act as market makers or advisors, brokers or commercial and/or investment bankers in relation to securities or related derivatives. As a result of these actions, Scotiabank may receive remuneration. All Scotiabank products and services are subject to the terms of applicable agreements and local regulations. Officers, directors and employees of Scotiabank and its affiliates may serve as directors of corporations.

Any securities discussed in this report may not be suitable for all investors. Scotiabank recommends that investors independently evaluate any issuer and security discussed in this report, and consult with any advisors they deem necessary prior to making any investment.

**This report and all information, opinions and conclusions contained in it are protected by copyright. This information may not be reproduced without the prior express written consent of Scotiabank.**

<sup>TM</sup> Trademark of The Bank of Nova Scotia. Used under license, where applicable.

Scotiabank, together with “Global Banking and Markets”, is a marketing name for the global corporate and investment banking and capital markets businesses of The Bank of Nova Scotia and certain of its affiliates in the countries where they operate, including; Scotiabank Europe plc; Scotiabank (Ireland) Designated Activity Company; Scotiabank Inverlat S.A., Institución de Banca Múltiple, Grupo Financiero Scotiabank Inverlat, Scotia Inverlat Casa de Bolsa, S.A. de C.V., Grupo Financiero Scotiabank Inverlat, Scotia Inverlat Derivados S.A. de C.V. – all members of the Scotiabank group and authorized users of the Scotiabank mark. The Bank of Nova Scotia is incorporated in Canada with limited liability and is authorised and regulated by the Office of the Superintendent of Financial Institutions Canada. The Bank of Nova Scotia is authorized by the UK Prudential Regulation Authority and is subject to regulation by the UK Financial Conduct Authority and limited regulation by the UK Prudential Regulation Authority. Details about the extent of The Bank of Nova Scotia's regulation by the UK Prudential Regulation Authority are available from us on request. Scotiabank Europe plc is authorized by the UK Prudential Regulation Authority and regulated by the UK Financial Conduct Authority and the UK Prudential Regulation Authority.

Scotiabank Inverlat, S.A., Scotia Inverlat Casa de Bolsa, S.A. de C.V., Grupo Financiero Scotiabank Inverlat, and Scotia Inverlat Derivados, S.A. de C.V., are each authorized and regulated by the Mexican financial authorities. Not all products and services are offered in all jurisdictions. Services described are available in jurisdictions where permitted by law.

Scotiabank recognizes the importance of personal and business information and we never take for granted the trust that you have placed in us to protect that information. We are committed to the ethical use of all our data. This report is based on anonymized and aggregated information and cannot be linked to any identifiable individual or business. For additional details on how we protect personal information, see <https://www.scotiabank.com/privacy>.

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.