



Tracking the Canadian Economy through COVID-19: Insights from customer transactions – December 10, 2020

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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 December 3rd, y/y growth in business sector transactions has remained robust throughout November:
 - The pace of the y/y expansion in automated business transactions in the second half of November was only slightly weaker than strong growth seen in the first half of the month. The wholesale industry payment flow remained above the 2019 levels in November, likely extending the strong activity recorded by Statistics Canada at wholesale firms in the previous months. Manufacturing firms continued to register the transaction flow that was below last year's levels.
 - Growth in outgoing payments has remained stable in November, with both rent payments and payroll deposits running above the levels of 2019, the former consistent with the labour market data from Statistics Canada showing continued growth in employment through November.
- Y/Y growth in consumer transactions (available through December 4th) has stabilized in positive territory, an encouraging sign after it dipped below zero in mid-November. Just as the holiday shopping season began in late November, spending more than kept up with last year's levels, once the timing is aligned for Black Friday and Cyber Monday in 2019-2020. Nevertheless, tentative signs of growth easing emerged, in particular at the provincial level.
 - Spending growth in provinces that imposed the latest lockdown measures has dipped significantly, with y/y growth in Manitoba turning down sharply.
 - The merchants that recorded rising sales over the previous few weeks – e.g. clothing, automotive and hardware stores – saw easing y/y growth over the past week.

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.
- In the current circumstances, comparing the dollar volumes of transactions in the current year and in 2019 can be indicative of the depth of the decline in economic activity in Q2-2020 and help track growth through the re-opening phase.
 - 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 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.

2. COVID-19 and the Canadian Economy: Caveats

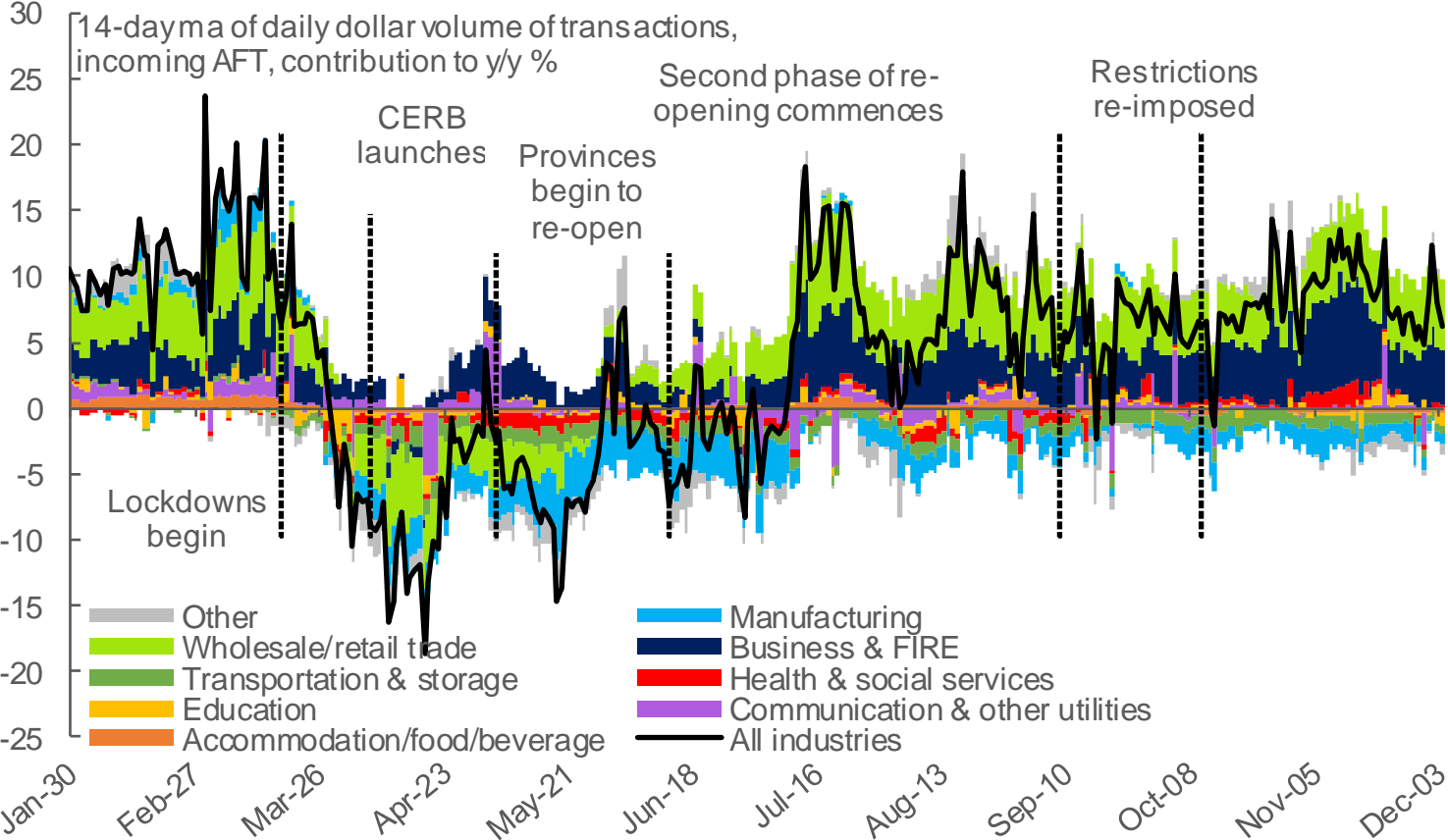
There are important caveats to analysis based on the payments data:

- 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.

3. Business Transactions Data: Incoming Payments Remained Strong in November

- Updated to December 3rd, Y/Y growth in business sector transactions has remained robust throughout November (Chart 1) despite the new restrictions put in place in various provinces and the rising number of infections.
- The wholesale industry payments remained above the 2019 levels, while the manufacturing firms continued to see the transaction flow below last year's levels (Charts 2-6).
- Automated Funds Transfers (AFT) are used for:
 - rent and mortgage payments;
 - payroll deposits; and
 - other bills.

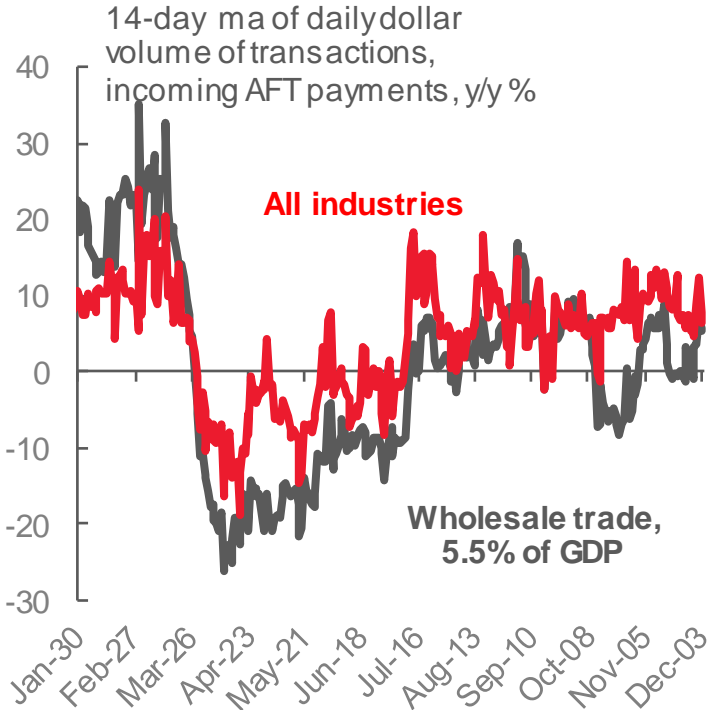
Chart 1



Sources: Scotiabank Economics, Data Science and Analytics.

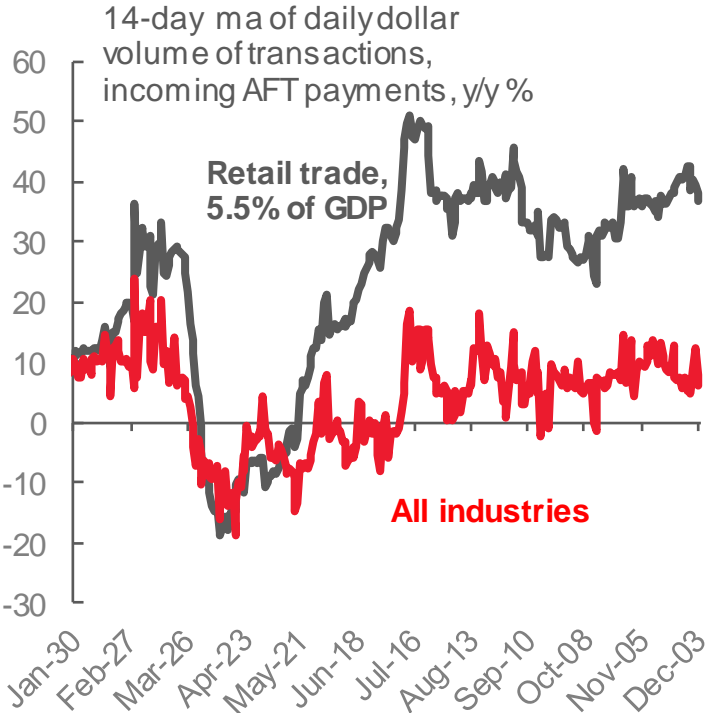
3. Business Transactions Data: Retail and Wholesale Payments Above 2019 Levels

Chart 2



Sources: Scotiabank Economics, Data Science and Analytics.

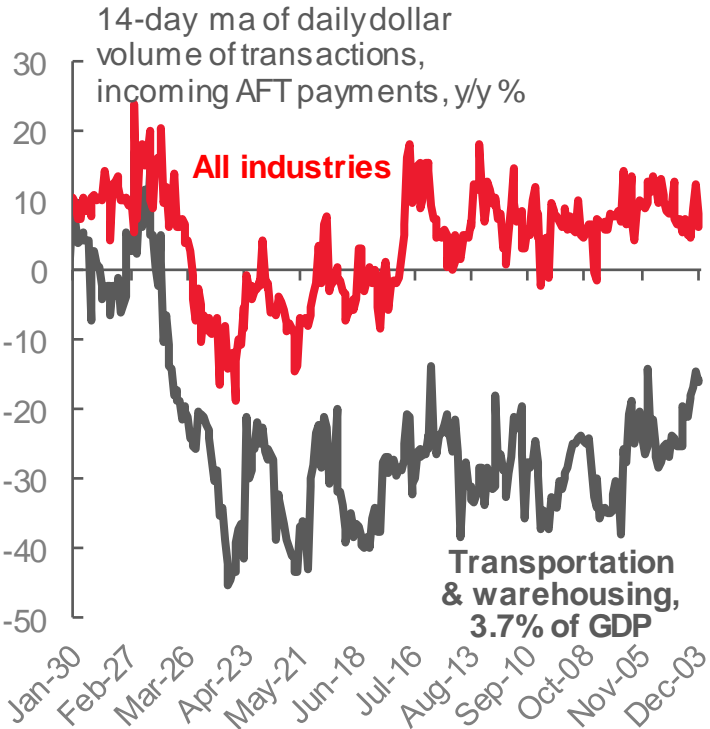
Chart 3



Sources: Scotiabank Economics, Data Science and Analytics.

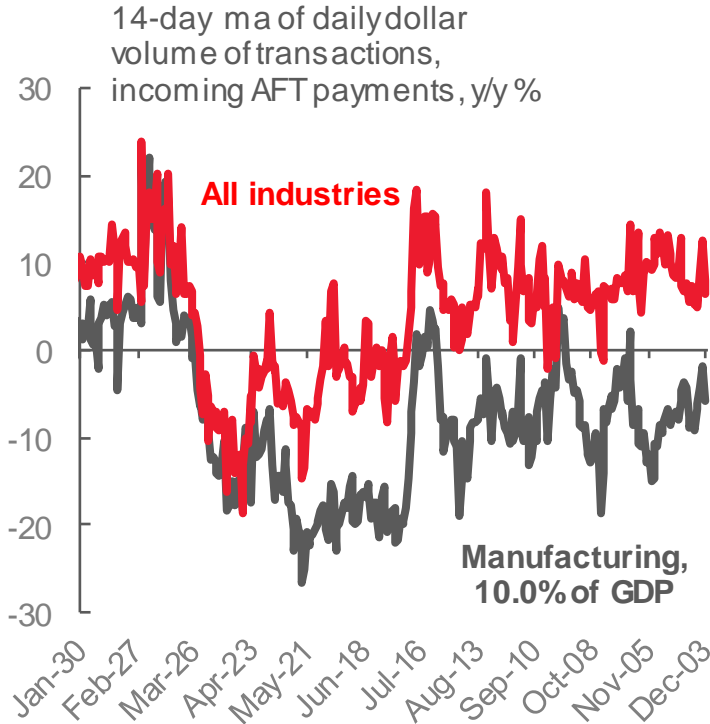
3. Business Transactions Data: Manufacturing Payments Fail To Rise Above 2019

Chart 4



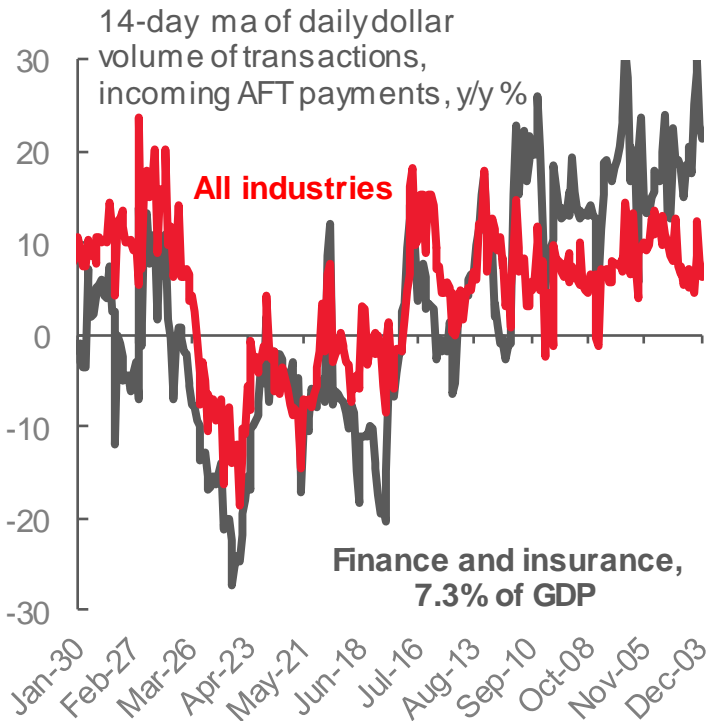
Sources: Scotiabank Economics, Data Science and Analytics.

Chart 5



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 6

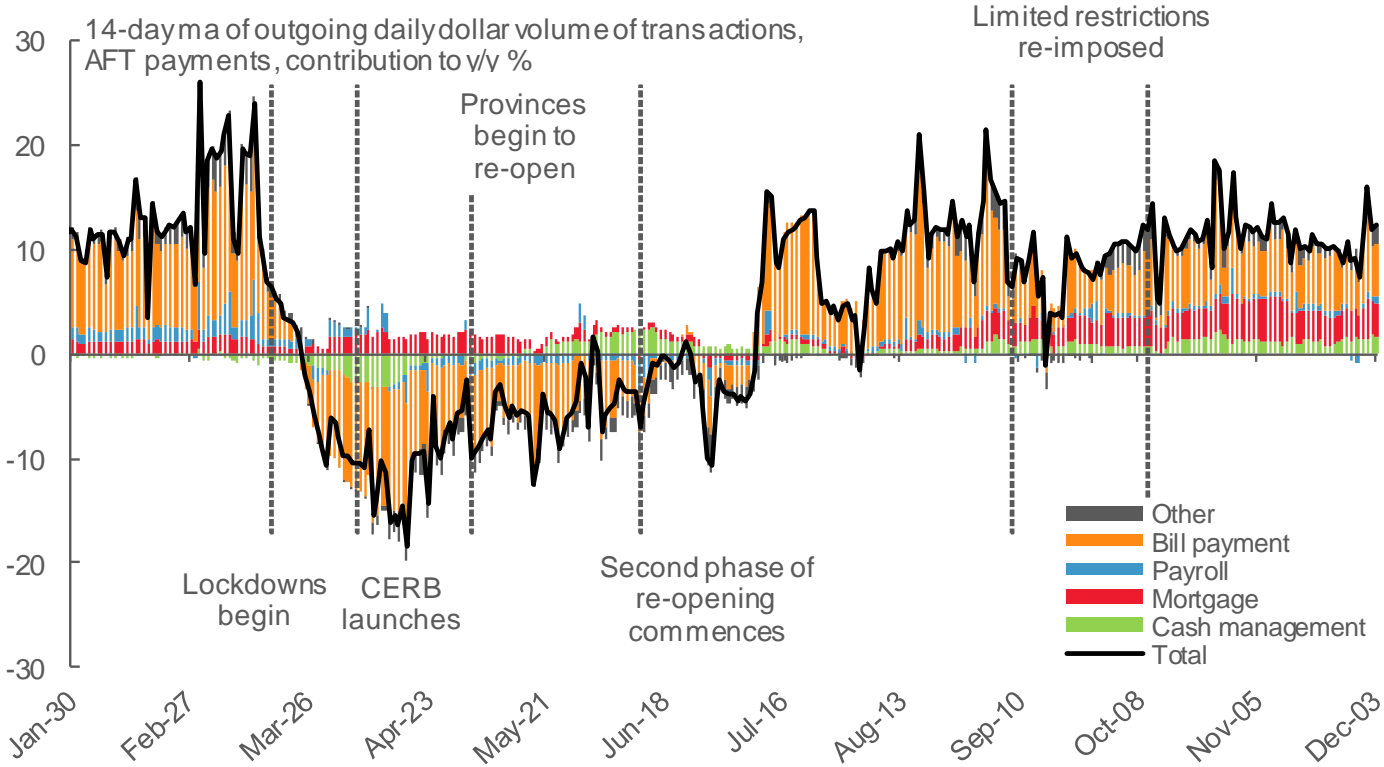


Sources: Scotiabank Economics, Data Science and Analytics.

3. Business Transactions Data: Growth in Bill Payments Stable Over the Past Month

- Growth in outgoing payments has remained stable in November (Chart 7), with contributions from general bill and mortgage payments pushing the supporting growth.
- Both payroll deposits and rent payments are running above the levels of 2019, the former consistent with the labour market data from Statistics Canada showing continued growth in employment through November (Charts 8 and 9).

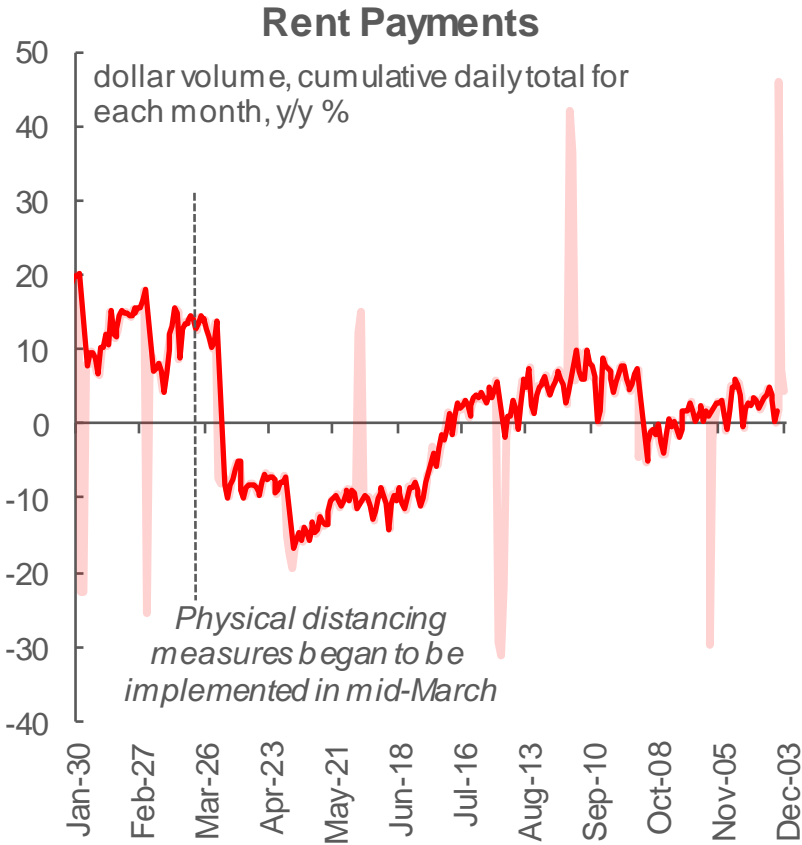
Chart 7



Sources: Scotiabank Economics, Data Science and Analytics.

3. Business Transactions Data: Payroll/Rent Payments Above 2019 Levels

Chart 8



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 9

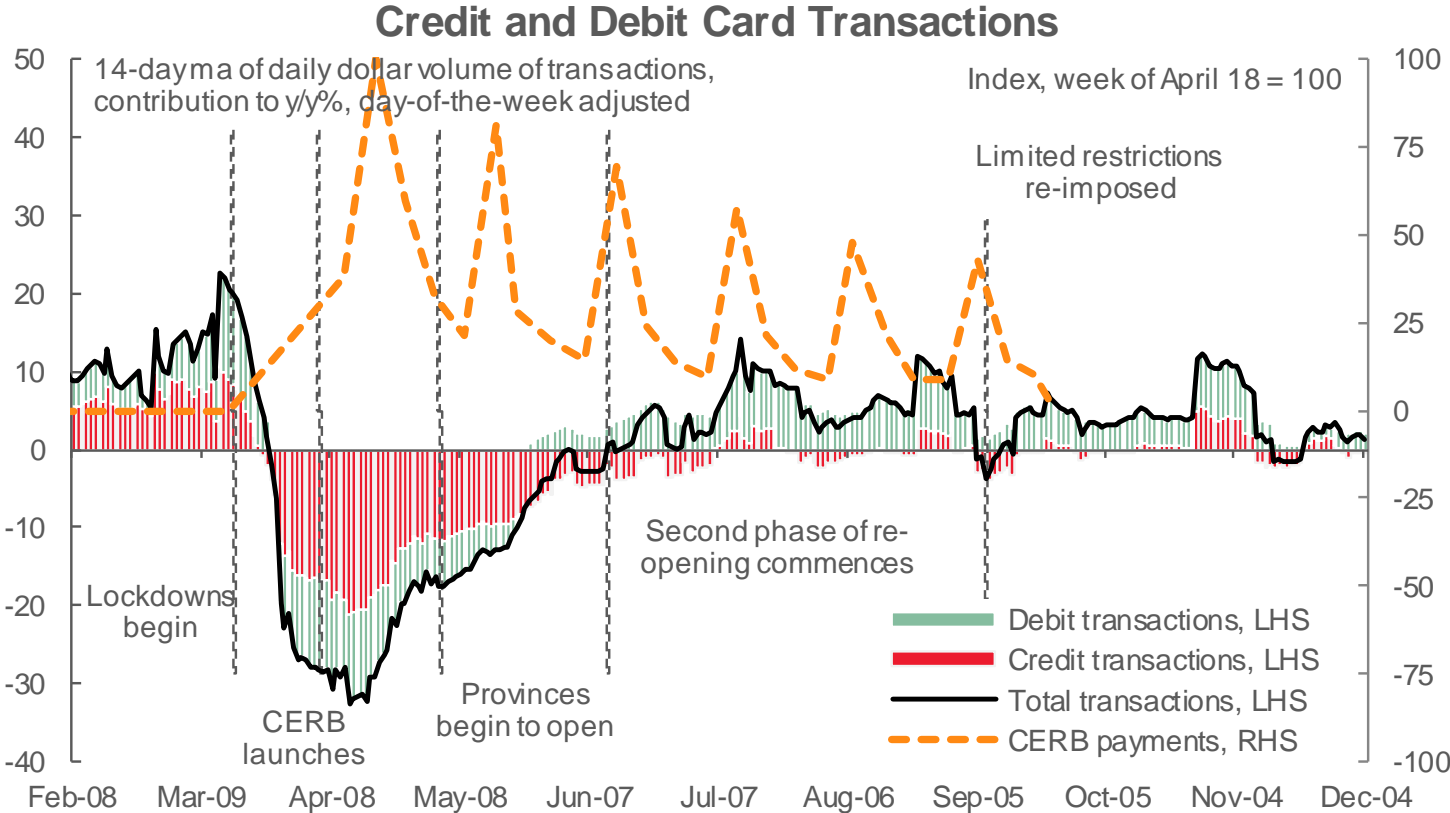


Sources: Scotiabank Economics, Data Science and Analytics.

4. Retail Transactions Data: Spending Growth Turned Positive in Late November

- Y/Y growth in consumer transactions (available through December 4th) has stabilized in positive territory, an encouraging sign after it dipped below zero in mid-November (Chart 10).
 - Just as the holiday shopping season began in late November, spending picked up slightly above last year's levels, once the timing is aligned for Black Friday and Cyber Monday in 2019-2020.
 - It remains to be seen whether growth picks up further through what will be a very different holiday season this year.

Chart 10

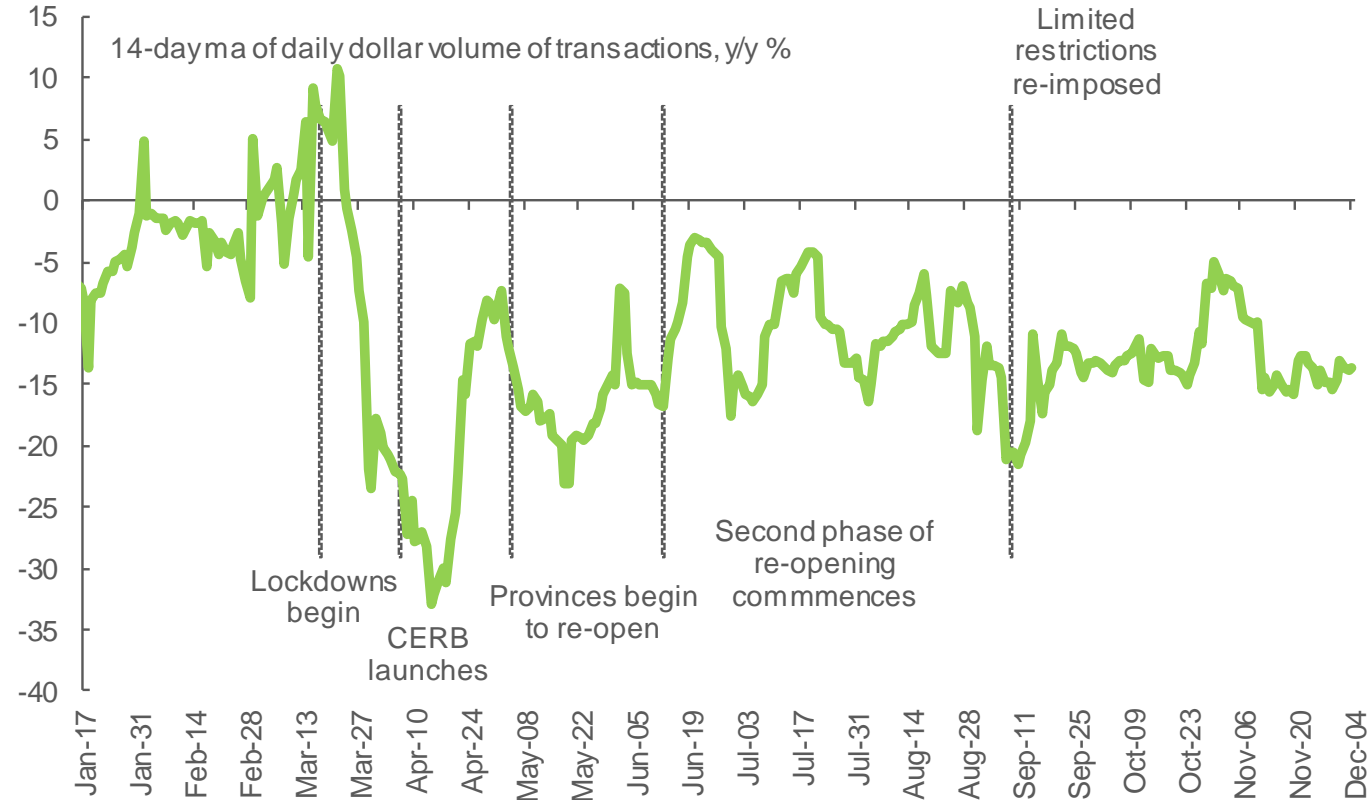


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: ABM Transactions Stable Below 2019 Levels

- The volume of debit card transactions through automatic banking machines (ABMs) showed very little variation in the last few weeks (Chart 11), despite a pickup in overall debit/credit card spending.
- Public health-related restrictions on retail store operations, consumers spending more time at home, as well as a move away from cash by store owners, could explain lower levels of ABM usage.

Chart 11



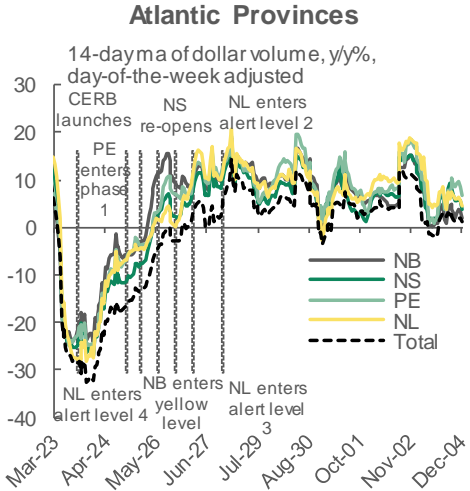
Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Growth Slowed In Provinces Where Restrictions Imposed

- Spending growth in provinces that imposed the latest lockdown measures has dipped significantly, with y/y growth in Manitoba turning sharply negative. Spending in Ontario, Quebec, BC and Alberta has slowed compared to the total spending recorded through Scotiabank's payment networks (Charts 12-15).

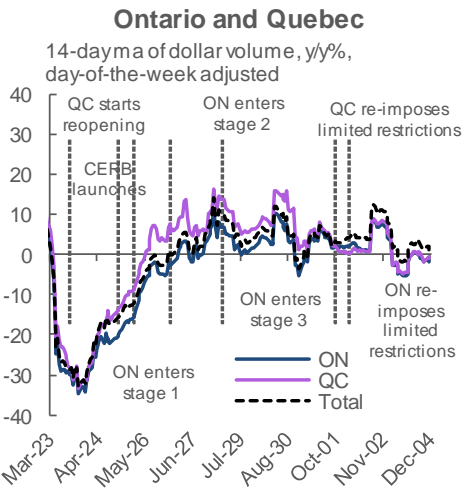
- With further tightening of public health measures expected in several provinces, whether the overall spending remains resilient in the next few months depends on the strictness and breadth of public health measures, the extent to which the measures are followed, and any adaptations they elicit on the part of businesses and consumers.

Chart 12



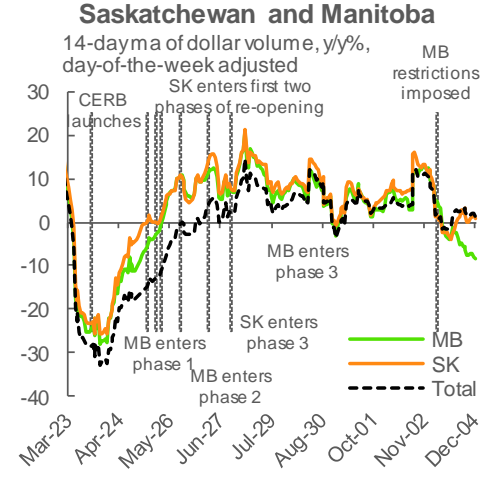
Sources: Scotiabank Economics, Data Analytics.

Chart 13



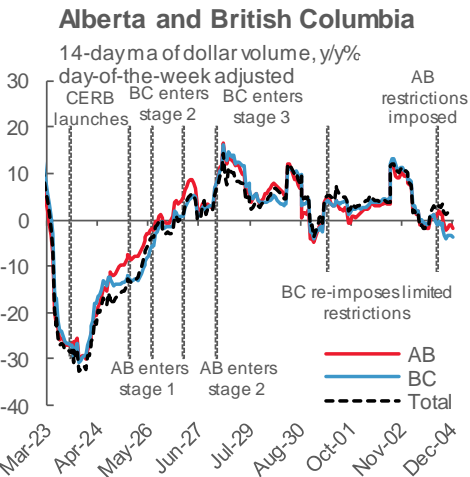
Sources: Scotiabank Economics, Data Analytics.

Chart 14



Sources: Scotiabank Economics, Data Analytics.

Chart 15

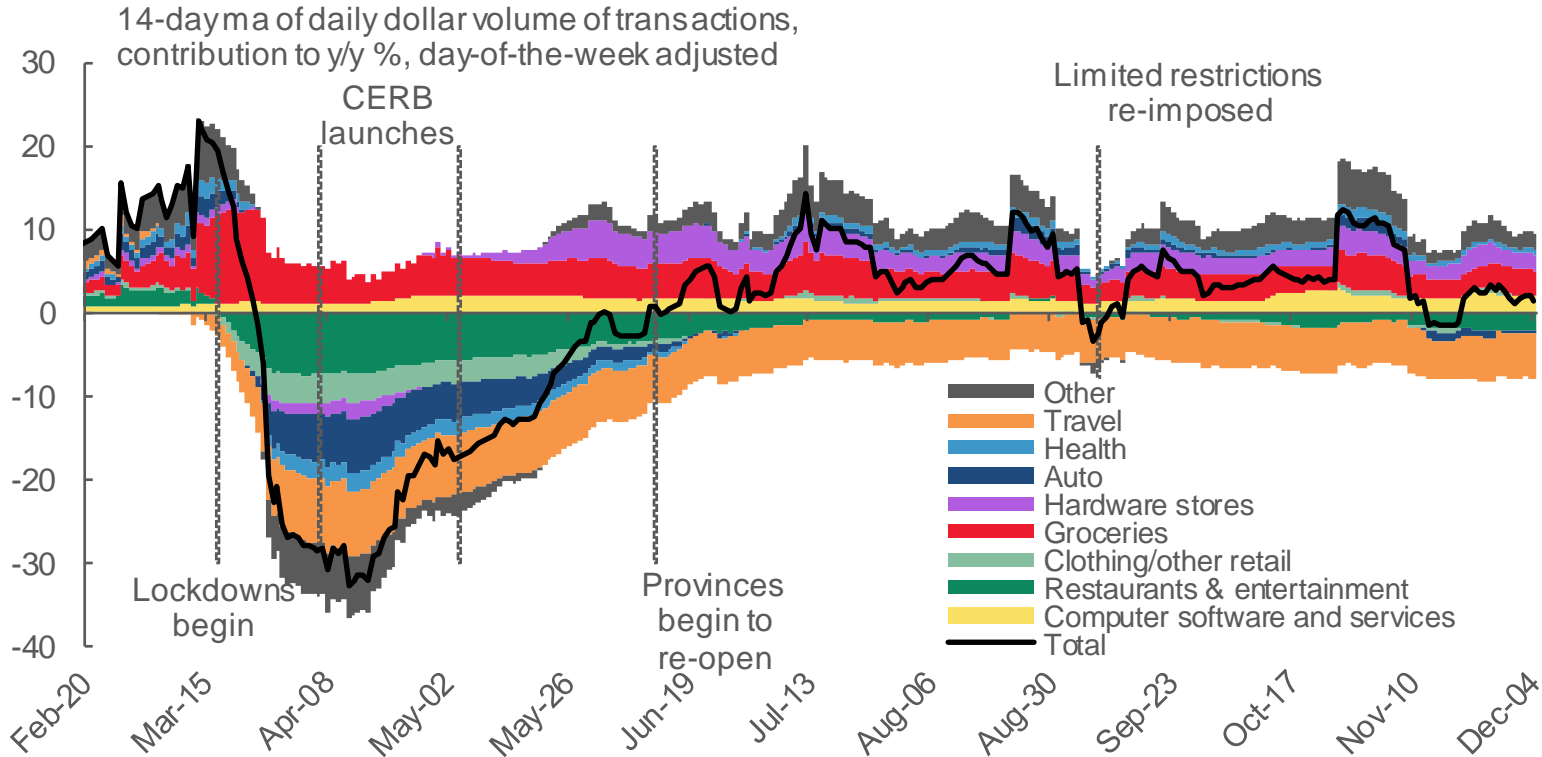


Sources: Scotiabank Economics, Data Analytics.

4. Retail Transactions Data: Growth Positive, But Weakened Slightly For Most Merchants

- Most changes in growth since the summer were driven by categories that surpassed the 2019 levels, while little, if any, change can be seen in travel and entertainment, which continue to languish far below the 2019 levels.
- Over the past week a slight easing in growth was seen across spending categories (Chart 16).

Chart 16

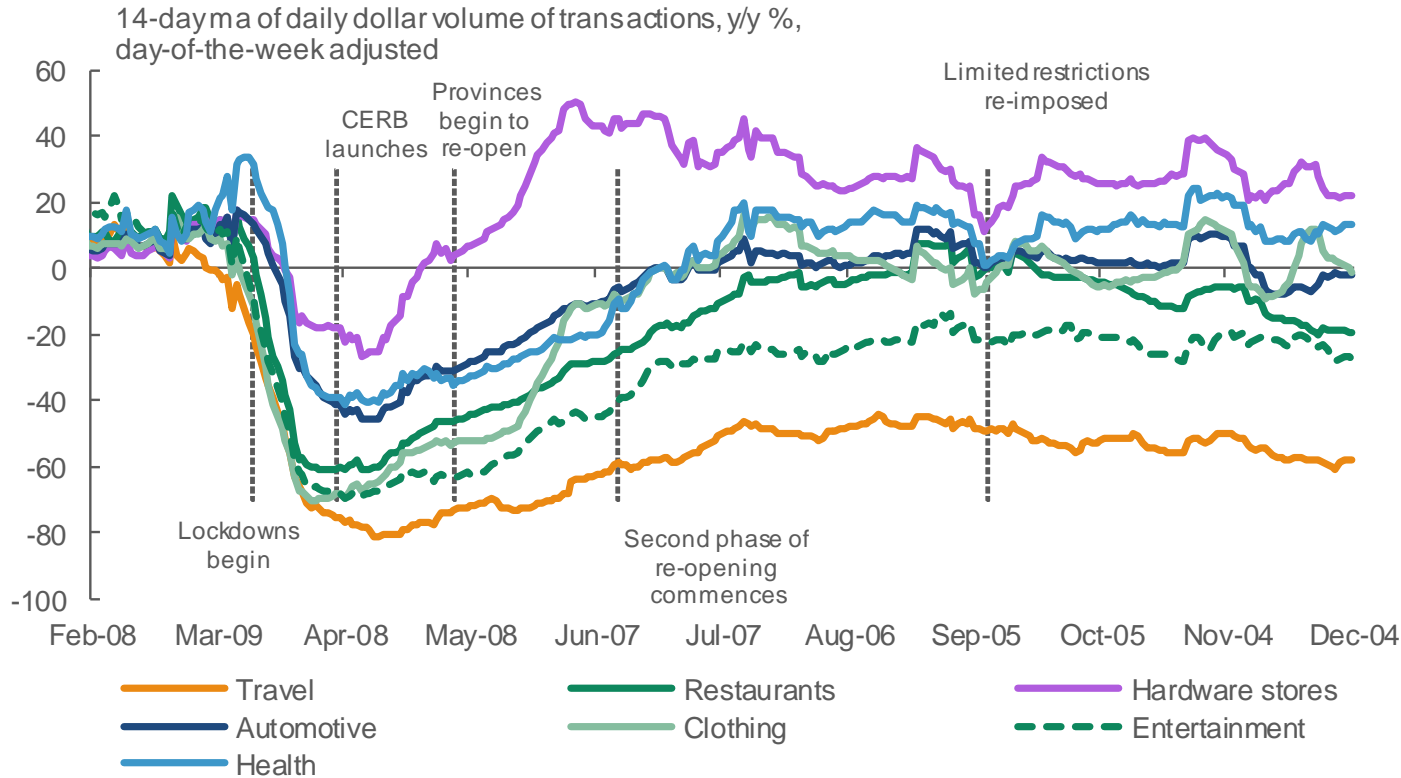


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Growth at Hardware, Clothing Stores Slips

- Merchants where growth picked up in late-November, such as hardware stores and clothing, slipped over the past week (Chart 17), while automotive spending stabilized close to 2019 levels.
- Growth in restaurant spending continued to decline, explained by colder weather as indoor dining options are drastically reduced compared to last year.
- Travel spending bears a close watch in the next few months as, before the pandemic, winter used to send Canadians to warmer climates, which should be reflected in a further slide in y/y growth in that category this year.

Chart 17

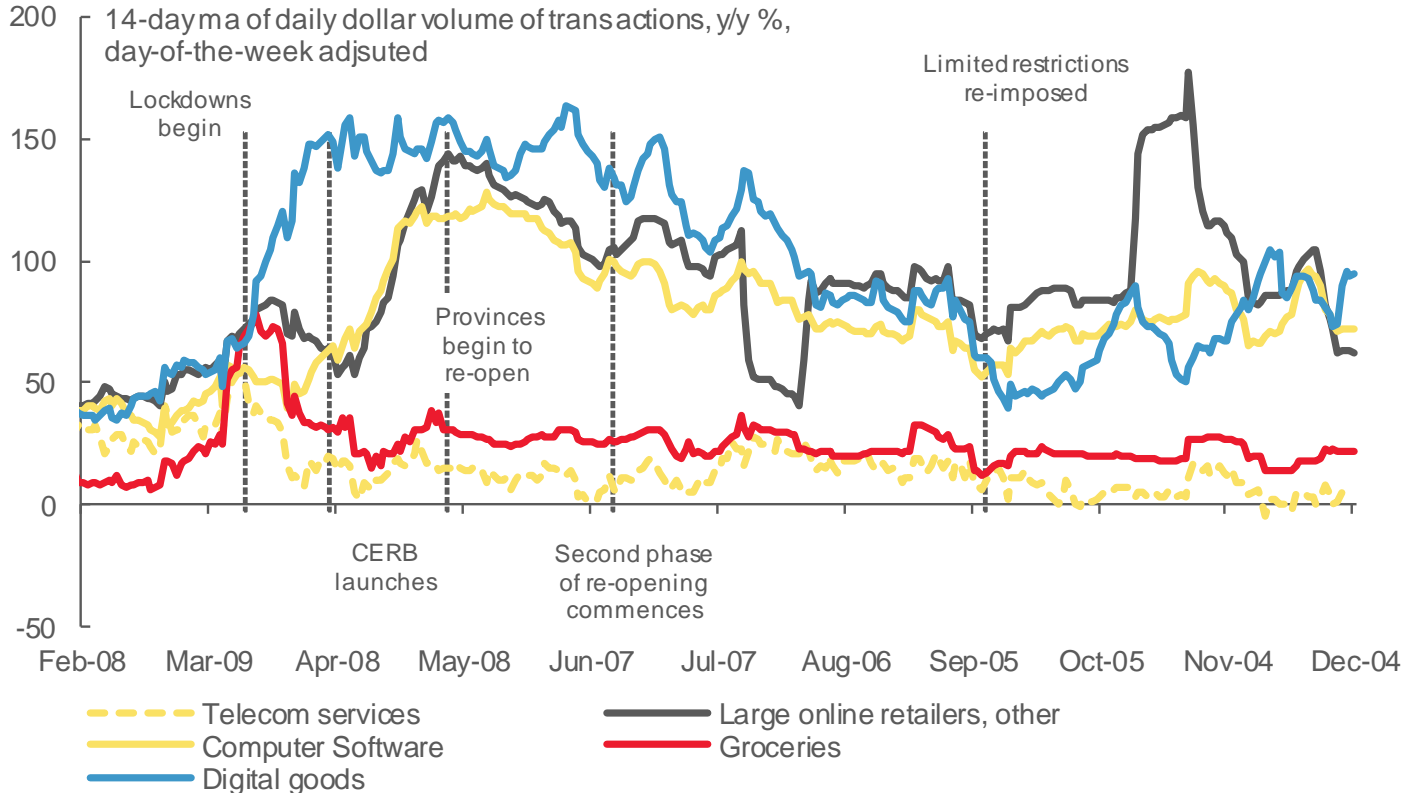


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Digital Spending Volatile Recently

- With Black Friday and Cyber Monday overall spending remaining slightly above last-year's levels, the categories that benefited from the move to digital purchases sustained their overall strong growth, with some showing a further increase and others declining slightly (Chart 18).
- Spending on groceries remained elevated over the past week, but far below the levels seen at the start of the pandemic in the spring.

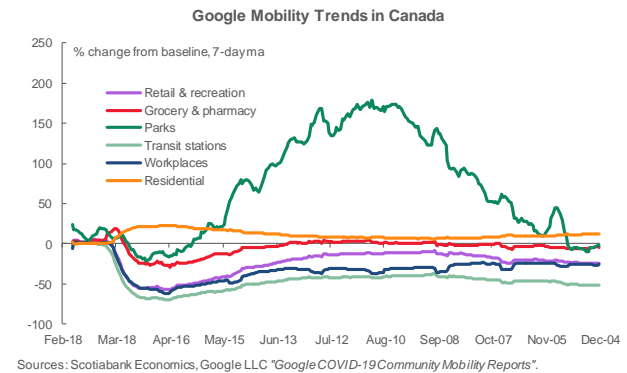
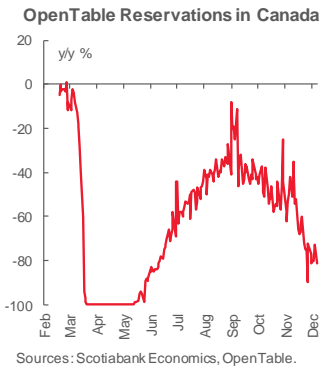
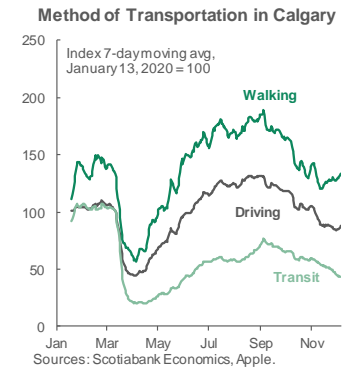
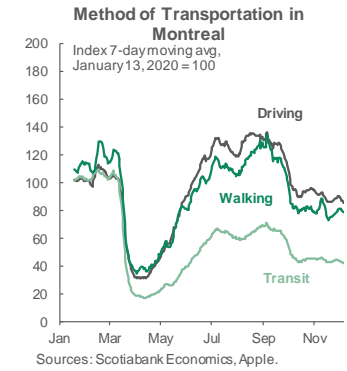
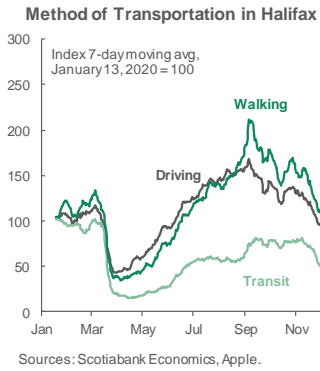
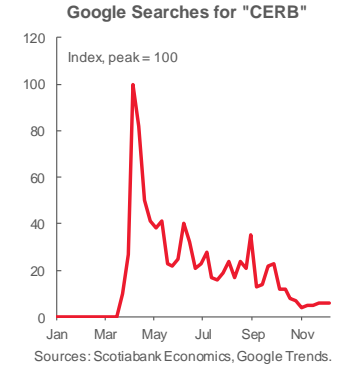
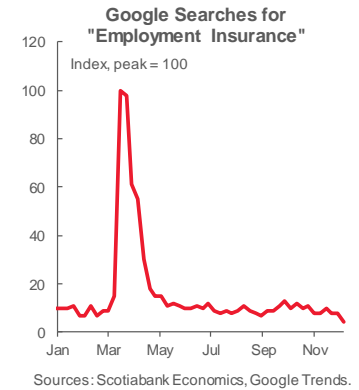
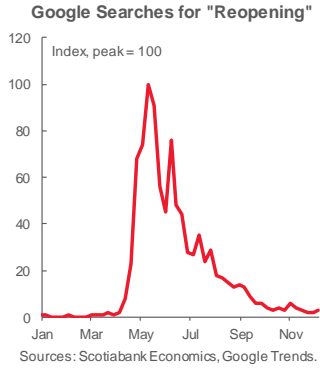
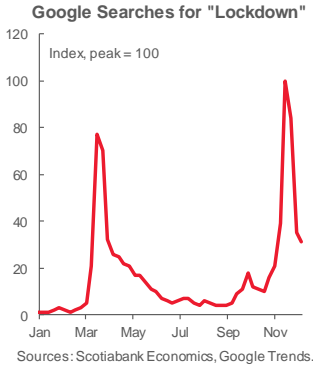
Chart 18



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

5. Other High-Frequency Indicators Of Activity

Charts 19-32 Google Searches, Various Keywords, Dining and Transportation Data



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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.