



# Tracking the Canadian Economy through COVID-19: Insights from customer transactions – October 29, 2020

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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

# 1. Key Insights from Canadian Customer Transactions

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*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 October 22<sup>nd</sup>, automated funds transfers in the business sector were relatively stable in the last week, continuing to run above last year's levels:
  - Inbound automated transactions continue to be supported by strong inflows to firms in the retail and financial and real estate industries. This is partially offset by weak flows to transportation and manufacturing.
  - Outgoing business sector transactions have remained relatively stable over the past month. Growth in payroll deposits stabilized above last year's levels, recovering somewhat after a relative decline in early September. Rent payments slowly edged up after declining relative to last year's levels in early October, as the commercial rent relief program expired and before the successor program was fully operational.
- Growth in consumer transactions, available through October 25<sup>th</sup>, stabilized recently, having slowed since mid-September peak, as limited restrictions were re-imposed in Ontario and Quebec:
  - Growth in spending in Ontario and Quebec slowed significantly in October, much faster than in other provinces.
  - Various merchant types experienced weaker y/y growth in spending, but restaurants, travel and entertainment were the most affected. In contrast, growth in purchases at hardware stores improved in the last week, showing that the shift towards home renovations has likely endured.

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

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- 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

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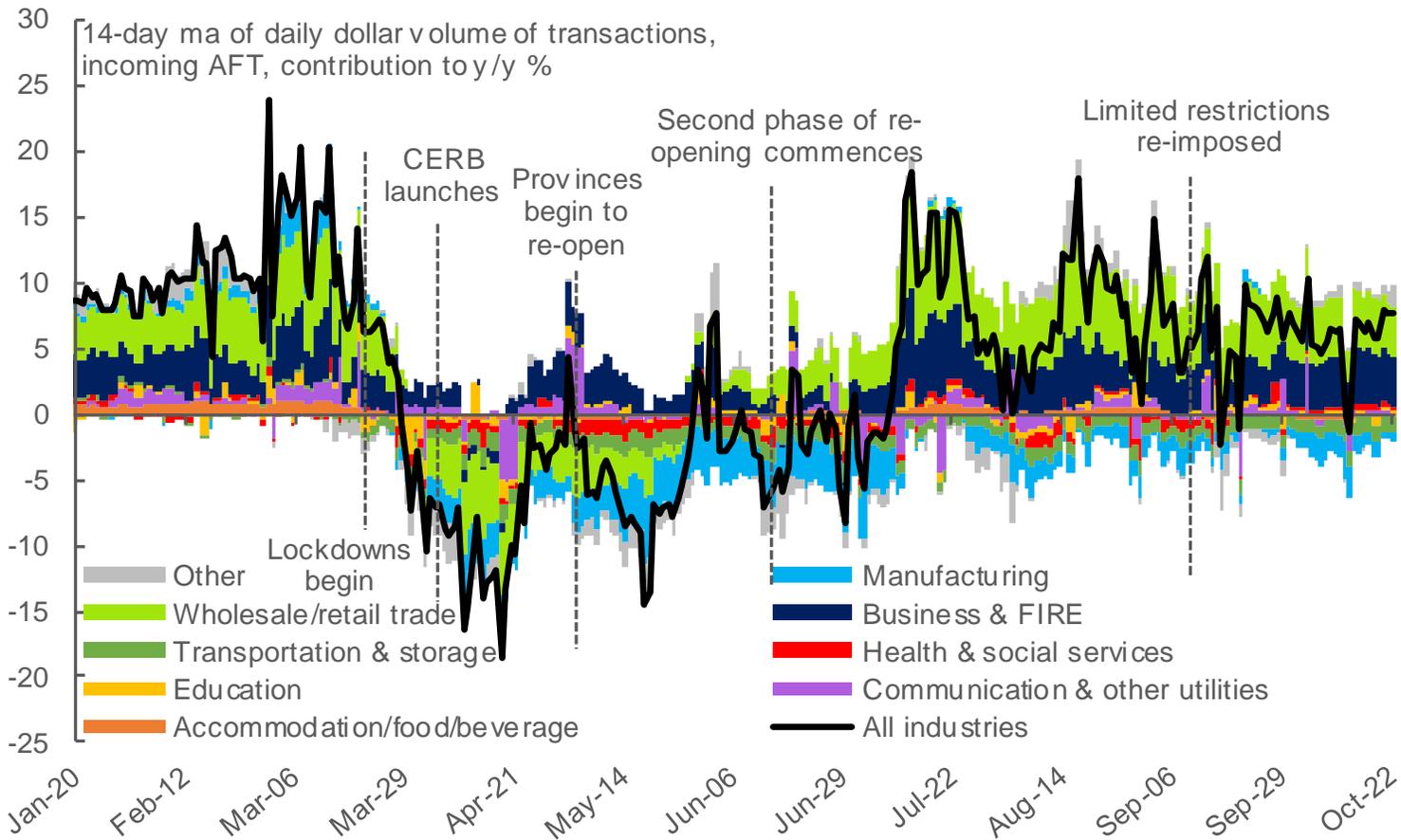
There are important caveats to analysis based on the payments data:

- 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 Stabilized Above Last Year's Levels

- Updated to October 22<sup>nd</sup>, automated funds transfers in the business sector were relatively stable in the last week, continuing to run above last year's levels (Chart 1).
- Inbound automated transactions continue to be supported by strong inflows to firms in the retail and financial and real estate industries. This was partially offset by weak flows to transportation and manufacturing (Charts 2-6).
- Automated Funds Transfers (AFT) are used for:
  - rent and mortgage payments;
  - payroll deposits; and
  - other bills.

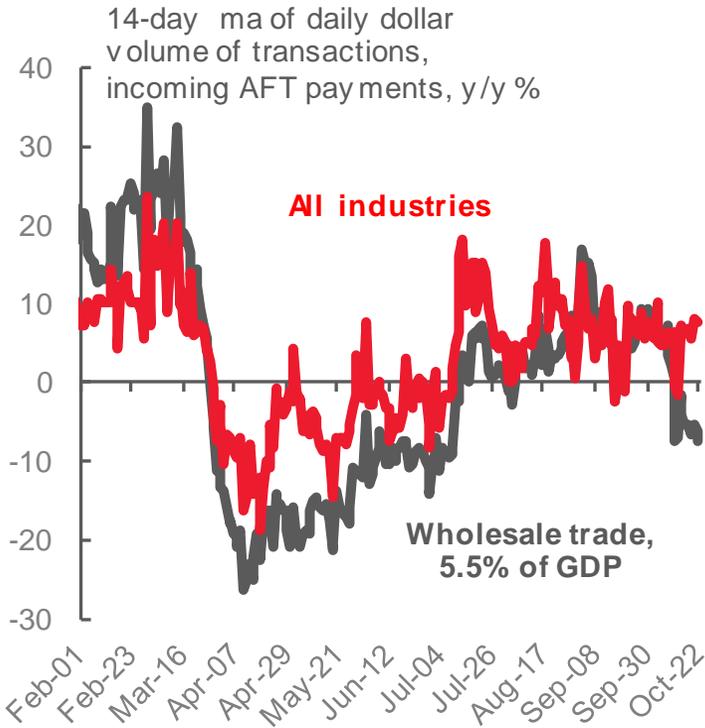
Chart 1



Sources: Scotiabank Economics, Data Science and Analytics.

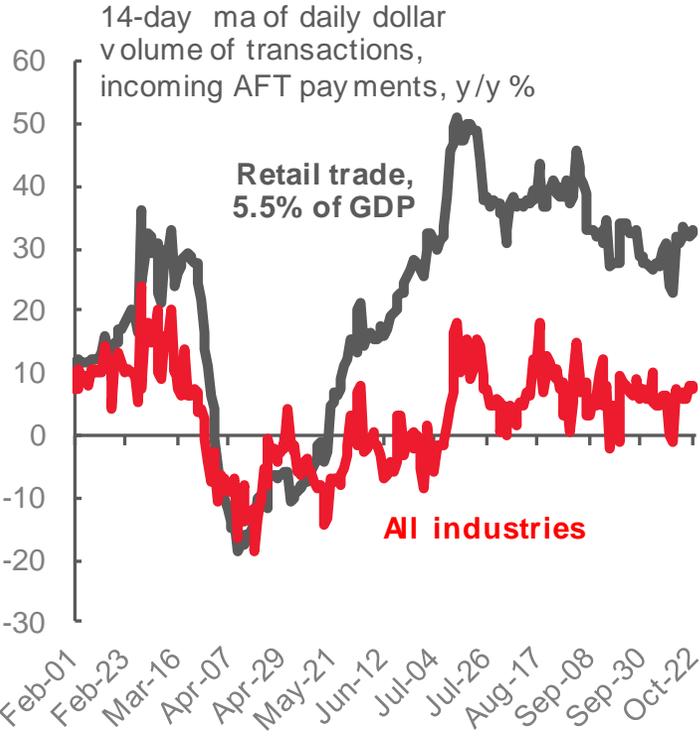
# 3. Business Transactions Data: Growth in Wholesale Payments Declines

Chart 2



Sources: Scotiabank Economics, Data Science and Analytics.

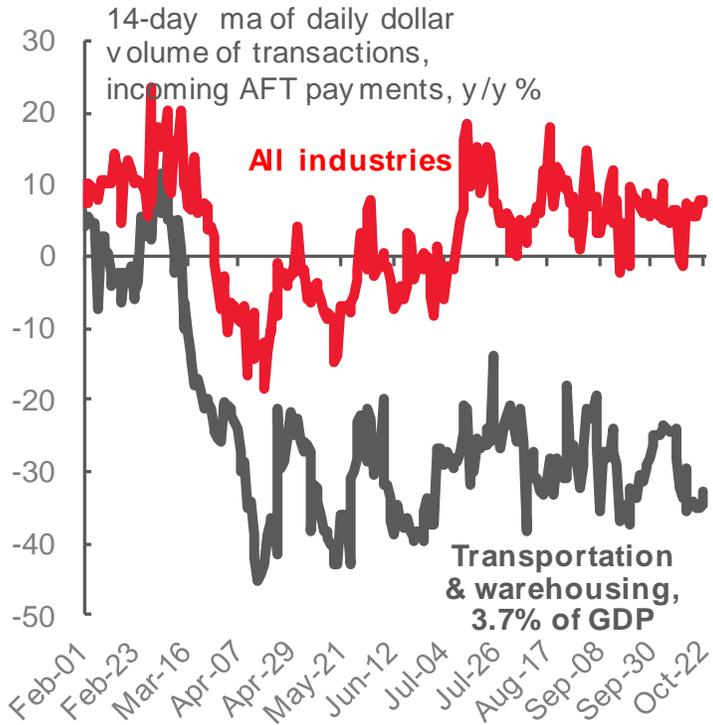
Chart 3



Sources: Scotiabank Economics, Data Science and Analytics.

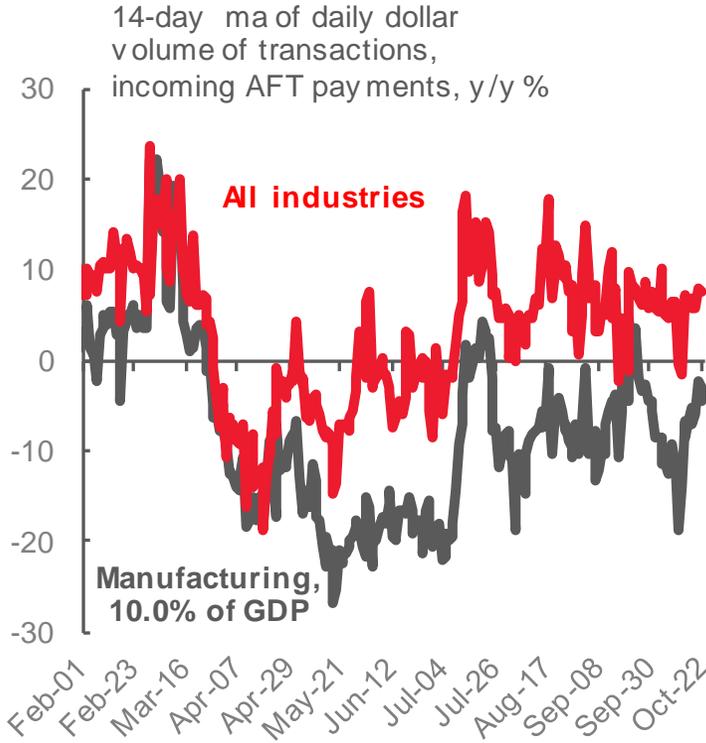
# 3. Business Transactions Data: Manufacturing/Transportation Below 2019 Levels

Chart 4



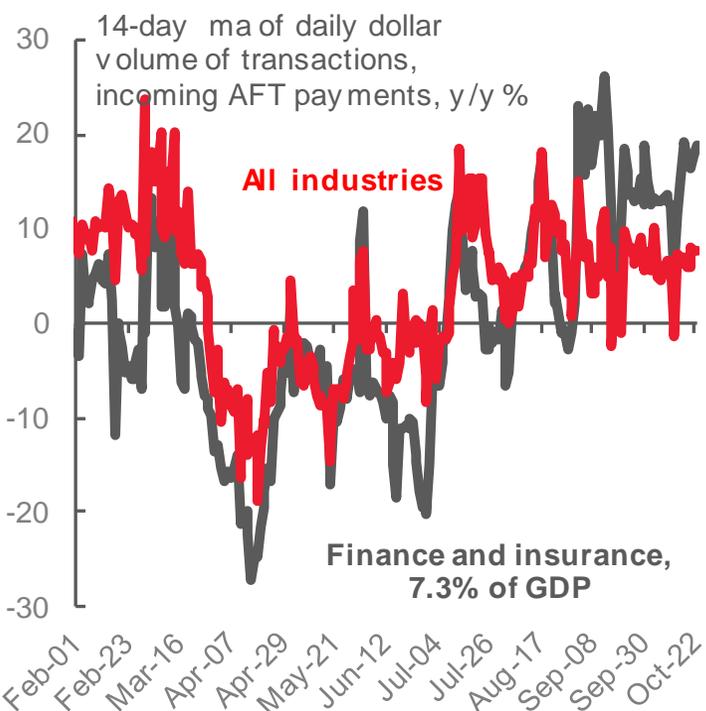
Sources: Scotiabank Economics, Data Science and Analytics.

Chart 5



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 6

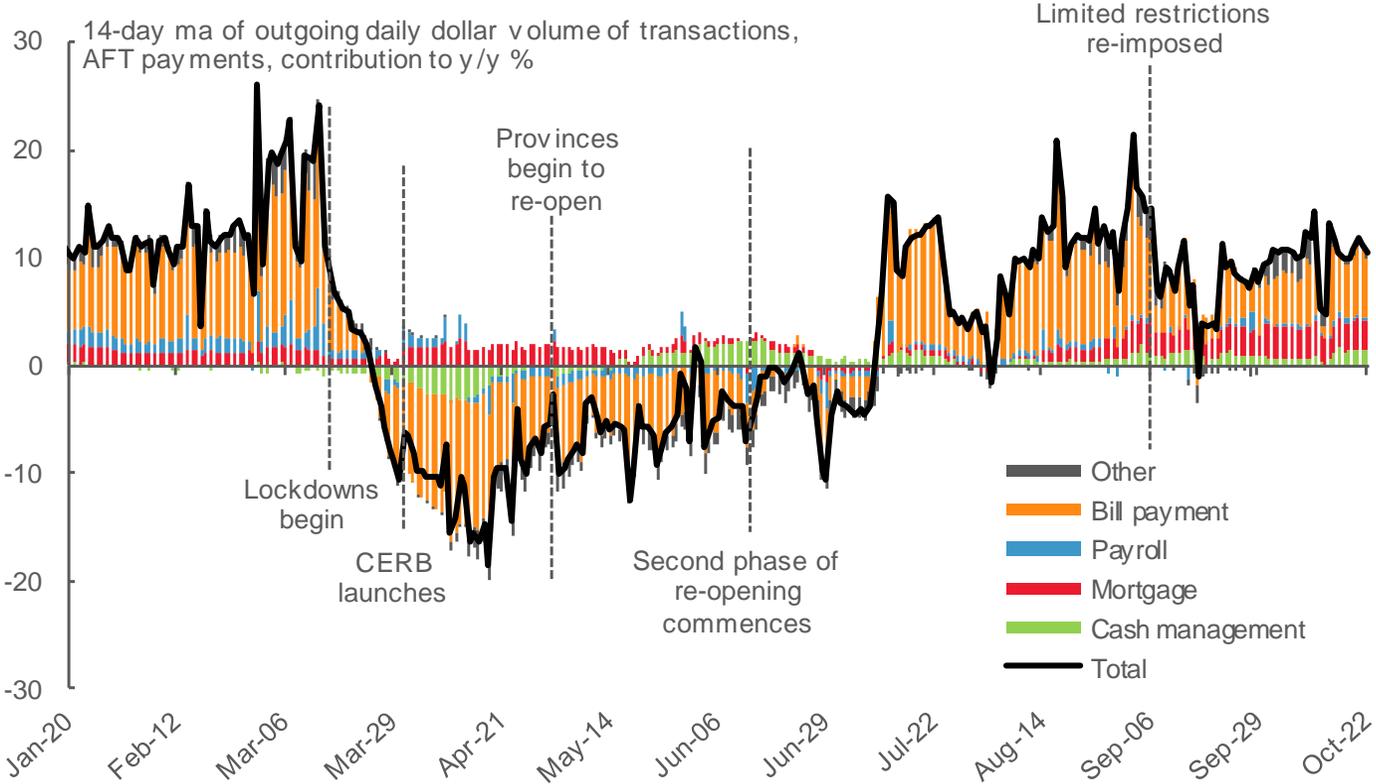


Sources: Scotiabank Economics, Data Science and Analytics.

# 3. Business Transactions Data: Bill Payments Stabilized Over the Past Month

- Y/Y growth in outgoing business sector transactions has remained relatively stable over the past month (Chart 7).
- Rent payments slowly edged up after declining relative to last year’s levels in early October, as the commercial rent relief program expired and before the successor program was fully operational (Chart 8).
- Growth in payroll deposits stabilized above last year’s levels, recovering somewhat after a relative decline in early September (Chart 9).

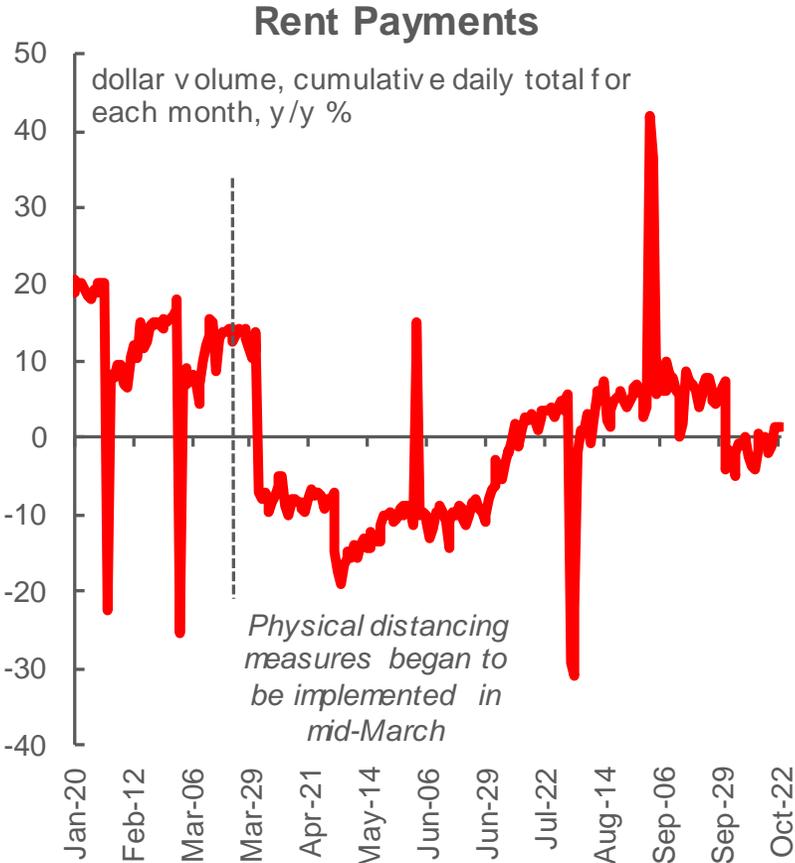
Chart 7



Sources: Scotiabank Economics, Data Science and Analytics.

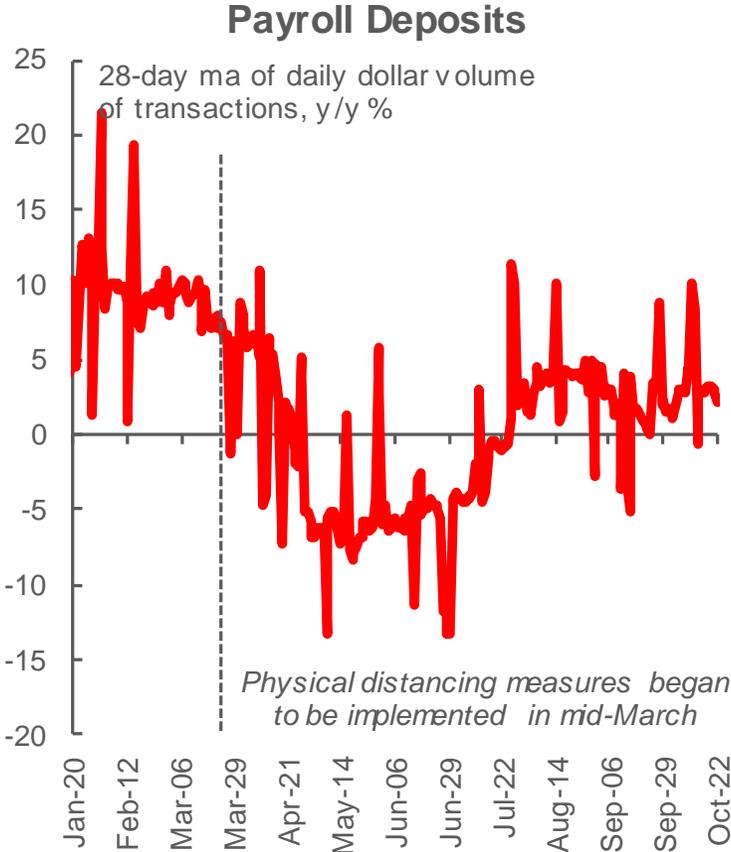
# 3. Business Transactions Data: Payrolls Relatively Stable, Rent Payments Edge Higher

Chart 8



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 9

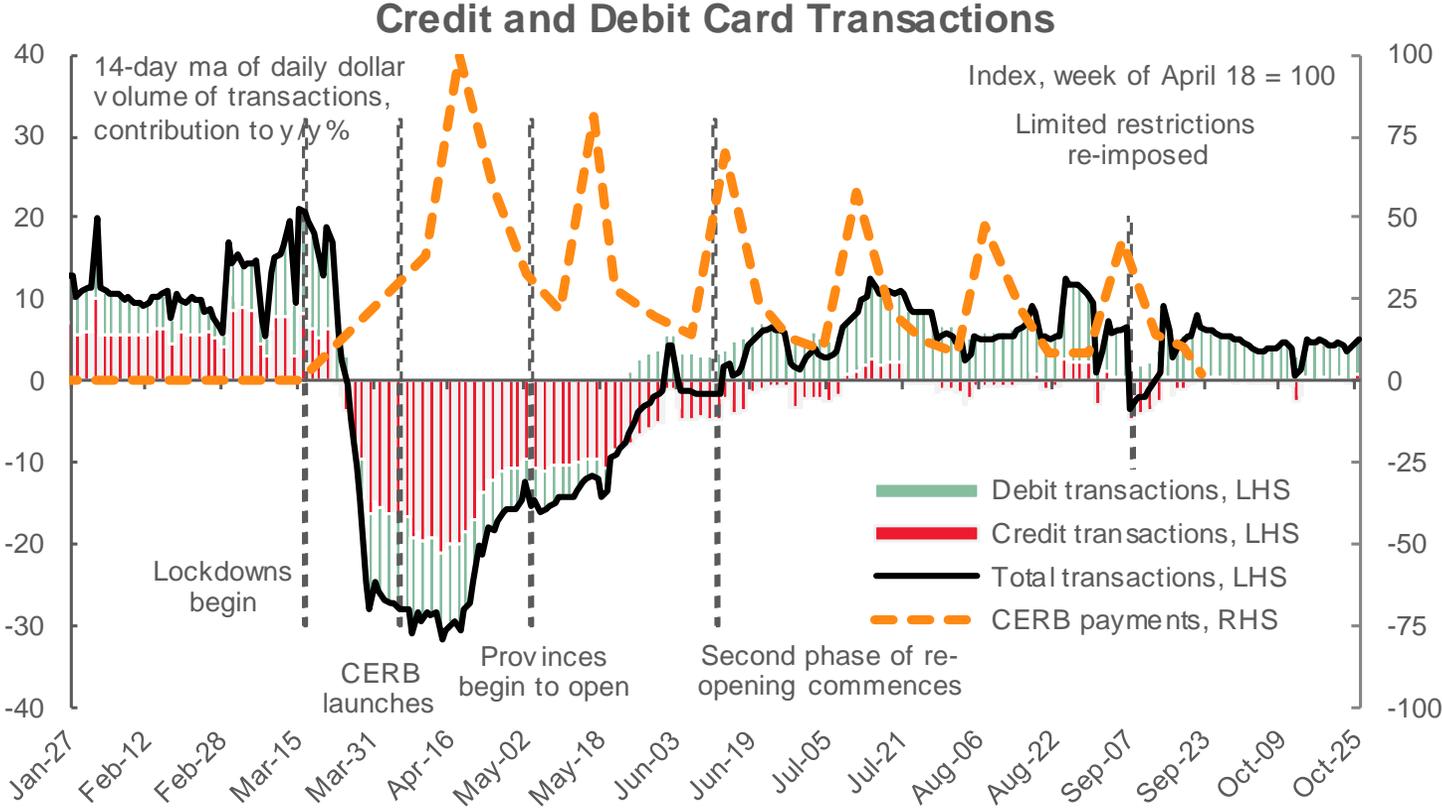


Sources: Scotiabank Economics, Data Science and Analytics.

# 4. Retail Transactions Data: Card Spending Growth Stabilizes

- Growth in consumer transactions, available through October 25<sup>th</sup>, stabilized recently, having slowed since the mid-September peak, as limited restrictions were re-imposed in Ontario and Quebec (Chart 10):
  - Relative to last year's levels, growth is mainly supported by stronger debit card transactions, as purchases of some of the big-ticket items (e.g. vacations, entertainment), which are likely to be paid through credit, were also the ones most affected by the pandemic.

Chart 10

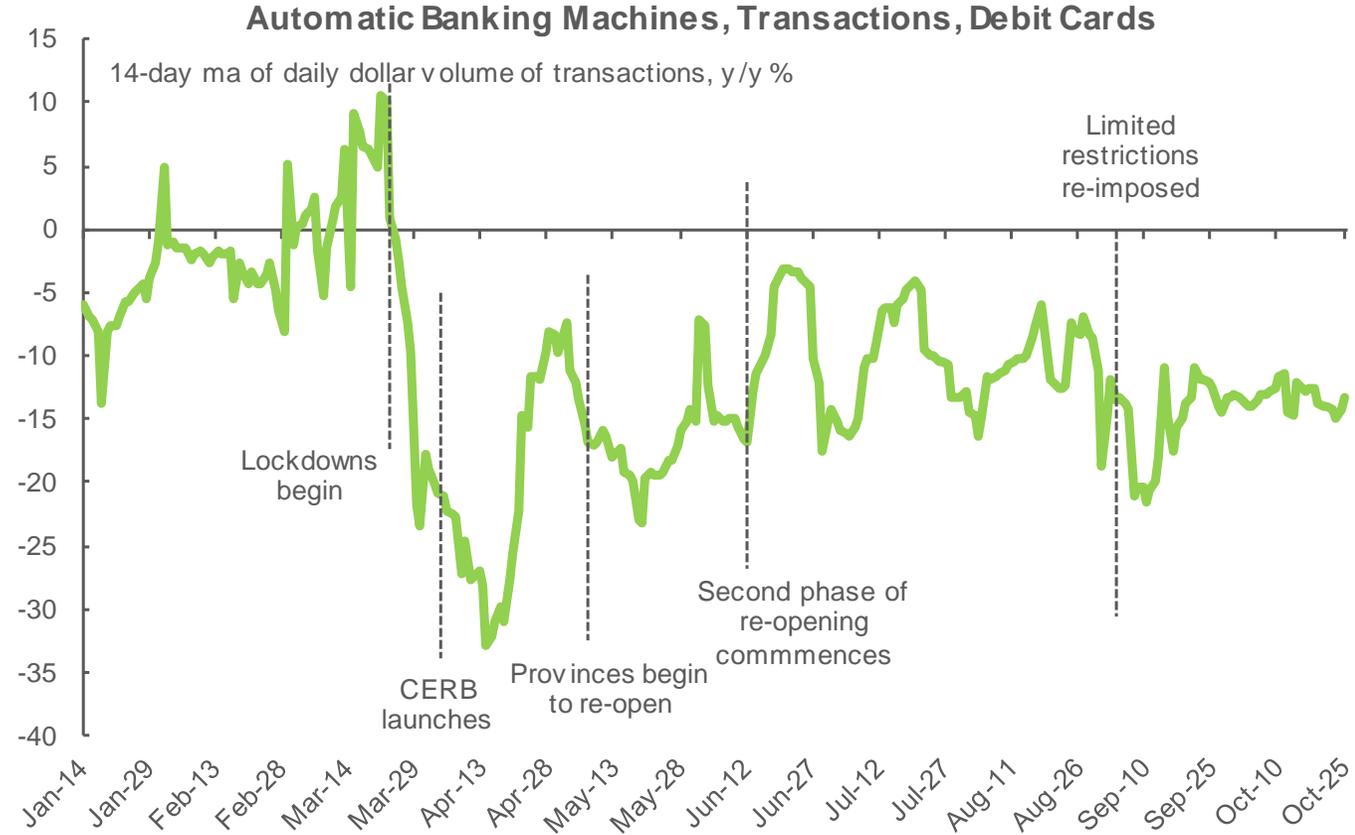


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 4. Retail Transactions Data: Use of Bank Machines Down

- The volume of debit card transactions through automatic banking machines (ABMs) continues to run significantly below the pre-pandemic levels (Chart 11).
- Public health-related restrictions on 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.

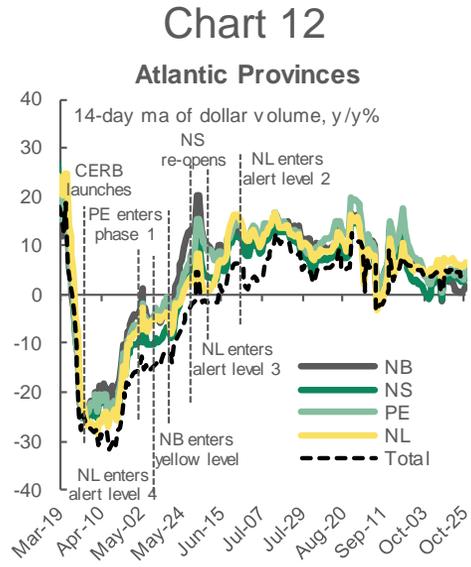
Chart 11



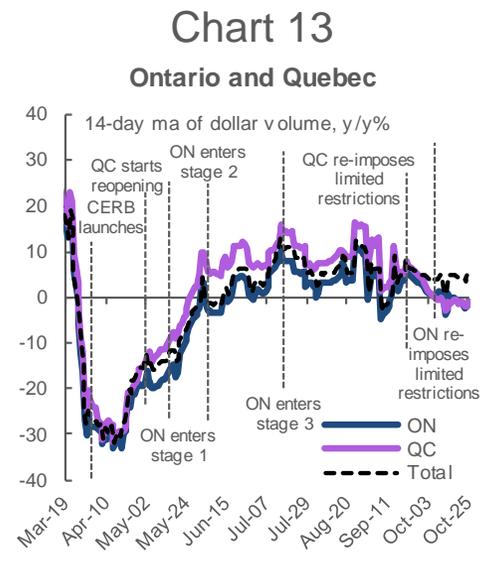
Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 4. Retail Transactions Data: Ontario and Quebec Show More Pronounced Slowdown

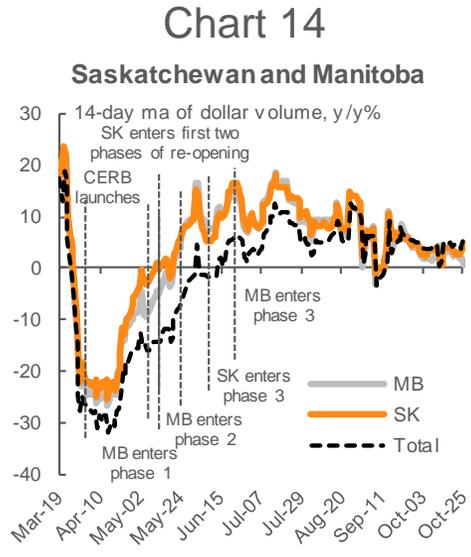
- In line with aggregate data shown in chart 10, most provinces show growth in payments stabilizing recently (Chart 12-15).
- Compared to September, growth in spending in Ontario and Quebec slowed significantly in October, much faster compared to other provinces, due to the worsening epidemiological situation and the re-imposition of restrictions on dining and entertainment.
- Alberta and BC show significantly slower growth on average through September and October compared to other provinces.



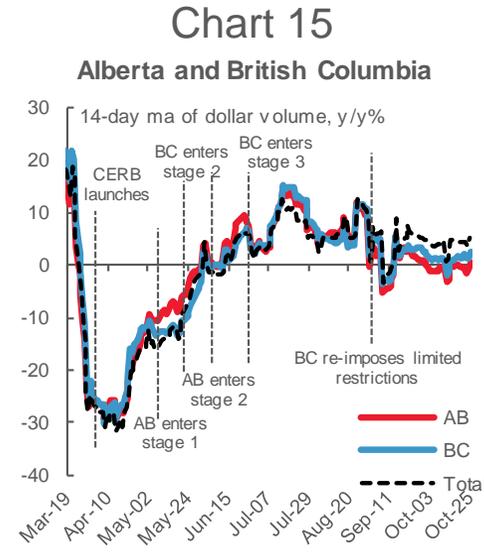
Sources: Scotiabank Economics, Data Analytics.



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Sources: Scotiabank Economics, Data Analytics.

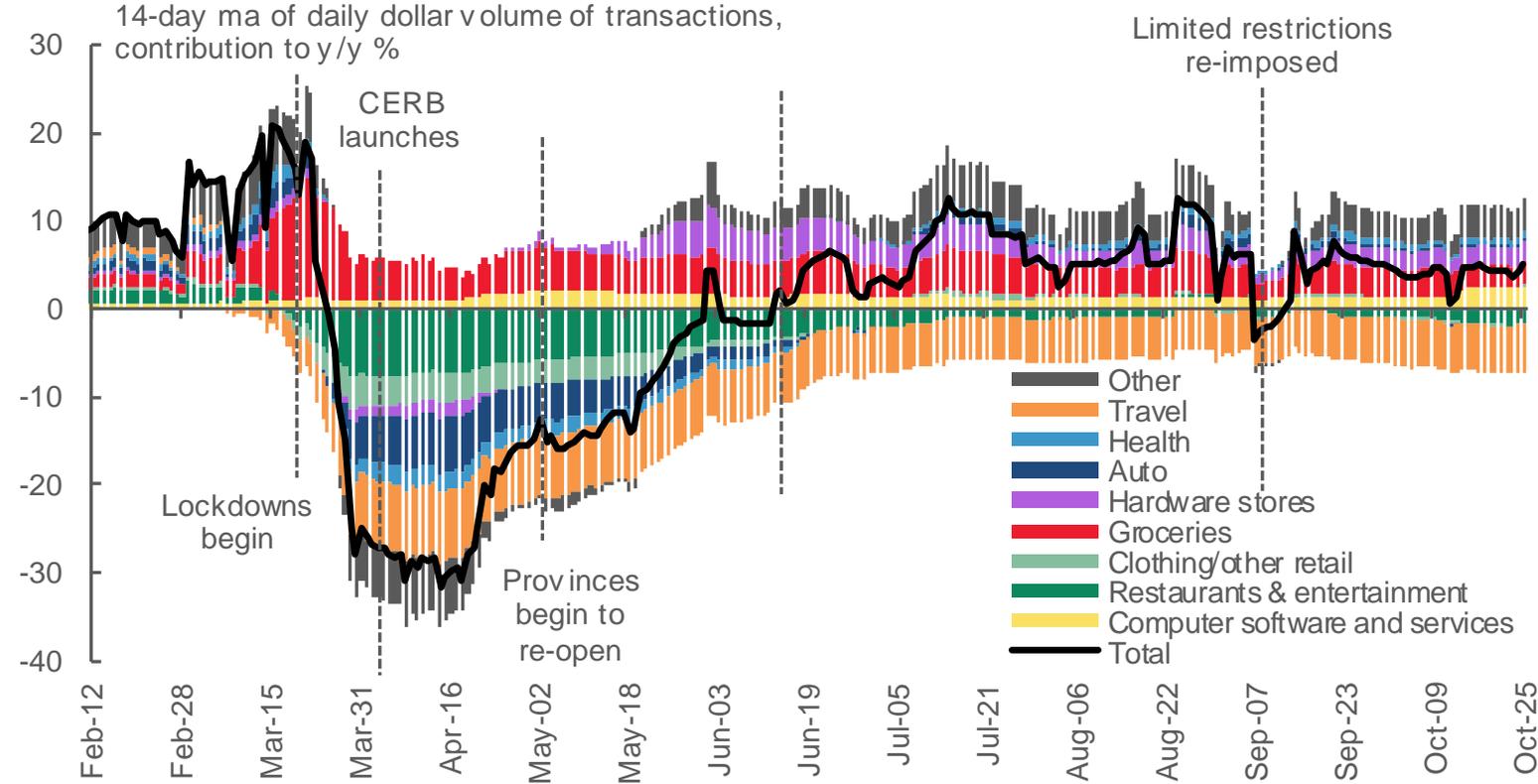


Sources: Scotiabank Economics, Data Analytics.

# 4. Retail Transactions Data: Growth in Card Spending Stabilized Lower Across Sectors

- Relative to mid-September, slower y/y growth in card spending was mainly driven by weaker growth in purchases related to restaurants, travel and entertainment, partially offset by a pickup in spending at online retailers (Chart 16):
  - Spending on meals at restaurants, travel and entertainment has slowed the most in October.

Chart 16

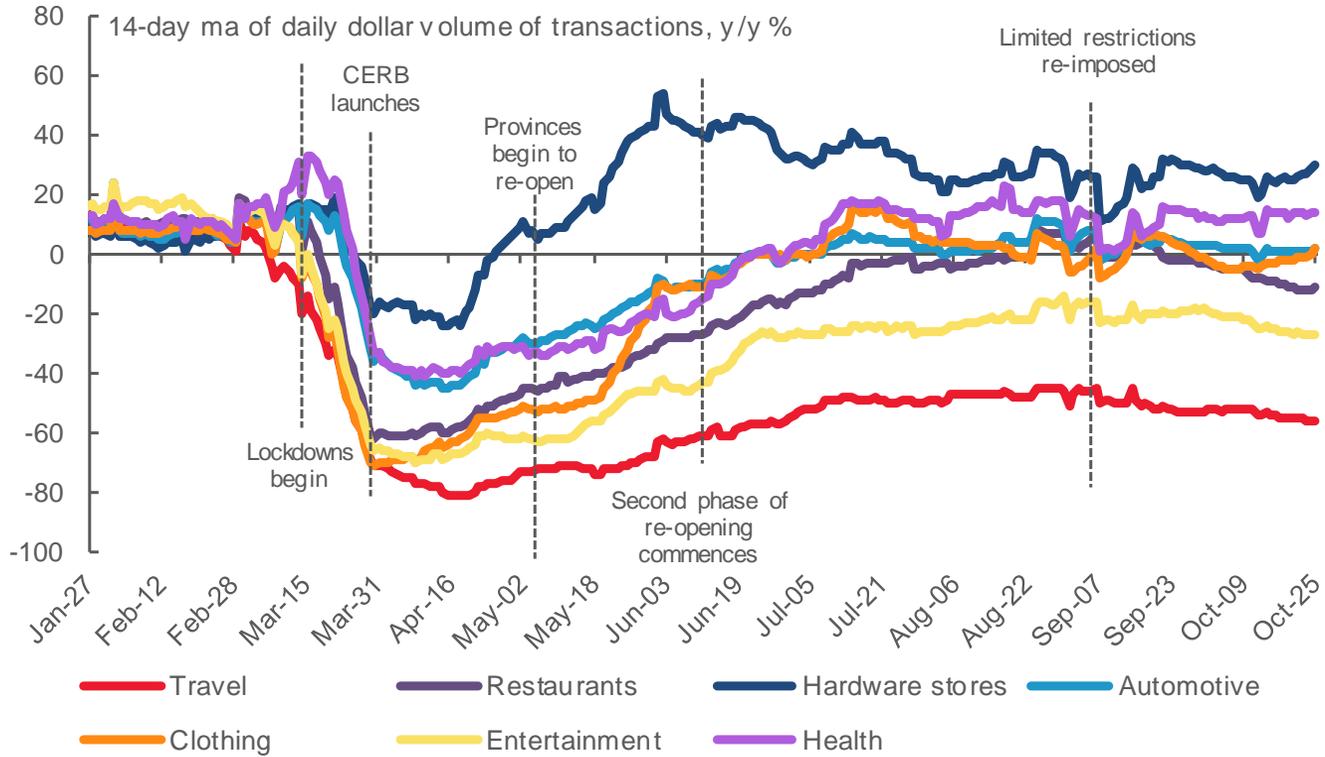


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 4. Retail Transactions Data: Travel, Restaurants and Entertainment Slow Further

- Various merchant types experienced weakening y/y growth in purchases, but restaurants, travel and entertainment were the most affected (Chart 17).
- In contrast, growth in spending at hardware stores improved in the last week, showing that the shift towards home renovations has endured.
- In addition, growth in spending on clothes began to pick up in the second half of October, after declining through late September.

Chart 17

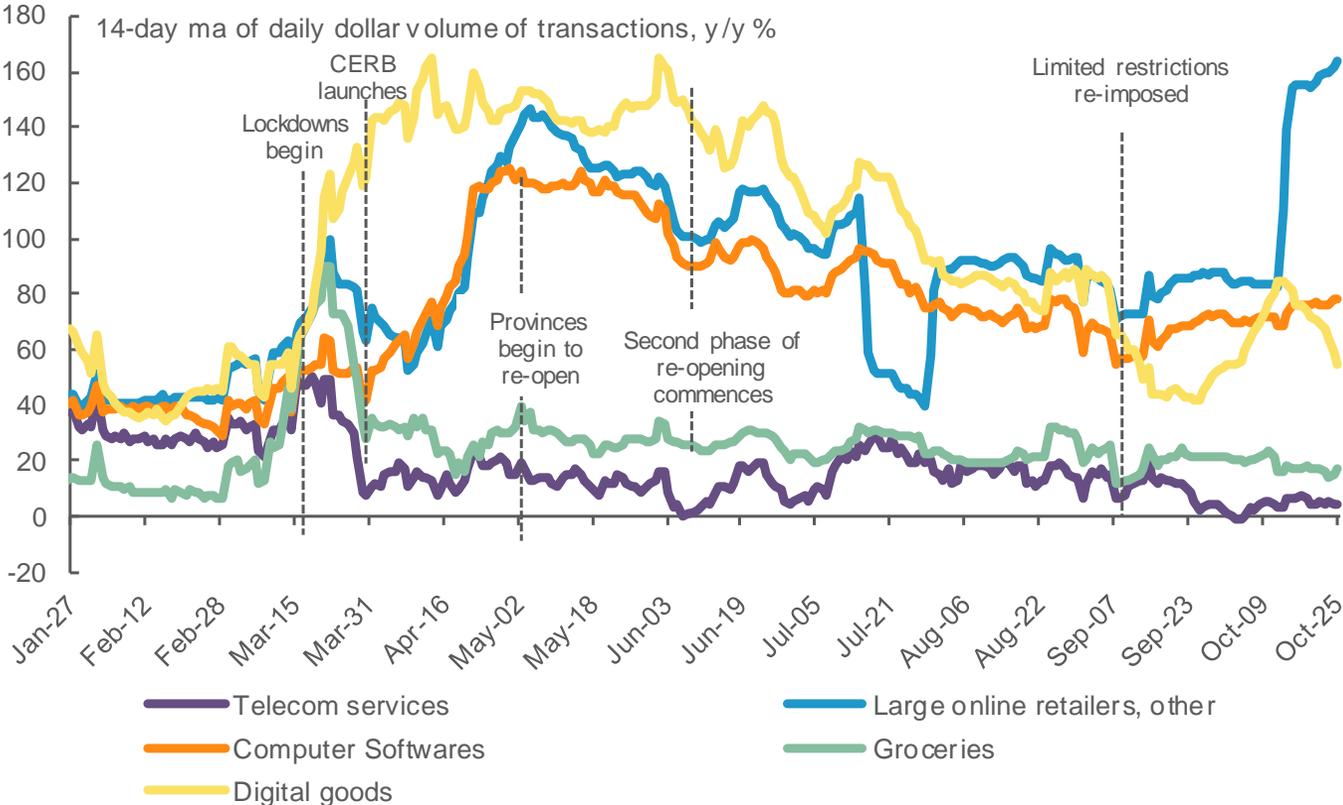


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 4. Retail Transactions Data: Software, Large Promotions Drive Spending Higher

- Growth in the categories that experienced stronger spending through the pandemic has diverged in recent weeks (Chart 18).
- Growth in groceries and telecom services has continued to trend lower, while purchases of computer software picked up further relative to last year's levels as October progressed.
- Spending at digital retailers was boosted by Prime Days held by at Amazon on October 13-14.

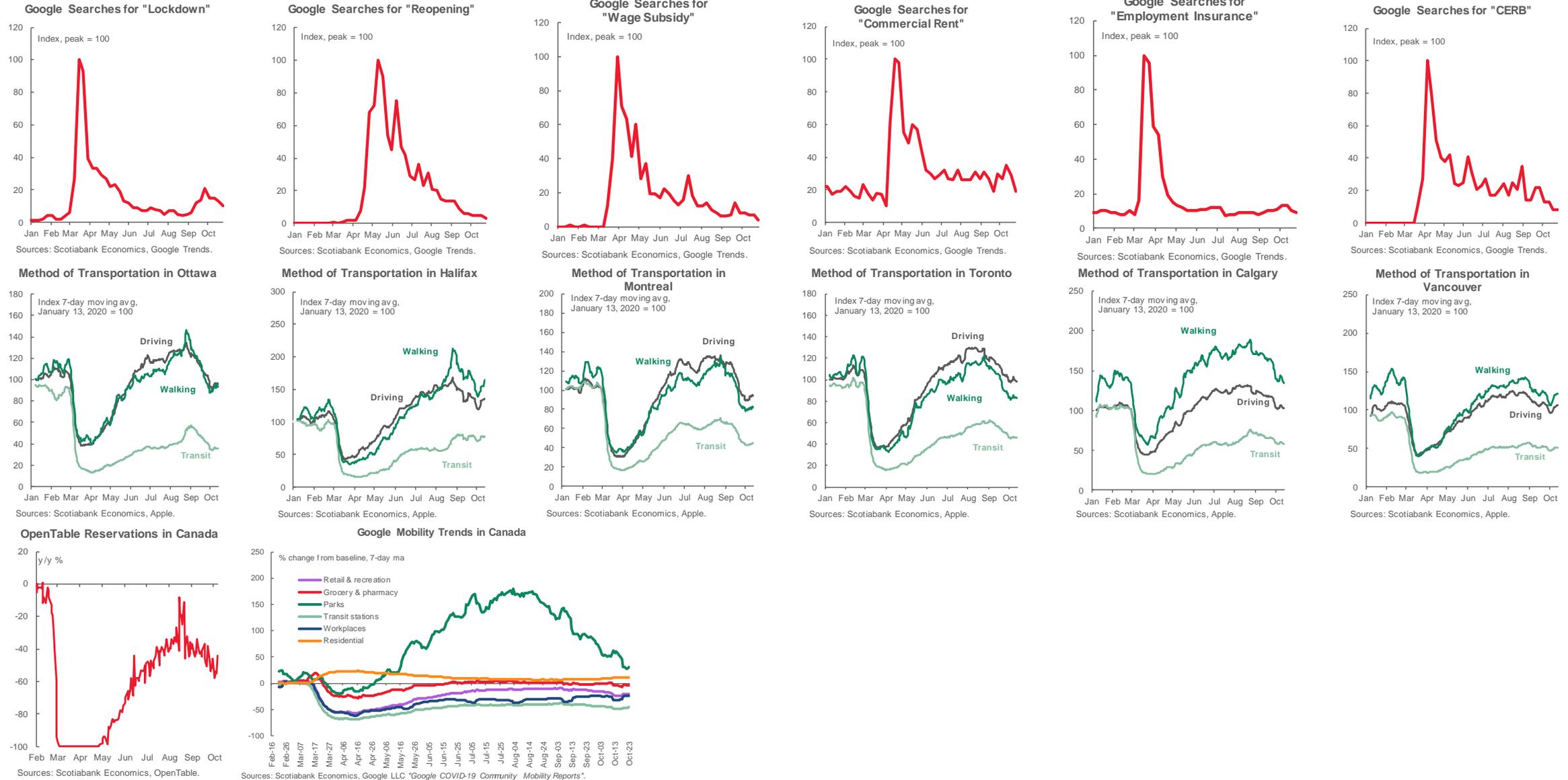
Chart 18



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.