



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

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1. Key Insights from Customer Transactions
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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 September 4th, automated funds transfers in the business sector remained volatile:
 - Incoming transactions declined in late August, before rebounding in the first few days of September. While some of this dynamic is explained by transactions in the financial sector, most industries saw declines in late-August. In particular, payments to manufacturing firms failed to surpass the level of 2019, having come close in mid-August, before falling back more recently.
 - Payroll deposits, while volatile, have stabilized relative to 2019 levels, suggesting that the pace of job growth has likely slowed in August.
- Consumer transactions, available through September 6th, have remained relatively stable compared to last year's levels:
 - Credit card spending, as well as cash usage, as shown by low levels of ABM transactions, continue to lag significantly compared to debit card usage.
 - Levels of spending in most categories have now stabilized compared to 2019. Nevertheless, there are tentative signs of spending starting to slow relative to July-August.
 - Recently-observed creep up in the number of COVID-19 cases across Canada could constrain and even reverse the nascent recovery in the hard-hit retail sectors.

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

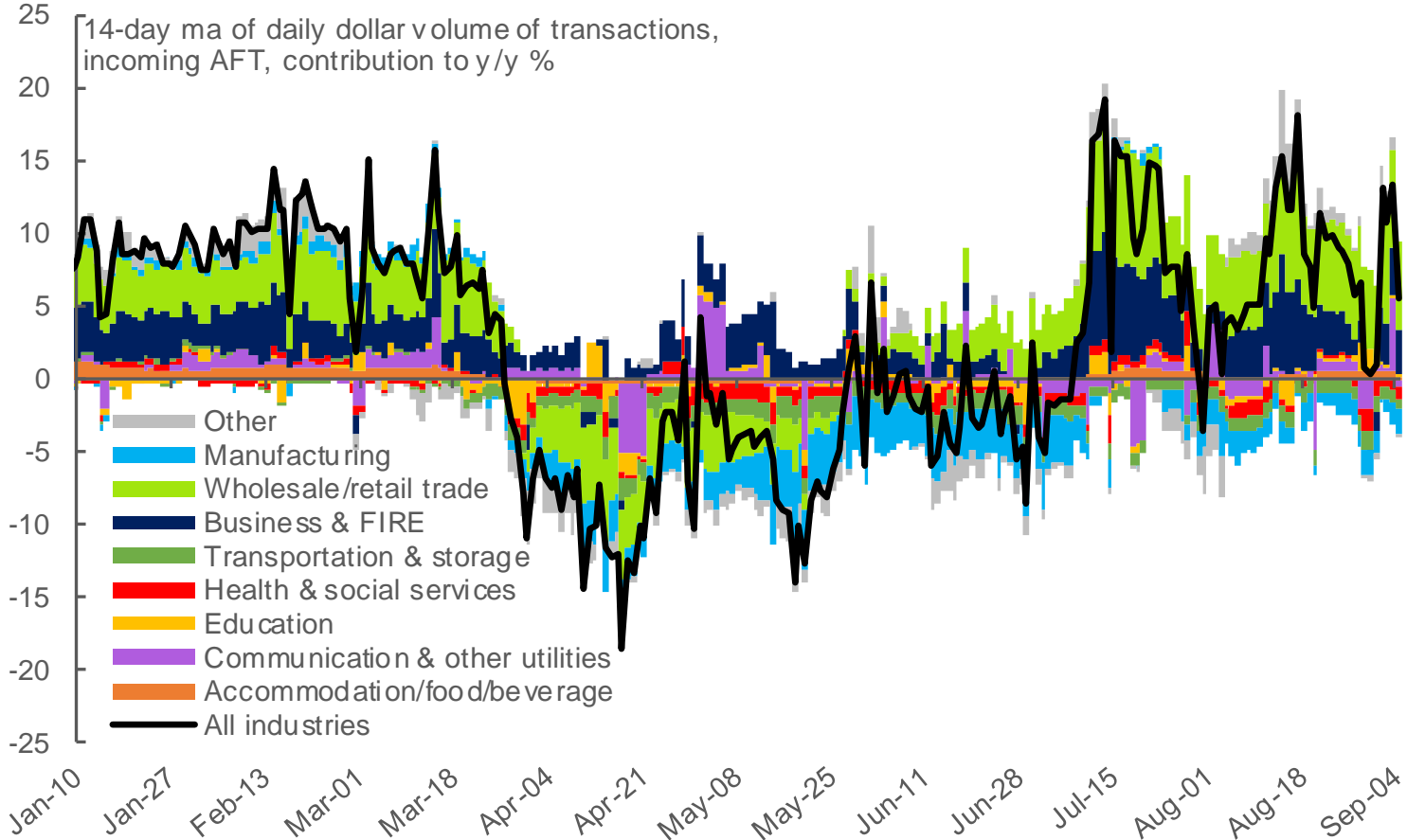
There are important caveats to analysis based on the payments data:

- 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: Volatile Hand-off to September

- Automated Funds Transfers (AFT) are used for:
 - rent and mortgage payments;
 - payroll deposits; and
 - other bills.
- Incoming transactions declined in late August, before rebounding in the first few days of September. While some of this dynamic is explained by transactions in the financial sector, most industries saw declines in late-August.
- In particular, payments to manufacturing firms failed to surpass the level of 2019, having come close in mid-August, before falling back more recently (charts 2-6).
- Payments in transportation and warehousing industries continue to run far below last year's levels.

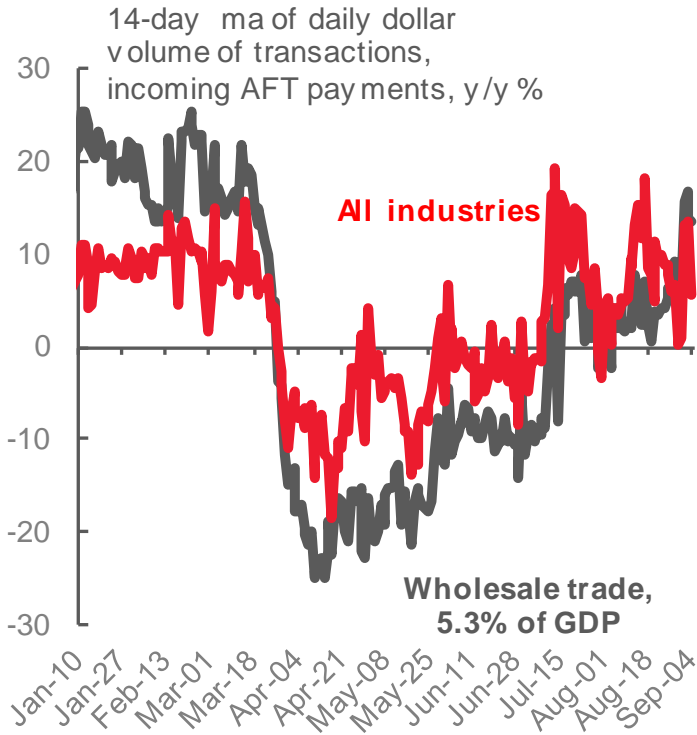
Chart 1



Sources: Scotiabank Economics, Data Science and Analytics.

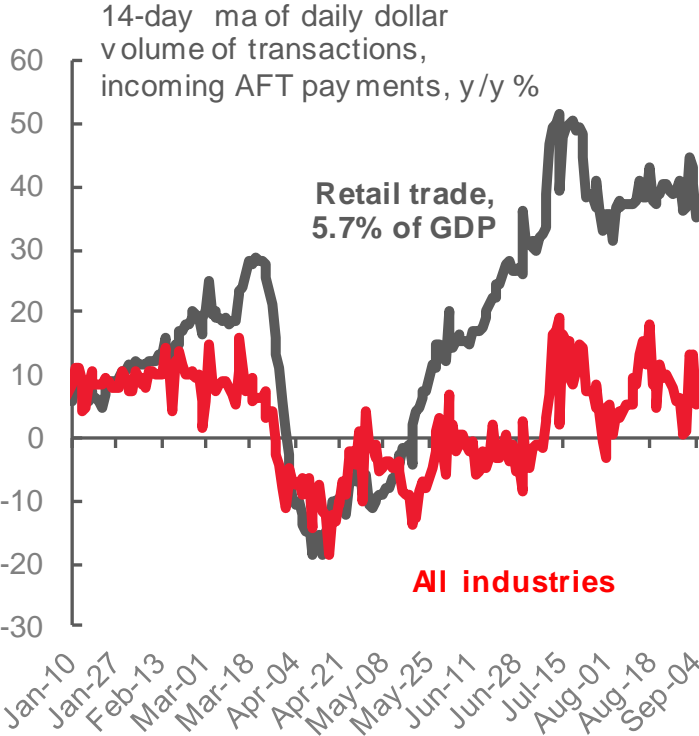
3. Business Transactions Data: Wholesale Payment Volumes Fully Recovered

Chart 2



Sources: Scotiabank Economics, Data Science and Analytics.

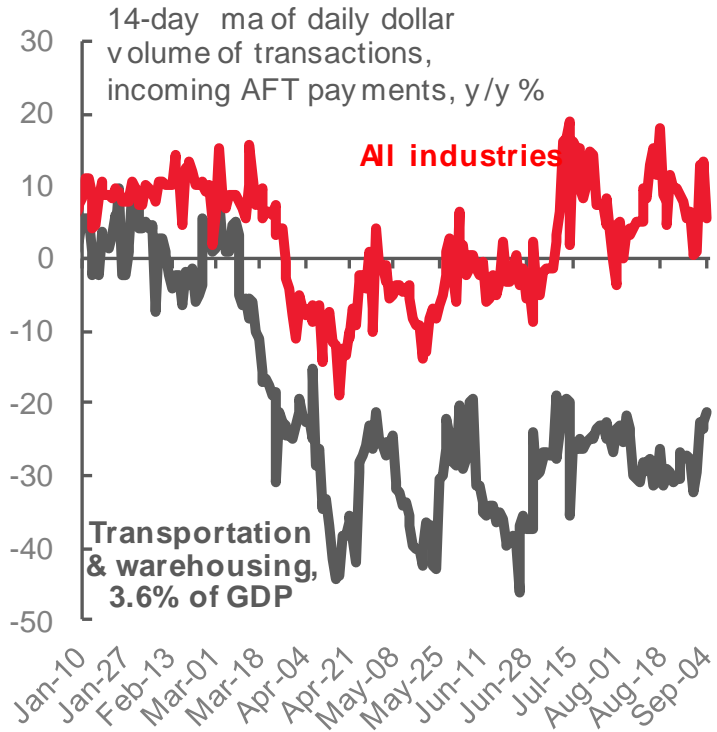
Chart 3



Sources: Scotiabank Economics, Data Science and Analytics.

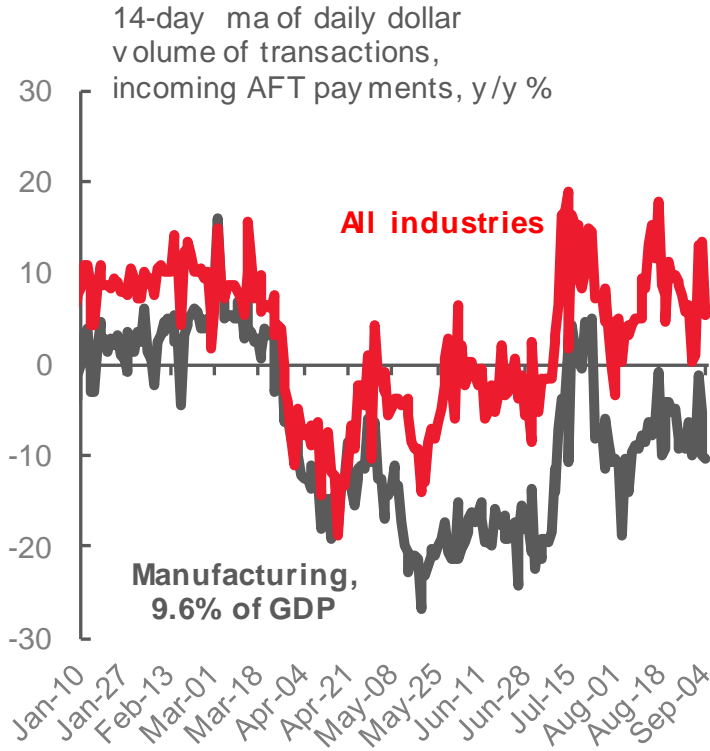
3. Business Transactions Data: Manufacturing Slides Back Below 2019 Level

Chart 4



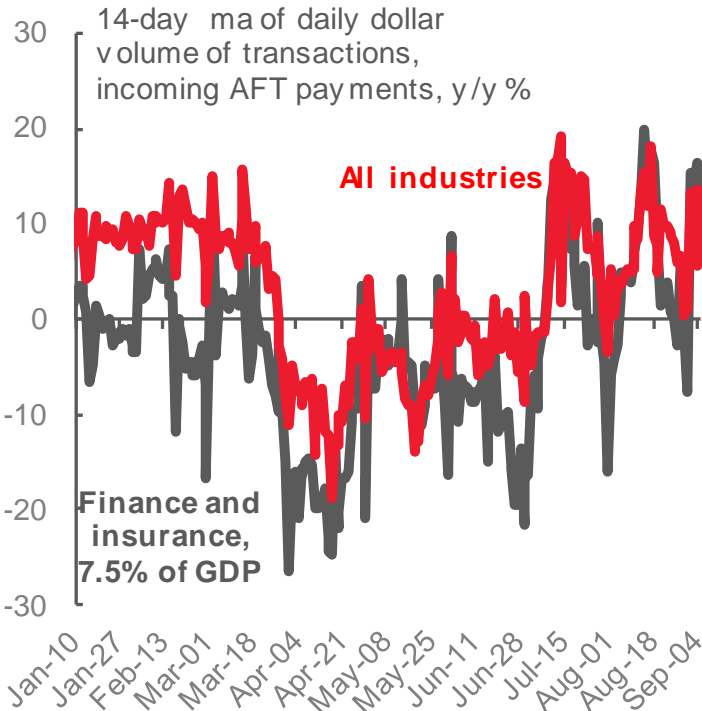
Sources: Scotiabank Economics, Data Science and Analytics.

Chart 5



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 6

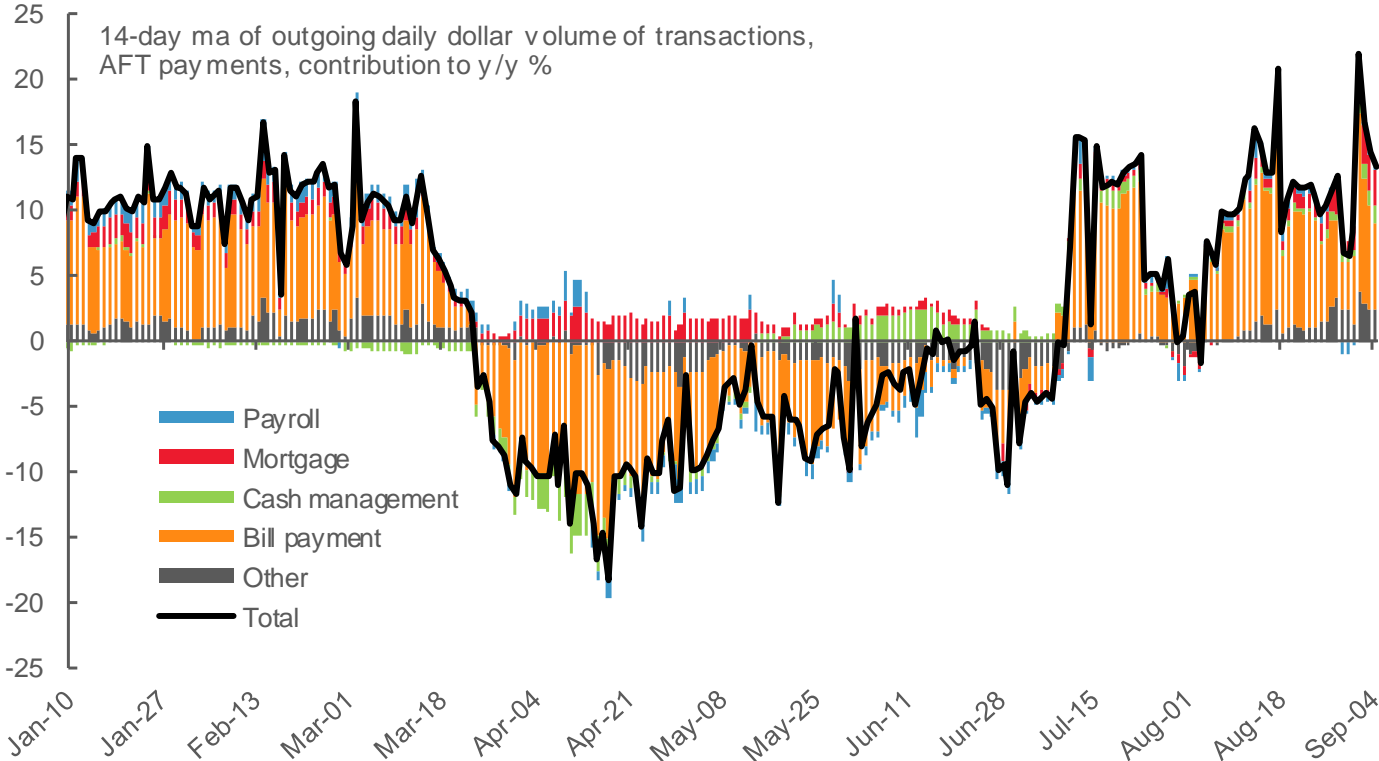


Sources: Scotiabank Economics, Data Science and Analytics.

3. Business Transactions Data: Bill Payments Remain High in early September

- Outgoing AFT payments remained at elevated levels in early September (Chart 7):
 - Payroll deposits, while volatile, have stabilized relative to 2019 levels, suggesting that the pace of job growth has likely slowed in August. (Charts 8 and 9).

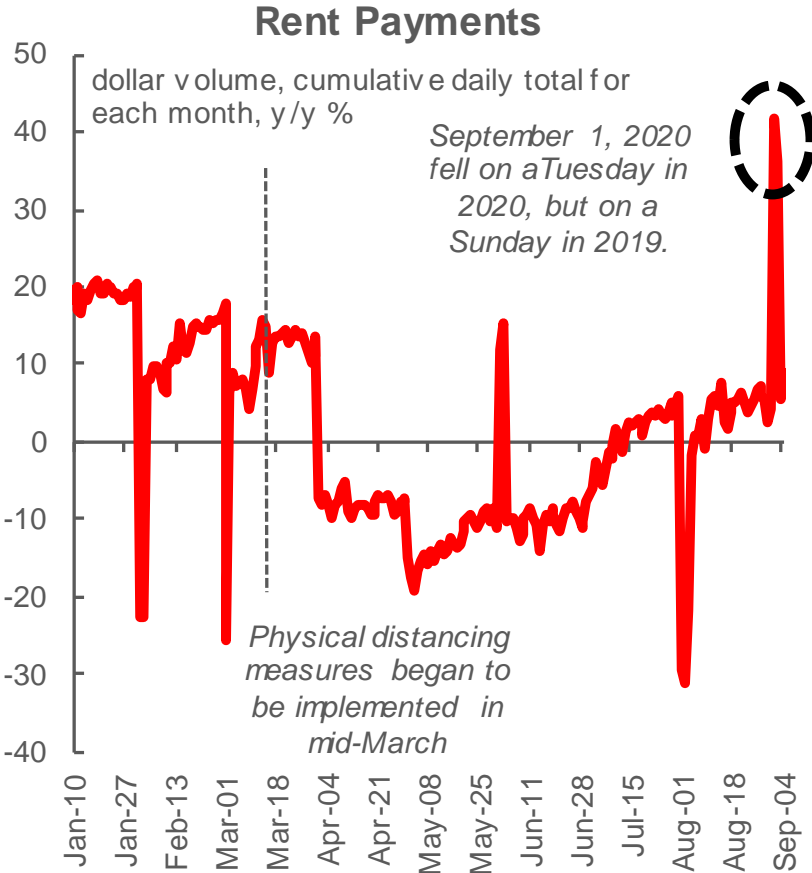
Chart 7



Sources: Scotiabank Economics, Data Science and Analytics.

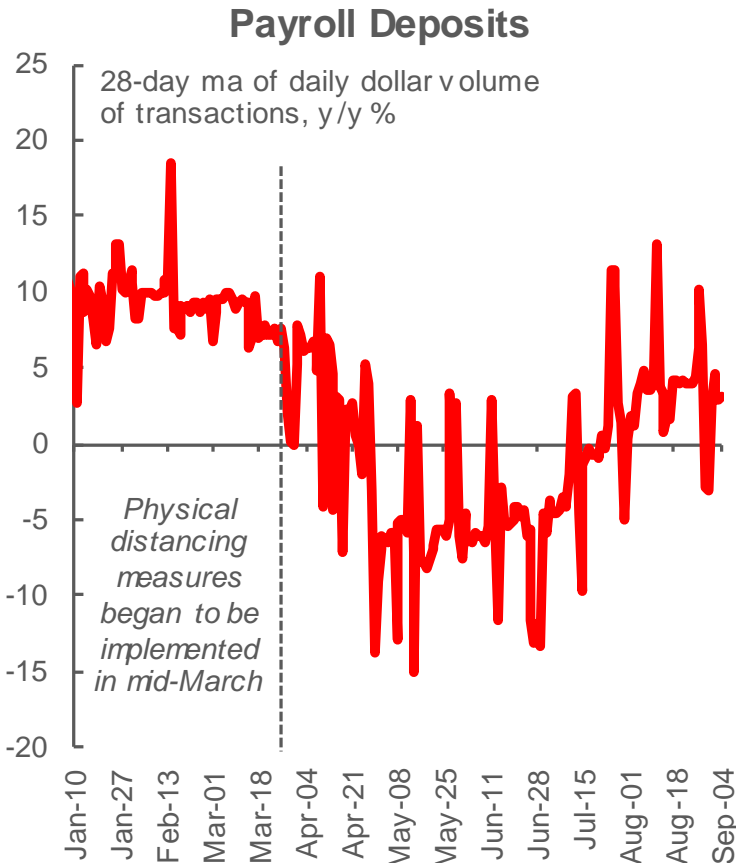
3. Business Transactions Data: Rent/Payroll Payments Stabilize

Chart 8



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 9

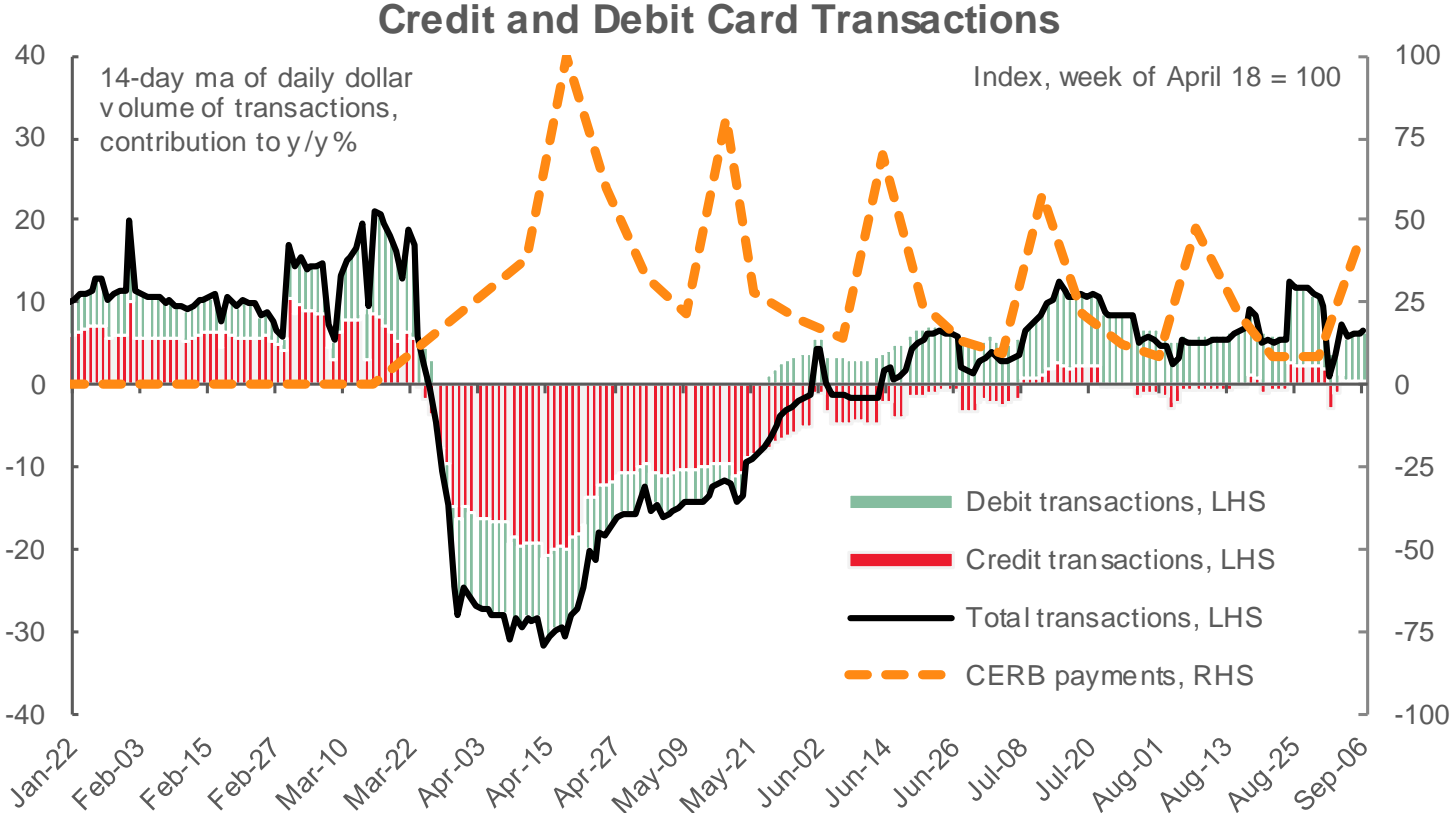


Sources: Scotiabank Economics, Data Science and Analytics.

4. Retail Transactions Data: Card Spending Growth Stabilized

- Consumer transactions, available through September 6th have remained relatively stable compared to last year's levels (chart 10):
 - Most categories of merchants now see spending flattening relative to a year ago.
 - Credit card spending, as well as cash usage, as shown by low levels of ABM transactions, continue to lag significantly compared to debit card usage.
- The amounts of CERB payments have been gradually coming down since reaching a peak in mid-April, in line with the observed improvement in the labour market in May-July.

Chart 10



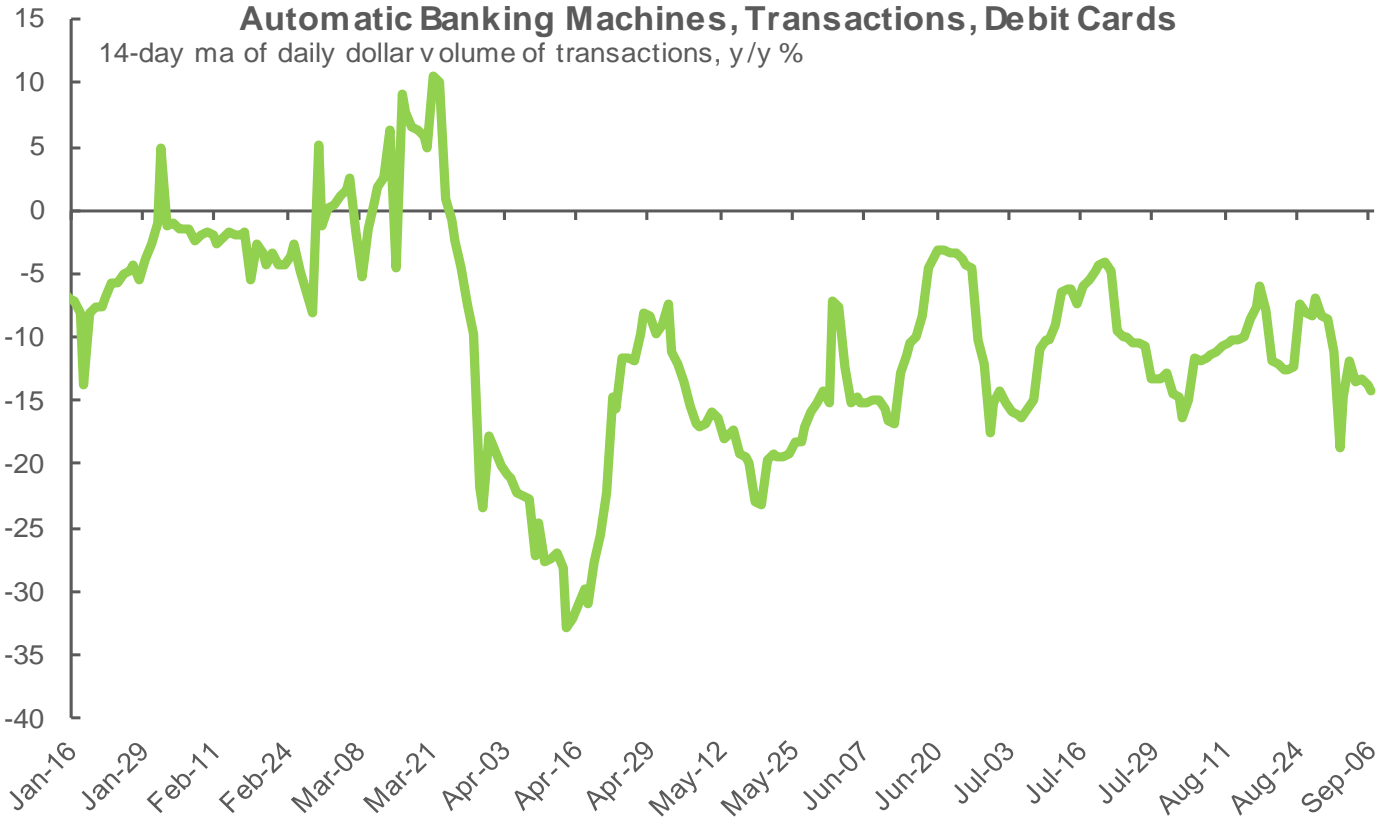
Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Use of Bank Machines Down

- A measure of declining cash usage, the volume of transactions through automatic banking machines (ABMs) has remained significantly below the level of 2019 with no sign of a turnaround (Chart 11):

Chart 11

- A jump in ABM transactions in mid-March, as demand for cash skyrocketed amid economic uncertainty, gave rise to a deep contraction in April.
- The volume of ABM transactions stagnated far below the level of 2019 for most of the summer.
- The declining use of cash as well as more people working from home is likely the explanation for the lack of recovery in ABM use.

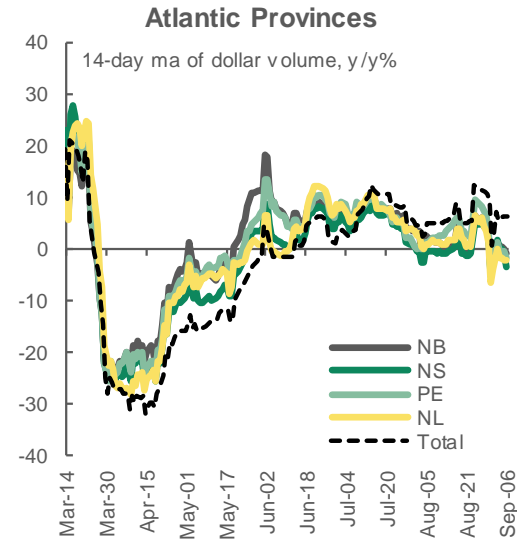


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Provinces See Volatile Pattern of Spending in September

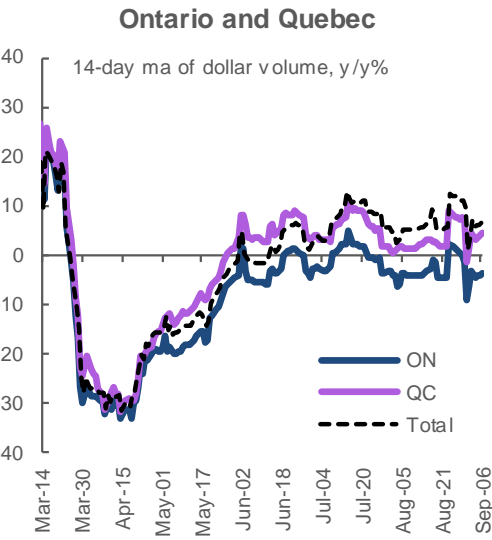
- Province-level data shows a consistent trend across provinces.
- Y/Y transactions growth in Ontario has turned lower in late-August and early September, despite a gradually expanding share of the re-opened economy (Chart 12). Most provinces show a decline since mid-August and the recent pickup in the number of COVID-19 cases could slow the recovery further.
- Note that the share of card transactions not tied to a particular province has been on the rise recently, explaining some of the divergence between the Canada-wide trend and provincial totals.

Chart 12



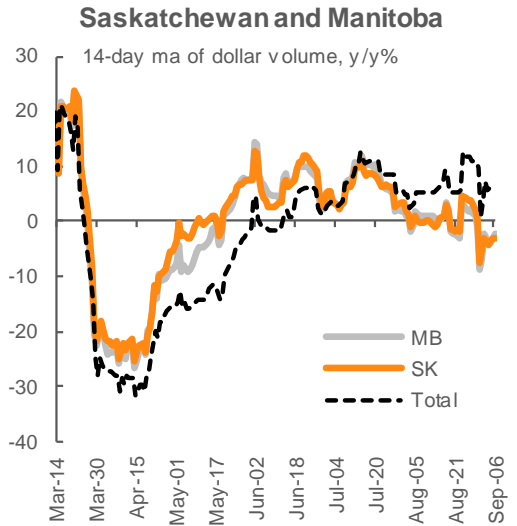
Sources: Scotiabank Economics, Data Analytics.

Chart 13



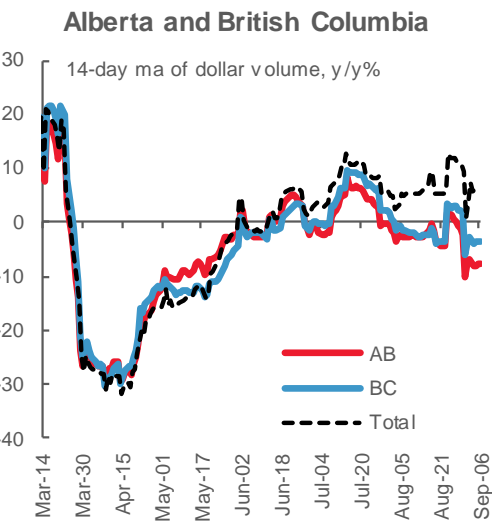
Sources: Scotiabank Economics, Data Analytics.

Chart 14



Sources: Scotiabank Economics, Data Analytics.

Chart 15

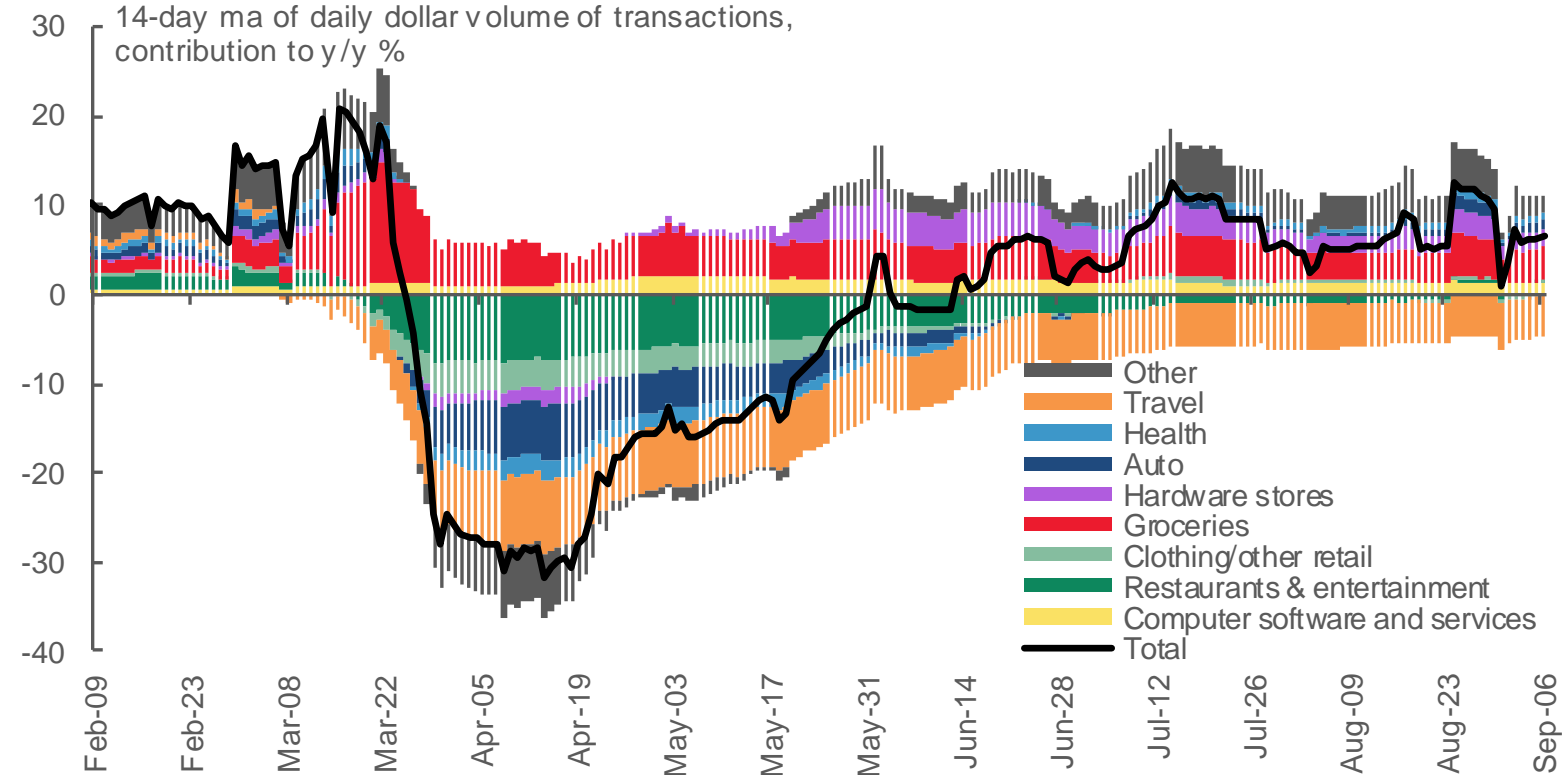


Sources: Scotiabank Economics, Data Analytics.

4. Retail Transactions Data: Card Spending Across Most Categories Stabilizes

- Throughout the past few months the dynamics and the composition of spending have remained relatively stable (Chart 16):
 - Spending on groceries, hardware and computers explains most of the y/y growth, while being partly offset by still-weak travel-related spending.

Chart 16

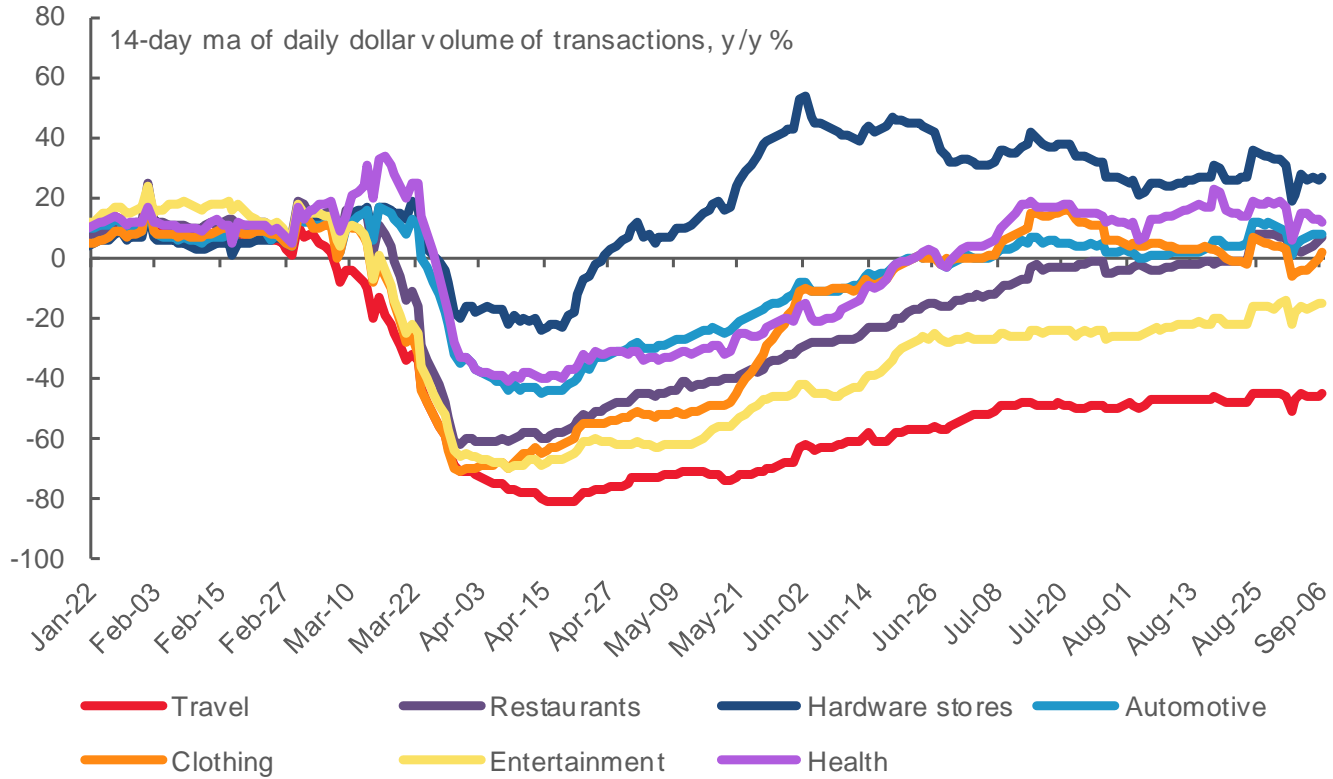


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Travel, Restaurants and Entertainment Spending Stalled

- As August came to an end most merchants had seen card spending stabilize relative to last year's levels, e (Chart 17):
 - Going forward, the continued recovery in the hard-hit areas of the retail sector will depend on the evolution of COVID cases and the successful re-opening of schools across Canada.
 - Recently-observed creep up in the number of cases could constrain and even reverse the nascent recovery.

Chart 17

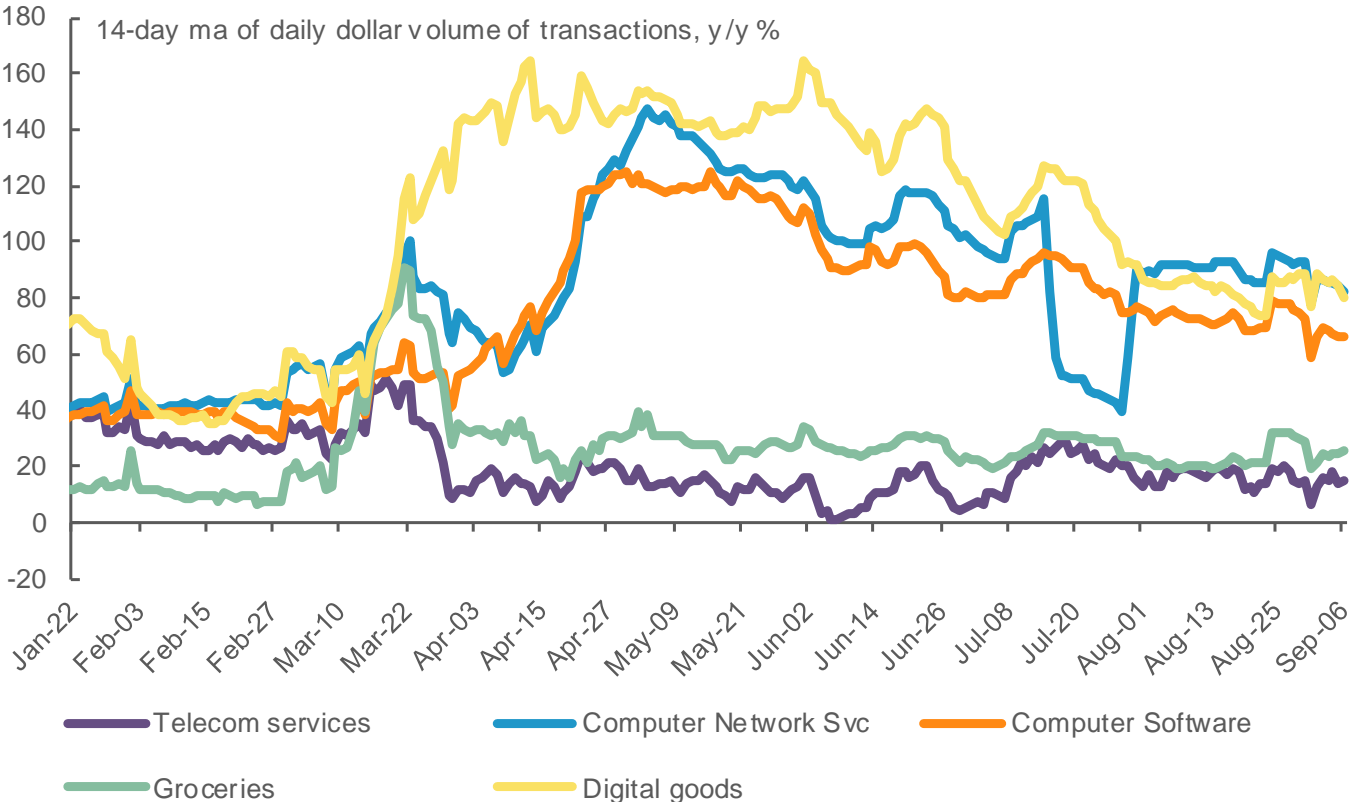


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Growth in Digital Spending Trending Down

- Categories that have been outperforming since the start of the pandemic still show strong, albeit declining, growth relative to last year (Chart 18).

Chart 18



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

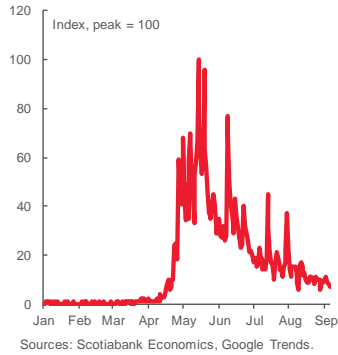
5. Other High-Frequency Indicators Of Activity

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

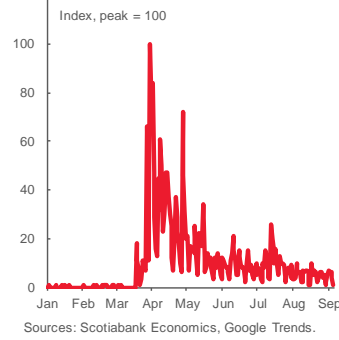
Google Searches for "Quarantine"



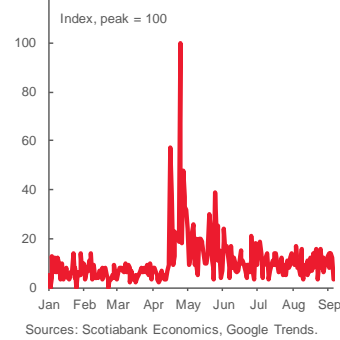
Google Searches for "Reopening"



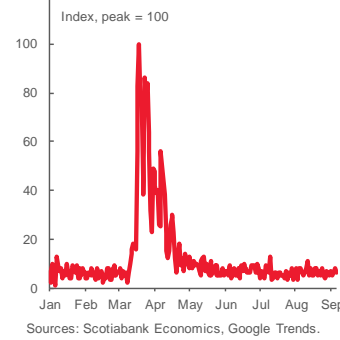
Google Searches for "Wage Subsidy"



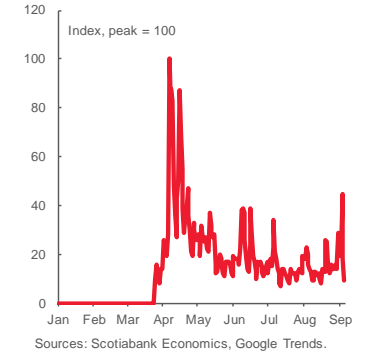
Google Searches for "Commercial Rent"



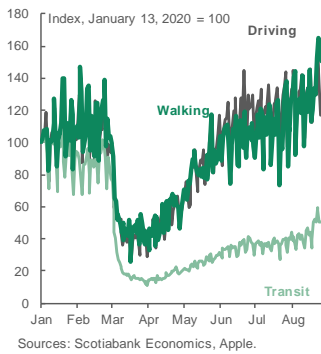
Google Searches for "Employment Insurance"



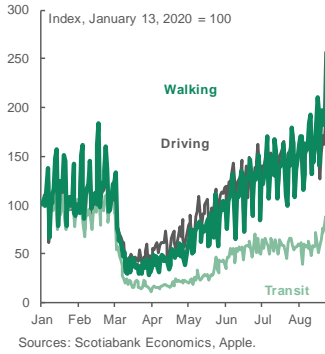
Google Searches for "CERB"



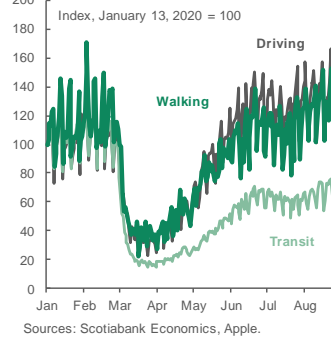
Method of Transportation in Ottawa



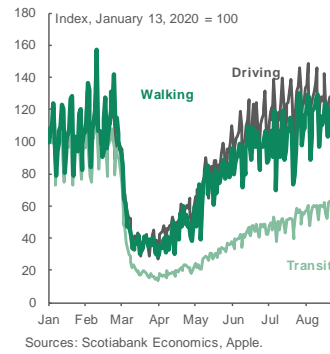
Method of Transportation in Halifax



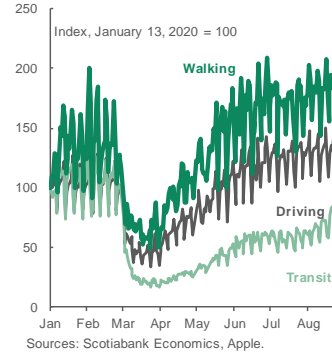
Method of Transportation in Montreal



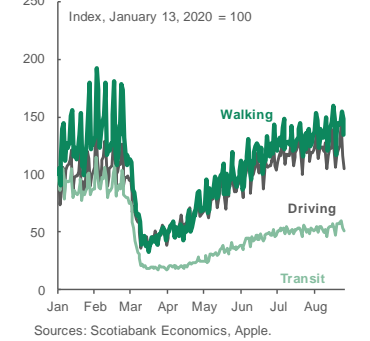
Method of Transportation in Toronto



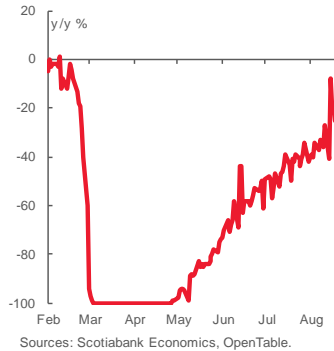
Method of Transportation in Calgary



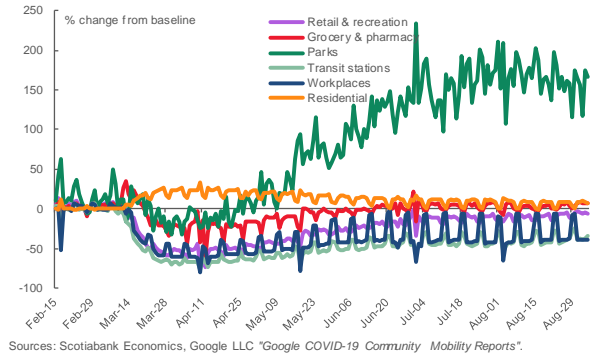
Method of Transportation in Vancouver



OpenTable Reservations in Canada



Google Mobility Trends in Canada



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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.