



Tracking the Canadian Economy through COVID-19: Insights from customer transactions – October 15, 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 October 9th, automated funds transfers in the business sector remained volatile:
 - Growth in incoming transactions was volatile since the end of September. Payments to the retail sector, while still showing strong growth relative to last year, continued to gradually come down in October. Incoming payments at manufacturing firms remained below last year's levels, in contrast to incoming payments in the financial industry, which were significantly above last year's levels so far in October.
 - Growth in payroll deposits, having tracked lower since mid-August, turned up in mid-September, consistent with the labour market showing renewed vigour according to the Labour Force Survey from Statistics Canada. The rent payments declined in early October, perhaps as a result of the expiration of the commercial rent relief program. With the announcement of a successor program the series is likely to pick up again.
- Growth in consumer transactions, available through October 11th, has been trending lower after a strong acceleration in the second half of September:
 - Spending on clothing has started to retreat relative to last year's levels, although the data in the last few days has started to show a tentative turnaround.
 - Spending at restaurants has been noticeably weaker since the beginning of October and is likely to weaken further as the re-introduced restrictions in Ontario and Quebec prevent dining in, while cold weather brings the patio season to a close.

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

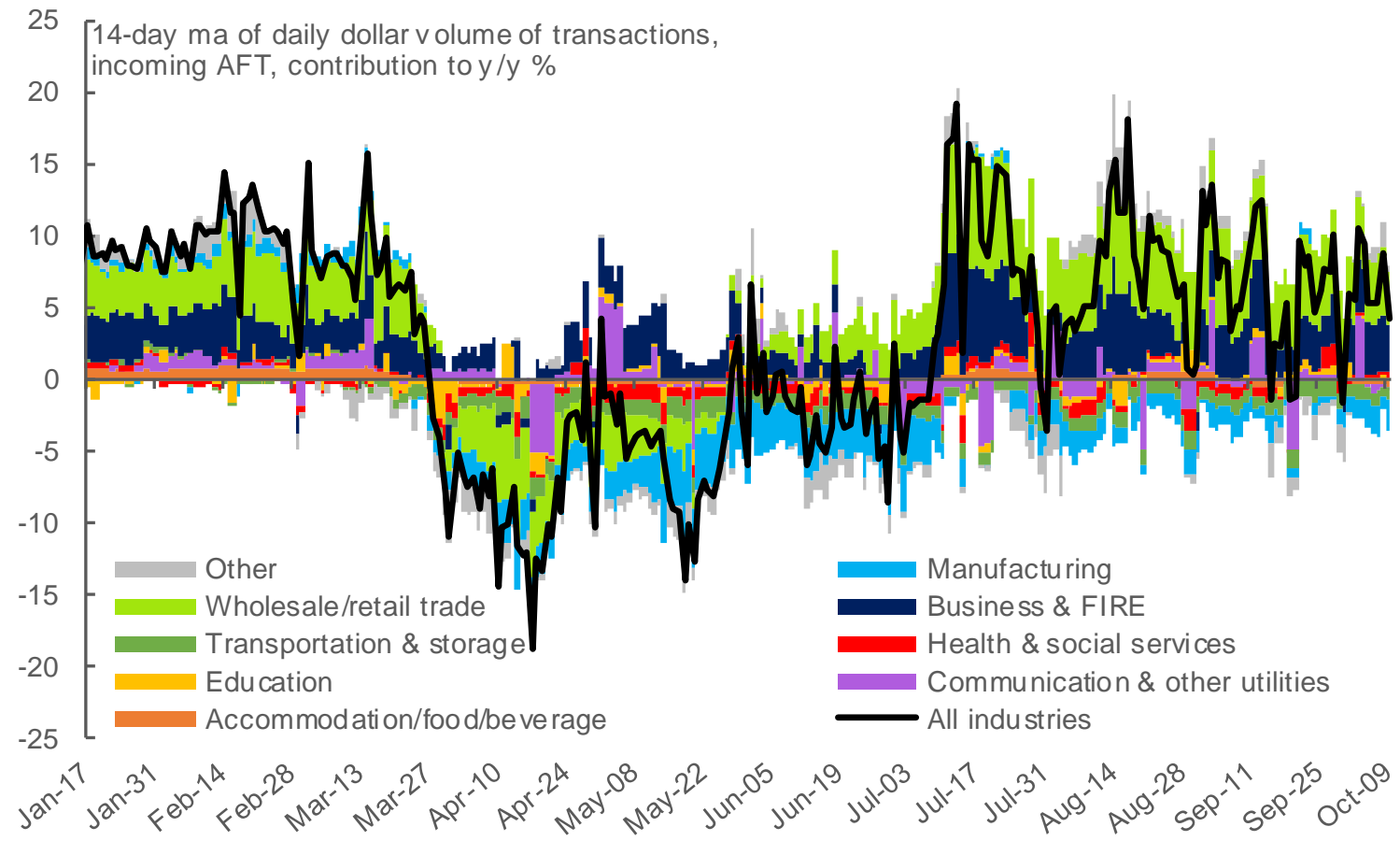
There are important caveats to analysis based on the payments data:

- 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 Growth in Early October

- Automated Funds Transfers (AFT) are used for:
 - rent and mortgage payments;
 - payroll deposits; and
 - other bills.
- Growth in incoming transactions remained volatile since late July, although recently the 14-day moving average was running about 5% above last year's levels (Chart 1).
- Payments to the retail sector, while still showing strong growth relative to last year, continued to gradually come down in October. Incoming payments at manufacturing firms remained below last year's levels, in contrast to the financial industry (Charts 2-6).

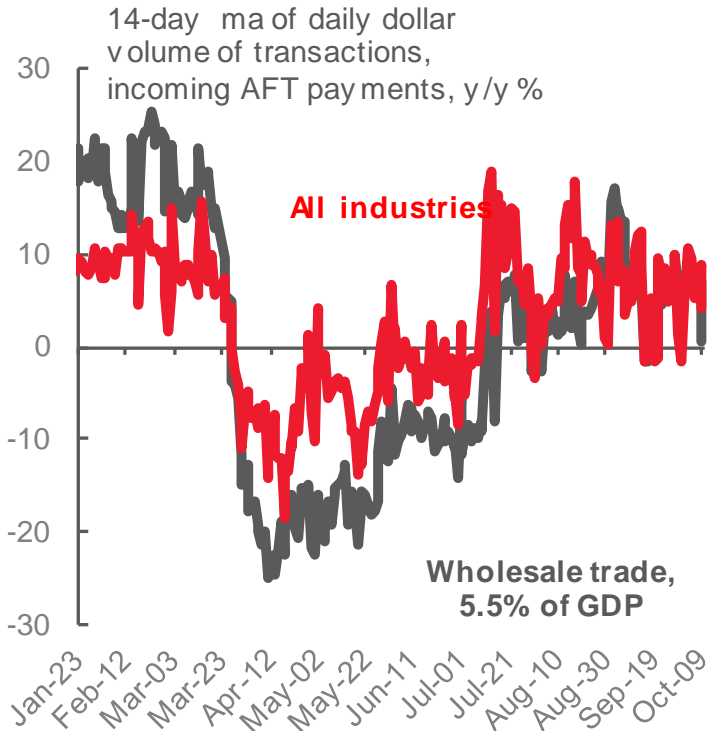
Chart 1



Sources: Scotiabank Economics, Data Science and Analytics.

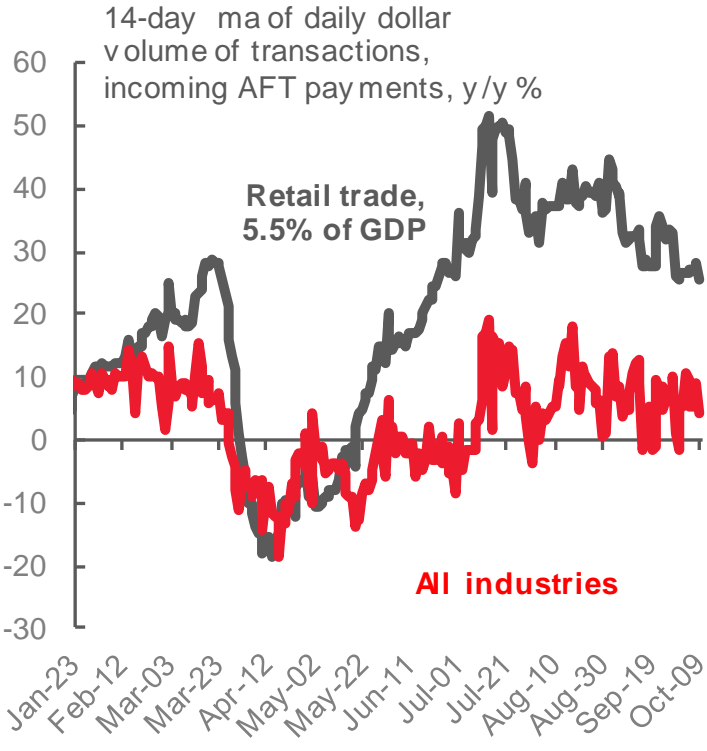
3. Business Transactions Data: Growth in Retail Payments Trending Lower

Chart 2



Sources: Scotiabank Economics, Data Science and Analytics.

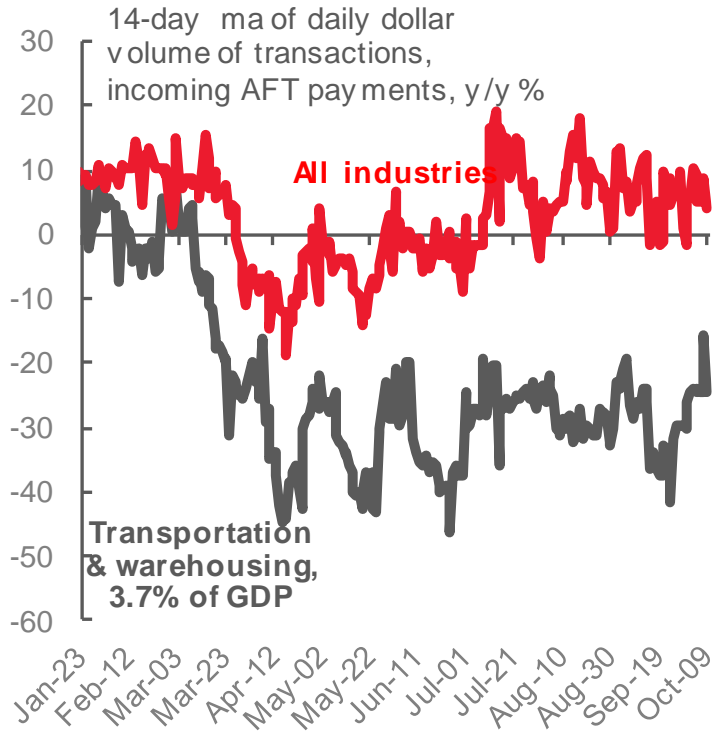
Chart 3



Sources: Scotiabank Economics, Data Science and Analytics.

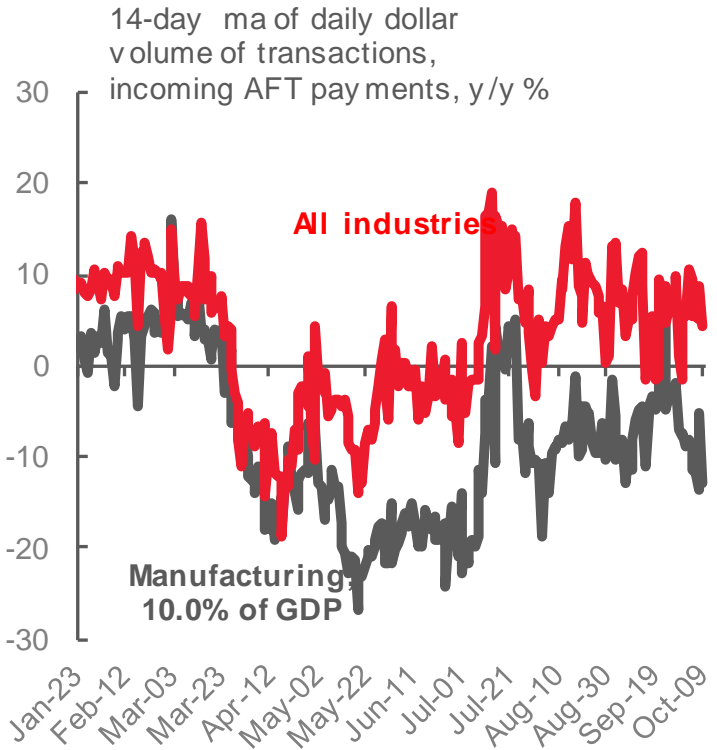
3. Business Transactions Data: Manufacturing Below 2019 Level

Chart 4



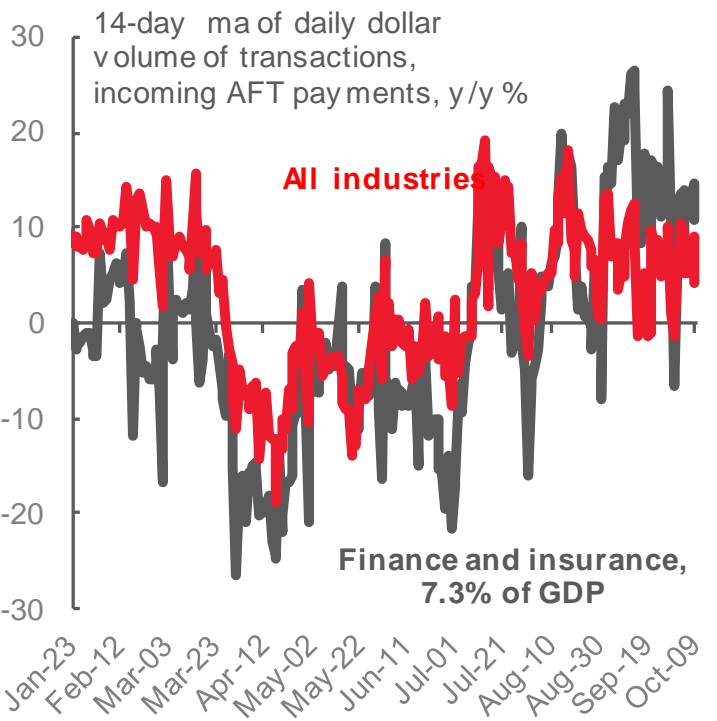
Sources: Scotiabank Economics, Data Science and Analytics.

Chart 5



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 6

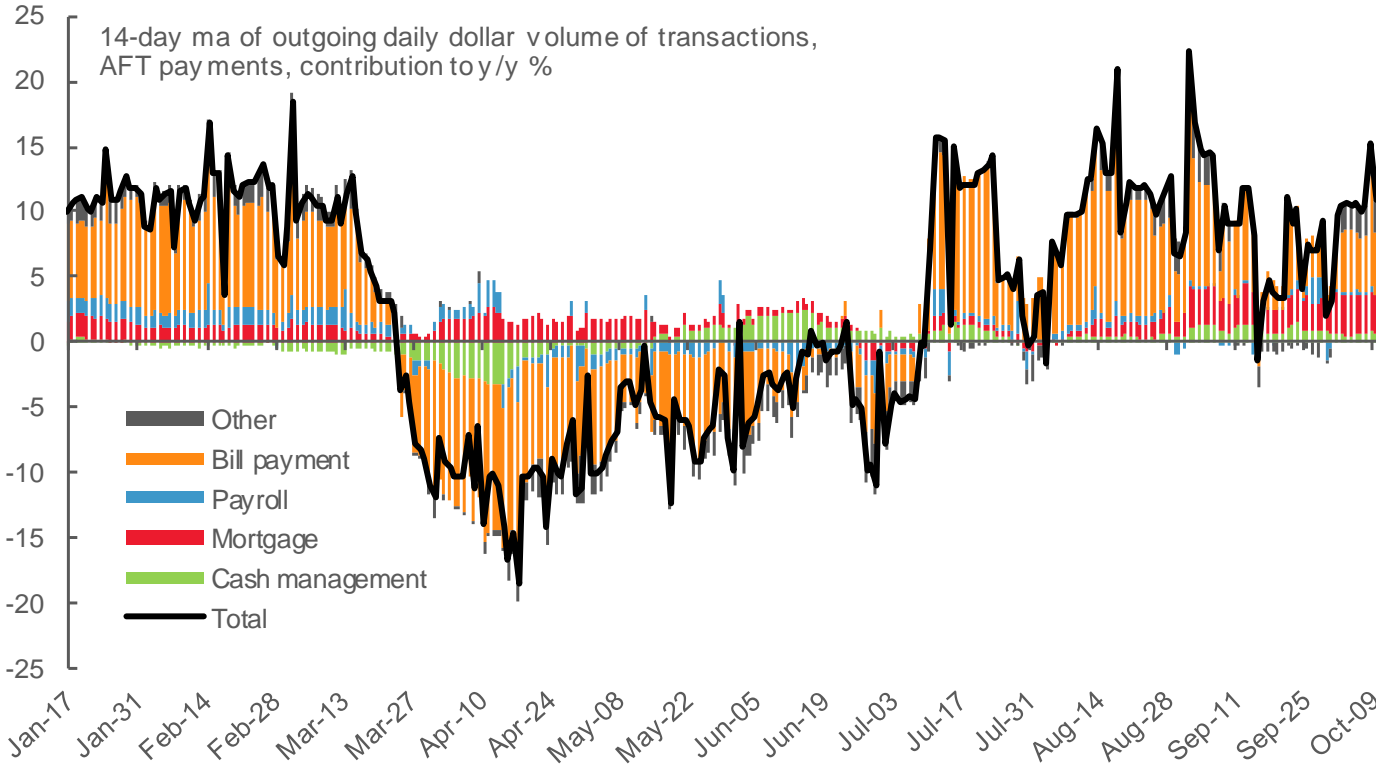


Sources: Scotiabank Economics, Data Science and Analytics.

3. Business Transactions Data: Bill Payments Rebound since mid-September

- Y/Y growth in outgoing payments has risen in the last few weeks, due to increases in general bill and mortgage payments, the latter most likely due to the expiration of payment deferrals (Chart 7).
 - Growth in payroll deposits, having tracked lower since mid-August, turned up in mid-September, consistent with the labour market showing renewed strength according to the Labour Force Survey from Statistics Canada.
 - The rental payments declined in early October, perhaps as a result of the expiration of the commercial rent relief program. With the announcement of a successor program the series is likely to pick up again (Charts 8 and 9).

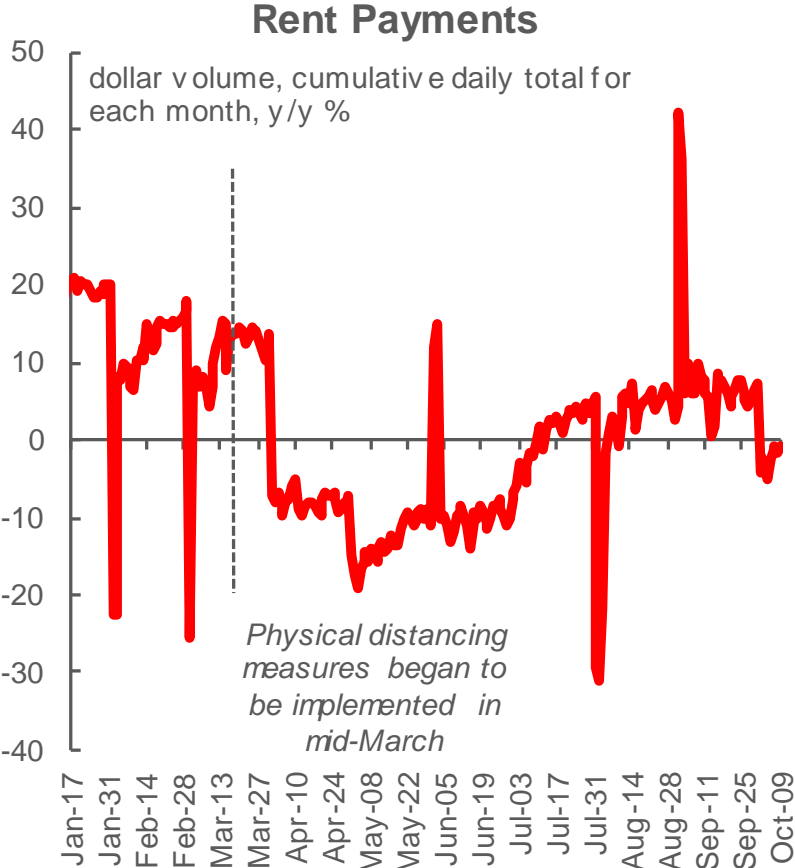
Chart 7



Sources: Scotiabank Economics, Data Science and Analytics.

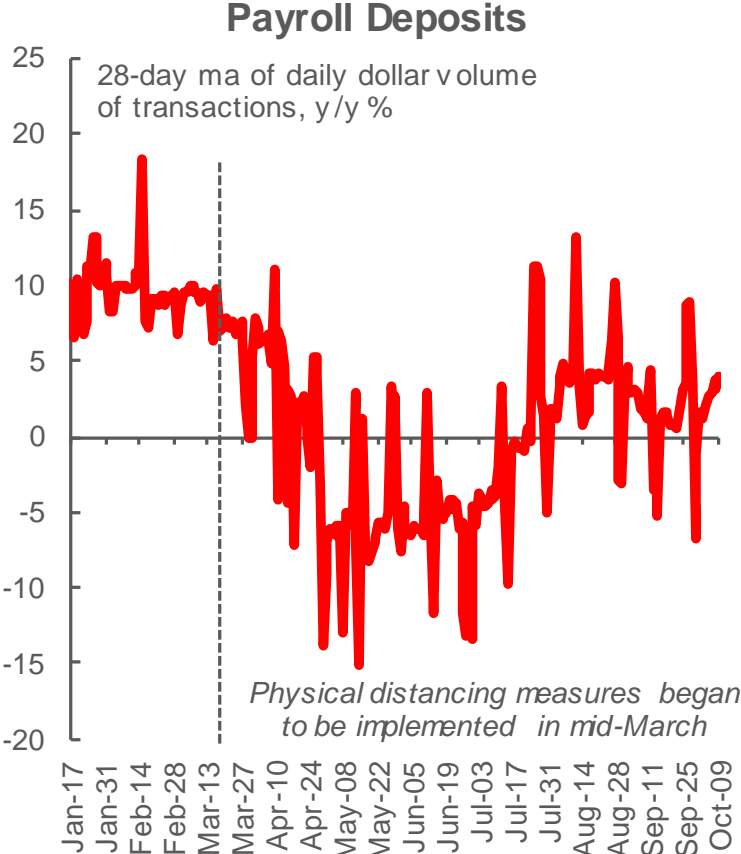
3. Business Transactions Data: Payroll Deposit Growth Picking Up, Rent Lower

Chart 8



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 9

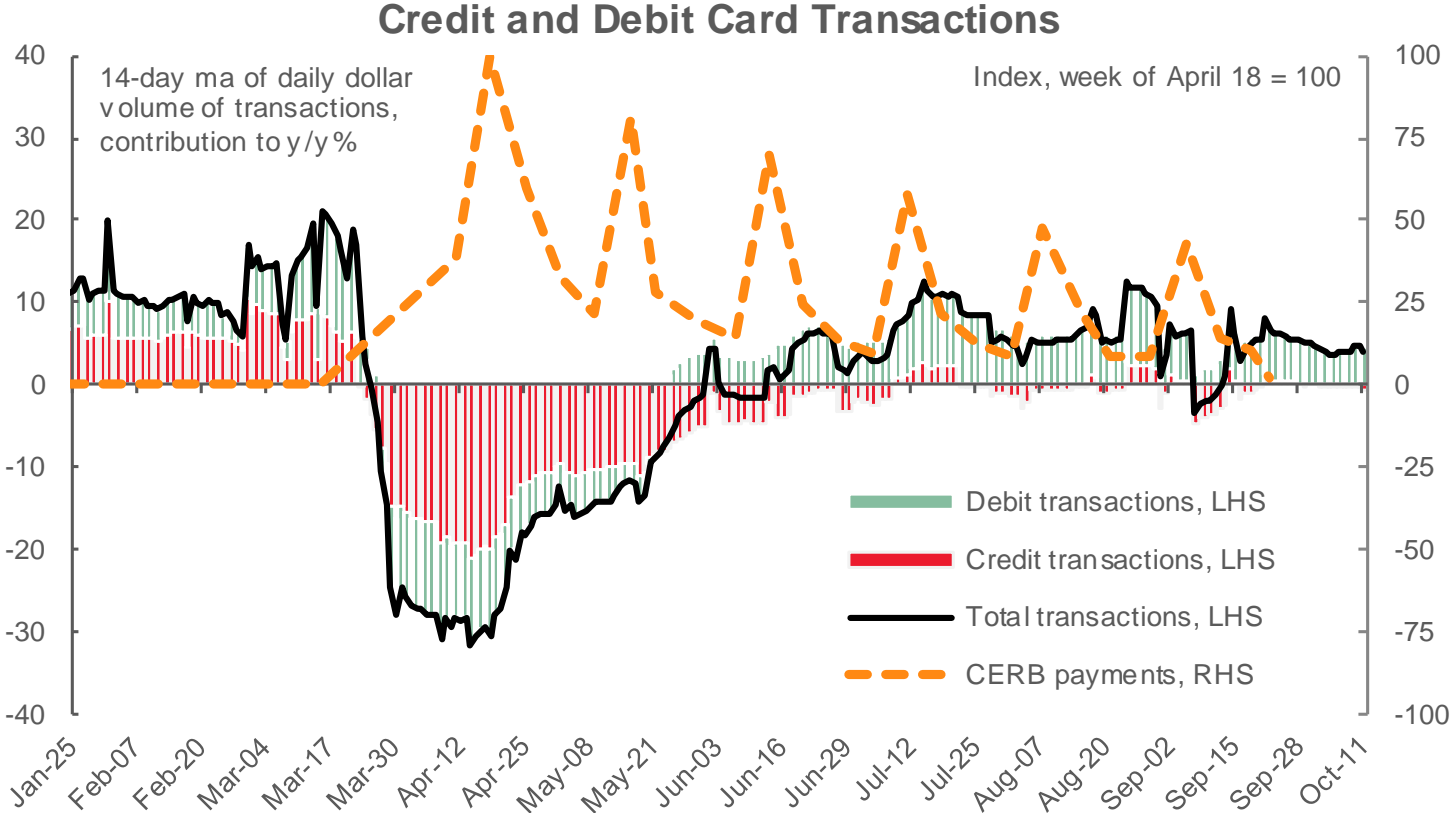


Sources: Scotiabank Economics, Data Science and Analytics.

4. Retail Transactions Data: Card Spending Growth Coming Down After September Spike

- Growth in consumer transactions, available through October 11th, has been trending lower after a strong acceleration in the second half of September (Chart 10):
 - The tentative trend towards lower y/y growth could be related to the rising COVID-19 cases and renewed restriction in Ontario and Quebec.

Chart 10

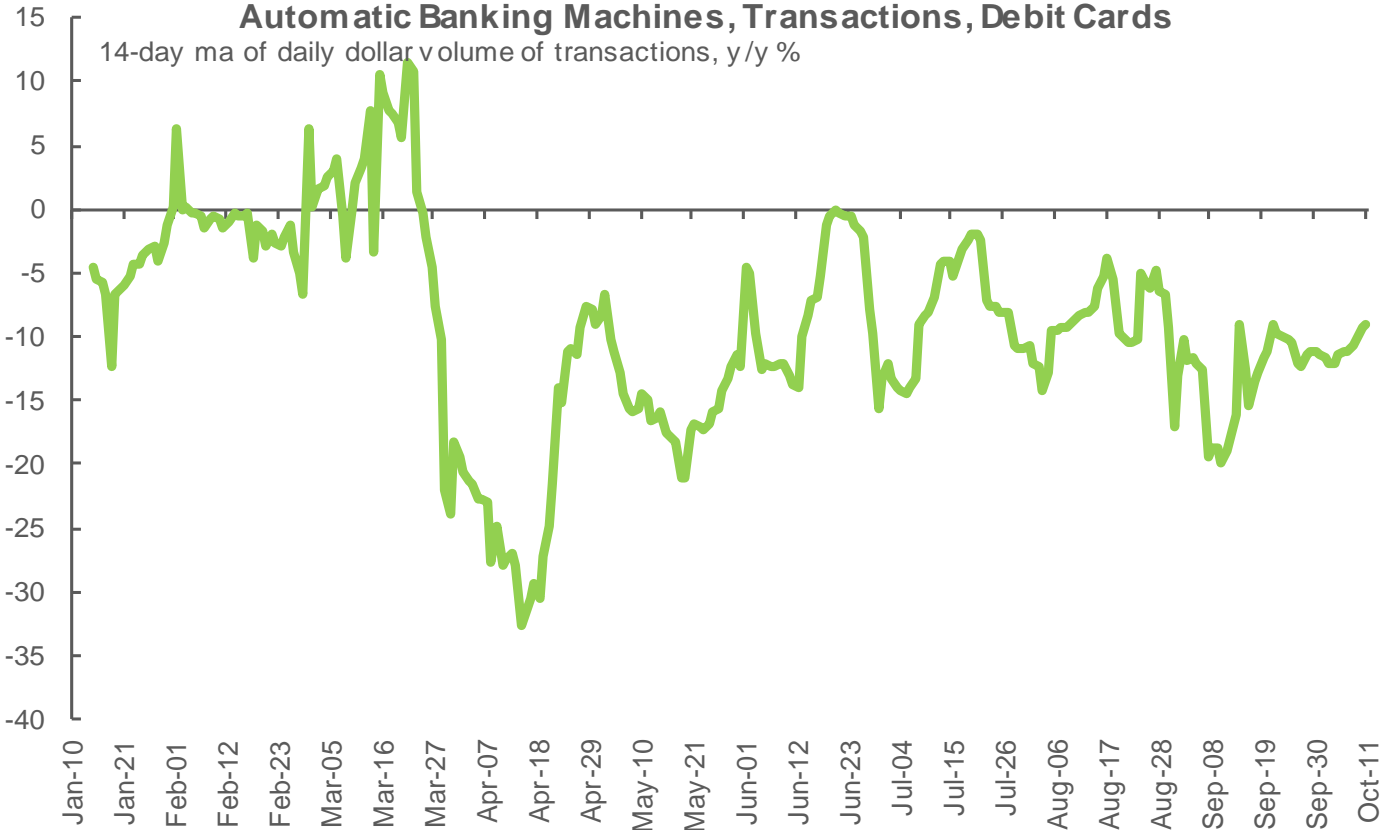


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Use of Bank Machines Down

- The volume of debit card transactions through automatic banking machines (ABMs) shows no sign of returning to 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 ABM usage.

Chart 11

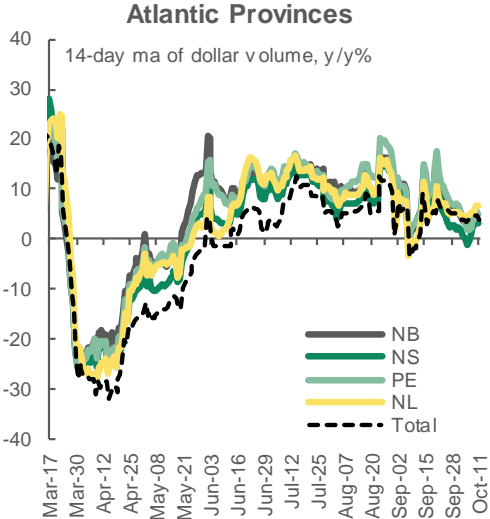


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Spreading Virus Starts to Hamper Growth in Provinces

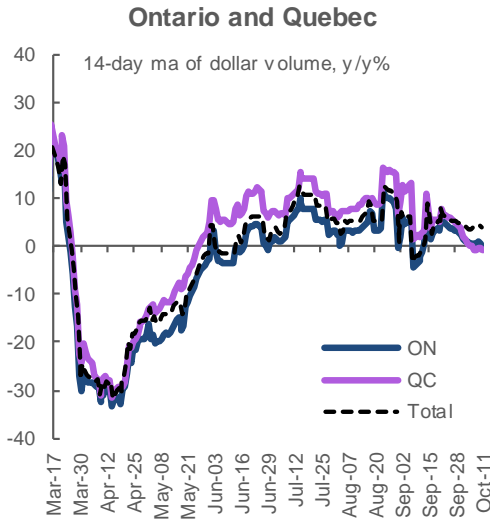
- In line with aggregate data shown in chart 10, province-level payments show a decline in y/y growth recently (Chart 12-15).
- Growth in Ontario and Quebec shows a slightly faster decline, as expected due to the worsening epidemiological situation and the re-imposition of restrictions on dining and entertainment.

Chart 12



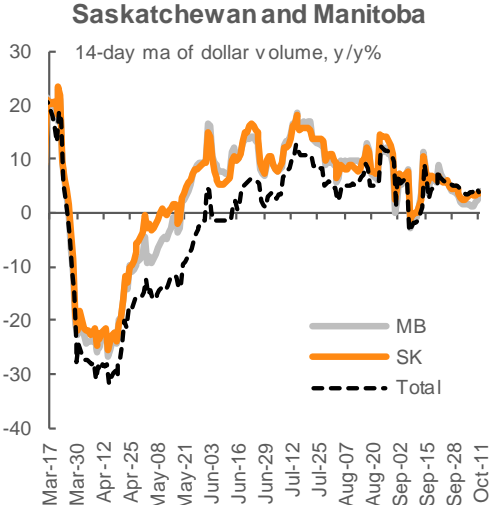
Sources: Scotiabank Economics, Data Analytics.

Chart 13



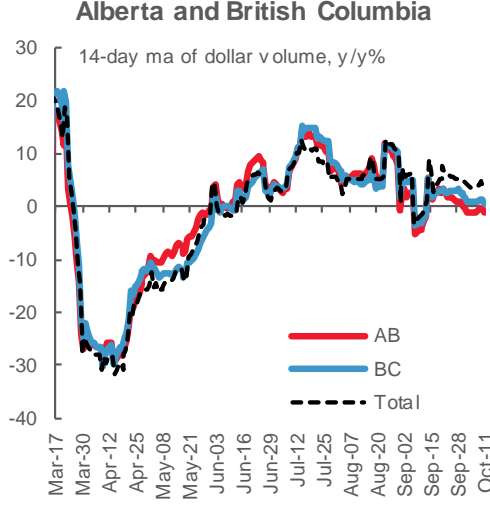
Sources: Scotiabank Economics, Data Analytics.

Chart 14



Sources: Scotiabank Economics, Data Analytics.

Chart 15

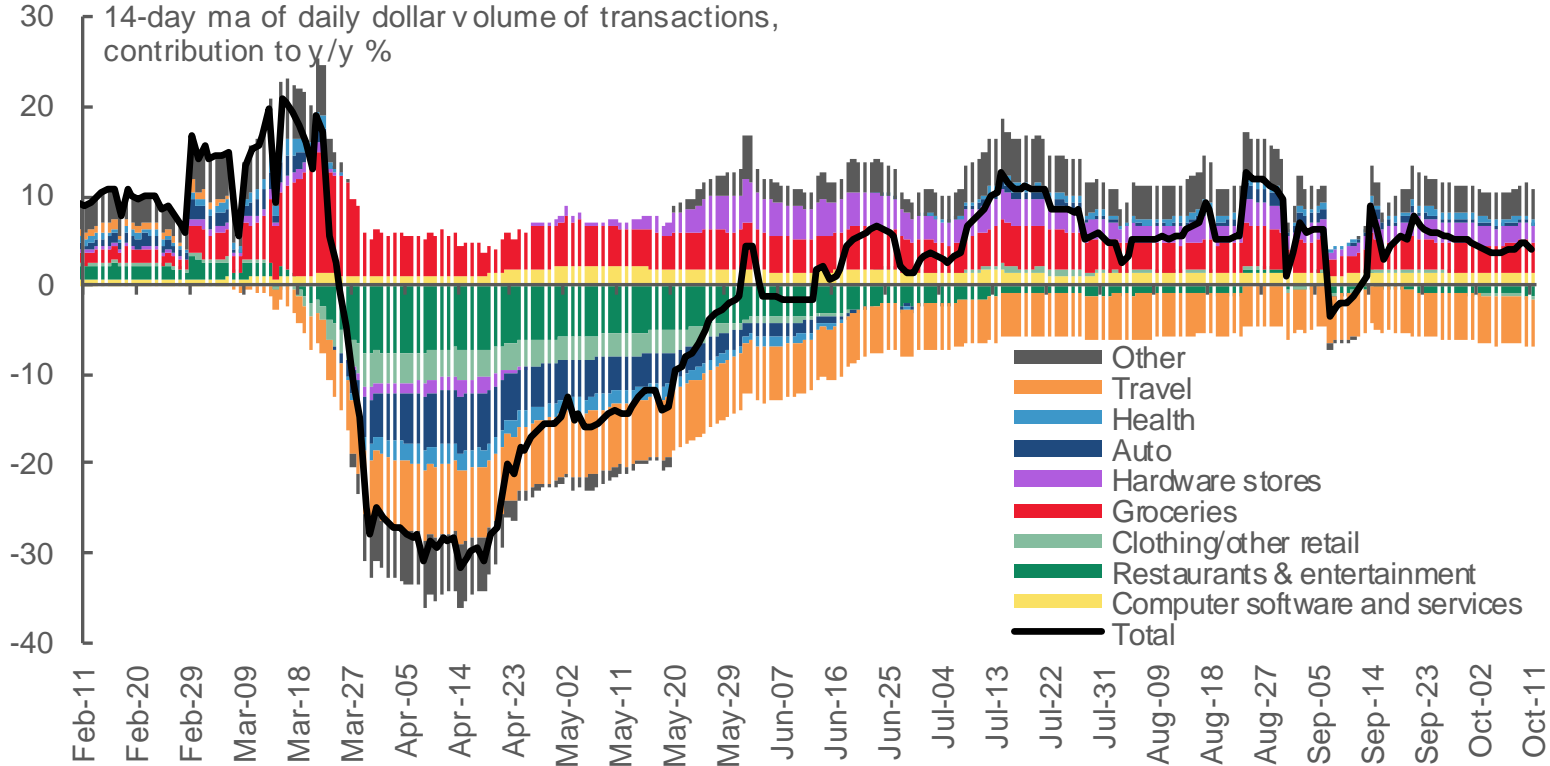


Sources: Scotiabank Economics, Data Analytics.

4. Retail Transactions Data: Card Spending Trending Lower Across Sectors

- The slowdown in y/y growth in spending since mid-September occurred on the back of weakness in several categories (Chart 16):
 - Travel-related spending growth started to trend lower, in addition to weaker restaurants and clothing.

Chart 16

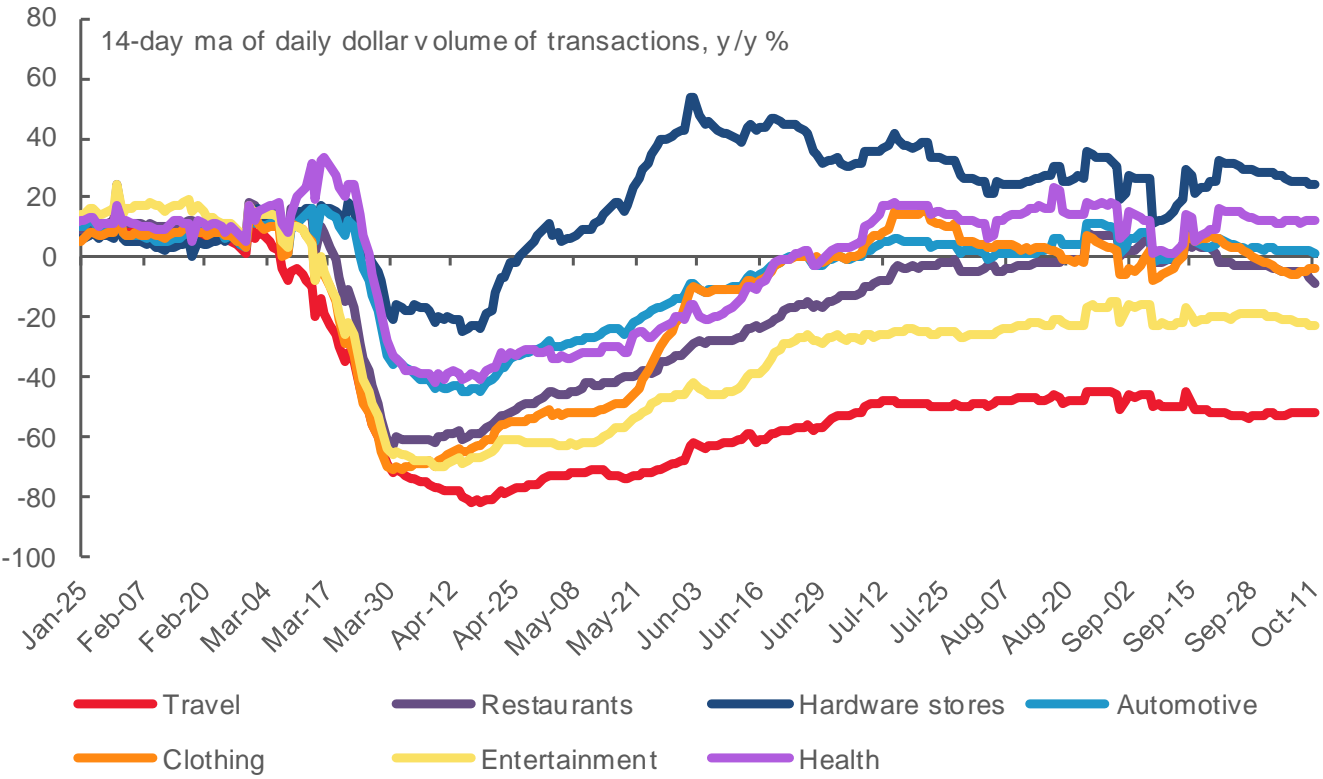


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

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

- Among other categories, spending at hardware stores remained much higher than in 2019, even as growth started to come down slightly after a very strong September (Chart 17):
 - Harder-hit categories, such as travel-related spending, as well as entertainment, clothing and restaurants continued to show declines in y/y growth.

Chart 17

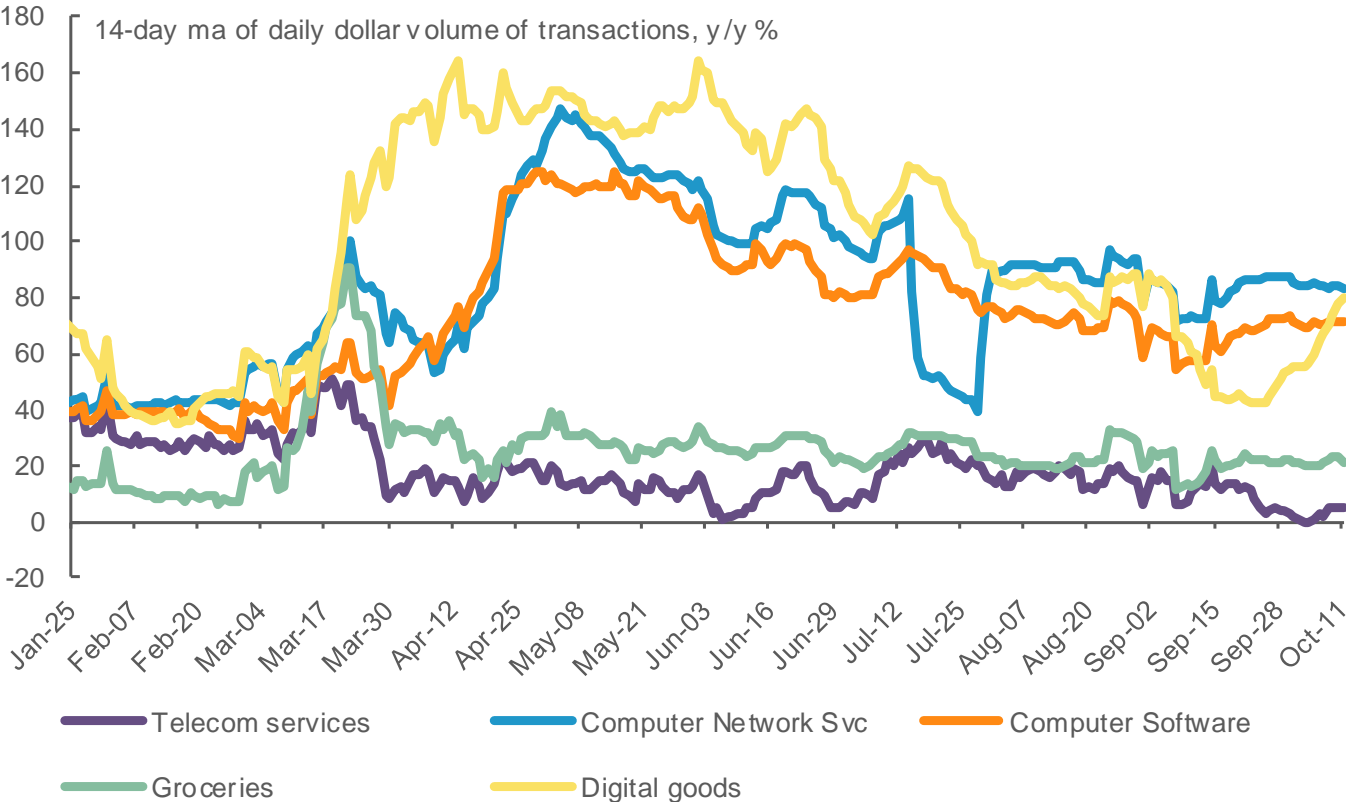


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Electronic Spending Growth Stable

- Among the categories that experienced stronger spending through the pandemic most show steady growth in September and early October (Chart 18):
 - Spending on digital goods is the only category that shows a turnaround after growth declined in September.

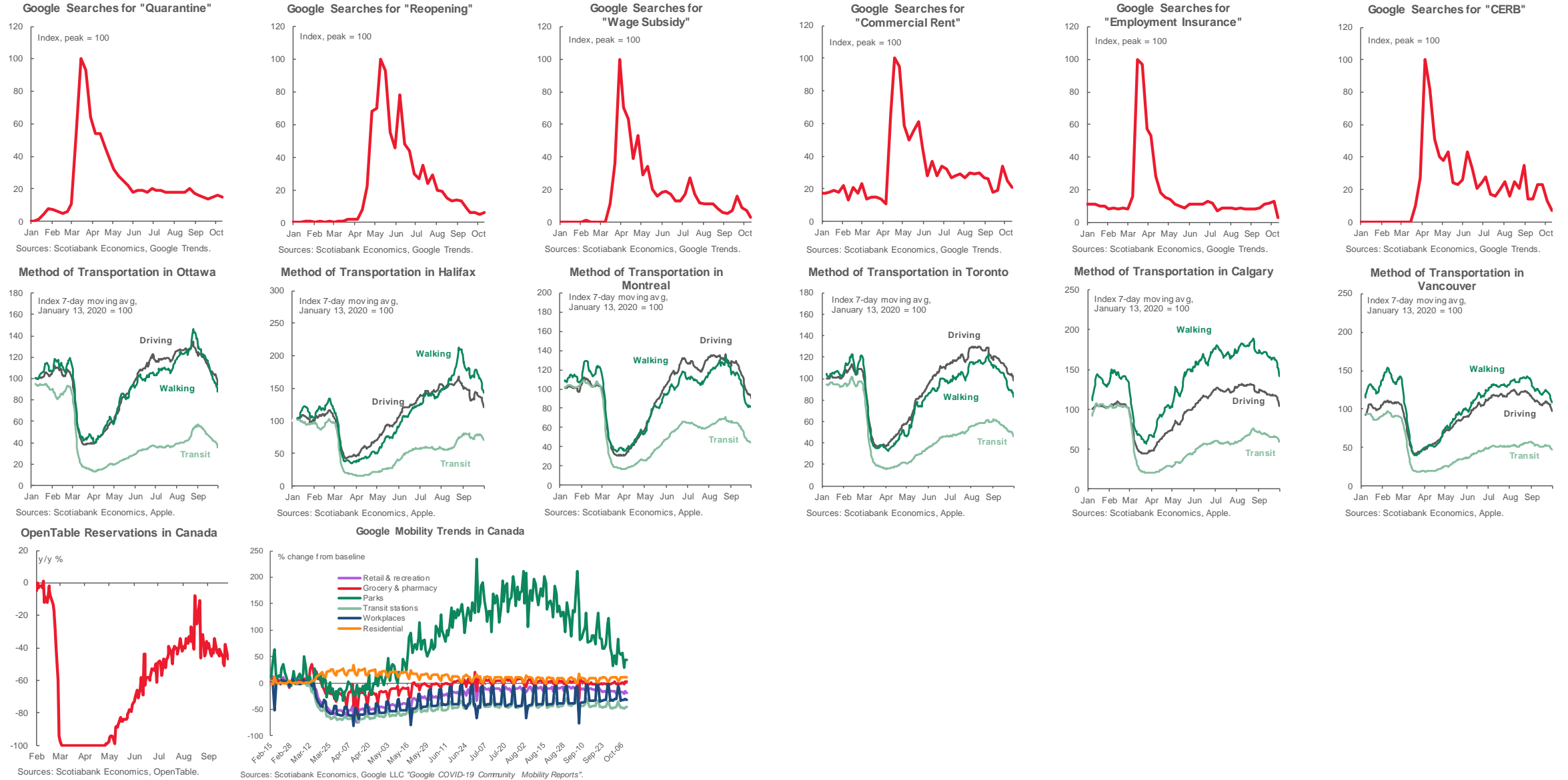
Chart 18



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.