



Tracking the Canadian Economy through COVID-19: Insights from customer transactions - June 25, 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:

- Business transactions updated to June 18th still running close to the levels of 2019:
 - Incoming transactions via automated funds transfer (AFT) have been just below the 2019 comparison, as higher retail and wholesale payments were offset by the weakness in transportation and manufacturing industries.
 - While overall outgoing payments have reached the levels of last year, payroll deposits and rent payments have not picked up and remain weak.
- Consumer transactions stayed above the levels of 2019 through June 22nd:
 - Automotive, clothing and health-related card spending, having declined significantly in March, have now reached the levels of a year ago.
 - Spending on entertainment started to improve relative to a year ago in the third week of June, while travel continues to be depressed.
 - Some caution is warranted in interpreting the data. First, some of the improvement in card spending is likely due to substitution away from cash. In addition, more recently the base effects boost year-on-year growth due to the volume of transactions slowing in early June of 2019.

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 automatic 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

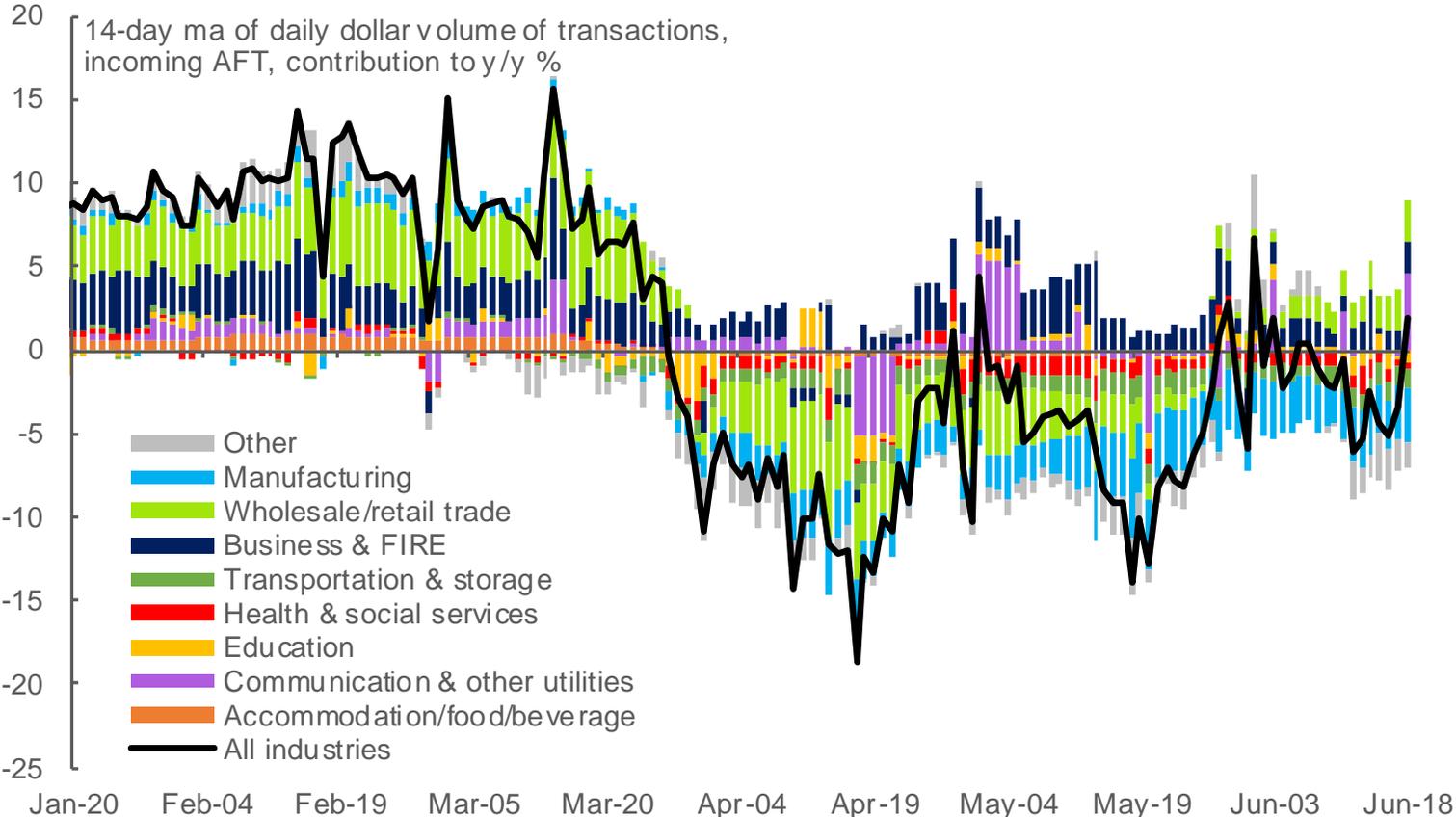
There are important caveats to analysis based on the payments data:

- 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: Growth in Incoming Payments Just Below 2019 Levels

- Automated Funds Transfers (AFT) are used for:
 - rent and mortgage payments;
 - payroll deposits; and
 - other bills.
- Incoming transactions have been just below the 2019 levels since early June (Chart 1):
 - Higher retail and wholesale payments were offset by the weakness in transportation and manufacturing industries (see Charts 2-6).

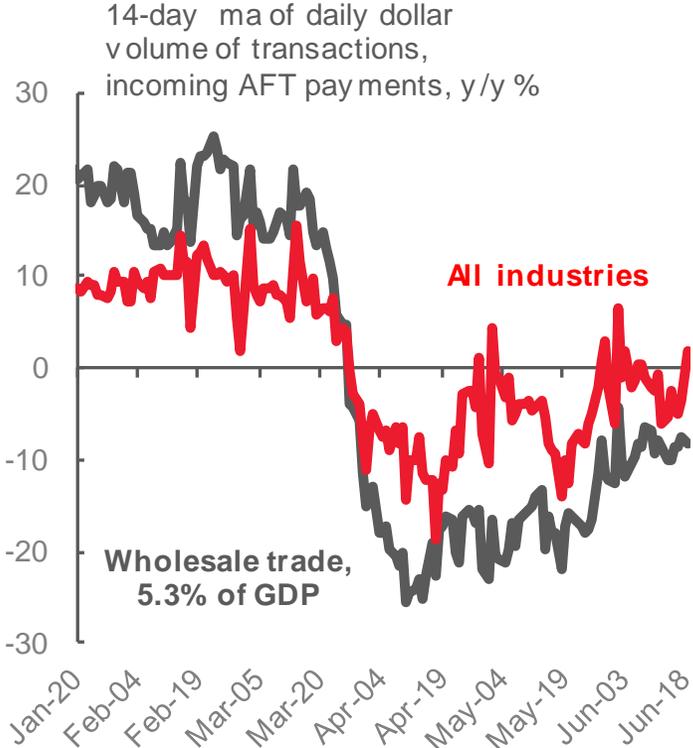
Chart 1



Sources: Scotiabank Economics, Data Science and Analytics.

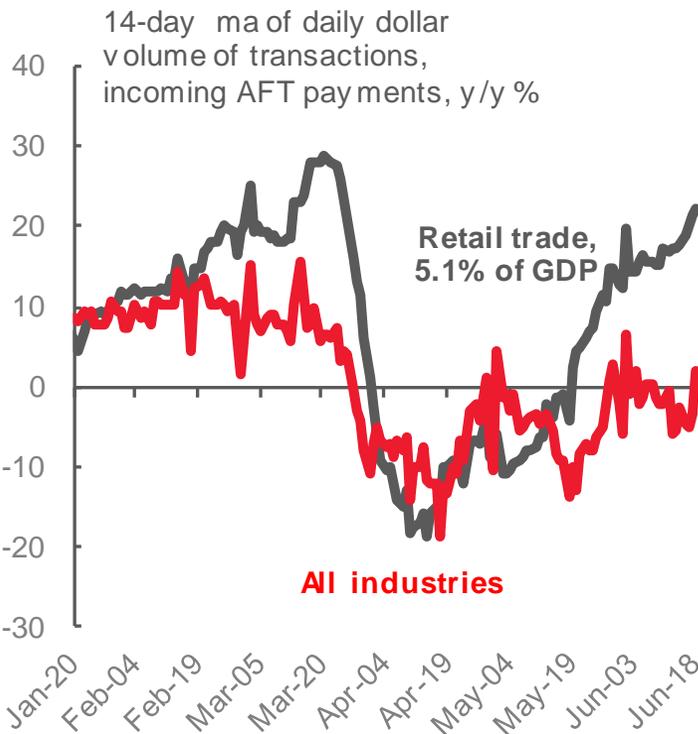
3. Business Transactions Data: Retail and Wholesale Trade Rise

Chart 2



Sources: Scotiabank Economics, Data Science and Analytics.

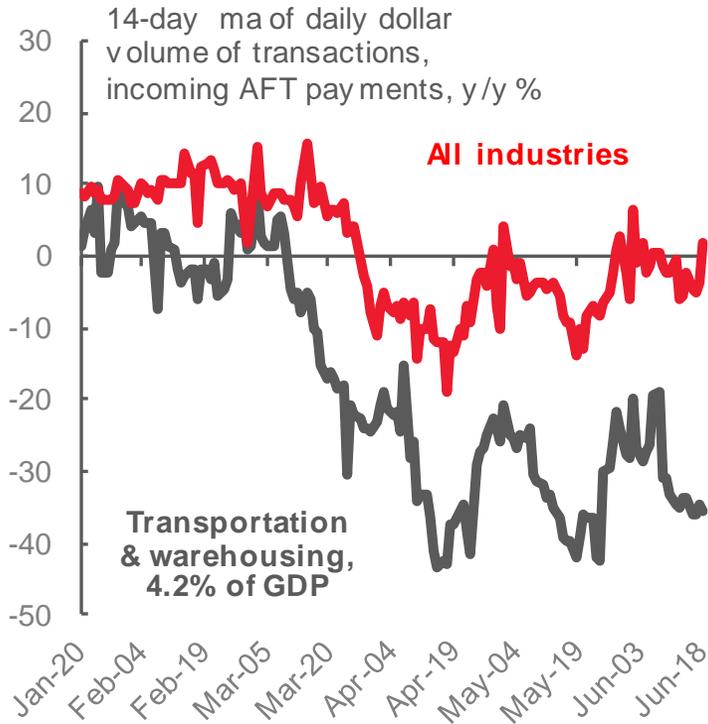
Chart 3



Sources: Scotiabank Economics, Data Science and Analytics.

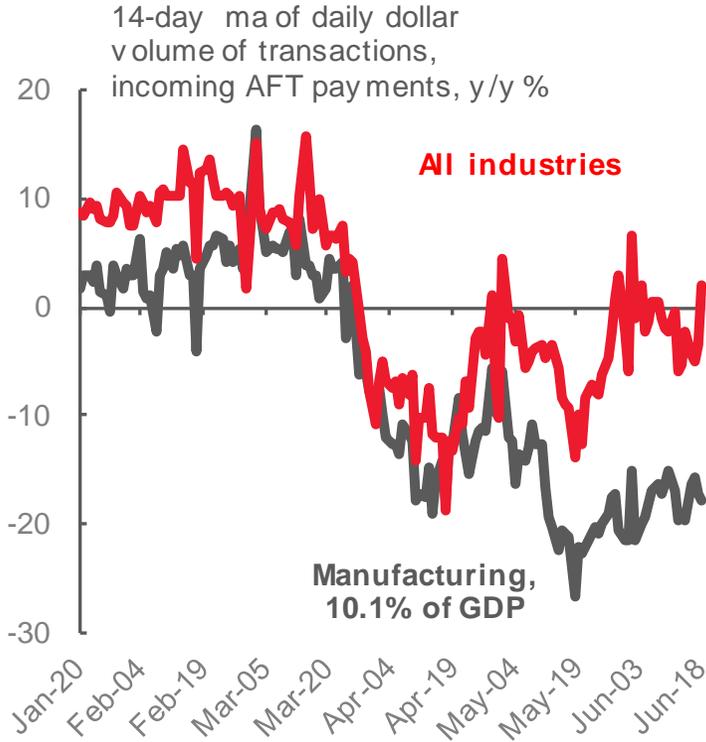
3. Business Transactions Data: Manufacturing and Transportation Weak

Chart 4



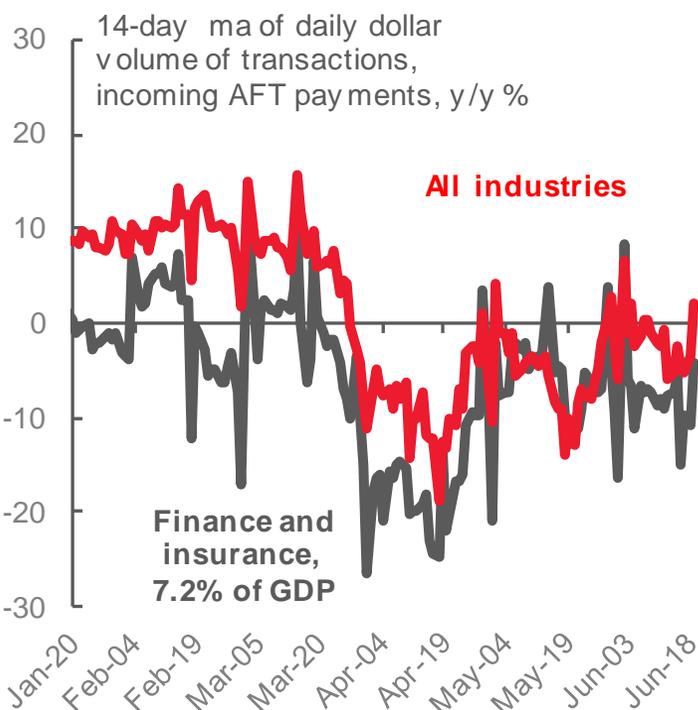
Sources: Scotiabank Economics, Data Science and Analytics.

Chart 5



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 6

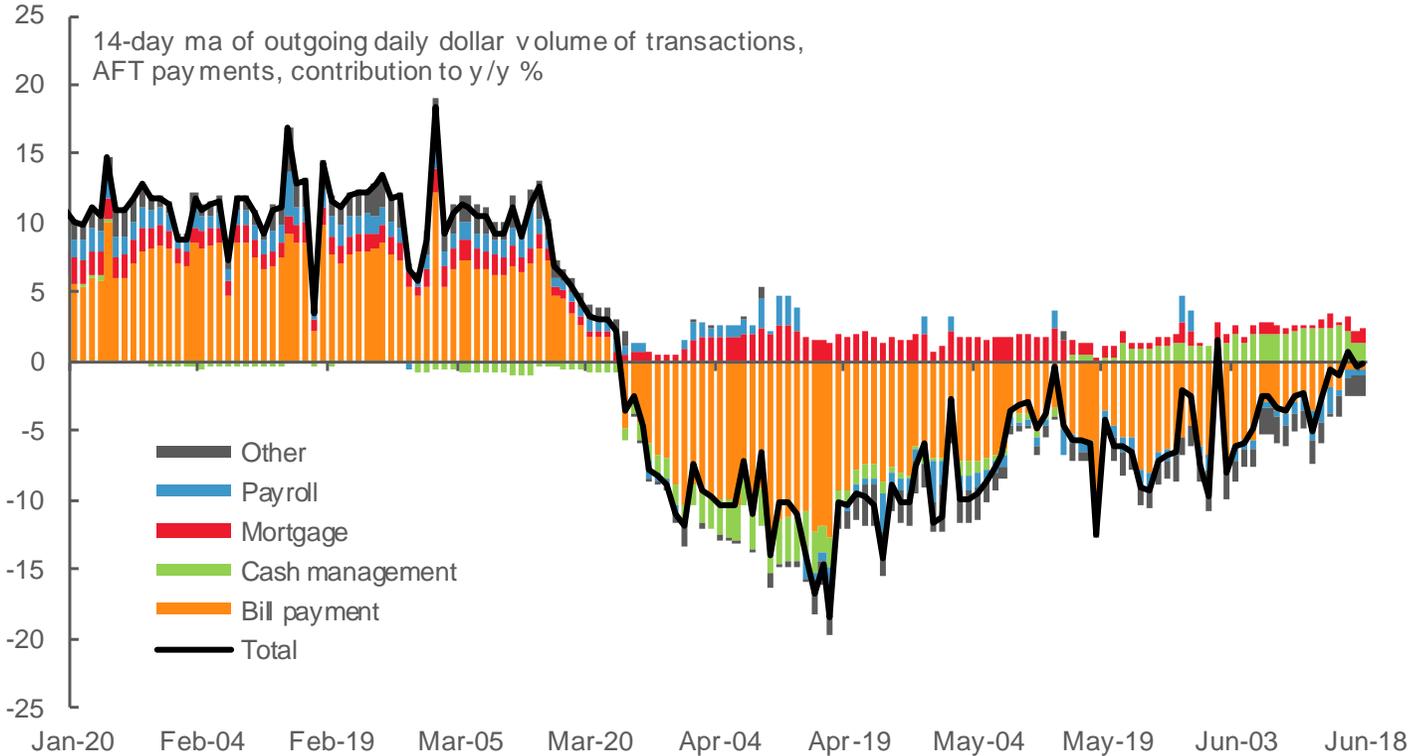


Sources: Scotiabank Economics, Data Science and Analytics.

3. Business Transactions Data: Outgoing Bill Payments Rise to 2019 Levels

- Outgoing AFT payments in the past few weeks were comparable to 2019 (Chart 7):
 - General bill payments finally reach the levels of 2019, while payments related to cash management continue to run above last year's levels, in line with firms' prioritizing liquidity in the current environment;
 - Nevertheless, payroll deposits and rent payments have remained weak relative to last year since late-March (Charts 8 and 9).

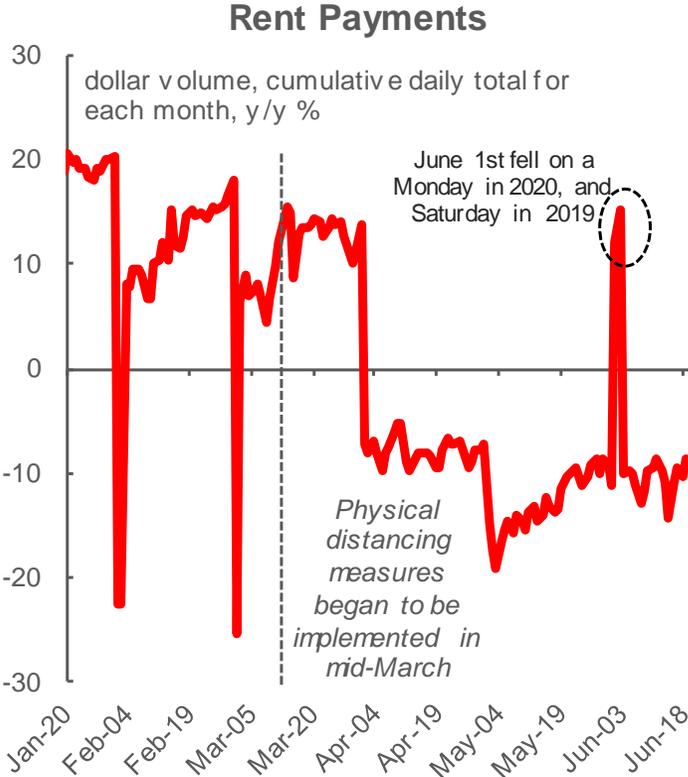
Chart 7



Sources: Scotiabank Economics, Data Science and Analytics.

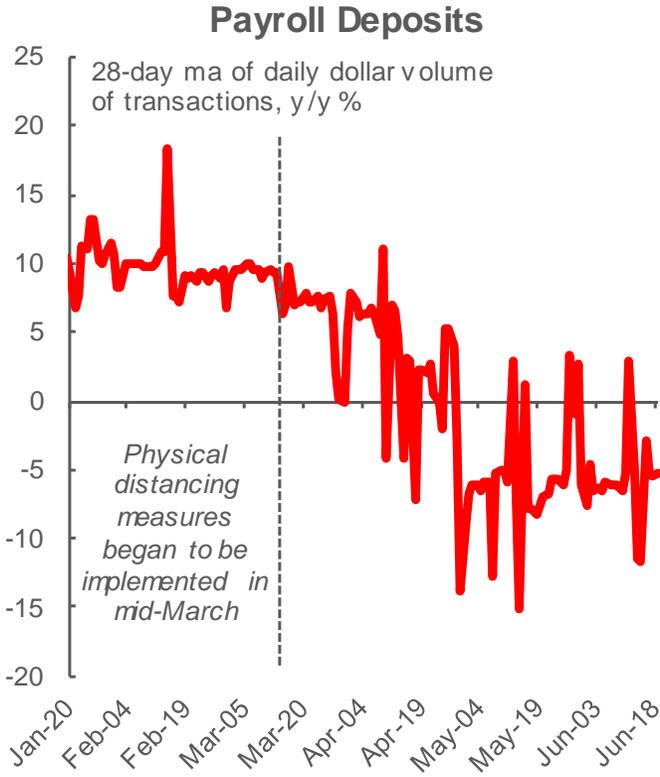
3. Business Transactions Data: Rent/Payrolls Still Weak in June

Chart 8



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 9

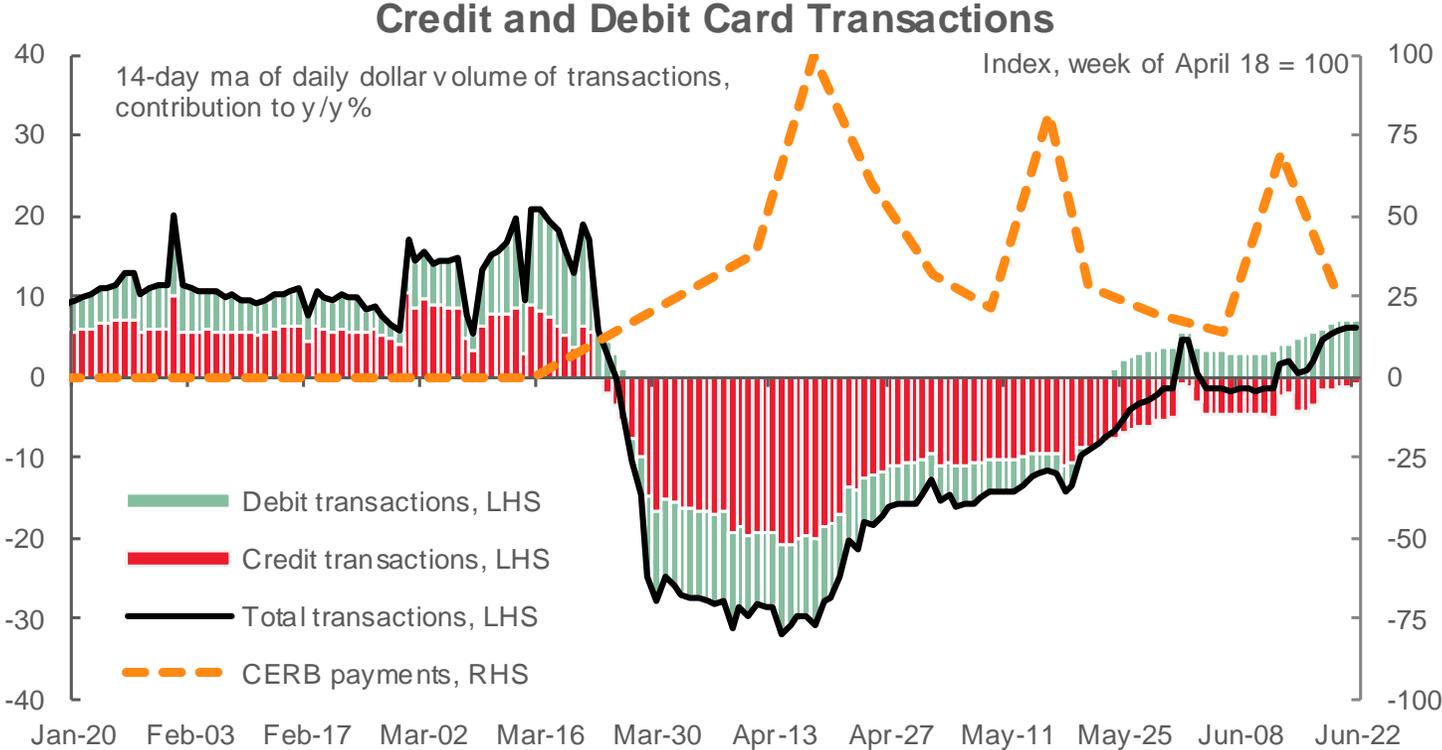


Sources: Scotiabank Economics, Data Science and Analytics.

4. Retail Transactions Data: Card Spending Shows Tentative Turnaround

- Card spending shows a turnaround since late May, currently running above the levels of last year (Chart 10):
 - Both debit and credit card spending have improved since the trough in April, although credit card spending still lags.
- Some caution is warranted in interpreting the data.
 - First, some of the improvement in card spending is likely due to substitution away from cash.
 - In addition, more recently the base effects boosted year-on-year growth due to the volume of transactions slowing in early June of 2019.

Chart 10

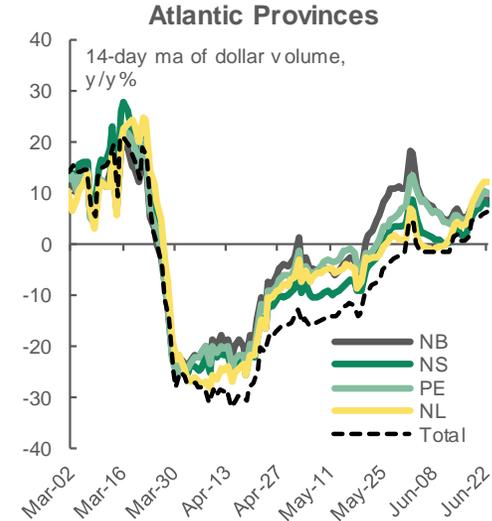


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Pace of Recovery Broadly Consistent across Provinces

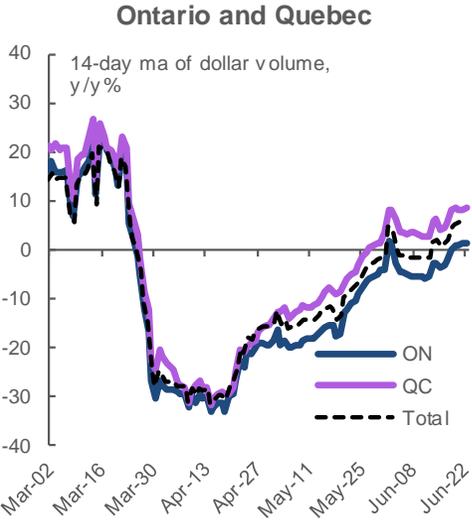
- Province-level data shows a consistent trend across provinces.
- Card spending in Atlantic provinces increased in line with average Canada-wide spending in the second half of June (Charts 11 and 13).
- Card spending in Quebec continued to outpace Ontario, but the recent announcement of the Phase 2 re-opening in GTA should help boost growth in Ontario (Chart 12).

Chart 11



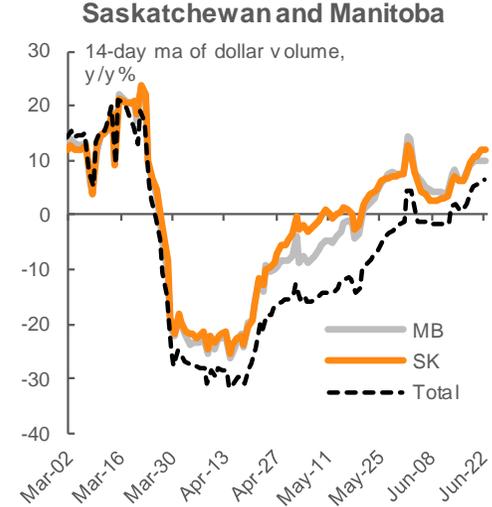
Sources: Scotiabank Economics, Data Analytics.

Chart 12



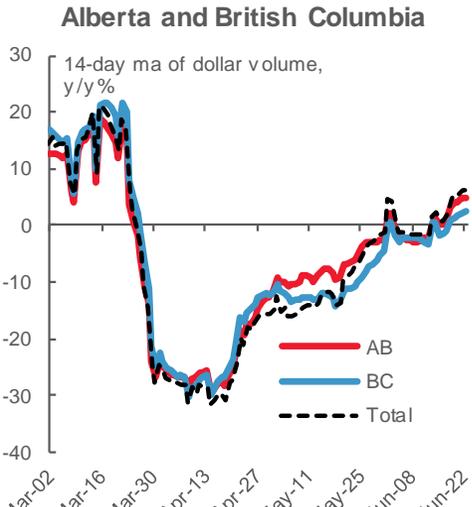
Sources: Scotiabank Economics, Data Analytics.

Chart 13



Sources: Scotiabank Economics, Data Analytics.

Chart 14

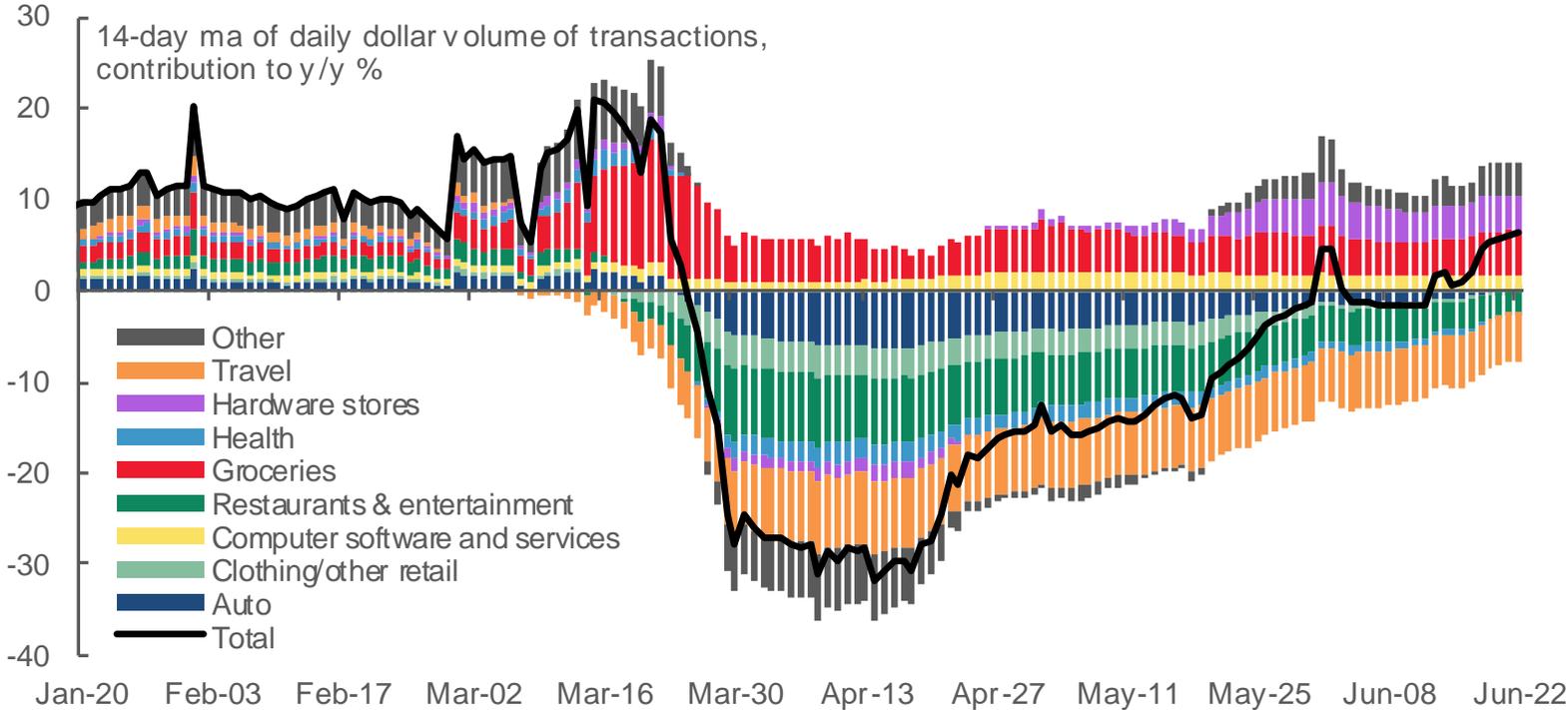


Sources: Scotiabank Economics, Data Analytics.

4. Retail Transactions Data: Overall Spending Slightly Above Last Year

- By merchant category, rising spending in the categories that were most negatively affected in the March-April period explains the recent pickup in y/y growth in total spending (Chart 15).

Chart 15

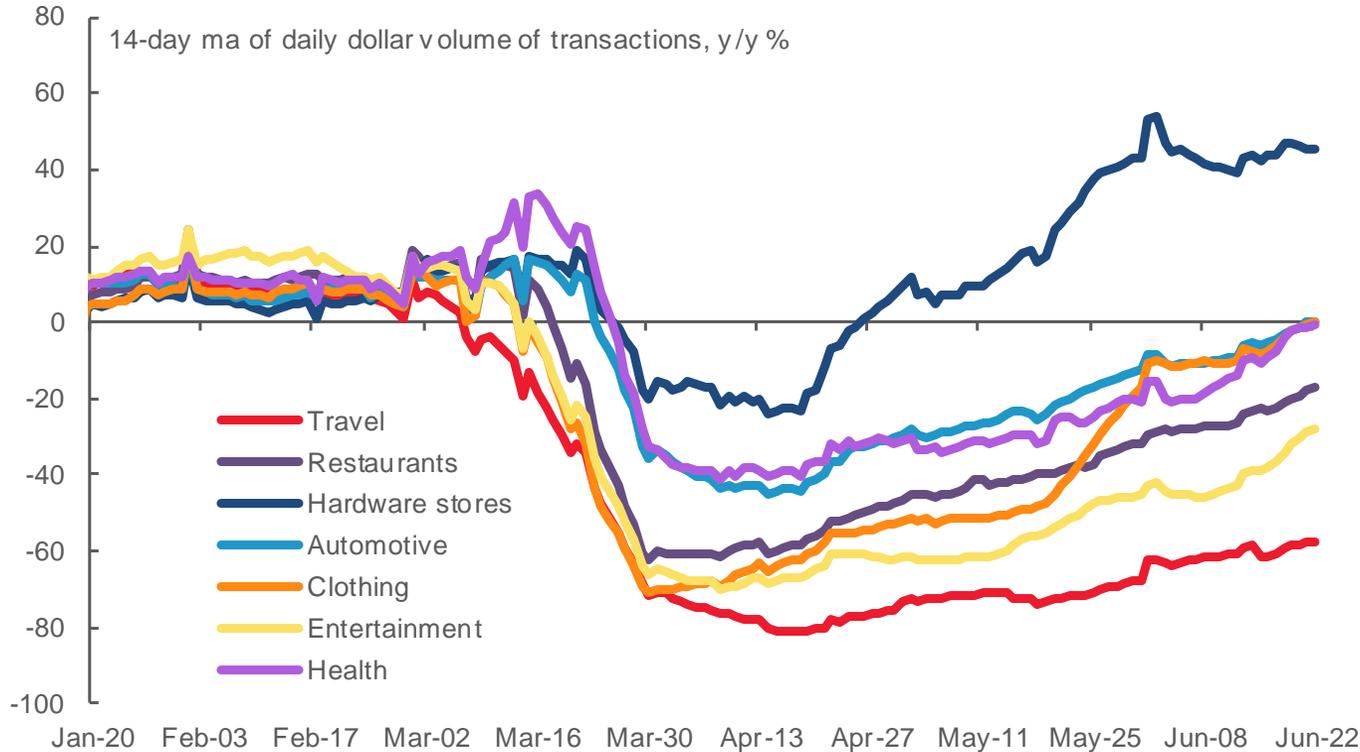


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Those Most Affected See Better Spending Recently

- In y/y growth terms (Chart 16) some merchants now see card spending comparable to 2019:
 - Automotive, clothing and health-related card spending, having declined significantly in March, has now reached the levels of a year ago.
 - Spending on entertainment started to improve significantly in the third week of June, while travel continues to be depressed.

Chart 16

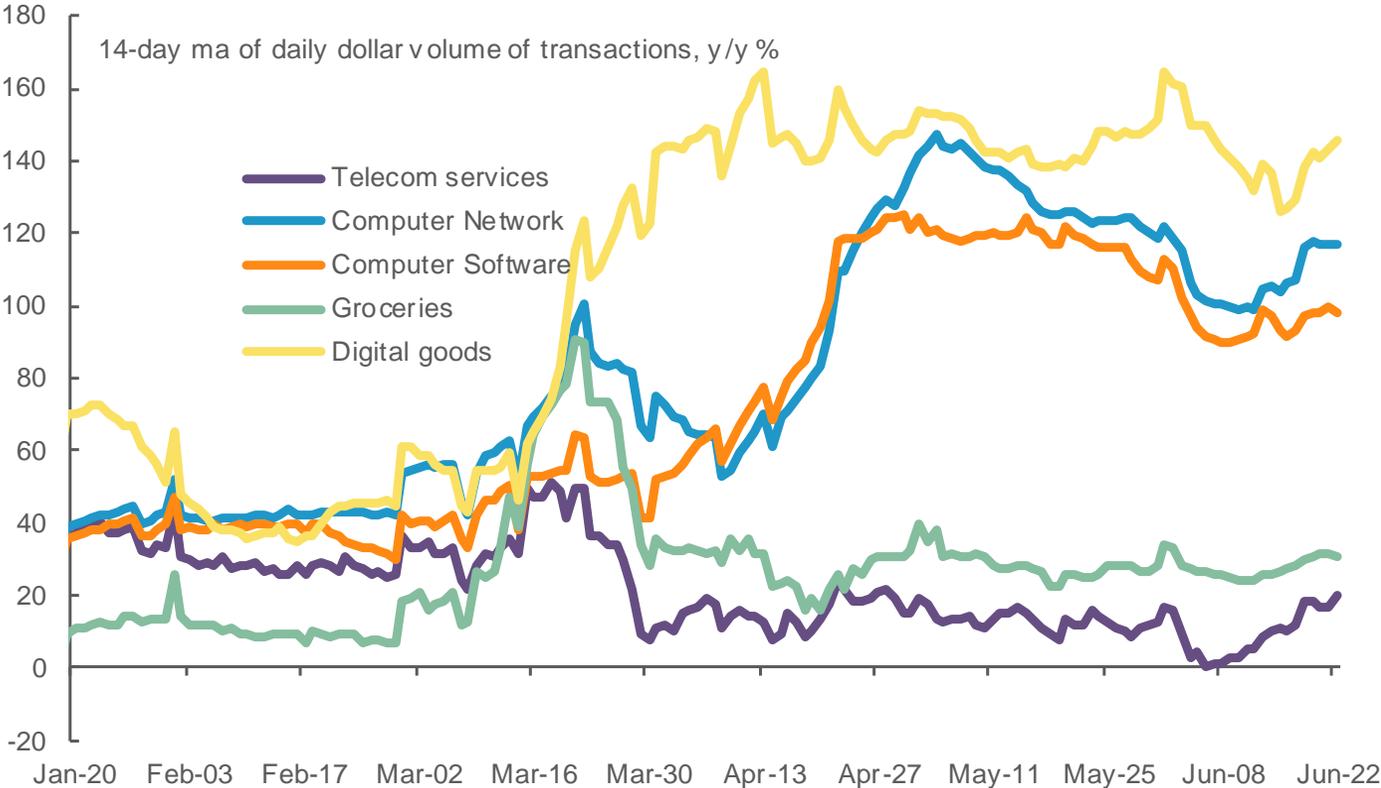


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

4. Retail Transactions Data: Winners of Homebound Work and Play

- Merchant categories that benefited from consumers staying at home saw growth stabilize more recently (Chart 17).

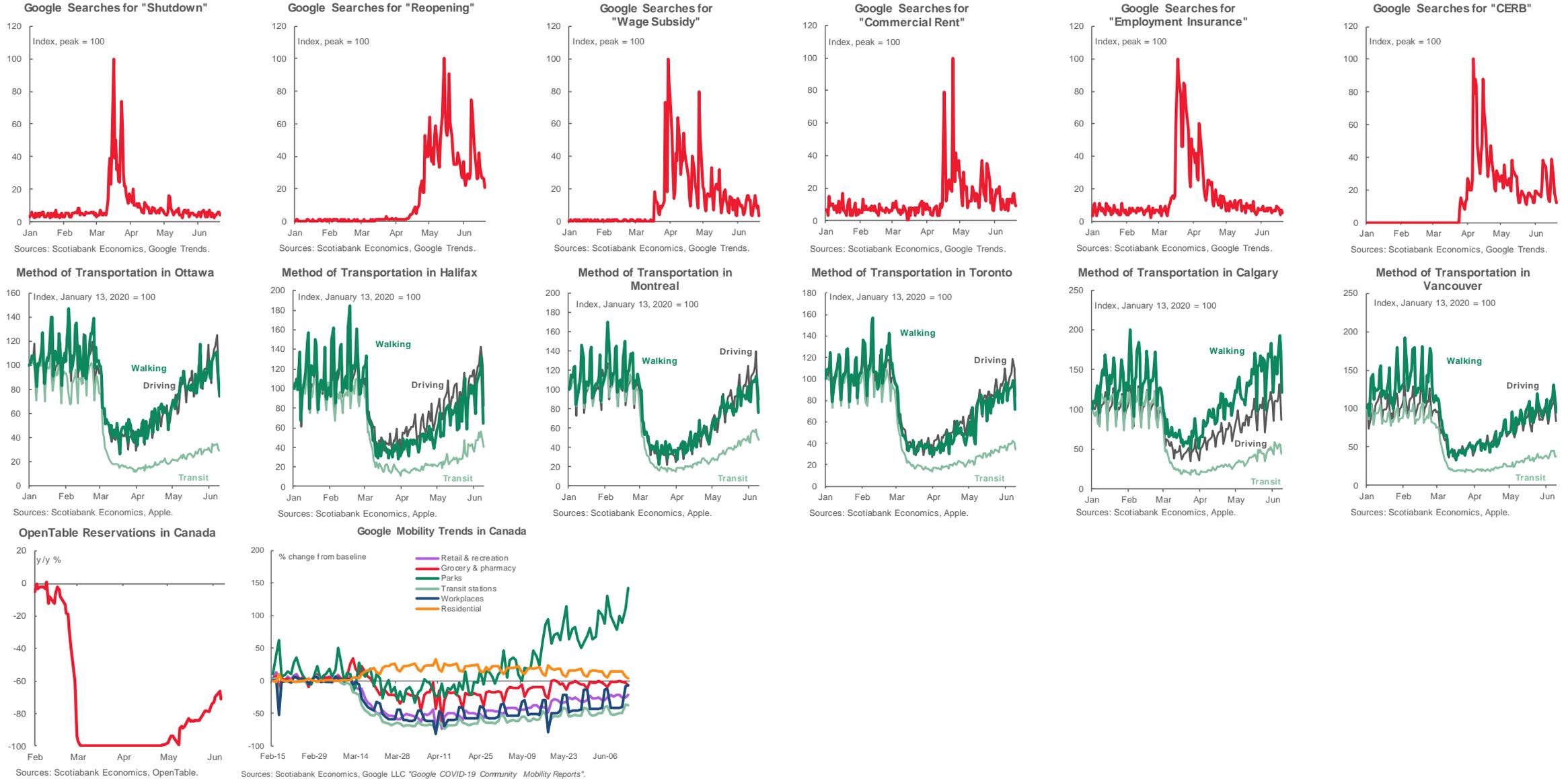
Chart 17



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



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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.