



# Tracking the Canadian Economy through COVID-19: Insights from customer transactions - June 18, 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
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# 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:

- Business transactions updated to June 11<sup>th</sup> include data revisions that put the volumes more in line with levels of 2019:
  - Incoming transactions via automated funds transfer (AFT) have been running at the levels of 2019 since late-May, mostly driven by higher retail and wholesale payments.
  - In contrast, transportation and manufacturing industries have not shown signs of improvement yet.
  - Looking through seasonal volatility, outgoing payments show payroll deposits and rent payments remaining weak relative to last year's levels.
- After running flat relative to 2019 totals, consumer transactions tentatively rose above those of 2019 through June 15<sup>th</sup>:
  - Part of the increase in volumes is explained by base effects (i.e. transactions in 2019 slowed in early June).
  - Automotive, clothing and health-related spending reached 2019 levels, recovering from dramatic declines in March and April.
  - Across provinces the extent of economic restrictions and re-opening plans differ, reflected in differing dynamics of consumer transactions.

## 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 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

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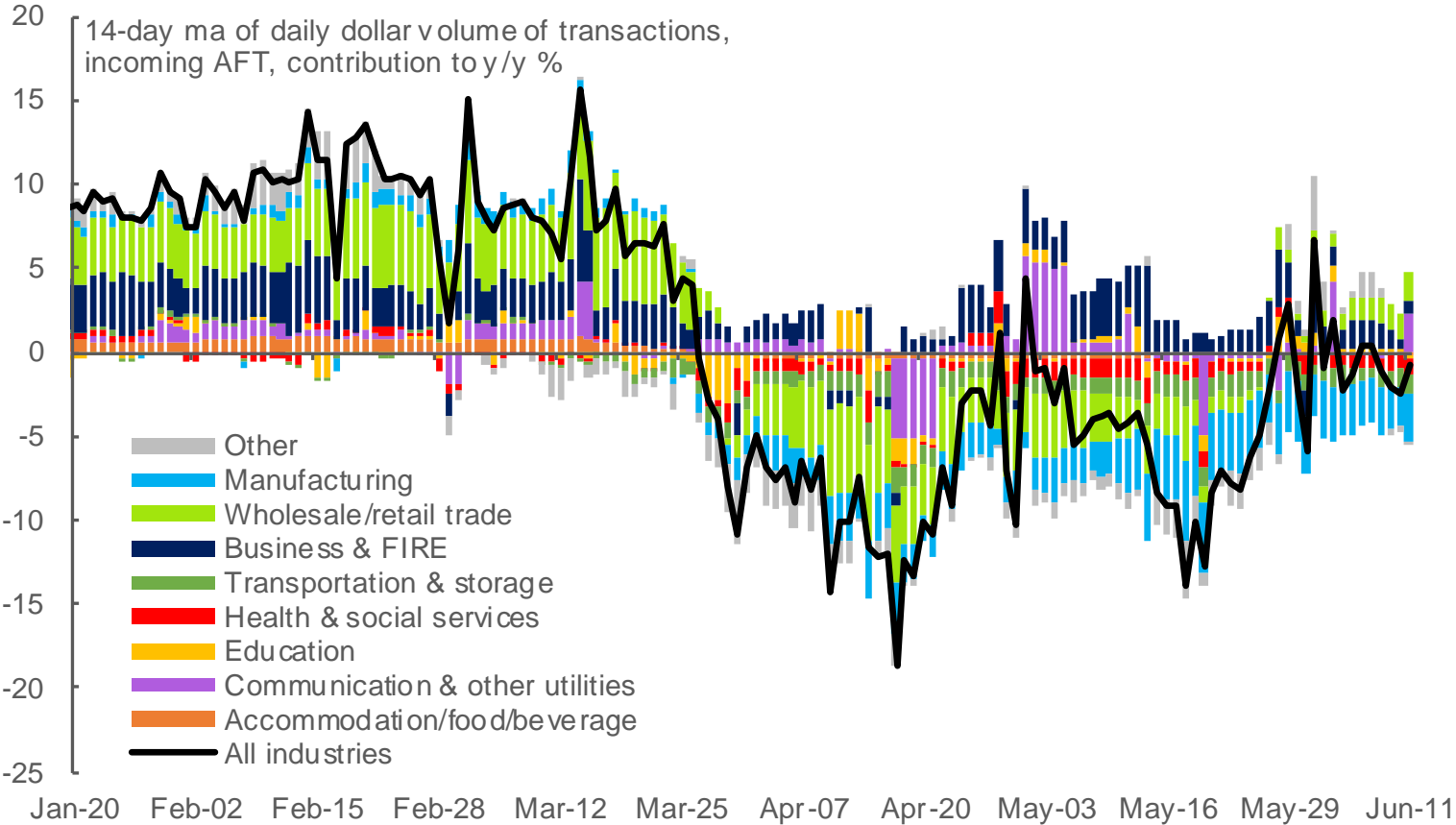
There are important caveats to analysis based on the payments data:

- 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: Growth in Incoming Payments Flat Recently

- Automated Funds Transfer (AFT) are used for:
  - rent and mortgage payments;
  - payroll deposits; and
  - other bills.
- The incoming volume of payments has been running at levels of 2019 since late-May, newly revised data show (Chart 1):
  - Higher transactions in retail and wholesale industries were the main drivers and mirror gradually lifting economic restrictions.
  - In contrast, transportation and manufacturing industries have not shown signs of improvement yet (Charts 2-6).

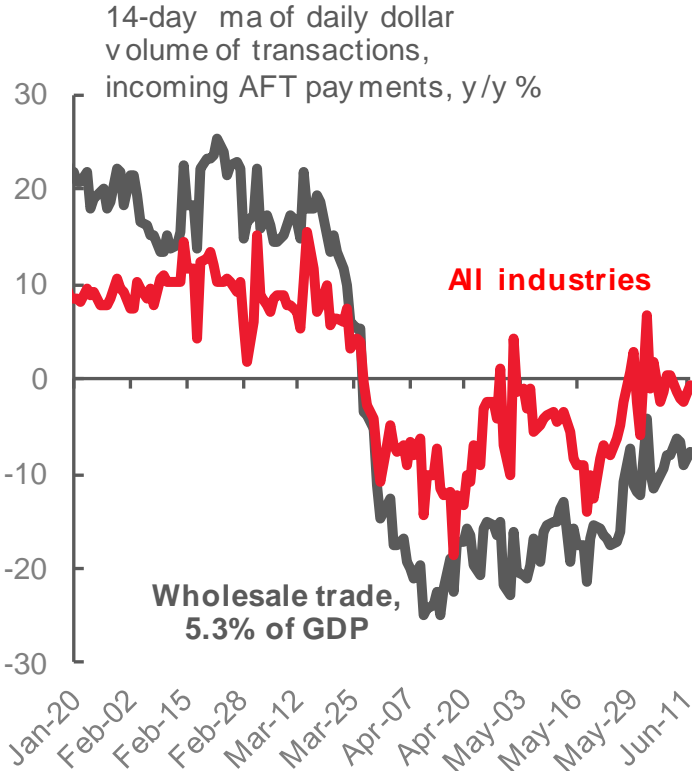
Chart 1



Sources: Scotiabank Economics, Data Science and Analytics.

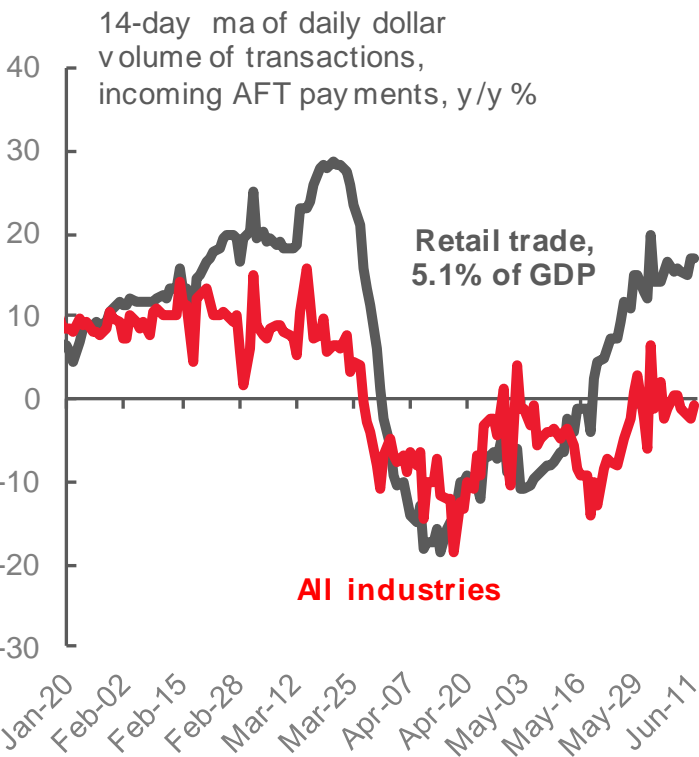
# 3. Business Transactions Data: Industries Show Large Declines

Chart 2



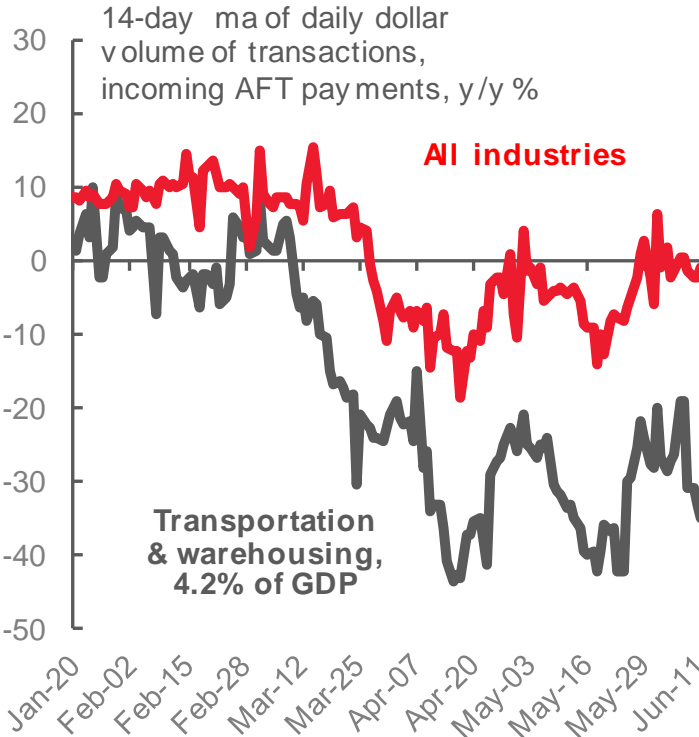
Sources: Scotiabank Economics, Data Science and Analytics.

Chart 3



Sources: Scotiabank Economics, Data Science and Analytics.

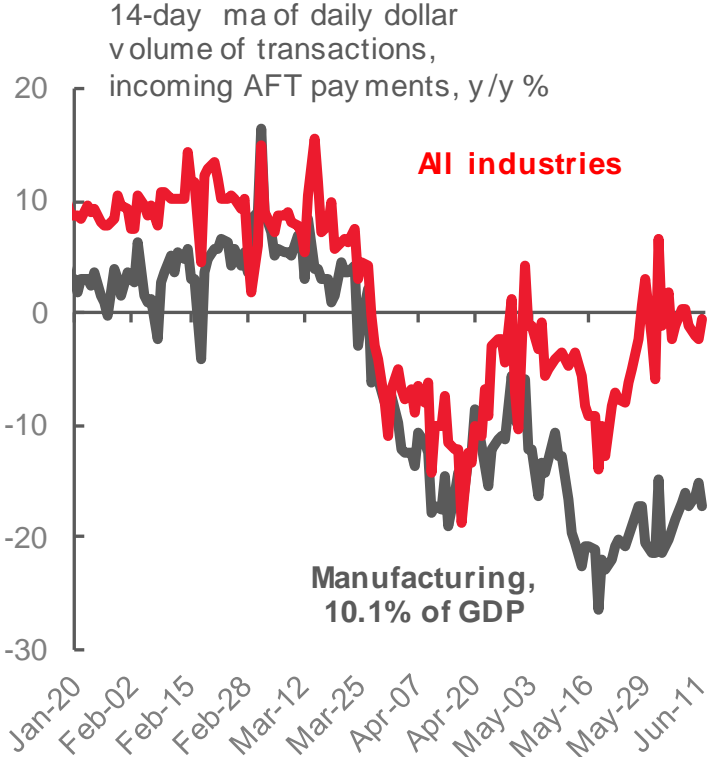
Chart 4



Sources: Scotiabank Economics, Data Science and Analytics.

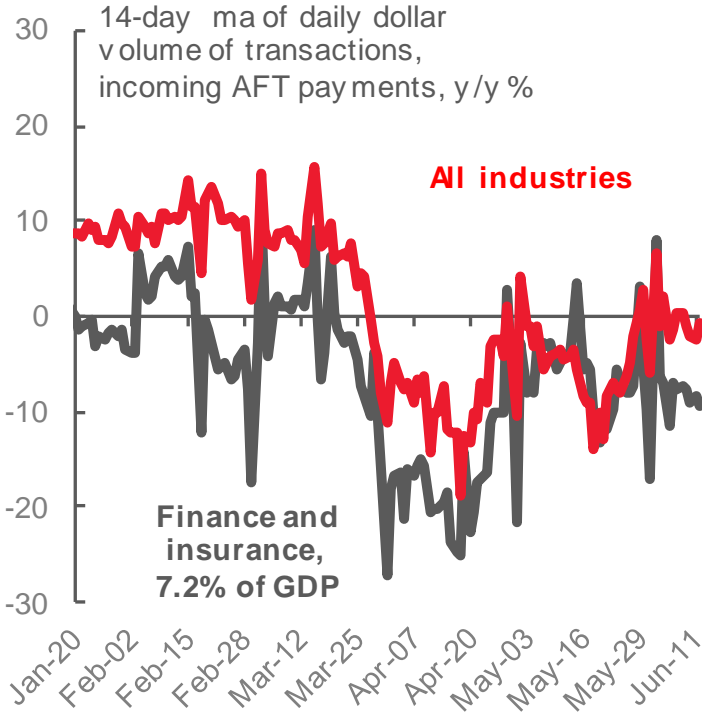
# 3. Business Transactions Data: Industries Show Large Declines, Uneven Improvement

Chart 5



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 6



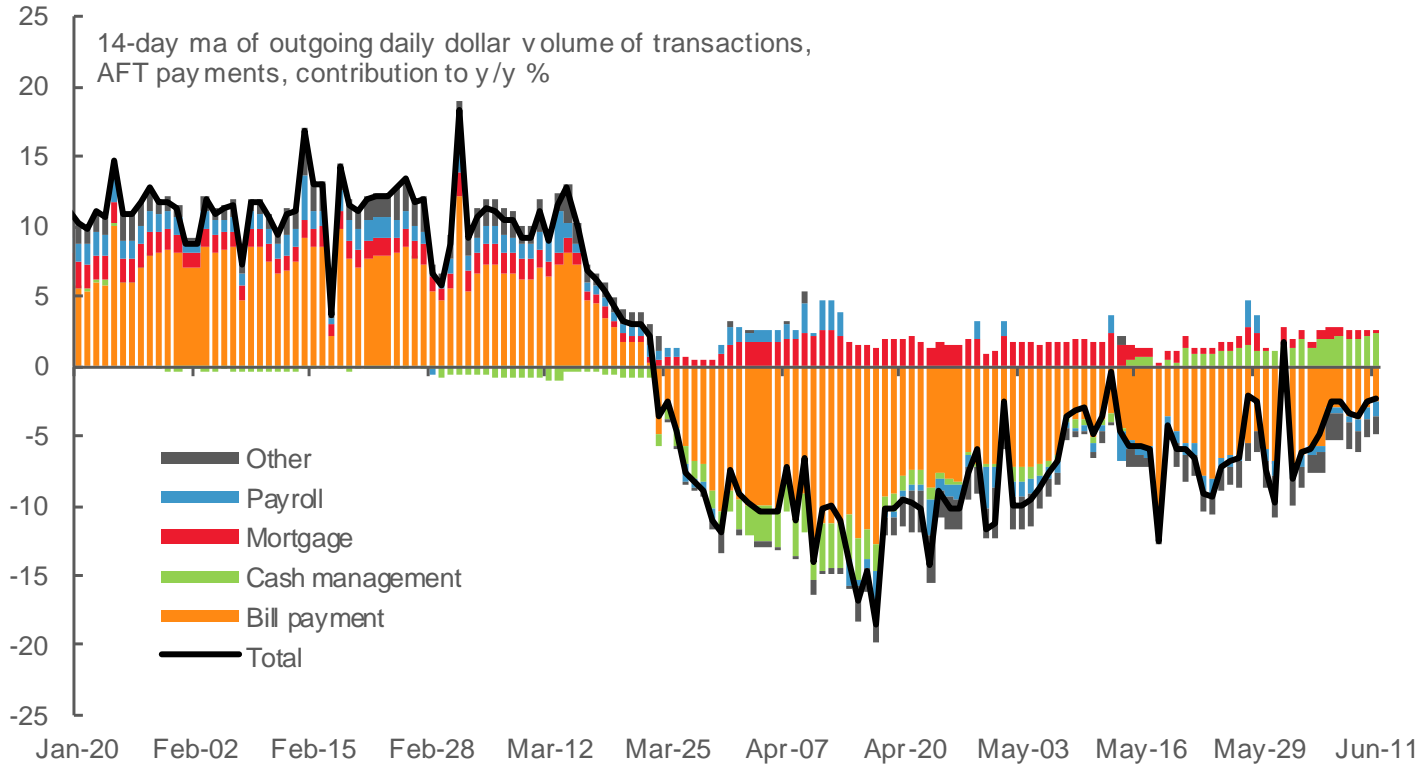
Sources: Scotiabank Economics, Data Science and Analytics.



# 3. Business Transactions Data: Outgoing Bill Payments Decline, Recover Slowly

- Outgoing AFT payments continue to run below levels of last year (Chart 7):
  - Transfers related to cash management have gradually risen since mid-May, in line with firms' prioritizing liquidity in the tough environment for business revenue;
  - Looking through seasonal volatility, payroll deposits and rent payments have remained weak relative to last year since late-March (Charts 8 and 9).

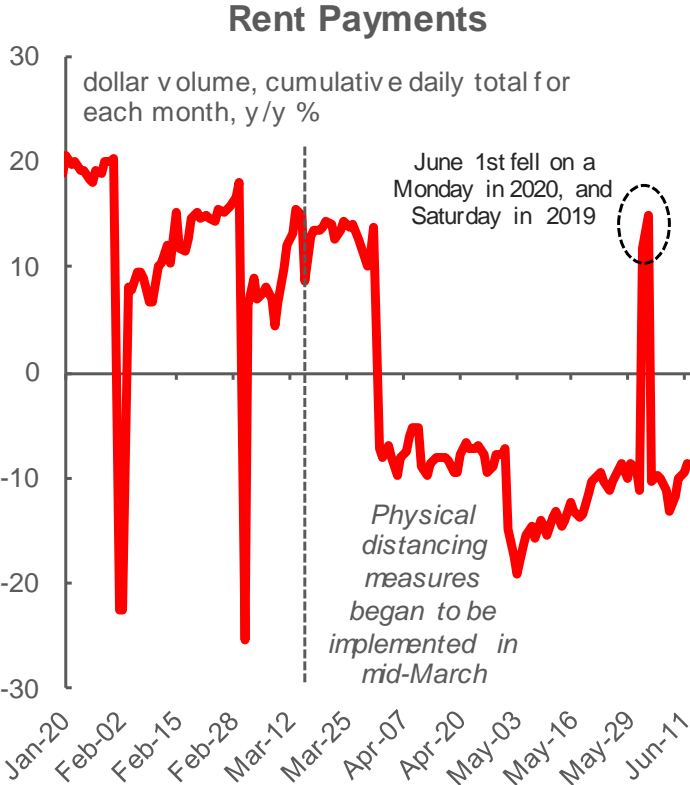
Chart 7



Sources: Scotiabank Economics, Data Science and Analytics.

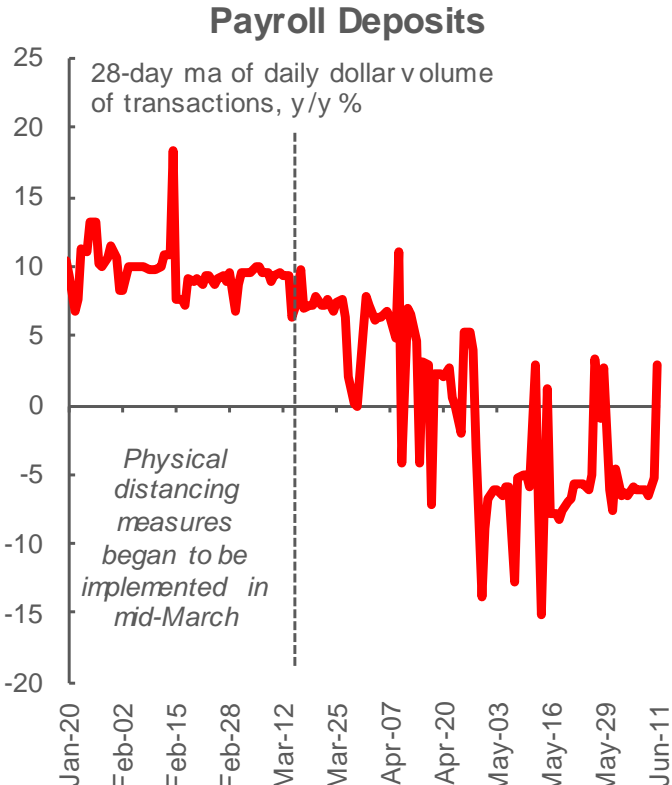
# 3. Business Transactions Data: Rent/Payrolls Still Weak in May

Chart 8



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 9

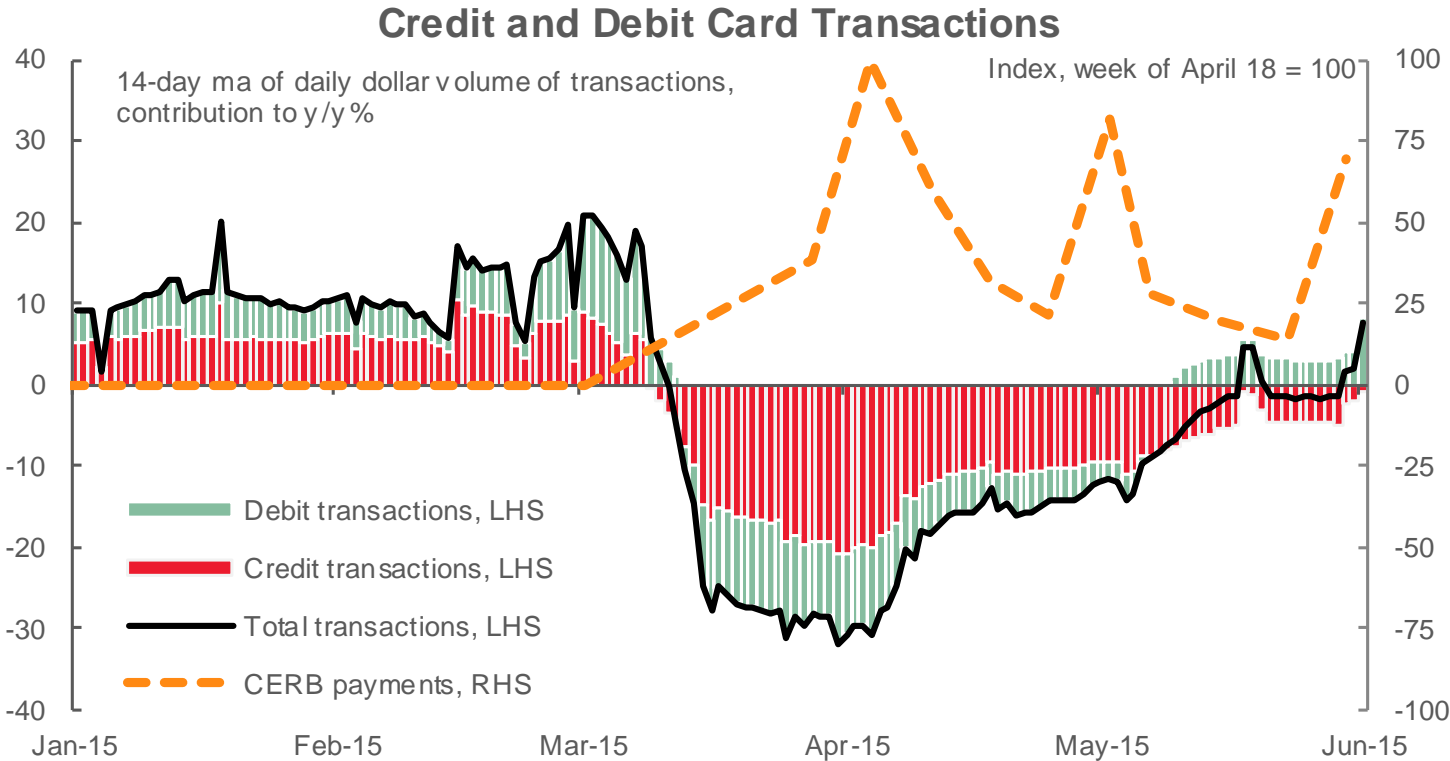


Sources: Scotiabank Economics, Data Science and Analytics.

# 4. Retail Transactions Data: Card Spending Shows Turnaround

- Physical distancing measures hit consumer spending hard.
- Since reaching the trough in late March debit and credit card spending clawed its way to the levels seen last year and is currently running above (Chart 10).
  - The recent rise relative to last year comes on the back of higher debit card spending and a tentative improvement in credit cards.
  - Base effects (lower June 2019 instead of higher June 2020) explain part of the rise relative to last year.

Chart 10

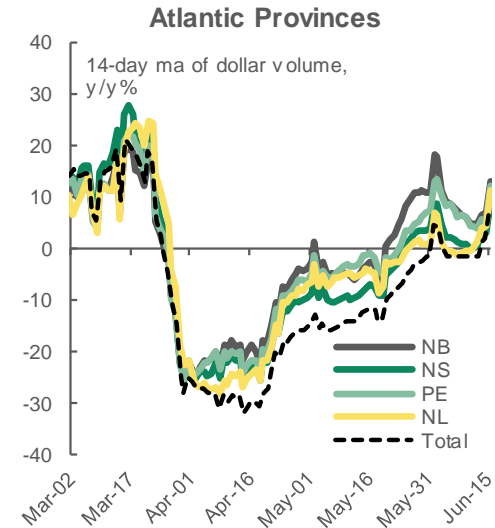


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

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

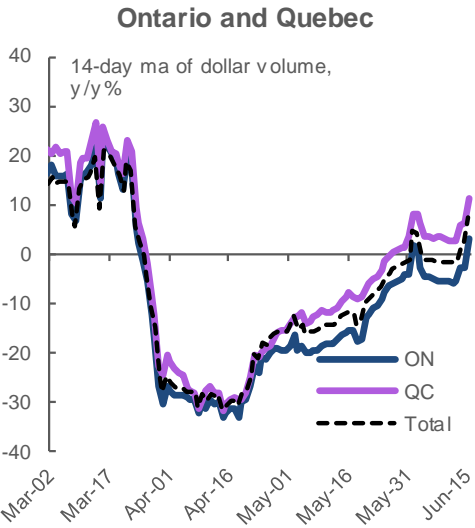
- Looking at province-level data shows small differences in the extent of economic restrictions and the pace of re-opening.
- Card spending in Atlantic provinces, Saskatchewan and Manitoba has declined slightly less compared to the average and has risen above 2019 levels in May (Charts 11 and 13).
- Quebec's more aggressive re-opening plan led to a faster rebound in total spending compared to Ontario after late April (Chart 12).
- Alberta and British Columbia are relatively in line in total spending growth recently (Chart 14).

Chart 11



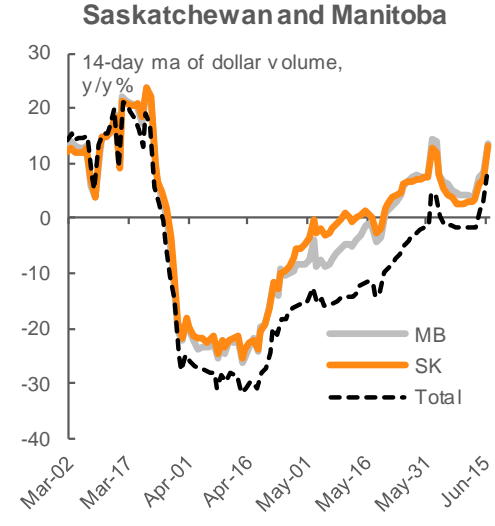
Sources: Scotiabank Economics, Data Analytics.

Chart 12



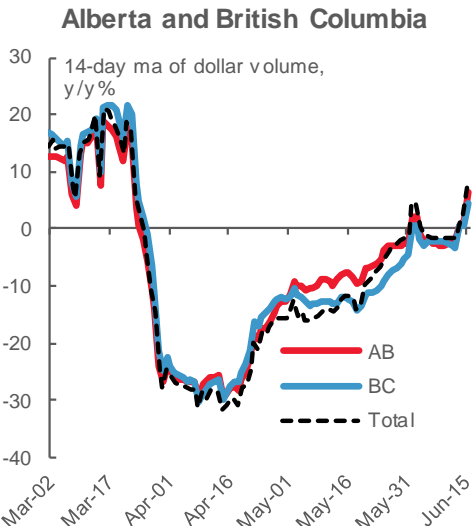
Sources: Scotiabank Economics, Data Analytics.

Chart 13



Sources: Scotiabank Economics, Data Analytics.

Chart 14

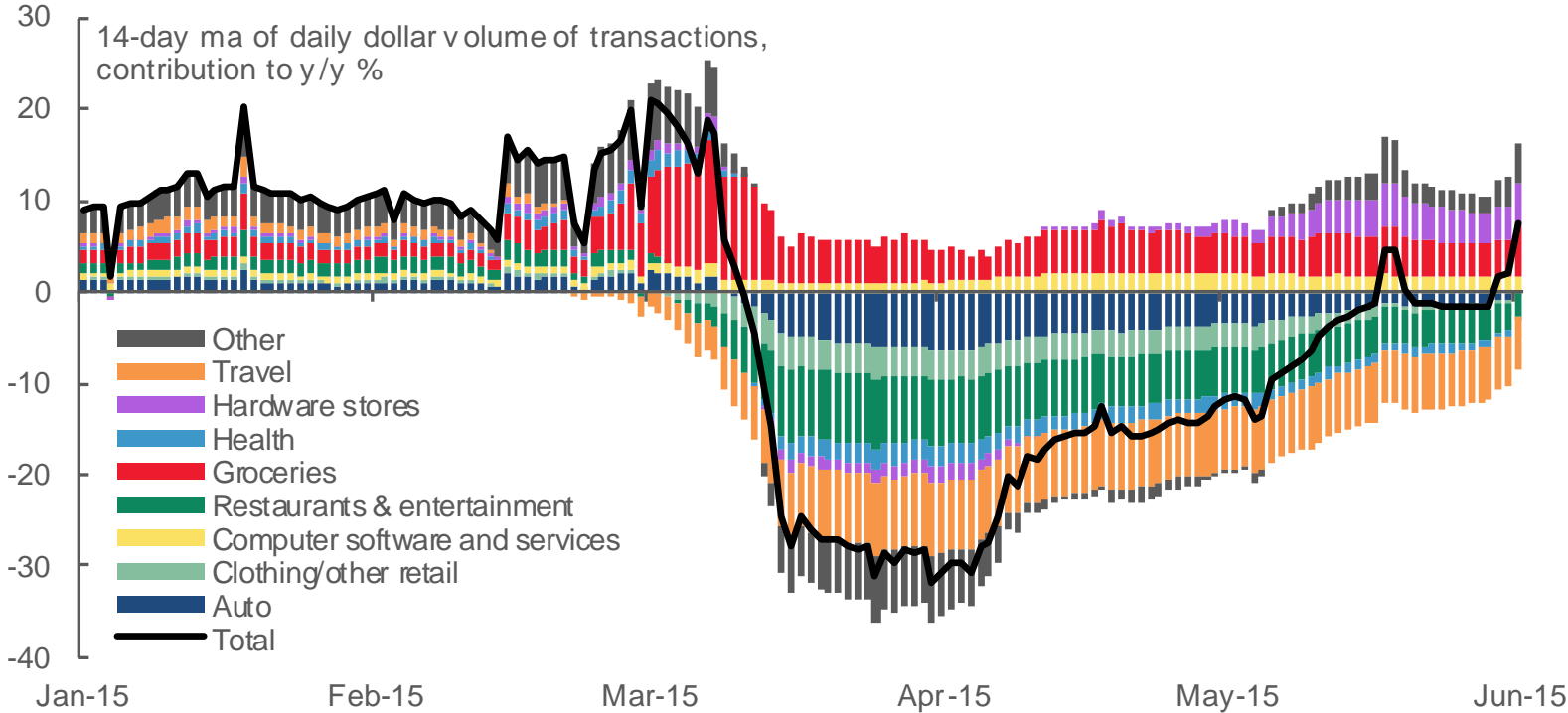


Sources: Scotiabank Economics, Data Analytics.

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

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

Chart 15

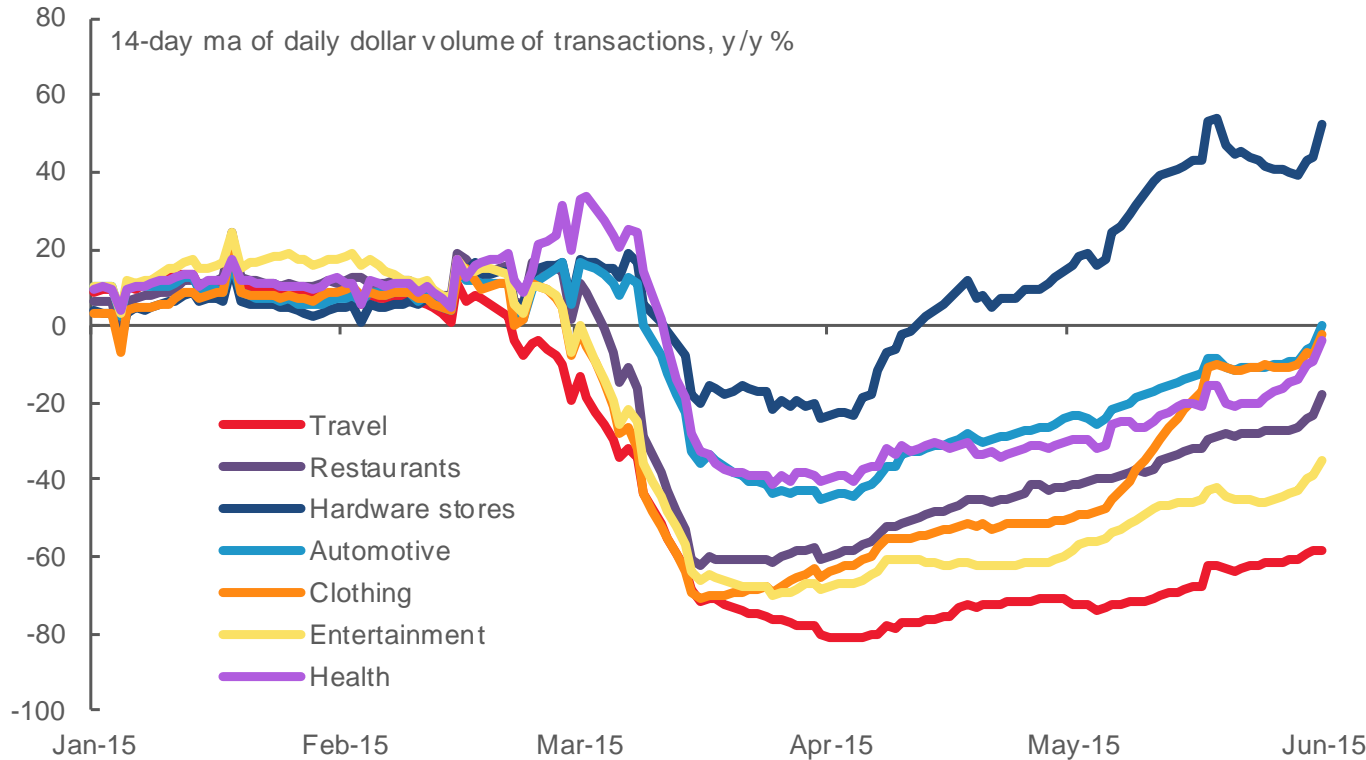


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 4. Retail Transactions Data: Those Most Affected see Growth Resume Recently

- In y/y growth terms (Chart 16) some merchants managed to reach the level of spending registered in 2019:
  - Automotive, clothing and health-related erased the gap with 2019 in mid-June.
  - Spending on travel-related products and services has not recovered so far with international travel still restricted.

Chart 16

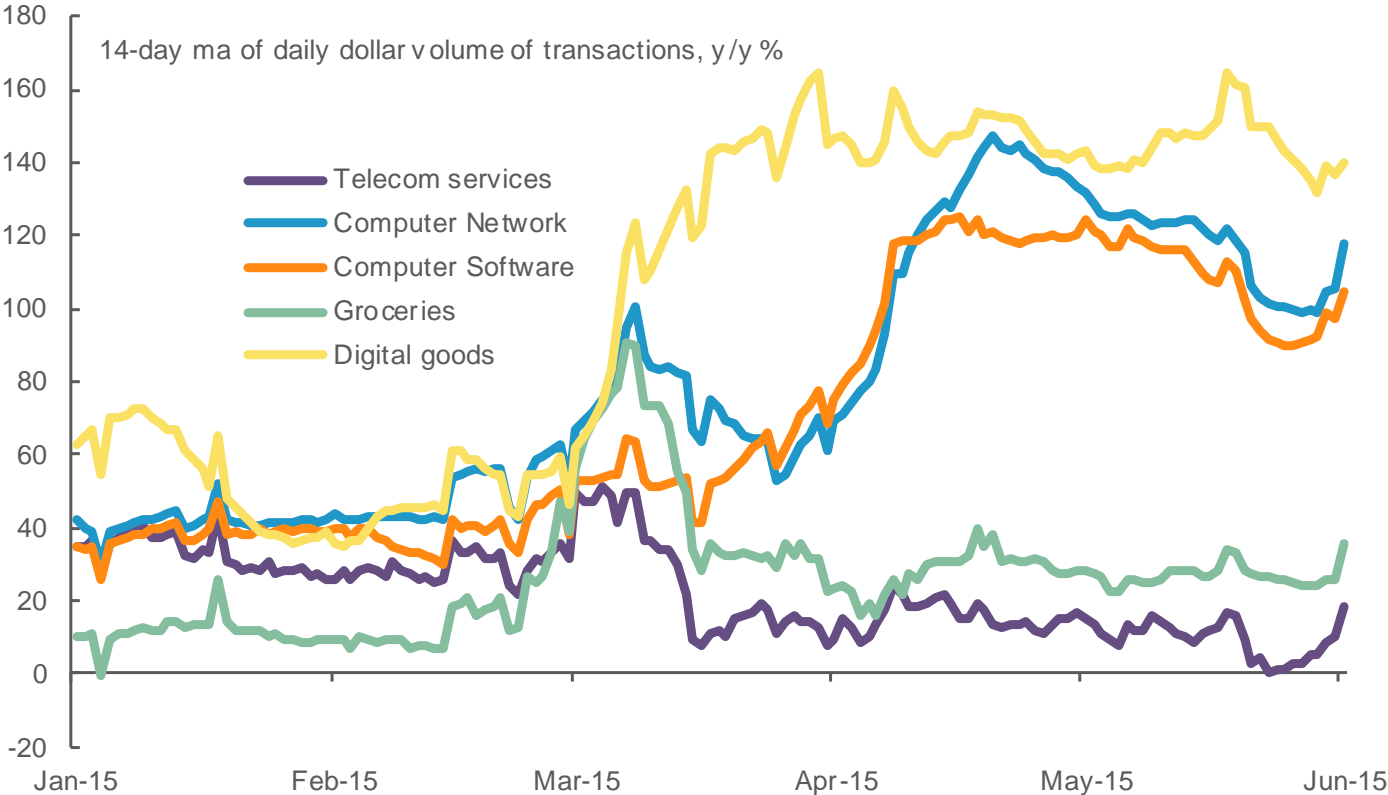


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

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

- Merchant categories that benefited from consumers staying at home saw stable or rising growth more recently (Chart 17):
  - Base effects could be explaining part of the pickup in growth.

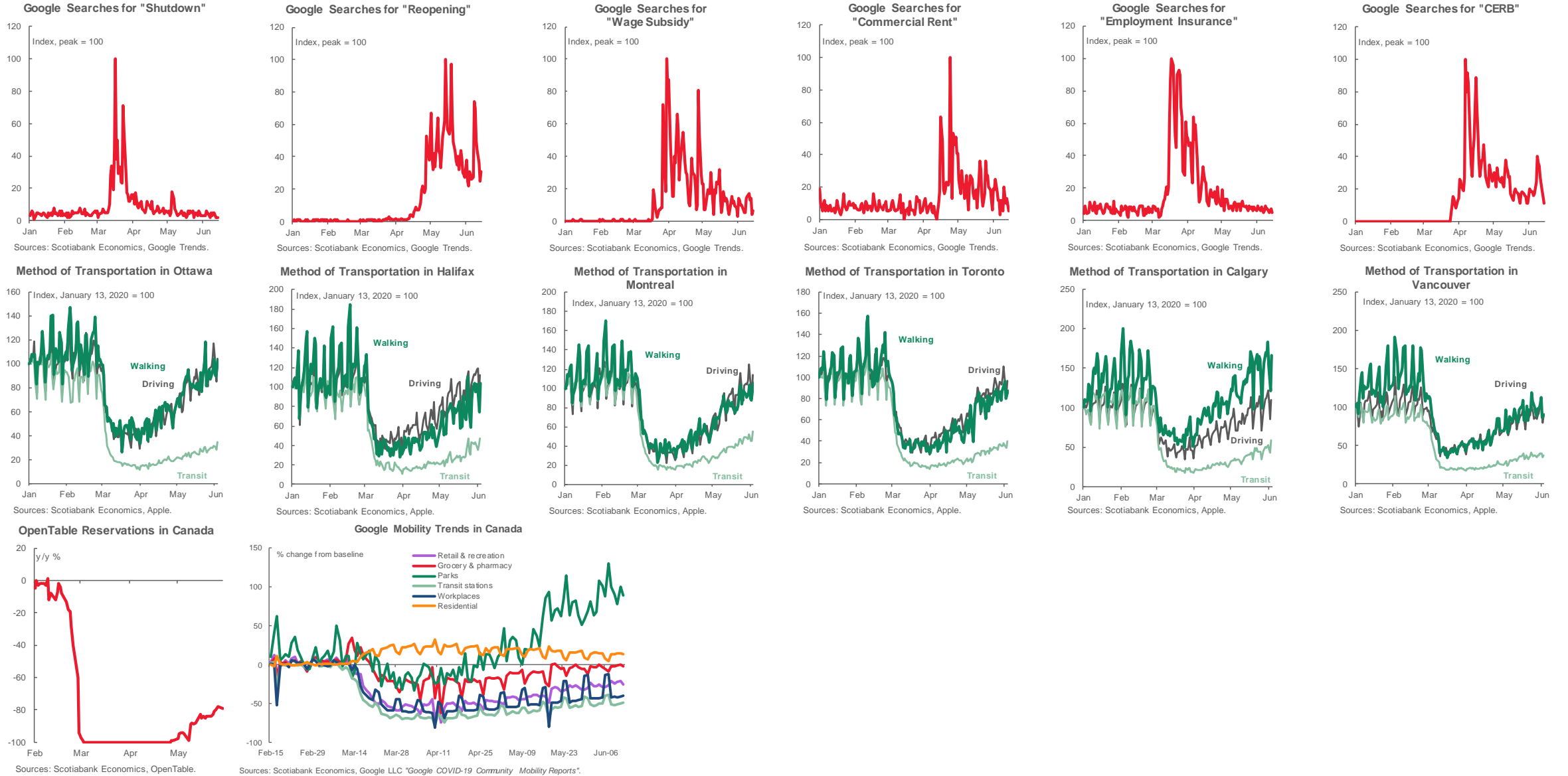
Chart 17



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.