

# Tracking the Canadian Economy through COVID-19: Insights from customer transactions – March 19, 2021

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### **Overview**

- 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
- 6. Caveats



# 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:

- The data update this week likely marks the last publication of the transactions deck in the current format. Going forward, the transactions data from a year ago will increasingly include the period of strict lockdowns of March 2020, which will distort the y/y growth calculation and introduce volatility that is unrelated to spending trends seen this year.
- On the business side, the transactions data updated to March 12<sup>th</sup> shows continued resilience despite some volatility since the start of March.
  - The flow of outgoing transactions remained stable supported by solid growth in general bills payments, payroll deposits and rent payments.
  - o Growth in incoming transactions was positive, with some signs of increased volatility in the last week. Retail and wholesale sectors saw a slight slowdown in payments recently, while the level of payments in transportation and warehousing started to improve relative to last year's levels.
- Consumer card spending relative to 2020 troughed in late January and early February, with the latest data (updated to March 15<sup>th</sup>) running in line with last year's levels:
  - Card spending in Ontario and Quebec recently caught up with last year's levels after a deep decline in the middle of winter amidst COVID-19 related restrictions. Sales at hardware and clothing stores, as well as entertainment-related spending all continued to rise through February and early March.



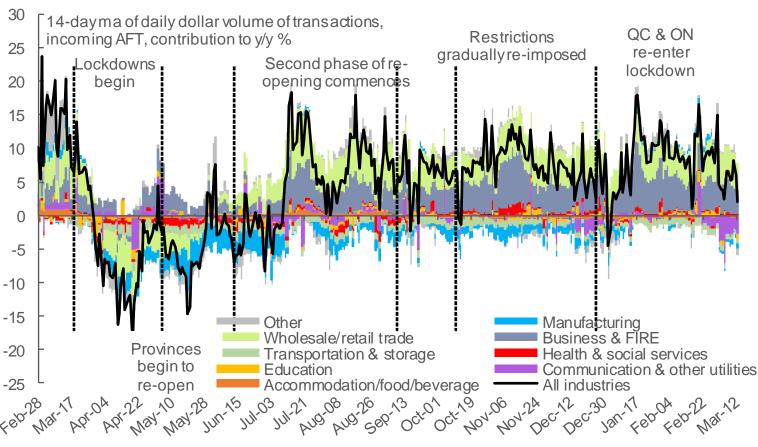
### 2. COVID-19 and the Canadian Economy: Scotiabank Transactions Data

- The following slides 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.
- 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.
- In the current circumstances, comparing the dollar volumes of transactions in the current year to its level of a year ago should help track growth through the re-opening phase.

# 3. Business Transactions Data: Business Payment Growth Slightly Weaker Recently

- On the business side, the transactions data updated to March 12th shows continued resilience despite some volatility since the start of March (Chart 1):
  - Growth in incoming transactions
     was positive, with some signs of
     increased volatility in the last week.
     Retail and wholesale sectors saw a
     slight slowdown in payments
     recently, while the level of
     payments in transportation and
     warehousing started to improve
     relative to last year's levels
     (Charts 2-6).

#### Chart 1

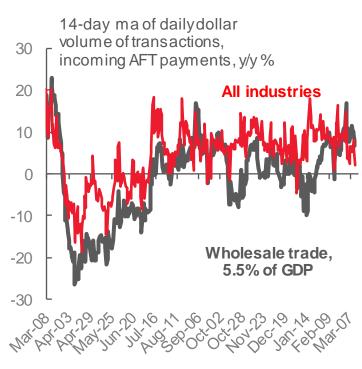


Sources: Scotiabank Economics, Data Science and Analytics.



### 3. Business Transactions Data: Wholesale/Retail Pull Back

### Chart 2

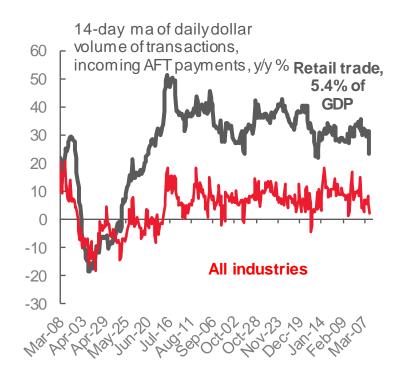


Sources: Scotiabank Economics, Data Science

and Analytics.

Last date shown: Mar 12, 2021

#### Chart 3



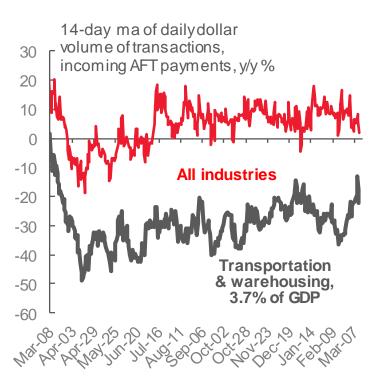
Sources: Scotiabank Economics, Data Science

and Analytics.



## 3. Business Transactions Data: Manufacturing Payments Fluctuate Around Zero

#### Chart 4

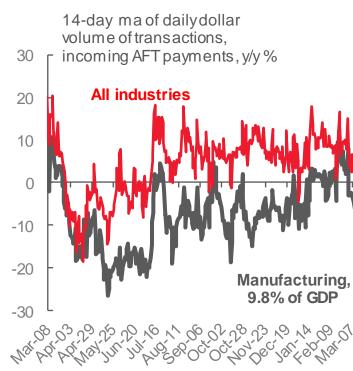


Sources: Scotiabank Economics, Data Science

and Analytics.

Last date shown: Mar 12, 2021

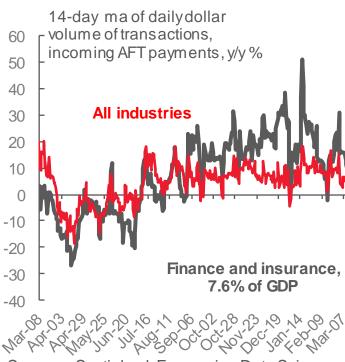
### Chart 5



Sources: Scotiabank Economics, Data Science and Analytics.

Last date shown: Mar 12, 2021

### Chart 6

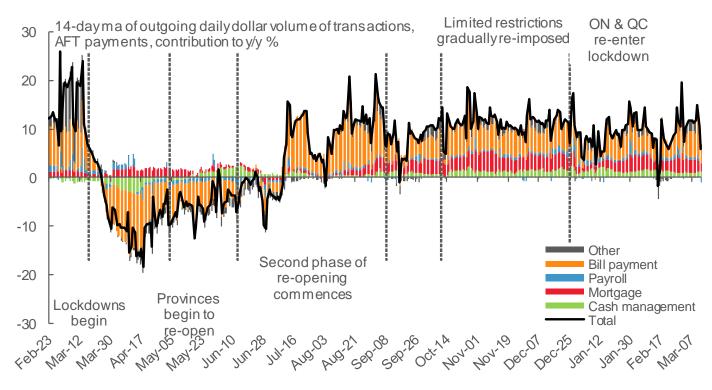


Sources: Scotiabank Economics, Data Science and Analytics.

## 3. Business Transactions Data: Growth in Bill Payments Stable

- The flow of outgoing transactions remained stable supported by solid growth in general bills payments, payroll deposits and rent payments (Charts 7-9).
- Continued growth in payroll deposits and rent payments is in line with other evidence of the Canadian economy remaining resilient in the face of the latest round of restrictions.
- A third wave might drive growth lower in the coming months, but the rising vaccination rates and the way businesses and consumers adapted to the environment suggests that the impact on economic activity should be muted.

### Chart 7

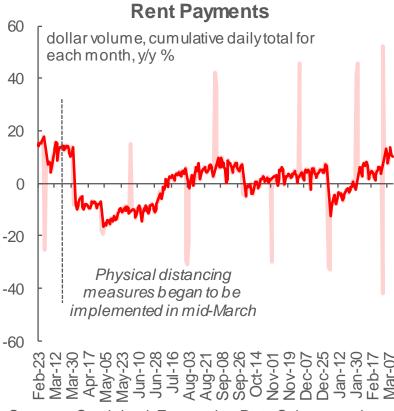


Sources: Scotiabank Economics, Data Science and Analytics.



### 3. Business Transactions Data: Rent/Payroll Payment Growth Remains Strong

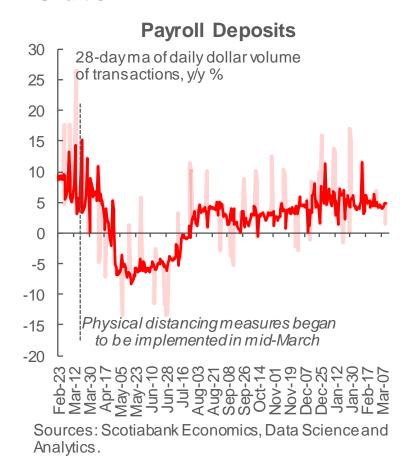
### Chart 8



Sources: Scotiabank Economics, Data Science and Analytics.

Last date shown: Mar 12, 2021

#### Chart 9

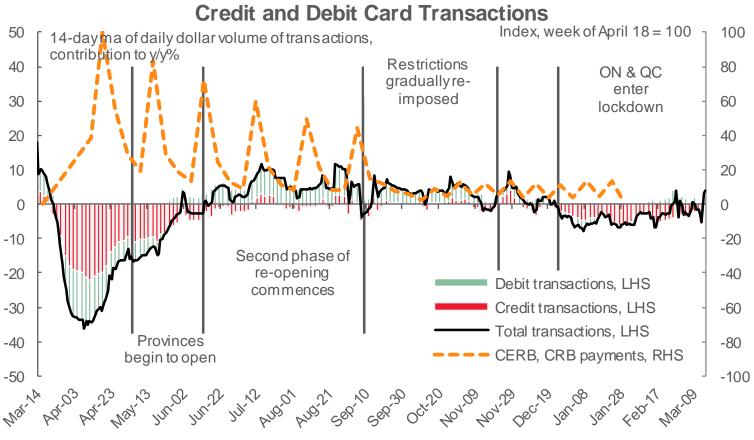




## 4. Retail Transactions Data: Total Spending Growth Fluctuated Around Zero Recently

- Consumer card spending relative to 2020 troughed in late January and early February, with the latest data (updated to March 15th) running in line with last year's levels (Chart 10).
- Y/Y growth in spending on both credit and debit cards recovered to the same extent in the last few weeks.





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

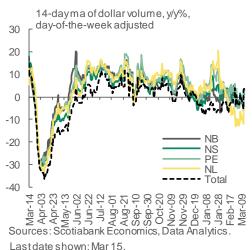


## 4. Retail Transactions Data: Growth in Hard-hit Provinces Improves the Most

- Card spending in Ontario and Quebec recently caught up with last year's levels after a deep decline in the middle of winter amidst COVID-related restrictions (Charts 11-14).
- As the virus cases creep higher across provinces, the likelihood of renewed strict provincial lockdowns will increase in the next few months.

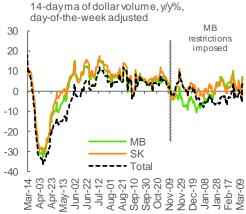
#### Chart 11

#### **Atlantic Provinces**



### Chart 13

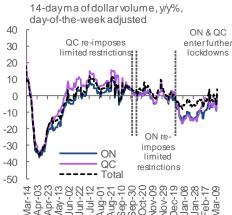
#### Saskatchewan and Manitoba



Sources: Scotiabank Economics. Data Analytics. Last date shown: Mar 15, 2021

#### Chart 12

#### Ontario and Quebec

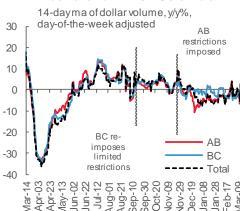


Sources: Scotiabank Economics, Data Analytics

Last date shown: Mar 15, 2021

#### Chart 14

#### Alberta and British Columbia



Sources: Scotiabank Economics, Data Analytics.

Last date shown: Mar 15, 2021

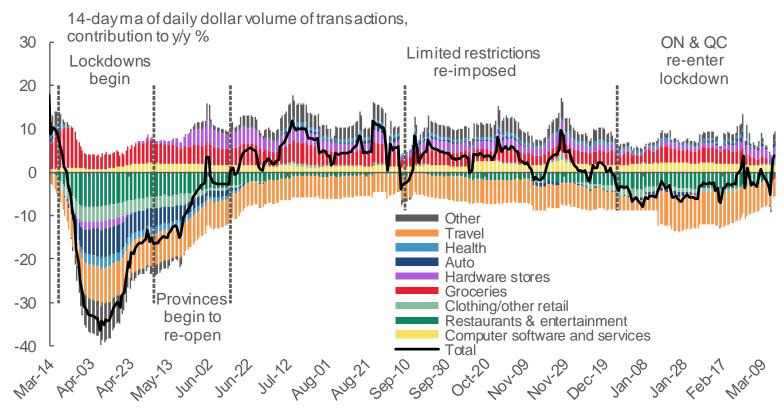


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## 4. Retail Transactions Data: Growth Dispersion Through Pandemic About to Shrink

- The dispersion of contributions to growth seen in this chart – between sectors that are continuing to struggle a year into the global pandemic and those that saw demand rise significantly – will fade and eventually reverse due to favourable base effect (Chart 15).
- For example, the y/y comparison of current travel spending will be made more favourable relative to even lower levels seen at the depths of the pandemic.

### Chart 15



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

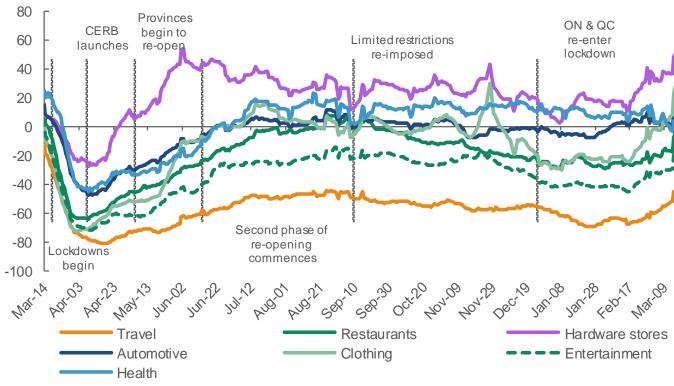


# 4. Retail Transactions Data: Clothing, Hardware Spending Rise Further

- Sales at hardware and clothing stores, as well as entertainmentrelated spending all continued to rise through February and early March (Chart 16).
- Home renovation spending is leaping higher, in line with a red-hot Canadian housing market and the increased desire to improve living space with more time spent at home.

#### Chart 16

14-day ma of daily dollar volume of transactions, y/y %



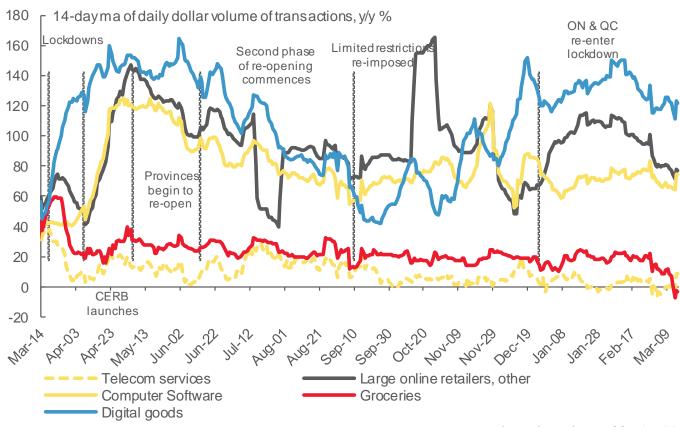
Sources: Scotiabank Economics, Customer Insights, Data & Analytics.



## 4. Retail Transactions Data: Purchases of Digital Media Moderated Recently

- Growth in spending on digital goods and at large online retailers has downshifted slightly, but continues to run at significantly higher levels than last year (Chart 17).
- Y/Y growth in grocery purchases declined below zero as the first shock of the pandemic a year ago sent consumers to stock up on food, boosting spending last year and reducing growth.





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



### 6. Caveats

- 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 data is observed at daily frequency and embeds different types of seasonal patterns.
  - o For retail payments, the volume and types of payments are different depending on the day of the week and the season.
  - o 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.



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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.

