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

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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
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 November 13\textsuperscript{th}, Y/Y growth in business sector transactions has remained strong, in contrast to growth in consumer spending trending lower:
  - Incoming payments have been strong in the first half of November, in part due to the improvement in wholesale, transportation and financial industries. Payments in the manufacturing industry have continued to oscillate, repeating the emerging pattern of stronger payments at the end of the month.
  - Growth in outgoing payments has been surprisingly stable since early October. Growth in payroll deposits picked up slightly in mid-November, potentially a good sign for the labour market. Rent payments strengthened somewhat recently, even as the bill that includes the commercial rent relief program is going through the legislative process.

• In contrast to the business sector, Y/Y growth in consumer transactions (available through November 15\textsuperscript{th}) came down sharply just before Remembrance Day, as the base effect – unusually weak 2019 spending that boosted growth artificially – fell out of the calculation. However, the continued slowing after that likely captures the impact of recently imposed pandemic restrictions:
  - Even abstracting from the base effects, spending in provinces across the country started to slow in November, with Y/Y growth turning slightly negative.
  - Few merchants were immune to the slowdown, with only a few categories showing growth stabilizing or increasing in the last week.
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.
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.
  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.
  o 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.).
  o 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.

- Updated to November 13th, y/y growth in business sector transactions has remained strong (Chart 1) despite the new restrictions put in place in various provinces and the rising number of infections.

- Wholesale, transportation and financial industries showed improvement in the first half of November, while payments in the manufacturing industry continued to oscillate, repeating the emerging pattern of stronger payments at the end of the month (Charts 2-6).

- Automated Funds Transfers (AFT) are used for:
  - rent and mortgage payments;
  - payroll deposits; and
  - other bills.

Sources: Scotiabank Economics, Data Science and Analytics.

**Chart 2**
14-day moving average of daily dollar volume of transactions, incoming AFT payments, y/y %

Sources: Scotiabank Economics, Data Science and Analytics.

**Chart 3**
14-day moving average of daily dollar volume of transactions, incoming AFT payments, y/y %

Retail trade, 5.5% of GDP

Sources: Scotiabank Economics, Data Science and Analytics.

**Chart 4**

- 14-day moving average of daily dollar volume of transactions, incoming AFT payments, y/y %
- All industries
- Sources: Scotiabank Economics, Data Science and Analytics.

**Chart 5**

- 14-day moving average of daily dollar volume of transactions, incoming AFT payments, y/y %
- All industries
- Transportation & warehousing, 3.7% of GDP
- Sources: Scotiabank Economics, Data Science and Analytics.

**Chart 6**

- 14-day moving average of daily dollar volume of transactions, incoming AFT payments, y/y %
- All industries
- Finance and insurance, 7.3% of GDP
- Sources: Scotiabank Economics, Data Science and Analytics.

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**Source:**
Scotiabank Economics, Data Science and Analytics.
3. Business Transactions Data: Growth in Bill Payments Stable Over the Past Month

- Growth in outgoing payments has been surprisingly stable since early October (Chart 7).

- Rent payments strengthened somewhat recently, even as the bill that includes the commercial rent relief program is going through the legislative process (Chart 8).

- Growth in payroll deposits picked up slightly in mid-November, potentially a good sign of a continued recovery in the labour market during the month (Chart 9).
3. Business Transactions Data: Payroll/Rent Payment Growth Improves

**Chart 8**

Rent Payments

- Physical distancing measures began to be implemented in mid-March

Sources: Scotiabank Economics, Data Science and Analytics.

**Chart 9**

Payroll Deposits

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

Sources: Scotiabank Economics, Data Science and Analytics.
4. Retail Transactions Data: Growth Sliding in November

- Y/Y growth in consumer transactions (available through November 15th) came down sharply just before the Remembrance Day as the base effect – unusually weak 2019 spending that boosted growth temporarily – fell out of the calculation. However, the continued slowing after that date likely captures the impact of recently introduced restrictions (Chart 10):
  - Both debit and credit transactions have now retreated below the level of 2019. Since mid-June growth dipped below zero once in early September, but it was temporary (mostly due to base effects) and the epidemiological situation has worsened significantly since then.

Sources: Scotiabank Economics, Customer Insights, Data & Analytics.
4. Retail Transactions Data: ABM Transactions Return to New Normal

- The volume of debit card transactions through automatic banking machines (ABMs) came back to the level that was seen at the end of October (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 of ABM usage.

Sources: Scotiabank Economics, Customer Insights, Data & Analytics.
4. Retail Transactions Data: Growth Slowing Across Provinces

- Abstracting from base effects, spending in provinces across the country began to slow in November, with Y/Y growth turning slightly negative, as the spread of COVID-19 induces consumers to avoid non-essential trips outside their homes and as the discussions of new restrictions gain urgency (Charts 12-15).

- Going forward, with new restrictions likely to be introduced in the coming weeks, payment flows are likely to decline even further.
4. Retail Transactions Data: Lower Growth for Merchants Who Outperformed Recently

- Few merchants were immune to the slowdown, with only a few categories showing growth stabilizing or increasing in the last week, with growth in most categories turning lower (Chart 16).

- As we approach the holiday season, it remains to be seen whether spending can keep up with last year’s flow, given the health-related restrictions on spending at physical stores are likely to bind more during holidays.
• Merchants where growth was below zero recently showed a slight decline, but most of the slowdown can be seen in categories where growth had recovered from the spring lockdowns (Chart 17).

• Growth in restaurant spending, automotive, health and even spending at hardware stores slowed in November following a temporary boost that was artificially driven by weaker 2019 totals.

• The coming weeks will demonstrate how durable the slowdown is.
4. Retail Transactions Data: Digital Spending Still Strong, Tentative Slowing Seen

• Higher demand for hardware and software required in the work-from-home environment persisted in the last week, even though some categories that benefited from the pandemic were not immune from the recent slowdown (Chart 18).

• Digital goods spending, which includes purchases of video games and digital media, saw a pickup in growth recently, in contrast to other categories.
5. Other High-Frequency Indicators Of Activity

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

Google Searches for “Lockdown”

Method of Transportation in Ottawa

OpenTable Reservations in Canada

Google Mobility Trends in Canada

Google Searches for “Reopening”

Method of Transportation in Halifax

Google Searches for “Wage Subsidy”

Method of Transportation in Montreal

Google Searches for “Commercial Rent”

Method of Transportation in Toronto

Google Searches for “Employment Insurance”

Method of Transportation in Vancouver

Google Searches for “CERB”

Sources: Scotiabank Economics, Google LLC “Google COVID-19 Community Mobility Reports”.
For each type of transaction (retail and ATF), we calculated a 14-day moving average daily in 2020 through early May and compare to a corresponding average for the same month and day in 2019.

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.

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