Present and Potential Futures of Competition in Canada's Banking and Payments Sector

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This research was supported by

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Executive Summary

Executive Summary

An efficient and innovative financial system is the foundation of a country's real economy. Like any market, banking and payments markets benefit from intense competition to lower prices, improve product and service quality, and provide innovative new offerings. But unlike many markets, regulators and market participants are also solving for the policy goal of stability and soundness to prevent financial crises and maintain consumer confidence[1]. Emerging from the 2008 financial crisis in a position of strength, the stability of Canada's banking sector has generally been a source of pride for Canadians. But competition and stability should not be a dichotomy, and the popular narratives surrounding Canada's banking sector may obscure assessment of the competitive outcomes for Canadian consumers and businesses. Policy makers and citizens should have a clear eyed view of how Canada's banking sector compares along a number of concurrent policy goals, of which competition is one.

To that end, this report provides a scan of literature, a review of common metrics and indicators, and a summary of ongoing policy changes to provide a data-driven view of the current dynamics and potential future of competition in Canada's retail banking and payments sector. Points of interest arising from that analysis include:

- Depending on the metric considered, there is mixed evidence on the current state of competition in Canada's banking and payments sector;
- Canada's banking system is more concentrated than international peers, and the Big Six banks[2] market share in major product categories has remained stable over the past decade despite the growth of fintech challengers;
- Canadian banks consistently outperform international peers on return on equity (ROE), driven in part by highly profitable domestic personal and commercial banking;
- The proportion of bank income from non-interest sources such as transaction and investment management fees has increased over the past decade, along with the absolute level of these fees.

Although the picture is not clear cut, there appears to be an opportunity to meaningfully increase the level of competition in Canada's banking and payments sector and deliver innovative and affordable financial services to Canadians. Canada is on the cusp of three major policy actions with the potential to kickstart that competitive intensity:

- Implementation of an open banking regime to give consumers greater control of their financial information and reduce barriers for new entrants
- Modernization of the infrastructure underpinning Canada's payments system supporting real-time and more data-rich payments
- Assignment of the Bank of Canada with regulatory oversight of FinTech companies and the review of the legislation determining who can access Canada's payments infrastructure

1 Office of the Superintendent of Financial Institutions, Oversight of Canada's Financial System https://www.osfi-bsif.gc.ca/Documents/WET3/FinSystem/eng/fisc-infographic.html

2 TD Bank (TD), Royal Bank of Canada (RBC), Scotiabank (BNS), Bank of Montreal (BMO), Canadian Imperial Bank of Commerce (CIBC), and National Bank (NBC)

But the success of any of these measures in changing competitive dynamics is not a given. To ensure that these pending policy actions meet their potential to provide Canadians with a more competitive banking and payments sector, regulators can and should adopt a course of action with the greatest chance of creating a foundation for new and innovative market participants. With that goal in mind, the following actions are recommended to address the future of data, infrastructure, and access in Canada's banking and payments system:

Data

- Adopt the recommendations of the Open Banking Advisory Committee and use the experience of international peers to adopt a more aggressive approach;
- Use open banking as an opportunity to lead by example on future data portability rights in forthcoming privacy legislation;
- Consider a broad range of use cases for open banking data beyond the financial sector.

Infrastructure

- Ensure that Payments Canada has the resources to meet or exceed the current timeline for payments modernization and that Canadians understand the cause of delays to date;
- Explore the potential of a Central Bank Digital Currency (CBDC) to serve as a competitive and cost effective outside payment option.

Access

- Open access to the infrastructure supporting Canada's payments system to FinTech firms under Bank of Canada regulation.

The task of Canada's regulators is not an enviable one but not an impossible one. Balance the critical policy goal of delivering a stable and secure banking system while creating an environment in which competitive challengers can dethrone incumbents. Although Canada has been slower to act than its peers, this only means that the opportunity to do better is still ahead of us.

Motivation

Motivation

The banking and payments sector is the foundation of a country's real economy. Consumers rely on the sector to keep their savings safe and achieve home ownership through mortgages, while businesses depend on fast and efficient payments to provide goods and services to customers, and on financing to expand their enterprises. This is why, like any industry, competition is desired to drive the sector to become more innovative and more efficient, and to have profits competed away by hungry new entrants. But unlike other industries, there is a perceived tension between stability that protects the investments and livelihoods of Canadians and a dynamic and competitive market that delivers efficient and innovative banking and payments services.

Whereas in other markets the process of creative destruction through competition is welcomed, the stability of the banking and payments sector and avoiding the panic that can ignite financial crises is a paramount aim of regulators. In creating and maintaining an efficient and effective payments system, regulators must strike the right balance between preventing unnecessary risk-taking and protecting the livelihoods of consumers with a desire for the benefits that competitive markets can bring. The popular narrative is that Canada's banking system emerged from the 2008 financial crisis relatively unscathed, and this is often attributed to a centralised regulatory regime with a greater focus on stability and systemic risk that peer jurisdictions[3]. This regulatory stance is reflected in public perceptions of the banking sector, with a recent IPSOS poll finding that more than 67% of Canadians believe there is enough competition in banking, compared to 49% for airlines and 28% for telecommunications,[4] and a 2019 survey commissioned by Payments Canada that found only one in five Canadians were in favour of open banking, with security and privacy as their main related concerns.[5]

But Canadians should understand the trade-offs that are either inherent to or have been attached to that narrative. Canada's major banks are immensely profitable businesses, and coverage[6] of the most recent earnings releases at time of writing provide a snapshot of how that profitability is typically viewed. Canadians may take pride in the profitability and global presence of their banks, but the profits of the financial sector can also be seen as a tax on the real economy that depends on the companies controlling Canada's banking and payments infrastructure. A traditional benefit of competition is the competing away of excess profits, with returns shared between new entrant challengers and the consumers and businesses that benefit from their competitive presence rather than entrenched incumbents.

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3 Bordo, Redish and Rockoff, "Why didn't Canada have a banking crisis in 2008 (or in 1930, or 1907, or ...)?", February 2015

4 Ipsos, "Most (88%) Canadians Say We Need More Competition as it's Too Easy for Big Business to Take Advantage of Consumers, February 8, 2022 https://www.ipsos.com/en-ca/news-polls/most-Canadians-say-we-need-more-competition

5 Payments Canada, "Payments Pulse Survey: Consumer Edition", May 13, 2019 https://www.payments.ca/industry-info/our-research/payments-pulse-survey-consumer-edition

6 The Globe and Mail, Bradshaw, J. "Bank of Nova Scotia and Bank of Montreal report surging profits as lending drives stronger banking revenue", March 1, 2022 https://www.theglobeandmail.com/business/article-bank-of-montreal-tops-quarterly-profit-expectations-on-strong-retail/

The Globe and Mail, Bradshaw, J. "CIBC and National Bank report soaring profits as revenues climb.", February 25, 2022 https://www.theglobeandmail.com/business/article-bank-of-montreal-tops-quarterly-profit-expectations-on-strong-retail/

The Globe and Mail, Bradshaw, J., "RBC sees first-quarter profit rise 6 per cent, but outlook is clouded by inflation and geopolitical upheaval.", February 24, 2022 https://www.theglobeandmail.com/business/article-rbc-profit-climbs-6-on-gains-in-retail-banking-loans-wealth-management/

Understanding this trade-off is particularly important as countries around the globe re-assess the role of competition in their economies. The International Monetary Fund (IMF) has found that several indicators of market power, the ability of a firm to influence factors such as price and quality, appear to be on the rise.[7] Market power is a key indicator of a lack of competition within a market. Where firms must compete on price, quality, and innovation, the slack of one competitor becomes the opportunity of another. Where competitive intensity is low however, firms are able to push higher prices, lower quality, and dampened innovation on consumers with no outside options. In late 2020, the United Kingdom's competition regulator, the Competition and Markets Authority (CMA), concluded an inquiry into the state of competition in markets across the country.[8] Looking at a variety of indicators, the CMA found a mixed story, but concluded that the level of competitive intensity had weakened over the past two decades.

The current period of broad-based and international inflation at the time of this report's drafting makes this research more urgent. There is increasingly a sense that the oligopolistic nature of the banks means that they have pricing power and can raise dividends at or above inflation.

Other realities of banking in Canada raise further concerns regarding the prospect of the Big Five banks ability to exercise their power. For instance, the "price of loyalty" at banks could mean that switching costs remain unnecessarily high for consumers. A new digital-first generation may be more mobile that previous generations; challenging the banks to innovate in new ways in order to retain customers. If the high and sustained profitability of banks is at the expense of Canadian consumers and small businesses that are subject to incrementally increasing "tolls" or "taxes" related to the cost(s) of basic banking, this would be further cause for concern.

The purpose of this report is to provide a data-driven assessment of the state of competition in Canada's banking and payments sector using publicly available measures of competition, a review of relevant literature, and a scan of commentary from existing players and new entrants in the sector. In doing so, the report aims to highlight opportunities for improvements to competitive intensity while respecting the multiple policy goals Canada must balance in delivering a stable, effective, and efficient banking and payments system and raise directions for future deeper study of competition in Canada's banking and payments space.

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7 IMF, "Rising Market Power—A Threat to the Recovery?", March 15, 2021
https://blogs.imf.org/2021/03/15/rising-market-power-a-threat-to-the-recovery/

8 Competition and Markets Authority, "The State of UK Competition", November 30, 2020,
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/939636/State_of_Competition_Report_Nov_2020_Final.pdf

Report Scope and Focus

Report Scope and Focus

Canada's financial system has multiple interdependent facets, each with their own set of policy considerations and competitive dynamics. To focus its analysis, this report prioritizes the retail and commercial banking and payments sectors, with an emphasis on consumers, small business, and the incumbent players and new entrants seeking market share.

Discussion of banking focuses on deposit taking and credit issuance, although there will be some commentary on financial services related to consumer asset and wealth management. The definition of lending will collapse all forms of retail credit, although market shares for key products such as mortgages will be broken out where possible. The conversation related to payments markets attempts to take as broad a definition of the methods through which consumers and businesses interact as possible, although some forms of payment, notably cryptocurrencies, will receive less attention.

Understanding that from a consumer perspective the line between "banking" and "payments" may be nonexistent, and that the markets are interconnected, for the purpose of delineation the report refers to the banking and payments sectors as discrete concepts. This potentially misleading delineation is useful for drawing lines between markets for share calculations, and discussing the roles played by incumbents and the challengers providing competitive threats.

Methodology

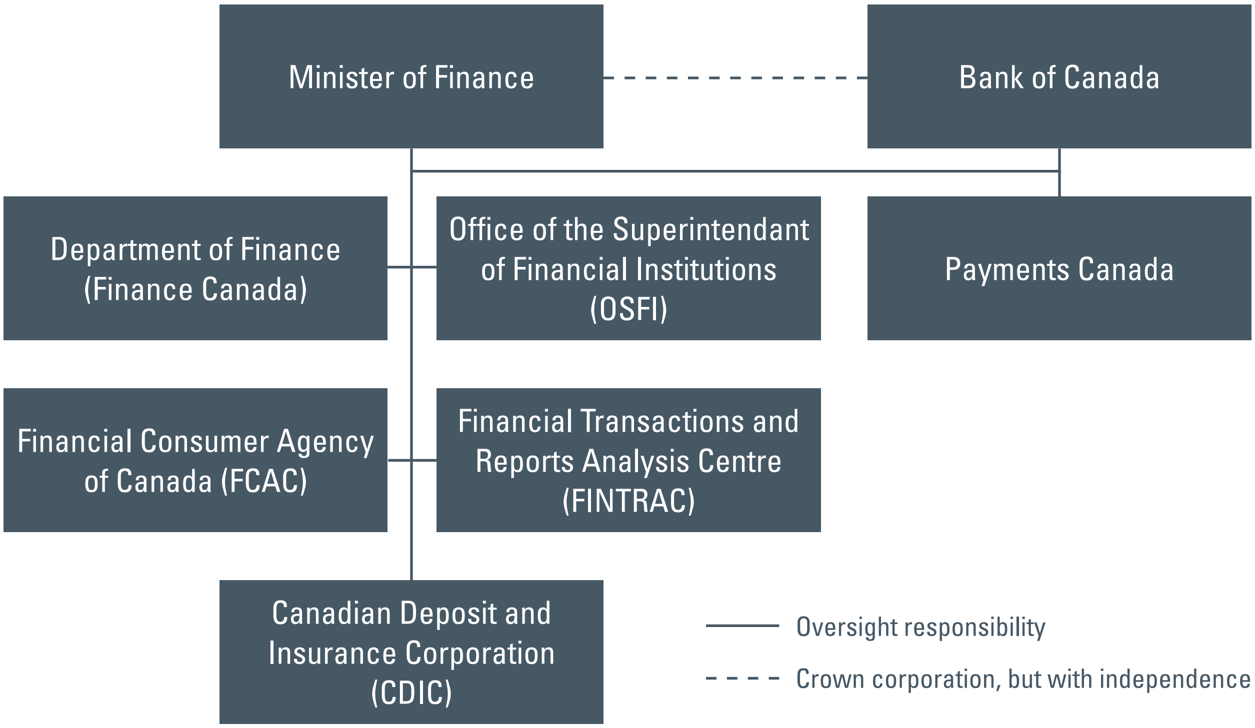
Methodology

The report's conclusions are drawn from a review of existing domestic and international literature on competition and the banking and payments sectors, publicly available data, financial data, and coverage and discussion of regulatory actions in Canada and international peers. Informal interviews with industry stakeholders were conducted to inform the review and identify sources of public data. Data collected includes traditional measures of competitive intensity such as levels of industry concentration, stability of market shares over time, and financial measures of profitability and efficiency, along with analysis of the composition of Canadian bank income over time. Where possible the report compared the performance of Canadian firms and outcomes in banking and payments markets with those of peer countries, with a focus on the members of the G20.Regulatory Landscape

Regulatory Landscape

Regulatory Landscape

As illustrated below, at the federal level there are eight entities responsible for the regulation of different aspects of Canada's banking and payments sector.



In addition to their federal counterparts, provinces have their own agencies responsible for oversight of financial institutions, for example in the case of credit unions and general consumer protection. This is along with the provincial regulation of financial securities, which is beyond the scope of this report.

While each element of the financial regulatory landscape plays an important role in promoting a sound financial system, this report will focus on the role of the Minister of Finance and their corresponding department, Payments Canada, the Bank of Canada and the Office of the Superintendent of Financial Institutions (OSFI). Ongoing and potential future policy initiatives related to competition in banking and payments implicate these regulatory bodies, the remaining regulators have remits that do not necessarily include promoting an efficient and competitive financial system.

Minister of Finance and the Department of Finance

As steward of the Canadian economy, the performance of Canada's banking and payments sectors are a core of the jurisdiction of the Minister of Finance and her respective department. Beyond oversight responsibility of the regulatory bodies illustrated above, Finance Canada is also the lead agency on policy initiatives with the potential to shape the future of banking and payments competition. Reflecting these responsibilities, the mandate letter for the Minister of Finance at time of writing included commitments to review bank fees to determine whether they were excessive, lower the average rates paid for payments services for merchants, and establish a single ombudsman for complaints related to banks.[9] In addition to the Minister of Finance, Canada's Associate Minister of Finance was tasked with the early 2023 launch of open banking and the modernization of Canada's payments system[10].

Payments Canada

Payments Canada, a public purpose non-profit organisation funded by the Bank of Canada, chartered banks, and other financial institutions in Canada, owns and operates much of the infrastructure that underpins our payments system. Their mandate includes facilitating the development and implementation of new payment methods and technologies, and to that extent have been engaged in a multi-year program of payments modernization that will have material consequences for the future of competition in payments.

Bank of Canada

Beyond its monetary policy responsibilities, the Bank of Canada also has oversight of the infrastructure underlying Canada's payments system through its relationship to Payments Canada to identify and manage systemic risk to the payments system. In addition to its oversight of Payments Canada, the Bank of Canada has recently been given a supervisory role for the growing sector of financial technology (FinTech) firms in Canada, increasing its ability to shape competitive intensity within the sector.

Office of the Superintendent of Financial Institutions (OSFI)

OSFI's mandate is to preserve the safety and soundness of the Canadian banking system rather than maintaining and supporting competition. But its power to determine which organizations are able to become federally-recognized financial institutions means it has considerable sway over entry into the banking sector.

Naturally the Competition Bureau, Canada's sole competition enforcement agency, the Competition Tribunal, the specialized administrative Tribunal to which civil competition cases are first brought, and the Competition Act itself are also relevant to discussions of competition and regulation in Canada's banking and payments sector. While references will be made to previous competition law investigations and litigation, as well as advocacy on the part of the Competition Bureau, as a law of largely general application Canada's competition law framework will not be the focus of this report.

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9 Office of the Prime Minister, "Deputy Prime Minister and Minister of Finance Mandate Letter", December 16, 2021 https://pm.gc.ca/en/mandate-letters/2021/12/16/deputy-prime-minister-and-minister-finance-mandate-letter

10 Office of the Prime Minister, "Minister of Tourism and Associate Minister of Finance Mandate Letter", December 16, 2021 https://pm.gc.ca/en/mandate-letters/2021/12/16/minister-tourism-and-associate-minister-finance-mandate-letter

Views of Competition

Views of Competition

Understanding that competition is one of the important policy goals, along with stability and efficiency, that the banking and payments regulatory community must solve for, we now turn to views of the historic and current state of competition in Canada.

A consistent theme in the measurement of competition is the limitations of individual measures to tell a definitive story about competitive intensity in a given sector or more granular markets. This does not preclude the ability to use a collection of analysis and imperfect measures to draw insights and identify areas of further inquiry related to trends within a market with the appropriate caveats in mind.

Beyond the respective caveats of the existing literature reviewed, the data underlying this report is limited in at least two ways. First, it collapses a number of distinct markets under the banners of retail banking and payments and considers national markets for both. Second, it relies on existing sources from regulatory and financial disclosures, each with their own aggregations and limitations. The report also understands that public coverage and commentary of the behaviour of market participants can be biased towards or against select interests, not unlike the arguments made by parties involved in a competition law enforcement case.

Recent History

Before covering analysis and data related to competition in banking and payments, it is worth considering some of the events in the recent history of Canada's banking and payments sector that justify a continued focus on protecting and promoting competition.

Although as the report will discuss, Canada's banking sector is more concentrated relative to global peers, Canadians had a brush with the potential for even less choice in the late 90s. While competition enforcement appears to have been relatively quiet in banking over the past two decades, this is likely the result of the tone set by Minister of Finance Paul Martin's decision to block the twin proposed mergers of RBC-BMO and TD-CIBC in 1998.[11] That decision rested on the logic that the mergers would lead to an unacceptable level of market concentration, reduced competition, and remove the government's flexibility to deal with future stability concerns.[12] Although TD's acquisitions of Canada Trust soon after showed that there was no blanket ban on major bank mergers, this decision set the tone for the current "Big Six" market structure to be the floor for competition in Canadian banking.

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11 The Globe and Mail, Bradshaw, J. "How blocked mergers foiled banks' ambitions — and forced the Big Six to innovate", December 25, 2018
https://www.theglobeandmail.com/business/article-20th-anniversary-of-the-failed-royal-bank-of-canada-and-bank-of/

12 Global Competition Review, Rowley and Clifford, "Canadian Banks: Why the Mega-Mergers were Stopped", March 1999
https://mcmillan.ca/wp-content/uploads/2020/07/Canadian-Banks_Why-the-Mega-Mergers-were-Stopped_Mar-1999.pdf

Over the same period of time Canada's payment system has faced more active public competition enforcement scrutiny. In 1995 Canada's Competition Bureau successfully argued that the joint owners and members of Interac payments network, composed of Canada's major banks, had jointly abused their dominance to exclude other firms from accessing the network.[13] Although the agreement outlining Interac's behavioural commitments arising from the case have been amended since, the core requirement that the network be opened up and barriers to competition in the payments space reduced remains in force.[14]

Major payment companies would again be under the microscope nearly two decades later, with the Competition Bureau alleging in 2010 that Visa and Mastercard had used a series of rules for retailers using their payment networks to suppress competition and allow the companies to pass price increases onto those retailers.[15] Despite finding evidence of market power and upward pressure on prices, the Competition Tribunal would ultimately decide that the conduct was the responsibility of regulators at the Department of Finance and not the Bureau to address. However, the case can be seen as setting the stage for the voluntary commitments that major payment service providers would enter in with the Department of Finance to lower their interchange rates.[16]

Beyond enforcement, Canada's Competition Bureau has also commented extensively on the banking and payments sector in its role advocating for greater competition in the Canadian economy. In 2017 the Bureau released its FinTech Market Study[17] covering retail payments, lending and crowdfunding, and investment advisory services. The Bureau raised a number of barriers to entry facing FinTech firms offering competitive challenges to these financial services, and provided regulators with a number of recommendations. Most notable was the recommendation to broaden access to core banking and payments infrastructure and consumer data, allowing a broader range of entrants to challenge incumbent firms.

These competition law cases and advocacy on the part of the Competition Bureau illustrate key elements of competition in banking and payments. They show the role that access to and control over infrastructure play in determining a firm's ability to compete in the interrelated markets. They also demonstrate the potential role for regulators in shifting the balance of competition in concentrated markets. Finally, they show the interlocking nature of a regulatory structure that balances competition and efficiency with stability and security.

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13 Competition Tribunal, "Interac - Reasons for Order", June 20, 1996
https://decisions.ct-tc.gc.ca/ct-tc/cdo/en/item/464875/index.do

14 Competition Tribunal, "Interac - Consent Order", June 20, 1996
https://decisions.ct-tc.gc.ca/ct-tc/cdo/en/item/464878/index.do

15 Competition Tribunal, "Visa, Mastercard - Reasons for Order and Order dismissing the Commissioner's application", July 23rd, 2013 https://decisions.ct-tc.gc.ca/ct-tc/cdo/en/item/463271/index.do

16 Department of Finance, "Backgrounder: New Voluntary Commitments From Payment Card Networks" August 9, 2018
https://www.canada.ca/en/department-finance/news/2018/08/backgrounder-new-voluntary-commitments-from-payment-card-networks.html

17 Competition Bureau, "Technology-led innovation in the Canadian financial services sector" December 14, 2017
https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04322.html

Typical Metrics of Competition

Four typical metrics in competition literature to determine the level of competition and the presence of market power are the Herfindahl-Hirschman Index (HHI), the Lerner Index, the Boone Indicator, and the H-statistic. A brief overview of each of these metrics is provided below, along with examples of the use of these metrics in evaluating Canada's banking sector relative to global peers.

Herfindahl-Hirschman Index

The HHI, or the Herfindahl-Hirschman Index, is an indicator of market concentration that factors in the number, size, and distribution of different competing firms.[18] This indicator is often used to compare pre-and post merger & acquisitions. Although thresholds have evolved over time, a score of under 1,500 typically suggests the market is competitive, a score of 1,500 to 2,500 indicates moderate concentration, and a score of above 2,500 means the market is highly concentrated. A situation of true monopoly, with only a single dominant player in the market, would result in a score of 10,000. Although the HHI is a relatively simple measure and easy to interpret, the HHI assumes that the firms in the market are more or less identical in their behaviour and performance. For example, easier market entry, indicating competition, would lower the HHI, but more efficient firms gaining traction and expanding their share of output, also indicating strong competition, would increase the HHI.[19]

Looking at Canada's banking sector through an HHI lens focused on asset and deposit shares, scores have typically ranged from 1800 - 1900, suggesting moderate concentration of Canada's banking sector.[20]

Lerner Index

The Lerner Index uses the level of markup in a market—that is the difference between price and marginal cost, to determine whether market power is present.[21] This is based on the idea that a

firm with market power is able to charge prices well above its own marginal costs, without other firms present to compete away its markup. A key point of contention in the study of competition is the power of high markups or margins to attract new competitors and redistribute that margin

to themselves and consumers. The Index ranges from 0 to 1, with 0 representing perfect competition and 1 indicating total monopoly. Since the Lerner index measures the deviation from a benchmark of the ideal competitive equilibrium with firms producing at constant returns to scale and equal marginal costs, the index itself does not consider whether this equilibrium is realistic.[22] The Lerner index also does not consider whether the difference between price and marginal cost may be due to "efficient use of scale or the need to cover fixed costs."[23]

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18 "Herfindahl-Hirschman Index (HHI)", Thomson Reuters Practical Law, accessed December 23, 2021, https://ca.practicallaw.thomsonreuters.com/7-502-0985?transitionType=Default&contextData=(sc.Default)&firstPage=t rue.

19 Michiel van Leuvensteijn, The Boone-indicator: Identifying different regimes of competition for the American Sugar Refining Company 1890-1914 (Tjalling C. Koopmans Research Institute, 2008).

20 Abayomi Oredegbe, "Canadian Banking Industry Profitability: Exploring the Relevance of Two Competing Hypotheses," International Journal of Economics and Finance 12, no. 4 (2020): 67-82, https://doi.org/10.5539/ijef.v12n4p67.

21 Kenneth G. Elzinga and David E. Mills, "The Lerner Index of Monopoly Power: Origins and Uses," The American Economic Review 101, no. 3 (2011): 558-564, https://www.aeaweb.org/articles?id=10.1257/aer.101.3.558.

22 Ibid.

23 Ibid.

Although available data only reaches 2014,[24] since 2008 Canada has had the highest Lerner Index relative to a collection of global peers. This reflects the narrative of the strong performance of Canada's banks following the financial crisis, but also suggests that our banks are exercising a degree of market power over Canadians.

Boone Indicator

The Boone indicator focuses on the sensitivity of profit to changes in their marginal costs. Efficient firms have lower marginal costs and higher profits, and in a competitive market, efficient firms should prevail with higher market shares and profits.[25] The lower the Boone score, the better, with a negative Boone indicator suggesting higher competition. The Boone indicator is a flexible measure—it can be used to measure the competitiveness in a market, or it can be used to measure how one firm compares to another firm in competitiveness in a specific period.[26] However, the Boone indicator has no benchmark—there is no single value that indicates different regimes of competition.[27]

When compared to peers such as the U.S. and U.K.over the same period as the above Lerner Index data, the Boone Indicator suggests that Canada's banking market is actually more competitive with an indicator of -0.07 compared to -0.04 and -0.05, respectively.[28] This provides an example of how the same market can provide different reads of competitive intensity depending on the measure used.

H-Statistic

Finally, the H-statistic captures the sensitivity of a bank's revenues to their input costs by summing up equilibrium gross revenue elasticities with respect to different input prices.[29] The H-statistic can range from 0 to 1; at 0, the market is monopolistic, while at 1, the market is perfectly competitive.[30] Numbers between zero and one can indicate differentiated goods that can still compete against each other as near substitutes.[31] Thus, the H-statistic is a clear, straightforward measure of market power.

However, in a 2020 study by Sanchez-Cartas, and as outlined by Paytechs of Canada's Alex Vronces[32], the H-statistic was mathematically proven to be problematic. In particular, the H-statistic can be incompatible with the Lerner's index; when the Lerner's index tends to 1, the H-statistic tends to 0, but when the Lerner

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24 FRED Economic Data, World Bank, "Lerner Index in Banking Market", data accessed March 10, 2022 https://fred.stlouisfed.org/graph/?id=DDOI04USA066NWDB,DDOI04EZA066NWDB,DDOI04AUA066NWDB,DDOI04CAA066NWDB,DDOI04FRA066NWDB,DDOI04GBA066NWDB,DDOI04JPA066NWDB,DDOI04IEA066NWDB,DDOI04SEA066NWDB,DDOI04ITA066NWDB,DDOI04DEA066NWDB

25 Michiel van Leuvensteijn, The Boone-indicator: Identifying different regimes of competition for the American Sugar Refining Company 1890-1914 (Tjalling C. Koopmans Research Institute, 2008).

26 Ibid.

27 Ibid.

28 FRED Economic Data, "Boone Indicator in Banking Market", data accessed March 10, 2022 https://fred.stlouisfed.org/graph/?id=DDOI05USA156NWDB,DDOI05IEA156NWDB,DDOI05NLA156NWDB,DDOI05JPA156NWDB,DDOI05AUA156NWDB,DDOI05DEA156NWDB,DDOI05BEA156NWDB,DDOI05CAA156NWDB,DDOI05MXA156NWDB,DDOI05EZA156NWDB#0

29 Alex Vronces, "Competition in banking—how big a problem is it?" Medium of Exchange, last modified December 14, 2021, https://themox.substack.com/p/competition-in-banking-what-problem?utm_source=url&s=r.

30 Ibid.

31 Ibid.

32 Ibid.

index tends to 0, the H-statistic tends to negative infinity.[33] In addition, when factoring in non-price variables in the H-statistic, one can reject the notion that monopolistic frameworks have significant market power.[34] Therefore, the H-statistic should be used as a measure of how input prices affect revenue, but not how concentrated the market is.[35]

Compared to a similar peer group, Canada's banking sector has a very high H statistic suggesting a competitive market despite high concentration.[36]

Moving from the metrics commonly found in academic literature, a scan is then performed of public and financial data to assess additional indicators of competition and build out a current state view of Canada's banking and payments markets, and the possible opportunity for competitive disruption.

Public and Financial Data

Concentration and Stability of Market Shares

The most common indicator of competitive intensity for a market is the level of concentration, that is, how shares of a given variable (e.g. revenue, assets) are distributed across players in an industry. Although the limitations of concentration as determinative of the level of competitive intensity are well documented, it still serves as a useful shorthand and starting point for assessment of a market. Concentration levels, whether on their own or through HHI calculations based on them, still inform the rules and heuristics competition agencies around the world use to guide their enforcement decisions, particularly regarding the decision to challenge a proposed merger of two competitors.

Banking

First we look at the current concentration levels among different types of financial institutions offering traditional banking services to Canadians, comparing the total share held by federally chartered banks and other financial institutions such as trust companies and credit unions. From this data we can see that banks hold a dominant share of 92% of assets at a national level. This reflects a weakness of national data to assess industry concentration, given the higher prevalence of credit unions in specific regions and communities within Canada, understated when taking a national view.

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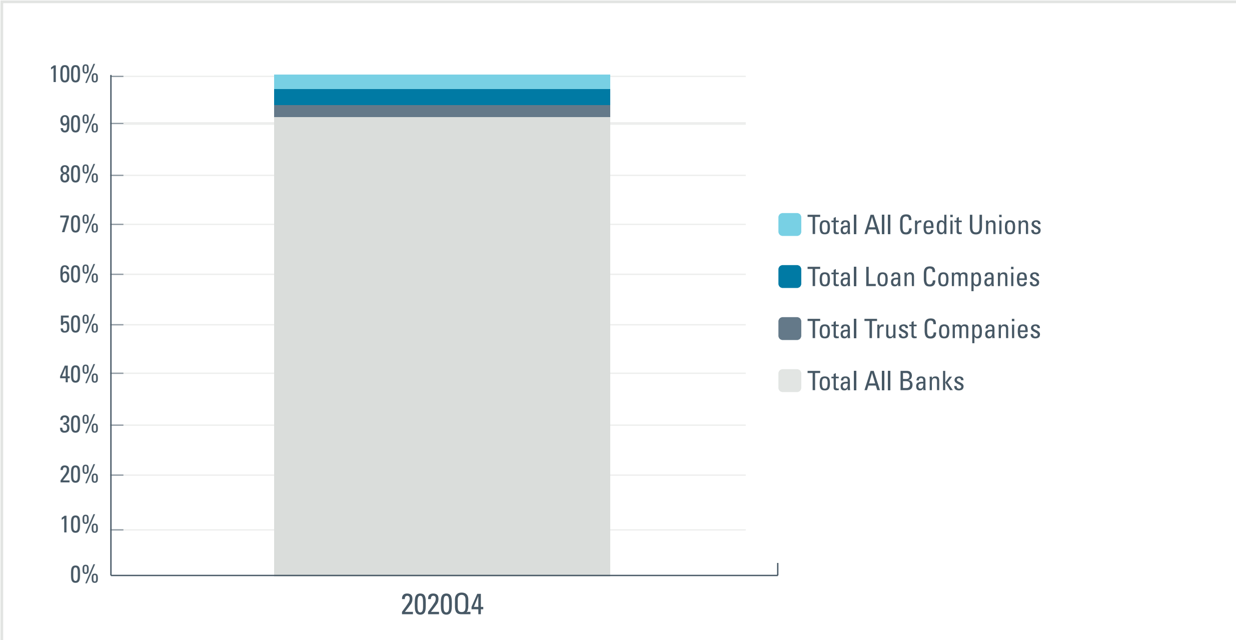
33 Juan Manuel Sanchez-Cartas, "Panzar-Rosse H Statistic and Monopoly. Issues on its Use as a Market Power Measure," The B.E. Journal of Economic Analysis & Policy 20, no. 4 (2020): 1-11, https://doi.org/10.1515/bejeap-2020-0193.

34 Ibid.

35 Ibid.

36 FRED Economic Data, World Bank, "H-Statistic in Banking", data accessed March 17, 2022 https://fred.stlouisfed.org/graph/?id=DDOI05USA156NWDB,DDOI05IEA156NWDB,DDOI05NLA156NWDB,DDOI05JPA156NWDB,DDOI05AUA156NWDB,DDOI05DEA156NWDB,DDOI05BEA156NWDB,DDOI05CAA156NWDB,DDOI05MXA156NWDB,DDOI05EZA156NWDB#0

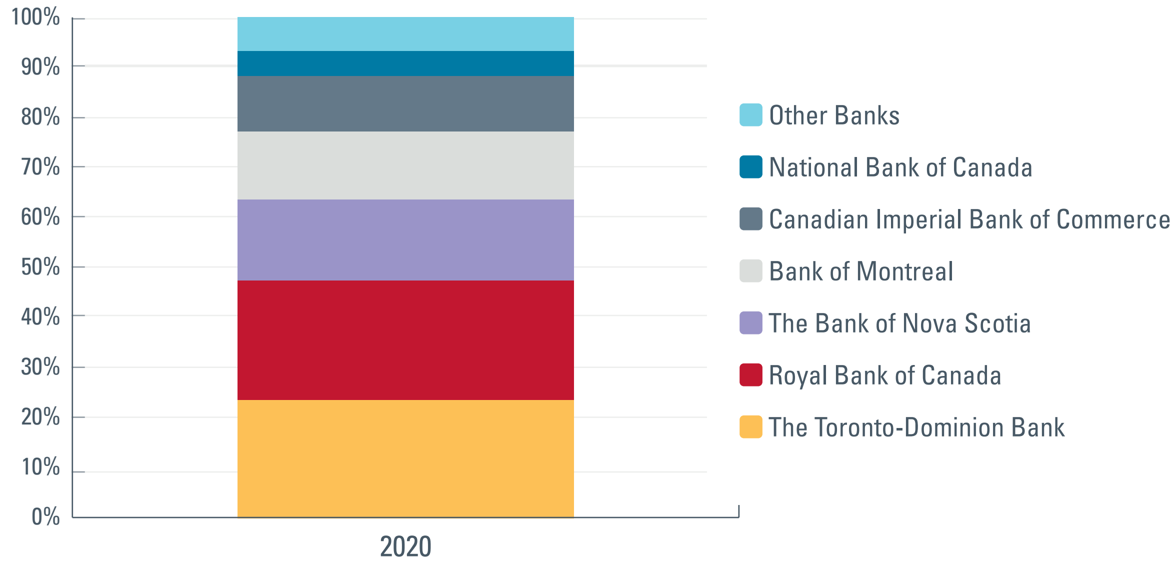
Asset Share Among Banks and Other Financial Institutions (2020Q4)



Source: OSFI Financial Data, Total Currency Total Assets. Data for December 31, Canadian Credit Union Association, National System Results 2020 Q4

Focusing on federally chartered banks, that figure can be decomposed to show the holdings of individual competitors. Unsurprisingly, the six major banks in Canada hold more than 90% of total assets, with the top three accounting for over 60%.

Asset Share Among Canadian Banks (2020Q4)



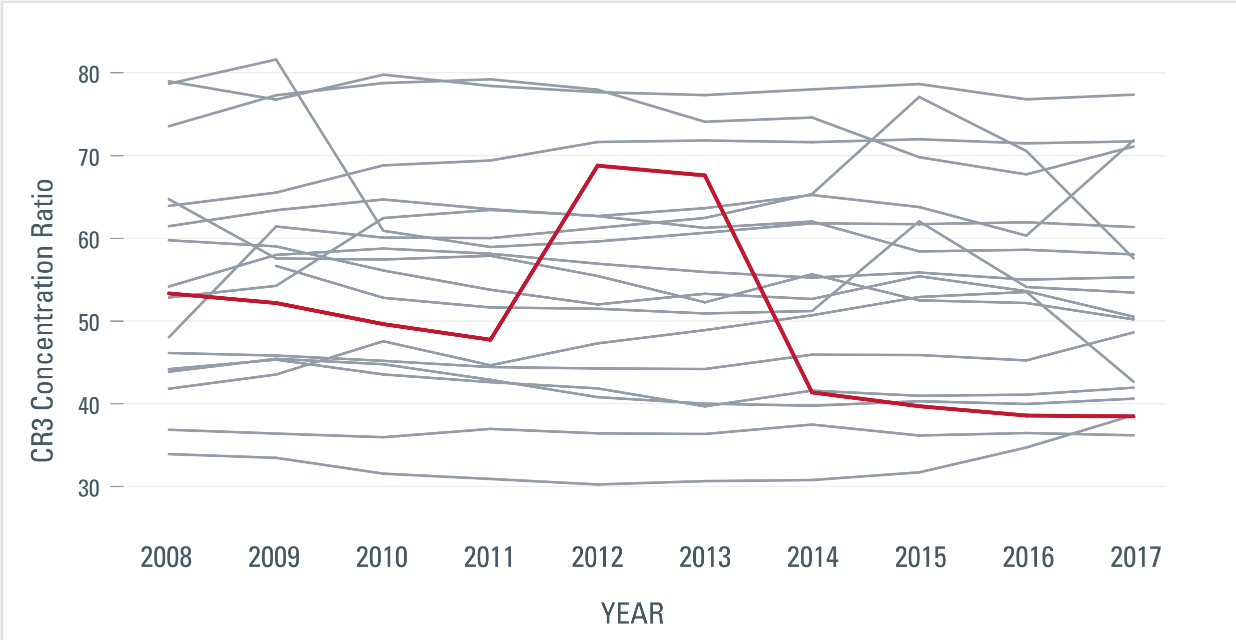
Source: OSFI Financial Data, Total Currency Total Assets. Data for December 31.

It is also useful to understand how these concentration levels compare to international peers. Until 2019 the World Bank aggregated and released data on the structure of the financial sector for countries around the world. Although nearing the end of its useful life, the data allows us to perform a standardized comparison of Canada's banking sector to that of other countries. Focusing on the G20, we see that based on a CR3 measurement (that is, the % of assets held by the three largest banks in a market), while not the most concentrated market by asset share, Canada's largest institutions have historically held an outsized share relative to other countries, and this standing has been relatively stable since 2009.

Possible drivers of this outcome include a long-held regulatory preference for fewer, larger, and more diversified players under the hypothesis that these conglomerates would be more stable compared to smaller and more fragile players. However, to the extent that this approach mutes competitive threats in favour of stability, Canada' banking market is at risk of lower levels of innovation, more conservative investment decisions, and higher prices for consumers[37].

37 Bordo, Redish and Rockoff, "Why didn't Canada have a banking crisis in 2008 (or in 1930, or 1907, or ...)?", February 2015

Canada and the G20: Asset Concentration by Top 3 Banks (2008 - 2017)



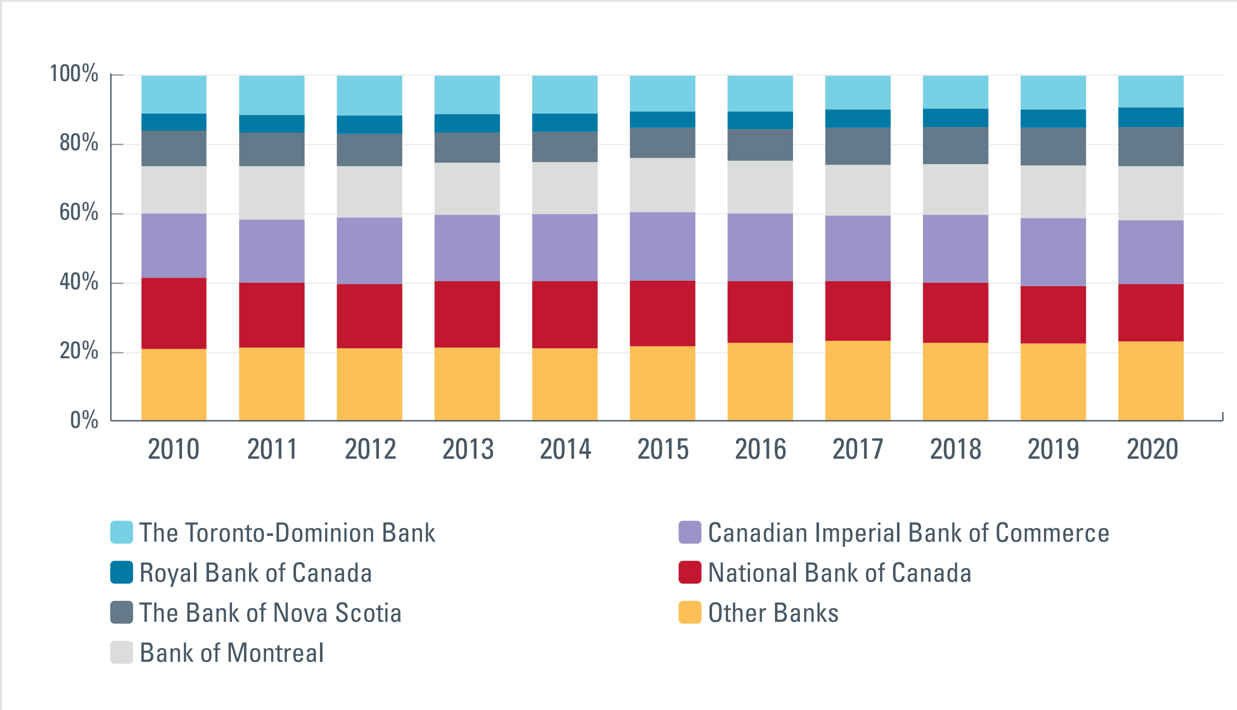
Source: World Bank Financial Structure Database (2019), Bankscope and Orbis Bank Focus databases. Data for Russia removed on account of data quality issues.

Beyond the level of concentration, assessments of competitive intensity are also interested in how dynamic market shares are within a given level of concentration. A market in which the top three players command a dominant market share could still be considered to have high competitive intensity if those players work to innovate and steal share from one another over time. Conversely, a market where shares among competitors are stable over time suggests a more oligopoly-like structure with muted competitive intensity.

Looking at data provided by OSFI, one can examine how shares between the major banks have changed over time, across key product categories such as individual non-mortgage lending, residential mortgages, and individual deposits. For each of these product categories, the results between players are fairly fixed throughout the period of the data, with little movement between the positions of the various players. Viewed through a stability lens, this could be seen as a positive indicator of the continued performance of financial institutions, but from a competitive intensity perspective suggests there are bounds on how far participants will go to dethrone one another.

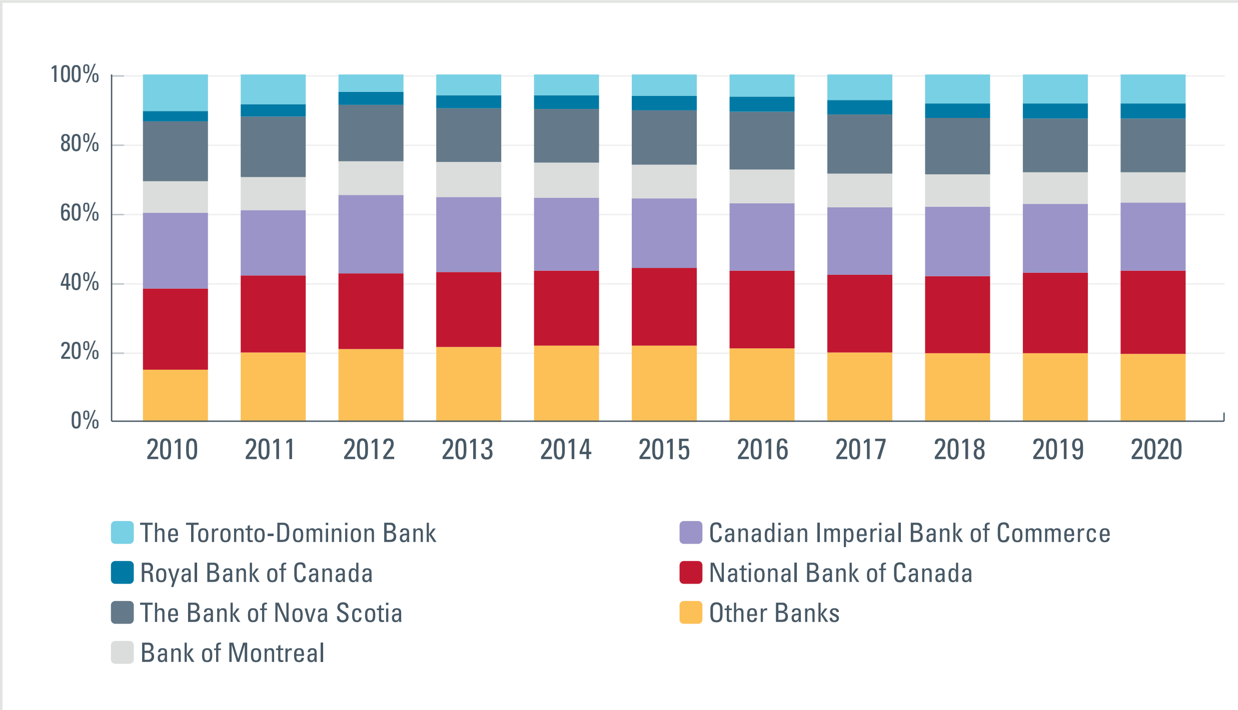
Focusing on individual deposits for example, TD has held the top share throughout, and only grown that share over time. Returning to a critique of the HHI, if TD is the most efficient firm across the sector, this could represent an increase in competition, even if it resulted in an increase of the sector's HHI. A rare exception is TD's jump from fourth place to second in residential mortgages from 2010 to 2015, although by 2020 BNS had retaken that position. Also worth noting that across each of the categories, the share held by banks other than the six biggest banks has never been much more than a collective 10% and has shrunk from its position in 2010.

Bank Market Shares by Product Category - Individual Non-Mortgage Lending (2010-2020)



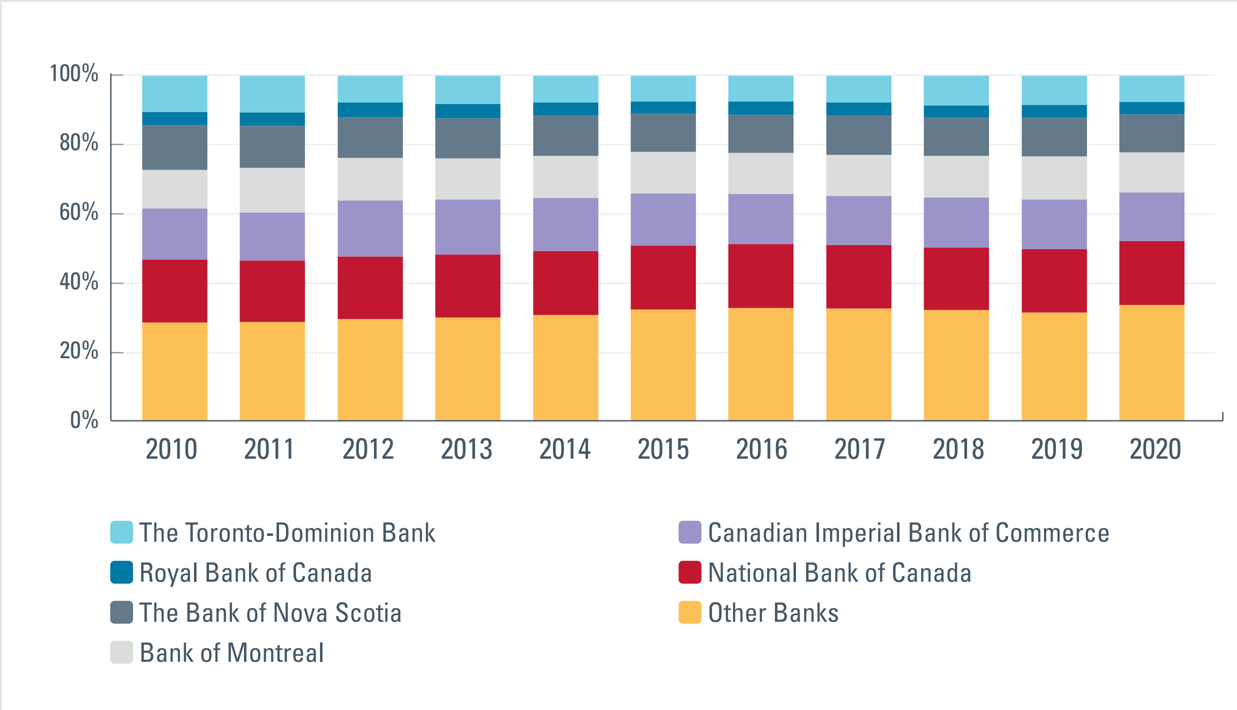
Source: OSFI Financial Data, Total Currency 3. Loans (a) Non-Mortgage Loans, less allowance for expected credit losses (vi) To individuals for non-business purposes and (viii) To individuals and others for business purposes. Data for December 31 of respective years.

Bank Market Shares by Product Category - Residential Mortgages (2010-2020)



Source: OSFI Financial Data, Total Currency 3. Loans (b) Mortgages, less allowance for expected credit losses (i) Residential (A) Insured and (C) Uninsured. Data for December 31 of respective years.

Bank Market Shares by Product Category - Individual Deposits (2010-2020

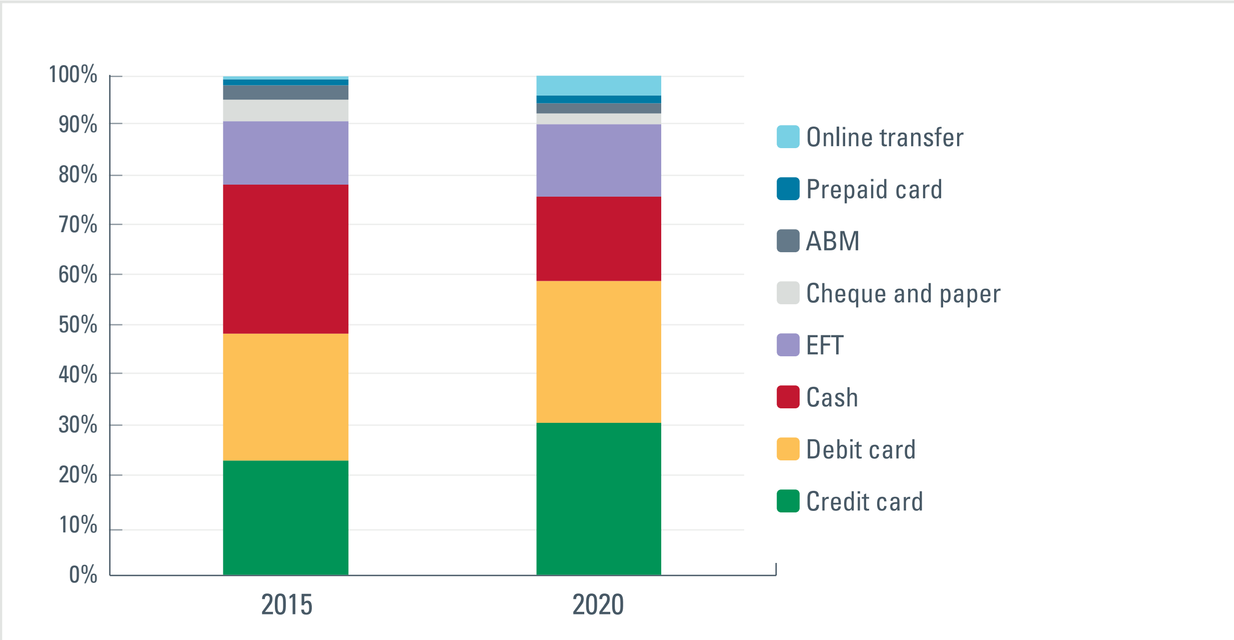


Source: OSFI Financial Data, Total 1. Demand and notice deposits (d) Individuals and 2. Fixed-term deposits (d) Individuals. Data for December 31 of respective years.

Payments

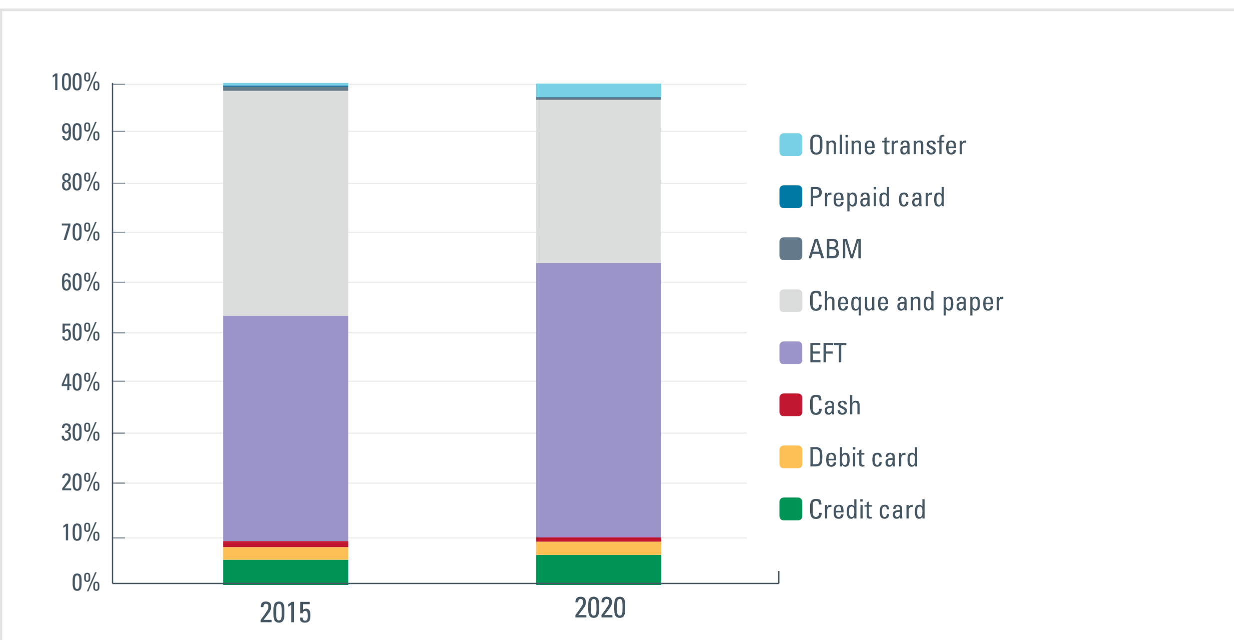
Shifting our attention to concentration across the payments landscape, Payments Canada annually details trends in the level of activity across payments methods, documenting shifts over time in the volume and size of commerce occurring across methods such as cheques, electronic funds transfers (EFT), online transfers, credit and debit cards, and of course cash. Unlike the OSFI data, Payments Canada's analysis focuses on the market share of payment methods rather than the share of individual companies.

Canadian Payment Volume (2015 - 2020)



Source: Payments Canada, Canadian Payment Methods and Trends Report 2021

Canadian Payment Value (2015 - 2020)



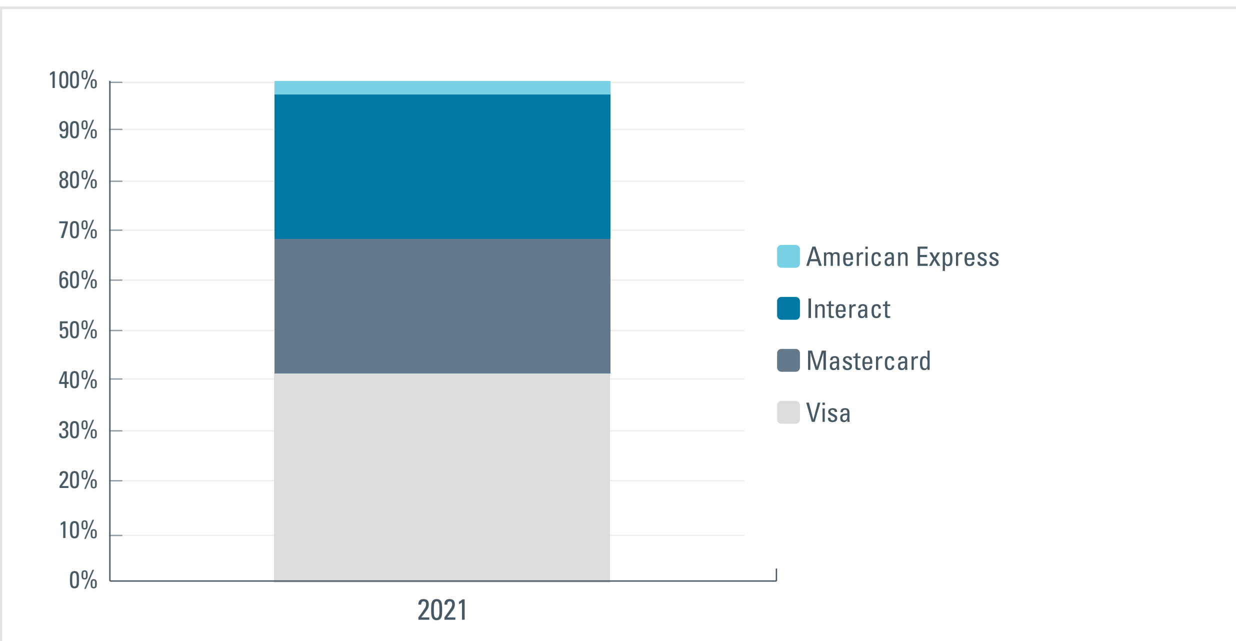
Source: Payments Canada, Canadian Payment Methods and Trends Report 2021

This shows that competition occurs not just between companies offering payment methods, but across the methods of payment themselves, potentially complicating the role of concentration in determining competitive intensity. Still, the characteristics of different methods of payment can create meaningful distinctions that are competitively relevant. Credit cards, for example, allow users to spread short term cash obligations across one or multiple payment cycles, but for that same reason often include spending caps that render them unusable for larger transactions.

Although they transact relatively little of the total value of payments in Canada, credit and debit transactions play an outsize role in the volume of transactions made by Canadians. Within types of payments, competition occurs along what the Competition Bureau refers to as intra-network and inter-network competition, the difference being that intra-network competition occurs between participants using the same payments system, and inter-network competition occurs between the payments systems themselves.[38] Intra-network competition could be thought of two banks both offering Visa credit cards competing for a consumer, whereas inter-network competition would more accurately describe American Express, which operates its own separate network, competing with Visa for a consumer.

While intra-network competition may fall along similar lines as the banking market share data shown above, inter-network competition for transactions focuses on a different set of actors. In Canada there are four major network providers on which credit, debit, and prepaid cards depend: Visa, Mastercard, Interac, and American Express. Looking at recent transaction share data, Visa, Mastercard, and Interac conduct by far the majority of transactions, with the three firms responsible for ~97% of volume.

Purchase Volume (Credit, Debit and Prepaid Cards)



Source: Nilson Report, Canada Card Network and Issuers, April 16, 2021

38 Competition Bureau, "Technology-led innovation in the Canadian financial services sector" December 14, 2017 https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04322.html

While Canada's payment landscape certainly displays high levels of concentration, this is less surprising given the role of network effects in payments markets. Network effects mean that the value of a network increases along with the number of users, and markets that demonstrate these effects can result in markets characterized by fewer, larger players. Canada's payments ecosystem is also less concentrated than our closest neighbour thanks to the presence of Interac. In their 2020 complaint to block Visa's acquisition of Plaid, a financial technology company, the U.S. Department of Justice (DOJ) noted that Visa had a 70% share of online debit transactions, with Mastercard as its closest competitor at 25%.[39] However, as previously noted, the ownership and governance of Interac is comprised of the same major financial institutions that dominate Canada's banking space.[40]

Although network effects may explain concentrated market structures, they do not exempt a market from competitive concerns, examples of which include the U.S. DOJ's complaint and Canada's own competition enforcement history. As evidenced by their presence in the mandate letter for the Minister of Finance, interchange fees, the fees charged to merchants for payment processing, are of ongoing political interest. In the wake of the Competition Bureau's case against Visa and Mastercard, in Canada these rates are the result of a voluntary commitment between major payment service providers and the Minister of Finance to "level the playing field" for smaller businesses unable to negotiate deals with payment networks.[41] Comparing a sample of interchange rates to global peers, while not uniquely high, interchange rates for credit and debit transactions in Canada are higher than peers such as the E.U. and U.K. who have pursued formal regulation rather than voluntary agreements.[42]

Return on Equity

Beyond concentration, measures of profitability are often an input into the assessment of competitive intensity and the presence of market power. Returning to the concept underpinning the Lerner Index, firms facing limited competition are better able to capture profits that would otherwise be competed away and shared with consumers. Although profitability between markets can depend on a number of characteristics, comparisons of the profitability of companies within markets can provide a window into whether a market is ripe for disruption by new entrants hungry to compete away high profits in less competitive markets.

Using return on equity (ROE), a standard financial measure of profitability and how efficiently those profits are attained, we can compare the performance of Canada's banking sector and its individual participants to our global peers.

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39 U.S. Department of Justice, "Justice Department Sues to Block Visa's Proposed Acquisition of Plaid", November 5, 2020
https://www.justice.gov/opa/pr/justice-department-sues-block-visas-proposed-acquisition-plaid

40 Interac, "Our Board of Directors", accessed March 12, 2022
https://www.interac.ca/en/about/our-people/board-of-directors/

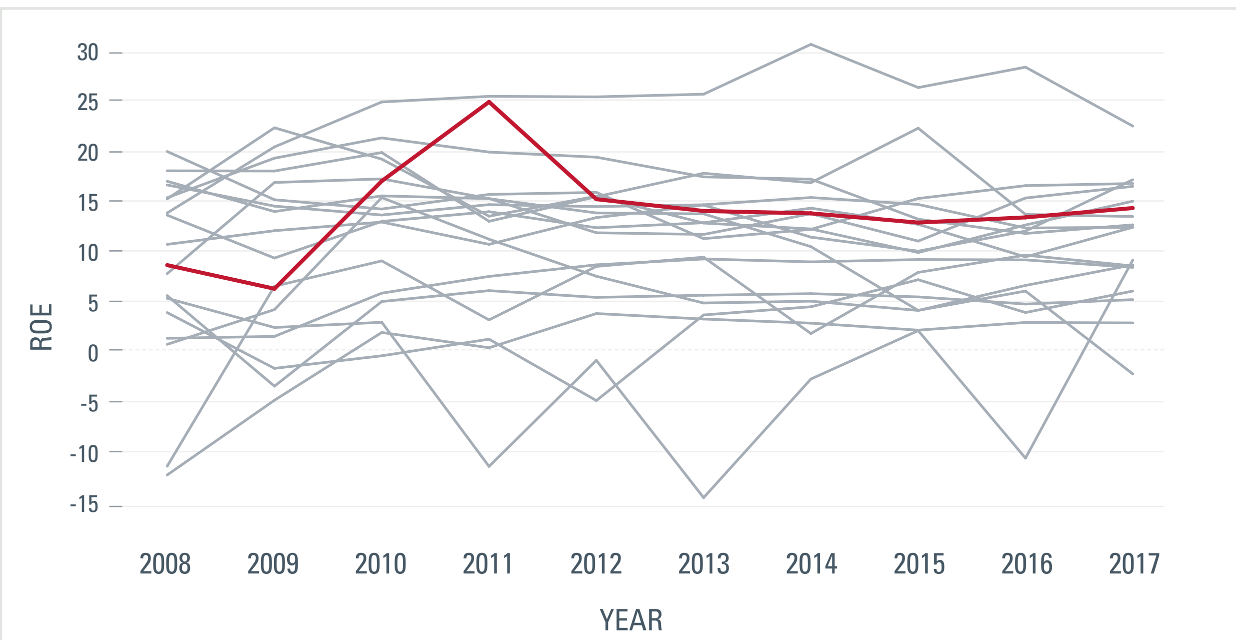
41 Department of Finance, "Backgrounder: New Voluntary Commitments From Payment Card Networks", August 9, 2020
https://www.canada.ca/en/department-finance/news/2018/08/backgrounder-new-voluntary-commitments-from-payment-card-networks.html

42 Kansas City Fed, "Credit and Debit Card Interchange Fees in Various Countries", August 2021
https://www.kansascityfed.org/documents/8288/CreditDebitCardInterchangeFeesVariousCountries_August2021Update.pdf

Returning to the same World Bank dataset, we can look across the banking sectors of G20 peers and determine on average where Canada's banking sector falls. Similar to concentration, while Canada does not have the highest average ROE, it is within the top third of its peer jurisdictions, at least until 2017. While not the most profitable, Canada's banks outperform peers such as the U.S., U.K., Japan and Germany, whose banks are on average some of the least profitable among G20 members. Financial analyst commentary points to a mix of higher leverage, a more profitable mix of business lines, higher fee (or non-interest) income, and a more developed "cross-sell culture" compared to counterparts in the U.S. as drivers of the higher profitability of Canadian banks.[43] Given the highly regulated nature of the industry, ROE can also depend on the mix of regulation a country employs in its banking sector. Whatever the mix of factors, Canada's banking sector has generated leading and relatively stable profitability since the financial crisis.

Even when scoring highly on ROE relative to international peers, a whole-of-bank ROE understates the profitability of the retail banking arms of these banks, the side of the banking business most relevant to consumers and small businesses. In 2021 RBCs overall ROE was 18%, while the ROE of its personal and commercial banking practice was 32% and 35.2% when focusing solely on Canadian banking,[44] and a gap of up to 20 percentage points is common across the other large banks in Canada.

Canada and the G20: Average Bank Return on Equity (2008 - 2017)



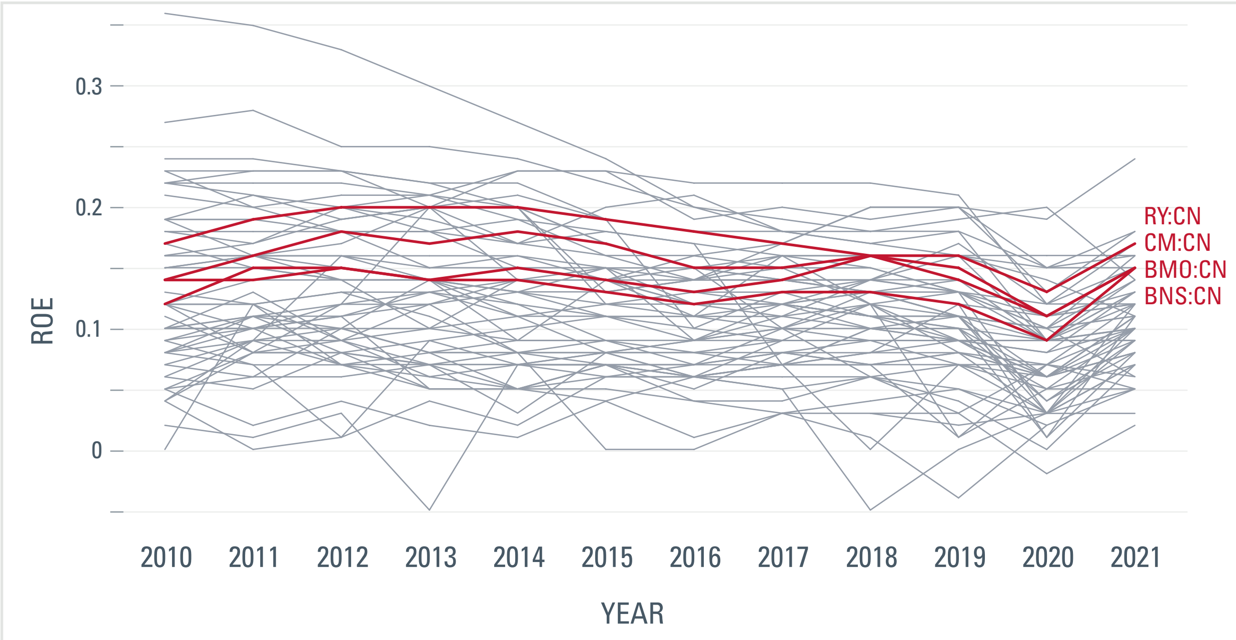
Source: World Bank Financial Structure Database (2019), Bankscope and Orbis Bank Focus databases. Data for Russia removed on account of data quality issues.

Looking at more up to date data comparing individual peer banks in the respective countries, it is clear that this trend has persisted, and that Canadian banks continue to have some of the highest ROE when compared to the largest banks in other G20 countries.

43 CIBC, "Bank Primer", February 20, 2018

44 RBC, "Supplementary Financial Information Q42021", November 30, 2021

Canada and the G20: Average Bank Return on Equity (2010 - 2021)



Source: Reuters Fundamentals Standardized Model – Banking. Data for Argentina, Russia, Italy, and Turkey removed for data quality issues.

Composition of Bank Income

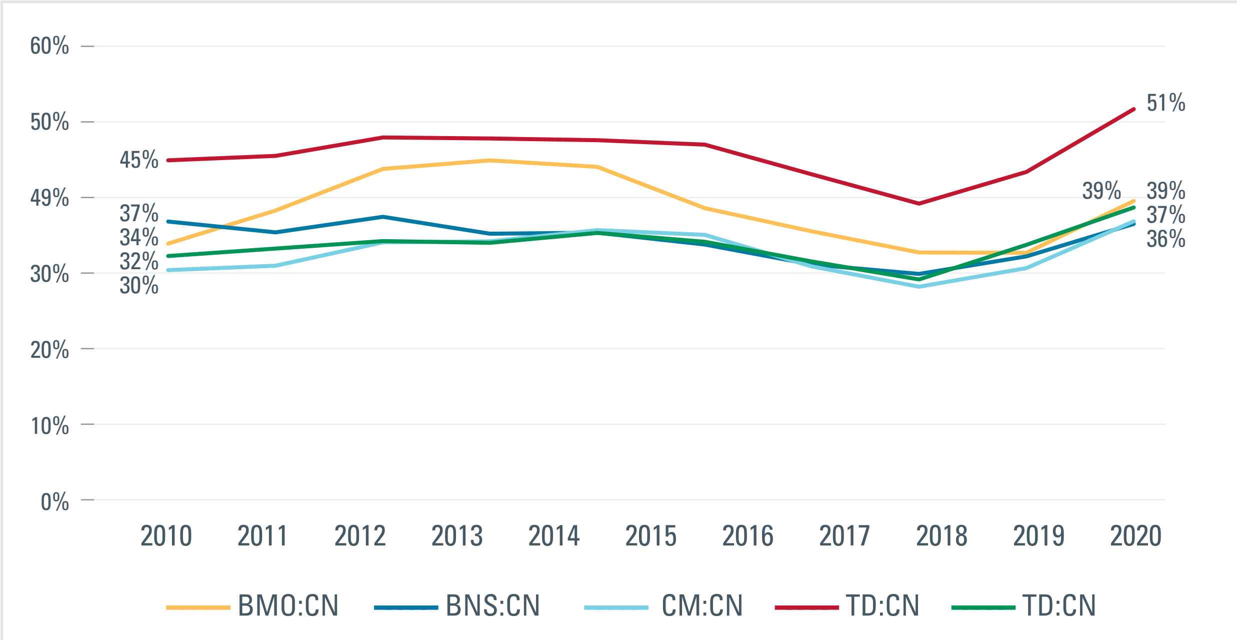
Understanding that Canadian banks are some of the most profitable in the world, it is worth exploring how those profits are made. Income a bank earns on its retail business can be split into two groups: net interest income and non-interest income. At a high level, net interest income is the difference between the amount the bank pays out for the deposits of savers and the amount it takes in from the funds it lends out to borrowers. Non-interest income then is every other revenue stream for a bank, a substantial portion of which, and most relevant to consumers and small businesses, is the fees associated with the products and services the bank offers.

In Canada, particularly in the low rate environment of the past decade, interest-bearing products, whether deposit accounts or lending products are fairly commoditized across banks, at least in terms of public advertising. For example, the prime rate, the benchmark interest rate on which banks determine the cost of their credit products is 2.7% for all the major banks at time of writing. Banks in Canada typically change their prime rate when the Bank of Canada changes its own overnight lending rate. Different prime rates could be used as a competitive differentiator but although there are occasionally exceptions, Canadian banks most often "pass on" the entire change in the overnight rate to their own prime rates.

In an environment where banks follow one another closely in terms of the rates offered by their interest-bearing products, it is worthwhile to examine trends related to non-interest income in Canada and compared to international peers.

First, over the past ten years the proportion of total income coming from non-interest income for each of the five largest banks in Canada has increased, although this proportion fell from 2016 -2018. This percentage is relatively similar for the five major banks, with the exception today of RBC which receives just over 50% of its income from non-interest sources and consistently has the highest percentage among its peers.

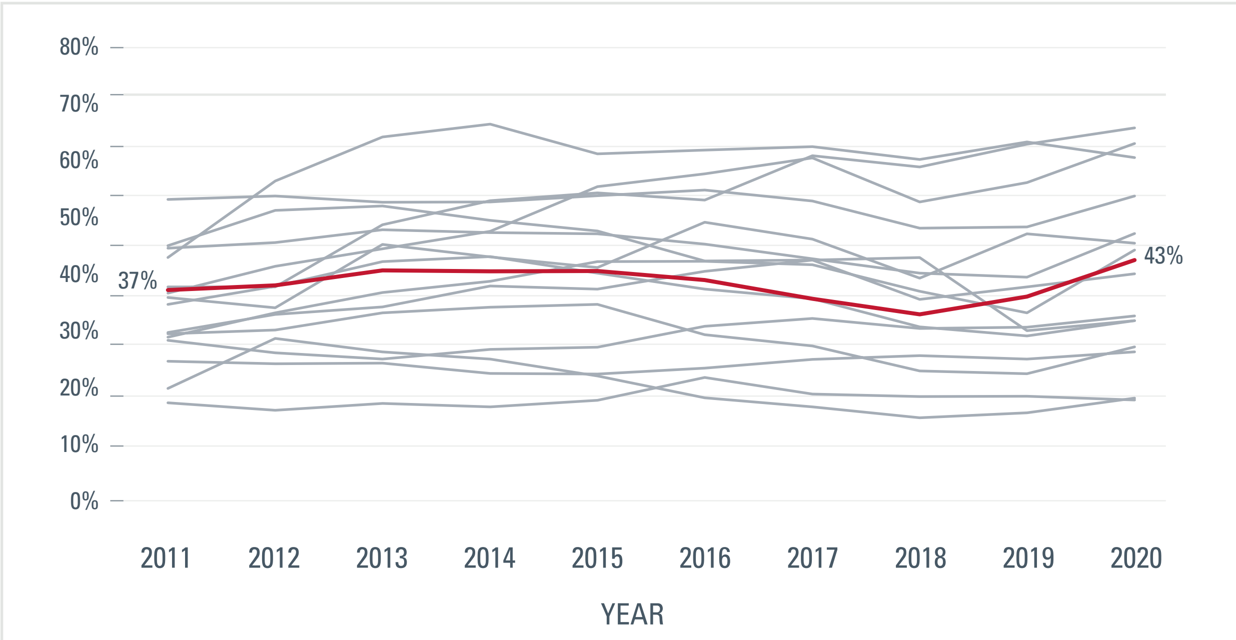
Domestic Bank Non-Interest Income as a % of Total Income (2011 - 2020)



Source: Reuters Fundamentals Standardized Model – Banking

However at an aggregate level Canada's banking sector does not appear to be an outlier in the proportion of income originating from non-interest or fee sources. Weighted by the non-interest income of the individual players, Canada's proportion of non-interest income falls squarely in the middle of the pack of G20 peers.

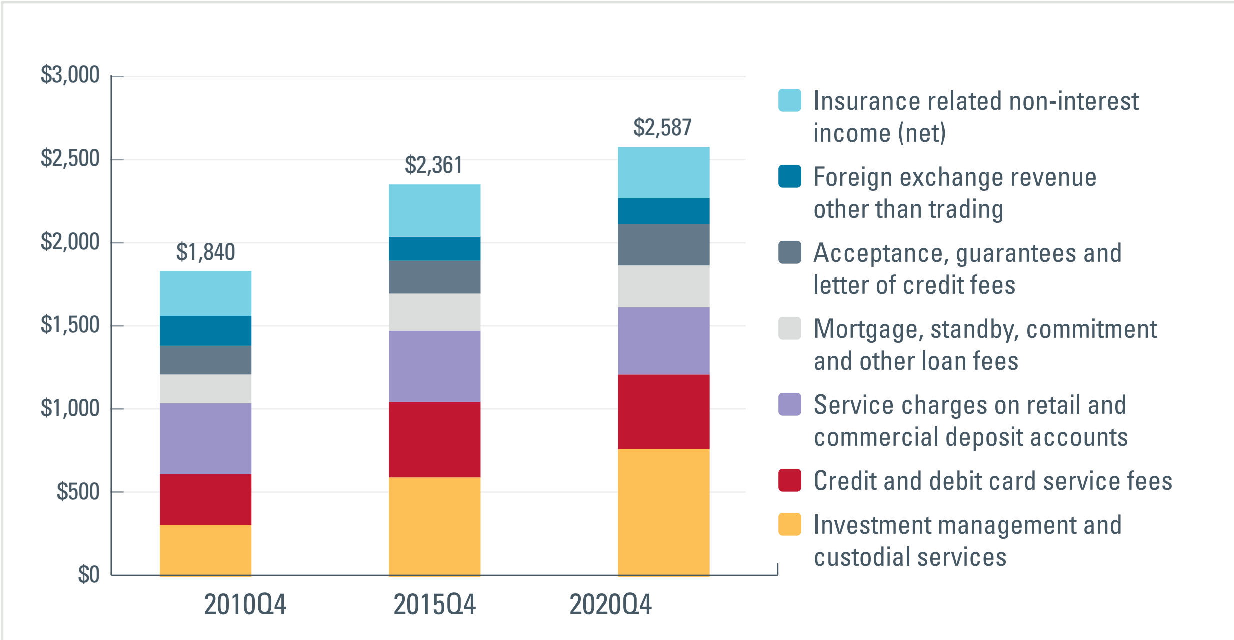
Weighted Average of Non-Interest Income as a % of Total Income for Largest Publicly Traded Banks for G20 Countries (2011 - 2020)



Source: Reuters Fundamentals Standardized Model – Banking. Data for Argentina, Russia, and Turkey removed for data quality issues.

Although Canada's reliance on non-interest income may not be an outlier, it is worth examining public data on how the level and composition of non-interest income has changed in Canada. Looking at OSFI data and focusing on the categories of non-interest income broken most relevant to consumers and small businesses (removing fees for other bank activities like initial public offerings (IPOs)) we see that, adjusted for inflation and the number of Canadian households, the average amount of banking fees has risen from approximately $1,840 in 2010 to $2,587 in 2020. Major fee categories include investment management and custodial services, along with credit and debit card services, the former having more than doubled in the ten year period and the latter increasing by approximately 50%. While not all of these fees are borne directly by consumers and businesses, it is useful to understand the trends in the categories that could make up the basis of competing future business models.

Composition and Level of Average Non-Interest Income per Household (2010-2020)



Source: OSFI Financial Data for Banks (All Banks), IBIS World Number of Households.
**"Other" and "Mutual (investment) fund, underwriting on new issues and securities commissions and fees" categories removed.*
**Adjusted for for 2020 dollars*

Unfortunately this data provides an incomplete picture of the trends driving the changes in composition and level of non-interest income. The increase in credit and debit card services is in part driven by a greater share of transactions occurring via these methods of payment. While Payments Canada data shows that total transaction volume has grown approximately 10% from 2011 to 2019,[45] credit and debit cards have made up an increasingly large portion of that volume, growing from 48% in 2015 to 59% in 2020. Increases in investment management and custodial services could reflect the acquisition of asset management businesses that were previously outside the remit of this regulatory data collection, or more intense competition with those businesses. But in each of these cases the outcome is a greater volume of dollars accruing largely to Canada's major financial institutions.

45 The Canadian payments system processed approximately 20.3 billion transactions in 2011 and 22.0 billion transactions in 2019. 2020 data is excluded on account of the pandemic.
Payments Canada, "2016 Canadian Payments Methods and Trends", November 16, 2016
https://www.payments.ca/sites/default/files/cpmt_report_english.pdf
Payments Canada, "2020 Canadian Payments Methods and Trends", November 17, 2020
https://www.payments.ca/sites/default/files/paymentscanada_canadianpaymentsmethodsandtrendsreport_2020.pdf

Current Regulatory Moment

Current Regulatory Moment

While traditional indicators of competition provide mixed signals domestically and in comparison to international peers, there appears to be an opportunity to improve the intensity of competition in Canada's concentrated and profitable markets for banking and payments.

Related mandate letters reflect two linked goals for the future of Canada's banking and payments sector: affordability and creating the potential for entry and innovation, both

by-products and drivers of competition. For the Minister of Finance, this comes in the form of attention on the level of bank fees paid by consumers, and the rates payment processors can charge merchants.[46] At the same time, the Associate Minister of Finance has been given the responsibility for shepherding the launch of open banking and a modernized Canadian payment infrastructure[47]. At the heart of these policy goals are questions of the data and infrastructure that underpin Canada's financial system, and the criteria for who is allowed to build products and services using them. Understanding Canada's progress to date in these areas is important to determine the next steps required for Canada to increase the competitive intensity in banking and payments, and inform whether new approaches are needed.

Open Banking

The core of open banking is safely and securely reducing the barriers for consumers to switch financial service providers by mandating and standardising access to consumer financial data for financial service providers. As a customer's banking relationship with a financial institution grows, it becomes an increasingly complex and risky process to transfer parts of that relationship to another financial institution. Companies like Wealthsimple, for example, have expressed that customers have difficulty sharing and transferring financial data, which poses a barrier for financial service companies and dampens the contestability of the financial services market.[48] Canadians can spread their financial relationships across multiple competing institutions, referred to as multi-homing, and an effective open banking system enables consumers to more easily engage in this kind of competition for different aspects of their financial lives. Similar to the portability of phone numbers in the telecommunication space, the promise of open banking is to reduce this complexity and risk and encourage consumers to take advantage of a wider array of competitive options.

An international peer that has led the way on open banking is the United Kingdom, who moved to implement an open banking regime after their competition authority, the Competition and Markets Authority (CMA) published a 2016 report concluding that the banking sector was lacking in competition and innovation, and crafted a set of remedies that would lead to the creation of an open banking regime.[49,50]

46 Office of the Prime Minister, "Deputy Prime Minister and Minister of Finance Mandate Letter", December 16, 2021 https://pm.gc.ca/en/mandate-letters/2021/12/16/deputy-prime-minister-and-minister-finance-mandate-letter

47 Office of the Prime Minister, "Minister of Tourism and Associate Minister of Finance Mandate Letter", December 16, 2021 https://pm.gc.ca/en/mandate-letters/2021/12/16/minister-tourism-and-associate-minister-finance-mandate-letter

48 Report of the Standing Senate Committee on Banking, Open Banking: What it means for you (Senate Canada, 2019).

49 Stephan J. Redican et al., "Preparing for open-banking: Lessons from the U.K.," BLG Canada's Law Firm, last modified February 26, 2020, https://www.blg.com/en/insights/perspectives/open-banking-uk.

50 "The Future of Financial Services", Open Banking, https://www.openbanking.org.uk/.

As part of the remedies issued by the CMA the country's nine largest banks would be mandated to develop an application programming interface (API) to allow customers to share their data with third parties.[51] In late 2016 the Open Banking Implementation Entity (OBIE)[52]—responsible for implementing open banking—was formed, and by 2018 a basic form of open banking related to chequing account data was introduced.[53] The OBIE's scope was then expanded to integrate payments other than personal and small business payments; credit cards, e-wallets, and prepaid cards into the open banking system. OBIE is also establishing the eligibility criteria and application process for financial service providers.[54] According to members of the OBIE, the mandate to create APIs by the CMA was a key element of the success of the implementation of open banking, as the "banks would not have done so voluntarily."[55]

But despite the relatively quick turnaround the UK experience has not been without issue. One challenge identified was a failure to communicate proactively to previously unregulated third-parties about their "impending regulatory oversight" needed to gain accreditation for open banking access.[56] This communication failure extended to consumers, and it appears there has been a lack of clarity over who would ultimately have access to their financial information. This is critical for a policy whose success is so dependent on consumer trust that their data will not be misused. The UK has also experienced issues with its oversight body, with a 2021 CMA report finding "a number of failings relating to the management of the OBIE" and are poised to replace the entity with another oversight body in 2022.[57] With those shortcomings in mind, it is notable that the UK was able to have some form of open banking system online roughly two years after the policy was put forward by the CMA. Beyond facilitating easier switching of financial relationships, consumers in the U.K. can purchase cars or pay their income taxes using open banking payment services, and competing payment services are beginning to emerge. Estimates suggest that half of U.K. small businesses and four million consumers use services relying on open banking, and by late 2023 it is projected that 60% of the UK population will use open banking.[58]

The speed at which the UK has implemented an open banking framework is reinforced when compared to the pace of open banking in Canada. In early 2018 the federal government announced they will review the benefits of open banking,[59] and later that year an open banking advisory committee was struck by the

51 Ibid.

52 The Review, Review into Open Banking: giving customers choice, convenience, and confidence, Commonwealth of Australia, 2017.

53 Stephan J. Redican et al., "Preparing for open-banking: Lessons from the U.K.," BLG Canada's Law Firm, last modified February 26, 2020, https://www.blg.com/en/insights/perspectives/open-banking-uk.

54 Ibid.

55 Report of the Standing Senate Committee on Banking, Open Banking: What it means for you (Senate Canada, 2019). https://sencanada.ca/content/sen/committee/421/BANC/reports/BANC_SS-11_Report_Final_E.pdf

56 Ibid.

57 CMA, "Corporate Report. Update on Open Banking." Gov. UK, last modified November 5, 2021, https://www.gov.uk/government/publications/update-governance-of-open-banking/update-on-open-banking.

58 Ibid.

59 Stephanie Marotta, "FP Explains: What is open banking and why hasn't it come to Canada yet?" Financial Post, last modified June 24, 2021 https://web.archive.org/web/20210713091357/https:/financialpost.com/fp-finance/fp-explains-what-is-open-banking-and-why-hasnt-it-come-to-canada-yet.

Minister Morneau.[60] In early 2020 that committee released a report following consultation advocating a hybrid model of implementation between government and industry, and an initial narrow scope including federally regulated banks.[61]

A second round of consultation was conducted by the Department of Finance, and its April 2021 report, which was released in August of that year, recommends a two-phase approach, beginning with appointing an open banking lead and establishing common rules, accreditation framework, and technical specifications for safe transfer of financial data within 9 months. In the next 9 months, third party service providers would be accredited and test data transfer mechanisms.[62] While these phases are occurring, the government should establish an entity to administer the open banking system.[63]

Since the appointment of an open banking lead in March 2022, coming after the advisory committee report was drafted and later published, it's not clear that the committees' recommended timeline will be met.

Most financial service providers are publicly in favour of open banking. The clearest advocates for open banking are fintech companies, who currently rely on practices such as screen scraping to access financial data from banks.[64] Commenters highlight that Canada may lag too far behind other countries like the UK[65] that already have clear regulatory frameworks in place, and that the current regulatory framework played a part in firms such as Revolut exiting the Canadian market.[66] While one might expect incumbents to not be in favour of an open banking regime, particularly in light of the UK experience, there are public interest groups in Canada that are not in favour of open banking as well. The Public Interest Advocacy Center (PIAC) believes that most customers do not want open banking.[67] In their opinion, consumers should be wary of open banking because of the existing lack of adequate consumer protection legislation in banking services and the associated privacy and cybersecurity concerns.[68]

Substantial disagreement between stakeholders also exists on nature of the framework underlying open banking. While some support overarching legislation to establish an entity responsible for implementation

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60 Advisory Committee on Open Banking, Final Report (Government of Canada, 2021), https://www.canada.ca/content/dam/fin/consultations/2021/acob-ccsbo-eng.pdf.

61 Darcy Ammerman and Taylor Farrell, "Open Banking in Canada: Could 2023 be the Year?" McMillan, last modified August 11, 2021, https://mcmillan.ca/insights/open-banking-in-canada-could-2023-be-the-year/.

62 Advisory Committee on Open Banking, Final Report (Government of Canada, 2021), https://www.canada.ca/content/dam/fin/consultations/2021/acob-ccsbo-eng.pdf.

63 Ibid.

64 Government of Canada, "Open banking," Government of Canada, last modified August 23, 2021, https://www.canada.ca/en/financial-consumer-agency/services/banking/open-banking.html.

65 Stephanie Marotta, "FP Explains: What is open banking and why hasn't it come to Canada yet?" Financial Post, last modified June 24, 2021. https://financialpost.com/fp-finance/fp-explains-what-is-open-banking-and-why-hasnt-it-come-to-canada-yet.

66 FinTech Futures, "Revolut exits Canada after trialling beta for year and a half", March 16, 2021 https://www.fintechfutures.com/2021/03/revolut-exits-canada-after-trialling-beta-for-year-and-a-half/

67 Report of the Standing Senate Committee on Banking, Open Banking: What it means for you (Senate Canada, 2019).

68 Ibid.

and mandating participation,[69] others advocate for industry-led standards and practices.[70] Additionally, stakeholders also disagree on what the technical specifications and standards should look like. Some stakeholders want a single standard to reduce inconsistencies, while others think a single standard may hinder innovation, competition, and flexibility to adapt to technological development.[71]

If the government follows the direction of the committee and appoints a lead for open banking, a key function of that lead will be cutting through these concerns and disagreements and finally creating a path forward for open banking in Canada.

Payments Modernization

While open banking may be one of the most important consumer-facing policy actions to support competition in banking and payments, the ongoing payments modernization represents an equally if not more important change to the infrastructure supporting Canada's payments system. Over a decade ago the Department of Finance struck a taskforce to begin to formulate the future of Canada's payments system, of which a key recommendation[72] was to reform the powers of the Canadian Payments Association (now known as Payments Canada) and enable the organization to conduct an overhaul of the key pieces of payments infrastructure: the Large Value Transfer System, unsurprisingly responsible for processing high-value transactions, and the Retail Batch Payment System, responsible for the majority of transaction activity consumers and small businesses conduct daily.

In 2015 the Bank of Canada, one of Payments Canada's oversight bodies, released a discussion paper outlining the policy objectives for the modernization of Canada's payment system[73]. These objectives reflected the alleged policy tensions outlined for the banking system as a whole: safety and soundness, efficiency of operations and use of resources, and meeting the needs of Canadians. The paper echoed many of the motivations present in the open banking discussion in Canada. The Bank was explicit that next-generation systems should lower barriers to entry for new competitors, reduce switching costs for consumers, and focus on interoperability, that is, the ability of systems to openly interact with one another. The Bank suggested a mix of system access and interoperability, with losses in efficiency possibly offset by greater interoperability.

In 2016 Payments Canada released its consultation paper for the future of Canada's payments system, *Developing a Vision for the Canadian Payments Ecosystem*[74]. Through that consultation stakeholders requested elements such as near real-time availability of funds, accessible payments data, visibility into the status of payments, improved privacy and alias systems for receiving payments, and better support for international payments. Following this consultation exercise, Payments Canada outlined their modernization target state in 2017. The target state proposed a new large value transfer system that supports a higher level of detail in payment messaging, data-rich retail payments with same-day settlement of transactions, and new real-time

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69 Advisory Committee on Open Banking, Final Report (Government of Canada, 2021), https://www.canada.ca/content/dam/fin/consultations/2021/acob-ccsbo-eng.pdf.

70 Ibid.

71 Ibid.

72 Department of Finance, "Moving Canada into the Digital Age", December 2011 https://www.canada.ca/content/dam/fin/migration/n12/data/12-030_1-0_eng.pdf

73 Bank of Canada, "Public Policy Objectives and the Next Generation of CPA Systems: An Analytical Framework", September 2015 https://www.bankofcanada.ca/wp-content/uploads/2015/09/dp2015-6.pdf

74 Payments Canada, "Developing a Vision for the Canadian Payment Ecosystem", April 20, 2016 https://www.payments.ca/sites/default/files/vision_-_ecosystem_-_whitepaper.pdf

payment rails that will support the development of new systems on top of it's core infrastructure, for both financial institutions and non-financial institution payment service providers, and allow users to make low-value real-time transfers to one another via aliases.

Later in 2017, the Department of Finance released a new Retail Payments Oversight Framework[75], outlining the principles Finance would use to guide the development of a new oversight framework for payment service providers and providing a window into the motivations of the regulator. Those principles included addressing risk to end users and avoiding regulatory duplication, oversight and compliance burden proportional to the level of risk of the payment activity, consistency across types of risk, and a focus on effectiveness of the oversight. Unsurprisingly, underlying these principles is a stated focus on promoting innovation and competition in Canada's payments system.

Although an efficient and data-rich large value transfer system is important, more relevant to Canadians on a daily basis is the implementation of the real-time payment rails (known as RTR) on which financial institutions and non-financial institutions will be able to create innovative services to support lower value transfers between consumers and businesses. In early 2021, Payments Canada selected Interac, an existing player in the Canadian payments space owned and governed[76] by major financial institutions in Canada, to develop the technology underlying Canada's RTR[77]. Although at the time the release of RTR was initially scheduled to launch infor 2019, and then 2022, the current go live date has been pushed to 2023.[78] Later in 2021, Payments Canada launched Lynx[79], its improved large value transfer system, but pushed the release of the new payment messaging system, ISO 20022, to later in 2022.

Although the stated focus on competition and innovation from those involved in the modernization of Canada's payment system is promising, the delays in its implementation put Canada well behind peer countries that have already completed similar modernizations. The United Kingdom launched its own RTR equivalent in 2008,[80] the United States in 2017,[81] and Australia did so in 2018.[82] Additionally, there are concerns that the selection of Interac as the provider of Canada's RTR solution may bias it towards existing players, but this is not necessarily a distinct approach compared to countries such as the United States[83] and Australia.[84]

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74 Payments Canada, "Developing a Vision for the Canadian Payment Ecosystem", April 20, 2016
https://www.payments.ca/sites/default/files/vision_-_ecosystem_-_whitepaper.pdf

75 Department of Finance, "A New Retail Payments Oversight Framework", October 6, 2017
https://www.canada.ca/en/department-finance/programs/consultations/2017/new-retail-payments-oversight-framework.html

76 Interac, "Our Board of Directors", accessed March 12, 2022
https://www.interac.ca/en/about/our-people/board-of-directors/

77 Payments Canada, "Payments Canada selects Interac Corp. as the exchange solution provider for Canada's new real-time payments system, the Real-Time Rail", March 2, 2021
https://www.payments.ca/about-us/news/payments-canada-selects-interac-corp-exchange-solution-provider-canada%E2%80%99s-new-real-time

78 Payments Canada, "Real-Time Rail", accessed March 12, 2022
https://modernization.payments.ca/the-plan/real-time-rail/

79 Payments Canada, "Payments Canada launches Lynx, Canada's new high-value payment system", September 1, 2021
https://www.payments.ca/%25C3%25A0-propos/nouvelles/payments-canada-launches-lynx-canada%25E2%2580%2599s-new-high-value-payment-system#:~:text=OTTAWA%2C%20September%201%2C%202021%20%2D,system%20for%20over%2020%20years.

80 Faster Payments, "Our achievements", accessed March 12, 2022 https://www.fasterpayments.org.uk/our-achievements

81 The Clearing House, "Our History", accessed March 12, 2022 https://www.theclearinghouse.org/about/history

82 NPP Australia, "The company", accessed March 12, 2022 https://nppa.com.au/the-company/

83 The Clearing House, "Owner Banks", accessed March 12, 2022 https://www.theclearinghouse.org/about/owner-banks

84 NPP Australia, "The company", accessed March 12, 2022 https://nppa.com.au/the-company/

The Bank of Canada's New Role as FinTech Regulator and the Review of the Canadian Payments Act

But the issue of timing aside, core to the future of competition in Canada's banking and payments sector is the question of what organizations are allowed to access the infrastructure underlying our payments system and compete for consumers.

In anticipation of the completion of Canada's payments modernization, in 2021 the federal government passed the *Retail Payments Activities Act,* giving the Bank of Canada the critical role of regulator of payment service providers not already covered by existing regulation. In effect, this puts the Bank in charge of regulating Canada's burgeoning FinTech space, leaving more traditional financial institutions to be covered by the current regulators. For FinTechs the Act creates registration and reporting requirements, the need to show appropriate risk preparation and mitigation plans, and keep separate user and operational funds.[85] To encourage compliance, the Act gives the Bank the power to revoke this registration, and administer monetary penalties in the event a payments service provider violates the terms of supervision.[86]

But the selection of regulator does not mean that FinTech firms will be able to compete once Canada's modernized payments infrastructure, and in particular the RTR, is fully operational. Currently, a requirement for gaining access to the modernized infrastructure is membership with Payments Canada, the organization responsible for its ownership and operation. Currently under the *Canadian Payments Act*[87], that membership is limited to banks, and other deposit taking institutions such as loan and trust companies.[88] The task of setting the future of this criteria falls to the Department of Finance, who launched a review of the Act in 2018 and released its report following that review in 2019.[89] One conclusion of that report was that Payments Canada would be better able to meet its policy objectives if a new class of membership were created for what it called "non-traditional payment service providers." Highlighting the contentious nature of any changes to the Act however, the report notes a "wide diversity of views" on how a new type of membership is incorporated into both the Act and the member governance of Payments Canada.

Reflective of the diversity of those views, and the complexity it presents for amending such an important piece of legislation, the federal government has yet to provide a timeline for the completion of the review of the C*anadian Payments Act.*

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85 Bank of Canada, "Retail Payments Supervision", March 12, 2022
https://www.bankofcanada.ca/core-functions/retail-payments-supervision/

86 Retail Payments Activities Act, "Administrative Monetary Penalties", assented to June 29, 2021
https://laws-lois.justice.gc.ca/eng/acts/r-7.36/FullText.html#h-1309405

87 Canadian Payments Act, "Establishment and Membership", R.S.C., 1985, c. C-21
https://laws-lois.justice.gc.ca/eng/acts/C-21/page-1.html#h-74081

88 Bank of Canada, "Retail Payments Supervision", March 12, 2022
https://www.bankofcanada.ca/core-functions/retail-payments-supervision/

89 Department of Finance, "Report on the Review of the Canadian Payments Act", February 21, 2019
https://www.canada.ca/en/department-finance/programs/consultations/2018/canadian-payments-act/report.html

Of the three policy levers currently in-flight, setting the boundaries for access to Canada's payments infrastructure is perhaps the most critical, and will be either a catalyst or drag on the positive effects of open banking and payment modernization. Without a diverse landscape of competitors in banking and payments to switch their services to, the value of being able to easily move their financial relationship to a consumer will be limited. Although Canadians will certainly benefit from more efficient and rapid payments systems, infrastructure only accessible by the usual suspects is likely to reproduce the concentrated market structure Canadians are already familiar with today.

While designating the Bank of Canada as the regulator of innovative financial services may end up being a boon to competition in the sector, the level of competitive intensity will ultimately be determined by who is able to compete in the first place, upon which the development and release of an updated *Canadian Payments Act* depends.

Agenda for a Competitive Banking and Payments System - Policy Opportunities

Agenda for a Competitive Banking and Payments System - Policy Opportunities

Each of the above policy levers has the potential to materially improve the competitive landscape in banking and payments in Canada, and accomplish the goals set out for the Minister and Associate Minister of Finance in their mandate letters. For this to occur, the above actions must be implemented with a strong bias towards increasing competitive intensity and dynamism, expanding the ranks of market participants beyond the major financial institutions familiar to Canadians. Without that focus, there is a real risk that the infrastructure for the future of Canada's banking and payments sector remains the realm of the major financial institutions seeking to close off the concentrated and profitable markets we see today. Government has an opportunity to counter that process and instead make openness and innovative markets the norm. To that end, included below are suggestions for policymakers and regulators to consider in their critical work on these files.

Data

Move Quickly to Implement the Recommendations of the Open Banking Advisory Committee's Report

Beyond the recent announcement of a federal lead for open banking, the Department of Finance should look to the methods employed in other jurisdictions, such as the U.K.'s move to mandate API access, to fast-track the availability of open banking to Canadians. The Department should also consider the accelerated introduction of more contentious elements of the Committee's report that would allow for competition across a greater range of services, for example the use of open banking data for payment services and for bi-directional "write access" for accredited new entrants.

Lead by Example on Data Portability with Open Banking

Open banking is just one plank in a broader need for the portability of consumer data in the Canadian economy. The version of C-11 tabled in 2020 included a framework for economy-wide data portability requirements, but in the absence of updated privacy legislation Canadians are limited in their ability to switch to competitive alternatives. In dealing with data so critical to the daily lives of Canadians, Canada's open banking framework has the opportunity to set a high watermark for supporting innovation, on which future data portability frameworks, supported by updated privacy legislation, are based.

Consider Broad Use Cases for Open Banking Data to Facilitate Innovation

Building on the committee's recommendation to not artificially constrain the scope of open banking and the experience of countries like the U.K., Canada's open banking framework, should entertain a wide range of uses for open banking data. Although suggested for the medium or longer term, the Department of Finance should begin accepting use cases from businesses outside the financial sector to ensure the open banking framework can quickly expand to maximize the potential of open banking data.

Infrastructure

Ensure the Current Real-Time Rail (RTR) Timeline is Met or Exceeded, and Understand Cause for Delays

The Department of Finance should provide Payments Canada with the support necessary to meet or exceed its timeline for the launch of Canada's RTR infrastructure to join the ranks of global peers with similar payments capabilities. At the same time, the Canadian public should understand the causes for the multiple delays in Canada's drive to modernize its payments infrastructure to better guide the future of payments innovation in Canada.

Explore Central Bank Digital Currency (CBDC) as a Competitive Alternative

A less discussed financial innovation with the potential to shift the competitive landscape in Canada is the Bank of Canada's work on CBDCs. A recent Bank of Canada staff paper frames the CBDC as a tool of competition policy, showing how a CBDC could "provide an alternative low-cost payment instrument for customers and merchants"[90] in the digital space, similar to the function of cash for in-person transactions, injecting competition into the banking and payments space. Although not covered in the Bank staff paper, CBDC accounts could also provide the foundation for other digital policy priorities, such as a national digital identifier. The degree of competitive impact will depend on the design of the CBDC and the goals of the Bank of Canada, but the organization should prioritize exploring the potential to bring a new lever of competitive potential to banking and payment markets.

Access

Deliver a Canadian Payments Act that Opens Canada's Payments Infrastructure to Firms Under Bank of Canada Oversight

The potential of Canada's more open and modernized banking and payments sector to buck the trends of concentration and market power ultimately depend on whether a new group of entrepreneurs and organization are allowed to truly compete in Canada's financial services sector. With the Bank of Canada in place as a strong steward for the interests of Canadians, the Department of Finance should put forward a Canadian Payments Act that creates a foundation for responsible experimentation and challenges to entrenched incumbents. The metrics for success should pull directly from the mandate letters of our elected officials, and include but not be limited to downward pressure on banking fees and interchange rates, particularly as it appears that major service providers are looking to raise rates in other countries.[91]

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90 Bank of Canada, "The Positive Case for a CBDC" July 20, 2021
https://www.bankofcanada.ca/wp-content/uploads/2021/07/sdp2021-11.pdf

91 Wall Street Journal, " Visa, Mastercard Prepare to Raise Credit-Card Fees", March 8, 2022

Directions for Future Research

Directions for Future Research

Although this report provides an overview of the current state of competition in banking and payments in Canada, it only addresses the surface of what is a deeper issue worth additional study by regulators, academics, and advocates. While not an exhaustive list, Canadians' understanding of markets that underpin their daily lives would be improved by additional research in the following areas.

Study of Competition in Banking and Payments by the Department of Finance

Although previous work on the topic has been highlighted in this report, the current approach to assessing competition in banking and payments is relatively ad hoc, depending on either academic interest, the whims of individual regulators, or relatively rare events such as competition litigation. The Department of Finance should perform and produce regular assessments of the state of competition in banking and payments, including analysis on dynamism, the level of business entry and exit within a market, with a focus on acquisitions by major financial institutions. That Canada's banking and payments space stands at a potential point of divergence makes study even more important, providing an opportunity to measure the performance of policy actions aimed to improve competition and course correct if desired results are not being achieved.

More and More Accessible Public Data on Competition

One barrier in particular is the availability of public data for Canadians to understand the current and historic state of competition in banking and payments. While regulators like OSFI offer some public data on aspects of personal and commercial banking in Canada, the data is limited and could easily be made more accessible to Canadians. For example, no regulator provides data on the number of applications for new financial institutions, or entry and exit of firms from financial services markets. Where greater detail and analysis is provided, the competition angle is often missing. Payments Canada produces an excellent overview[92] of the Canadian payments space and trends in transaction behaviour, but the report stops short of evaluating competitive conditions within and across methods of payment. Given the drawbacks of individual metrics, greater detail on the data that underlies evaluations of competition would allow for a more robust understanding of the evolution of competition in financial services markets.

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92 Payments Canada, "Canadian Payment Methods and Trends Report 2021", September 29, 2021, https://www.payments.ca/industry-info/our-research/pandemic-sparks-evolutionary-year-payment-landscape-reveals-new-payments

Conclusion

Conclusion

A country's banking and payments system forms the foundation upon which the real economy is built. It provides individuals security for their savings and investments, enables commerce between consumers and businesses, and directs the flow of funding for companies in all industries. At the same time, the cost of the banking and payments system represents a tax on the real economy, making a competitive and efficient payments system key policy goals.

Canada's banking system, anchored on a small handful of financial giants, is world-renowned for its stability and resilience through the 2008 financial crisis. Canada's banks are some of the world's most profitable, and the lines of business on which consumers and businesses rely are often the most profitable segments of the bank's entire operation. Canada's banking system is also more concentrated than international peers, and market shares between the major firms have shifted little in the past decade. Canada's payments space has been subject to investigation and litigation by our competition enforcement agency, and regulators have pointed to evidence of market power in both payments and banking.

The question that emerges is whether the stability Canadians are grateful for inherently requires what appears to be muted competition, or whether a better outcome for Canadians is possible. But it is an exciting moment for the potential of competition in Canada's banking and payments system. Multiple major policy actions with the potential to shift the status quo and test the assumption that stability is oppositional to competition are set to be implemented in the near future. But several of these changes are long overdue relative to global peers, and without a clear focus on increasing competition, existing market structures and the outcomes flowing from them are likely to cement themselves once again to the detriment of Canadians. A competitive economy deserves a competitive banking and payments sector supporting it, and that reality is within reach for Canada.

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