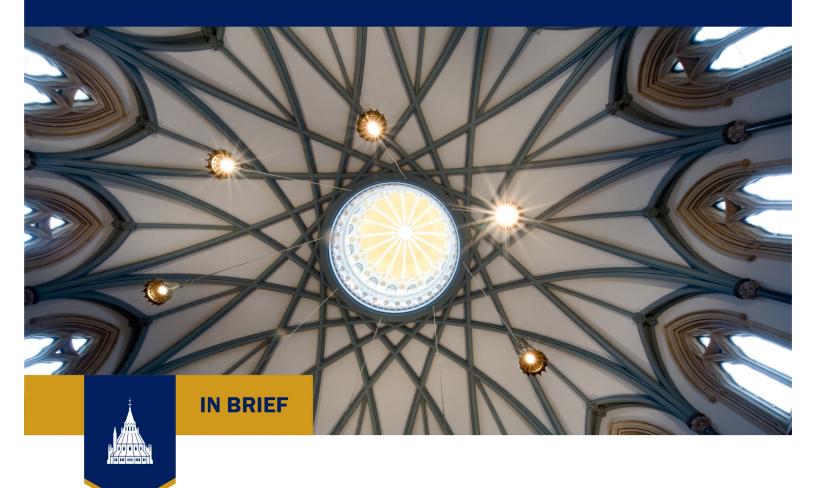
LIBRARY OF PARLIAMENT BIBLIOTHÈQUE DU PARLEMENT



OPEN BANKING

Publication No. 2019-42-E **28 October 2019**

Brett Stuckey Adriane Yong Economics, Resources and International Affairs Division Parliamentary Information and Research Service



CONTENTS

1	INTRODUCTION	1
2	AN ALTERNATIVE TO "SCREEN SCRAPING"	1
3	HOW DOES OPEN BANKING WORK?	3
4	OTHER CONSIDERATIONS WITH RESPECT TO OPEN BANKING	3
5	OPEN BANKING INITIATIVES IN OTHER JURISDICTIONS	4
5.1	European Union and United Kingdom	4
5.2	Australia	5
6	CONCLUSION	6

OPEN BANKING

1 INTRODUCTION

Policy-makers in countries such as the United Kingdom (U.K.) and Australia have argued that consumers should have more control of their personal financial data and are implementing what is called "open banking" to facilitate the transfer of that control to consumers. Open banking generally has two elements: the first is to provide consumers with the ability to direct banks when to share selected financial data with other businesses; the second is to provide customers with additional ways to make payments from their bank accounts.

In its 2018 Budget, the federal government indicated that it intended to undertake a review of the merits of open banking in Canada through an advisory committee and proceeded, in January 2019, to release a consultation paper to this effect.

In June 2019, the Standing Senate Committee on Banking, Trade and Commerce released its report, *Open Banking: What it Means for You*, which contained several recommendations for the implementation of an open banking framework in Canada.²

2 AN ALTERNATIVE TO "SCREEN SCRAPING"

As the financial technology (commonly known as fintech) industry continues to evolve, new financial products and services are being offered to consumers around the world.³ To access these products and services, consumers must transfer their personal financial data. However, in most cases, consumers lack control over their data as they are collected and stored by their financial institutions. Thus, if consumers wish to use a fintech service, such as data aggregators that consolidate consumers' financial data from various accounts and institutions, they have no choice but to use "screen scraping" technologies to produce a snapshot of their financial situation.

Screen scraping is the process by which certain smartphone fintech apps gain access to a user's banking data. In screen scraping, consumers provide a third party, usually a fintech company, with their login credentials for their online banking platform. The fintech then uses this information to log in and "impersonate" the customer to extract data. Having login credentials allows that fintech to gain access to the customer's entire account, leaving the individual open to the risk of identity theft or fraud and potentially violating the terms and conditions of their service contract with their financial institution. Furthermore, in providing access to the data, the consumer loses control over where and for how long the data is stored.

The Department of Finance Canada estimates that almost 4 million Canadians currently use smartphone applications that use screen scraping to access their personal financial data and that number is growing rapidly.⁴

A more secure way to allow fintechs to access consumer financial data would be through application programming interfaces (APIs). An API is a software intermediary that allows two apps to talk to each other. It acts as a universal access point by which information is retrieved from a database. By using APIs to provide fintechs with access to personal financial information, consumers maintain the security of their login credentials and could potentially control which information to provide to fintechs and how long they would have access to it. APIs are a central element in open banking.

Money Management Under Screen Scraping Versus Open Banking SCREEN SCRAPING **OPEN BANKING** Login credentials banking login credentials to remain confidential. 1234 *** money management application. Consumer consents to specific Money management financial information being accessed application accesses accounts by money management application. for which it has credentials. Money management Information is accessed through application collects consumer's financial institutions' application API detailed financial data. programming interface (API). including transactions API allows money management Money management application to access data securely application stores credentials and without the need for and financial data. login credentials. Four million Canadians Consumer can revoke currently use screen 4 million consent at any time. scraping services. © Library of Parliament

Figure 1 – Transferring Financial Data by Screen Scraping Versus an Application Programming Interface

Source: Figure prepared by Library of Parliament.

3 HOW DOES OPEN BANKING WORK?

APIs are the main technological mechanism by which banks provide access to consumer data to a fintech in an open banking framework. In a similar type of transaction, ridesharing service Uber uses an API from PayPal to process payments and from Google to provide map functionality.

Open banking can take various forms, depending on the jurisdiction and its regulatory and market environments. Like other jurisdictions, Canada must decide whether participation by banks would be voluntary or mandatory. It must also decide which financial products a Canadian open banking regime would apply to, including possibly chequing and savings accounts, credit cards, mortgages, and personal and business loans. How fintechs are given access to the regime is another important consideration, including whether they should be accredited somehow and, if so, which body should manage that accreditation. Another important issue is how consumers would opt in and opt out of open-banking activities. Some jurisdictions are even considering going beyond the banking industry and applying open banking regulations to other industries with sensitive consumer data such as the energy or insurance industries.

Canada must also decide what type of privileges fintechs might have within an open banking regime. These types of privileges may be categorized as follows:

- "read only" privileges, in which APIs allow consumers to decide which fintechs would receive such access. These privileges could, for example, be used to collect information to provide a single snapshot of a customer's financial picture.
- "write" privileges, in which APIs are used by fintechs to initiate payments on a customer's behalf. These privileges could, for example, be used to facilitate or automate bill payments or for automated wealth management services.
- "move" privileges, in which customers may more easily switch providers for certain accounts and services based on analysis provided by the fintech.

 These privileges could, for example, be used to allow a customer to easily switch to accounts or investment products that are more beneficial to them.⁵

4 OTHER CONSIDERATIONS WITH RESPECT TO OPEN BANKING

While most analysts agree that providing Canadian consumers with more control over their personal financial data would be a good thing, there has been a debate in the industry regarding how to implement it within Canada's regulatory environment.

For example, over the past several years, privacy experts, the Office of the Privacy Commissioner of Canada and various stakeholder groups have noted the risks to privacy posed by open banking and urged the federal government to update the *Personal Information Protection and Electronic Documents Act* in this respect, in

order to modernize Canada's privacy regime and keep it up to date with privacy legislation in other jurisdictions, in particular the European Union (EU).⁶ According to the Department of Finance Canada, an open banking regime in Canada must ensure that privacy rights are respected and that there is adequate consumer protection when financial data is being shared.⁷

Another concern that has been expressed is whether a proposed open banking framework would apply to provincially or territorially regulated financial institutions, such as credit unions and *caisses populaires*.

In terms of benefits, experts have indicated that open banking may provide opportunities and benefits for financially vulnerable or "underbanked" individuals and that there may be significant economic gains for the Canadian economy from increased growth in the fintech sector. For consumers, the Department of Finance Canada indicated that open banking could make financial transactions easier to conduct, increase financial literacy and provide individuals with financial services that may not be accessible at traditional financial institutions. 9

5 OPEN BANKING INITIATIVES IN OTHER JURISDICTIONS

Like Canada, many countries are examining the benefits and challenges of open banking for their citizens, financial sector and economy as a whole. Some countries – including India, Japan, Singapore, South Korea, and the United States – are allowing the market to drive the implementation of open banking and data sharing measures, while others – such as Australia, the U.K. as part of the European Union, and Hong Kong – have chosen to legislate an open banking regulatory framework. ¹⁰ Currently, the two countries that have the most established open banking regimes are the U.K. and Australia.

5.1 EUROPEAN UNION AND UNITED KINGDOM

In order to address new digital payment services and consumer concerns about privacy and cybersecurity breaches, the EU introduced two key pieces of legislation which both came into effect in 2018: the General Data Protection Regulation (GDPR)¹¹ and the Payment Services Directive 2 (PSD2).¹² The GDPR sets out obligations for businesses to protect consumers' personal data, as well as consumers' rights with respect to personal data held by businesses. The PSD2 updates the EU's directive on payment services to account for online and mobile payments and provides protection for consumers from payments-related fraud and abuse. As well, to promote the development and use of innovative digital payment services, PSD2 allows registered fintechs to access bank accounts upon receiving consent from a consumer.

To meet its PSD2 obligations and to address competition concerns in the U.K. retail banking market, the U.K.'s Competition and Markets Authority established the Open Banking Implementation Entity (OBIE), a private corporation funded by the U.K.'s nine largest banks. The OBIE's mandate includes developing technical standards – including API standards – for sharing personal financial data, supporting regulated fintechs and banks in their use of the open banking standards, maintaining a registry of regulated financial services providers that are enrolled in open banking, and managing disputes and complaints. As of September 2019, the U.K. had 116 registered third-party providers. As PSD2 focusses primarily on payments, the U.K. established the Advisory Group on Open Finance in July 2019 to determine whether financial data sharing should be offered for a wider range of financial services. If

PSD2 came into effect on 14 September 2019. However, the European Banking Authority recently announced that, because businesses in some EU countries were not yet ready to implement elements of the "strong customer authentication" requirements set out in PSD2, the deadline for complying with these requirements is extended to 31 December 2020. ¹⁶

5.2 AUSTRALIA

In contrast to the EU and U.K., Australia has chosen to apply data-sharing measures on a much broader scope. In May 2018, Australia introduced a "Consumer Data Right," which aims to give consumers more access to, and control over, their personal data. ¹⁷ The Consumer Data Right will first apply to the banking sector to implement open banking, and then to the energy and telecommunications sectors and potentially to other sectors in the future. The lead regulator in the field is the Australian Competition and Consumer Commission (ACCC), with support from the Office of the Australian Information Commissioner and the Data Standards Body.

Open banking is to be introduced in phases, with the goal of having consumer data for mortgages, credit and debit cards, and deposit and transaction accounts accessible by 1 February 2020. As of 25 September 2019, the ACCC has published the framework for the implementation of the Consumer Data Right in banking and has released draft rules on how businesses can become accredited in order to provide products and services to consumers.¹⁸

With respect to applying the Consumer Data Right to other sectors, the ACCC has already issued a consultation paper on how to best apply this right in the energy sector. ¹⁹ In August 2019, it also released a paper discussing the model it plans to use to share data in this sector. ²⁰

6 CONCLUSION

As the Department of Finance Canada's Advisory Committee on Open Banking considers the various aspects of implementing an open banking regime in Canada, it faces the challenge of fostering the competitiveness of Canada's financial sector by creating an environment where fintechs can provide Canadians with more options, while at the same time protecting the privacy and security of their personal financial data.

NOTES

- Department of Finance Canada, <u>A Review into the Merits of Open Banking</u>, Consultation Document, January 2019.
- Senate, Standing Committee on Banking, Trade and Commerce [BANC], <u>Open Banking: What It Means for You</u>, 1st Session, 42nd Parliament, June 2019.
- Fintech refers to both the innovative ideas being developed into financial services technologies and applications, as well as the businesses that are offering these services. While fintech usually refers to independent financial services businesses, banks also offer fintech applications.
- BANC, <u>Evidence</u>, 1st Session, 42nd Parliament, 20 February 2019 (Julien Brazeau, Senior Director, Strategy and Coordination, Financial Institutions Division, Financial Sector Policy Branch, Department of Finance of Canada).
- 5. PricewaterhouseCoopers, <u>Canadian Banks 2019 Open banking is coming</u>, 2019.
- 6. BANC (June 2019), pp. 24-28.
- 7. Department of Finance Canada (January 2019).
- 8. BANC (June 2019), p. 13.
- 9. Department of Finance Canada (January 2019).
- 10. Deloitte, Open Banking around the world: Towards a cross-industry data sharing ecosystem.
- European Union, "Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)," Official Journal of the European Union, 119 4.5.2016, 2016, p. 1.
- European Union, "<u>Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC," Official Journal of the European Union (PSD2), 337 23.12.2015, 2015, p. 35.
 </u>
- 13. Open Banking Implementation Entity, About Us.
- 14. Financial Conduct Authority, Advisory Group on open finance, 8 August 2019.
- 15. According to the definition contained in Article 4 of the PSD2, "strong customer authentication" means
 - an authentication based on the use of two or more elements categorised as knowledge (something only the user knows), possession (something only the user possesses) and inherence (something the user is) that are independent, in that the breach of one does not compromise the reliability of the others, and is designed in such a way as to protect the confidentiality of the authentication data.
- European Banking Authority, "<u>EBA publishes Opinion on the deadline and process for completing the migration to strong customer authentication (SCA) for e-commerce card-based payment transactions</u>, News release, 16 October 2019.

- Australian Competition and Consumer Commission [ACCC], "ACCC welcomes consumer data right," News release, 9 May 2018.
- 18. ACCC, "Consumer Data Right draft rules out," News release, 29 March 2019.
- 19. ACCC, <u>Energy CDR Consultation on energy data access models</u>, Backgrounder, 25 February 2019.
- 20. ACCC, "Next step for consumer data right in energy," News release, 29 August 2019.