Centre for International Governance Innovation

Digital Policy Hub

Digital Policy Hub — Working Paper

Understanding Consumer Perceptions of Fintech Banking in Canada

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The Digital Policy Hub at CIGI is a collaborative space for emerging scholars and innovative thinkers from the social, natural and applied sciences. It provides opportunities for undergraduate and graduate students and post-doctoral and visiting fellows to share and develop research on the rapid evolution and governance of transformative technologies. The Hub is founded on transdisciplinary approaches that seek to increase understanding of the socio-economic and technological impacts of digitalization and improve the quality and relevance of related research. Core research areas include data, economy and society; artificial intelligence; outer space; digitalization, security and democracy; and the environment and natural resources.

The Digital Policy Hub working papers are the product of research related to the Hub's identified themes prepared by participants during their fellowship.

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Partners

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Key Points

- There is a clear global trend toward increased digitalization of the financial services industry. In Canada, the potential of financial technology to enhance accessibility, diversify offerings and bring new competition to its oligopolistic banking sector is still in its early stages. Consumer adoption of financial technology (fintech) products and services remains relatively low compared with other advanced economies, despite a generally positive perception of fintech services among consumers.
- New participants in the banking sector offer innovative, competitively priced services, but they face significant barriers. Established banks leverage historical advantages such as extensive branch networks and brand recognition, while also advancing their own fintech through subsidiaries or acquisitions of potential competitors.
- Although banking sector concentration has enhanced system stability, especially during crises, it limits competition and consumer choice, potentially reducing financial consumer welfare. Trust remains crucial for fintech adoption, with traditional banks benefiting from established relationships and infrastructure. While fintech app reviews indicate user satisfaction, surveys show Canadians remain hesitant to abandon traditional banking.
- The state of fintech adoption extends beyond market efficiency concerns to fundamental questions of consumer choice and market freedom in a liberal democracy. While the concentrated banking sector provides stability, it restricts competition and consumer autonomy, as evidenced by limited options to switch providers.
- Policy makers should move quickly to implement policy innovations such as open banking while strengthening consumer protection mechanisms and increasing consumer representation in financial sector policy making. Sentiment analysis could provide valuable insights for this more consumer-oriented policy approach.

Introduction

The rise of “digital finance” — the integration of technology and financial services, or fintech — is transforming how people transact and manage their finances (Gomber, Koch and Siering 2017; Frost 2020; Ozili 2023; Faucher and Houle 2023). Increasingly, consumers expect easy-to-use, instantaneous access to money transfers, payments, credit and other financial services. This shift reflects a broader trend toward digitalization in the global economy[1] (Qureshi and Woo 2022; Samson et al. 2024).

Technology has been a key driver of growth and development of the financial industry, expanding delivery channels[2] (Batiz-Lazo and Reid 2011; Batiz-Lazo and Wood 2002; Arner, Barberis and Buckley 2015; Moretti and Narain 2022); however, the rapid pace of recent innovations and the entry of non-traditional players introduce important policy challenges, including consumer risks (Arner, Barberis and Buckley 2015).

1 According to Guyllaume Faucher and Stephanie Houle (2023), digitalization is the process through which the use of data, digital platforms and advanced analytics (such as machine learning and artificial intelligence) transforms the production process and interactions with other economic agents.

2 For example, the introduction of automated teller machines (ATMs) in 1967, or the development of magnetic stripe plastic cards in 1969, which allowed the development of credit and debit cards (see www.ibm.com/history/magnetic-stripe; Konheim 2016).

Despite these challenges, fintech innovation promises to introduce more competition into Canada's banking sector, thereby enhancing accessibility, increasing choices and reducing costs for consumers (Philippon 2016; Competition Bureau of Canada 2018). The COVID-19 pandemic further accelerated the adoption of digital financial services (Agarwal and Nalwaya 2021).

Canadians have, however, lagged global peers in adopting fintech services (Deloitte 2015; EY 2017, 2019; Berruti et al. 2024). In 2019, Canada's adoption rate was about 50 percent, below the global rate of 64 percent (EY 2019). More recent figures reveal that in 2022, 74 percent of Canadians continued to make exclusive use of traditional banks and their services over purely digital alternatives (Leger 2022). Similarly, the McKinsey Retail Banking Consumer Survey, in 2023, reports that only 13 percent of Canadians utilize products by fintech companies, compared with 32 percent in the United Kingdom and 42 percent in the United States (Berruti et al. 2024).

These figures raise an important question: Why does fintech adoption remain lower in Canada than in comparably advanced economies? The most common methods for answering this kind of question draw on surveys or interviews (Jünger and Mietzner 2020; Xie et al. 2021; Mahmud, Joarder and Muheymin-Us-Sakib 2022). However, this working paper proposes the use of a novel approach called "sentiment analysis" to evaluate customers' unsolicited views of a selection of high-profile Canadian fintech companies in the banking sector. Sentiment analysis is a natural language processing (NLP) technique that involves identifying the emotional tone or polarity of a given text (Hutto and Gilbert 2014; Kolchyna et al. 2015).

While Canada is home to a broad range of fintech companies (Khairnar 2023; Dasgupta 2024), the focus of analysis is on the segment of so-called neobanks, or digital-only banks. These companies offer banking products and services exclusively through digital platforms, such as mobile apps and websites, without operating physical branch networks.

Institutional Design of the Canadian Banking System

Banking is by its nature a risky business. Banks are in the business of taking short-term demand deposits and making long-term, relatively illiquid loans. This discrepancy between short-term costs and long-term returns — the asset-liability management risk — means that banking systems often tend toward fragility (Goodhart et al. 1998), with recurring financial crises threatening national and even global economies. The Canadian banking system is an interesting exception to this rule, however. It has enjoyed decades of stability, with no major bank failures and no losses to depositors.

Indeed, Canada's banking system is recognized globally for its stability, with most scholars attributing its resilience to early nineteenth-century institutional foundations, large branch networks that help spread risk, a risk-averse banking culture and a single point of regulatory oversight (Bordo, Rockoff and Redish 1993; Allen and Engert 2007; Bordo, Redish and Rockoff 2015; MacDonald and van Oordt 2017; Pigeon 2023). Canadian banks emphasize retail and branch-level strategies, focusing on deposit funding (McKeown 2017; Anand and Peihani 2019).

However, from a consumer perspective, a concentrated banking system limits competition, which, in turn, tends to restrict service offerings, lead to higher interest rates on loans, lower rates on deposits and credit rationing (Gibney, Bibi and Lévesque 2014; Berger and Hannan 1989; Hannan 1991; Spence 2024). The limited competition has also been associated with slower adoption of financial innovations. The Competition Bureau of Canada (2018) acknowledged that increased competition in the banking system could stimulate innovation and better address consumer needs.

The persistence of this concentrated structure reflects the established banks' ability to maintain market dominance through multiple mechanisms: extensive branch networks, entrenched customer relationships and sophisticated regulatory compliance capabilities. Moreover, these institutions leverage their influence to shape regulatory focus, often emphasizing risks of fintech adoption that could respond to their market preservation strategy rather than a reflection of actual comparative risk levels between traditional and fintech banking services.

This pattern of market consolidation extends beyond banking, characterizing multiple sectors of the Canadian economy, including telecommunications, airlines and retail (Hearn and Bednar 2024; Spence 2024). Thus, the resistance to fintech adoption represents a broader systemic pattern where incumbent market power effectively constrains innovation and competition, potentially compromising consumer welfare and market dynamism.

Fintech Landscape in Canada

The Financial Stability Board defines fintech as "technologically enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial services" (Financial Stability Board 2017, 7). Similarly, PwC, in its mapping exercises of the Canadian fintech landscape, adopts a broad definition to consider "technology companies providing services to the financial services industry, and technology companies which create, distribute, and administer financial products themselves."[3] This approach to defining the fintech market facilitates a comprehensive understanding of the diverse ecosystem of business operating within the financial sector, not limited to the traditional banking services sector but also including services such as payment processing, insurance, online trading, financial infrastructure, business management, cybersecurity, identity verification, and blockchain technologies (KPMG 2025).

Following this broad perspective, some estimates identify more than a thousand fintech companies operating in Canada (Khairnar 2023; Dasgupta 2024), primarily early-stage start-ups founded between 2011 and 2020 (Dasgupta 2024). Toronto is the primary hub, leading in start-ups and deal volume, while Vancouver, Montreal and Calgary are also significant fintech hubs.

Neobanks, or digital-only banks, are a subset of fintech companies that provide banking services exclusively through digital channels such as the internet and mobile apps. Unlike traditional banks, these institutions are normally not regulated under Canada's Bank Act and thus cannot legally call themselves "banks." Instead, they typically partner with federally regulated banks to offer services such as deposit accounts, credit and debit cards, and other financial products. Within this sector it is possible to identify digital-only banks subsidiaries established by traditional banks to compete with fintech

3 See www.pwc.com/ca/en/industries/technology/canadian-fintech-market-map.html and www.pwc.com/ca/en/industries/technology/mapping-canadas-maturing-fintech-market.html.

and meet diverse customer needs that can be denominated as "flanker" digital banks[4] or "fintech" banks. Examples include Tangerine, a subsidiary of Scotiabank, and Simplii Financial, the digital banking division of CIBC, both offering online services distinct from their parent banks (see Table 1 for details).

Table 1: Characteristics of Selected Fintech Banking Institutions in Canada

Fintech Banking Institution	Products Offered	Partnership or Relationship with CDIC-member Federally Regulated Financial Institutions	App Downloads (from Google PlayStore)	Monthly Downloads (from CrunchBase)	Funding Rounds (Total in CDN$)	Year Founded	HQ
Neo Financial neofinancial.com	No-fee Mastercard with cash back, high-interest savings accounts and investment products.	Peoples Bank of Canada (savings accounts), ATB Financial (credit cards)	100K+	31,818	8 rounds ($494 M)	2019	Calgary, Alberta
Koho Financial koho.ca	Prepaid Mastercard with cash back rewards, budgeting tools and savings features.	Peoples Trust Company	1M+	19,735	14 rounds ($548 M)	2014	Toronto, Ontario
EQ Bank eqbank.ca	High-interest savings accounts, international money transfers and GICs.	Subsidiary of Equitable Bank	100K+	9,657	Not available	2016	Toronto, Ontario
Wealthsimple wealthsimple.com	Online investment platform offering commission-free stocks, ETFs, and cryptocurrencies trading, no-fee high-interest chequing account, TFSA Calculator.	Merger with Canadian Share Owner Investments Inc. (broker-dealer); partnered with different financial institutions	1M+	90,370	9 rounds ($1.1 B)	2014	Toronto, Ontario
Tangerine Bank tangerine.ca	Chequing and savings accounts, credit cards and mortgages.	Subsidiary of Scotiabank (originally ING Direct)	1M+	32,968	Not applicable	1997	Toronto, Ontario
Simplii Financial simplii.com	No-fee chequing and savings accounts, credit cards and mortgages.	Division of CIBC	1M+	Not available	Not applicable	2017	Toronto, Ontario

Source: Author's compilation from institutions' own websites, Google PlayStore and CrunchBase.

4 Flanker brands banks refer to digital-only banking services owned and operated by traditional large banks, designed to compete directly with independent fintech companies. They represent a strategic response by established institutions to compete in the fintech space while maintaining their core business model.

Drivers of Fintech Adoption in Canada

Different surveys have consistently documented that a large-scale adoption of fintech services in Canada remains relatively low (EY 2017; 2019; Mintel 2022; Berruti et al. 2024). This limited adoption can be attributed to multiple interconnected factors: a stringent regulatory environment, established bank dominance and conservative innovation approaches (Breton and Côté 2006; Clements 2019, 2020). A recent McKinsey report (Berruti et al. 2024) highlights other factors, including unequal funding distribution among fintech segments, challenges in talent acquisition and limited consumer openness to digital innovation. Additionally, regulatory fragmentation between federal and provincial levels creates barriers for new fintech participants (Clements 2019), which limits competition and hinders adoption.

A limited awareness and low brand recognition of new fintech companies may also slow fintech adoption in Canada. This is partly due to consumer caution around sharing information digitally (Acquisti, Brandimarte and Loewenstein 2020). The Leger fintech in Canada survey shows that fintech companies such as Neo Financial, Koho and EQ have about 40 percent brand recognition, while flanker banks, such as Tangerine (89 percent) and Simplii Financial (62 percent), enjoy significantly higher awareness (Leger 2022). Traditional banks have also demonstrated strategic adaptability by integrating fintech innovations internally (Clements 2019), resulting in bank-driven fintech advancements that are comparable to start-up-led fintech developments in other countries. Canada's major banks have established innovation hubs and formed partnerships that enable them to gradually embrace new technologies (Reaume 2015; Reuters 2024), creating significant competition for online banks that depend heavily on technology for their value proposition. In that respect, the Leger survey reveals that 82 percent of Canadians trust traditional banks to adopt cutting-edge technologies, while 80 percent expect them to stay updated (Leger 2022).

Trust in Canada's traditional banking institutions may also be impeding uptake of "neobanks." In general, trust plays a foundational role in economic transactions (Harari 2014). The adoption of technological innovations in the financial system is intrinsically linked to public trust and is especially relevant in the context of new financial technologies, where trust acts as a bridge between skepticism and adoption (Amnas et al. 2023). Canadians have developed long-established trust-based relationships with established banks (Breton and Côté 2006). Leger's survey indicates that 61 percent of respondents have stayed with the same bank for at least 10 years (Leger 2022). Similarly, McKinsey noted the challenges in persuading Canadians to explore alternative financial providers (Berruti et al. 2024). However, Andrew Spence (2024) argues that this loyalty reflects the market power of an overly consolidated system, which ultimately undermines consumer well-being by reducing opportunities for new entrants to build trust and introduce alternative digital products and services.

Traditional banks' advantage is further reinforced through strategic initiatives targeting long-term relationship building, particularly through youth banking programs that establish banking relationships before adulthood (Tiwari 2022). These early-acquisition strategies, combined with high switching costs and natural customer inertia, effectively maintain market share.

Sentiment Analysis of Fintech Users

Sentiment analysis, or opinion mining, is the process of using NLP to identify and extract subjective information from text. It evaluates the emotional tone behind the written words, classifying it as positive, negative or neutral. This method is commonly used to understand opinions and emotions expressed in social media posts, reviews and news articles (Hutto and Gilbert 2014; Kolchyna et al. 2015). This analysis provides insights into consumer frustrations, expectations and overall satisfaction of services or products (Hutto and Gilbert 2014).

This methodology offers advantages for public opinion analysis, making it valuable for policy makers. It enables near real-time monitoring of public perceptions by analyzing large data sets, providing insights into shifts in opinion. This cost-effective and scalable approach eliminates the expenses associated with traditional surveys. Additionally, sentiment analysis captures spontaneous opinions, reducing response biases and offering a deeper understanding of public attitudes and emotions (Wankhade, Rao and Kulkarni 2022).

Following this approach, an exploratory sentiment analysis[5] was applied on a sample of about 180,000 reviews from fintech apps' users to gain insight into their adoption of fintech services. The sample includes most prominent fintech players, including Neo Financial, Koho, EQ, Wealthsimple and two digital fintech banks, namely Tangerine — the only federally regulated "bank" in the sample — and Simplii Financial, a division of a federally regulated bank. To compare and benchmark, the analysis also considers the reviews of the mobile banking apps of the six largest institutions.

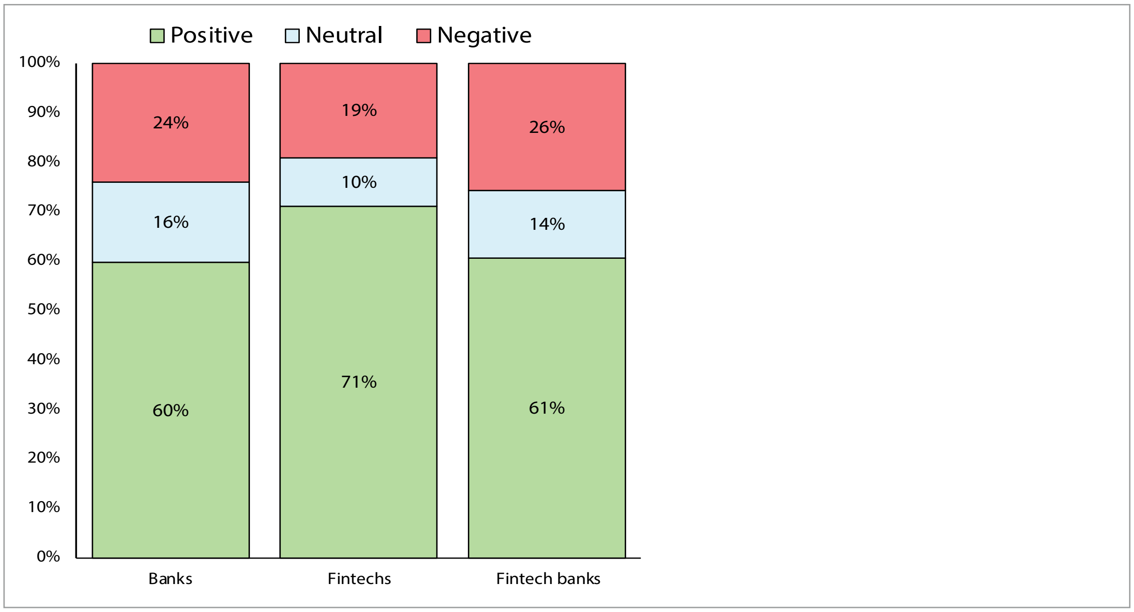
Overall Results and Discussion

Figure 1 depicts the sentiment distribution across the three main categories of the sample. It shows that fintech services are perceived more positively than their more conventional bank competitors, with more than 70 percent of the fintech reviews classified as positive in contrast with 60 percent for conventional banks and 61 percent for bank flanker brands (that is, Tangerine and Simplii). This favourable view of fintech is further evidenced in Figure 2, which shows the sentiment breakdown across individual institutions: fintech such as Koho and EQ Bank achieved significantly high positive sentiment ratings (81 percent and 68 percent, respectively), while some traditional banks, such as RBC and BMO, had higher proportions of negative reviews (31 percent and 29 percent, respectively).

Positive sentiments emphasize ease of use, reliability and simplicity, with words such as "easy," "great," "awesome" and "love" frequently appearing in the reviews for fintech apps. In contrast, negative expressions highlight frustrations with "money," "time," "account" and "support," reflecting common issues such as service delays, unresponsive customer support and problems with transactions. Notably, words such as "slow,"

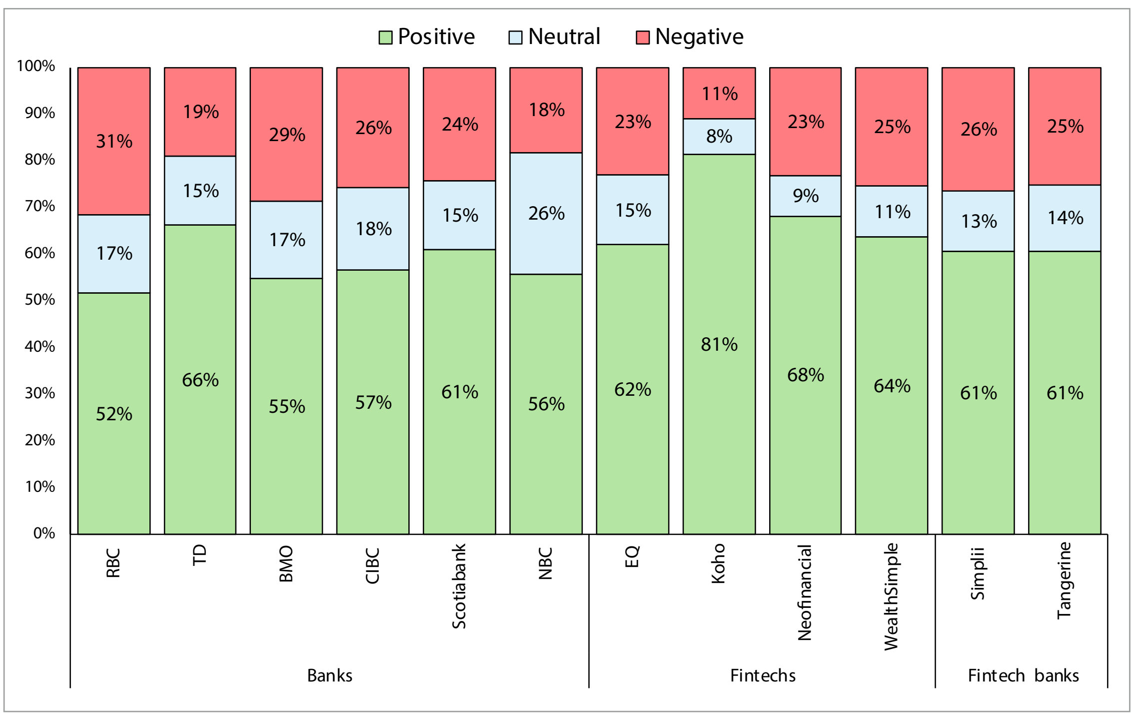
5 The analysis applied the Valence Aware Dictionary and sEntiment Reasoner (VADER) tool developed by C. Hutto and Eric Gilbert (2014). It is a rule-based model specifically designed to perform well on social media text. VADER is effective in handling the informal, conversational language commonly found in app reviews, including slang, abbreviations and emoticons, which are often used to express sentiment concisely in digital spaces.

Figure 1: Sentiment Analysis Distribution by Type of Institution



Source: Author's calculations based on a sample of 179,320 reviews from 12 apps.

Figure 2: Sentiment Analysis Breakdown by App



Source: Author's calculations based on a sample of 179,320 reviews from 12 apps.

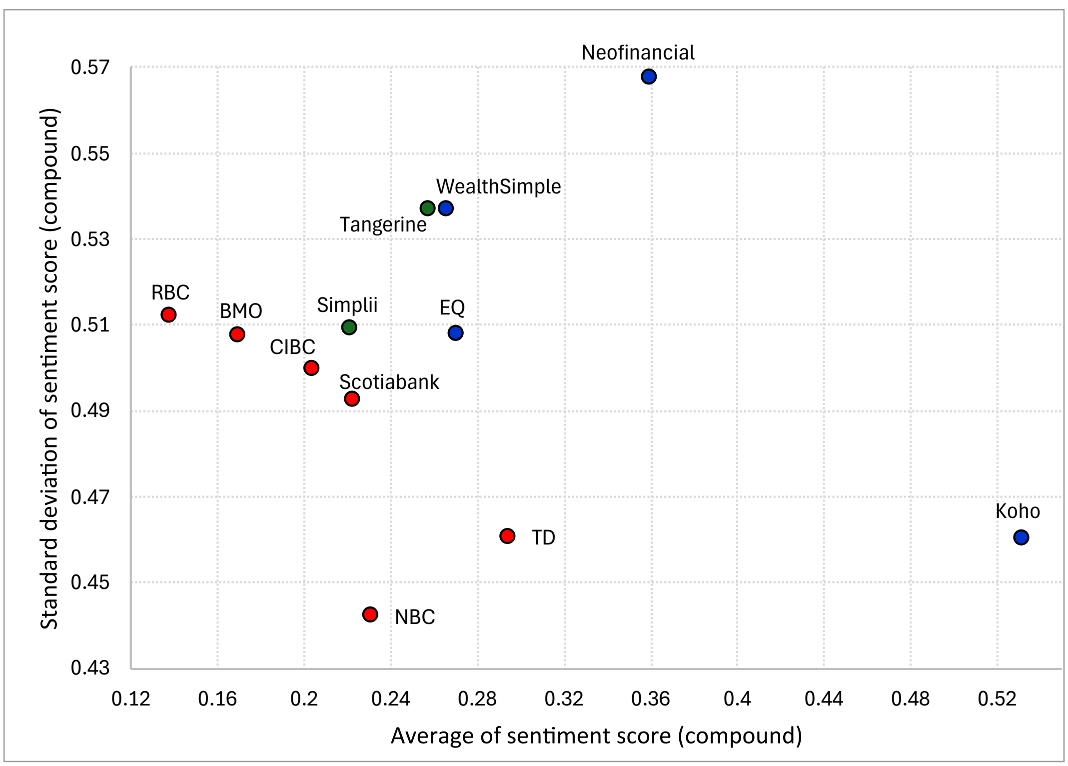
"terrible," "worst" and "issue" reveal areas where fintech and mobile banking services fail to meet consumer expectations.

Despite fintech's relatively positive reception, the traditional dominance of banks and lingering trust issues may contribute to lower fintech adoption. Many Canadian consumers still rely on established banks due to familiarity and perceived security, especially when experiences with fintech involve sensitive financial matters, as indicated by terms such as "support" and "money" in negative reviews. The distribution shown in Figure 3 demonstrates the varied performance across financial institutions, with fintech providers, such as Koho, generally eliciting more positive reactions compared to traditional banks, indicating that established institutions encounter more difficulties in meeting customer expectations, though the consistency of feedback varies significantly across both categories.

While Canadian fintech services generally receive positive sentiment, the slower rate of adoption could arise from trust concerns, the entrenched position of traditional banks and specific service challenges highlighted in consumer feedback. Addressing these barriers, particularly by enhancing support services and resolving reliability concerns, could be essential for increasing fintech acceptance in Canada.

The sentiment analysis results suggest a gap between the traditionally strong confidence Canadians have in traditional banking (Clements 2019, 2020) and the relatively positive perceptions of fintech products among those who use these services. This dissonance underscores and confirms the structural barrier within Canada's banking framework,

Figure 3: Distribution of Average and Standard Deviation of Sentiment Scores of Fintech Banking



Source: Author's calculations based on a sample of 179,320 reviews from 12 apps.

which influences the slower fintech adoption rate. At the same time, it also challenges claims that Canadians are satisfied with the status quo.

Additionally, the results provide evidence of the disconnect between consumer experiences and market outcomes in Canadian banking. For example, while Koho achieved significantly positive sentiment ratings (81 percent), its market penetration remains limited by structural barriers to competition. Similarly, the consistently positive reception of EQ Bank's products (62 percent positive sentiment) hasn't translated into substantial market share gains, suggesting that factors beyond service quality determine market outcomes.

Limitations of the Analysis

Online reviews provide valuable insights but are subjective and can vary widely due to personal biases (Hu, Liu and Zhang 2008). They often lack demographic representativeness (Godes and Silva 2012) and may reflect strong opinions rather than the average consumer experience (Hu, Zhang and Pavlou 2009). Factors such as technology access and language barriers further complicate the data, highlighting the need for careful interpretation.

Conclusions

This research reveals a paradox in Canada's financial services: while fintech users show high satisfaction rates exceeding 70 percent, overall market adoption remains low. This disconnect indicates significant structural barriers within Canada's banking sector that go beyond consumer preferences or service quality.

Traditional banks maintain market dominance through established trust relationships, regulatory familiarity and extensive infrastructure. While Canada's concentrated banking sector provides stability, analysis suggests this comes at the cost of reduced innovation and consumer choice.

Sentiment analysis shows that consumers who adopt fintech services consistently find them superior in user experience, cost transparency and innovation. This limited adoption despite high satisfaction mirrors broader market consolidation patterns across the Canadian economy, where incumbent advantages and regulations often favour established players.

The fintech adoption question represents a crucial case for policy makers in balancing market competition with systemic stability. The research indicates that Canada needs a calibrated approach to financial sector development — maintaining banking stability while creating paths for innovative alternatives that enhance consumer welfare.

The challenge is not about choosing between stability or innovation but creating a regulatory framework that supports both. Canadians deserve a financial landscape that enables informed choice, maintains consumer protections and fosters innovation while managing systemic risks.

Recommendations

- **Consumer protection mechanisms:** The preliminary analysis suggests that financial consumers require institutional channels to voice their experiences and frustrations with banks and fintech companies. They are willing to share their perceptions, but the lack of effective consumer rights protections limits their ability to influence practices.

  Canada needs an effective agency to represent users' rights against financial institutions. A strong consumer protection framework is central for the growth and development of Canada's fintech banking sector (Spence 2024). A dedicated agency that provides robust complaint resolution mechanisms[6] is necessary to monitor players, ensure transparency and set standards onwards for digital and traditional banking products. Without such an agency, consumers may feel unheard and have limited options for addressing misconduct, often turning to online reviews or social media. While the Financial Consumer Agency of Canada (FCAC) promotes financial literacy and oversees federal compliance, its ability to resolve individual complaints is limited, relying instead on third-party ombudsman services,[7] which can reduce efficiency and accountability.

- **Consumer representation in financial policy making:** A significant challenge in Canadian financial policy is the need for formal consumer representation. Policy makers should create mechanisms for direct consumer input in regulatory processes, improving communication between users and regulators and leading to more informed decision making. Consumer sentiment analysis could provide valuable insights for policy development. Using public sentiment data would help regulators address service reliability and trust concerns. The current ombudsman system limits continuous consumer feedback about financial institutions. A data-driven approach incorporating user input could enable more inclusive policy development in Canada's banking sector, while ensuring adequate regulation to protect consumer financial well-being.

- **Improvements in the regulatory environment to increase competition:** The analysis indicates that Canadians have a more favourable perception of fintech apps than traditional banks and their flanker brands, driven by better user experience and innovation. Regulatory reform is needed to encourage new market entrants, creating a balanced marketplace where banks and fintech companies compete equally, leading to improved services and lower costs.

  A balanced regulatory framework supporting both innovation and consumer protection is essential. Policies such as open banking can expand access to fintech products (Babina et al. 2024), while reducing switching barriers through account portability could also boost adoption. Currently, established banks

6 Examples of advanced economies with strong financial consumer protection agencies are the US Consumer Financial Protection Bureau and the UK Financial Conduct Authority, which ensure compliance and advocate for consumers.

7 On November 1, 2024, the FCAC announced that the Ombudsman for Banking Services and Investments would become the single external complaints body for all federally regulated banks, replacing the option of the ADR Chambers Banking Ombuds Office.

maintain information advantages, which makes it difficult for consumers to switch providers (Cao, Garcia-Appendini and Huylebroek 2024).

- **Market conduct allegations mechanisms:** The analysis of consumer reviews of fintech banking products highlights issues such as service delays, poor support and transaction problems. To enhance accountability, regulators could set clearer guidelines for banks and fintechs, requiring regular disclosures on customer satisfaction. Dedicated feedback channels for non-dispute-related experiences would allow for proactive monitoring, identifying issues before they escalate. A stronger framework for market conduct is essential, with standardized guidelines for complaint handling, service disruptions, and transparent resolution processes. Regular audits of customer service should be mandated and publicly reported, aiding consumer preferences and ensuring accountability.

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