Centre for International Governance Innovation

Digital Policy Hub

Digital Policy Hub - Working Paper

# Focusing on Users: Lessons for Canada's CBDC from the Digital Euro and Digital Pound

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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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### **Key Points**

- This working paper explores what the digital Canadian dollar project can learn from the digital euro and digital pound to cultivate a more user-focused approach, while remaining neutral on the question of its necessity.
- Development and public engagement strategies are highlighted. Insights from the
  United Kingdom are utilized to advocate for an ongoing consultation model, while the
  phased implementation approach of the European Union inspires transparency and
  expectations settings.
- The unique Canadian context for consumer protection is discussed, raising the need for new ways to deal with a payment landscape that includes a central bank digital currency.
- A significant focus is placed on responsible handling of personal data and clear regulatory processes and language, drawing from data-related expectations in the European Union and legislation concerns in the United Kingdom.
- The paper concludes with dedicated conclusion and recommendations sections. These sections emphasize that meaningful public participation should exist in both the technical design and regulatory processes. Recommendations span across five key areas, critical to the successful integration of the digital Canadian dollar within the fabric of society: developmental approach, engagement strategy, regulation and consumer protection, regulatory novelty and further research.

### Introduction

In the age of digitalization, money is also evolving (Siklos 2023). Central bank digital currencies (CBDCs) are a new form of money, issued and backed by a central bank (Zhang 2020). CBDCs aim to provide a safe and convenient way of making payments in the digital economy while preserving the benefits of central bank money.

Generally, CBDCs can be placed in two main categories (Bech, Shimizu and Wong 2017): wholesale CBDCs are available for financial institutions seeking to hold reserve deposits with a central bank, while retail CBDCs (rCBDCs) are available to the general public. In this working paper, I focus exclusively on rCBDCs and use this term interchangeably with CBDC.

According to the Atlantic Council's CBDC Tracker, 134 central banks worldwide are currently exploring issuing a CBDC, representing 98 percent of global GDP, and 19 of the Group of Twenty (G20) countries are at the advanced stages of CBDC development, with 11 already at the pilot stage. Central bank exploration efforts include the digital euro by the European Central Bank, 2 the digital pound by the Bank of England 3 and the digital Canadian dollar by the Bank of

<sup>1</sup> See www.atlanticcouncil.org/cbdctracker/.

<sup>2</sup> See www.ecb.europa.eu/euro/digital\_euro/html/index.en.html.

<sup>3</sup> See www.bankofengland.co.uk/the-digital-pound.

Canada.<sup>4</sup> These CBDCs have been created to be complementary to physical cash and their issuance is pending the jurisdiction's governmental approval.

This working paper is a continuation of a previous working paper (Freiman 2024) that focused on the topics of programmability and surveillance from a governance perspective. The objectives of this working paper are to point out the governance features of other CBDC projects to draw lessons for the Canadian project. The comparative framework is limited to governance topics relating to engagement strategies and personal data in the European Union and the United Kingdom. This focus is due to the limited availability of CBDC projects already launched, and the choices of the United Kingdom and European Union are due to their relatively similar stages of exploration. This paper offers lessons into the potential future interplay of stakeholder involvement and personal data in the design and governance of a CBDC in Canada.

As the Bank of Canada explores the digital Canadian dollar, the dialogue surrounding its governance is not just timely but imperative. This dialogue must encompass pragmatic steps toward setting a strategic plan that resonates with Canadian values and the expectations of citizens. To this end, this working paper discusses six topics. Within the area of engagement strategy and governance, it addresses:

- the limited engagement, so far, in the digital Canadian dollar;
- · the digital euro's "phases" strategy; and
- the digital pound project's consultation efforts.

The unique Canadian context for consumer protection opens the discussion on the topic of personal data, to bring forward

- theoretical insights about privacy;
- · the privacy expectations existing in the European Union; and
- the example of how a regulatory back door can damage the CBDC project in the United Kingdom.

From these six topics, relevant lessons for the digital Canadian dollar are drawn. The next section presents an argument that currently there is no clear Canadian strategy available to the public.

# The Digital Canadian Dollar: A Work in Progress with Uncertain Future Directions

There are significant debates worldwide whether rCBDCs are needed. Skeptics and opponents point out that rCBDCs are not necessary and do not solve any existing problem (see Cash 2022; Canadian Bankers Association 2022). Often, banking

<sup>4</sup> See www.bankofcanada.ca/digitaldollar

professionals have little understanding of what rCBDCs are and how they work (see Jones 2023), and when they do understand, they worry that rCBDCs might render cases of bank runs "much quicker and more frequent" (Dubé 2023) or lead to lower deposits and lending (Payments Canada 2022; Chang et al. 2023). In addition to financial and economic concerns, another concern raised is that under the wrong conditions, rCBDCs can pose a constant threat, with the system being exploited in the future to surveil citizens (Freiman 2022, 2023b, 2024; Organisation for Economic Co-operation and Development 2023, 5; Prasad 2023; Big Brother Watch 2023).

Nevertheless, there are many motivations to issue CBDCs (Freiman 2024), which range from addressing the declining use of cash, promoting financial inclusion, enhancing crime prevention measures, increasing payment efficiency and encouraging additional competition in the digital payments landscape. Other motivations include the prevention of currency substitution and the protection of monetary sovereignty, as well as the introduction of programmable money and payments to support social policies. These reasons, together with the bandwagon effect (Eichengreen 2023), are driving the development of CBDCs.

CBDCs are likely to be used as surveillance tools by some governments. However, they could also represent an opportunity for central banks in democracies to offer state-of-the-art digital payment that the private sector cannot provide. If they are user-focused, CBDCs could offer better privacy protection than existing payment options, which routinely trade financial data and are transparent to law enforcement agencies. A design underlining anonymity could be, in an ideal world, the digital answer to the erosion of privacy and government surveillance (Jiang, forthcoming 2024).

With these debates and concerns ongoing, the Bank of Canada is exploring the development of the digital Canadian dollar in case the government asks it to issue one. When it comes to trust and confidence in a monetary system, there is no room for CBDCs to fail. While this working paper remains silent on whether a digital Canadian dollar should be issued, it assumes that the development of such a currency, even if it is never officially issued, must meaningfully include the perspectives of a wide range of stakeholders, in addition to thorough background research.

The Bank of Canada has been researching various aspects of this potentially new currency. For example, it has published research on the state of cash usage (Engert, Fung and Segendorff 2019; Welte et al. 2024); the relations of CBDCs to monetary sovereignty (Diez de los Rios and Zhu 2020); the technological aspects of this currency (Shah et al. 2020) and monetary policy (Davoodalhosseini, Rivadeneyra and Zhu 2020); the impact on traditional banking and lending (Chapman et al. 2023); privacy (Darbha and Arora 2020); anonymity (Cheng and Izumi 2024); accessibility (Miedema et al. 2020); and competition with bank deposits (Li, Usher and Zhu 2024). Before a "closure" on how the product design is "stabilized" (Bijker 2010, p. 68; Humphreys 2005) — that is, how the final product is used by the public — there are many questions remaining regarding how the digital Canadian dollar would work, including its usage and governance.

In addition to its conduction of research, the Bank of Canada has also declared that it will engage stakeholders' input on various topics, such as privacy, digital

dollar ecosystem and financial stability, in 2024.<sup>5</sup> However, there remains a great deal of speculation about the design and governance of this digital currency, as well as about the Bank of Canada's ability to meaningfully engage with stakeholders.

Currently, there is still no clear strategy available that specifies how a CBDC will govern data, how the privacy of its users will be preserved, how consumers will be protected or how competition between various potential service providers will work. The different pieces of the puzzle are not yet connected and considering that development on this currency has already begun, it is surprising that much remains unknown. Alert civil society organizations and a meaningfully involved public must help to shape the design and governance of this new digital Canadian dollar.

## Meaningfully Engaging All Stakeholders

### The Digital Canadian Dollar: Limited Engagement

The Bank of Canada has been exploring the idea of a CBDC since at least 2016 (Fung and Halaburda 2016) and engaging with local stakeholders since at least 2020. In February 2020, the Bank of Canada announced that it began building the capacity to issue a CBDC (Bank of Canada 2020). From September 2020 to March 2023, the Bank of Canada met with financial sector members (Bank of Canada 2023). Between September 2022 and January 2023, it met with civil society organizations (ibid.). In addition, it has conducted qualitative engagement with nine focus groups and completed both in-person and online fieldwork (Ipsos 2023). The online consultation was open to Canadians for six weeks (May 8 to June 19, 2023), gathering almost 90,000 responses, with the results published in November (Forum Research Inc. 2023).

But despite having met with members of the financial sector (Bank of Canada 2023), leading financial institutions are still raising questions about the necessity of the digital Canadian dollar (see Canadian Bankers Association 2022). Additionally, the Bank of Canada (2023) has only met with five civil society organizations: CNIB Foundation, which addresses vision health and loss; Inclusion Canada, which focuses on inclusivity for people with intellectual disabilities and their families; Prosper Canada, which is dedicated to expanding economic opportunities for Canadians living in poverty; United Way Centraide Canada, which helps people who experience vulnerability in communities; and Option consommateurs, which aids consumers and defends their rights.

There is no doubt that these organizations are important for the design of the digital currency of Canada; however, they also represent only a fraction of the landscape of Canadian civil society. Additionally, completely missing from these meetings are civil liberty and privacy-focused civil society organizations. The efforts that have been taken so far by the Bank of Canada — namely, meeting with the financial sector and civil society organizations, as well as engaging with the public — are insufficient

<sup>5</sup> See www.bankofcanada.ca/digitaldollar.

steps toward understanding the broad scope of concerns, requirements and views of the public, and in turn drawing valuable insights for the development of a digital currency. As for the online consultation, which revealed a lack of trust in the Bank of Canada and the potential digital Canadian dollar (WealthRocket 2023; Freiman 2023a), it was ill-prepared. First, the qualitative engagement conducted for the preparation of the public consultation only had a total of 63 participants with nine focus groups, based solely on socio-demographic features (Ipsos 2023). Second, nearly all of the respondents who participated in the consultation — almost 90,000 Canadians — had already heard about the digital Canadian dollar. Despite this large number of responses (compared to 50,000 responses in the United Kingdom and 8,221 in the European Union to similar consultation efforts), the Canadian consultation is completely nonrepresentative of the attitudes of average citizens, who may be unaware of this topic.

The Bank of Canada's credibility is essential for fulfilling its mandate, serving as the cornerstone of its operations and policy implementations. This credibility through engagement has so far been accomplished with the assistance of the financial sector, particularly through the Retail Payment Activities Act and the Retail Payment Activities Regulations. Such an extensive engagement demonstrates trust formation processes. However, credibility is important not only within the financial sector, but also among the general public. Therefore, the consultation is both a missed opportunity to build awareness of the digital Canadian dollar *and* a missed opportunity for a more inclusive and representative engagement strategy that meaningfully involves the public. It is a missed opportunity to further build trust.

It is preferable to establish a digital Canadian dollar that is not only technologically advanced, but also socially responsible, and therefore more likely to be widely accepted. In addition to these criticisms, by following the practices of the central banks of the United Kingdom and European Union, the government of Canada can ensure that its digital dollar is both technically advanced and worthy of the general public's trust.

### The Digital Euro: From Investigation to Preparation

Within the European Union, the Eurosystem is the central banking system of the euro area, comprising the European Central Bank and the national central banks of the European Union member states that use the euro as their currency.

In October 2020, the Eurosystem published a document discussing the design aspects, benefits and challenges of issuing a digital euro (European Central Bank 2020). Soon after, the Eurosystem had a public consultation running until mid-January 2021. In April 2021, they published an analysis of its 8,221 responses (European Central Bank 2021a). By July 2021, the European Central Bank launched their investigation phase (European Central Bank 2021b) and commissioned a pan-European focus group to understand their citizens' attitudes toward digital payments (Kantar Public 2022).

In June 2023, the European Commission (Directorate-General for Financial Stability, Financial Services and Capital Markets Union 2023) put forward a dual proposal aiming to establish the digital euro as a currency alongside banknotes and coins after asking the public for feedback (European Commission 2023a). This dual proposal presented a

<sup>6</sup> See www.bankofcanada.ca/core-functions/retail-payments-supervision/retail-payments-supervision-key-milestones.

framework for the digital form of the euro as a complement to cash, and is known as "The Single Currency Package," composed from the proposals to regulate legal tender of euro banknotes and coins (European Commission 2023b) and the establishment of the digital euro (European Commission 2023c).

Following this package, the European Central Bank and the Eurosystem entered the preparation phase of the digital euro (European Central Bank 2023a, 2023b). This stage is planned to last until October 2025, and during this stage the rulebook will be finalized, the service providers selected and the rollout plan drafted (Cipollone 2024b, 15).

From the European Central Bank, the Bank of Canada can consider adopting this phased approach to help continuously refine the design of its digital currency. The phased approach is structured and transparent and can therefore serve as an exemplary model for Canada. Transparent planning is essential, even if the government of Canada has not yet decided to move forward, because the public does not know if the Bank of Canada is currently only considering the development of a digital Canadian dollar or is actually in the process of developing it. If indeed there is a development of the digital Canadian dollar, it would be preferable to meaningfully involve the public in its design.

Transparency regarding the progress and challenges encountered at each phase can help reduce uncertainty and manage public expectations, especially if it involves integrating public input into the design. Such integration will ensure that the final product is well-tailored to meet the needs of Canadians and is likely to result in more trust.

### The Digital Pound: Consultation and Expert Advice

The Bank of England and HM Treasury CBDC Taskforce for the digital pound was announced in April 2021. In February 2023, they oversaw a paper (Bank of England and HM Treasury 2023) that assessed the case and proposed a design for the digital pound, the United Kingdom's version of a retail CBDC. This paper was open to responses until June 2023, and more than 50,000 individuals, businesses and civil society organizations responded. In January of the following year, the Bank of England and HM Treasury (2024) outlined how this feedback will guide them in the design of a digital pound.

In addition, the Bank of England and HM Treasury have sought routine expert advice in the forms of several working groups on privacy, retailer needs and offline payments<sup>7</sup> and fora such as the Academic Advisory Group,<sup>8</sup> CBDC Technology Forum<sup>9</sup> and CBDC Engagement Forum.<sup>10</sup> This last forum is intended to discuss topics such as the digital pound's use cases and data and privacy implications (ibid.).

The Bank of Canada can expand its consultation process from ad hoc meetings to ongoing working groups in a way that is similar to that of the Bank of England and HM Treasury. This will ensure the constant inclusion of a broader array of civil society groups, with a particular emphasis on those specializing in civil liberties and human rights — areas fundamental to the successful implementation of a CBDC. Such proactive

<sup>7</sup> See www.bankofengland.co.uk/the-digital-pound/digital-pound-working-groups.

<sup>8</sup> See www.bankofengland.co.uk/the-digital-pound/cbdc-academic-advisory-group.

<sup>9</sup> See www.bankofengland.co.uk/the-digital-pound/cbdc-technology-forum.

<sup>10</sup> See www.bankofengland.co.uk/the-digital-pound/cbdc-engagement-forum.

measures to raise awareness and understanding among citizens will lead to a more representative and meaningful engagement process, ultimately resulting in a better product that aligns with both the experts' advice and the public's expectations and needs.

# Responsibly Handling Personal Data

### **Unique Canadian Context for Consumer Protection**

Among central banks, the Bank of Canada has offered the most comprehensive analysis of the tensions surrounding privacy in the context of local anti-money laundering and combatting the financing of terrorism (AML/CFT) regulations (Jiang, forthcoming 2024). However, there is a lack of research on consumer protection regulations, and the case of Canada is unique in this regard.

Although CBDCs are direct claims on central banks, globally CBDC projects are being developed as two-tier systems, in which the distribution and transactions are completed through financial institutions and commercial entities. This is also the case in Canada. However, Canada is different from many other countries in terms of the real-time gross settlement system infrastructure: while elsewhere it is common that the central bank is responsible for operating the payment system, in Canada, Payments Canada, a public purpose organization, is responsible for operating the payment infrastructure (Payments Canada 2022).

The expected involvement of commercial payment service providers using the Payments Canada infrastructure, with the liability of the Bank of Canada, raises expectations for new standards and regulatory requirements. These unique considerations also raise questions about who will provide consumer services, which entity will be responsible in cases of fraud or hacking, whether payments are guaranteed to have zero cost for the end-user (unlike other payment service providers, who typically charge for their services) and how this arrangement will align with the assurance of competitive commercial alternatives.

The consumer protection framework in Canada resembles the EU-level regulations and member states' national laws in terms of hierarchy. The Canadian framework operates at the federal level, addressing issues such as product safety and anti-competitive practices, while the provinces and territories have their own forms of legislation to further protect consumers.

A new Financial Consumer Protection Framework dealing with consumer rights in relation to banks came into force in mid-2022 (*Canada Gazette* 2021). The topic of consumer protection for the digital Canadian dollar is expected to mature as the project advances. However, it is currently unclear whether the Financial Consumer Agency of Canada, or any other entity, has (or needs) a strategy for the digital Canadian dollar, or how much it is being involved with its design, if at all.

# Theoretical Insights about Privacy

Raphael Auer and his co-authors (2023) draw a map of the CBDC privacy landscape from the perspective of stakeholder conflicts and stakeholder proximity to the data. Their work has yielded several insights relevant to the objectives of this paper: First, practical and applicable privacy definitions in regard to CBDCs are needed: the lack of practical definitions of privacy in the financial usage context stalls the development of privacy solutions.

Second, fighting crime with financial evidence requires different methods that are likely to conflict with privacy interests. Designing a CBDC that balances privacy against a single method would be counterproductive when tackling criminals who change their behaviour. The privacy-security balance must be concretely established.

Third, Auer et al. observe that accessing more data can, paradoxically, increase privacy. A too-restricted privacy approach might lead to a future regulatory demand for logging transaction details outside the CBDC payment system.

The Canadian model involving Payments Canada and commercial entities must navigate the complexities of providing robust consumer protection. The lack of clear privacy definitions, as highlighted by Auer et al. (ibid.), could hinder the development of privacy solutions. Another challenge is to consider the ever-evolving tactics of criminals without compromising the privacy of citizens. Lastly, the paradoxical notion that more data access can enhance privacy stresses the need for a nuanced privacy strategy. This is especially relevant in the Canadian context, in which the involvement of multiple stakeholders raises questions about responsibility and accountability for consumer service and protection.

As the project progresses, these considerations will become increasingly refined, with the expectation that they will be discussed publicly and transparently by meaningfully engaging all stakeholders in technical design *and* regulatory processes. What can Canada learn from other jurisdictions in this regard?

### **Digital Euro: Setting Privacy Expectations**

The digital euro project provides some general understanding of how personal data would be treated. While standards for the digital euro personal data protection do not yet exist, the European Data Protection Supervisor (EDPS) and the European Data Protection Board (EDPB) have issued recommendations to ensure the highest standards of personal data protection (EDPB-EDPS 2023).

European Central Bank member of the executive board, Piero Cipollone, has addressed several data-related issues: the digital euro system is intending to process "only essential personal data, avoiding excessive centralization of such data, and introducing a so-called privacy threshold for online transactions to curb tracing for anti-money laundering purposes" (quoted in Emmanuel 2024). An example of avoiding excessive centralization that also relates to money laundering is the idea that payment service

providers, rather than governmental authorities, can be equipped with the abilities to assess whether a transaction relates to money laundering (Panetta 2022).

Cipollone (2024a) has also spoken to questions relating to data, having a viable alternative to CBDC, offline and online payments and control over data and its governance authority. Cash offers the highest level of privacy, given that no data is collected, and remains an alternative to the digital euro. Offline payments require physical proximity that can offer cash-like privacy, where the details of the transaction would only be known to the payer and the payee. When it comes to online payments, low-risk and low-amount payments can be processed differently, with an increased privacy protection.

Moreover, through the technical design choice of the digital euro infrastructure, it would be impossible for the Eurosystem to infer identity from payments. To this end, pseudonymization of transactions, hashing, data segregation and other cryptographic and privacy-related techniques would be employed. The digital euro is expected to provide its users with control over their own data: when a user engages with the payment service provider, part of the transaction process would include an informed decision about the uses of data. In addition, the General Data Protection Regulation would apply to all payment service providers. Policy makers are also seeking a governance structure that will involve an independent data protection authority to oversee compliance with data protection rules and regulations.<sup>11</sup>

The European Central Bank's technical design choices that favour privacy-enhancing technology are similar to ideas previously raised by the Bank of Canada (Darbha and Arora 2020). However, the European Central Bank and the European Union's approach to data protection offers valuable insights for Canada's consumer protection efforts beyond privacy, namely a decentralized approach to data processing and an independent regulatory oversight.

The European Union's approach, which emphasizes processing only essential personal data and avoiding excessive centralization, can inform the Canadian approach. The idea that payment service providers could assess transactions for money laundering, rather than governmental authorities — a decentralized approach to data governance — may be compatible with Payments Canada's infrastructure and the landscape of financial entities that can provide payment services.

Additionally, the European Union's commitment to user control over data and informed decision making during transactions, together with its planned independent data protection authority for the digital euro, could guide the Canadian project. An independent and federal regulatory oversight authority for the digital Canadian dollar can ensure alignment with data protection standards and consumer rights and citizens' protections under a new regulatory framework.

<sup>11</sup> See also European Parliament (2024, 40) for the establishment of a dedicated unit within the European Central Bank, dealing with accounting, organization and decision-making processes independently.

### **Digital Pound: A Regulatory Backdoor Concern**

In the United Kingdom, the current proposal and intention for the digital pound state that the government would not have access to the public's financial data. Despite this proposal and intention, the current legislative process suggests a potential back door. A report by Big Brother Watch (2023, 63) points to the concern: currently, processing personal data is only lawful under certain limiting conditions, such as a legitimate interest that balances the purpose against the rights of the data subject. However, the Data Protection and Digital Information Bill, which is currently in progress, introduces the concept of "recognized legitimate interests." Through this concept, report authors contend, data can be processed without a legitimate interest-balancing test. Given this legal ability, data generated by users of the digital pound could be accessed and processed without the person's knowledge or consent. If this concern were to become a reality, it would represent a regulatory back door. These privacy concerns are likely to dissuade individuals from using a CBDC (Tronnier and Qiu 2024).

Two lessons can be drawn from the potential for a regulatory back door in the United Kingdom's legislation: first, civil society organizations will need to closely monitor and take an active part in creating legislative developments. Policy makers involved with the regulatory aspect of the digital Canadian dollar must commit to ensuring that data handling is consistent with privacy legislation and that data is processed with explicit and full user knowledge and consent. It remains to be determined whether privacy and consumer protection will be covered through a dedicated digital currency legislation or whether existing legislation would be updated. Second, the regulatory conditions for processing data must not entail any ambiguity or the possibility of back doors. These pitfalls might lead to a loss of trust in the legislative process or a hesitancy to use the digital Canadian dollar due to privacy concerns.

### Conclusion

The development of a CBDC is both a technological and a societal endeavour. As such, it demands a comprehensive engagement strategy and governance model that resonates with citizens' values and expectations.

The limited engagement with the digital Canadian dollar highlights a need for much broader and more inclusive consultation processes that capture the diverse perspectives of the general public and civil society, especially in regard to consumer protection, civil liberties and privacy.

Learning from the phased strategy of the digital euro, Canada can benefit from a similar approach that enhances transparency and effectively manages public expectations. The digital pound consultation further underscores the importance of evolving from ad hoc discussions to sustained collaborative efforts through ongoing working groups.

<sup>12</sup> See www.bankofengland.co.uk/the-digital-pound/digital-pound-working-groups.

<sup>13</sup> Bill 30, Data Protection and Digital Information Bill [HL], 2022–2023 sess, 2023 (1st reading 8 March 2023), online: <a href="https://bills.parliament.uk/publications/53287/documents/4126">https://bills.parliament.uk/publications/53287/documents/4126</a>.

Consumer protection in the digital age necessitates clear standards and regulatory frameworks, particularly concerning privacy. The experience of the European Union has demonstrated the significance of decentralizing AML and CFT responsibilities and ensuring that cash remains a viable option for those individuals valuing transactional privacy. The example brought here from the digital pound project serves as a cautionary tale of the potential pitfalls of regulatory back doors, emphasizing the need for unambiguous legislation that addresses privacy concerns head on. This is in addition to the theoretical insight that clear definitions of privacy are needed in the financial usage context — more specifically, in the digital Canadian dollar context — to develop practical design solutions and regulatory frameworks.

The Bank of Canada needs to develop a general strategy for meaningful public engagement beyond the digital Canadian dollar project. This strategy should prioritize ongoing engagement to empower the public and enhance long-term trust and credibility in the bank. Such a strategy will be particularly useful in a future in which more identities, infrastructure and financial transactions become digital.

In addition to the design and policy-related recommendations, this working paper suggests three main areas for future research: engagement strategies, consumer protection and governance involving citizens' participation.

Ultimately, the success of the Canadian CBDC project, should it continue, depends not only on the trust of the financial sector, but also on that of Canadian citizens. Meaningful involvement of all stakeholders in the technical design and regulatory processes is a strategy to gain this trust. A tailored design that meets the specific local needs of diverse Canadians will yield a better product that aligns with expert advice as well as public needs and expectations.

### Recommendations

The following recommendations are additions to the previous recommendations regarding privacy and rights, accessibility and governance that were put forward in an earlier working paper (Freiman 2024; see also Table 1 below):

- The Bank of Canada should consider a phased approach in the development of a CBDC. In addition to enhancing transparency and managing public expectations, a gradual step-by-step approach will allow careful monitoring of civil society organizations and the adjustment of policies if needed.
- A meaningful engagement strategy must entail ongoing working groups that foster dialogue among stakeholders from various sectors. These groups can ensure that the consultation process is inclusive, capturing a wide range of perspectives from both the general public and civil society. To further build trust in the digital Canadian dollar, it is recommended to engage the public not only in the technical design but also in the regulatory processes, ensuring that the final product meets public needs and expectations. Lastly, developing a general public engagement strategy can strengthen the Bank of Canada's credibility and trust, paving the way for a future with further technological developments.

- Regarding regulation and consumer protection in the development of a CBDC: first, regulatory clarity must be established to prevent ambiguities and ensure legislation is free of regulatory back doors. Second, it is crucial to develop clear definitions of privacy that can guide the creation of practical design solutions and regulatory frameworks. Third, cash should be guaranteed as a viable alternative to the digital currency. Fourth, to protect consumer data, the system should support offline and online payments without any digital traceability that offer cash-like privacy as much as possible. Last, user autonomy over personal data must be prioritized, giving individuals complete control when interacting with payment service providers.
- Two distinct recommendations emerge in the context of regulatory novelty. First, the establishment of an independent regulatory oversight authority is crucial. This federal-level body would ensure the project's adherence to the highest standards of accountability. Second, by distributing AML and CFT processes, the system can better protect personal data and prevent the risks associated with centralization.
- Lastly, three recommendations stand out regarding further research. The first is a recommendation to undertake methodological comparative research on CBDC engagement strategies across various projects around the world, or at least the G20. Such research should critically assess and measure the effectiveness of these strategies, with results that can be clearly communicated and understood in table form. The second recommendation is to delve into the topic of consumer protection within the local Canadian ecosystem. This should include examining existing regulatory frameworks and authorities, identifying potential gaps and proposing robust safeguards if a digital Canadian dollar is indeed issued. The third is to research the topic of CBDC governance strategies that consider the public's ongoing involvement. The scarcity of literature on CBDC governance strategies, particularly those involving the public, is a glaring oversight that not only highlights the novelty of CBDCs as technologies, but also stresses the critical need for research that integrates technological advancement with citizens' participation.

**Table 1: Policy Recommendations** 

Area of Focus	Essence	Recommendation
Developmental approach	Transparency and expectations	Adopt a phased approach to enhance transparency and manage expectations.
Meaningful engagement strategy	Collaboration	Transition to ongoing working groups for sustained collaboration on different topics with different groups.
	Meaningful inclusivity	Broaden consultation processes to meaningfully include the general public and civil society, addressing the current lack of representation in the digital Canadian dollar's design.
	Credibility and trust in the Bank of Canada	Consider developing a general public engagement strategy that includes regular consultations to strengthen trust and credibility among the general public.
Regulation and consumer protection	Regulatory clarity	Guarantee legislative clarity and avoid regulatory back doors.
	Privacy definition	Develop clear definitions of privacy to create practical solutions.
	Single currency regulatory package	Assure cash remains a viable option alongside the introduction of the digital Canadian dollar.

Area of Focus	Essence	Recommendation
	Offline payments	Offer cash-like privacy for offline payments.
	Online payments	Offer cash-like privacy for low-risk and low-amount online payments.
	User autonomy	Give users complete control over their data when engaging with payment service providers.
Regulatory novelty	Oversight	Create an independent, ongoing, regulatory oversight authority at the federal level to oversee the digital Canadian dollar project.
	Decentralize AML/CFT processes	Decentralize AML and CFT responsibilities among financial institutions and payment services to avoid excessive centralization and to protect personal data.
Further research	Comparative research	Conduct methodological comparative research on CBDC engagement strategies, with a critical focus on evaluation metrics.
	Local research	Explore the local Canadian consumer protection ecosystem, assessing frameworks and authorities to ensure safeguards.
	Governance strategies	Research the topic of CBDC governance strategies that consider the public's ongoing involvement.

Source: Author.

Note: AML = anti-money laundering, CBDC = central bank digital currency, CFT = counter-terrorist financing.

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#### **About the Author**

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