The Future of Currency: Defining Canada's Role in Global Digital Monetary Reform

Michelle Ehinlaiye, Ethan Ellsmere, and Claudia Gallant

Issue

Central banks have begun recognizing the potential of public digital currencies as both a tool to facilitate monetary reform, and a danger to global financial stability. Canada must engage with international partners to create a regulatory framework for central bank digital currency (CBDC) reform that promotes democratic values, while reducing the risks of destabilizing implementation.

Background

CBDCs are a form of fiat currency that are issued completely electronically by a country's central bank. Different from crypto currencies, CBDCs are issued, monitored and backed by public institutions (Wierts and Boven 2022; Bank for International Settlements [BIS] 2020). Since CBDCs are completely electronic, certain implementations allow for unprecedented access to currencies to any individual with an electronic device (Adams, Kewell, and Parry 2018). Possible design features such as offline functionality, zero transaction fees and data portability are ways of making CBDCs more accessible and attractive to more people, especially those in remote areas (Group of Thirty 2020).

As of December 2022, 114 countries, representing over 95 percent of global GDP, are researching CBDCs. Sixty countries are in the advanced phases of exploration, development, pilot or launch (Atlantic Council 2022). All Group of Seven (G7) countries have now moved into development stages of CBDCs and 18 of the Group of Twenty countries are now in the advanced stages, with seven of them issuing pilot projects (ibid.).The Society for Worldwide Interbank Financial Telecommunication (SWIFT) reported that the international trade capability of CBDCs is being further explored by 14 central and commercial banks worldwide — including Banque de France, the Deutsche Bundesbank, Standard Chartered, and Wells Fargo — which are testing pilot inter-network communication to accelerate full-scale use of CBDCs for trade purposes by ensuring interoperability within their trading network (SWIFT 2022). While the Bank of Canada has decided not to pursue the implementation of a domestic CBDC at this time, because of the rigour of current national monetary infrastructure, Canada continues to research and develop CBDC capabilities to better understand avenues of implementation should it be needed in the future (Bank of Canada 2023).

A Call for Regulation

The BIS emphasised in the 2020 "principles of CBDCs" that the novel currencies' implementation must *do no harm*, that "any CBDC must support … the ability of central banks to fulfil their mandates for monetary and financial stability" (G7 Research Group 2021). Forums of international policy development have begun recognizing the latent potential public digital currencies pose to global financial innovation (BIS 2020), asserting that the values of transparency, accountability and digital inclusivity should be foundational to its development (BIS 2020).

Current CBDC innovation in the global fora remains uncoordinated, leaving the webs of financial market structures vulnerable to disruptions if development continues without global regulatory support. Nigeria's implementation effort of the CBDC "eNaira" and its following cash-withdrawal restrictions in a push for CBDC efforts, induced national civil unrest and "cash riots" (Anthony 2023). Nigeria's "cautionary tale for other countries" (ibid.) highlights a dangerous incongruence between the understood opportunities that the novel currency can create under guiding frameworks, and the disruptions to global financial stability created in the wake of premature adoption. With global CBDC development and research funding increasing exponentially since 2020 (BIS 2020), alongside 25 current national implementations and pilot projects as of June 2022 (UN Department of Economic and Social Affairs 2022), the declaration of CBDC positions alone is insufficient to address the underdeveloped regulatory frameworks and discourse necessary for global financial stability. From the lessons of CBDC implementation efforts and growing research on equitable CBDC development, a guiding set of principles must be promoted to ensure the harmonization of international policy in support of inclusive monetary security, accountable government use and transparent implementation to promote public trust.

The Guiding Principles of CBDC Development

One of the main appeals of CBDCs is their design, which has been created to thrive within the public sector. This allows for greater levels of accountability and transparency among central banks within this currency type. The trackability of this currency offers possibilities for combatting cybercrime, including anti-money laundering and counter-terrorism financing, as every transaction is monitored (*ACAMS Today* 2021). Therefore, CBDCs have the potential to combat digital illicit activities while also enhancing levels of integrity through its public institutional framework, which prioritizes a secure platform that users can trust.

For example, the rapid development of digital currencies in Africa, such as the Nigerian eNaira and the Ghanian eZwich, has resulted in organizations such as the West African Economic and Monetary Union (WAEMU) considering the implementation of CBDCs for its potential in creating transparency and accountability (Simons 2022; IMF 2022). The WAEMU cites CBDC development as a platform for reform to begin remediating the US$120 billion trade finance gap that Africa faces today (tralac 2015). According to the BIS, the use of distributed ledger technology and cryptographic hashes supported by CBDCs offer enhanced accessibility to ensure a high level of integrity for transaction records that can create confidence for states and businesses to further engage in global commercial activities and pathways to reform (BIS 2022).

Although the benefits of increased accountability and transparency outweigh the disadvantages, there are increased concerns regarding public surveillance. The design of CBDCs creates a digital footprint for each individual that uses this currency (European Data Protection Supervisor 2023). Therefore, people's payments and spending habits are tracked by public institutions, which presents a threat to one's privacy. The risks associated with tracking digital transfers revolves around the ability of public central banks to access information connected to an identity, thus leading to state misuse that could create biased profiling and unwanted surveillance (ibid.).

The significance of streamlining financial connections is addressed through the adoption of CBDC technology and it supports a renewed engagement in international trade and investment through lowered trade finance barriers (SWIFT 2022). These include factors such as the reduction of cross-border interest rates and near instantaneous transaction times. Under SWIFT connector gateways, CBDC networks and existing payment systems can be harmonized to facilitate new levels of cross-border interoperability (ibid.). This form of collaboration will allow for greater inclusivity among banks, which would increase access to central banks in order to achieve mandates such as payment settlements (BIS 2021b).

As a result of greater streamlined financial connectivity, currency substitution, defined as using foreign currency instead of one's domestic currency, would result in issues for both the sending and receiving country within this network. According to the BIS, this occurrence would devalue independent monetary policies that have been implemented by the countries involved (BIS 2021a). With regard to the sending country, greater demand than supply for the foreign currency could lead to an increase in capital flow within that nation (ibid). While this may not necessarily be a negative outcome, the drawback in this situation lies in its interference with monetary policy and the extent to which it is enforced. As for the receiving country, the result of currency substitution would lead to a destabilization of the domestic currency demand (ibid). This would affect the domestic central bank as it would struggle to control the flow of money due to the lack of domestic liquidity, reducing the influence domestic banks have on domestic monetary systems and policies (ibid).

The promotion of financial inclusion is a crucial feature of CBDCs that could be used to further efforts to develop less economically stable countries. CBDCs have the potential to become a more accessible method of digital financial transfers. According to the World Bank, approximately 1.7 billion people are unbanked (World Bank 2021). The World Economic Forum showcases that CBDCs could bring financial services to people previously excluded from traditional banking systems. In remote areas without digital infrastructure, transactions through CBDCs can be made at little or no cost using cellular devices, completely offline. In regions such as Sub-Saharan Africa where transfers and payments come at an expensive cost of eight percent per transfer (Fuje, Quayyum and Ouattara 2022), CBDCs could create a viable option for a cheaper, faster and easier method of banking compared to private forms of digital currency.

The increased use of digital currencies presents a risk of eliminating physical cash, which has no cost associated with transactions. This means that legislation would need to be created to ensure that CBDC transfers do not have an associated "transaction cost." Ultimately, while proponents of digital currencies are hopeful about the prospect of updating the current monetary system, CBDCs may not have a radical impact on current trading or domestic transactions.

Recommendations

The construction of an inter-ministerial position on CBDCs through a concerted policy harmonization effort will fortify Canadian policy responses to future developments. CBDC's potential for fundamental monetary transformation continues to be a topic of policy research for the Bank of Canada, analyzing implications to security, transparency and the effective support of current Canadian policy imperatives. New implementation efforts in foreign jurisdictions requires Canada to harmonize its national position on CBDC governance and assuage incongruities in current policy stances. Unifying an inter-ministerial approach to Canada's position on CBDC development will provide key actors in the Canadian government the information necessary to successfully engage with CBDC technology.

Continued leadership by Canada in key forums of policy development to promote the coordination of international policy regulation. SWIFT, in tandem with its central bank partners (BIS 2021a), launched the first pilot of a cross-border CBDC settlement mechanism interoperable between both traditional and digitized fiat mediums (SWIFT 2022). SWIFT's successful implementation of global public digital currency exchange represents the latest initiative led by key forums of policy innovation that continue to shape policy in CBDC development. Asia-Pacific Economic Cooperation (APEC) has already facilitated the drafting of a digital CBDC inclusion agreement (APEC 2022). Canada's position as a founding member provides a unique opportunity to bring national insights on CBDC learning and promote a collaborative path for accountable implementation practices, with an emphasis on regulatory oversight and concerted interoperability. With digital inclusivity remaining a key value for Canadian policy by the Bank of Canada (2023) and GAC (2023), balancing both important elite forums of policy innovation and plurilateral mediums must be considered to project a position of inclusive financial digitization.

Canadian accession to the Digital Economy Partnership Agreement (DEPA) and reflexive economic agreements should remain a priority. The lack of comprehensive regulation for public digital currencies in international financial institutions highlights the nascence of CBDC development. Where rigid international regulatory frameworks may fail to adapt to the rapid evolution of CBDC technologies, the adoption of a reflexive approach to digital financial governance through the creation and accession to living agreements should become a policy imperative. DEPA, led by Canadian-aligned partners of New Zealand, Singapore and Chile (Government of Canada 2022), acts as both a statement of financial multilateral cooperation, and a cognizance to the evolving climate of digital economic technologies through its principles of adaptive governance. As the impacts of CBDC development are realized, Canada's engagement with reflexive digital governance bodies will ensure its policy development remains at the forefront of accountable implementation practices.

Under the auspices of digital inclusivity, Canada must engage with the developing normative discourse surrounding CBDC implementation. The Bank of Canada's growing research in both wholesale and integrated CBDC development highlights the necessity that governance structures must be integrated to ensure intersectional compliance with financial security and rule-of-law. Preliminary contributions to the "CBDC principles endorsement" announced by G7 and the BIS mark the first step for Canadian contributions in shaping international norm-setting behaviour for the novel financial technology. As the international fora looks to Canadian governance as a model for democratic values, a determined projection of good governance principles into CBDC will prove vital against emerging concerns of the technologies misuse.

About the Authors

Michelle Ehinlaiye is a student in Wilfrid Laurier University's Master of International Public Policy program, based at the Balsillie School of International Affairs.

Ethan Ellsmere is a student in Wilfrid Laurier University's Master of International Public Policy program, based at the Balsillie School of International Affairs.

Claudia Gallant is a student in the University of Waterloo's Master of Arts, Global Governance program, based at the Balsillie School of International Affairs.

Acknowledgments

The authors would like to thank Dr. Colin Chia and Leah Cabral, Dr. Paul Samson and officials at Global Affairs Canada for their guidance and mentorship throughout the course of the fellowship program.

Works Cited

ACAMS Today. 2021. "CBDCs: The Time Has Come." March 30. www.acamstoday.org/cbdcs-the-time-has-come/.

Adams, Richard, Beth Kewell, and Glenn Parry. 2018. "Blockchain for Good? Digital Ledger Technology and Sustainable Development Goals." In the *Handbook of Sustainability and Social Science Research* by Walter Leal Filho, Robert W. Marans and John Callewaert, 127-140. Springer International Publishing.

Anthony, Nicolas. 2023. "Nigerians' Rejection of Their CBDC Is a Cautionary Tale for Other Countries." CATO Institute, March 6. www.cato.org/commentary/nigerians-rejection-their-cbdc-cautionary-tale-other-countries#.

APEC. 2022. "Strategies and Initiatives on Digital Financial Inclusion: Lessons from Experiences of APEC Economies." APEC, December. www.apec.org/docs/default-source/publications/2022/12/strategies-and-initiatives-on-digital-financial-inclusion-lessons-from-experiences-of-apec-economies/222_fmp_strategies-and-initiatives-on-digital-financial-inclusion.pdf?sfvrsn=77e0fd25_4.

Atlantic Council. 2022. "Central Bank Digital Currency Tracker." December 15. www.atlanticcouncil.org/cbdctracker/.

Bank of Canada. 2023. "Central Bank Digital Currency (CBDC)." Accessed March 20. www.bankofcanada.ca/research/digital-currencies-and-fintech/projects/central-bank-digital-currency/.

BIS. 2020. "Central Bank Digital Currencies: Foundational Principles and Core Features." www.bis.org/publ/othp33.pdf.

———. 2021a. "Central Bank Digital Currencies for Cross-Border Payments: Report to the G20." July. www.bis.org/publ/othp38.pdf.

———. 2021b. "Central bank digital currencies: financial stability implications." BIS, September. https://www.bis.org/publ/othp42_fin_stab.pdf.

———. 2022. "DLT-Based Enhancement of Cross-Border Payment Efficiency." www.bis.org/publ/work1015.pdf.

European Data Protection Supervisor. 2023. "TechDispatch #1/2023 — Central Bank Digital Currency." March 29. https://edps.europa.eu/data-protection/our-work/publications/techdispatch/2023-03-29-techdispatch-12023-central-bank-digital-currency_en#:~:text=Due%20to%20the%20digital%20nature,transactions%20or%20alternative%20remittance%20systems.

Fuje, Habtamu, Saad Quayyum, and Franck Ouattara.2022. "Exploring and piloting digital currencies is becoming more popular amongst African central banks, but why?" World Economic Forum, July 4. www.weforum.org/agenda/2022/07/more-african-central-banks-are-exploring-digital-currencies-69560066da.

G7 Research Group. 2021. "G7 Finance Ministers and Central Bank Governors' Statement on Central Bank Digital Currencies (Cbdcs) and Digital Payments." University of Toronto, October 14. http://www.g7.utoronto.ca/finance/211013-statement.html.

Global Affairs Canada. 2023. "Global Affairs Canada: Departmental Plan 2023-2024". August 8. https://www.international.gc.ca/transparency-transparence/departmental-plan-ministeriel/2023-2024.aspx?lang=eng.

Government of Canada. 2022. "Background: Canada's possible accession to the Digital Economy Partnership Agreement". August 25. www.international.gc.ca/trade-commerce/consultations/depa-apen/background-information.aspx?lang=eng.

Group of Thirty. 2020. "Digital Currencies and Stablecoins: Risks, Opportunities, and Challenges Ahead." Washington, DC. https://group30.org/images/uploads/publications/G30_Digital_Currencies.pdf.

IMF. 2022. "Digital Currency Innovations in Sub-Saharan Africa." Regional Economic Outlook Analytical Note, October. www.imf.org/-/media/Files/Publications/REO/AFR/2022/October/English/DigitalCurrencyNote.ashx.

Simons, Bright 2022. "African governments are turning to cryptocurrencies but can they team up?" Brookings Institution, March 16. https://www.brookings.edu/blog/future-development/2022/03/16/african-governments-are-turning-to-cryptocurrencies-but-can-they-team-up/.

SWIFT. 2022. "Ground-Breaking Swift Innovation Paves Way for Global Use of Cbdcs and Tokenised Assets." October 5. www.swift.com/news-events/press-releases/ground-breaking-swift-innovation-paves-way-global-use-cbdcs-and-tokenised-assets.

tralac. 2015. "US$120 bn trade finance gap holding back African growth". May 15. www.tralac.org/news/article/7402-us-120-bn-trade-finance-gap-holding-back-african-growth.html.

UN Department of Economic and Social Affairs. 2022. "Monthly Briefing on the World Briefing on the World Economic Situation and Prospect." August 1. www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/Monthly_Briefing_163.pdf.

Wierts, Peter and Harro Boven. 2022. "Central Bank Digital Currency — Objectives, Preconditions and Design Choices." *Occasional Studies* 20, no. 1. Amsterdam: De Nederlandsche Bank, September 21. www.dnb.nl/media/espadbvb/central-bank-digital-currency.pdf.

World Bank. 2021. "Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19." The Global Findex Database. www.worldbank.org/en/publication/globalfindex.