HIGH-LEVEL SUMMARY TECHNICAL ASSISTANCE REPORT

DOMINICAN REPUBLIC

Assessing the Implications of a Retail Central Bank Digital Currency (Phase 1 and 2)

August 2024

Prepared By

Paduraru, Anca (Mission chief, MCM); Gross, Marco (MCM); Miettinen, Paavo Akseli (MCM); Driessen, Karl Johan Theodor (External expert); Chacon Rey, Maria Fernanda (LEG); Poh, Kristel (LEG); Forte, Stephanie (LEG); Budau, Victor (ITD)

High-Level Summary Technical Assistance Report
Monetary and Capital Markets, Legal, IT Departments

DOMINICAN REPUBLIC - Assessing the Implications of a retail Central Bank Digital Currency (Phase 1 and 2)

Prepared by Paduraru, Anca (Mission chief, MCM); Gross, Marco (MCM); Miettinen, Paavo Akseli (MCM); Driessen, Karl Johan Theodor (External expert); Chacon Rey, Maria Fernanda (LEG); Poh, Kristel (LEG); Forte, Stephanie (LEG); Budau, Victor (ITD)

The *High-Level Summary Technical Assistance Report* series provides high-level summaries of the assistance provided to IMF capacity development recipients, describing the high-level objectives, findings, and recommendations.

ABSTRACT: The mission helped the BCRD to assess a CBDC's potential macro-financial, legal, and financial integrity implications, and shared lessons from other countries' CBDC and digital money projects, technology considerations, practices for stakeholder engagement, and how CBDC can increase financial inclusion, among others. The mission advised the BCRD to continue the exploration of macro-financial implications of a CBDC, conduct the legal framework revisions should a positive decision of CBDC be taken, assess risks to financial integrity once a firmer design choice is made, and build up technology knowledge and capacity meanwhile.

JEL Classification Numbers: C63, E42, E58, G23, K10, O32
Keywords: CBDC, digital money, macro-financial, legal, payments, digitalization

International Monetary Fund, IMF Publications
P.O. Box 92780, Washington, DC 20090, U.S.A.
T. +(1) 202.623.7430 • F. +(1) 202.623.7201
publications@IMF.org
IMF.org/pubs

Background

The *Banco Central de la República Dominicana* (BCRD) is exploring Central Bank Digital Currency (CBDC), with International Monetary Fund (IMF) assistance. An internal group explores CBDC since 2022, and recently conducted preliminary analysis of CBDC implications and a brainstorming of potential policy objectives that could support a CBDC design. BCRD requested IMF assistance with the CBDC exploration and understanding its implications and two missions took place in the Dominican Republic (DR), in June and September 2023. These assisted the BCRD with assessing a CBDC's potential macro-financial, legal, and financial integrity implications, and shared lessons from other countries' CBDC and digital money projects, technology considerations, practices for stakeholder engagement, and how CBDC can increase financial inclusion, among others.

Summary of Findings

DR has a well-developed national payment system, but further improvements are necessary. The national payment and securities settlement system (SIPARD) processes large value payments in DOP and USD and allows instant payments directly from users' internet banking. It is the core of a regional infrastructure (SIPA) which links the national payment systems of Costa Rica, DR, El Salvador, Guatemala, Honduras, Nicaragua, and Guatemala, and supports their financial regional integration. BCRD also runs a check-clearing system and various closed-loop card and mobile payment systems operate in DR. Electronic payments are possible with a wide range of instruments - cards, credit transfers, direct debit, e-wallets, etc. Despite the generous offer, about half of the population does not have access to a financial product and remittance (in part informal) is highly prevalent, and costly. According to a 2017 BCRD survey, more than 90 percent of payments are still in cash, with high production and management costs, and in the context of a largely informal workers economy. Some electronic payments are taxed by the government, which may contribute to users' poor adoption. Hence, there are potential benefits of a CBDC to improve payments, in addition to supporting other policy objectives.

The main focus of the IMF assistance was the exploration of CBDC macro-financial implications. As a first step, the BCRD had conducted preliminary analysis on the possible implications and potential policy objectives, related to different design options of a CBDC. As a second step, a quantitative analysis was conducted based on an IMF-staff developed model[1] which is primarily built around the additional competition that a CBDC would induce for the banking system and the resulting potential for strengthening monetary policy pass-through and monetary sovereignty. It helps quantifying volume and price effects (deposit balances, deposit rates, reserve volumes, etc.), and the consequence for bank profits and central bank seigniorage, alongside underlying drivers. Various counterfactual scenario simulations were conducted, combining assumptions for the utility of CBDC and possible interest paid on CBDC.[2] Conditional on current initial conditions in DR and the design options, CBDC take-up may range between an estimated 1 and 20 percent of total money under some primary reference scenarios.

The DR banking system is found to be able to withstand the estimated drop in its net income when a CBDC were to be introduced, which would still rest in sufficiently positive territory so that risks to bank solvency appear rather limited. The analysis suggests that a "rotation" from banking system net income (falling) to central bank seigniorage (rising) may likely take place when CBDC will be demanded and subtract from deposit holdings. The estimated fall in bank profitability would be such that it still well rests in positive territory, for risks to bank solvency to appear rather limited. Furthermore, CBDC

---

[1] Gross, M., and Letizia, E. 2023. "To Demand or Not to Demand: On Quantifying the Future Appetite for CBDC." IMF Working Paper No. 23/9, International Monetary Fund, Washington DC.

[2] The BCRD has not made any decision with respect to whether a CBDC would be designed to bear interest or not. The model-based analysis remains agnostic and merely provides results to help understand the implications of an interest-bearing feature.

take-up can help reduce the structural excess liquidity of the banking system and the stock of BCRD bonds, supporting BCRD seigniorage and its solvency position.

The mission also explored in depth the legal implications of issuing CBDC. It reviewed theoretical legal aspects of issuing CBDC, including its use as “money” and “currency”, legal considerations of each design type (token- or account-based, direct or intermediated, interest-bearing or unremunerated) and implications of sanctioning CBDC as legal tender. It appears that the DR’s Constitution and/or the Monetary and Financial Law would require changes to underpin CBDC in sound legal provisions, as they currently appear to provide some legal obstacles for the issuance of CBDC. Private law implications and including CBDC in all payment-related regulations also need to be reviewed before issuing CBDC.

Other aspects preliminarily discussed were the financial integrity and technology implications of CBDC. A fully-fledged assessment of financial integrity implications will only be possible at a more mature CBDC exploration stage and based on a firmer design choice. However, the mission noted the need to conduct a detailed risk assessment covering each design feature and specific use, as well as assessing the implications from a privacy and anonymity perspective. The mission outlined the most important obligations under the FATF standard for safeguarding CBDC transactions against money laundering (ML) and terrorism financing (TF) risks. From a technology angle, the mission underlined how design options follow CBDC policy objectives, and specific architectures and technologies implement the design. Presentations detailed key enabling technologies (e.g., offline payment capability, distributed ledger technologies) and how CBDC can be integrated into a “platform”, alongside other assets and currencies.

Guidance was also provided on the organization of the CBDC project and engagement in stakeholder discussions along the way. Based on other countries’ experience, a sample roadmap for CBDC exploration was reviewed with BCRD staff. This showed the complex process and the importance of a sound policy underpinning of CBDC. A stakeholder map was determined, noting that banks are an important group, and increasing intensity of engagement and transparency is needed as the CBDC project matures (e.g., the publication of a topical working paper or an official discussion paper). The BCRD is determined to fully understand all implications of a CBDC and, at the appropriate time, engage in dialogues with these stakeholders to clarify in particular the potential risks and benefits of a CBDC.

Summary of Recommendations

The BCRD was encouraged to continue developing quantitative analyses of macro-financial implications of a CBDC. The analysis and model application provided to the BCRD during the assistance can serve as an input to that, and potential extensions could incorporate transaction cost effects and the macroeconomic real effects, beyond the so-far “nominal focus” of the model. Such analysis would provide useful insights for discussions with stakeholders such as banks and government.

The BCRD staff was advised on changes needed to the legal framework in light of issuing CBDC. Specifically, obstacles might be found in the Constitution, and a revision of the Monetary and Financial Law and other regulations is necessary to introduce the possibility of currency in digital form and foresee special provisions depending on the type of CBDC design.

Other recommendations related to financial integrity, technology, and the CBDC exploration process. The BCRD should assess the ML/TF risks of retail CBDC before issuance, and on an ongoing basis to determine and implement appropriate measures to mitigate these. During exploration, it should prepare its technological skills for future transformation in digital payments, including in other non-CBDC digital payments projects. Also, the outcome of the internal brainstorming of CBDC policy objectives should now be streamlined to prioritize a few priority objectives that will drive the main design choices. Finally, the mission encouraged a two-pronged approach that BCRD may wish to formalize by a Digital Payments Strategy, whereby CBDC exploration continues in a small-scale project, but a parallel initiative explores ways to enhance the existing digital payments (e.g., improving instant payments, or removing existing obstacles to financial inclusion and electronic payments adoption).