Bank of Namibia

Consultation Paper on Central Bank Digital Currencies (CBDCs)

October 2022

1. Background and Purpose

For generations, banknotes and coins issued by central banks have served as the legal tender at the core of the monetary system. In every country, legislation is established which declares the physical banknotes and coins issued by the central bank as legal tender, which *must* therefore be accepted if offered in settlement of a debt or meeting a financial obligation.

A preliminary definition of CBDC can be defined as an electronic, fiat liability of a central bank that can be used to settle payments or as a store of value. It fulfils much of the same functions as the currency (banknotes and coins) issued by the Bank of Namibia (BoN or the Bank) but in a digital form.

This Consultation Paper flags the key considerations, benefits, and risks related to a Central Bank Digital Currency (CBDC) and seeks consultation and input towards any future course the Bank of Namibia may to pursue in this area. It should be noted at the outset that Namibia's degree of freedom regarding a CBDC is likely to be influenced by its membership of the Common Monetary Area (CMA). With the Rand co-circulating alongside the Namibia Dollar as legal tender in Namibia, the options open to holders of Rand currency are likely to also impact the options that Namibia would wish to open to the holders of Namibia Dollar currency. Accordingly, the direction taken by South Africa regarding CBDC is likely to have an impact on Namibia's decisions in this regard. Consultations and collaborations between the CMA member countries are being held to appropriately push for and develop as far as possible, a common view and approach on CBDCs that will serve all the CMA countries optimally.

This Consultation Paper brings together the main strands of thought emerging from the research and deliberations in the Bank over the past two years. In 2020, this culminated in an internal Consultation Paper titled "*Distributed Ledger Technologies, Virtual Assets, Central Bank Digital Currency and Artificial Intelligence/Big Data Analytics",* which explored and consolidated the Bank's effort and understanding in these areas. In 2021, the topic of CBDC received increased attention, with several departments of the Bank deliberating the possible operational dynamics of various CBDC models along with their impact to monetary policy, costs, risks, and benefits. The viewpoints that resulted were consolidated, of which the main strands of thought have been summarised in this Consultation Paper.

2. Why should Namibia consider launching Central Bank Digital Currency?

As at July 2022, there are about 100 CBDCs globally that are either in research or development stages and two fully launched CBDCs; the e-Naira which was launched in

October 2021 and the Bahamian sand dollar which was launched in October 2020 (IMF, 2022)**.** Countries have different motivations for exploring and issuing CBDCs including financial stability, payment safety and robustness, financial inclusion, payment efficiency domestically and cross border and monetary policy implementation (Codruta Boar, 2021).

In the context of Namibia, the motivation for a possible CBDC lies in further extending financial inclusion. Financial inclusion may be defined as the delivery of financial services and products that are available, accessible, and affordable to all segments of the population. Access to finance remains a bottleneck for the rural population, which faces considerable hurdles. Although access to mobile phones, which is a key enabler, is relatively high, network / internet connectivity remains a challenge for most households in rural areas. Electricity coverage throughout the country is a further notable constraint. In addition, numerous households face challenges from a transportation perspective accessing the ATMs and other infrastructure that facilitate payments and economic participation. These challenges result in high costs and inconvenience for the already less privileged. The introduction of CBDC could therefore enhance financial inclusion through improving access to digital financial services, enhancing the efficiency of national payment systems, encouraging the broad digitisation of traditionally cash-based segments of the population, and reducing cost. The technology will particularly enable people with access to mobile phones and remote digital money outlets to access basic financial services, such as sending and receiving money in a convenient manner.

The latest results from the Namibia Financial Inclusion Survey (NFIS) indicate that the country's banked population stood at 78.0% in 2017, an increase from 69.0% reported in 2011 and 49.0% reported in 2007. The state of financial inclusion in Namibia could be considered high and commendable compared to other developing countries. The current level of 78.0% also exceeds the objective set out in the Namibia Financial Sector Strategy (NFSS) ahead of time (the NFSS had set a target of 74.0% inclusion by 2021), and this was achieved without jeopardising financial stability, particularly in the banking industry. However, while most of the adult population is financially included (access), there is room for continuous improvement and deepening. These improvements ensure higher levels of access, and reasonable levels of affordability and availability of payments services, particularly for the informal sector and in rural Namibia.

Electronic money has contributed significantly to the improvement of financial inclusion. In Namibia's case, the penetration of electronic money through mobile wallets in the financial sector has been a success story. Limitations experienced by the end-users include having to commute to an ATM and withdrawing banknotes before being able to transact. However, despite these limitations, there has been considerable growth in the volume of e-money transactions and number of e-money issuers (the latter including banks and non-banks) over the years.

Apart from financial inclusion, there are other good reasons to pursue a CBDC such as modernising the financial system as well as improving cross-border payments from a process efficiency and cost-effectiveness perspective. A cash-lite society in which fewer physical banknotes are transported to and from bank branches, ATMs, and held in people's wallets and enterprises' tills will reduce the risks and costs attached to the movement and holding of and transacting in physical cash accordingly. In this regard, some fees and charges could therefore also be reduced or avoided entirely. Further, cash-related risks such as those of fraud and money laundering will also be mitigated. If designed appropriately and in collaboration with participating countries, CBDC could also have the potential to make cross-border payments more efficient, easier, and potentially cheaper. It would add a modern option to the way cash is used in an increasingly digital world. These points all have merit and further reinforce financial inclusion by reducing costs and risks, for instance.

According to the IMF, Sub-Saharan Africa remains one of the most expensive regions to send and receive money, with an average cost of just under 8 percent of the transfer amount. CBDCs could make sending remittances easier, faster, and cheaper by shortening payment chains and creating more competition among service providers (Fuje, Quayyum, & Ouattara, 2022). Faster clearance of cross-border payments would help boost trade within the region and with the rest of the world.

3. National Payment System (NPS) Considerations

CBDCs can be designed for use among financial institutions (wholesale CBDC) or by the general public (retail CBDC):

a) A **wholesale CBDC** is issued by a central bank to financial institutions (banks and non-banks particularly Fintech companies) for the settlement of interbank transfers and other related wholesale transactions between financial institutions. Wholesale CBDCs and banks' cash reserves held with the central bank would ideally operate in the same way in that the settlement process requires the central bank to debit the account of the owing bank and credit the account of the receiving bank in the settlement system. This approach is similar to the current approach in Namibia in which only commercial banks have an account with the central bank. The only extension would be the inclusion of Fintech companies into the regulatory ambit of BoN. This approach is hailed in the sense that it does encourage intermediation by the banking sector.

b) A **retail CBDC is issued by the central bank to financial institutions who are further allowed to distribute the CBDC to the public for retail transactions.** From an access and usage point of view a retail CBDC can fall under two categories. Under category 1, the retail CBDC acts as a settlement medium for retail transactions, which would allow the general public to hold CBDC either by having an account with the central bank or through third-party mediums such as prepaid cards, electronic wallets or mobile application devices.

The 2nd category of retail CBDC would require the Central Bank to issue CBDC to intermediaries such as banks, authorized fintechs, payment service providers, etc., and such intermediaries would open an account for end-users and distribute the retail CBDC. There are benefits and drawbacks to both categories of retail CBDC, which require thorough analysis for an appropriate approach to be considered for Namibia.

c) In the **hybrid model**, i.e. a combination of category 1 and category 2 retail CBDC, the central bank retains the CBDC claims and maintains a ledger with retail transactions. The financial institutions are tasked with issuing the retail CBDC, onboarding clients and executing retail payments between customers and merchants. The central bank remains responsible for operating the CBDC's core system while the financial institutions carry out operational tasks and customer-facing activities. This ensures that financial institutions remain relevant and competitive in the CBDC environment and can be left to design and implement innovative ways to provide retail CBDC payment services.

4. Anti-money Laundering Considerations

Namibia has certain international obligations including complying with the Financial Action Task Force (FATF) recommendations which set out a comprehensive framework of measures countries should implement to combat money laundering, financing of terrorism and proliferation of weapons of mass destruction. These recommendations consider financial inclusion and may, in some instances, allow for simplified measures to create a simple, hassle-free environment for small transactions/balances and to focus regulatory effort on large transactions/balances. It remains key for countries like Namibia to assess its anti-money laundering, financing of terrorism and proliferation risks and apply combatting measures proportionate to these risks. To this end the Financial Intelligence Centre through its mandate in collaboration with other law enforcement and competent authorities must ensure that Namibia is not prone to money laundering.

5. Physical Cash Distribution Considerations

CBDC could reduce the time, costs, and challenges of distributing and managing physical cash. It could play a vital role in improving efficiency in the operations of the banking sector. Cryptographically produced CBDC cannot easily be counterfeited. Consequently, it reduces the risks of loss of confidence in the national currency because CBDC is exclusively issued and monitored by the central bank and has resilient security features. CBDC could reduce the cost associated with printing and minting costs, insurance, transportation, and distribution of notes and coins.

Although CBDC seems to mitigate many of the challenges that are associated with the issuance of physical cash, the national infrastructure to accommodate the usage of CBDC in Namibia is not fully geared for it. In terms of ICT coverage, a large part of the population does not have access to network services. Some rural areas still face challenges with the network coverage. In addition, not all Namibian citizens have access to a smartphone and therefore the consideration is for CBDCs to be complementary to cash and for the solution to offer offline functionality.

6. Monetary Policy and Financial Stability Considerations

In settings such as that in Namibia, where monetary policy runs primarily through the central bank and commercial bank lending rates, CBDC is unlikely to have a large impact on the basic monetary policy mechanism. The basic mechanism of monetary policy is likely to remain intact, with the Monetary Policy Committee (MPC) deciding on the appropriate level of the Repo rate, the commercial banks setting their lending rates in alignment with the Repo rate, and borrowers adjusting their borrowing and spending behaviour accordingly. Depending on the exact design of the CBDC, some details around monetary policy may, however, change. However, if an interest-bearing retail based CBDC is introduced, it may lead to significant and, in some instances, disruptive reactions in the financial system.

The financial stability implications of a CBDC largely depend on its design, the scale of adoption and the characteristics of the Namibian financial system. A properly designed CBDC is not likely to threaten financial stability; however, digital forms of money also harbour risks for the financial system as explained below. A well-designed CBDC system could be used as an early warning mechanism to signal stress in the financial system, thus allowing for appropriate and timely intervention by the central bank.

In the event that the design of and security systems surrounding CBDC fail, it could have undesirable consequences for financial stability. Fraudulent creation, multiplication of CBDC or hacking that causes the CBDC systems to freeze up or be otherwise compromised would have a negative impact on financial stability since it could hamper confidence in the liabilities of the central bank. In turn, as the authenticity of instruments that are apparently created by the central bank is called into doubt, the central bank's ability to stabilise the financial system by creating liquidity would be significantly undermined. In principle, the same would hold if the paper banknotes issued by the central bank were to be copied fraudulently and put into circulation by the counterfeiters on a large scale. However, with banknotes, this would take time and would trigger actions by the authorities to clamp down on counterfeiting. The difference is that with digital instruments and systems, a breach in security could in an instant, result in an exponential increase in such instruments or the freezing of transactions driven by such instruments across the whole country and even further. Even if a CBDC failure is considered extremely unlikely, financial stability authorities should consider adverse scenarios and develop contingency plans to safeguard financial stability. Their efforts should be in proportion to how important CBDC becomes in the economy.

However, a well-designed CBDC has the potential to support financial stability. It would also broaden the choices open to economic agents. It comes with some warnings, however – should its security features be compromised, the central bank's ability to intervene credibly and effectively will be impaired.

7. Legal Considerations

Should CBDC be formally introduced in Namibia, comprehensive changes to laws and regulations will be needed. The key sets of legislation have already been identified in detail and these include Bank of Namibia Act, Act 1 of 2020 and associated pieces of legislation administered by the Bank of Namibia, such as the Banking Institutions Act, 1998 (No 02 of 1998) (as amended), the Payment System Management Act, 2003 (Act No. 18 of 2003), Prevention of Counterfeiting of Currency Act, 1965 (Act No. 16 of 1965) and Currencies and Exchanges Act 1933 (Act No. 09 of 1933). This would similarly hold true for the Financial Intelligence Act, No 13 of 2012, (as amended), administered by the Financial Intelligence Centre, where relevant. Once the Bank's position on CBDC has progressed to full clarity, action in this regard will require close cooperation with the Government's Law Reform and Development Commission and Ministry of Justice to propose amendments to the affected laws.

8. BoN Approach and Way Forward

Given the CMA realities, the BoN will continue to engage and collaborate with CMA countries towards developing as far as possible a common view and approach on CBDCs that will serve all the CMA countries optimally. The BoN will continue to monitor regional and international developments around CBDCs and learn from other jurisdictions through benchmarking and forums like the recently held Thought Leadership Event focusing on CBDCs and Virtual Assets. These learnings will be done while considering the context of Namibia.

Finally, the BoN will consider engaging a CBDC Technical Consultant/Subject Matter Expert that will assist the Bank in enriching the process of crafting the BoN CBDC Roadmap by providing the following: development of BoN CBDC body of knowledge by further developing the current Consultation Paper and consolidating stakeholders' views, a preliminary concept design of a potential Namibian CBDC, legislative gap analysis exercise, stakeholder engagement approach and plan and a proof of concept (POC) approach and plan, if required.

9. Call for Public Consultation and Input

The Bank of Namibia is hereby inviting stakeholders to provide input into this Consultation Paper, which lays out the rationale for moving forward with exploring a CBDC issued by the central bank as it is legally required under Section 38 of the Bank of Namibia Act 1 of 2020, to issue currency. Namibia should continue to weigh the benefits and drawbacks of any CBDC as a sovereign state, regardless of the Common Monetary Area's stance on a CBDC.

The following should be included in the inputs needed from stakeholders: The public and stakeholders are requested to provide input on the following key areas, however not restricted thereto: the reasons for a CBDC in the Namibian market; the preferred operating model; the effects and factors to be considered while establishing a CBDC in Namibia. The input will be used solely to determine the Bank's future stance on CBDC. All inputs should be forwarded to:

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References

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