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# Using eNaira CBDC to solve economic problems in Nigeria

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#### Abstract

This paper discusses how the eNaira central bank digital currency (CBDC) might be used to solve some economic problems in Nigeria. It presents the eNaira as a payment option, a monetary policy tool and a financial stability tool to solve some economic problems in Nigeria. I show that the eNaira can be instrumental in solving fiscal revenue challenges, controlling inflation, increasing foreign exchange accretion, managing exchange rate, addressing food insecurity, reducing financial stability risks, reducing poverty level, and recovering from a recession. The implication is that the eNaira can support the monetary, fiscal and regulatory authorities in preserving macroeconomic stability. However, a trade-off might arise among policy objectives if the eNaira cannot achieve multiple policy objectives at the same time.

**Keywords**: eNaira, CBDC, central bank digital currency, fiscal revenue, inflation, foreign exchange, food insecurity, financial stability, poverty, Nigeria, blockchain, exchange rate, recession.

JEL Codes: E21, E31, G28, E58.

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# 1. Introduction

This paper discusses how the eNaira central bank digital currency (CBDC) might be used to solve some economic problems in Nigeria

The recent COVID-19 pandemic plunged many countries into a recession including Nigeria. The pandemic led to growing interest in private digital currencies which many individuals used as safe haven assets during the pandemic. This trend led central banks around the world to monitor the developments in private digital currencies and study their economic implications.

Recently, many central banks have gained some interest in a digital currency that is issued by the central bank, commonly known as a central bank digital currency (CBDC). A central bank digital currency (CBDC) is the digital equivalent of physical money and is a liability of the issuing central bank. A BIS survey suggests that 80 percent of central banks around the world are working on a CBDC (Barontini and Holden, 2019). Only few countries have issued a CBDC, such as Nigeria and the Bahamas, while other countries are still researching CBDCs to determine the economic benefits, risks and the best use case of a CBDC.

A CBDC has the potential to enlarge access to central bank reserves so that both commercial banks and the general public will be able to use central bank money to transact and save (Minesso, et al, 2022). CBDCs have the potential to ensure adequate central bank money for the public; preserve central bank seigniorage revenue; reduce the lower bound on interest rates; support unconventional monetary policy; reduce financial stability risks; increase contestability in payments; promote financial inclusion; inhibit

criminal activity associated with physical cash; and to counteract the growing influence of private digital currencies in the domestic economy (Engert and Fung, 2017; Barontini and Holden, 2019; Obiora, 2022).

Although CBDCs can be used to achieve many objectives, each central bank need to identify a pressing economic need or problem which a CBDC can help to solve, and identify the domestic macroeconomic and financial implications of issuing a CBDC. Therefore, an important question that arises for central banks is whether a CBDC can assist in solving the most pressing economic challenges in a country.

In this article, I focus on Nigeria, and show how the eNaira might be used to solve some economic problems in Nigeria. The discussion in the article contribute to the monetary economics literature that examines the economic implications of issuing a CBDC. This discussion paper contributes to existing studies that examine the monetary and financial implications of issuing a Bindseil CBDC such as (2019), Kumhof and Noone (2021),Davoodalhosseini (2022), and Agur, Ari and Dell'Ariccia (2022). This study also contributes to on-going policy debates about country-specific CBDC design and implementation, and how it affects the economy.

The rest of the paper is organised as follows. Section 2 presents the literature review. Section 3 describes how the eNaira can solve a number of economic problems such as fiscal revenue challenges, inflation, recession, foreign exchange accretion, food insecurity, financial instability, and rising poverty. Section 4 presents the conclusion of the study.

### 2. Literature Review

Several studies examine how central bank digital currencies can be used to solve some economic problems. But these studies have not analysed how the eNaira CBDC can be used to solve economic problems in Nigeria. For instance, Bordo and Levin (2017) show that a central bank digital currency (CBDC) can transform the monetary system and facilitate the transparent conduct of monetary policy by serving as a practically costless medium of exchange, secure store of value, and stable unit of account. They emphasize that, to achieve these benefits, the CBDC should be account-based and interest-bearing in order for CBDCs to bring price stability benefits. Kwon, Lee and Park (2022) show that a CBDC can significantly reduce tax evasion which is carried out in cash transactions. They argue that CBDCs will improve welfare by discouraging tax evasion and rewarding tax payments, but this beneficial effect of CBDC depends on whether the central bank is permitted to perform a fiscal role in the economy. Ozili (2023a) shows that the Nigeria CBDC, the eNaira, can increase financial inclusion by (i) offering an easy account opening process which increases financial inclusion, (ii) enabling digital access to diverse financial services in the financial system, (iii) offering low-cost financial products and services, (iv) eliminating excessive bank charges, and (v) attracting people who have lost confidence in banks. Ozili (2023b) shows that CBDCs have the potential to preserve financial stability because central banks will not issue a CBDC if it limits central banks' ability to achieve their core mandate which includes monetary stability, financial stability and price stability; therefore, the issuance of a CBDC by a central bank will promote financial stability or, at least, the CBDC will not pose any material risks to financial stability.

# 3. Solving Nigeria's economic problems using the eNaira

Below are some economic problems that the eNaira can assist in solving.

### 3.1. Fiscal revenue challenges

### 3.1.1. Nigeria's revenue problem

Nigeria has a significant revenue problem, not a debt problem. Nigeria's revenue is far smaller than its true potentials. The tax-to-GDP ratio in Nigeria has been decreasing in the last 10 years. The tax-to-GDP ratio in Nigeria was 7.3 percent in 2010 and further decreased to 6.3 percent in 2020, making Nigeria's revenue-GDP ratio one of the lowest in the world.

Nigeria's revenue is low because of many self-inflicted wounds ranging from highly organized oil theft to significant vandalism as of 2022. As a result, Nigeria's crude oil production fell from about 2.4 million metric tons in 2012 to less than 1.5 million metric tons in 2021. Nigeria's share of crude oil exports decreased from 5.68 percent of global crude oil exports in 2012 to 4.68 percent in 2020. While Nigeria earned US\$89.8 billion from crude oil sales in 2012, it only earned US\$30 billion in 2020. This represents a 67 percent decline (from US\$89.8 billion to US\$30 billion) in oil revenues and shows the serious state of Nigeria's low fiscal revenue.

Although tax collection has doubled, and tax administration has improved in the last couple of years, some improvements are still very much needed. For example, Nigeria's VAT rate at 7.5 percent is still amongst the lowest in the world. Nigeria's VAT rate is less than half of the average VAT rate in the

World at 15.3 percent and in the Africa region at 15.4 percent. Yet, efforts to increase Nigeria's VAT rate to a double-digit rate has received fierce resistance by many. There is a need to find alternative ways to generate more revenue for Nigeria which can be collected using the eNaira CBDC to avoid revenue leakages. The fiscal authorities can take advantage of the eNaira to rebuild Nigeria's fiscal buffers and change Nigeria's fiscal fortunes.

For example, Nigeria can increase revenue by introducing a hotel surcharge that should be paid to the government via the eNaira. The government can generate huge sums from imposing a surcharge for hotel accommodations that will be paid to the government through the eNaira. Assuming there are 500 hotels with an average of 40 rooms each in Abuja, and a room rate of N60,000 per night with an occupancy rate of 70 percent per annum, it means that the government can generate over N15 billion (or \$32,586,945) annually from this surcharge alone through CBDC payment. Note too that this idea does not affect the poor and vulnerable in Nigeria, given the fact that most people who stay in hotels are well-off and rich people.

The government can also introduce Federal property taxes in the FCT and collect the taxes using the eNaira. The government can achieve this by segregating the city into towns and exempt places where the median income is low. For example, property taxes can only be collectible in Wuse, Maitama, Gwarinpa, Maitama, Asokoro, Garki, Central Area, and the likes, whereas Kubwa, Kuje, Lugbe, Maraba and the likes can be exempted. In doing so, the government will only tax those who can afford it and exempt the poor. Given the preference for hiding the identity of home owners in Abuja, the government can simply give buildings unique identities/code, and allow

CBDC payments to be done using the building code despite the concealed ownership. At this stage, all that the government want is revenue payment through CBDC payment. The government can deal with ownership later.

#### 3.1.2. Tax administration and collection using CBDC

The low tax revenue in Nigeria is partly caused by poor tax administration and tax evasion which deprives the Federal Government of the tax revenue it needs to fund the Federal Budget (Gurama et al, 2015). Many research studies have associated tax revenue problems to the physical properties of cash (Chodorow-Reich et al, 2020; Chan et al, 2022). Existing research show that tax evasion and tax fraud are easier to carry out in a cash-based economy like Nigeria, and these practices are more rampant with informal taxes which are often collected in the form of cash (Otusanya, 2011; Onyeka and Nwankwo, 2016).

There is a need to devise an alternative way to collect and administer taxes in Nigeria. A possible alternative is to use the eNaira to collect taxes in a more efficient manner. A central bank digital currency has a digital recordkeeping technology that can help the tax authorities to better monitor taxpayers' transactions to combat tax evasion and fraud in order to increase tax revenue. When the eNaira is deployed for tax collection purposes, eNaira payments made for a certain amount will be recorded on an electronic medium known as the blockchain. The eNaira payments will be visible and traceable for onward remittance to the tax authorities. The traceability of payments will compel agents to report their income truthfully for tax purposes.

Paying taxes using eNaira allows taxpayers to be able to observe their revenues, expenses and payable taxes in real time, and it helps taxpayers to keep a track of their taxes both paid and due so that they are not shocked by extensive taxes at the end of the year. Introducing tax policies that encourage the use of the eNaira for the digital payment of taxes can improve tax administration and collection in Nigeria.

However, the use of the eNaira to assist in tax collection and administration efforts should be supported with strong internal control, whistle-blower protection, corruption auditing, increasing collaboration between government and taxpayers, improving access to public services, and greater tax transparency.

#### 3.2. Controlling inflation

Nigeria's double-digit inflation rate has remained a persistent problem in the last 7 years. The annual inflation rate in Nigeria was 15.7 percent in 2015, 12.1 percent in 2018, 13.2 percent in 2020 and 17 percent in 2021. Common causes of the double-digit inflation in Nigeria include excess liquidity in the banking sector, the high cost of doing business, insecurity, herder-farmer clashes, logistics bottlenecks in food supply and other external shocks.

The eNaira can reduce the level of inflation in Nigeria in two ways. First, the widespread use of the eNaira in Nigeria, alongside a limited use of cash, will reduce the amount of physical cash outside the banking sector. This will reduce the hoarding of physical currency notes which are used to engage in speculative activities that are inflationary in nature. When there is widespread eNaira adoption and usage, physical currency notes will no longer be available for hoarding as they will be replaced with a central bank

digital currency, thereby starving speculators of the physical cash they use to engage in speculative activities that are inflationary.

Another way in which the eNaira can be used to control inflation is if the eNaira is interest-bearing (i.e., if the central bank pays interest on the eNaira holdings of users). Generally, a CBDC can be a potent monetary policy tool for controlling rising inflation levels if the CBDC is interest-bearing and when there is limited use of cash in society (Minesso et al, 2022). In Nigeria, the central bank can use an interest-bearing eNaira to control the rate of inflation. The central bank can achieve this by raising the interest rate paid on eNaira deposits above the interest rate paid on bank deposits. This will lead to deposit migration from banks to the central bank in the form of eNaira deposits as depositors will migrate a portion of their bank deposits to eNaira deposits to benefit from the high eNaira deposit rate. This will reduce liquidity in the banking sector and reduce inflation that is caused by excess liquidity in the banking sector (Keister and Sanches, 2019; Bhowmik, 2022).

Moreover, if the eNaira is interest-bearing, the eNaira deposit rate will constitute the floor for the monetary policy rate because banks will not lend below the eNaira deposit rate, rather they will lend above the eNaira deposit rate. In this way, increasing the eNaira deposit rate will help to control inflation as it will compel banks to reprice their loans by increasing the interest rate on new loans which will reduce credit supply and reduce inflation that is caused by excessive bank lending.

#### 3.3. Recession

A recession, or economic recession, refers to a period of temporary economic decline during which consumption, investment, production and trade activities are reduced, thereby leading to a fall in economic output (Abberger and Nierhaus, 2008; Kambil, 2008). A recession is often characterized by a fall in GDP in two successive quarters. The recent recession in Nigeria, particularly the 2016 and 2020 recessions, were caused by a sustained fall in oil prices and the COVID-19 pandemic which transmitted adverse shocks to the Nigerian economy. It led to a significant decline in foreign exchange revenue, rising debt levels, rising fiscal deficit, rising unemployment and a sustained decrease in economic output for two consecutive quarters. In times like this, the central bank of Nigeria can use the eNaira as a monetary policy tool or a fiscal policy tool to support recovery from a recession.

A non-interest-bearing eNaira can be used as a fiscal policy tool to facilitate recovery from a recession through the provision of eNaira-based fiscal stimulus to households and small businesses during a recession, in order to increase aggregate demand towards recovery from the recession. The central bank and the fiscal authorities can use the eNaira to roll out a number of interventions to alleviate the economic hardship faced by Nigerian households and SMEs during a recession. The central bank can also roll out a CBDC-based targeted credit facility to support small, medium and large corporations whose economic activities have been significantly affected by the recession.

An interest-bearing eNaira can also be used to facilitate a recovery from a recession. Using the interest rate paid on eNaira deposit as a monetary policy tool, alongside a reduction in cash holdings, will eliminate the interest rate effective-lower-bound as a constraint on monetary policy. This will allow the interest rate on eNaira deposit to go as negative as needed to offset a major negative shock to aggregate demand and exit a recession caused by prolonged low aggregate demand. The low interest rate, or negative interest rate, on eNaira deposit will stimulate aggregate spending towards economic recovery and will lead to a much quicker recovery from the recession.

### 3.4. Foreign exchange reserves accretion and exchange rate

The central bank can use the eNaira to increase foreign exchange reserves accretion in a more efficient way. Presently, Nigeria has inadequate foreign exchange supply which has put constant pressure on the exchange rate. There are four major sources of foreign exchange inflow into Nigeria. They include (i) foreign exchange from the proceeds of oil exports, (ii) foreign exchange from proceeds of non-oil exports, (iii) foreign exchange from diaspora remittances, and (vi) foreign exchange from foreign direct/portfolio investments. All these sources were adversely affected by the COVID-19 pandemic. In addition, most of them are unreliable sources that are prone to exogenous global shocks such as the COVID-19 pandemic, unfavourable fall in oil prices, geopolitical conflicts and trade wars.

The foreign exchange from the proceeds of oil exports accounts for over 90 per cent of Nigeria's foreign exchange inflows. However, the proceeds from oil revenue has fallen since the start of the COVID-19 pandemic in 2020, and fell to an all-time low in early 2022 despite Nigeria's economic recovery from

the 2020 COVID-induced recession. This led to shortage of foreign exchange amid rising demand for foreign exchange. The low foreign exchange supply and rising demand for foreign exchange increased pressure on the exchange rate which led the central bank to depreciate the Naira in order to ease the pressure on the Naira against the Dollar. The central bank's efforts to control the demand for foreign exchange has to be accompanied by a corresponding increase in foreign exchange supply.

The eNaira can facilitate the increase in foreign exchange supply to Nigeria. The eNaira can increase foreign exchange inflow from diaspora remittances into Nigeria by removing third party intermediaries and reducing regulatory barriers that hinder remittance inflows. This will encourage increased remittance inflow and increase foreign exchange supply to Nigeria. The eNaira can also be used to enhance the effectiveness of the central bank's Naira-4-Dollar Scheme, and can boost remittances from the current US\$6 million per week to over US\$150 million per week. The eNaira can also be used to achieve the goal of the CBN's RT200 FX programme which aims to raise US\$200 billion in foreign exchange earnings from non-oil proceeds over the next 3-5years.

Furthermore, widespread eNaira adoption and usage in Nigeria will enable the CBN to reduce the amount of physical currency notes in circulation, some of which are hoarded by currency speculators and used to speculate against the Naira, which adds further pressure on the Naira and leads to currency depreciation. The widespread adoption and usage of the eNaira, along with the limited use of physical cash, will ultimately strengthen the Naira because currency speculation will be difficult to achieve using the eNaira.

## 3.5. Food insecurity

Food insecurity in Nigeria is caused by recurrent floods, herder-farmer clashes, insecurity, rising prices of imported food ingredients, and disruptions in domestic and global supply chain logistics. Over the last 7 years, the CBN has rolled out several development finance interventions in the agricultural sector to increase food security in Nigeria. The eNaira can be used to channel intervention funds to smallholder farmers and corporations in the agricultural value chain who are valuable stakeholders in the effort to increase food security. The eNaira can act as an efficient and effective payment tool for channelling intervention funds to the agricultural sector of the economy to increase food production and food security.

For example, the eNaira can be used to facilitate payments to support the Anchor Borrowers' Programme (ABP) and the Commodity Development Initiative (CDI) which together are aimed at strengthening key agricultural commodities' value chains and repositioning Nigeria to become a self-sufficient food and industry raw material producer. The eNaira can also be used as a payment tool for lending to smallholder farmers and for stimulating investments across the agriculture value chains.

The eNaira can also facilitate the payment of intervention funds to rice millers to ramp up the production of paddy rice for processing under the Paddy Aggregation Scheme (PAS), and to provide working capital facility to rice millers to ensure all year round activities. The eNaira can also facilitate the payment of intervention funds to more than 53,000 maize farmers cultivating 62,910 hectares, with an expected yield of 188,730 million metric tonnes across 30 States of the Federation. The eNaira can also facilitate the efficient

payment of intervention funds under the Commercial Agriculture Credit Scheme (CACS) scheme which has financed more than 610 commercial agricultural projects across the country.

#### 3.6. Financial system instability

The last major financial crisis in Nigeria occurred in 2010, and was caused by poor lending practices, poor corporate governance and weak risk management practices. Since then, the Nigerian financial system has been largely stable up until now. The eNaira can be used as a potent tool to assist the central bank in achieving its goal of preserving financial stability. The eNaira can be designed to incorporate safeguards that mitigate financial stability risks caused by eNaira activity. But the eNaira's ability to offer financial stability benefits depend on whether the eNaira is interest-bearing or non-interest-bearing.

When there is widespread eNaira adoption and usage, an interest-bearing eNaira can be used to quell a liquidity crisis in the banking sector (assuming the liquidity crisis is not caused by eNaira activity or bank-to-eNaira disintermediation). The central bank can reduce the eNaira deposit rate below the rate paid on bank deposit, or can reduce the eNaira deposit rate to 'zero' or a negative rate to encourage and incentivize individuals to move their eNaira holdings to bank deposits. The resulting eNaira-to-bank deposit migration will give banks access to cheap funding and liquidity, which banks can use to quell an ongoing liquidity crisis in the banking sector.

An interest-bearing eNaira can also be used to put an end to excessive risktaking which often manifests in the form of excessive and risky lending. Excessive risk-taking by banks can lead to risky lending which can increase systemic risk in the banking sector and the financial system. In times of excessive-risky lending, the central bank can significantly raise the eNaira deposit rate above the rate on bank deposit to encourage and incentivize bank customers to move their customer deposits to eNaira holdings. The resulting bank-to-eNaira deposit migration will reduce banks' ability to lend from cheap customer deposits as the amount of customer deposits at the disposal of banks will be reduced. This will reduce banks' ability to lend from customer deposits, reduce aggregate bank lending, decrease risk-taking and reduce systemic risk in the financial system.

Furthermore, there are financial stability risks associated with widespread CBDC usage. The most important risk is financial stability risk arising from disorderly and structural bank disintermediation. It arises mainly from the absence of regulatory limits to individual CBDC holdings which can lead to higher volatility in customer deposits and/or a significant reduction in customer deposits in the banking sector. A significant reduction in customer deposit funding will require banks to either (i) increase competition for market-based funding, (ii) obtain costly market-based funding, (iii) reduce their assets; (iv) increase risk-taking to offset expected margin shortfall, and (v) increase interest rates. These actions by banks will affect bank lending, bank profitability, the provision of financial services and increase banks' susceptibility to a bank run (Keister and Sanches, 2019; Fernandez-Villaverde et al, 2020). To mitigate CBDC-induced financial stability risks, the eNaira has been designed to have a regulatory threshold for individual CBDC holdings. This will limit the movement of customer deposits from banks to the eNaira wallet, thereby mitigating the risk of disorderly bank disintermediation. Other safeguards that may be considered include: (i) a further reduction in the amount of eNaira that can be held by individuals, and (ii) paying uncompetitive interest rates on eNaira holdings to discourage large bank-to-eNaira deposit migration.

Furthermore, the central bank's issuance of a non-interest-bearing eNaira has some positive benefits for financial system stability. One, a non-interestbearing eNaira will encourage Nigerians to use their eNaira holdings primarily for payments rather than as a safe haven asset. This will prevent large-scale bank-to-eNaira deposit migration which can occur if the eNaira bears interest and is considered to be a safe haven asset. Two, the introduction of a non-interest-bearing eNaira is unlikely to affect bank lending and profitability, as banks will not need to raise their own deposit rates to match the eNaira deposit rate. This will further preserve bank stability and financial system stability. Three, the introduction of a non-interest-bearing eNaira will allow Nigerian banks to retain their market power in the market for customer deposits, and ensure that banks are not pressured to raise their deposit rates to match the eNaira deposit rate. More importantly, the noninterest-bearing eNaira can reduce the risk of bank runs because it is already possible to digitally and instantly transfer eNaira money between a weak bank and a strong bank, or from the central bank to a failing bank through the eNaira. This will prevent the collapse of distressed banks that are facing a bank run, as large amounts of eNaira money can be instantly transferred to distressed banks to pay their depositors.

#### 3.7. Rising poverty

Nigeria was among the countries with the highest number of people living in poverty in the world in 2022. Nigeria was ranked 103 of 121 countries in the World Bank's 2022 *Poverty and Prosperity Report*. Despite having a booming digital economy (ICT) sector which contributed almost 18 per cent to Nigeria's GDP growth in the second quarter of 2021, Nigeria contributed three million people to global extreme poverty and is considered to be home to a large share of the global extreme poor in 2021 and 2022. This devastating statistic shows that there is a need to ensure that the eNaira has features that caters for the needs of people living in extreme poverty in Nigeria.

Rural and remotes communities in Nigeria can be lifted from hardship and poverty by deploying eNaira possibilities to those communities despite the challenges in these communities such as digital and physical connectivity problems, limited Internet penetration, lack of secure Internet servers and limited access to financial systems.

The eNaira can be used to offer financial services to poor people living in rural and remote communities where there are poor digital infrastructure and poor internet connectivity. The eNaira has both online and offline capabilities which ensures that poor people can be on-boarded at any time even without Internet connectivity. Poor people in such communities can use the eNaira to safely receive stipends and upkeep allowances from family, friends and relatives and donors. They can also use the eNaira to make low-cost payments and to receive income for services rendered which will enable them to earn income and rise above poverty.

The eNaira also offers low transaction cost. In the past year, there were no transaction costs or fees for eNaira payments. If the zero transaction cost on eNaira is sustained, it will benefit poor people who mostly perform low-value digital transactions using the eNaira. This can encourage poor people to use eNaira digital payments to improve their welfare.

The eNaira also offer solutions that cater for the large number of poor people that use non-smart phones. The central bank has taken steps to ensure that non-smart phone users have the capability to perform eNaira transactions seamlessly, and to avoid digital discrimination between smart phone users and non-smart phone users. The central bank introduced the \*997# eNaira USSD code which enables poor people without a non-smart phone to perform eNaira transactions using their non-smart phones. They can use the eNaira USSD capability to access a range of financial services that meet their needs.

The eNaira can also be used to channel investment in human capital development and social protection activities and projects that expand economic opportunities for the poor. This will create jobs and increase financial access for poor women and poor young people in rural communities.

eNaira payment solutions can also be used to support the development of a robust and well-funded technical and vocational education system and training programmes for millions of Nigerians outside the formal school system, or who possess only a primary education. eNaira payments made for this purpose can be tracked, monitored and audited to ensure that the funds are sent to the intended beneficiaries who are poor (Obiora, 2022).

The eNaira can also be used to broaden access to microfinance to reduce poverty in Nigeria. The eNaira can be used to increase financial inclusion of the poor, and enable the Nigerian government to better plan and provide microfinance services that cater for the needs of the poorest of the poor. Also, when poor people are financially included, the eNaira can provide a more reliable, faster, cheaper and more auditable platform for the Nigerian government to send direct payments to poor citizens who are eligible for social welfare benefits.

## 4. Conclusion

This paper discussed how the eNaira might be used to solve some economic problems in Nigeria. It was shown that the eNaira can be instrumental in solving fiscal revenue challenges, controlling inflation, increasing foreign exchange accretion and managing exchange rate, addressing food insecurity, reducing financial stability risks, reducing poverty level, and recovering from a recession.

The implication of the findings is that the eNaira can assist in solving some economic problem either as a payment option or as a monetary policy tool or as a financial stability tool. Whichever is the case, the central bank should ensure that the eNaira incorporates design features that helps to achieve the pressing economic objective(s) the central bank wants to achieve.

Although the eNaira will evolve with time and its possibilities are endless, the central bank should not allow endless changes to the eNaira just for the sake of it. Rather, the central bank should ensure that the reasons and implication

of new changes to eNaira design and other technical changes are well understood so that new eNaira innovations can assist in preserving macroeconomic stability for businesses, for citizens and for society as a whole.

## Reference

Abberger, K., & Nierhaus, W. (2008). How to define a recession? *CESifo Forum* (Vol. 9, No. 4, pp. 74-76). München: ifo Institut für Wirtschaftsforschung an der Universität München.

Agur, I., Ari, A., & Dell'Ariccia, G. (2022). Designing central bank digital currencies. *Journal of Monetary Economics*, 125, 62-79.

Barontini, C., & Holden, H. (2019). Proceeding with caution-a survey on central bank digital currency. Proceeding with Caution-A Survey on Central Bank Digital Currency. *BIS Paper*, No. 101.

Bhowmik, D. (2022). Monetary policy implications of central bank digital currency with special reference to india. *Asia-Pacific Journal of Management and Technology*, 2(3), 1-8.

Bindseil, U. (2019). Central bank digital currency: Financial system implications and control. *International Journal of Political Economy*, 48(4), 303-335.

Bordo, M. D., & Levin, A. T. (2017). Central bank digital currency and the future of monetary policy (No. w23711). *National Bureau of Economic Research*.

Chan, H. F., Dulleck, U., Fooken, J., Moy, N., & Torgler, B. (2022). Cash and the hidden economy: Experimental evidence on fighting tax evasion in small business transactions. *Journal of Business Ethics*, 1-26.

Chodorow-Reich, G., Gopinath, G., Mishra, P., & Narayanan, A. (2020). Cash and the economy: Evidence from India's demonetization. *The Quarterly Journal of Economics*, 135(1), 57-103.

Davoodalhosseini, S. M. (2022). Central bank digital currency and monetary policy. *Journal of Economic Dynamics and Control*, 142, 104150.

Engert, W., & Fung, B. S. C. (2017). Central bank digital currency: Motivations and implications (No. 2017-16). *Bank of Canada Staff Discussion Paper*.

Fernández-Villaverde, J, D Sanches, L Schilling and H Uhlig (2020): "Central bank digital currency: central banking for all?", *NBER Working Paper Series*, No 26753, February.

Gurama, Z. U., Mansor, M., & Pantamee, A. A. (2015). Tax evasion and Nigeria tax system: an overview. *Research Journal of Finance and Accounting*, 6(8), 202-211.

Kambil, A. (2008). What is your recession playbook? *Journal of Business Strategy*, 29(5), 50-52.

Keister, T and Sanches, D (2019). Should Central Banks Issue Digital Currency? Federal Reserve Bank of Philadelphia Working Paper, 19-26, June.

Kumhof, M., & Noone, C. (2021). Central bank digital currencies—Design principles for financial stability. *Economic Analysis and Policy*, 71, 553-572.

Kwon, O., Lee, S., & Park, J. (2022). Central bank digital currency, tax evasion, and inflation tax. *Economic Inquiry*, 60(4), 1497-1519.

Minesso, M. F., Mehl, A., & Stracca, L. (2022). Central bank digital currency in an open economy. *Journal of Monetary Economics*, 127, 54-68.

Obiora, K.I. (2022). Special Remarks at the IMF CBDC Seminar in Frankfurt Germany, June.

Ozili, P. K. (2023a). eNaira central bank digital currency (CBDC) for financial inclusion in Nigeria. In *Digital Economy, Energy and Sustainability: Opportunities and Challenges* (pp. 41-54). Cham: Springer International Publishing.

Ozili, P. K. (2023b). CBDC, Fintech and cryptocurrency for financial Inclusion and financial stability. *Digital Policy, Regulation and Governance*, 25(1),40-57.

Onyeka, V. N., & Nwankwo, C. (2016). The effect of tax evasion and avoidance on Nigeria's economic growth. *European Journal of Business and Management*, 8(24), 158-166.

Otusanya, O. J. (2011). The role of multinational companies in tax evasion and tax avoidance: The case of Nigeria. *Critical Perspectives on Accounting*, 22(3), 316-332.