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# **The role of central bank in greening the Nigerian financial system**

**Peterson K. Ozili**

## **Abstract**

The chapter explores the role of the central bank of Nigeria (CBN) in greening the financial system. I explore the ways in which the central bank could green the financial system. Some of the offered suggestions include disclosure requirements, establishing green finance labs, creating a green bank, and the use of differentiated cash reserve requirement based on environmental impact. The insights offered in this chapter are useful to bank supervisors and the monetary authority in understanding how financial and monetary decisions affect the environment.

Keywords: Central bank, green finance, financial institutions, financial system, green bonds.

JEL Classification: G21, G28.

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## 1. Introduction

Many central banks around the world have expanded their role beyond price and monetary stability in an attempt to mitigate non-economic exogenous shocks that affect the macro economy in unprecedented ways. For example, many central banks used unconventional monetary policy tools to respond to the COVID-19 induced health crisis (Mosser, 2020; Ozili and Arun, 2020). Some central banks have also responded to climate change by requiring regulated banks to disclose the impact of climate risk on their business (Campiglio et al, 2018). Other monetary authorities have responded to gender inequality issues in the banking sector to reduce gender inequality and the risk of social activism (Braunstein and Heintz, 2008; Ozili, 2023). These are few examples of how central banks are expanding their roles beyond their traditional function in order to address emerging non-economic issues and exogenous shocks.

An important emerging issue in the global economy is the effect of unfavourable climate change on the global economy and central banks are being pressured to respond to climate change (Dikau and Volz, 2021). In response to this, some central banks have begun to assess the potential effect of climate change related risk on the banking sector. The outcome of such assessment can offer insights to central banks on how best to mitigate climate change related risk, and also offer some insights on how to make the financial system more resilient to environmental and climate change shocks.

One way to prepare the financial system to withstand climate change shocks in Nigeria is to embark on an aggressive green finance program for the financial system. Green finance is financing that yields economic benefits while protecting the environment. Wang and Zhi (2016) define green finance as finance that protects the environment while pursuing economic profits. These two definitions show that green finance promotes the financing of projects and activities while being mindful of any damage to the environment to ensure that firms do not damage the environment in the pursuit of profits.

Given this backdrop, this chapter offers some ideas on how the CBN can green the Nigerian financial system. The chapter contributes to the existing financial stability literature by showing that green finance offers a possible solution to mitigate or dampen

the effect of climate change on the financial system. The chapter also adds to the finance literature by offering insights on how innovative finance, in this case green finance, can be used to promote a sustainable financial system.

The remainder of the chapter is categorized as follows. The related literature is discussed in section 2 while the ways in which the CBN can support the greening of the financial system are discussed in section 3. Finally, the concluding remark is presented in Section 4.

## **2. Literature review**

The literature show that green financing has several benefits. For instance, green financing can help to construct smart cities (He et al, 2020). Scaling green finance may significantly decrease funding for activities that harm the environment (Sachs et al 2019a). Green finance can also reduce CO2 emission (Li et al, 2021). Existing studies identified a number of innovative green financing instruments e.g., green bonds, (Ozili, 2021; Lindenberg, 2014); community-based green funds (Sachs et al, 2019b); green bond grant scheme (Chang et al, 2019), green blended finance instruments (Mehta, 2017) and central bank digital currency (Ozili, 2022). Berensmann and Lindenberg (2016) suggest three strategies to increase funding for green activities. They include (i) develop better standards and disclosure rules, (ii) encourage green financing and investments by providing incentives, and (iii) improve policy coordination. Tu et al (2020) show that a green bond market would need a low interest rate, favorable monetary policy, and a sound legal framework. Taghizadeh-Hesary and Yoshino (2019) showed that private participation in green financing could increase by creating green credit guarantee schemes and by offering tax rebate to green investors. Some studies examine the role of a central bank in green financing. Ozili (2021) suggests the use of a capital surcharge, adjusted tier 2 capital, prohibiting lending to businesses that harm the environment, and requiring banks to move their critical infrastructure to a safer location, while Volz (2017) suggests that central banks should use policy instruments e.g., capital and interest rate controls. Other studies identify the challenges of greening the financial system.

Berensmann and Lindenberg (2016) show that there is no clarity about the term 'green' in green finance and it leaves room for multiple interpretations, and there is an unwholesome short-term-ism among investors in green projects. Gilchrist et al (2021) and Falcone and Sica (2019) identify policy uncertainty about green finance, the short-term orientation of financial instruments and the unavailability of data as major challenges.

### **3. Role of central bank of Nigeria in greening the Nigerian financial system**

Greening the financial system should be considered by the CBN for two reasons. One, unfavourable climate change events can impede the productive capacity of the Nigerian economy and weaken its ability to generate employment and income. Two, greening the financial system can support the central bank's efforts to diversify the economy away from its dependence on carbon-laden crude oil products. It can help to grow the non-oil sector of the economy.

#### ***3.1. Issue green bonds to support green finance.***

A 'green bond' is used to raise financing for green projects (Dikau and Volz, 2021). It has positive environmental and/or climate benefits. It raises funds from investors and the realized funds are used to fund activities that protect the environment from man-made activities that damage the environment.

#### ***3.2. Introduce an environment protection strategy (EPS) disclosure requirement.***

This approach will require the CBN to introduce some disclosure requirement. CBN can require banks to ensure that corporate borrowers provide a comprehensive 'environment protection strategy (EPS)' documentation. The EPS is a documentation that require corporate borrowers to disclose the measures they have put in place to ensure that their corporate activities do not create any man-made risk to the environment and the climate. Such documentation requirement will ensure that borrowers' activities do not harm the environment where they operate.

### ***3.3. Establish green finance labs or climate regulatory sandboxes.***

CBN can establish green finance labs that would develop innovative green financing products that incorporate ESG considerations into traditional and non-traditional financing instruments. This would ensure the development of financing instruments that (i) integrates ESG factors, (ii) lead to better long-term returns for investors, and (iii) generate positive benefits for society (Shaydurova et al, 2018; Cerqueti et al, 2023).

### ***3.4. Establish a green bank.***

The CBN may consider creating a green bank. A green bank is a financial institution that offer loans only for green projects or projects that have sizeable benefits for the environment and society. The need for a green bank arises when traditional financial institutions are unwilling to issue loans for green projects primarily because green investments often have very low return on investment.

### ***3.4. Use differentiated cash reserve requirement as an incentive to lenders.***

Under this approach, banks that give out substantial loans to green project and activities will be required to keep a lower cash reserve ratio with the CBN so that they can have more money to give out as loan for green projects and for green investment (Volz, 2017), while banks that do not lend to green projects and activities will be required to keep a higher cash reserve ratio with the CBN.

### ***3.5. Green central banking***

The CBN should incorporate environmental considerations into its core policymaking activities. This will require the CBN to take into account environmental factors in its monetary policy, financial stability and development finance decision making. This will not only ensure that the central bank leads by example in the financial sector but will also ensure that the CBN exclude fossil fuels from its development finance programs so that the central bank is not seen as contributing to climate change risk by encouraging lending to businesses involved in fossil fuel activities (Şimandan and Păun, 2021).

## 4. Conclusion

This article discussed the role of the CBN in greening the financial system. Five approaches were suggested, which includes: issuing the EPS disclosure requirements, establishing green finance labs, creating a green bank, and the use of differentiated cash reserve requirement based on environmental impact. The CBN should ensure that financial institutions lend to activities that promote a sustainable financial system while protecting the environment. Green finance offers an innovative approach to achieve this goal. The CBN should ensure that the lending decisions of financial institutions take into account environmental considerations when lending to corporate borrowers. It is recommended that the CBN should encourage financial institutions to increase lending to economic agents that seek loans for green projects and activities. It is also recommended that the Bankers committees together with the CBN should develop collective initiatives for greening the financial system. It is also recommended that the CBN should solicit the support of all stakeholders and the Bankers committee towards greening the financial sector.

One limitation of this study is that it did not use empirical data to suggest ways to dampen the effect of climate change. Another limitation of the study is that it focuses only on central banks. These limitations present a fruitful area for further research. Future research can extend this study by exploring ways to mitigate climate change risk and the role of CBN in mitigating such risk. Future research can explore how to regulate green finance in the banking sector.

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