


## Chapter 4

# Central Bank Digital Currency and the Monetary Policy and Financial Stability Implications

Peterson K. Ozili

 <https://orcid.org/0000-0001-6292-1161>  
Central Bank of Nigeria, Nigeria

### ABSTRACT

*The chapter analyzes the implication of central bank digital currency (CBDC) issuance for financial stability and monetary policy. It was shown that widespread central bank digital currency adoption and usage may accelerate bank deposit to CBDC migration which could elevate liquidity risk in the banking sector, increase interest rate, reduce bank loan supply, lower bank profit, increase the likelihood of bank panic, and transmit financial stability risks to the financial system. Also, issuing a central bank digital currency can strengthen monetary policy transmission if there is effective coordination between the monetary policy rate and the central bank digital currency deposit rate. If done properly, changes in the central bank digital currency deposit rate will affect households and businesses and compel commercial banks to respond by adjusting their deposit rates too, thereby enhancing the interest rate channel of monetary policy.*

### 1. INTRODUCTION

Historically, monetary systems have undergone several transformations. The first monetary system was the trade-by-barter system (Williamson and Wright, 1994). The barter system was abandoned due to its many problems such as the inability to

DOI: 10.4018/979-8-3693-0770-0.ch004

make deferred payments and difficulty in storing of goods that were used as money (Williamson and Wright, 1994; Kregel, 2021). The weakness of the barter system led to the creation of fiat paper money. Recently, the use of technology to enhance digital payments has led to the creation of digital money, which is categorized into two forms: private digital currency and public digital currency. An example of a public digital currency is a central bank digital currency.

A central bank digital currency (CBDC) is an electronic legal tender, which serves as digital money (Auer et al., 2022). Interest in CBDC emerged in 2017. Since then, there are debates on how central bank digital currency will transform money (Bindseil, Panetta and Terol, 2021), and its effect on physical currency notes or cash (Taskinsoy, 2021). Lots of arguments have emerged about whether central banks should adopt a central bank digital currency or whether they should abandon the idea completely (Berentsen & Schär, 2018).

Those in support of central banks issuing a central bank digital currency often cite many benefits which include enabling efficient payments, enhancing the conduct of monetary policy, promoting financial inclusion, enabling efficient welfare disbursement to citizens, promoting financial stability and increasing seigniorage income (Nelson, 2021; Ozili, 2022; Kim & Kwon, 2019; Ozili, 2023a). Those against the issuance of a central bank digital currency often cite its disadvantages such as too much government control of citizens' money, increasing ability for government snooping and surveillance via central bank digital currency, and risks to financial stability (Hoffman et al., 2020; Ballaschk & Paulick, 2021; Samudrala & Yerchuru, 2021).

Notwithstanding the debates in support or against the issuance of a central bank digital currency, many central banks have begun to research the potential effect of central bank digital currency issuance on central banking objectives particularly financial, monetary and price stability. There are debates about the implication of CBDC for the conduct of monetary policy. Monetary policy entails the coordinated effort of the central bank to manage the amount of money in circulation in order to achieve low inflation and sustainable economic growth (Lukonga, 2023), while financial stability refers to the absence of financial crises or a condition where the financial system can efficiently facilitate the allocation of financial resources, manage financial risks, and withstand shocks (Allen & Wood, 2006).

If central banks intend to use CBDC to enhance monetary policy and preserve financial stability, they need to carefully design the CBDC to have features that enable the attainment of specific financial stability and monetary policy objectives of the central bank while mitigating any unintended consequences. Although the likely effect of central bank digital currency on financial stability and monetary policy are known in theory, the actual outcomes in reality are still unknown because many central banks have not issued an operational CBDC at the time

9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/central-bank-digital-currency-and-the-monetary-policy-and-financial-stability-implications/336722](http://www.igi-global.com/chapter/central-bank-digital-currency-and-the-monetary-policy-and-financial-stability-implications/336722)

## Related Content

---

### An Overview on Mobile Cloud Computing: Impact on the Auditing Process

Carlos Santos, Helena Inácioand Rui Pedro Marques (2019). *Organizational Auditing and Assurance in the Digital Age* (pp. 120-136).

[www.irma-international.org/chapter/an-overview-on-mobile-cloud-computing/222622](http://www.irma-international.org/chapter/an-overview-on-mobile-cloud-computing/222622)

### Balancing Acts: The Yin and Yang of Debit and Credit on the Stage of Financial Well-Being

Mukul Bhatnagar, Rajendra Rajaram, Sanjay Tanejaand Pawan Kumar (2024). *Emerging Perspectives on Financial Well-Being* (pp. 37-56).

[www.irma-international.org/chapter/balancing-acts/347776](http://www.irma-international.org/chapter/balancing-acts/347776)

### Innovative Revenue Collection Practices in South European Countries and the Case of Hellenic Independent Authority for Public Revenue

Konstantinos Papageorgiou, Angelos Stavros Stavropoulos, Konstantinos Derleres, Konstantinos Miliorisand Aristidis Papagrigoriou (2022). *International Journal of Corporate Finance and Accounting* (pp. 1-12).

[www.irma-international.org/article/innovative-revenue-collection-practices-in-south-european-countries-and-the-case-of-hellenic-independent-authority-for-public-revenue/301460](http://www.irma-international.org/article/innovative-revenue-collection-practices-in-south-european-countries-and-the-case-of-hellenic-independent-authority-for-public-revenue/301460)

### Applying Multiple Linear Regression and Neural Network to Predict Business Performance Using the Reliability of Accounting Information System

Ahmed H. Al-Dmourand Rand H. Al-Dmour (2018). *International Journal of Corporate Finance and Accounting* (pp. 12-26).

[www.irma-international.org/article/applying-multiple-linear-regression-and-neural-network-to-predict-business-performance-using-the-reliability-of-accounting-information-system/212735](http://www.irma-international.org/article/applying-multiple-linear-regression-and-neural-network-to-predict-business-performance-using-the-reliability-of-accounting-information-system/212735)

### Cloud TV: A Techno-Economic Approach in the Emerging Era of the Internet of Things

Georgia Dede, Georgios Loupatatzis, Dimitris Grigoropoulos, Georgios Chatzithanasis, Thomas Kamalakisand Christos Michalakelis (2020). *International Journal of Corporate Finance and Accounting* (pp. 39-53).

[www.irma-international.org/article/cloud-tv/261858](http://www.irma-international.org/article/cloud-tv/261858)