

CENTRAL BANK DIGITAL CURRENCIES: RECONSIDERING MONEY IN THE DIGITAL AGE

Assoc. Prof. Dr. Daniela-Georgeta Beju¹

PhD Vasile Paul Bresfelean¹

PhD Maria Ciupac-Ulici^{2,3}

¹ Faculty of Economics and Business Administration, Babes-Bolyai University of Cluj-Napoca, **Romania**

² IPAG Business School, Paris, **France**

³ Hyperion University, Bucharest, **Romania**

ABSTRACT

The aim of this paper is to explore the theoretical foundations of Central Bank Digital Currencies (CBDCs), as a digital variant of traditional existing money. We present the characteristics, advantages and disadvantages of Central Bank Digital Currencies in the current context of financial digitalization. We also distinguish them from cryptocurrencies, which are virtual currencies issued in a decentralized manner by private entities. In addition, we examine how different countries are approaching CBDC implementation, presenting selected pilot programs and initiatives that reflect diverse technological and policy priorities. We also evaluate the potential and difficulties of these digital currencies and their effects on the economy and society. Our analysis reflects a growing interest among central banks, that is driven not only by technological developments but also by the need to respond to the increasing popularity of private digital alternatives. Despite the potential benefits of Central Bank Digital Currencies, there are still challenges related to cybersecurity, privacy, the transmission of monetary policy and the possible disruption of traditional banking systems. This paper provides a structured overview that helps clarify the role CBDCs might play in the evolving financial landscape, rather than offering a comparative methodology. While CBDCs are still in their early stages, their emergence marks a shift in how public money is understood and deployed in the digital age.

Keywords: central bank digital currency, digital money, cryptocurrencies, financial systems, international adoption

INTRODUCTION

In recent decades, major advances in technology have reached the world of money, payments and financial services. These changes aim to make such systems easier to access, less costly and quicker to use, even across countries. The adoption of cryptography and distributed ledger technology (DLT), such as blockchains, for record-keeping has enabled the creation of digital assets. These assets are supported by a broader ecosystem of infrastructure and also by the related actors (like exchanges, wallet providers, miners). This shifts away from traditional reliance on central bank money, and regulated financial intermediaries (Bespalova et al., 2025).

Within the broader category of digital assets, we usually distinguish between privately issued unbacked tokens/crypto assets, stablecoins, central bank digital currencies.