

Chapter 11

CBDCs Around the Globe: Scenarios, Experiments, and Implementation Endeavors

Maria Shilina

 <https://orcid.org/0000-0002-1611-805X>

Paradigm Research Institute, Skolkovo Institute of Science and Technology (Skoltech) Moscow, Russia

ABSTRACT

CBDCs have taken center stage in the digital finance arena, as central banks worldwide explore the advantages and challenges they present. The number of CBDC projects has increased significantly over the past few years, encompassing 131 countries that collectively represent 98% of the global economy. This chapter delves into the dynamic landscape of CBDCs worldwide, exploring various scenarios, ongoing experiments, and implementation efforts. The research sheds light on the motivations behind CBDC initiatives, examines the practical experiments conducted by central banks (from launched to pilot and developing programs), and explores cross-border projects and collaborations. Through a comparative analysis of various approaches to CBDCs, the chapter uncovers a nuanced narrative of economic, social, and political factors that influence the design and deployment of CBDCs. This chapter offers a comprehensive overview of the CBDCs landscape, assisting policymakers, financial institutions, and the general public in understanding the potential future of digital currencies.

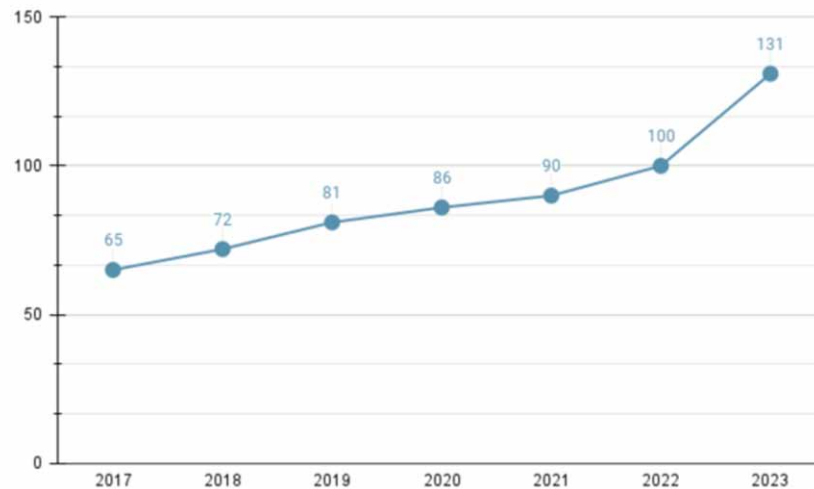
1. INTRODUCTION: RISING ENGAGEMENT IN CBDCS

Central Bank Digital Currencies (CBDCs) have become a focal point for global central banks, with potential implications for the global financial landscape. In 2023, policymakers transitioned from proof of concept to pilot programs in various jurisdictions. According to the Bank for International Settlements (BIS) (2023), by the end of 2023, 93% of central banks were involved in CBDC development, and nearly 20% are expected to issue a digital currency in the near term. The 2023 PWC index shows that 21 new central banks engage in CBDC research on retail projects compared to the 2022 index, with 8 starting pilot programs, including India, Singapore, Hong Kong, and Norway (Blumenfeld et al., 2023). Addi-

DOI: 10.4018/979-8-3693-1882-9.ch011

tionally, 7 new central banks are researching wholesale CBDC projects, with 3 initiating pilot programs, including Colombia, Namibia, Tanzania, Brazil, and the Philippines. The United States remains notably absent and progressing primarily in a wholesale CBDC version, with retail development stalled. Figure 1. illustrates the increasing engagement of central banks in CBDC initiatives.

Figure 1. Increasing engagement of central banks in CBDC work by years (number of engaged countries by years, 2017-2023) (Author based on the BIS central bank surveys on CBDCs and crypto, 2017-2023)



CBDC research also is evolving rapidly (Ozili, 2023). Many works focus on the role of central banks in CBDC development (Williamson, 2021; Fernández-Villaverde et al., 2021; Shkliar, 2020), and CBDCs' impact on monetary systems, policies, and banking operations (Shen & Hou, 2021). Papers also cover such areas as CBDCs possible implications and benefits (Bhaskar et al., 2022; Elsayed & Sousa, 2022; Calle & Eidan, 2020); CBDC design and technological innovations (Aguret et al., 2022; He et al., 2023; Lee et al., 2021; Narula et al., 2023; Son et al., 2023); and security, and privacy issues (Pocher & Veneris, 2021).

A lot of research is carried out by global bodies like the BIS (Auer et al., 2022; Auer & Böhme, 2021, 2022) and the International Monetary Fund (IMF) (Das et al., 2023; Soderberg et al., 2023; Tourpe et al., 2023; Georgieva, 2022; Lannquist & Tan, 2023). For example, to share knowledge and engage with policymakers worldwide, the IMF has launched a virtual CBDC Handbook, emphasizing ongoing collaboration with central banks and global bodies, such as the Group of Twenty (G20), to assess the potential effects of CBDCs on financial stability and cross-border payments. Countries are conducting their own CBDC research according to their specific objectives, and the IMF is committed to assisting countries exploring CBDCs.

The number of existing CBDC projects has increased significantly over the past few years. Countries vary in their CBDC development stages, ranging from public consultations to practical use cases. A total of 131 countries representing 98% of the global economy are now exploring digital versions of their currencies. A study by the Atlantic Council (2023) indicates that nearly half of these countries

23 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/cbdcs-around-the-globe/341669

Related Content

Social Media Marketing and Brand Loyalty Among Online Shoppers in Anambra State, Nigeria: Mediating Effect of Brand Awareness

Ebuka Christian Ezenwafor, Adeola A. Ayodeleand Chukwudi Ireneus Nwaizugbo (2021). *Journal of Electronic Commerce in Organizations* (pp. 16-27).

www.irma-international.org/article/social-media-marketing-and-brand-loyalty-among-online-shoppers-in-anambra-state-nigeria/280077

The Impact of E-Commerce Customer Relationship Management in Business-to-Consumer E-Commerce

Pauline Ratnasingam (2008). *Journal of Electronic Commerce in Organizations* (pp. 30-46).

www.irma-international.org/article/impact-commerce-customer-relationship-management/3520

Situational Enterprise Services

Paul de Vrieze, Lai Xuand Li Xie (2016). *Encyclopedia of E-Commerce Development, Implementation, and Management* (pp. 858-867).

www.irma-international.org/chapter/situational-enterprise-services/149007

Process-Oriented Reorganization Projects in Electronic Government

Jörg Becker, Lars Algermissenand Björn Niehaves (2006). *Encyclopedia of E-Commerce, E-Government, and Mobile Commerce* (pp. 926-932).

www.irma-international.org/chapter/process-oriented-reorganization-projects-electronic/12653

Intelligent Software Agents in Electronic Commerce: A Socio-technical Perspective

Mahesh S. Raisinghani, Chris Klassenand Lawrence L. Schkade (2002). *Strategies for eCommerce Success* (pp. 196-207).

www.irma-international.org/chapter/intelligent-software-agents-electronic-commerce/29849