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THE RELEVANCE OF INTRODUCING CENTRAL BANK DIGITAL CURRENCY

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Abstract: This article analyzes international experience in the implementation of Central Bank Digital Currency (CBDC) and evaluates its role in improving the efficiency of national payment systems and cross-border transactions. The study examines the prospects for introducing a digital som in Uzbekistan, assessing the necessary institutional conditions and the expected economic benefits. Based on the findings, scientific and practical recommendations are proposed to strengthen state incentive mechanisms for accelerating digitalization and enhancing the efficiency of financial services.

Keywords: Central Bank Digital Currency (CBDC), digital som, payment system, digitalization, financial services, cross-border payments, state incentive policy.

Аннотация: В статье проанализирован международный опыт внедрения цифровой валюты центрального банка (CBDC) и оценено её значение для повышения эффективности национальных платёжных систем и международных расчётов. Рассмотрены перспективы внедрения цифрового сума в Узбекистане, институциональные предпосылки и ожидаемые экономические преимущества. Разработаны научно-практические предложения по совершенствованию механизмов государственного стимулирования цифровизации и повышению эффективности финансовых услуг.

Ключевые слова: цифровая валюта центрального банка (CBDC), цифровой сум, платёжная система, цифровизация, финансовые услуги, международные расчёты, государственная политика стимулирования.

INTRODUCTION

The rapid development of digital technologies is transforming the global financial system and creating new approaches to payment services, monetary circulation, and financial intermediation. Technologies such as artificial intelligence, blockchain, cloud computing, and electronic wallets have accelerated the digitalization of payment systems, making financial transactions faster, safer, and more efficient. Consequently, central banks worldwide are modernizing payment infrastructures to strengthen financial stability and improve the efficiency of financial services.

Digital technologies are transforming the technological processes associated with the form and content of settlement and payment systems, executing them rapidly and conveniently. These systems are built upon the utilization of artificial intelligence, blockchain technologies, and electronic wallets. Furthermore, modern payment systems must be based on centralized management, ensuring they are convenient, fast, and secure.

Against this background, Central Bank Digital Currency (CBDC) has emerged as one of the most important innovations in modern monetary policy. Many countries, including China, Sweden, the European Union, Kazakhstan, and Russia, are actively developing or piloting CBDC projects to improve payment efficiency, reduce transaction costs, and strengthen financial inclusion.

For Uzbekistan, where the digital transformation of the financial sector is accelerating, studying the prospects of introducing a digital som has become increasingly relevant. Therefore, this study analyzes international experience, evaluates the potential benefits and challenges of CBDC implementation, and identifies opportunities for introducing a national digital currency in Uzbekistan.

Literature review on the topic

The rapid development of digital technologies has significantly transformed financial systems worldwide, leading central banks to explore Central Bank Digital Currency (CBDC) as an innovative monetary instrument. Over the last decade, CBDC has become one of the most actively discussed topics in monetary economics, financial technology, and central banking research.

The theoretical foundations of CBDC have been widely examined by international financial institutions and academic researchers. The Bank for International Settlements (BIS) defines CBDC as a digital form of sovereign money issued by a central bank that combines the reliability of traditional fiat currency with the efficiency of modern digital payment technologies. According to the BIS (2023), CBDCs have the potential to improve payment efficiency, reduce transaction costs, strengthen financial inclusion, and enhance the resilience of national payment systems.

The International Monetary Fund (IMF) emphasizes that the introduction of CBDC should be accompanied by an appropriate legal framework, cybersecurity infrastructure, and monetary policy mechanisms. IMF researchers (Boar & Wehrli, 2021; IMF, 2023) argue that although CBDCs create significant opportunities for improving financial services, they may also pose challenges related to financial stability, banking intermediation, and data privacy.

Several scholars have analyzed the economic implications of CBDCs. Auer, Cornelli, and Frost (2020) argue that digital currencies can increase payment system efficiency while strengthening competition in financial markets. Similarly, Kiff et al. (2020) suggest that properly designed CBDCs can contribute to reducing cash management costs, increasing transparency of financial transactions, and combating illicit financial activities.

China's Digital Yuan (e-CNY) has become one of the most widely studied practical examples of CBDC implementation. According to the People's Bank of China, the e-CNY pilot has demonstrated significant improvements in retail payment efficiency, cross-border transactions, and government financial services. At the same time, Sweden's e-Krona project and the European Central Bank's Digital Euro initiative illustrate how advanced economies are preparing their financial systems for digital transformation.

In Uzbekistan, scientific research on CBDC remains relatively limited. Existing studies mainly focus on payment system digitalization, financial technologies, and blockchain applications. Rakhimova (2024) examined modern trends in the digitalization of Uzbekistan's payment system, while Salaev (2022) analyzed the organization of digital assets in commercial banks. However, comprehensive studies assessing the economic feasibility, institutional readiness, and policy implications of introducing a national CBDC in Uzbekistan remain insufficient. Therefore, this study seeks to fill this research gap by evaluating international experience and identifying the opportunities and challenges associated with implementing a digital som in Uzbekistan.

RESEARCH METHODOLOGY

This study employs a qualitative research design based on comparative, analytical, and descriptive research methods. The research aims to assess the relevance of introducing Central Bank Digital Currency (CBDC) in Uzbekistan by examining international experience, theoretical approaches, and existing institutional conditions.

The theoretical framework of the research is based on modern monetary economics, digital finance theory, financial innovation theory, and institutional economics. The study also relies on the concepts of digital transformation and financial inclusion developed by international organizations, including the Bank for International Settlements (BIS), the International Monetary Fund (IMF), and the World Bank.

The research methodology incorporates several complementary methods. First, a comparative analysis is conducted to evaluate the experiences of countries actively developing CBDCs, including China, Kazakhstan, Sweden, and the European Union. Second, document analysis is applied to examine official reports, legal documents, policy papers, and international recommendations related to digital currencies. Third, content analysis is used to identify the major economic advantages, potential risks, and institutional requirements associated with CBDC implementation.

The empirical basis of the study includes official publications of the Central Bank of Uzbekistan, the Bank for International Settlements (BIS), the International Monetary Fund (IMF), the World Bank, the People's Bank of China, and recent academic publications indexed in Scopus and Web of Science databases. The collected information is analyzed systematically to identify common trends and evaluate their applicability to Uzbekistan's financial system.

The reliability of the research findings is ensured through the use of internationally recognized data sources, recent academic literature, and official statistical information. The combination of comparative analysis, document review, and content analysis enhances the validity of the conclusions and provides a comprehensive assessment of the prospects for introducing a Central Bank Digital Currency in Uzbekistan.

ANALYSIS AND RESULTS

Central bank digital currency (CBDC) payment systems currently being piloted in developed countries enhance the efficiency of financial services provided to the population. In particular, the digital yuan (mBridge)

project, which has been actively utilized by the Central Bank of China since 2023, provides extensive conveniences to the population. Moreover, it has been deployed in Kazakhstan since 2025, while in Russia, its implementation is scheduled for September 1, 2026.

The introduction of Central Bank Digital Currency (CBDC) in our country will serve to create new business models in the entrepreneurship sector and allow for enhanced control over the targeted allocation and spending of financial resources. Additionally, it will help avoid dependence on external payment systems that could threaten the financial stability and sovereignty of the national currency.

As is known, Uzbekistan officially received the status of a BRICS partner state on January 1, 2025. Looking at the future projects of BRICS, Russia's Deputy Minister of Finance Ivan Chebeskov noted that Russia, together with the central banks of BRICS member countries, is working on launching the BRICS Bridge platform for digital payments in national currencies (for instance, this could involve the digital ruble, yuan, or rial).

In general, a positive decision regarding the issuance of digital securities in one of the major global economies could stimulate other regulators to take action, potentially creating a chain reaction on a global scale. Current research indicates that central bank digital currencies can become a primary new payment instrument within individual countries, and subsequently, for international transactions.

Therefore, considering the conveniences of utilizing digital currencies and ensuring a timely response to international transactions associated with digital currencies, it is highly expedient for Uzbekistan to initiate the creation of its own central bank **"digital currency concept" (the digital som)**. In this process, the security of digital currency operations must undoubtedly be prioritized and taken into strict account.

Furthermore, implementing digitalization to increase the efficiency of financial services involves certain inevitable expenditures (such as programming, automation, integration, etc.). For this reason, it is necessary to activate the incentive function of the state to accelerate the digitalization process across all sectors. Specifically:

- Tax Exemptions: Turnovers of taxpayers related to the provision of digitalization services (according to a legally defined list) should be exempted from taxation, specifically profit tax and value-added tax;
- Encouraging Talent: In order to accelerate digitalization, frequent contests focusing on digitalization themes should be organized among individuals and legal entities operating in this field within the republic, and the winners should be rewarded with various levels of monetary prizes.

This mechanism will stimulate an increase in the number of potential specialists working in this industry and encourage the creation of advanced digital technologies in the future. Such promotional events can be conducted by various levels of state and private entities, including ministries, organizations, or educational institutions.

CONCLUSIONS AND SUGGESTIONS

1. Utilizing the potential of digital currency: Based on the expanding capabilities of various countries using their own digital currencies and the achievements of international experience in this direction, it is expedient for the Central Bank of Uzbekistan to develop a "central bank digital currency" concept with the aim of introducing a central bank digital currency (CBDC) in our country in the near future.

2. Digitalization incentive measures as a success factor: To accelerate digitalization, frequent contests on digitalization topics should be organized among those active in this field within the republic, and winners should be rewarded with monetary prizes at various levels. This will stimulate an increase in the number of capable specialists involved in this field and the development of flawless digital technologies in the future.

3. Activating the state's incentive function to accelerate the digitalization process across sectors: To accelerate the digitalization process in various fields, it is necessary to activate the state's incentive function. To enhance the efficiency of digitalization and financial services, taxpayers' turnovers from the realization of digitalization-related services (according to a legally defined list) should be exempted from taxation (profit tax and value-added tax) for a specified period.

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