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**ANALYSIS OF THE ADVANTAGES OF DIGITAL NATIONAL CURRENCIES: THE DIGITAL RUBLE AND FOREIGN CASES***Abstract:*

The purpose of our article is to highlight the problem of introducing a national service/technology and, as a result, to identify obstacles and results already achieved. The article discusses the process of developing a digital ruble in Russia, from its beginning at the end of 2020 to a pilot launch in 2023, which is associated with the imminent planning of the release of a full-fledged digital ruble for the use of customers. The authors consider the current results of development, the advantages of the new system, foreign experience, as well as the main differences from other types of currency.

*Keywords:*

National currencies, banks, ruble, business.

Over the past few years, the Bank of Russia has been working on the creation and implementation of the digital ruble. Public discussions are being held, and the topic has gained a great resonance among the population. The relevance of our research lies in the consecration of a popular and significant topic in our time.

It is important to note that the introduction of the digital ruble will significantly improve the efficiency of the payment system, reduce cash costs, increase the security of transactions, and speed up settlement processes. Also, the digital ruble can contribute to a wider spread of non-cash payments and the development of the digital economy. The development and implementation of the digital ruble is a complex and multifaceted process that requires a coordinated approach from the state, banks, and enterprises. However, with proper planning and implementation of plans, the digital ruble can become a new stage in the development of the Russian financial system and improve the living conditions of the population.

The introduction of the digital ruble opens new prospects and opportunities for Russia to develop the financial system, improve the security of payments and increase the efficiency of the economy. However, to successfully implement a new technology, it is necessary to consider all possible risks and challenges, develop an implementation strategy, and ensure the support of all participants in the process.

The study was carried out using a case study methodology on the example of world leaders in the field of digital currencies - Nigeria, the Bahamas, Jamaica, and China, it is concluded that it is important to prepare and correctly implement digital currency for successful use and adoption by the population. The similarities and differences between the digital ruble and cryptocurrencies are considered, the centralized control and emission of the digital ruble by the Bank of Russia is highlighted.

The authors identified the following advantages of digital currency: ensuring the security of transactions, which reduces the risk of fraud, improving access to financial services, and reducing financial costs.

A central bank digital currency (CBDC) is the digital equivalent of national currencies issued and regulated by central banks. They are provided and guaranteed by central banks for ease of use in digital technologies and online transactions.

By being responsible for issuance, banks seek to increase the efficiency of foreign exchange transactions and reduce the cost of cash handling. It is possible to increase the efficiency of money circulation by moving from paper banknotes to digital currency using the latest technological advances. According to some researchers, the introduction of digital currency by the central bank can often improve the well-being of citizens. For example, it has the potential to increase total output Goods. This is happening, firstly, due to the improvement of accessibility for citizens and businesses, as a simplification of financing, obtaining loans and investing to expand production. Secondly, it may be advantageous to reduce costs while reducing commission costs. In addition, the central bank receives a new policy tool and, as a result, control of financial transactions, which is an important condition for fair competition among firms. It is not surprising that many countries are developing a national digital currency. [1]

Speaking of international settlements, it is necessary to consider foreign experience. Today, many people in the world are developing and piloting their own digital currencies. Nigeria, the Bahamas, and Jamaica launched their CBDCs in August 2022. [2] The need for a digital currency in Nigeria was due to the fall of the national currency and the growing popularity of cryptocurrencies, which subsequently entailed a number of restrictions from the Central Bank of Nigeria, which did not bring the desired result. The experiment with the transition to digital naira in 2023 was considered unsuccessful, in the three years since the introduction of the digital currency, only 4% of the population used it. [3] Examples of digital currency in the Bahamas and Jamaica are considered to be more successful and the only one that works.

Now, the most successful pilot of the digital currency is the pilot in China. According to the People's Bank of China, the volume of digital yuan in circulation at the end of 2022 amounted to 13.61 billion (about \$2 billion). Digital yuan can be used to pay in pharmacies, some stores, and on digital platforms, but there is still no full-fledged use of the yuan in China. [4]

According to analysts, the digital ruble will be launched into mass circulation no earlier than the end of 2024. Currently, its use is being tested in a pilot mode, with the participation of a limited number of clients – employees of the Bank of Russia. [5] According to preliminary data, the study identified possible risks, such as: insufficient preparation of the population, problems with data protection and the loss of customers from banks, due to the fact that transactions will be carried out directly by the Central Bank of the Russian Federation. To minimize risks, experts recommend conducting legal education and security training for users.

According to Russian Deputy Finance Minister Alexei Moiseev, the digital ruble will play an important role in international trade, since its use can reduce the costs and risks of foreign trade operations [6]. The risk of the digital ruble in international settlements lies in its non-compliance with international standards and its rejection on the world stage.

If we compare the digital ruble with other monetary forms, it is important to highlight a few similarities and differences (Table 1). Firstly, both the digital ruble and the cryptocurrency are an electronic analogue of money. A unique numerical code contributes to the existence of these funds. Secondly, both forms of money are stored in e-wallets and can be used for various transactions. However, the main difference is that the cryptocurrency does not have a single issuer and centralized management. At the same time, the digital ruble is a form of national currency, which the Bank of Russia is called upon to regulate.

Table 1 – Comparative analysis of the digital ruble, the regular ruble and cryptocurrency <sup>43</sup>

Index	Digital Ruble	Regular ruble		Cryptocurrency
		Cash	Cashless funds	
Form	Numeric code	Paper banknotes, coins	Digital record in the banking database	Numeric code
Regulatory Body	Central Bank	Central Bank	Central Bank, Commercial Bank	Missing
Emission	To replenish its wallet, the credit institution sends a request to the Bank of Russia to issue digital rubles. The Bank of Russia writes off non-cash funds from the correspondent account of a credit institution and issues	Implementation in the event of an increase in the volume of banknotes issued by the RCC and a decrease in receipts. With the permission of the Central Bank, the bank may put into circulation the missing amount	In the case of non-cash emission by the Central Bank, money is transferred to a commercial bank. After that, part of the funds is transferred to the client's current account.	Emission is carried out by mining, i.e. the generation of a new cryptocurrency (tokens) when performing calculations using special devices.

<sup>43</sup> Compiled by the authors on the basis of: the Central Bank of Russia and the work of Albekov A. U., Vovchenko N. G., Epifanov T. V., Filchakov N. Y. "Electronic Currency: Potential Risks to National Security"

	a digital ruble in an equivalent amount.	from the reserve fund.		
Store of value	No interest accrual	No interest accrual	With the possibility of accrual of interest	With the possibility of accrual of interest
Currency Transactions	Direct payment			It is necessary to convert the amount in cryptocurrency into traditional currency

Moreover, it is important to pay attention to how the emission is carried out. The issue of the ordinary ruble is carried out by issuing monetary currency into circulation through commercial banks. In the case of the digital ruble, the issuance of money takes place through the distribution of digital tokens and a transfer to an electronic wallet by the Central Bank.

According to the data, it is possible to accrue interest income on the balance on non-cash funds. This means that if the bank's customers have funds on their balance, a certain interest will be accrued on them. As a rule, the conditions for accrual of interest on the balance are quite feasible with regular use of the card, unlike deposits, where there are a greater number of influencing factors. With the development of alternative finance, it has become possible to place a cryptocurrency deposit in special exchanges, which is characterized by high interest rates. The digital ruble is not expected to have such an option. Probably due to the complexity in the technical implementation.

Thus, international experience shows the prospects for the introduction of digital currencies. The authors identified the following key advantages of the digital ruble:

- The digital ruble ensures the security of transactions, as all transactions will pass through secure cryptographic protocols, which reduces the risk of fraud and increases confidence in financial transactions.
- The digital ruble makes transactions and banking services more accessible to all segments of the population and businesses, which means that even people without bank accounts or access to financial services will be able to easily make payments and access financial services.
- There is also an advantage for business in the absence of commissions when conducting transactions with the digital ruble, which can significantly reduce the cost of financial transactions.

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