

PRINCÍPIOS DE DIREITO PÚBLICO E PRIVADO NA REGULAMENTAÇÃO DA MOEDA DIGITAL DO BANCO CENTRAL DA RÚSSIA

PUBLIC AND PRIVATE LAW PRINCIPLES IN THE REGULATION OF THE DIGITAL CURRENCY OF THE CENTRAL BANK OF RUSSIA

DMITRY SMIRNOV

North Caucasus Federal University, Russia. E-mail: dmi197526@yandex.ru Orcid id: <https://orcid.org/0000-0002-8300-0828>

IRINA KLYUKOVSKAYA

North Caucasus Federal University, Russia. E-mail: klyukovskaya@inbox.ru Orcid id: <https://orcid.org/0000-0003-4498-2571>

LEYLA BOTASHEVA

North Caucasus Federal University, Russia. E-mail: botasheval@gmail.com Orcid id: <https://orcid.org/0000-0001-7704-2960>

OLEG LAUTA

North Caucasus Federal University, Russia. E-mail: oligarxx@inbox.ru Orcid id: <https://orcid.org/0000-0002-9385-2303>

ROMAN GABRILYAN

North Caucasus Federal University, Russia. E-mail: roman@gabrilyan.com Orcid id: <https://orcid.org/0000-0001-9938-5809>

IRINA YACOBI

North Caucasus Federal University, Russia. E-mail: 4437@mail.ru Orcid id: <https://orcid.org/0000-0001-5700-9311>

RESUMO

Objetivo: O artigo examina os princípios de direito público e privado na regulamentação da moeda digital emitida pelo Banco Central da Rússia. O foco principal está na análise da natureza jurídica do rublo digital, que apresenta características tanto de direito financeiro quanto de direito civil.

Métodos: A pesquisa utilizou uma abordagem teórica com base em publicações científicas e a análise das disposições legais do direito financeiro e civil russo. O método jurídico formal foi aplicado para descrever a natureza intersetorial da moeda digital, abordando a interação entre normas de direito público e privado.

Resultados: Os resultados mostram a dualidade da natureza jurídica do rublo digital. De um lado, ele é um objeto de direito financeiro, emitido e controlado pelo Banco Central da Rússia. Por outro lado, a regulamentação do rublo digital reflete princípios de direito privado, principalmente no que se refere à sua utilização em transações e



contratos privados. Essa dualidade levanta questões sobre o enquadramento legal da moeda digital e sobre a necessidade de maior clareza conceitual e normativa.

Conclusão: O estudo conclui que o rublo digital introduz novos desafios para o sistema jurídico da Rússia, com implicações tanto no âmbito público quanto privado. Há uma necessidade de evolução legislativa que aborde a regulamentação detalhada das moedas digitais, incluindo suas interações com os direitos e deveres dos usuários. A introdução do rublo digital representa uma etapa crucial na modernização do sistema financeiro russo, mas também exige um cuidado maior com as questões de segurança e liberdade individual.

Palavras-chave: Moeda digital. Rublo digital. Direito financeiro. Direito civil. Banco Central da Rússia. Regulamentação jurídica.

ABSTRACT

Objective: The paper examines the interdisciplinary regulation of centralized digital currency issued by central banks. The study focuses on the public and private law principles of the Central Bank of Russia's digital currency.

Methods: The theoretical basis consists of scientific publications on the issue. The study is based on the analysis of the legal provisions of financial and civil legislation determining the digital ruble's legal status. The formal legal method allowed the authors to describe the content of the digital currency's inter-sectoral legal nature.

Results: The legal nature of the Central Bank of Russia's digital currency is investigated. Close attention is paid to the provisions "On the digital ruble" focusing on the public and private law norms. The lack of a clear conceptual framework causes difficulties in interpreting the basic categories. The dual legal nature of the digital ruble is substantiated. This duality is manifested in the fact that the digital ruble is an object of financial law as the national digital currency issued by the Central Bank of Russia. On the other hand, one should consider the binding nature of the digital ruble reflected in the provisions of private law and the Federal Law "On the national payment system".

Conclusion: Digital currencies are considered or implemented by many central banks around the world. Despite the importance and potential consequences of such drastic changes in national currencies, many unknown parameters remain.

Keywords: Legal relationship. Civil law. Financial law. Digital currency. Digital ruble. Central bank digital currency.

INTRODUCTION

The digital experiment of introducing digital currencies by central banks is gaining scale and momentum (Lambekova et al., 2017). A growing number of governments are willing to promote their central bank digital currency (CBDC) (Kochetkov et al., 2023). CBDC, as a digital innovation of public authorities, can



fundamentally change the structure of the state's internal financial system and the role of the central bank (Wang, 2023). Money and payment systems are developing rapidly (Nosova et al., 2018). The development of digital platforms and networks and the growing share of online commerce have created a demand and technological space for digital transactions that can radically change payment and financial intermediation systems (Bobkov et al., 2020). The financial system switched to electronic payment long ago (Kuznetsova et al., 2020). The speed and convenience of electronic transactions work in favor of their active application. According to statistics from the Central Bank of Russia, in the first quarter of 2023, citizens made more than 1.2 billion transactions through the Fast Payment System (FPS), which is almost 3 times higher than in the same period of the previous year. The amount of transactions for the reporting period amounted to 5.4 trillion rubles (an increase of more than 2 times) (Bank of Russia, n.d.) The network and digital effects are the most important features of the modern payment system.

Although a little over a decade has passed since the creation of Bitcoin, the first cryptocurrency, interaction with cryptocurrencies has reached all social sectors, including businesses, investors, consumers, and public and private institutions (Kulanov et al., 2020). The active cryptocurrency growth has forced central banks to find ways to adapt (Shor et al., 2022). A few years ago, many regulators began to explore the idea of issuing CBDC, a new form of money. In the context of the ongoing digitalization of the global financial system, CBDC serves as a form of centralized digital asset (Borodina et al., 2023). It can play an important role in ensuring timely financial stability, building a modern technological payment system, updating monetary policy, and establishing a new monetary era (Wang et al., 2022). However, despite the increased popularity of digital currency, there are many unanswered questions about CBDC's feasibility and implementation. It is believed that the development of digital currencies threatens the norms of financial sovereignty and affects the global financial system (Buckley et al., 2021).

The Bank of Russia is currently implementing technological solutions to issue and introduce the digital ruble (Zelinskaya & Takmasheva, 2023). The digital ruble regulations were adopted last year. As a result, amendments were made to regulatory legal acts determining its legal regime. The emergence of a third form of money and the updating of financial and civil legislation arouse scientific interest (Khamzin &



Moldabayev, 2013). CBDC requires more scientific understanding, given the challenges of replacing traditional currency.

LITERATURE REVIEW

Digital currency exists exclusively in digital form and has no physical counterpart, such as paper money or coins. It is often used for online transactions and can be transferred electronically (Kirillova et al., 2021). Digital currency continues to gain popularity and is increasingly used by businesses and consumers globally (Muyang et al., 2023). Digital currencies can be divided into two categories: CBDC and cryptocurrency.

CBDC is a digital form of money issued by the central bank. Due to its technological form and private nature, the emergence of digital money was met with considerable pessimism. Some express concerns about its decentralization creating an unstable atmosphere for cryptocurrencies and stablecoins (Revyakina et al., 2024). However, the prevalence of these forms of digital currency has increased over time, putting pressure on central banks to meet this demand. This is especially true if we consider the massive preference for digital payment and the increasing costs and operational difficulties associated with printing money.

The International Monetary Fund defines CBDC as a new form of paper money issued digitally by the central bank and serving as a legal tender (Tobias et al., 2018).

The central bank issues digital currencies in the form of digital tokens comparable to cryptocurrencies and other digital currencies (Panassenko et al., 2024). CBDC is a digital legal tender or paper digital currency issued by a central bank (Alora et al., 2024). Although China took the first step, dozens of other countries are exploring the possibility of creating their CBDC or other forms of sovereign digital currency. By the end of 2023, CBDC have been fully put into circulation in Nigeria, the Bahamas, and Jamaica. Pilot projects on the use of digital currencies have been launched in 13 more countries, including China and Russia (Dionysopoulos et al., 2024).

CBDC is believed to be the next milestone in the evolution of money, as many studies have shown significant benefits of using government-issued digital currency (Borodina et al., 2023). The main motives for using CBDC are to increase the security, reliability, efficiency, and convenience of payments and to reduce the issuance cost. To function as money, CBDC must fulfill its fundamental role claimed by the state



theory of money (Kuehnlenz et al., 2023). Since the presentation of the Concept of the Digital Ruble in April 2022, the debate around its legal nature has not subsided (Bank of Russia, 2021). The regulations of the national digital currency, which entered into force on August 1, have become the most significant ones in settlement and payment regulation since the adoption of the legislative act on the national payment system. At the time of the adoption of these amendments, the Federal Law on Digital Financial Assets, Digital Currency, and Amendments to Certain Legislative Acts of the Russian Federation (hereinafter Law on DFA) fixing the legal definition of digital currency had already existed. However, the legal status of the mega-regulator's digital asset remains ambiguous and not properly regulated by legal norms. There are no comprehensive works on the legal essence of the virtual assets of the Bank of Russia and accounting for transactions with them. There is also no unified approach to the conceptual apparatus at the theoretical level. In terms of the conceptual apparatus, there is no concept of the digital ruble. It is not a digital currency in the understanding of the provisions of the Law on DFA due to its public legal nature. The Civil Code of the Russian Federation in Article 128 recognizes the digital ruble as a type of non-cash fund relating to property rights.

There are three types of participants in the CBDC system: the Central Bank, commercial banks, and end users. The Central Bank is responsible for the development of monetary policy and the issuance, withdrawal, and circulation of currency. It acts as the operator of the digital ruble. Commercial banks act as intermediaries linking the Central Bank and end users. End users can make transactions and direct payments. End users include individuals, small businesses, and large companies, and payments can be intrabank, interbank, and cross-border.

Based on the current structure of the legal relationship, the contractual relations between the participants in the digital ruble platform are uncertain. The Central Bank as the operator of the digital ruble becomes a key subject of civil law relations, closing the contractual relationship on itself and acting as an obligee concerning the national digital currency (Sitnik, 2023). The new legal status of the mega-regulator as a participant in civil law relations was discussed by experts of the 12th St. Petersburg International Legal Forum. The academic community is also actively discussing the legal status of the digital ruble platform as a structural element of the national payment system. The issues of dispute settlement between the Central Bank and credit



institutions and between credit institutions and end users remain open.

MATERIALS AND METHODS

We employed a formal legal method as the primary analytical tool to dissect the legal framework governing the digital ruble issued by the Central Bank of Russia. This approach was instrumental in uncovering digital currency's intrinsic legal nature straddling the boundaries between public and private law. The formal legal method facilitated a rigorous examination of the statutory provisions relevant to the digital ruble, derived from financial and civil legislation.

To complement this, we used the dialectical method to address the dynamic and occasionally contradictory characteristics of legal regulations concerning digital currency. Conclusions and proposals were based primarily on an analysis of current regulations and their application.

The study was supported by an extensive review of Russian and international research. This included a wide array of scientific publications and doctrinal analyses providing diverse perspectives on the regulatory issues of digital currencies.

RESULTS

Our analysis shows that there is no single approach to digital currency yet. The national digital currency has all the functions of money (as a unit of calculation and a means of preserving value) and is backed by the Central Bank. Due to the novelty and lack of completeness of legislative regulation, using national digital currency poses risks, such as threats and vulnerability in information security. The question remains about the legal consequences of losing a password to a digital wallet, inheriting such assets, etc. It is promising to further study the legal essence of the national digital currency, its binding, financial, and legal nature, amendments to the Budget Code of the Russian Federation and the Tax Code of the Russian Federation, and financial control implementation.

The turnover of the national digital currency should be carried out in a legal and regulatory environment that is favorable and defined. The complex legal nature determines the requirements for the regulatory environment, which must ensure a balance of public and private interests, while simultaneously addressing issues such as confidentiality and data security. Despite its advantages, the digital ruble, like other



technologies of this type, also threatens individual freedom, leading to extreme centralization and absolute transparency.

The success of the digital ruble project depends on its acceptance by the public and market participants. Given the diversity of the population and the different levels of technological literacy, to ensure widespread adoption, the digital currency project must consider these important factors.

Thus, the theoretical advantages of a digital currency are obvious, but the feasibility of implementation depends on several factors, including technical infrastructure, regulatory framework, and public recognition.

CONCLUSIONS

The study showed that the digital ruble represents a new frontier in Russia's monetary policy and financial system. As part of our analysis, we showed that the digital ruble has a dual legal nature. On the one hand, it functions as a national digital currency within the framework of financial law. On the other hand, it reflects the principles of private law in its binding and contractual aspects. This duality creates a unique legal landscape in which traditional financial regulation intersects with modern digital innovations. The implications of such a hybrid legal status are significant because they suggest that the digital ruble can serve as a central bank control tool and a means of private transactions, narrowing the gap between government goals and the financial autonomy of individuals.

The main problem identified in our analysis is the lack of a clear conceptual framework and legal terminology concerning digital currencies. This uncertainty complicates the interpretation of legal norms and the application of regulations, emphasizing the need to develop more precise legal vocabulary and specialized regulations designed to regulate digital currencies.

There is a need to continue studying the legal and financial consequences of the introduction of the digital ruble and other similar digital currencies. There is a critical need for legislative improvements that adapt to the unique features of digital currencies and support their integration into the existing financial infrastructure. To achieve this goal, a balanced approach is required, considering the opportunities and challenges presented by digital currencies and ensuring their positive contribution to the economic and social structure.



REFERENCES

- Alora, A., Sahoo, P., & Sasidharan, A. (2024). Central bank digital currency adoption challenges - The case of an emerging nation. *Finance Research Letters*, 59, 104756. <https://doi.org/10.1016/j.frl.2023.104756>
- Bank of Russia. (n.d.). SBP: Osnovnye pokazateli [Fast Payment System: The main indicators]. https://www.cbr.ru/analytics/nps/sbp/1_2023/ (accessed on March 18, 2024). (In Russ.)
- Bank of Russia. (2021, April). Kontsepsiya tsifrovogo rublya [The concept of digital rouble]. https://www.cbr.ru/Content/Document/File/120075/concept_08042021.pdf (accessed on March 18, 2024). (In Russ.)
- Bobkov, V. N., Simonova, M. V., Loktyuhina, N. V., & Shichkin, I. A. (2020). Peculiarities of unstable employment in the era of a digital economy from data of social media of Russia. In *Digital transformation of the economy: Challenges, trends, and new opportunities* (pp. 235-243). Cham: Springer. http://dx.doi.org/10.1007/978-3-030-11367-4_22
- Borodina, M., Idrisov, H., Kapustina, D., Zhildikbayeva, A., Fedorov, A., Denisova, D., Gerasimova, E., & Solovyanenko, N. (2023). State regulation of digital technologies for sustainable development and territorial planning. *International Journal of Sustainable Development and Planning*, 18(5), 1615-1624. <https://doi.org/10.18280/ijstdp.180533>
- Buckley, R. P., Arner, D. W., Zetsche, D. A., Didenko, A. N., & van Romburg, L. (2021). Sovereign digital currencies: Reshaping the design of money and payments systems. *Journal of Payments Strategy and Systems*, 15(1), 7-22.
- Dionysopoulos, L., Marra, M., & Urquhart, A. (2024). Central bank digital currencies: A critical review. *International Review of Financial Analysis*, 91, 103031. <https://doi.org/10.1016/j.irfa.2023.103031>
- Khamzin, Y., & Moldabayev, R. (2013). Statutory regulation of small and medium-scale entrepreneurship in Kazakhstan. *World Applied Sciences Journal*, 25(5), 827-831.
- Kirillova, E. A., Zulfugarzade, T. E., Blinkov, O. E., Serova, O. A., & Mikhaylova, I. A. (2021). Prospects for developing the legal regulation of digital platforms. *Jurídicas CUC*, 18(1), 35-52. <https://doi.org/10.17981/juridcuc.18.1.2022.02>
- Kochetkov, E., Zhilkina, T., Zudilova, E., Philippov, D., & Popova, L. (2023). Modeling the macroeconomic transmission environment: Public sector impact using the money and financial market model. *Relacoes Internacionais no Mundo Atual*, 1(39), e06270.
- Kuehnlenz, S., Orsi, B., & Kaltenbrunner, A. (2023). Central bank digital currencies and the international payment system: The demise of the US dollar? *Research in International Business and Finance*, 64, 101834. <https://doi.org/10.1016/j.ribaf.2022.101834>



Kulanov, A., Issakhova, A., Koshkina, O., Issakhova, P., & Karshalova, A. (2020). Venture financing and the fuel and energy complex: Investing in alternative energy. *International Journal of Energy Economics and Policy*, 10(5), 531-538. <http://dx.doi.org/10.32479/ijeep.9963>

Kuznetsova, I., Okagbue, H., Plisova, A., Noeva, E., Mikhailova, M., & Meshkova, G. (2020). The latest transition of manufacturing agricultural production as a result of a unique generation of human capital in new economic conditions. *Entrepreneurship and Sustainability Issues*, 8(1), 929-944. [http://dx.doi.org/10.9770/jesi.2020.8.1\(62\)](http://dx.doi.org/10.9770/jesi.2020.8.1(62))

Lambekova, A., Nurgalieva, A., Syzdykova, E., Zhanibekova, G., & Aff, J. (2017). Development of internal audit. *Journal of Advanced Research in Law and Economics*, 8(8), 2483-2489. [https://doi.org/10.14505//jarle.v8.8\(30\).19](https://doi.org/10.14505//jarle.v8.8(30).19)

Muyang, G., Sekerin, V., Efremov, A., Gorokhova, A., & Gayduk, V. (2023). Legal basis for the development of an industrial internet platform in the context of digital transformation. *Revista Jurídica*, 3(75), 667-678.

Nosova, S. S., Meshkov, S. A., Stroeve, P. V., Meshkova, G. V., & Boyar-Sozonovitch, A. S. (2018). Digital technologies as a new vector in the growth of innovativeness and competitiveness of industrial enterprises. *International Journal of Civil Engineering and Technology*, 9(6), 1411-1422.

Panasenko, S., Fedyunin, D., Osipova, E., Star, I., Zotova, A., & Iavdoliuk, E. (2024). Features, factors, and risks of the influence of metaverses on business development in the digital economy: Russian and international context. *Revista Relações Internacionais do Mundo Atual*, 1(43), 397-409.

Revyakina, E., Cherckesova, L., Safaryan, O., & Lyashenko, N. (2024). Improving performance, cryptographic strength of the post-quantum algorithm NTRUEncrypt and its resistance to chosen-ciphertext attacks. *Journal of Theoretical and Applied Information Technology*, 102(1), 186-194.

Shor, I., Grinenko, A., Gridneva, O., Samolysov, P., & Ledovskikh, N. (2022). Bank development in Russia under COVID-19 pandemic: Economic, legal, and organizational aspects. *Revista Relações Internacionais do Mundo Atual*, 2(35), 402-410.

Sitnik, A. A. (2023). Digital ruble as an object of financial law regulation. *Actual Problems of Russian Law*, 18(8), 20-36. <https://doi.org/10.17803/1994-1471.2023.153.8.020-036> (In Russ.)

Tobias, A., Martin, M., & Moris, O. (2018). Pro lit svet na tsifrovye valyuty tsentralnykh bankov [Shedding light on central bank digital currencies]. *Zapiski dlya obsuzhdeniya sotrudnikov*, 8, A001.

Wang, H. (2023). How to understand China's approach to central bank digital currency? *Computer Law & Security Review*, 50, 105788. <https://doi.org/10.1016/j.clsr.2022.105788>



Wang, Y., Lucey, B. M., Vigne, S. A., & Yarovaya, L. (2022). The effects of central bank digital currencies news on financial markets. *Technological Forecasting & Social Change*, 180, 121715.

Zelinskaya, A., & Takmasheva, I. (2023). Mechanisms for effective interaction between authorities and business entities in the context of the covid-19 pandemic and post-covid economy. *Revista Juridica*, 3(75), 652-666.

