ЦИФРОВАЯ ВАЛЮТА: ОПЫТ РОССИИ И КИТАЯ
DIGITAL CURRENCY: RUSSIAN AND CHINESE EXPERIENCE

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Аннотация. Стремительное развитие новых технологий, таких как большие данные, блокчейн и искусственный интеллект, вывело цифровую экономику на авансцену истории, что потребовало умения адаптироваться, идти в ногу со временем и совершенствовать правовое регулирование.

В 2023 г. в Российской Федерации были сделаны важные шаги на пути к внедрению цифрового рубля. В частности, впервые было проведено тестирование операций с цифровым рублем при участии реальных клиентов, а Государственная дума приняла ряд важных нормативных правовых актов, которые вносят поправки в действующее законодательство и регулируют введение цифрового рубля на территории России.

Однако стремительное развитие цифровой валюты происходит не только в России, многие страны озадачены разработкой и внедрением новой формы денежных средств, которая одновременно повысит прозрачность и надежность проводимых операций, а также будет способствовать повышению стабильности национальной валюты.

В данной статье рассмотрены особенности правового регулирования и проведения операций с цифровой валютой на примере опыта Российской Федерации и Китайской Народной Республики.

Ключевые слова: цифровая валюта, цифровой рубль, цифровой юань, цифровые финансовые активы, криптовалюта, налогообложение, денежное обращение, цифровая экономика


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Abstract. The rapid development of new technologies, such as big data, blockchain, and artificial intelligence, has propelled the digital economy to the forefront of history, necessitating the ability to adapt, keep up with the times, and improve legal regulations.

In 2023, the Russian Federation took significant steps towards the introduction of the digital ruble. Specifically, transactions with the digital ruble were tested for the first time with the participation of real customers, and the State Duma adopted several important legal acts that amend the current legislation and regulate the introduction of the digital ruble in Russia.

However, the swift evolution of digital currencies is not exclusive to Russia, many countries are grappling with the development and implementation of a new form of money. This form aims to simultaneously enhance the transparency and reliability of transactions while contributing to the stability of the national currency.

In this article, we propose to examine the features of legal regulation and the conduct of transactions with digital currency, using the experiences of both the Russian Federation and the People’s Republic of China as examples.
Back in 2017, the Government of the Russian Federation announced the development of proposals for the technological implementation of the issuance of a national cryptocurrency [1]. Russia’s interest in developing a digital currency at that time was driven by the desire to enhance the security of the national payment system, amid sanctions, the intention to reduce reliance on the dollar in international settlements and the effort to combat the shadow economy.

The next significant step towards the establishment of a national digital currency occurred with the release of a report for public consultations by the Central Bank of the Russian Federation in October 2020 [2]. Considering the responses received during public discussions, by spring 2021, the Central Bank had formulated the Digital Ruble Concept (hereinafter also referred to as the Concept). This document outlined the issuance model, key design elements, and the primary stages of implementing the national digital currency [3].

Both the report and the Concept stressed that the digital ruble is not a cryptocurrency, as its issuance will be centrally managed by the Bank of Russia, serving as the guarantor of settlement security.

During the same year, the Central Bank introduced the establishment of a platform for testing digital currency transactions. Testing commenced in the winter of 2022, with the participation of 12 banks. Following successful test transactions, representatives from the Central Bank announced the initiation of pilot projects in August 2023, involving the use of the digital ruble in transactions with real customers.

In conjunction with the testing of the digital ruble platform, the regulatory framework for the integration of the digital ruble into the national payment system was developed and enhanced.

Therefore, in July 2023, the President of Russia signed the Federal Law amending the Civil Code of the Russian Federation, officially recognizing the digital ruble as an object of civil rights [4]. On the same day, the Federal Law “On Amendments to Certain Legislative Acts of the Russian Federation” was enacted, granting customs authorities the authority to collect customs payments, special duties, anti-dumping and countervailing duties, interest, and penalties in digital rubles from the...
The Covid-19 coronavirus pandemic played a significant role in bolstering not only the Chinese but also the global trend towards the creation of digital currency. This trend was fueled by a substantial increase in the demand for e-commerce and e-financial services. Consequently, starting in the winter of 2019, China initiated the gradual introduction of the digital yuan (e-CNY) into the payment system of the People’s Republic of China. This endeavor was spearheaded by the National Bank of China with approval from the State Council, and involved the collaboration of major commercial banks such as the Bank of China, China Construction Bank, Industrial and Commercial Bank of China, Agricultural Bank of China, as well as leading Chinese mobile operators, including China Mobile, China Unicom, and China Telecom.

In the spring of 2020, the governor of the People’s Bank of China, Yi Gang, announced the commencement of pilot tests for the digital yuan in several Chinese cities, namely Shenzhen, Suzhou, Xiong’an, and Chengdu. In these locations, local governments distributed digital yuan through lotteries. Subsequently, the testing of digital yuan operations expanded to include Shanghai, Hainan, Changsha, Xi’an, Qingdao, and Dalian. Additionally, the Winter Olympic Stadium in Beijing, where the 2022 Olympic Games were held, joined the testing initiative. Consequently, during the Olympic Games, there were over 30 million downloads of a digital wallet to mobile phones for the purpose of paying for various tourist services, including transport, food, accommodation, etc.

In line with the Fourteenth Five-Year Plan for the Development of Informatization in China (2021-2025), the digital yuan is currently in the pilot project phase and is operational in only 11 regions of the country. Nevertheless, as reported by the People’s Bank of China, by the end of 2021, over 260 million digital wallets had already been activated, facilitating a total transaction volume of approximately 87.6 billion yuan (equivalent to around $13.8 billion). Subsequently, by 2023, this figure escalated to 1.8 trillion yuan (approximately $252 billion).

To date, the digital yuan is undergoing tests in more than 8 million retail outlets for various purposes such as retail transactions, payments at catering establishments, usage in public transport, and settling government services (e.g., utilities).

In 2020, a representative from the Bank of China expressed the viewpoint that a regulated token could potentially replace physical cash. However, the success of the digital yuan’s ascendance as the primary method of payment will hinge on factors such as the efficiency and transaction cost differentials compared to traditional methods, as well as the general perception of the digital yuan among the populace.
To enhance trust and acceptance of the digital yuan among the Chinese population, the government has opted for a gradual introduction of the digital currency. In the initial phases, the e-CNY will coexist alongside traditional forms of payment. As citizens become accustomed to this alternative form of currency, China intends to complete the transition to a cashless payment system, ultimately phasing out physical cash. The rationale behind this gradual approach is to prevent the shock and apprehension that an abrupt introduction of the digital yuan might induce, given concerns about heightened transaction transparency, which could lead to resistance among participants in the financial system [18].

The transition period and the gradual acclimatisation of the population to digital wallet transactions began in China even before the introduction of the new currency. This was evident when all payments in the country started being processed through the Alipay and WeChat payment systems. Concurrently, China phased out payment by bank cards, which are currently accepted primarily in major shopping centers and not universally across all settlements in the country. While cash payments are still feasible, they often come with inconveniences, such as the challenge of obtaining change from public transport drivers or supermarket cashiers. In essence, the Chinese populace typically conducts retail and online purchases, pays for government services and public transport, transfers funds to relatives, and purchases tickets for cultural events using their mobile phones and QR-codes.

When delving into the technological aspect of digital currency transactions, the Chinese digital yuan currently operates under a two-tier issuance and settlement model, specifically characterized as an intermediary digital currency system [10, 19]. At the upper tier of this model, the People’s Bank of China assumes the role of issuing digital rubles, conducts transactions on the digital ruble platform, and opens digital wallets for financial institutions and the Federal Treasury. These entities, in turn, attract customers and provide payment services. While this model enhances the Central Bank’s control over monetary transactions, it concurrently raises technological risks, given that the Central Bank’s platform is used not only for emission but also for transactions involving the digital ruble [12].

Despite all before mentioned risks, a digital currency-based payment system offers a significantly heightened level of security and lower transaction costs compared to existing models. Unlike the Chinese model, the Russian digital ruble platform does not support payment anonymity. Personal payer data and transfer details remain confidential and encrypted from external users and third parties. However, authorised bodies and financial organisations have access to this information, actively monitoring transactions and implementing procedures to combat money laundering and terrorist financing.

In essence, the adoption of digital currency facilitates increased transparency and transaction control. Transactions are exclusively feasible on the digital ruble platform, ensuring the confidentiality of personal data while enhancing their protection. Concerning data security, it is crucial to highlight that access to the digital ruble platform is safeguarded through cryptographic encryption, accessible only with access keys certified by the Federal Security Service.

Although, the incorporation of advanced technologies and the restructuring of the interaction framework between authorised bodies and financial organisations, the new payment system not only avoids an increase in the cost of monetary settlements but also lowers transaction costs. For instance, the utilisation of digital currency in international settlements will streamline the circulation period and decrease overall costs associated with servicing cross-border payments. Additionally, the integration of a smart-contract payments. Additionally, the integration of a smart-contract system will ensure the complete automation of settlements between the customer/
Moreover, it appears that the cost can be influenced by adjusting of transaction rates with the digital ruble, either increasing or decreasing. In our view, this mechanism can be implemented in Russia similarly to the People's Bank of China, which does not impose charges on financial institutions for organising the circulation of digital yuan. In turn, financial institutions do not apply any commission for transactions using digital yuan.

To allow Russian users and the financial sector sufficient time to adapt to the introduction of a new payment instrument, the Bank of Russia, following the approach of the People’s Bank of China, plans to implement the digital ruble gradually and in a controlled manner. This approach aims to minimise the outflow of liquidity resulting from the transition to digital money. According to the mega-regulator and numerous scholars, the effective use of limit mechanisms, such as imposing time restrictions on transaction amounts, along with an increase in mandatory insurance of bank deposits or adjustments in interest rates, can mitigate most risks associated with the transition.

Despite the differing emission models and legal regulations for digital currency in Russia and China, both countries encounter similar challenges and tasks necessitating legislative revisions. One pressing issue requiring further examination is the definition of central bank digital currency — is it a cryptocurrency, a form of physical cash/non-cash money, or a novel means of payment?

For instance, the Chinese government positions the digital yuan as a digital version of fiat currency issued by the People’s Bank of China, managed by an authorised operator, and holding the status of legal tender. Despite its hybrid nature, based on a set of technologies, the People’s Bank of China often characterises the digital yuan as an electronic form of cash without categorising it as an independent form of money [10].

Furthermore, the absence of a unified approach to the nature of the digital yuan results in a lack of alignment with certain branches of legislation. This discrepancy is particularly evident in criminal law, where challenges arise due to the emergence of fake digital wallets in the Chinese market despite the relatively short period of pilot project implementation, necessitating appropriate responsibility for the creation of such fake wallets [21].

However, within the realm of criminal law, current interpretations of the digital yuan hinder its classification as a currency. This complicates the prosecution under “currency” articles for counterfeiting digital yuan. The challenge lies in the fact that one crucial criterion for determining elements of crimes involves assessing the degree of processing of genuine banknotes and the loss of monetary homogeneity. For instance, in the case of physical cash, distinguishing counterfeit from genuine currency involves a simple physical comparison. In contrast, with digital currencies, the evaluation requires determining whether the source code of the authentic token is preserved within the counterfeit digital yuan — a task that often proves to be highly challenging [22].

Additionally, the definition of national currency inherently implies legal tender status across the entire country. However, the digital yuan, at present, is only accepted for payment in specific pilot regions, complicating its equivalence with existing forms of money [22].

Furthermore, doctrinal debates persist regarding the classification of digital yuan fraud. There is ongoing disagreement on whether it should be categorised as unauthorised access to the People’s Bank of China system or to the system of a commercial bank affiliated with the platform [23], as well as whether it involves the forgery of a part of the digital code or the entire code [24].

Collectively, these issues underscore the imperative to refine and specify the legal framework governing transactions involving the digital yuan. Similar challenges stemming from insufficient legal regulation of digital currency are evident in Russian legislation.

Specifically, there appears to be ambiguity surrounding the interpretation of the term “digital ruble.” Articles 128 and 140 of the Civil Code of the Russian Federation employ language such as “non-cash money, including digital rubles,” and “non-cash payments, including payments in digital rubles.” These phrases suggest that the digital ruble is construed as a subtype of non-cash money.

Simultaneously, as per the current version of the Federal Law “On Digital Financial Assets, Digital Currency, and on Amendments to Certain Legislative Acts of the Russian Federation” [25] and considering the amendments set to take effect in 2024, “digital currency is a set of electronic data (digital code or designation) [...], which is offered and (or) can be accepted as a means of payment, and is not the currency of the Russian Federation”.

Furthermore, aligning with the Digital Ruble Concept developed by the Central Bank [3], and the current information available on the Bank of Russia's website, the digital ruble is positioned as the third form of money, coexisting alongside physical cash and non-cash options [26]. This perspective is echoed in the doctrinal view that the digital ruble represents “a new form of fiat money” [12].

Determination of the precise nature of the digital ruble and the legislative consolidation of its definition hold significance for future legislative endeavors, especially when amending existing legislation. For instance, if the digital ruble is considered a subtype of non-cash money, extensive and cumbersome modifications to various
branches of legislation, including tax, customs, and civil laws, may be avoided. This is because referencing a non-cash form of money would inherently encompass transactions involving digital rubles.

However, if the introduction of the digital ruble constitutes the introduction of a new form of currency into circulation, then amendments to the existing legislation become imperative. Furthermore, if the digital ruble shares common features with non-cash funds but is fundamentally different, the current wording of Articles 128 and 140 of the Civil Code may lack precision and thus warrant modification.

Various scholars and international organizations present diverse approaches to understanding central bank-issued digital currencies. At the Official Monetary and Financial Institutions Forum a digital currency was defined as an asset issued by a central bank for facilitating payments and settlements in both retail and wholesale transactions. Within this context, “retail” digital currency signifies a digital representation of cash usable in settlements between individuals and organizations, while “wholesale” digital currencies are exclusive to authorized participants for conducting interbank transactions [27].

Professor Ulrich Bindsiel from the European Central Bank characterizes digital currency in his work as electronically circulating money accessible to a broad range of users [28].

According to an approach outlined by the Bank for International Settlements in 2018, a digital currency is defined as a novel form of central bank currency that distinguishes itself from the required reserves and settlement balances held by commercial banks at the central bank [30]. Subsequent revisions refined the definition to “a digital payment instrument denominated in a national unit of account, which is a direct obligation of the central bank” [31]. A parallel definition is found in the work of Codruta Boar & Andreas Wehrli, where they describe digital means of payment as “digital money issued by a central bank, denominated in a national unit of account, in the form of a central bank obligation” [32].

Russian experts in the field also present varying opinions. Some researchers suggest interpreting electronic money as “a type of non-cash money, which, from a legal perspective, constitutes rights or obligations (claims)” [33]. Simultaneously, another perspective posits that digital currency represents a novel form of fiat money, functioning as an electronic obligation of the central bank, denominated in the national unit of account, and serving as a medium of payment and savings [12].

We endorse this perspective and assert that digital currency should not be likened to any existing forms of money. It possesses distinctive features that categorise it as a unique, innovative type of means of payment, notwithstanding common attributes that make digital currency settlements akin to both cash and non-cash payments.

Digital currency encompasses all the functions and attributes inherent in money — it serves as a means of payment, a measure of value, a medium of circulation, and a store of value. Analogous to established forms of money, digital money constitutes a commitment from the central bank to anyone holding a digital wallet.

Nevertheless, this novel form of money diverges significantly from existing ones. It amalgamates features of both physical cash and non-cash money: on the one hand, it is universally applicable throughout the country, and transactions are feasible without internet access, akin to cash. On the other hand, transactions using this new form of money are possible remotely, utilizing a mobile device or terminal, thereby aligning more closely with non-cash transactions.

At the same time, unlike non-cash funds, which are an entry in the owner’s bank account, digital currency is a unique digital code (token).

However, we consider it necessary to note that despite the use of distributed ledger technology, which is similar to the technologies used in the creation of cryptocurrencies, central bank digital currencies differ from stablecoins due to the embodiment in digital currency of a monetary obligation of the issuing central bank, which is not contained in any of the cryptocurrencies [34].

Considering the aforementioned arguments, we believe it is more pragmatic to shape domestic legislation on digital currency in alignment with the direction advocated by the Central Bank, specifically, by regulating the digital ruble as a novel, distinct form of money.

In light of this, we recommend amending the existing legislation and revising Articles 128 and 140 of the Civil Code as follows:

**ARTICLE 128. OBJECTS OF CIVIL RIGHTS**

To the objects of civil rights are referred items (including cash money and certificated securities), as well as the other property, inter alia property rights (including non-cash money, digital currency, non-certificated securities, digital rights); deliverables of work and services; protected results of intellectual activity and the means for individualisation that are equated to them (the intellectual property); intangible benefits.

In Russian: **Статья 128. Объекты гражданских прав**

К объектам гражданских прав относятся вещи (включая наличные деньги и документарные ценные бумаги), иное имущество, в том числе имущественные права (включая безналичные денежные средства, цифровые рубли, бездокументарные ценные бумаги, цифровые...**
The ruble shall be the legal means of payment, which shall be accepted by its face value on the entire territory of the Russian Federation.

The payments on the territory of the Russian Federation shall be effected both in physical cash, non-cashless money and digital currency.

In Russian: Пункт 1 статьи 140. Деньги (валюта) Рубль является законным платежным средством, обязательным к приему по нарядчительной стоимости на всей территории Российской Федерации.

Платежи на территории Российской Федерации осуществляются путем наличных и безналичных расчетов, а также расчетов цифровыми рублями.

In conclusion, it is noteworthy that the development and issuance of a national digital currency remain a pertinent topic for numerous countries worldwide. Despite the steps made by Russia in 2023 towards implementing the digital ruble, aspects such as its place in the financial landscape, legal regulation, functional characteristics, and payment mechanisms still require further refinement.

To achieve this objective, we advocate considering international experiences in digital currency adoption with China emerging as a notable partner. China has been at the forefront, initiating research and pilot projects in the realm of digital payment instruments. After extensive scientific development, China successfully tested the digital yuan across a huge territory, encompassing ethnic, cultural, and economic diversity within the population.

These contextual conditions are also characteristic of Russia, thus rendering cooperation in the introduction of national central bank currencies particularly promising amid the growing political and economic ties between Russia and China.

In light of this, we have conducted an analysis of the current legal regulations pertaining to digital currency in both the Russian Federation and the People’s Republic of China. Building upon this analysis, our paper formulates proposals for amending domestic legislation in this evolving field.

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