THE ECOSYSTEM OF CRYPTOCURRENCY AS AN OBJECT OF CIVIL RIGHTS IN BRICS COUNTRIES

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https://doi.org/10.21684/2412-2343-2020-7-2-37-65

The article presents a comparative legal analysis of the modern legal regulation of the multidimensionality of digital electronic currency in BRICS countries. It assesses the possibility of civil circulation of a digital property right as an economic and legal segment without clear legal regulation. It analyzes the judicial practice related to confidentiality, acquisition, and trading of virtual currency. The article justifies the ability to integrate a single digital currency – CRYPTOBRICS, a single equivalent for all payments in the form of cryptocurrency within the framework of BRICS for settlements and increase in the trade exchange volume on these international platforms. This will provide for the legalization and consolidation of the legal framework of cryptocurrency within the context of objects of civil rights, allowing BRICS members to become regulatory leaders in the field of digital assets. We formulated a proposal to create an international agreement defining the parameters of the digital currency issue based on blockchain technology for interstate transactions, which allows the BRICS counties to establish the next stage of their mutual integration for the free trade zone and the customs union. Unifying the civil circulation of cryptocurrency and using the platform of modern non-monetary digital circulation as our foundation, we concluded that BTC can be classified as a type of digital property right. The article justified the theoretical definition of digital property right in the form of cryptocurrency as a resource stored in a device or electronic system which allows the end user to complete transactions using virtual currency and denominated in another payment unit, as opposed to currencies issued by sovereign states. We suggested that insurance companies be insured against all possible risks associated with cryptocurrency circulation and cybersecurity as a civil measure to protect the order of intangible digital codes – cryptocurrencies.

Keywords: cryptocurrency; bitcoin; blockchain; digital currency; digital right; object of civil law; BRICS; digital law; digitalization of law; law digital environments.

Recommended citation: Natalya Dulatova & Abd Hakim Abd Razak, *The Ecosystem of Cryptocurrency as an Object of Civil Rights in BRICS Countries*, 7(2) BRICS Law Journal 37–65 (2020).

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Introduction

Today, there is a need to assess the heightened interest of investors in this unconventional financial instrument, as well as to minimize legal risks in the cryptography ecosystem and the scalable blockchain infrastructure. The revolution in the field of electronic payments and digital economy has already taken place, but there is not yet sufficient understanding of this phenomenon. Whether this phenomenon will continue to exist, whether it will crash, or cryptocurrency will become part of our lives – all these issues are being debated by leading world powers trying to outline the legal framework of virtual currency.

When an author under the pseudonym Satoshi Nakamoto published the paper "Bitcoin: A Peer-to-Peer Electronic Cash System" in 2008, the first cryptocurrency using the new blockchain technology was introduced.

The principle forming the basis of Bitcoin can be formulated in one short sentence:

We consider an electronic coin as a chain of *electronic signatures*.

Michel Zade et al., Is Bitcoin the Only Problem? A Scenario Model for the Power Demand of Blockchains, Frontiers in Energy Research, 13 March 2019 (Mar. 30, 2020), available at https://www.frontiersin.org/ articles/10.3389/fenrg.2019.00021/full.

This principle was formulated even more succinctly by W. Luther and J. Olson in their article "Bitcoin is Memory." Today, foreign analysts are exploring the idea of digital currency with a positive bias:

We assess the effectiveness of using a cryptocurrency system to support block and retail sales. Using summary data for debit cards, we confirm that cryptocurrencies are a much better alternative for low-cost and high-volume transactions.³

While cryptocurrencies are not likely to replace traditional fiat currency, they could change the way Internet-connected global markets interact with each other, clearing away barriers surrounding normative national currencies and exchange rates ... Cryptocurrencies may revolutionize digital trade markets by creating a free flowing trading system without fees.⁴

Russian researchers characterize cryptocurrency as follows:

Cryptocurrency, then, means money that is made hidden and private – and therefore secure – by means of encryption, or coding.⁵

Bitcoin in the most general form is a certain set of consecutive records on an electronic carrier which reflect the information on the transactions conducted through its use by senders and recipients.⁶

This is a special type of an electronic asset representing encoded information, which is issued, accounted, and functioning in a decentralized manner based on cryptographic information protection methods and blockchain technology.⁷

² William J. Luther & Josiah Olson, *Bitcoin is Memory*, 3(3) Journal of Prices & Markets 22 (2015).

Jonathan Chiu & Thorsten V. Koeppl, The Economics of Cryptocurrencies – Bitcoin and Beyond, at 3 (Mar. 30, 2020), available at https://www.bis.org/events/eopix_1810/chiu_paper.pdf.

⁴ Peter D. DeVries, An Analysis of Cryptocurrency, Bitcoin, and the Future, 1(2) International Journal of Business Management and Commerce 1, 1 (2016).

Marina Chudinovskikh & Victor Sevryugin, Cryptocurrency Regulation in the BRICS Countries and the Eurasian Economic Union, 6(1) BRICS Law Journal 63, 65 (2019).

⁶ *Кучеров И.И.* Криптовалюта как правовая категория // Финансовое право. 2018. № 5. С. 6–7 [Ilya I. Kucherov, *Cryptocurrency as a Legal Category*, 6 Financial Law 3, 6–7 (2018)].

⁷ Бердышев А.В. Будущее рынка криптовалют // Вестник Университета. Экономика и экономические науки. 2018. № 12. С. 119 [Alexander V. Berdyshev, *The Future of the Cryptocurrency Market*, University Bulletin. Economics and Economic Sciences 119, 119 (2018)].

Every layperson begins their general acquaintance with cryptocurrency with understanding the electronic currency system and blockchain technology. In forming our own financial literacy, let us define that blockchain as a chain of blocks for distributing a database in which information storage devices are not connected to a multi-unit server. Such databases contain an ever-growing list of records (blocks), i.e. the records are stored by each participant in the system (just as we might sequentially record the events of our day in a notebook). At the same time, each participant in the system can track the transactions of this system. However, they do not see the information recipient and sender, since every object is encrypted, ensuring confidentiality.

Bitcoin provides to users security without identification.8

Any attempt to make changes to the blockchain is impossible because the information is rejected if the previous record does not match. A special key is needed for such changes. We believe that the use of blockchain technologies reflects the promising aspects of evolution in the field of the technologies needed to solve a vast number of global problems. Countries that are ready to use this technology can achieve impressive innovative success. Blockchain technology can be used to stimulate the development of cryptocurrency markets, helping to revive or create competitive economic zones.

Technical Director of Izetex PTE Ltd., expert of the National Committee on BRICS Research Alexey Studnev made a meaningful and well-balanced statement:

BRICS, like the blockchain, has a decentralized nature. For this reason, BRICS projects can easily use the blockchain and benefit from its properties in the very near future. Projects of the BRICS members can receive the following benefits from implementing the blockchain in their processes: 1) effective economic interaction, fast, open, boundless, without intermediaries; 2) financial instruments and services to directly support projects which meet the companies' needs and do not depend on external factors; 3) the possibility to expand the labor market and joint activities for companies and their employees, breaking down the barriers of countries, currencies and continents; 4) outside protection of copyrights and intellectual property for individuals and companies.°

Notably, at the 10th BRICS summit held in 2018 in Johannesburg, the banks of China (CDB), Russia (Vnesheconombank), Brazil (BNDES), India (EximBank), and

Mario Lukinović, Cryptocurrency, Blockchain, and Bitcoin, 7(1) FBIM Transactions 85, 85 (2019).

⁹ Студнев А. Блокчейн – эффективный механизм стимулирования экономического сотрудничества в странах БРИКС // BRICS information portal. 5 декабря 2017 г. [Alexey Studnev, Blockchain – an Effective Mechanism to Stimulate the Economic Cooperation in the BRICS Countries, BRICS information portal, 5 December 2017] (Mar. 30, 2020), available at http://infobrics.org/post/26102.

South Africa (South Africa Development Bank) signed an agreement to cooperate on developing the digital economy and blockchain research. It is likely that such an agreement will significantly expands the cooperation between the BRICS countries in the use of innovative technologies and the optimization of digital products.

Today, each of the five countries is trying to adapt independently in the developing Internet economy. For example, a Brazilian bank tokenized the Real on the Ethereum blockchain to make grants transparent when studying digital currency. Russian bank Vnesheconombank signed a cooperation agreement with Ethereum Russia. The Ministry of Foreign Affairs of China stated that Ethereum programming language, Solidity, is dominant in their country. The interest in blockchain technologies is certainly growing in all the countries, but the developing cooperation between the BRICS countries will allow the banks of these countries to unite scientific and practical research in the field of economics and legal relations.

Despite the fact that in Russia, alongside other BRICS countries, there is legal uncertainty on the legal status of cryptocurrency, over-the-counter investments in bitcoins and other cryptocurrencies are growing. Any capital invested in such a market is not technically prohibited by law. However, it remains unclear whether companies are allowed to use the cryptocurrency platform. In China, it is difficult for the government to prohibit completely the purchase and sale of cryptocurrency due to the presence of offshore markets offering services to investors. Financial analysts suggest that the activity of investors in India, China, and Russia will grow in the coming years, regardless of the policies in these countries.

The absence of a statutory definition of this phenomenon, unsettled business conduct and, accordingly, poor judicial practice indicate the difficulty of understanding the legal framework of electronic digital media. Therefore, today, there is a problem of legalizing cryptocurrency as an object of civil rights and searching for a universal way to settle civil disputes related to the circulation of such currency.

1. Cryptocurrencies in the Civil Law of the BRICS Countries

1.1. India

The official position of the government of India is as follows: the Department of Economic Affairs (DEA), the Central Board of Direct Taxes, the Central Board of Indirect Taxes and Customs, the Administration of the Investor Education and Protection Fund all support a complete ban on the issue and sale of cryptocurrencies.¹⁰

In 2019, the Committee of the Government of India prepared the Banning of Cryptocurrency and Regulation of the Official Digital Currency Bill, which proposes

¹⁰ Миллер В. Правительство Индии вновь обсуждает запрет на криптовалюты // BitJournal. 26 апреля 2019 г. [Vladimir Miller, Indian Government Reopens Cryptocurrency Ban, BitJournal, 26 April 2019] (Mar. 30, 2020), available at https://bitjournal.media/26-04-2019/pravitelstvo-indii-vnov-obsuzhdaet-zapret-na-kriptovaljuty/.

a 10-year prison sentence for persons who "mine, generate, hold, sell, transfer, dispose, issue, or deal in cryptocurrencies." Thus, cryptography falls under a complete ban. Despite every object, the bill gives the following definition:

A cryptocurrency is a digital or virtual currency that uses cryptography for security and is generally based on blockchain technology, a distributed ledger enforced by a disparate network of computers.

Analyzing this bill of the Government Committee, we can reduce its main theses to the following:

- Cryptocurrencies were created non-sovereignly and, in this sense, they are completely an initiative of private enterprises;
- The Committee believes that private cryptocurrencies should not be permitted. These cryptocurrencies cannot serve the purpose of a currency. Private cryptocurrencies are incompatible with the basic functions of money/currency, therefore, private cryptocurrencies cannot replace optional currencies;
- A review of the best global practices also shows that no jurisdiction has recognized private cryptocurrencies as a legal currency;
- The Committee recommends banning all cryptocurrencies in India, except for any state-issued cryptocurrency;
- The Committee approves the position taken by the Reserve Bank of India (RBI) to eliminate the interface of RBI regulated institutions with cryptocurrencies. It also recommends banning dealing in cryptocurrencies for all exchanges, individuals, traders and other financial system participants;
- Accordingly, the committee recommended a law prohibiting cryptocurrencies in India and criminalizing any cryptocurrency-related activities in India;
- The committee also recommends the government establish a standing committee to take into account global and national technological advances, as well as opinions of global standardization authorities to re-examine the issues addressed in the report, as necessary;
- The committee believes it would be expedient to consider the issue of introducing an official digital currency in India with an unbiased eye.

These concerns are understandable. Despite repeated warnings of the National Central Bank, people in India continue to fall victim to cryptocurrency fraud. According to recent reports, the Anti-Terror Subdivision (ATS) of Rajasthan police discovered fraud with bitcoins in the amount of 150 million Rupees (2 million USD).

Given the high chances of using cryptocurrencies for currency laundering, various governmental authorities, such as the Income Tax Department and the Central Board of Indirect Taxes and Customs (CBIC), fully approved the cryptocurrency ban. The cryptocurrency ban draft was developed for some time under the auspices of Minister of Economy Subhash Chandra Garg.

To this end, Indian scientists note that

Bitcoin is a progressive computerized cash idea and an installment framework ... One can utilize this innovation for some exchanges in gadgets like telephone, tablets, PCs et cetera. Other than being a novel thought, Bitcoin likewise has financial advantages. Utilization of Bitcoins is less expensive contrasted with charge card expenses. The wallet programming is a shared system programming program which stores private keys.¹¹

Studying mobile technologies in India, researchers write that

Digital currency and mobile technology can cater the needs of small transaction at affordable cost. It can also help reducing time, more accurately and make faster transactions in bulk. Many emerging economies like India, Brazil, and Nigeria have embarked on mobile technology to overcome financial exclusion.¹²

However, the Supreme Court of India warns the government and the RBI to study out the code of normative instruments on crypto regulation. To support cryptocurrency, the economic community of India mentions a clause, according to which citizens of India can "be engaged in any profession or any trade and business." The RBI prohibited financial institutions from offering cryptocurrency purchase services to buy cryptocurrencies. The RBI's aggressive approach to maintaining the cryptocurrency ban began when the Indian Securities and Exchange Board sent its officials to Japan, Great Britain, and Switzerland to study the legal framework concerning the exchange and trade of cryptocurrencies.

In April 2019, the Central Bank provided a list of innovative products, services, and technologies to be considered for testing. In addition to currency transfer services, digital KYC, digital identification services, artificial intelligence, and machine learning applications, this list includes smart contracts and "blockchain technology-based applications." The Central Bank of India proposed an "Approximate Negative List" of products, services, and technologies which "may not be accepted for testing." This list included cryptocurrency, cryptoasset services, as well as settlements in cryptoassets. Thus, legal regulation of digital currencies is frozen, all the regulated entities shall not deal with cryptocurrency or provide services to any individual or company dealing with cryptocurrency.

Choudhari P. Sukhbir & S.S. Manivannan, Crypto Currencies for Digital Currency Using Cipher Text and SHA256, 13 Journal of Advanced Research in Dynamical and Control Systems 530, 530 (2017).

Vrajlal K. Sapovadia, Financial Inclusion, Digital Currency, and Mobile Technology in Handbook of Block-chain, Digital Finance, and Inclusion. Vol. 2: ChinaTech, Mobile Security, and Distributed Ledger 361, 361 (D.L.K. Chuen & R.H. Deng (eds.), London: Academic Press, 2017).

Kevin Helms, RBI Excludes Cryptocurrency from Indian Regulatory Sandbox, Bitcoin News, 19 April 2019 (Mar. 30, 2020), available at https://news.bitcoin.com/rbi-cryptocurrency-indian-regulatory-sandbox.

After the scandalous report of the Committee of the Government of India was published, many crypto traders and exchange founders firmly held to the opinion that if the Banning of Cryptocurrency and Regulation of the Official Digital Currency Bill 2019 comes into force, the state economy will suffer certain losses. Most agree that such a law will be challenged in court, since it infringes the basic human right to trade. Thus, a lawyer of the Supreme Court and the Bombay High Court said:

The right to be engaged in any profession or business is subject to reasonable restrictions provided for in Article 19(6) of the Basic Law.

The lawyer added that

the government clearly considers cryptocurrency as a payment system, but it is not and should not be considered as such. Cryptocurrency is neither a legal tender nor, in the absence of a regulatory mandate, a payment system. In the ideal case, it could be considered as a commodity, and if so, it would be open to trade and could be regulated. Instead, the government responded, as always, in a knee-jerk way and tried to ban the digital asset.

Indian scientists are also trying to explore the idea of disputable financial mechanisms from the perspective of objects of civil rights:

There are two views among the scholars; first view is Bitcoin could be considered as currency and if it so then it does not qualify for definition of goods ... Second view is Bitcoin could consider as service (trading in financial services and exchange).¹⁴

Bitcoin is one of the most innovative financial instruments of our time, which does not only bring financial transactions to a new level of virtual reality, but also opens up vast opportunities for financial integration. Such virtual currencies demonstrated a high transaction simplicity at minimal costs and large transparency. However, due to the very nature of virtual transactions, it is very difficult for a financial regulatory authority to monitor and control such mechanisms. In India, Bitcoin is in its infancy. The RBI and SEBI are very cautious about Bitcoin. Today, there is no legal framework to define Bitcoin as an object of rights.¹⁵

Rahul J. Nikam, Model Draft Regulation on Cryptocurrency in India, 4(2) Hasanuddin Law Review 146, 155 (2018).

Kishore Bhattacharjee & Rekha Tiwary, Bitcoin: A Bit too Far (Mar. 30, 2020), available at https://www.researchgate.net/publication/333731444_Bitcoin_A_Bit_too_Far_in_Indian.

It is clear that until a final decision is made, the country's crypto industry is in limbo. Let us emphasize once again that currently (as of August 2019), the Indian government is discussing the cryptocurrency bill. They plan to entitle it the "Banning of Cryptocurrency and Regulation of the Official Digital Currency Bill 2019." The bill suggests that the government allow for the creation of a digital rupee as legal tender and currency, defining a digital rupee as "a form of currency issued by the digital reserve bank and approved by the central government as a legal tender." The bill states that

the central government, in consultation with the Central Board of the Reserve Bank, may approve digital rupee to be legal tender with effect from such date and to such extent as may be specified.

All this suggests that the government wishes to introduce an Indian-owned digital currency.

1.2. Brazil

The official position of the Brazilian government is as follows: according to a statement published in Banco Central do Brasil, the government does not see a risk to the financial system of Brazil, but it is wary of using cryptocurrencies. The Central Bank opposes the use of cryptocurrencies, emphasizing that they can become a channel for currency laundering and terrorism and violate foreign exchange regulations.

Bitcoin and other cryptocurrencies are not a legal currency under the Law of Brazil, but the Brazilian Civil Code defined digital currency as "a resource stored in a device or an electronic system." Many Brazilian analysts believe that this definition does not reflect the essence of cryptocurrency, as it covers digital currency as ordinary assets. Being a movable asset means that transactions can be made without any restrictions – except for the obligation to pay taxes and declare your property to the Brazilian IRS.

E. Bizyukova, expert from the All-Russian Academy of Foreign Trade of the RF Ministry of Economic Development and intern at the National Committee on BRICS Research, notes in her research:

Brazil had long-term problems with bureaucracy and standards-compliant activities even in traditional financial markets, which led to a prolonged economic crisis, which has started to decline only recently. Treasury bonds in Brazil used to be one of the most popular and profitable investments. However, due to the drop in prices, people began to look for new investment methods. According to statistics, currently, in Brazil there are already two more bitcoin investors than in other markets. In January, it became known that about 1.5 million crypto traders operate in the country, while a little more

than 600 thousand people are registered on the standard Brasil, Bolsa, Balcão exchange. Moreover, new users of local cryptocurrency trading platforms are appearing, which affects the growth of the Bitcoin exchange rate. ¹⁶

Brazilian scientists defending digital assets note that financial crises, the appearance of social problems in developing countries and the increased access to digital devices encouraged a growing number of communities across the world to develop digital currency projects.¹⁷

At the beginning of 2018, the Securities and Exchange Commission of Brazil (CVM) announced that digital currency cannot be considered a financial asset, and therefore, direct investments are not allowed. Earlier, President of the Central Bank llan Goldfine noted:

Bitcoin is an unsupported financial asset that people buy because they think that it will be valued. This is a typical bubble or pyramid ... The central bank is not interested in bubbles or illegal payments.

However, already on 30 May 2019, the President of the Chamber of Brazil appealed to appoint a special commission which would regulate the circulation and issue of cryptocurrencies in the country. In addition, in June 2019, Brazil hosted a meeting of representatives of various departments which discussed blockchain technology and the ways it could help the state government.

Within the framework this study, we are interested in the judicial practice of the southeastern city of Brazil, Sao Paulo, concerning the use of cryptocurrency. According to local news publisher Portal do Bitcoin, judge Renata Barros Souto Maior Bairo delivered a judgment in favor of a cryptocurrency exchange after Banco Santander took "insulting" actions, since it associated Mercado Bitcoin funds with "fraudulent transactions carried out by third parties." Thus, the court found that Banco Santander should unfreeze the account of Mercado Bitcoin local cryptocurrency exchange, which had over 1.35 million reais (350,000 USD). The court judgment established that "the absence of regulatory instruments does not turn [any object] into criminal activity." As a result, Santander was forced to unfreeze 350,000 USD of the exchange with the "interest rate of 1% per month." In this case, the court explained that the absence of clear regulations regarding cryptocurrencies and business in this industry does not mean that it is illegal activity. The court

¹⁶ Бизюкова Е. Криптовалюта завоевывает Бразилию // НКИ БРИКС, Россия. 28 марта 2018 г. [Catherine Bizyukova, *Cryptocurrency Conquers Brazil*, National Committee on BRICS Research, 28 March 2018] (Mar. 30, 2020), available at http://nkibrics.ru/posts/show/5abaa19c62726942a4170000.

Eduardo H. Diniz et al., Social Cryptocurrencies: Social Finance Organizations at the New Era of Digital Community Currencies (Mar. 30, 2020), available at https://bibliotecadigital.fgv.br/dspace/bitstream/ handle/10438/27742/Socialcrypto%20-%20EGOS%20-%20final.pdf.

added that the exchange, acting in good faith, is not responsible for the actions of its users.¹⁸

The following judicial practice is also of interest: as reported by Cointelegraph Brazil, on 17 June 2019, an appeal by large Spanish Santander Bank against the judgment of Sro Paulo State Court was denied in the Mercado Bitcoin cryptocurrency case. Santander filed a claim to the Brazilian Mercado Bitcoin exchange in 2018, after the bank had allegedly closed the exchange account at its discretion. The bank, having branches in Latin America, expressed concern about the origin of funds in the account due to the nature of crypto-exchange transactions. Over 1 million reais (about 350,000 dollars) were blocked, but the court subsequently ordered Santander to release the funds. In addition, the bank is obliged pay a monthly fine of 1% for the blocked funds; which reportedly amounts to over 200,000 reais (51,000 USD). The newer decision rejected an additional appeal and affirmed the previous decision, which forces Santander to return the funds and pay the fine. Cryptocurrency exchanges previously faced problems with banks closing their accounts, since some financial institutions believe that the cryptocurrency industry is too unregulated and/or unstable to do business with companies.

Many analysts note that Brazil is a hive of cryptocurrency in Latin America. Over the last two years, the number of people trading bitcoins and other cryptocurrencies increased by 100,000 times, to a total of 1.4 million dollars. In January 2019, the Securities and Exchange Commission of Brazil prohibited local investment funds from buying digital coins, since "cryptocurrencies cannot be qualified as financial assets." However, the Commission immediately made a U-turn allowing for the possibility that Brazilians may buy cryptocurrency related to investment funds. Even national politicians talk about bitcoins; a candidate in the recent presidential election campaigned for the official legalization of bitcoins.

Therefore, it can be noted that today, the initial refusal of the Brazilian government from the cryptocurrency market is in motion, from a complete denial of this phenomenon by the bodies in power to the possibility of introducing blockchain technology and the development of the crypto industry in Brazil.

1.3. China

Until recently, the Chinese government has maintained the following position: the Central Bank established full control over cryptocurrencies, while the conditions "ripened" to cover these technologies by a transfer to a digital system and payment efficiency. At the same time, there is still no official date for the introduction of digital currencies; there is a struggle with mining and illegal trading of cryptocurrencies.

¹⁸ Бразильская биржа Mercado Bitcoin выиграла судебный процесс против Banco Santander // The Blockchain Journal. 12 марта 2019 г. [Brazilian Mercado Bitcoin Won a Lawsuit Against Banco Santander, The Blockchain Journal, 12 March 2019] (Mar. 30, 2020), available at https://thebcj.ru/2019/03/12/brazilskaya-birzha-mercado-bitcoin-vyigrala-sudebnyj-process-protiv-banco-santander/.

In 2017, Chinese Minister of Foreign Affairs Wang Yi proposed "BRICS+," a concept aimed at strengthening dialogue and cooperation between BRICS countries and other emerging markets and developing countries to promote the expansion of partnerships and support the joint development and prosperity on a larger scale.

In the same year, seven governmental institutions in China, namely: the People's Bank of China (PBC), Central Leading Group for Cybersecurity and Informatization of the Communist Party of China, Ministry of Industry and Information Technologies, State Administration for Industry, China Banking Regulatory Commission, China Safety Regulatory Commission and China Insurance Regulatory Commission jointly issued an announcement to prevent the risks of token offering and financing. This announcement prohibits all ICOs in China and requires any companies or individuals, which have previously passed ICOs, to take measures, including the return of marker assets to investors, to protect their rights. The announcement also described the process of how the fundraisers gave out digital tokens to investors, making financial contributions in the form of cryptocurrencies such as bitcoins.

The announcement noted:

By nature, it is an unauthorized and illegal public financing activity, which involves financial crimes such as the illegal distribution of financial tokens, the illegal issuance of securities and illegal fundraising, financial fraud, and pyramid scheme.

Among the crimes mentioned in the announcement, illegal fundraising, which usually means fundraising without any government approval, is a crime widely used to suppress undesirable financial activity, since the scale of the crime can be interpreted rather widely. Within several months after the announcement, most cryptocurrency exchanges closed their platforms in China, but continued their exchange business through platforms registered in foreign jurisdictions, which seemed more favorable for the exchange business than China. They adjusted their business models. To avoid direct confrontation with Chinese monetary authorities, some exchanges no longer provided exchange services between flat currency and cryptocurrencies. Some of them decided to supplement their platforms with a new token (such as USDT, QC, etc.), the cost of which is equivalent to the value of flat currency as an intermediary between flat currency and cryptocurrency. Investors can use the specified currency to buy this new token, and then use this new token to buy cryptocurrency. In addition, individual exchanges have launched peer-topeer trading platforms supporting direct transactions between investors without

George D. Toloraya et al., BRICS Current and Future Role in Maintaining International Peace and Security in Realizing the BRICS Long-Term Goals: Road-Maps and Pathways – A Proposal by the BRICS Think Tanks Council, at 68 (Mar. 30, 2020), available at https://www.orfonline.org/wp-content/uploads/2017/08/ Brics.pdf.

any exchange as a CCP. On these platforms, one investor can buy cryptocurrency from another investor and pay with Alipay or WeChat bank transfers to the seller. However, these modified business models are not entirely safe from the standpoint of Chinese criminal law. Although major exchanges moved overseas, they can still be held criminally liable in China. If an exchange is founded or managed by citizens of China, or they make decisions in China to manage a foreign exchange, or if investors are located in China, and if an exchange exercises prohibited functions, the Chinese agencies of justice will still have jurisdiction over these citizens.

To further prevent Chinese investors from buying and selling cryptocurrencies on foreign exchanges, China blocked Internet access to the sites of some foreign exchanges. According to Chinese law, no one should use the Internet to view information which violates Chinese laws and regulations. In March 2019, the People's Bank referred to the lack of reliability of cryptocurrency as a legal tender. A similar position was held by the National Development and Reform Commission of China, proposing to prohibit cryptocurrency mining in the country.

Despite the ban on ICO and cryptocurrency exchanges, the PBC and other governmental authorities unexceptionally start to show huge enthusiasm for using block-chain technology to update Chinese financial systems and become a world leader in this new innovative technology.

The unstable geopolitical global situation in the relations of China with other states probably forced the government to shatter its position. This June, the Information Government Agency of the People's Republic of China (PRC) and the largest information and press conference center in the PRC Xinhua (新華社) characterize cryptocurrency as a valuable asset which is attractive to investors and can attract investors to the country. In August 2019, a message appeared that the People's Bank of China is preparing to launch a new cryptocurrency; the government is developing a national digital asset, possibly to stabilize the yuan.

PhD of China notes that

Central Bank Digital Currency (CBDC) contributes to optimizing payment functions of fiat money, reducing reliance on payment services provided by the private sector, alleviating regulatory burdens and pressure on the central bank, and strengthening the authority of fiat money. Moreover, issuance of CBDC helps to address dilemmas of modern monetary policies, including inefficiencies in policy transmission, difficulties in countercyclical control, flow of currency away from the real economy to the virtual economy and inadequate management of policy expectations.²⁰

Yao Qian, Central Bank Digital Currency: Optimization of the Currency System and its Issuance Design, 12(1) China Economic Journal 1, 1 (2019).

According to data published by the Chinese judicial system, 274 legal cases related to cryptocurrency have been recorded. According to China Currency Network, 126 of these are criminal cases, mainly related to property and economic crimes. Another 107 were civil cases related to breach of contract and inadequate management practices, and two of them were administrative cases.²¹

Understandably, China does not have a clear concept or legal regulation of bitcoin delivery based on blockchain technology. Nevertheless, based on the applicable legal position, the arbitration court confirmed bitcoin as an object of ownership. The court relied on the provisions of the general principles of civil law, the provisions of "the Contract Law and Contract Agreement," as well as the principle of good faith and the arbitration concept of respect for the parties' autonomy.

Therefore, from the perspective of this study, legal judgments of the arbitration court of China are of interest. The Shenzhen Court of International Arbitration considered a dispute on a transfer of capital via cryptocurrency. This case became a precedent for the arbitration court practice of China, as it involved special types of digital settlements, such as BTC (Bitcoin), BCH (Bitcoin Cash), and BCD (Bitcoin Diamond).²²

Let us analyze the essence of the judicial dispute. Applicant A (partnership), applicant B (individual) and defendant C (individual) signed "a Share Transfer Agreement," indicating that defendant C transfers a 5% stake in Company X owned by applicant A. The capital transfer amounted to 550,000 Yuan, 250,000 of which are paid by defendant C to applicant A. Since applicant B instructs defendant C to manage the assets (bitcoins) based on the partial income gained by a portion of the assets, the application is filed after defendant C returns BTC, BCH, and BCD to the applicant under the contract as per the schedule. Individual B agreed to pay the share of the remaining capital transfer of 300,000 Yuan to the applicant instead of defendant C. After the agreement was signed, defendant C did not return BTC, BCH, or BCD and did not pay the transfer of funds according to the contract. Both applicants brought the case before the Shenzhen Arbitration Commission with the following claims:

- 1. The first applicant transfers ownership of a 5% stake in Company X to the defendant, and the defendant simultaneously pays a capital of 250,000 Yuan to the first applicant;
- 2. The defendant reimbursed the second applicant for the lost in the amount of 20.13 BTC, 50 BCH, and 12.66 BCD equal to 493,158.40 dollars, and interest (calculated from the date of filing the application for arbitration according to the interest rate of the Bank of China in U.S. dollars for same period until the date of return);
 - 3. The defendant paid a fine of 100,000 Yuan to the second applicant.

Lubomir Tassev, Chinese Courts Face Hundreds of Crypto Cases, Struggle with Rulings, Bitcoin News, 16 August 2018 (Mar. 30, 2020), available at https://news.bitcoin.com/chinese-courts-face-hundreds-of-crypto-cases-struggle-with-rulings.

Judgment of the Shenzhen Court of International Arbitration of 25 October 2018 (Mar. 30, 2020), available at https://mp.weixin.qq.com/s/U_qDgQN9hceLBbpQ13eEdQ.

In the narrative part of the judgment, the court indicates the following: firstly, a contract for the return of bitcoins concluded between individuals does not violate Chinese regulations and should not be considered invalid. Secondly, despite the fact that bitcoin exists only in the virtual space of the network, it has special characteristics in terms of ownership, and this does not prevent it from becoming an object of delivery. Thirdly, until the regulatory instruments determine the legal framework of bitcoin, the arbitration court cannot provisionally identify it as "a virtual network property" based on the regulation of Article 127 of the General Principles of Civil Law. However, the court notes that bitcoin has properties which can dominate and be controlled, have some economic value, and bring economic benefits to the parties.

The defendant objected to the asserted claims, arguing that "The Share Transfer Agreement" was invalid, and the circulation and delivery of the digital currency was illegal. According to the relevant provisions of the "Announcement on the prevention of the risk of financing subsidies" issued by 7 departments of the People's Bank of China, the issuance of tokens (ICO) refers to financing organizations through the illegal sale and circulation of tokens, as well as attracting bitcoins for investors. So-called "virtual currency," such as Ethereum, is essentially an unauthorized illegal public financing and is raises suspicion of the illegal sale of tokens, illegal issuance of securities, and illegal criminal activities, such as illegal fundraising, financial fraud, and pyramid schemes. According to the defendant, "payment and organization of the transfer price" in the contract is invalid because they violate the obligatory provisions of the law.

Despite the defendant's objections, the Arbitration Court found that according to the relevant provisions of the "Announcement on the prevention of the risk of financing subsidies," bitcoin is not issued by monetary authorities, has no monetary attributes and no legal framework equivalent to a currency. However, there is no law or regulatory instrument which explicitly prohibits parties from conducting bitcoins or private transactions in bitcoins and poses investment risks. The agreement between the two parties in this case provides for an obligation to return bitcoins. The defendant's reference to the prohibition of cryptocurrency circulation is applied only if the financing organization sells the token through any fake currency, to investors illegally selling tokens, illegally issuing securities, carrying out illegal criminal activities, financial fraud, pyramid schemes, and any other illegal criminal activities.

In case of this dispute, the agreement signed by the parties is a true reflection of their will and does not violate the obligatory provisions of laws and regulatory instruments, therefore, this agreement is binding on the parties, and, respectively, the parties must fully comply with it.

The arbitration court found that there is no Internet technology which expands the space of people's real life to cyberspace; the circulation of bitcoins, cash bitcoins, etc., and the process of their delivery is carried out through electronic encoding programs supported by Internet technologies. Each transaction party should first install an electronic wallet on a computer terminal, thus having a unique address,

automatically generating a key pair – a private key and a public key. The public key is publicly disclosed, and the private key is specific identification information. The owner can control their bitcoin at any time using the private key. In other words, bitcoins can be delivered via Internet technologies.

The Arbitration Court of China confirms the practical recognizability of cryptocurrency as an object of civil rights in contractual corporate relations between the parties.

The media report a large number of judicial disputes relating to cryptocurrency exchanges. For example, the court considered a dispute between a Chinese cryptocurrency exchange and one of its users, in which the court decision does not even comment on the legality of digital asset trading. The platform, Coinnice, accidentally sent 5 BTC to its client's wallet when the system was updating. He withdrew the BTC, sold them, and then refused to compensate for the exchange, insisting that trading bitcoins with CNY was illegal in China, and accusing Coinnice of a criminal offense. When the dispute was considered as a civil case, the court in Beijing passed a verdict aligning with contractual legislation. It also determined that the defendant's successful registration under his real name and with his bank account constituted an acceptance of the Coinnice service agreement. The court found that both parties should fulfill their obligations under the contract, and ordered the client to reimburse the exchange's losses. After the appeal, the higher court, the Second Intermediate People's Court of Beijing, confirmed the verdict that any violations of the relevant rules on behalf of the trading platform do not affect the defendant's obligation to return the funds.

In the near future, virtual property, including digital currencies, may be recognized in China as a "fundamental human right." These provisions are contained in the new draft of the basic provisions of the national Civil Code. Article 104 regulates the following:

Special rights or virtual property are defined as "objects of property rights" and should be treated accordingly.

Article 108.2.8 addresses the issues of intellectual property and digital information.

Article 127 of the General Rules of the Civil Law of China states:

If laws contain any provisions on the protection of data and virtual property on the Internet, such laws must be respected.

One interpretation of this is that one of the main laws in China recognizes the legal status of cryptocurrency as a virtual property and, accordingly, objects of civil rights.

Chinese scientists have stated that:

Bitcoin is a digital cryptocurrency that has attracted substantial interest in recent years from the general public, profit seekers, risk takers, academic practitioners, and, last but not least, economists. Although it is referred to as new, Bitcoin has existed since 2009 and is rooted in technology that goes back even farther.²³

The decentralized digital currency Bitcoin is an anonymous alternative to the centralized banking system and enjoys widespread and increasing adoption. Since Bitcoin created, many other electronic currencies have been developed ... We combine the POW and blockchain technology of Bitcoin to give better protection against double-spending attacks.²⁴

Chinese researchers note the problem of the inconsistency of scientific papers dealing with cryptocurrency:

Since the blockchain was successfully applied only to bitcoin, the existing blockchain studies do not reveal the position of the digital currency, they create some chaotic concepts and formulations of the blockchain, which limits its use in other non-digital currency fields.²⁵

Today, the Chinese government strives to use cryptocurrency as a financial instrument. Taxation is based on the standard rules for goods: cryptocurrency transactions are subject to Corporate Tax, Individual Income Tax, Capital Gains Tax. Sales of cryptocurrencies may be subject to Value-Added Tax. In other words, the legislative establishment of a non-monetary digital asset in China is considered as a virtual world if it is permissible to store and conduct transactions with cryptocurrencies.

1.4. South Africa

Today, the government of the Republic of South Africa maintains the following position: cryptoassets can perform functions similar to those of securities and goods. South Africa does not intend to ban their trade. IFGW offers a set of rules to protect investors in cryptoassets and helps monitor decentralized digital tokens, which include the registration of cryptoasset service providers.

Some historical facts: in 2014, the South African Reserve Bank (SARB) issued a consultation document determining legal regulation of cryptocurrency: the registration

Altab Hossin & Sajjad Hosain, Bitcoin: Future Transaction Currency?, 13(3) International Journal of Business and Information 385, 385 (2018).

²⁴ Yanbing Wu et al., *A Regulated Digital Currency*, 62(3) Science China Information Sciences (2019) (Mar. 30, 2020), available at https://link.springer.com/article/10.1007/s11432-018-9611-3.

²⁵ 沈彬,毛燕琴,李莉.一种面向非数字的区通用用方案[J].南京大学学(自然科学版),2019,39(01):1-11 [Shen Subin et al., *Blockchain Based Approach Beyond Digital Currency Domain*, 39(1) Journal of Nanjing University of Posts and Telecommunications (Natural Science) 1 (2019)].

requirement will be applied to cryptoasset payment providers: wallet providers, such as Luno, and companies providing cryptoasset storage software. Cryptoasset providers will have to comply with the anti-currency laundering regulations, which, in case of banks, include identification of clients and their addresses. These service providers will also have to track and report suspicious transactions.

On 6 April 2018, the South African Revenue Service (SARS) clarified the cryptocurrency status tax. The SARS noted that

The South African Revenue Service (SARS) will continue to apply normal income tax rules to cryptocurrencies and will expect affected taxpayers to declare cryptocurrency gains or losses as part of their taxable income.²⁶

The tax law explicitly stipulates:

Following normal income tax rules, income received or accrued from cryptocurrency transactions can be taxed on revenue account under "gross income."²⁷

In other words, the South African Revenue Service does not indicate how cryptocurrency transactions should be performed; it is clear that all asset transactions are subject to some form of taxation. When trading cryptocurrency, tax laws are applied. This includes a potential capital gain tax, for example, when you buy a bitcoin as an investment and then sell it profitably or, alternatively, income tax, when transactions are part of your routine business. Ultimately, when making a decision on whether your crypto transactions are subject to value added tax or income tax, certain considerations will be taken into account, such as the intention, the period of holding the asset and the way it was financed, as well as many cases of the common law.

However, we can say that the cryptocurrency landscape in South Africa is currently not regulated. The aforementioned official document issued by the South African Reserve Bank exposed its position regarding what it calls virtual currencies (VC) and decentralized convertible virtual currencies (DCVC).

Here are some noteworthy aspects from this document concerning cryptocurrencies in general:

- 1. Cryptocurrencies are not a legal tender according to the SARB's definition, legal tender is banknotes and coins officially issued by a bank (see Section 3.2.3 of the document);
- 2. Since cryptocurrencies do not exist in physical form, they go beyond the scope of the aforementioned definition;

SARS's Stance on the Tax Treatment of Cryptocurrencies, Press Release, South African Revenue Service, 6 April 2018 (Apr. 6, 2018) (Mar. 30, 2020), available at https://www.sars.gov.za/Media/MediaReleases/Pages/6-April-2018---SARS-stance-on-the-tax-treatment-of-cryptocurrencies-.aspx.

²⁷ Id.

- 3. The Reserve Bank regulates and has the exclusive right to issue and manage all currencies in the form of coins and banknotes. This is legal tender, as opposed to cryptocurrency;
- 4. The use of bitcoins (and other cryptocurrencies) for making payments is not recognized by law. In addition, by law, a trader is allowed to refuse from any payment made in bitcoins.

The SARB has no objections to the use of DCVC (cryptocurrencies) – a clause in Section 2.1 of the official document provides for the use of DCVC for trade and exchange. This means that one can freely trade and exchange bitcoins and other cryptocurrencies in the Republic of South Africa.

However, it should be noted that in the long run, the Central Bank of South Africa, which is actively studying cryptocurrency and has a loyal policy in this area, can establish guidelines to stimulate such innovations. As in other legal systems facing the cryptoindustry in their states, South Africa has many problems related to cybersecurity of storing and trading digital assets. Thus, in March 2019, the Sunday Times (South Africa) reported that 27,500 people, including South Africans, lost over 50 million dollars when they were subject to fraud by transferring their bitcoins to an online wallet. The publication called it "one of the largest frauds in South Africa."

In 2019, the Minister of Finance of South Africa Tito Mboweni announced the formation of a task group for cryptocurrency asset management. According to BusinessLive local business publication, the group will be tasked to study the technology for the development of a "cohesive government response to cryptocurrencies and a single intergovernmental regulatory framework." The Minister noted that the group would also examine potential sales of tokens and blockchain technology inside the country.

Despite fluctuations in the position of the official authorities, we can state the use of cryptocurrency as a financial instrument in the Republic of South Africa, the object of which is the ownership of digital assets. All this invites the assumption and allows us to conclude that cryptocurrency can be defined as an object of civil rights in the Republic of South Africa.

1.5. Russia

In Russia there is neither direct legalization nor a ban on the use of cryptocurrency. According to the official statistics: in January 2014, the Central Bank of the Russian Federation first formulated its position on this issue – to establish a complete ban on quasi-cash; in September 2017, the Central Bank of the Russian Federation announced that it considered it premature to admit cryptocurrencies, as well as any financial instruments denominated or associated with cryptocurrencies, to circulation and use in on-exchange trading in the Russian Federation.²⁸

²⁸ ЦБ не допустит криптовалюты на российский рынок как денежные суррогаты // TACC. 8 сентября 2017 г. [The Central Bank Will Not Admit Cryptocurrencies to the Russian Market as Quasi-Cash, TASS, 8 September 2017] (Mar. 30, 2020), available at https://tass.ru/ekonomika/4546253.

The Ministry of Finance of the Russian Federation developed a draft law "On Digital Financial Assets" proposing to define cryptocurrency, mining, token, and smart contract. It was assumed that RF citizens would be allowed to sell and exchange cryptocurrencies through professional participants of securities markets. At the same time, cryptocurrency could not be a legal tender, it was prohibited to exchange it for real currency or goods on penalty of criminal liability. Unfortunately, this effective financial instrument was rejected by the Central Bank of the Russian Federation, which pushes all cryptocurrency exchange transactions into a further shadow market.

Today the situation is as follows: the aforementioned draft law, which was passed by the State Duma in its first reading last March and was prepared for adoption by the end of 2018, is being finalized. The law was amended while taking into account the opinion of the crypto community. It is planned that the rights certifying monetary claims, the rights to securities made using the blockchain, and liability rights will be recognized as digital financial assets.

Analyzing the draft law, significant provisions on the use of smart contracts have been introduced, the term "digital law" is applied to electronic data which will certify the rights to various property items – property, deliverables, provision of services, exclusive rights. Similar changes will be made to the Civil Code of the Russian Federation. Now, the draft law is being approved by the Executive Office of the RF President. It is planned to pass the law at the end of this March, which should, accordingly, enter into force in October 2019.

At the same time: in March 2019, the State Duma of the Russian Federation rejects the legalization of digital currency in its draft law and introduces the concept of "digital rights," i.e. a financial instrument which will be issued in an information system based on a distributed ledger, namely in a blockchain. In other words, neither the legislator nor the Central Bank of Russia are in a rush to take risks by formalizing a legal definition of payment tokens. The term "digital currency" could formalize the legal status of cryptocurrency in the Civil Code of the Russian Federation.

A. Stepanchenko notes:

In our opinion, if cryptocurrency acquires the function of an ordinary legal tender, it will allow it to become a kind of an international payment unit, since such a currency is issued by a boundless virtual community. The circulation of such an international payment unit will surely need special regulation not only at the national, but also at the international level.²⁹

The absence or insufficiency of legal regulation of any given object of rights generally entails difficulties in the implementation of such rights and obligations. The parties using cryptocurrency in one or another capacity should act in good faith, in

²⁹ Степанченко А.В. Иностранная валюта как объект современного гражданского оборота // Бизнес, менеджмент и право. 2013. № 2(28). С. 37 [Andrey V. Stepanchenko, Foreign Currency as an Object of Modern Civil Circulation, 2(28) Business, Management and Law 36, 37 (2013)].

pursuance of the provisions of Article 10 of the Civil Code of the Russian Federation. Otherwise, it is difficult to imagine how to protect civil rights of unscrupulous civil circulation participants.

Today in Russia, there is a need for a precise civil consolidation of cryptocurrency circulation in the digital environment:

- for the successful completion and settlement of transactions with it,
- to ensure the protection of cryptocurrency right holders,
- to properly control digital relations when such objects are hidden during bankruptcy (inclusion in the debtor's bankruptcy estate) and other executive actions of authorized bodies.
- for civil consolidation and inclusion of cryptocurrency in the mass of the succession,
 - to prevent financing of criminal activities, etc.

Scientific studies in civil law of electronic currency most often deal the discussion of the question – whether cryptocurrency is an object of civil rights or not.³⁰ For example, there are categorical statements:

Cryptocurrency is a new object of civil rights, and its legal framework is only under formation.³¹

But in general, the scientific world adheres to the following position:

Jurists have not yet reached a consensus on the nature and legal status of virtual currency. Virtual currency has the nature of both obligations and property rights, since it can be both a legal tender and a commodity.³²

By now, a stable judicial practice on the territory of Russia which is related to digital assets in one way or another.³³ So, for example, in March 2018, the Arbitration

³⁰ Меликов У.А. Криптовалюта в системе объектов гражданских прав // Вестник ЮУрГУ. Серия «Право». 2018. Т. 18. № 1. С. 60–66 [Umrillo A. Melikov, Cryptocurrency in the System of Civil Rights, 18(1) Bulletin of SUSU. Series "Law" 60 (2018)]; Савельев А.И. Криптовалюты в системе объектов гражданских прав // Закон. 2017. № 8. С. 136–153 [Aleksandr I. Saveliev, Cryptocurrencies in the System of Objects Civil Rights, 8 Law 136 (2017)]; Сидоренко Э.Л. Правовой статус криптовалют в Российской Федерации // Экономика. Налоги. Право. 2018. № 2. С. 129–137 [Elina L. Sidorenko, The Legal Status of Cryptocurrencies in the Russian Federation, 2 Economics. Taxes. Law 129 (2018)]; Синицын С.А. Вещь как объект гражданских прав: возможные и должные критерии идентификации // Законодательство и экономика. 2016. № 11. С. 7–17 [Sergey A. Sinitsyn, A Thing as an Object of Civil Rights: Possible and Proper Identification Criteria, 11 Legislation and Economics 7 (2016)].

³¹ *Кузнецов Ю.В.* Правосудие без закона: правовой статус криптовалюты в деле о банкротстве // Экономическая политика. 2018. № 13(6). С. 122 [Yuri V. Kuznetsov, *Justice Without Law: Legal Status of Cryptocurrency in a Bankruptcy Case*, 13(6) Economic Policy 122, 122 (2018)].

³² Irina Cvetkova, Cryptocurrencies Legal Regulation, 5(2) BRICS Law Journal 128 (2018).

³³ Постановление Арбитражного суда г. Москвы от 18 февраля 2019 г. № A40-12639/16 [Ruling of the Arbitration Court of Moscow of 18 February 2019 in case No. A40-12639/16].

Court of Moscow did not include the contents of a cryptowallet in a debtor's bankruptcy estate. He court indicated that, based on the direct interpretation of the rule of law, cryptocurrency does not belong to objects of civil rights, is beyond the legal field on the territory of the Russian Federation, settlement of cryptocurrency transactions, its transactions are not secured by the compulsory force of the state. In addition, the absence of a controlling center in the cryptocurrency system and the anonymity of cryptocurrency users does not allow us to determine with certainty that the cryptocurrency in the cryptowallet belongs to the debtor.

The legislative, legal definition of civil rights is reduced to the following: objects, including cash and documentary securities; other property, including cashless funds, uncertificated securities, property rights; deliverables and rendering of services; protected intellectual property and equivalent means of individualization (intellectual property); intangible benefits.

Analysis of various sources shows that cryptocurrency is assessed as follows by the judicial legislation and the scientific community in Russia:

[1.] Due to the optionality of the civil law provisions, the Civil Code of the Russian Federation lacks an exhaustive list of objects of civil rights ... the applicable civil legislation does not contain the concept of "other property" referred to in Article 128 of the Civil Code of the Russian Federation, its broadest interpretation is permissible taking into account modern economic realities and the IT development level.³⁵

[2.] Bitcoin does not fall under the definition of electronic currency, which is given in clause 18 of Article 3 of the Federal Law No. 161-FZ "On the National Payment System," and neither falls under the definition of a payment system, which is contained in clause 20 of Article 3 of the same Law. Bitcoin is neither a foreign currency (clause 2 of part 1 of Article 1 of the Federal Law of 10 December 2003 No. 173-FZ "On Currency Regulation and Currency Control") and does not fall under the objects of civil rights listed in Article 128 of the Civil Code of the Russian Federation, not being an object (commodity), cash or noncash currency, uncertificated securities and property rights. 36

[3.] If we further analyze Article 128 of the Civil Code of the Russian Federation, this is neither cash (as a variety of objects), nor non-cash funds

³⁴ Постановление Арбитражного суда г. Москвы от 5 марта 2018 г. № A40-124668/17-71-160-Ф [Ruling of the Arbitration Court of Moscow of 5 March 2018 in case No. A40-124668/17-71-160-F].

³⁵ Постановление Девятого арбитражного апелляционного суда от 15 июня 2018 г. по делу № A40-124668/2017 [Ruling of the Ninth Arbitration Court of Appeal of 15 June 2018 in case No. A40-124 668/2017].

³⁶ Решение Ряжского районного суда Рязанской области от 26 апреля 2017 г. по делу № 2-160/2017 [Decision of the Ryazhsky District Court of the Ryazan Region of 26 April 2017 in case No. 2-160/2017].

and uncertificated securities (clearly defined in the considered article in the wording of the Federal Law of 2 July 2013 No. 142-FZ), nor property rights. And, frankly speaking, I would not want to reduce bitcoins to protected intellectual property, since their essence and purpose do not lie in this (not to mention that the Bitcoin client software is open source). There remains one category – "other property," which, if we follow the literal interpretation given in Article 128 of the Civil Code of the Russian Federation, is not exhaustive.³⁷

[4.] *Not being currency* (the RF Ministry of Finance regards cryptocurrency as quasi-cash), *a security* (because cryptocurrency lacks the features stipulated by Article 142 of the Civil Code of the Russian Federation), *other property or property right* (because cryptocurrency lacks proprietary and legally binding nature), any cryptocurrency accepted by an official as a reward for their service actions (inaction) corresponds to the criminal law concept of *a property-related service*.³⁸

[5.] Cryptocurrency cannot be recognized as an object because its status has not received legal expression. On the same basis, it cannot be attributed to non-cash funds and the Civil Code of the Russian Federation and a detailed definition of the civil law features of a token as a property right or an uncertified security are much more important.³⁹

It is worth recalling that on 26 February 2019, the Plenum of the Supreme Court of the Russian Federation⁴⁰ included the concept of cryptocurrency in the Criminal Code of the Russian Federation (Arts. 174, 174.1). Now, digital currency converted

³⁷ *Apxunos B.* Bitcoin: основные принципы и отдельные юридически значимые особенности // Закон.ру. 13 января 2014 г. [Vladislav Arkhipov, *Bitcoin: Basic Principles and Separate Legally Significant Features*, Zakon.ru, 13 January 2014] (Mar. 30, 2020), available at https://zakon.ru/blog/2014/1/13/bitcoin_osnovnye_principy_i_otdelnye_yuridicheskiznachimye_osobennosti.

Шарапов Р.Д., Минин Р.В., Капаева Е.О. Криптовалюта: уголовно-правовой аспект // Юридическая наука и правоохранительная практика. 2018. № 2(44). С. 48 [Roman D. Sharapov et al., Cryptocurrency: Criminal Limb, 2(44) Legal Science and Law Enforcement Practice 42, 48 (2018)].

³⁹ Sidorenko 2018, at 129.

⁴⁰ Постановление Пленума Верховного Суда Российской Федерации от 26 февраля 2019 г. № 1 «О внесении изменений в постановление Пленума Верховного Суда Российской Федерации от 7 июля 2015 года № 32 «О судебной практике по делам о легализации (отмывании) денежных средств или иного имущества, приобретенных преступным путем, и о приобретении или сбыте имущества, заведомо добытого преступным путем»» // Российская газета. 2019. 7 марта. № 51 [Ruling of the Plenum of the Supreme Court of the Russian Federation No. 1 of 26 February 2019. On Amendments to the Ruling of the Plenum of the Supreme Court of the Russian Federation of 7 July 2015 No. 32 "On the Judicial Practice in Cases on Legalization (Laundering) of Cash or Other Property Acquired by Criminal Means, and Acquisition or Sale of Property Known to Have Been Obtained by Criminal Means, "Rossiyskaya Gazeta, 7 March 2019, No. 51].

from virtual assets becomes the subject matter of a crime. Such changes are made to the Criminal Code of the Russian Federation on the recommendation of the Financial Action Task Force on Currency Laundering.

Therefore, the question is: if cryptocurrency becomes a subject matter of a criminal assault, then it corresponds to the features of another's property, accordingly, as a subject matter of property crimes. To this end, it would be logical to conclude that if the supreme judicial authority recognized cryptocurrency as property from the standpoint of criminal law, using the cross-sector analogy, digital currency also acts as an object of civil rights. Moreover, what object? Let us try to analyze in detail the usability of these categories in civil circulation – an object or a right...

Let us try to conclude as follows: in the theory of civil law, any objects of property rights are individually-defined objects. If we are speaking about cash (bank notes), this is a generic object, except for cases when they represent, for example, a collection of coins or banknotes. In turn, non-cash funds held by a bank and reflected in the personal accounts of citizens cannot be called objects from the standpoint of civil law; the presence of such funds in the accounts only allows one to claim cash. In other words, non-cash currency held by a bank on the basis of a bank account agreement (Art. 845 of the Civil Code of the Russian Federation) cannot be an object of property rights or the owner's property, but rather characterizes the personal right of claim to the bank. Such currency is presented only in the form of an electronic record and is included in the depositor's property as a proprietary right of claim.

Despite the legislator's position on the exclusion of the "digital currency" category from the Civil Code of the Russian Federation and a deep unwillingness to give cryptocurrency legal status as an object of rights, from the perspective of legal engineering, digital currency and digital rights are similar categories, thereby unifying the civil circulation of cryptocurrencies and resting on the platform of modern non-cash digital circulation, it is admissible to recognize cryptocurrency as a digital property right (alongside with non-cash monetary funds and uncertificated securities) which can circulate in the information system.

Nevertheless, the legislator's opinion that digital currency cannot be attributed to a variety of any object of civil rights is not without logic. The fact is that cryptocurrency has significant unique features. It is a set of electronic data created in an information system, meeting the characteristics of a decentralized information system, and used by the system clients to make payments.

Rapidly developing information technologies and digitalization of many relations certainly influence the dynamics of the civil law development. Objects of civil rights are saturated with new categories, new issues of digital asset regulation arise. Therefore, modern problems should be revised as applied to the established approaches in the theory of civil law.

Conclusion

Today, the legal systems of the BRICS countries are discussing the legal and economic nature of non-traditional investment mechanisms, while there is no unified approach to the use of virtual currencies in the domestic markets of the analyzed countries, nor in the international space. Based on this uncertainty, at present, cryptocurrency cannot be unambiguously classified as a financial asset.

K. Saito and M. Iwamura note that

Bitcoin and other similar digital currencies on blockchains are not ideal means for payment, because their prices tend to go up in the long term (thus people are incentivized to hoard those currencies), and to fluctuate widely in the short term (thus people would want to avoid risks of losing values).⁴¹

The appearance of such concepts as blockchain, cryptocurrency, and smart contract, undoubtedly, represents prospects for business and private investments, and at the same time, is accompanied by risks inherent in the traditional market of digital currencies: risks of cybersecurity and confidentiality, risks of emission, trust, circulation, storage and accounting, risks of future legitimacy of their acquisition and trade. The scientific literature analyzes such possibilities:

Our study of the ransomware ecosystem illustrates that the phenomenon of cybercriminals increasingly using Bitcoin for payments produces an opportunity to gain key insights into the financial inner workings of these operations ... We were able to conservatively estimate that the overall ecosystem revenue for the past two years was over 16 million USD extorted from on the order of 20,000 victims.⁴²

Today, many people believe that cryptocurrency is unstable, not regulated in any way, does not guarantee protection to the investor, is subject to extreme volatility (instability), and is extremely attractive to cybercriminals. The prospects for virtual earnings can be as ambiguous as the currency itself. Therefore, anyone who invests in bitcoins or carries out cryptocurrency transactions should firstly consider all the risks to take the necessary measures. As my own proposal to protect intangible digital codes – cryptocurrencies – we suggest that insurance companies insure all the aforementioned possible risks.

⁴¹ Kenji Saito & Mitsuru Iwamura, How to Make a Digital Currency on a Blockchain Stable, 100 Future Generation Computer Systems 58, 58 (2019).

⁴² Danny Yuxing Huang et al., *Tracking Ransomware End-to-End* (Mar. 30, 2020), available at https://static.googleusercontent.com/media/research.google.com/ru//pubs/archive/46785.pdf.

Nevertheless, arguably, the study of the cryptocurrency basics is economically necessary in the modern world. Many experts believe that blockchain and cryptocurrencies are the future of financial transactions. We believe that one of the main advantages of cryptocurrency is its convenience. Cash transfer fees are minimized due to the absence of any third party. Another advantage is transparency. The use of the blockchain to complete transactions ensures good conscience of all the parties. In turn, smart contracts accelerate and provide business relationships in transactions. Another advantage of cryptocurrency transactions is anonymity. At the same time, cryptocurrencies do not depend on the exchange rate and interest rates.

Foreign news sources often call the technology forming the basis of cryptocurrency the distributed ledger technology (DLT). With this in mind, cryptocurrency is sometimes described as a "digital token" in a distributed ledger which can be used to exchange value and facilitate payments. DLT platforms are distinguished by many indicators, including: who can see and (or) store a ledger copy, who can update the ledger, what information is needed to verify a transaction in the ledger, as well as how tokens are created and distributed. In recent years, various types of DLT-based digital tokens have been developed and released. Some of them have characteristics somewhat similar to securities (such as stocks or bonds), and others are tokens which can be used to access a certain product or service (provided through the use of the DLT). They are often called "security tokens" and "service tokens," respectively. Cryptocurrencies, security tokens, and service tokens are jointly called "cryptoassets." Nevertheless, each term should be approached carefully, each term should be carefully studied and analyzed from the economic and legal perspective by the scientific community.

Currently, currency transfers between financial institutions across the world are provided by the Society for Worldwide Interbank Financial Society for Worldwide Interbank Financial Telecommunications – SWIFT acting on the basis of an agreement concluded between central banks of most countries. International authorities control both financial flows and the SWIFT technology itself. An authoritative scientist notes that cryptocurrency is a direct competitor of SWIFT, since if the latter carries out sender-recipient transactions through a single center (via SWIFT itself), the blockchain will provide sender-recipient transactions without any third party (intermediary, such as SWIFT). This will accelerate the transaction and reduce its cost.⁴³

Today, the BRICS countries seek to develop a common platform of retail payments and transfers for member states (a single payment system called BRICS Pay). It is assumed that payments will be made via a mobile application, regardless of the buyer's national currency. At the same time, other states will be able to use the platform. The first project was launched in South Africa at the beginning of April 2019. The Chamber of Commerce and Industry noted that the creation of a new international payment

⁴³ Chris Skinner, *Will the Blockchain Replace Swift?*, American Banker, 8 March 2016 (Mar. 30, 2020), available at https://www.americanbanker.com/opinion/will-the-blockchain-replace-swift.

system (NIPS) was a priority task for the BRICS members, taking into account the instability in the economic sphere. All the BRICS countries, except for South Africa, have their own national payment systems. This is ELO in Brazil, MIR in Russia, RuPay in India and UnionPay in China. According to the official data published on the organizations' websites, the Brazilian system issued 120 million national cards, Russian – 50 million, Indian – 500 million, and Chinese – over 6 billion.⁴⁴

Such single-payment systems can support the growth of investment resources only in national currencies. We believe that similar international payment systems should include opportunities for cryptocurrency (blockchain) payments, restarting all the services in a new form and optimizing them for the current realities of the ecosystem. In particular, such a cryptocurrency payment service may exist to pay taxes, repay loans, transfer to other clients' cards, and make any payments – mobile communications, domestic or international, make Internet purchases, etc.

Russian scientist George Toloraya, Doctor of Economic Sciences, Professor of Moscow State University of Foreign Affairs of the Ministry of Foreign Affairs of Russia, Executive Director of the National Committee on BRICS Research, Head of the Center for Russian Strategy in Asia of the Institute of Economics at the RAS, Head of the Regional Programs Department of the Russkiy Mir Foundation, profoundly discusses the following question:

We are very interested in using national currencies, the possibility of creating a payment unit in the form of a "currency payable" of BRICS (RUIND). A new trend is state-sponsored cryptocurrencies discussed in all the BRICS countries. This is a common cryptocurrency and the use of blockchain technology.⁴⁵

Based on the aforementioned, we believe it is necessary to create a single digital currency, i.e. a single equivalent for all payments in the form of cryptocurrencies – CRYPTOBRICS, which will be used by the participants of various economic relations, in particular, the BRICS members, for settlements in these states. To this end, we need an international agreement, which will determine the parameters of the digital currency issuance based on blockchain technology. Transparency and protection of such financial assets will be necessary to carry out international transactions. Coming to an agreement between the BRICS member countries will be the next stage of their mutual integration for the free trade zone and the customs union.

⁴⁴ Страны БРИКС создадут единую платежную систему // Известия. 1 марта 2019 г. [The BRICS Countries Will Create a Single Payment System, Izvestia, 1 March 2019] (Mar. 30, 2020), available at https://iz.ru/851440/2019-03-01/strany-briks-sozdadut-edinuiu-platezhnuiu-sistemu.

⁴⁵ Толорая Г.Д. Обеспечение устойчивого развития: Потенциал финансовых инициатив БРИКС [George D. Toloraya, Ensuring Sustainable Development: The Potential of BRICS Financial Initiatives] 224 (S.V. Karataev (ed.), Moscow: Russian Institute for Strategic Studies, 2018).

All this will provide for the legalization and consolidation of the legal framework of cryptocurrency at the international level, establishing its conceptuality within the contents of objects of civil rights, thereby allowing the BRICS members to become regulatory leaders in the field of digital assets.

We believe that from the standpoint of civil law of all the BRICS countries, digital property right in the form of cryptocurrency should be defined as a resource stored in a device or electronic system which allows the end user to make payment transactions in the form of a virtual currency (CRYPTOBRICS) and denominated in another payment unit, as opposed to currencies issued by sovereign states.

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