

Artículo de investigación

The Place of Cryptocurrency in the System of Financial Instruments**Місце криптовалюти в системі фінансових інструментів**

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Hnatovska Aliona¹¹¹<https://orcid.org/0000-0001-7171-3209>**Manzhosova Olena**¹¹²<https://orcid.org/0000-0002-8873-4783>**Marushchak Anna**¹¹³<https://orcid.org/0000-0002-4611-4906>**Oleksiy Uliana**¹¹⁴<https://orcid.org/0000-0002-3374-7114>**Abstract**

The article deals with the problems of determining the place of the cryptocurrency in the system of financial instruments and the study of its legal status in Ukraine and in the world. The problems of influence of cryptocurrencies on the economy of Ukraine and other countries across the world, potential threats posed by the cryptocurrency system for users of such systems and ways of legal regulation of cryptocurrency transactions are considered. The terminology that is widely used in the cryptocurrency field is analyzed, the main types of cryptocurrencies and the technologies on which they function are considered. Their characteristic features, positive and innovative concepts, which were introduced with their appearance, are identified. The legal status of cryptocurrencies and their prevalence has been investigated. The modern concepts of regulation of the cryptocurrency market in Ukraine and in the world are characterized. In the course of researching the subject of the article, the authors conclude that it is necessary to establish state control over the regulation of the legal status of cryptocurrency and prevent its possible negative impact on the country's economy. It was also concluded that a draft law would be considered that would address the issue of regulation and control of cryptocurrency transactions.

Анотація

Статтю присвячено розгляду проблем визначення місця криптовалюти в системі фінансових інструментів та дослідженню її правового статусу в Україні та у світі. Розглянута проблематика впливу криптовалют на економіку України та інших країн світу, потенційні загрози, які створює криптовалютна система для користувачів таких систем та шляхи правового регулювання криптовалютних операцій. Проаналізована термінологія, яка широко використовується в криптовалютній сфері, розглянуті основні види криптовалют та технології, на основі яких вони функціонують. Визначено їх характерні риси, позитивні та інноваційні концепції, що були запроваджені з їх появою. Досліджено правовий статус криптовалют та їхню розповсюдженість. Охарактеризовані сучасні концепції регулювання ринку криптовалют в Україні та у світі. В процесі дослідження теми статі, автори приходять до висновку про необхідність встановлення державного контролю щодо регулювання правового статусу криптовалюти та запобігання можливого її негативного впливу на економіку країни. Також зроблено висновок про необхідність розроблення законопроекту, в якому буде розглянуто питання

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врегулювання та контролю операцій з криптовалютами.

Ключові слова: біткоїн, блокчейн, емісія криптовалют, криптовалюта, регулювання обігу криптовалют.

Introduction

The technological process, transforming the life of society, is increasingly stepping towards the digital space. The global computerization world is gradually leading to the development and increased interest in the online marketplace and the ability to conduct online operations on it. The volatility of the banking system has necessitated the development of a fundamentally new currency that will not be associated with any banking institution and will have the highest level of security.

Therefore, the emergence of cryptocurrencies and the rapid development of cryptocurrencies marked a new stage in the evolution of financial relationships. Cryptocurrency financial transactions are becoming more and more widespread in today's world. On the Internet one can see any kind of cryptocurrency, the total number of varieties has reached about 2000. However, the legal status of cryptocurrency remains uncertain and unformed today. Even though bitcoins are becoming more widespread, the legal regulation of their circulation remains unsatisfactory. Therefore, in view of the above, the urgent issue is to address the problem of research on the legal status of cryptocurrency in the system of objects of both financial and civil relationships. It is no coincidence that science has recently started seeking approaches to understanding virtual money in general.

Considering the work by K. Pashchenko "Comparative analysis of the financial and legal nature of electronic money and cryptocurrencies" (2017) or the work by T. Kovalchuk and K. Palivoda "Digital currency as a virtual source of fictitious capital" (2014), we can conclude that cryptocurrency topic will not lose its relevance for quite a long time, because the entire cryptocurrency network is directly connected to the computer space and exists only within its limits, which will only facilitate its spread and adaptation to the modern world. Therefore, the financial and legal problems of regulating the cryptocurrency market is one of the major reasons for the inhibition of their public recognition on the domestic territory.

Having analyzed the ambiguity of understanding of the essence of cryptocurrency, it should be noted that now cryptocurrency continues its active development caused by the needs of society. Cryptocurrencies are calculating between market participants around the world, while scientists are still deciding whether or not all the features of monetary theory defined by the theory of economics are present or absent in cryptocurrencies. There are a number of studies that analyze the differences and common features of virtual currency, digital currency and e-money on the basis of international regulations. (S. Volosovych, 2016; Kovalchuk A., Stetsenko S., 2018; Kovalchuk A., 2016).

Also worth noting is the works by such authors as Yulia A. Polyakova, Olga A. Vorobyova, Elena M. Chertakova, Nina V. Olinder, Natalya Z. Mazur "Revisiting the formation of the legal status of cryptocurrency in the Russian legislation" (2019). The article reviews the views of domestic and foreign authors about the concept of cryptocurrency, the principles of its operation and the need to establish its legal status. Thus, it can be concluded that research in the field of cryptocurrency use by both representatives of legal and economic science does not lose its relevance, but on the contrary, there is a need to thoroughly determine both economic and legal nature of cryptocurrency and its place in the system of financial instruments.

Methodology

The methodological basis of this article is the dialectical method, which made it possible to explore the objectives of the study in their relationship, unity and development. Taking into account the stated purpose and objectives, we also used such methods as formal-legal, systematic, comparative-legal, structural-functional and other methods. These methods allowed to conduct scientifically founded analysis of the place of cryptocurrency in the system of financial instruments, The aforementioned methods allowed us to explore

the concepts of regulation of the cryptocurrency market, to give a general description of the cryptocurrency system and to reveal its impact on the economy of the countries across the world.

Results and discussion

At present, there is no single approach among regulators of the leading countries across the world, in particular the European Union countries, to determine the legal status of cryptocurrencies and regulate transactions with them.

Today, there are about two thousand types of cryptocurrencies (their number is constantly changing), and in practice there are over 460 varieties with a total capitalization of hundreds of billions of US dollars. The most widespread among them are Bitcoin, Litecoin, Ethereum, BitcoinCash, Namecoin and others. Their popularity in the world is growing against the lack of a single cryptocurrency concept, which varies from identification with "commodity", "payment instrument", "unit of account" to "intangible digital asset", "investment asset", "financial asset", "separate type of securities", etc.

Among all types of cryptocurrencies, digital money called bitcoin, cryptographic algorithm of which was created at the end of 2008, is particularly popular.

In their research, scholars view digital currency as a virtual source of fictitious capital (T. Kovalchuk, 2014), or as an attribute of Internet communications (V. Lukyanov, 2014).

Cryptocurrency is also referred to as "virtual currency" and "digital currency". However, these terms cannot be considered absolute synonyms for cryptocurrencies because they are broader in scope (cryptocurrencies are one type of "decentralized virtual currencies" - FATF report "Virtual currencies", 2014). By definition, the Financial Action Task Force (FATF) is a virtual currency that is a digital value and can be traded digitally acting as a medium of exchange; or currency; or value storage, but without legal status in any jurisdiction (Virtual Currencies, 2014).

The legal framework of currency is erroneous and applied to cryptocurrencies solely because of its common name, which creates a number of legal conflicts.

It should be noted that outside the computer space the cryptocurrency market is impossible. Scientists focus their attention on the fact that the emergence and active popularization among the online community of various types of cryptographic money, the issue and functioning of which is provided by mathematics and cryptography, rather than the regulatory framework of the state, carries systemic threats. A special place among them belongs to anonymity and the depersonification of financial payments. However, despite the fact that the issue of the respective types of cryptocurrencies is not predetermined and is not related to the financial state of the real economy, and the exchange rate of cryptocurrencies is not subject to the will of the state or the central bank, cryptocurrency has gained significant worldwide popularity.

The base of cryptocurrency is blockchain technology. Blockchain is a public registry or database containing all the information about the transactions of the respective cryptocurrency. It is a relay of information that has been pre-written into a special fixed size data block and is called a hash by experts. That is, "hashing" or mathematical conversion of information into hash blocks is a prerequisite for blockchain. The basic point here is that the blockchain is not structured in the address dimension, as is the case in bank accounts. In a legal context, it is possible to track and determine how many cryptocurrency units belong to a specific email address, but not to an individual or entity. Scientists are pointing out that today's cryptocurrency market offers many opportunities for money laundering, terrorist financing and cyber fraud., This is where the role of states in properly regulating cryptocurrency transactions is difficult to overestimate. (Kovalchuk A. T., 2018).

One should keep in mind that most regulators in other countries across the world, including the European Central Bank, are cautious about legislative initiatives and, in parallel with their own research, closely monitor the development of new technologies and phenomena to develop the most effective approach to regulating cryptocurrency transactions.

Analyzing the direction of cryptocurrency innovations in other countries, for example, in France, both the government and locals in digital currency have found keen interest and a variety of practical applications. Millions of euros in technology development, state-of-the-art cryptocurrency development, blockchain agro-sector enhancements and the thousands of

commodities that can be purchased for bitcoin – those are just some of the aspects of France’s plans. (Financial Geography: The Cryptocurrency Revolution of France (2019). In Germany, too, cryptocurrency is becoming more and more popular. In 2018, the German Ministry of Finance recognized bitcoins and other altcoins as "official means of payment". Since then, the popularity of Bitcoin and crypto payments has increased several times (Cryptocurrencies in Germany, 2019).

Cryptocurrency is gaining popularity and will have a significant impact on the economy of the countries in the future.

The main goals that were achieved through the introduction of cryptocurrencies were: a) the removal of a third party (government, banking and financial institutions) outside the transactions between participants in the transfer; b) anonymity of participants; c) security of conducted transactions. At the same time, the use of cryptocurrencies is evaluated differently by the governments of the countries across the world, and in some cases they are considered illegal. The transnational nature of operations with cryptocurrencies, the absence of physical borders in their implementation causes the complexity of regulation of their circulation in the territory of Ukraine (Kucheriavenko M. P., Dmytryk O. O., Holovashevych O. O., 2019). The purpose of the study is to determine the place of cryptocurrency in the system of financial instruments.

In view of the current legal standards in Ukraine (Civil Code of Ukraine, 2003), Law of Ukraine “On the National Bank of Ukraine” (1999), Law of Ukraine “On currency and currency transactions” (2018), Law of Ukraine “On payment systems and transfer of funds in Ukraine” (2001), the Law of Ukraine “On Information” (1992), and other concepts of “cryptocurrency” and the regulation of transactions with it, the following are not subject to the regime of regulation:

- Cash, since cryptocurrency does not exist in the form of banknotes, coins, bank accounts, it cannot be recognized as money in the interpretation of Ukrainian legislation;
- Currency legislation, since cryptocurrency is not tied to a currency of any state, it cannot be recognized as a currency or legal tender of a foreign state, and is not a currency value in the interpretation of currency legislation;

- Electronic money and the use of means of payment, since cryptocurrency is not issued by a bank and is not a monetary obligation of a particular person, it cannot be recognized as electronic money;
- Legal relations concerning regulation of activity with securities; the cryptocurrency lacks the characteristics of the document and the issuer, namely: it does not have an established document form with the appropriate details, certifying monetary or other property rights, it does not have a definition of the relationship between the issuer of the security (the person who issued the security) and the person who is entitled to securities, and does not provide for the performance of obligations under such securities, as well as the possibility of transferring the rights to the security and rights to the securities to other persons. Therefore, cryptocurrency cannot be a security;
- The fact that in the cryptocurrency there are no features of the document in the form of banknotes, there is no issuer, and there is also no purpose of production; therefore, cryptocurrency cannot be recognized as a monetary surrogate (according to its definition in the Law of Ukraine “On the National Bank of Ukraine”).

Therefore, despite the existence of numerous practices in the world of using cryptocurrencies as a measure of value, exchange and accumulation, its complex legal nature does not allow it to be identified with any of the related concepts (cash, currency, legal tender, electronic money, securities, money surrogate, etc.).

The question of the legal status of cryptocurrencies in Ukraine and the legislative regulation of transactions with them, taking into account the position of regulators of other countries and recent trends in the development of such technologies, is only at the beginning of its path of development and integration into public life. The purpose of regulation of transactions related to cryptocurrency is, first and foremost, protection of consumer rights, counteraction to money laundering and other illegal actions, identification of the subjects of transactions (financial monitoring), the mechanism of taxation of the received income, declaration and so on. At the same time, the process of amending the legislation of Ukraine should take place on the basis of a deep and detailed study of this

phenomenon, its impact on financial markets, experience and recent decisions of other regulators across the world, etc.

It should be emphasized that the legislative regulation should in no way hinder the use and development of modern IT technologies in the financial sector and should not result in the flow of specialists and capital or the transfer of business beyond Ukraine.

Pursuant to the Bill "On cryptocurrency circulation in Ukraine" (2017), the Verkhovna Rada proposes to install cryptocurrency as a program code that is subject to property rights and may act as a mine, the information of which is entered and stored in the blockchain system as the current account units. blockchain systems in the form of data (program code), that is, an asset. Thus, in the domestic territory, lawmakers plan to recognize cryptocurrency not as a means of payment but as an object of property that can be exchanged for other goods or services. This can hardly be considered a serious argument in favor of regulating the cryptocurrency market. The general principles of cryptocurrency circulation are proposed to be regulated by the Constitution of Ukraine, the Civil Code of Ukraine, the Economic Code of Ukraine, the Tax Code of Ukraine, the Law of Ukraine "On Information", "On the Circulation of Cryptocurrency in Ukraine" and the regulatory acts of the National Bank of Ukraine. The National Bank of Ukraine is proposed to implement state regulation in the sphere of cryptocurrency circulation.

In this case, it is appropriate to recall that in April 2017, the Japanese government recognized bitcoin as legal tender. Since then, the number of stores that accept cryptocurrency as an actual payment method has been increasing. At the same time, it is clear that for such decisions a high level of legal culture and legal consciousness should prevail in the respective territory, which, in the end, with a high degree of probability indicates the respect of citizens for the law and the rule of law in the state.

At the same time, the fact that the Ministry of Finance together with SCFM of Ukraine together with the SCFM has drafted and presented on the relevant website a bill on improvement of norms on prevention and counteraction to the legalization of criminal capital, which in no way mentions the issues of regulating the regulation of operations, is not very optimistic and inadequate. Although many MPs' electronic declarations already contain information that they own large amounts of cryptocurrency.

It is very important at the intergovernmental level to legally deny the ability to carry out cryptocurrency transactions without legalizing the personal data of users. According to Mark Ginsburg (2017), cryptocurrency and blockchain not only in the interests of citizens provides security, security, mobility, economy and comfort, but it also in the interests of the state transparency and inevitability of each transaction allows the tax authorities to see the history of any purchase or transaction, will greatly complicate tax avoidance.

At the same time, when looking for ways to regulate the circulation of cryptocurrency, you should not forget about the potential dangers of this type of activity that involves cryptocurrency transactions. The anonymity of cryptocurrency transactions opens up a huge field of opportunities for cyber fraud.

The lack of virtually all varieties of cryptocurrencies of universal acceptance and, at the same time, the perceived financial and legal problems of regulating the cryptocurrency market is one of the major reasons for the inhibition of their public recognition on the domestic territory. Also, due to the impossibility of predicting the macroeconomic and social consequences of the development of the cryptocurrency market, the authorities of the Ukrainian state authorities still question the expediency of recognizing digital money as legal tender. And this is despite the fact that, according to some professional assessments, mastering the rules of the cryptocurrency market, the controlling state authorities would be able to track: how much did bitcoin, lightkoin, nemkoin, pirkoin, fezerkoin and other cryptocurrency varieties several years ago, and how much now. And the difference is to collect tax.

Blockchain and cryptocurrencies offer a real opportunity for the general public to exercise their right to choose to use traditional banking services, or to try something new. One touch of a smartphone key instantly makes a payment transaction free of charge at any point of the globe where the blockchain system is set up.

Thus, there are currently issues of developing the legal framework for regulating the cryptocurrency market in Ukraine. The sooner legal steps are taken in this direction, the more protected will be those who will be involved in cryptocurrency transactions.

At the meeting of the Financial Stability Board, the National Securities and Stock Market

Commission of Ukraine presented the concept of state regulation of cryptocurrency transactions. The Financial Stability Board, in turn, supported this concept, which involves recognizing certain categories of cryptocurrencies and tokens as financial instruments.

This concept involves the recognition of certain categories of cryptocurrencies and tokens with financial instruments, defines the role and functions of government bodies (NBU, NCSSMF, MoF, DFS, SCFM) in regulating the circulation of these instruments, licensing participants of transactions and disclosure of information. It can be considered that in Ukraine an important first step has been made in forming a consensus of state bodies and financial regulators, which confirms the readiness to work with the Verkhovna Rada and the cryptocurrency on the formation of the legislative and regulatory framework. This will ensure transparency and quality of investor and cryptocurrency market relations.

The total size of the cryptocurrency mining segment in Ukraine exceeds \$ 100 million. US per year. In 2017-2018, Ukrainian-born companies created 25-nation cryptocurrencies, with ICO funds raised over \$ 99 million. US equivalent. Ukraine is among the top 10 countries in the world by number of users of cryptocurrencies, and daily trading volumes with the use of hryvnia reach \$ 1.9 million. US dollars. In turn, Kazakhstan offered their own version of the concept of regulation of the cryptocurrency market. (Astana International Financial Center (IFAC), 2019) In addition, today the number of companies registered with the IFCA has increased to 235. The National Securities and Stock Market Commission of Ukraine intensifies cooperation with the Committee of the International Financial Center "Astana".

The document is intended to regulate the relations arising during the storage and circulation of virtual currencies through the operators of specialized trading platforms.

The document also defines the key terms used in the process of issuing, storing and circulating virtual currencies. In particular, the concepts of "smart contract", "digital wallets", "mining" are introduced. A separate section describes the legal basis for the private placement of securities exempted from registration with a financial regulator. The authors of the document propose to introduce about ten different modes of private placement of tokenized securities, depending on

the amount involved, category of investors, types of shares.

In order to protect the rights of unqualified investors, the document proposes to consolidate their disclosure requirements, which is essential for making an informed investment decision, and to limit investments in securities of \$ 2000.

However, in the case of supporting documents, the amount of investment for such investors may exceed the stated limit, but not more than 10% of annual income and not more than \$ 100 thousand. The document also stressed that the ban on virtual currencies could have a negative impact on the level of regional and global threat of money laundering and terrorist financing, as it could drive virtual currencies into the shadow economy, where they would continue to function without the proper oversight of regulators. Virtual currency turnover must be consistent with consumer protection, financial stability, internal and network information security.

It should be noted that the drafting of amendments to the MFCA adheres to the principle of technological neutrality, in order to avoid frequent revision of the rules of the laws that arise in connection with the appearance of new technological developments.

Conclusions

Considering the general characteristics of the cryptocurrency system and its impact on the economy of the countries across the world, we can reach the following conclusions.

First, with the advent of cryptocurrencies and the development of cryptocurrencies, it can be argued that a new stage in the evolution of financial relationships has come. The use of cryptocurrencies has a significant impact on the economy of Ukraine and other countries across the world. However, of course, such influence also implies the complexity of regulating their circulation both domestically and abroad. Even as of today, it is practically impossible to track the movement of funds in the cryptocurrency network, which means that it is impossible to track the exchange transactions, tax the profits, hold them accountable for illegal enrichment, and so on.

Secondly, the legal status of cryptocurrencies in Ukraine is still open and awaits the attention of the relevant authorities. Without official definition of legal status by public authorities, any normative regulation in this area is pointless.

That is, the process of integrating the cryptocurrency system into public and public life should be phased.

Thirdly, one of the major reasons for inhibiting public recognition of cryptocurrencies is the financial and legal problems of regulating the cryptocurrency market in Ukraine. This is primarily due to the country's weak economy and the inability to predict the macroeconomic and social consequences of the development of the cryptocurrency market. In addition, the Ukrainian authorities are still questioning the expediency of recognizing digital money as legal tender, which further delays the process of determining the legal status of cryptocurrencies. Despite the fact that, according to some professional assessments, by mastering the rules of the cryptocurrency market, the controlling state authorities would be able to monitor the movement of cryptocurrency transactions within the country, which would significantly change the approach to this issue.

Fourth, there are different concepts today regulation of the cryptocurrency market, and in many countries, they are already in place and delivering results. It is reasonable and justified to expand the relations on the use of tax control cryptocurrencies aimed at ensuring the proper payment of taxes, fees, and payments provided by the current legislation of Ukraine. However, the introduction of tax controls will only be possible if the tax level recognizes cryptocurrencies or transactions with them for tax purposes.

References

- Astana International Financial Center has registered 235 residents (2019): <https://inbusiness.kz/ru/last/mezhdunarodnyj-finansovyj-centr-astana-zaregistroval-235-residents>.
- Cryptocurrencies in Germany (2019): financial geography: <https://cryptobit.media/en/articles/overview/1412/>.
- Financial Geography: France's Cryptocurrency Revolution (2019): <https://cryptobit.media/en/articles/overview/2547/>.
- Kovalchuk, A., Stetsenko, S. (2018). *Financial and legal principles of regulation of the cryptocurrency market*. Public law. 1/29. Pp. 85–92.
- Kovalchuk, T., Palyvoda, K. (2014). *Digital currency as a virtual source of dummy capital*. Banking. 2014. 1, 2. Pp. 3–11.
- Kovalchuk, A. (2016). *Fight against dirty money laundering*. International standards and national realities. 318 p.
- Kucheryavenko, M.P., Dmytryk, O.O., Holovashevych, O.O. (2019). *Cryptocurrencies: development, features and classification*. Financial and credit activities: problems of theory and practice. Type 3. No. 30, pp. 371-374.
- Lukyanov, V.S. (2014). *The Emergence of the Cryptocurrency Market in the Information Network Paradigm*. Current problems of the economy. No. 8 (158). Pp. 436–441.
- Mark Ginsburg (2017): https://protocol.ua/en/milliarder_ginzburg_glavnaya_tsel_ssha_i_es_chtobi_v_tsentre_evropi_nepoyavilos_ocherednoe_somali_potomu_v_ukrainu_vnedryat_blokcheovaly.
- On the circulation of cryptocurrency in Ukraine*. (2017) Draft Law No. 7183 of 6 October 2017: http://search.ligazakon.ua/l_doc2.nsf/link1/JH5JJ00A.html.
- Pashchenko, K. (2017). *Comparative analysis of the financial and legal nature of electronic money and cryptocurrencies*: http://nbuv.gov.ua/UJRN/Pgip_2017_7_21.
- Virtual Currencies* (2014): Key Definitions and Potential AML / CFT Risks: FATF Report: <http://www.fatf.gafi.org/media/fatf/documents/reports/virtualcurrency&key&definitions&and&potential&aml&cft&risks.pdf>.
- Volosovych, S. (2016). *Virtual currency: globalization challenges and prospects*. Ukraine economy. No. 4 (653). Pp. 68-77.
- Yulia A. Polyakova, Olga A. Vorobyova, Elena M. Chertakova, Nina V. Olinder, Natalya Z. Mazur. Revisiting the formation of the legal status of cryptocurrency in the Russian legislation. *Amazonia Investiga*, 8 (22), 711-718: <https://www.amazoniainvestiga.info/index.php/amazonia/article/view/824>.