Issues of regulating cryptocurrency and control over its turnover: international experience

Проблеми регулювання криптовалют та контроль за їх обігом: міжнародний досвід

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Abstract

The article deals with an important and relevant topic – the definition of the concept and essence of cryptocurrencies, the study of the problems of their legal regulation, the rationale for control over their turnover, as well as the analysis of ways to counter money laundering that involves cryptocurrency. The authors emphasize that measures taken exclusively at the state level are not enough to create an effective, integrated and comprehensive system for regulating the legal status of cryptocurrencies. Therefore, international cooperation and the strengthening of cooperation between various states in the field of cryptocurrency regulation is important. The authors analyze the scientific doctrine regarding the essence of cryptocurrency. It was found out that there was no single approach to the definition of “cryptocurrency” among scientists. Moreover, cryptocurrencies in various laws of the world have different status. The authors used general scientific and special scientific methods, which provided an objective analysis of the purpose of the study. The research methods were used in interconnection and interdependence, which ensured the comprehensiveness and completeness of the research, as well as the validity of the obtained scientific results. The authors have determined states where cryptocurrency has an official status.

Anotaція

Стаття присвячена важливій та актуальній темі – визначенню поняття та сутності криптовалют, дослідженням проблем їх правового регулювання і обґрунтуванню необхідності здійснення контролю за їх обігом, а також аналізу шляхів протидії відмиванню та легалізації доходів отриманих незаконним шляхом з криптовалютою.
Автори наголошують, що задля створення ефективної, комплексної та всеохоплюючої системи регулювання правового статусу криптовалют, заходів, які вживаються виключно на державному рівні різних країн є недостатнім. Саме тому, такого важливого значення набуває міжнародна співпраця та посилення кооперації різних держав у сфері регулювання криптовалют.
Автори аналізують позиції наукової доктрини щодо та сутності криптовалют. З'ясовано, що єдиного підходу до визначення поняття криптовалюта серед науковців немає. Крім того наголошується на різном статусі криптовалют в різних законодавствах країн світу.
У статті використовувалися загальнонаукові та спеціально-наукові методи пізнання, що забезпечило об'єктивний аналіз мети дослідження. Методи дослідження використовувалися в статті у взаємозв’язку і
is at the initial stage of legal regulation or completely prohibited at the state level.
The relevance of the research consists in the actual absence of the legal framework for the regulation of cryptocurrencies, which is conditioned by the novelty of this phenomenon and the problems related to its functioning. The authors proposed their own definition of cryptocurrency based on its main features.

**Key Words:** cryptocurrency, crypto asset, digital currency, cryptocurrency turnover, legal status of cryptocurrencies, legal regulation of cryptocurrencies.

**Introduction**

The constant development of the market leads to the emergence of new financial instruments, goods, products and monetary surrogates, one of which is a cryptocurrency. At the same time, the emergence of a new financial instrument necessitates the determination of the legislative regulation of this phenomenon and the definition of its legal status, which determines the relevance of this research.

The problems of analyzing and studying the functioning of digital currencies include the fact that the cryptocurrency market is relatively new and unexplored, which led to the practical absence of a legal framework.

The aim of the article is to study and analyze the legal regulation of cryptocurrencies, which will allow for a more detailed study of the digital currency market in order to ensure the financial and digital security of Ukraine.

There is no unequivocal opinion in society about the new phenomenon in finance. Banking experts call the cryptocurrency “World Financial Pyramid” or “suspicious currencies.” There is no common opinion among individuals. Most active users of various cryptocurrency services justify their choice by the independence of cryptocurrency from fluctuations in the global financial market and almost complete anonymity of transactions. However, there are opponents of this phenomenon, who consider cryptocurrency a financial scam. Nevertheless, individuals and legal entities have the freedom to choose to use or not to use cryptocurrency in commodity-money relations, but the state has still unresolved issue in the legal regulation and circulation of cryptocurrency.

Discussion questions of the essence of cryptocurrency are investigated. In the scientific and practical environment, cryptocurrency is considered as digital currencies, electronic means of payment, new forms of electronic money, "New Money" and sometimes even as a mirage. An assessment of the current state of cryptocurrency in various aspects is mentioned.

The mechanism of regulation of cryptocurrencies in different countries has been assessed — those who recognize this tool and actively regulate it, as well as reject and tolerate, but do not have regulatory principles for its use.

To achieve this goal, it is necessary to solve the following tasks: to determine the concept and essence of cryptocurrency, to study foreign experience in regulating digital currencies, to study the regulatory legal support of cryptocurrencies, to analyze the practice of cryptocurrency turnover and to identify the main problems of their legal regulation.

Theoretical framework

We can identify a number of problems related to the legal regulation of the status of cryptocurrencies and the implementation of control over their turnover. In our opinion, one of the main problems is the anonymity of cryptocurrencies, and, consequently, the inability to control their use. However, there is a debate about the anonymity of cryptocurrencies—some
consider it an advantage, others consider it a significant disadvantage. This factor can give rise to a number of other problems. Due to its anonymity, cryptocurrency becomes a convenient tool for the shadow economy. There is a danger of financing illegal activities (terrorism, drug trafficking, etc.), and individuals and society as a whole may be involved in illegal activities. Due to the use and turnover of cryptocurrency, the state is deprived of most of its income in the form of taxes, commissions, etc. This puts the entire budget system of the country at risk. In order to eliminate this factor, it is necessary to change the very principle of turnover of this currency and to develop appropriate legal regulation. The legal regulation of digital money is characterized by the problem of interaction and cooperation of countries, since each country has its own traditions, tasks, and national priorities, and the use of cryptocurrency provides for cross-border interaction of states. For this purpose, it is necessary to harmonize the legal status and regulation of cryptocurrencies in countries, which is currently impossible.

Understanding the obvious ambiguity and heterogeneity of legal regulation of cryptocurrency in foreign countries, we will try to determine the essence and features of monetary policy of Ukraine in this direction. First of all, we note that the very term “cryptocurrency” is controversial, because the degree of its compliance with Art. 1 of the Law of Ukraine “On Currency and Currency Transactions” requires additional justification.

Despite the presence of domestic and foreign economic research on the issue of cryptocurrency, the legal side of the issue remains more than debatable, given the almost complete lack of a clear position of the legislator. In the most general form, we can formulate at least three approaches:

First, cryptocurrency can in principle be considered as a means of payment (Grinichko N., Ubiraev S.).

The second approach is to consider cryptocurrency as the actual sui generis currency or currency values. (Zakorzhievskiy, V.V.).

The third approach involves considering cryptocurrency as a property of a special kind, capable to participate in civil turnover and has some value. (Berdyshhev A.).

The scientific literature defines the main concepts of “cryptocurrency”:

1. a form of digital currency, which emission and accounting are based on asymmetric encryption and the use of various cryptographic protection methods (Angel, J., 2015).
2. an innovative payment network and a new form of money that uses P2P technology that operates without a central supervisory authority or bank, transaction processing is performed jointly by the network (Gervais, 2014).
3. a special type of electronic money based on a decentralized mechanism of emission and turnover and has a complex system of information technology procedures based on cryptographic methods of protection, regulating the identification of owners and fixing the facts of their changes (Ober, 2013).

Yulia A. Polyakova defines cryptocurrencies as decentralized convertible digital currencies based on mathematical principles, which are generated and controlled automatically by software, – have become such an instrument (Polyakova, Vorobyova, Chertakova, Olinider & Mazur, 2019).

V. L. Dostov notes that cryptocurrency is a type of digital money that uses distributed networks and publicly available transaction logs, and combines key cryptographic ideas with the monetary system to create a secure, anonymous and potentially stable virtual currency (Dostov V. L., 2014).

A. Carstens gave the most comprehensive interpretation of the concept of cryptocurrency. He focuses on two key components of monetary turnover – trust and convention. The proliferation of cryptocurrencies only underscores the important role of central banks as managers of public trust, reminding that money is the result of a convention, but if trust in money does not win, the legal mandate that gives value to money becomes meaningless (Carstens A., 2018).

Experts of the Federal Reserve System A. Berentsen and F. Schar characterize various currencies according to their governance structure, focusing on cryptocurrencies and government-issued money; they recognize the existence of a large unmet demand for a liquid asset that allows households and firms to make savings outside of the private financial sector (Berentsen A., 2018).

In our opinion, cryptocurrency should be defined as a digital currency (virtual, without physical
The practice of legal regulation of cryptocurrencies in many countries shows the problem of the impossibility of developing its legislative framework as a result of the uncertain status of cryptocurrencies and the ambiguity of the attitude towards them (Andreeva G.N., 2018). It is also worth noting that cryptocurrency can act as a speculative tool when its turnover is a way to attract capital, and exchange transactions that are based on the difference in cryptocurrency rates become a new type of earnings. However, making a profit from such speculations is a rather difficult type of earnings, which determines a rather high risk of cryptocurrency transactions (Sannikova, 2018).

The authors note that the instable nature of the cryptocurrency complicates the process of implementing its legislative regulation, but this is what determines the volatility of the cryptocurrency market. Thus, there is a kind of vicious circle, when the functioning and determination of the status of cryptocurrencies has not yet allowed many countries to determine its legal status, and the lack of the legal framework generates shadow operations and criminalization of relations in the sphere of digital currency turnover (Efimova L.G., 2020). To prevent all negative consequences of the functioning of the cryptocurrency market, it is necessary to cooperate and combine the efforts of all states to develop a unified regulatory framework for regulating cryptocurrencies. At the moment, the interaction of countries to solve problems related to the control of cryptocurrencies has not developed. Some countries are trying to independently determine the legal status of these currency types, while other countries lack cooperation and exchange of experience and information with other states.

Methodology

The authors used general scientific and special scientific methods, which provided an objective analysis of the purpose of the study. Taking into account the specifics of the topic, goals and objectives of the study, the dialectical method was used to outline the methodological framework of the study and clarify the nature of these concepts; the scientific method of analysis and synthesis were used to clarify and systematize the theoretical foundations about the nature of regulation of the cryptocurrency; the formal-legal method was used to determine the structure and relationship between the concepts that were studied, as well as to study relevant regulatory acts of national and foreign legislation. These and other research methods were used in the article in the interconnection and interdependence, which ensured the comprehensiveness and completeness of the research, the validity of the scientific results obtained.

Results and discussion

Today, there are many different problems in the implementation and development of legal regulation of cryptocurrencies and the implementation of control over their turnover. The authors emphasize that it is a matter of time to determine ways to solve the identified problems, but now there is no strategy to address the shortcomings of the cryptocurrency market. In our opinion, the most significant problems of legal regulation of cryptocurrency are money-laundering; the significant shortfall in government revenues as taxes and commissions; financing of prohibited areas; the lack of a unified regulatory framework in the regulation of cryptocurrency; the inability of protection of participants of the cryptocurrency market. At the same time, we offer measures and solutions to these problems.

In order to counteract money laundering and financing of illegal activities, it is advisable to create maximum transparency (openness) of cryptocurrency transactions and the ability to identify customers. It is also necessary to pay attention to the development of legislative acts and increase control over the implementation of transactions that involve cryptocurrencies, which will minimize the risks of money laundering and financing of illegal activities.

The establishment of certain clear legal grounds for obtaining access by public authorities to certain information in the field of cryptocurrency turnover will solve the problem of under-receipt of tax revenues from these activities. We also consider it necessary to hold events with the participation of different countries to determine the legal status of cryptocurrencies, identify problems, and determine ways to solve them. Strengthening cooperation and interaction between states.

The development of global trading systems, globalization and increasing attention to
scientific, technological and information research have expectedly translated into the emergence of a new financial instrument that can significantly simplify transactions between individuals and legal entities to pay for goods and services, ensure transparent investment activities and use the cutting-edge technology to improve quality of life (Polyakova, Vorobyova, Chertakova, Olinder & Mazur, 2019).

In the process of the rapid development of information technologies, new tools for managing the economy appear every day, including electronic money. The economy of most countries is improving and developing, and people are always in search of a better and more convenient one. This led to the appearance on the market of an analog of traditional currencies — cryptocurrencies (Dvulit, Peredalo, Tylipska, Terno and Stabel, 2019).

This currency does not physically exist, it is digital and stored exclusively on computers and functions thanks to large blockchain technology. Blockchain is a distributed database containing information about all transactions (communications) performed by all system participants (Zenin, Kuteynikov, Izhavi, & Yapryntsev, 2019).

Ahmed Ashoor defines the blockchain as a digitized, decentralized, public register of all cryptocurrency transactions. Blockchain technology is an infrastructure technology for cryptocurrency (Ahmed Ashoor; Kamaljeet Sandhu., 2019).

Analysts of the Central Bank of Finland concluded that it is more appropriate to compare cryptocurrency with money than with a modern electronic payment system. This eliminates the need to regulate such a system within which the currency protocol is adhered to, and the transaction fees themselves are determined by the users regardless of the efforts of the “producers” (Huberman, Leshno, Moallemi, 2017).

V. Constâncio, Vice-President of the European Central Bank, believes that cryptocurrency is not a currency because it cannot perform classical currency functions, such as serving as a unit of measure of value that can be used to express the value of another commodity (Cryptocurrencies can never drive out money, 2017).

According to a survey by the Central Bank of the Russian Federation, cryptocurrency is a decentralized virtual currency based on mathematical algorithms and protected by cryptographic methods, which emission is performed based on distributed registers (Bank of Russia review on cryptocurrencies, 2017).

The Council of the Federation of Switzerland has also defined the concept of cryptocurrency as a virtual currency, a digital representation of value that is accessed online, functions as money, i.e. used as payment for real goods and services, but is not accepted as a payment instrument (Swiss Confederation, 2014). In the European Union, cryptocurrency has been classified by the European Central Bank as a converted, decentralized virtual currency. In Japan, cryptocurrency can be used as a means of payment, and the activities of platforms for buying and selling cryptocurrency are licensed.

In Canada, cryptocurrencies are allowed to be used to pay for goods and services under the rules of barter transactions, but they are not recognized as payment instruments. The Canadian Tax Agency characterizes cryptocurrency as a digital commodity for tax purposes.

Some European States have formulated their position on the concept and essence of cryptocurrency as private money and means of payment. This approach is applied in the UK, where legislation on cryptocurrency is being under development (Egorova, 2019). The position of Spain is quite interesting. In Spain in 2014, at the legislative level, cryptocurrency was classified as an electronic means of payment in relation to gambling, while such operations were not subject to value-added tax. In particular, in Germany, cryptocurrency is also recognized as a form of private money that is taxed as capital, and bitcoin itself is recognized as a payment unit.

It is possible to conclude that the approach to determining the nature and legal status of cryptocurrencies differs radically around the world: cryptocurrencies are recognized as money, property, they are completely prohibited and, on the contrary, are planned for state turnover.

Thus, cryptocurrencies are a certain private, anonymous and decentralized network that operates independently of the banking system or the government of the country.

Based on the considered features and interpretations of cryptocurrencies, we can offer a comprehensive definition of cryptocurrencies through a set of their features:

- a digital code – the result of the operation of the corresponding computer program (Sinel’nikova-Muryleva, Shilov, Zubarev, 2019);
they can be created using an appropriate protocol that functions in a decentralized manner using blockchain technology;

- it is a type of digital property that serves as a means of payment in society;

- it is a decentralized currency, emitted and stored in a decentralized manner using blockchain technology (Fenwick, Mark and Vermeulen, Erik P. M., 2018);

- does not have a physical form, i.e. cannot exist in the form of coins or banknotes.

Today, transactions with cryptocurrency, in particular with bitcoin as their most common variety, attract the attention of many people on the planet, not only professionals but also ordinary citizens. Some want to make money and are actively engaged in it, others are trying to understand what it is and what is its secret.

Obviously, cryptocurrency is a relatively new instrument of the financial market, but its value does not depend on the amount of labor invested, as is traditionally the case for ordinary goods and services.

**Legal status of cryptocurrencies**

From a legal point of view, according to the legislation of Ukraine, cryptocurrency cannot be attributed to legal currencies, the official monetary unit in Ukraine is the hryvnia, and the emission and turnover of other monetary units on the territory of Ukraine and the use of monetary surrogates as a means of payment are prohibited (On the National Bank of Ukraine, 1999).

In 2014, the National Bank of Ukraine (hereinafter referred to as the NBU), by Letter No. 29-208/72889 (Letter of the National Bank of Ukraine), determined that “Bitcoin as a type of cryptocurrency is a monetary surrogate that does not have real value security” (Letter of the National Bank of Ukraine, 2014). Thus, the NBU attributed the cryptocurrency to monetary surrogates, and this position was referred to by judicial practice. In addition, it was determined that: banks do not have legal grounds for crediting foreign currency received from the sale of cryptocurrencies abroad. On March 22, 2018, the NBU issued Letter No. 40-0006/16290, which referred the NBU’s Letter on recognizing Bitcoin as a monetary surrogate as such that has lost validity. Therefore, it is possible to hope that the corresponding Letter of the NBU and the NBU’s Explanations will no longer apply and the owners of cryptocurrencies will no longer have the risk of recognizing cryptocurrencies as monetary surrogates (Letter of the National Bank of Ukraine, 2018).

Despite this, Ukraine is in the top five countries in the world by the number of users of various bitcoin wallets. The reason for this is the fact of the significant popularity of bitcoins among Ukrainian IT specialists who actively invest in this currency.

Currently, cryptocurrency transactions occur outside the legal framework of Ukraine and carry high risks, which can lead to significant financial losses of the population and the inability to protect the rights of consumers of financial services. We believe that without proper legal regulation, cryptocurrency creates prerequisites for the implementation of illegal trade both within the country and abroad. In addition, the National Bank of Ukraine considers it premature to allow cryptocurrency to be circulated on the territory of Ukraine.

In our opinion, the National Bank of Ukraine, cyber police and the Prosecutor's office of Ukraine should hold meetings aimed at studying the issue of money laundering as a result of the use of cryptocurrencies in order to monitor the turnover of cryptocurrencies (Klochko, Kulish, Reznik, 2016).

Within the framework of such cooperation, expert and interdepartmental working groups should be created. Their work should be aimed at identifying ways to counteract crimes in the sphere of the economy during the cryptocurrency turnover (Muzychuk, Bezpalova, Rudoi, Kalenichenko, 2020).

Not so long ago, the main question about the status of cryptocurrencies in Ukraine and abroad came up against the main dilemma: to prohibit or not to prohibit cryptocurrency; if there is a need to regulate the turnover of cryptocurrencies; to tax it or not? Currently, the draft law on amendments to the Tax Code of Ukraine and some other laws of Ukraine regarding the taxation of transactions with crypto assets is under consideration in the Committee of the Verkhovna Rada of Ukraine. This draft law defines the concept of a virtual asset as a special type of property that is a value in digital form that is created, accounted for and disposed of electronically. Virtual assets include crypto assets, token assets, and other virtual assets (Draft Law on Amendments to the Tax Code of Ukraine and some other laws of Ukraine on taxation of transactions with crypto-assets, 2019). The legislator defines cryptocurrency in the draft law on cryptocurrency turnover in
Ukraine as program code (a set of characters, numbers and letters), which is an object of property rights, which can act as a means of exchange, information about which is entered and stored in the blockchain system as accounting units of the current blockchain system in the form of data (program code). Both bills contain rules for regulating mining activities, define the procedure for transactions with cryptocurrencies, define legislation in the field of cryptocurrency turnover, and define legislation on establishing liability for violations of the rules on the use and turnover of cryptocurrency.

To establish the legal regime of cryptocurrency activity in Ukraine as accurately as possible and determine the status of the cryptocurrency itself, in our opinion, it is necessary to consider the experience of foreign countries, both positive and negative, to work out the best way for our state in the sphere of regulating the cryptocurrency turnover.

**Foreign experience**

The legal status of cryptocurrencies, in particular the “bitcoin” system, differs significantly in different countries. In a number of countries, cryptocurrency transactions are officially allowed. They are usually treated as a commodity or investment asset, or money, and are subject to the relevant legislation for tax purposes.

The authors focus on an important aspect of the functioning of the cryptocurrency – its state regulation. In terms of regulation, there are three groups of states:

1) states where cryptocurrency has an official status (a commodity, financial asset, payment instrument, or another instrument);
2) countries that are on the way to regulate cryptocurrency;
3) cryptocurrency transactions are prohibited at the state level (Stukalo, Krasnikova, Balash, 2018).

The first group of states includes about forty countries, including Australia, Argentina, Great Britain, Germany, Denmark, Canada, the United States, Saudi Arabia, Singapore, France, Switzerland, Sweden, South Korea, Japan, China, Hong Kong, etc.

For example, the Reserve Bank of Australia in 2013 identified the Bitcoin cryptocurrency as an alternative to currencies of different countries and the payment system (Information Paper for the Payments System Board, 2013). However, the Australian Securities and Investment Commission does not consider cryptocurrency as a financial product, and cryptocurrency activities, i.e. activities directly or indirectly related to cryptocurrencies, such as mining, or use as a means of payment or exchange, are not subject to licensing.

In 2014, the Australian Taxation Office noted the possibility of introducing the taxation of cryptocurrency transactions (The Australian Financial Review, 2014). Currently, cryptocurrency transactions in Australia are subject to standard income tax. At the same time, when using cryptocurrency as an investment, there is no need to pay capital gains tax (Australia Income Tax Assessment Act, 1997). At the same time, in Australia, there is a legal opportunity to pay wages in cryptocurrency, but only if there is a contract between the employee and the employer (Tax treatment of crypto-currencies in Australia, 2014).

Argentina is one of the leading countries in the use of cryptocurrency. In July 2014, the UIF Department allowed all financial institutions to conduct transactions with bitcoin and other virtual currencies and obliged them to inform them about their transactions with cryptocurrency (Anokhin Nikolai Valentinovich, Shmyreva Alexandra Ivanovna, 2018).

Japan is currently one of the most liberal countries in the field of legal regulation of cryptocurrency. Since April 1, 2017, due to certain amendments made by the Japanese Parliament, Bitcoin and other cryptocurrencies have been recognized as payment instruments.

Canada ranks second in the world after the United States in the number of bitcoin ATMs, which indicates the high popularity of the cryptocurrency in this country. To better understand blockchain technology, the government is developing a digital version of the Canadian dollar based on it (Shin, 2016).

China is one of the fastest-growing financial and technology markets in the world. It is where most mining pools are located, i.e. special web services that are used for distributing computing power.

The current legislation of China does not have any special rules for taxation and transactions with cryptocurrency. At the same time, cryptocurrency is defined as a virtual commodity, not a currency. Thus, the sale of digital money can be subject to value-added tax,
and income and profit obtained in cryptocurrencies are subject to income tax, income tax, and capital gains tax (Kudryashova, 2018).

In Bulgaria, digital currency is considered as a financial instrument and is subject to appropriate taxes (Lexology, 2016).

In Switzerland, cryptocurrency is considered as assets, and transactions with them do not require special permits, but the purchase and sale of cryptocurrencies on a commercial basis and on existing trading exchanges are subject to licensing.

In Austria, cryptocurrency is considered by the tax authorities as an intangible asset, and its mining is considered as an operating activity. Therefore, the income received as a result of its alienation is subject to income tax (The brave new world of Bitcoin, 2016).

The second group of countries includes Russia, Ukraine, Denmark, France, Germany, and Thailand.

As for the regulation of cryptocurrency in the Russian Federation, there is no legislative certainty yet, although some efforts have been made by the authorities in this area over the past two years. Thus, at the end of January 2018, the Ministry of Finance of the Russian Federation prepared a bill “On Digital Financial Assets”, where it assumes the sale of cryptocurrencies at organized auctions (Bill of the Russian Federation On Digital Financial Assets, 2018).

For example, in Denmark, the state considers cryptocurrency as a foreign currency. In France, bitcoin is recognized as a legal monetary unit. In Germany, transactions using cryptocurrency will be taxed at a rate of 10% (Dudnikov, 2018). The third group of countries where cryptocurrency transactions are prohibited includes Thailand, Brazil, Colombia, Ecuador, Bolivia, Vietnam, Iceland, and Bangladesh. In particular, in Thailand, cryptocurrency is not recognized as a payment instrument until the law that regulates it is adopted. Therefore, the Central Bank recommended that banks and financial institutions refrain from transactions with cryptocurrency in terms of trade and investment. However, these recommendations do not apply to online exchange transactions (Financial Services Commission: financial measures to curb speculation in cryptocurrency trading, 2018).

In Colombia, the Central Bank noted that digital currency is not a currency and legal payment instrument (coindesk, 2014). In Ecuador and Bolivia, cryptocurrency is officially prohibited. In addition, bitcoin transactions are prohibited and illegal in Vietnam, Iceland, and Bangladesh (Sorokina, 2018). Today, there are many different types of digital currencies in the world, and states have not yet developed unified standards for their regulation.

In the modern world, there are many different types of digital currencies, and states have not yet developed common standards for their regulation. We can assume that the formation of a single framework that would establish the legal status and relations in the sphere of cryptocurrency turnover is a matter of time only. In general, each country strives to create favorable conditions for the development of new technologies, including digital currencies.

**Conclusions**

Summing up the above, the authors want to note that the legal regulation of cryptocurrencies in Ukraine faces many problems, namely, the functioning of such a market is characterized by the presence of price risks in various industries and spheres of activity. The main problem of this system is the anonymity of cryptocurrencies. It causes the inability to protect the interests and rights of market participants, the problem of using cryptocurrencies for criminal purposes, as well as issues of taxation of transactions associated with the loss of huge amounts of state revenue. The authors note that the existence of a currency that is not controlled by the state can destroy the established market principles of turnover and significantly undermine the economic, budgetary and monetary system of the country, lead to imbalance and instability. Cryptocurrencies do not function as a single unit of account, nor as a payment instrument, so they cannot be considered a stable form of money today.

Thus, we can conclude that the legal regulation of cryptocurrencies in each country is in the process of formation. Studying the experience of other countries will create a legal framework that takes into account the interests of the state, business and individuals. The adoption of relevant laws will not only combat money laundering, ensure security, but also receive income in the form of taxes from individuals and legal entities engaged in cryptocurrency transactions.

We offer the following ways of legislative regulation of the issues covered above:
abolish the status of anonymity of participants in cryptocurrency relations in order to combat money laundering and terrorist financing;
- maintain decentralization, which, in our opinion, will allow the interaction of entities directly in the implementation of transfers without intermediaries, such as commercial banks. This avoids transaction fees for individuals, as well as reduces the processing time of requests and direct movements of crypto-funds;
- to provide the state with access to information on the transfer of assets to monitor compliance with the legality of transactions, accounting for the use of cryptocurrencies, as well as to provide access to information on persons carrying out such transactions;
- given the emergence of new projects related to cryptocurrency, to oblige the founders to undergo the procedure of licensing their activities;
- to equate income from cryptocurrencies as business income and to tax capital gains on the model of legal regulation of cryptocurrencies in Japan and Sweden.

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**Bibliographic references**

About the National Bank of Ukraine (1999). Recovered from https://zakon.rada.gov.ua/laws/show/679-14

Ahmed, A., Kamaljeet, S. (2019). Framework and Model for Cryptocurrency Innovation and its Impact on Economic Transformation // International Journal of Innovation in the Digital Economy (IJIDE)10(4) DOI: 10.4018/IJIDE.2019100103

Andreeva, G.N. (2018). Current problems of the legal regulation of cryptocurrencies in the Russian Federation. (REVIEW) // Social and human sciences. Domestic and foreign literature. Ser. 4, State and Law: Review Journal. No. 2, 60-64.

Angel, J. (2015). The Ethics of Payments: Paper, Plastic, or Bitcoin? Journal of Business Ethics, 3, 603-611.

Anokhin, N. V., Shmyreva, A. I. (2018). Cryptocurrency as an instrument of the financial market / Ideas and ideals journal No. 3, Volume 2. Recovered from https://cyberleninka.ru/article/n/kriptovalyuta-kak-instrument-finansovogo-rynka

Australia Income Tax Assessment Act (1997). Recovered from https://www.legislation.gov.au/Details/C2019C00049/Html/Volume_6

Bank of Russia review on cryptocurrencies. (2017). ICOs and approaches to their regulation. Moscow. December 2017 // Recovered from http://www.cbr.ru/content/document/file/36009/rev_ico.pdf

Berentsen, A., Schar, F. (2018). The Case for Central Bank Electronic Money and the Non-case for Central Bank Cryptocurrencies. Federal Reserve Bank of St. Louis. Recovered from https://research.stlouisfed.org/publications/review/2018/02/13/the-case-for-central-bank-electronic-money-and-the-non-case-for-central-bank-cryptocurrencies

Bill of the Russian Federation On Digital Financial Assets, (2018). Bill of the Russian Federation No. 419059-7 About digital financial assets. Recovered from https://sozd.duma.gov.ru/bill/419059-7

Carstens, A. (2018). Money in the Digital Age: What Role Central Banks? BIS, Recovered from https://www.bis.org/speeches/sp180206.htm

Coindeks. (2014). Central Bank of Colombia Says 'Bitcoin is Not a Currency'. Recovered from https://www.coindesk.com/central-bank-colombia-says-bitcoin-currency

Draft Law on Amendments to the Tax Code of Ukraine and some other laws of Ukraine on taxation of operations with crypto-assets. (2019). Verkhovna Rada of Ukraine. Recovered from http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=67423

Dudnikov, D.V. (2018). Problems of regulation of relations on the use of cryptocurrencies in the Russian Federation // Electronic Network Political Journal “Scientific Works of KUBSTU”. Kuban State Technological University (Krasnodar). No. 6. - S. 119-123.

Dvuliit, Z., Peredalo, Kh., Tyilipska, R., Terno, R. and Stubel, R. (2019), “Cryptocurrency: state and trends of development”, Ekonomika ta derzhava, vol. 1, pp. 10–14. DOI: 10.32702/2306-6806.2019.1.10

Efimova, L. G. (2020). Sources of legal regulation of public relations in cyberspace // Lex Russica. Volume 73 No. 3 (160), 114-120.

Egorova, M. A. (2019). The concept and legal regulation of cryptocurrency in foreign countries. Greater Eurasia: Development, Security, Cooperation. Yearbook. Vol. 2. Part 1 / RAS INION. Sep. scientific cooperation; Repl. ed. IN AND. Gerasimov. Recovered from https://cyberleninka.ru/article/n/ponyatie-i-pravovoe-regulirovanie-kriptovalyut-v-zarubezhnyh-stranah/viewer
Lexology. (2016). The brave new world of Bitcoin — Austria // Recovered from https://www.lexology.com/library/detail.aspx?g =a7d1807c-2ae8-43c9-9bf1-b1b66da984d

Muzyczuk, O. M., Bezapalova, O. I., Rudoi, K. M., Kalenichenko, L. I. (2020). International experience of ensuring public safety and order by police forces during mass events and the possibility of its application in Ukraine. Amazonia investiga. Vol. 9 Núm. 25 / pp. 493–499. https://amazoniainvestiga.info/index.php/amazonia/article/view/1099

On the classification of operations with “virtual currency / cryptocurrency” Bitcoin as transactions in foreign currency trading, as well as the grounds for crediting to a current account in foreign currency an individual foreign currency received from the sale of Bitcoin. Recovered from http://search.ligazakon.ua/_doc2.nsf/link1/lb14375.html?_ga=2.138709434.86257076.1586952364-470601430.1586952364

Polyakova, Y. A., Vorobyova, O., Chertakova, E., Olinder, N., & Mazur, N. (2019). Revisiting the formation of the legal status of cryptocurrency in the Russian legislation. Amazonia investiga. Vol. 8(22), 711-718. Retrieved from https://amazoniainvestiga.info/index.php/amazonia/article/view/824

Reuters. (2017). Cryptocurrencies can never drive out money — ECB’s Constancio. Central Banks. Recovered from https://www.reuters.com/article/uk-ecb-currency/cryptocurrencies-can-never-drive-out-money-ecbs-constancio-idUSKBN1D92CR

Sannikova, L. V., Pescherov, A. I. (2018) Legalization of cryptocurrency in Russia: problems and prospects // Property relations in the Russian Federation. 2018. No 9 (204). Recovered from https://cyberleninka.ru/article/n/legalizatsiya-krivojanyutv-rossii-problemy-i-perspektivy

Shin, L. (2016). Canada Has Been Experimenting With A Digital Fiat Currency Called CAD-COIN. Forbes. Recovered from https://www.forbes.com/sites/laurashin/2016/06/16/canada-has-been-experimenting-with-a-digital-fiat-currency-called-cad-coin/#1566ad9f46a4

Sinel’nikova-Muryleva, E. V., Shilov, K. D., Zubarev, A. V. (2019). The Essence of Cryptocurrencies: Descriptive and Comparative Analysis //Finance: Theory and Practice // Finance: Theory and Practice, vol. 23, issue 6, 36-49. Recovered from https://doi.org/10.26794/2587-5671-2019-23-6-36-49

Sorokina, Y. S. (2018) Bitcoin: an innovative
currency or an instrument of financial crime?
Political Internet electronic scientific journal of
the Kuban State Agrarian University, No. 131, p.
1301-1310. DOI
http://ej.kubagro.ru/2017/07/pdf/108.pdf
Stukalo, N. V., Krasnikova, N. O., Balash, O. O.
(2018). Cryptocurrency functioning in the global
economy // Visn. Dnipro. Univer. Ser. Worlds
Economy and International Economic
Vidnosy’ny’.2018, 10 (26), S. 109–119 doi
10.15421/181811. Recovered from
http://www.dnu.dp.ua/docs/visnik/fmecon/progr am_5c0e995b6ea3f.pdf
Swiss Confederation (2014). Federal Council
report on virtual currencies in response to the
postulates Schwaab (13.3687) and Weibel
(13.4070). Recovered from
http://www.news.admin.ch/
NSBSSubscriber/message/attachments/35361.pdf
Tax treatment of crypto-currencies in Australia-
specifically bitcoin (2014). Australian Taxation
Office. Recovered from
https://www.ato.gov.au/General/Gen/Tax-
treatment-of-crypto-currencies-in-Australia---
specifically-bitcoin/
Zenin, S., Kuteynikov, D., Izhayev, O., &
Yapriansev, I. (2019). Applying Technologies of
Distributed Registries and Blockchains in
Popular Voting and Lawmaking: Key Methods
and Main Problems. Amazonia Investiga, 8(20),
330-339. Retrieved from
https://www.amazoniainvestiga.info/index.php/amazonia/article/view/147