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Financial Markets Security: Tax Aspect

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Abstract. Financial markets are the fundamental of the functioning of the modern economy. The development and globalization of financial markets has made the speed of information presentation, the speed of its processing and security as the main criteria for their functioning. Digital technologies, instantly penetrating into the financial sphere, make the question of interest about the safety protection of the financial market functioning. The author discusses the foundations of the functioning of financial markets, and their tools. Special attention is given to the safety. The focus is on those security threats that carry cryptocurrencies that have appeared relatively recently and are widely used in both national and international markets. In the world community there is no unequivocal understanding of what a cryptocurrency is: a digital commodity, a calculated monetary unit, an investment asset. Due to the lack of consistent approach to the essence of cryptocurrency and its uncertain legislative status in many jurisdictions of the world, the tax aspects of its operation are of great interest and they determine the relevance and novelty of this research. The paper discusses a number of threats in terms of tax administration of operations with cryptocurrencies. There is the assumption that it is necessary to create a model of a financial market along with its convenience, speed and multi-functionality, which would provide the guarantee of security and transparency in financial markets, the safety of clients' assets and their personal data.

1 Introduction

Over the last years, the issue of economic security of both individual countries and the entire economic space has become more relevant. In this age of high technologies, the emergence and development of electronic and digital money, the issue of security of financial markets, which are becoming more global and technological, becomes highly relevant. As a means of payment – cryptocurrencies are widely used both in national and international circulation. But more potential threats to financial markets lie in the use of cryptocurrencies as financial assets (financial instruments). On the one hand, everyone understands the importance and the need to ensure financial security, and on the other hand, many of its aspects, in particular tax, are beyond the bounds of a comprehensive system understanding and the more effective practical realization. This problem is one of the main and therefore, the most relevant in modern conditions of realization of the innovation economy.

The development and virtualization of financial markets has produced such term as financial technologies, which are widely used to improve the mechanisms of its operation: making payments, lending, investing, etc. These aspects were widely discussed in the works of both Russian [1, 2] and foreign authors [3, 4]. Cryptocurrency is one of such technologies. Various works of foreign authors [5–13], as well as a number of works of domestic authors [14–24] are devoted to its appearance, features of functioning and prospects. Most researchers believe that cryptocurrencies are new types of money, which the state needs to accept, legitimate, and take the basis of the functioning of the modern-digital economy [14–16, 19–20].The stability of the functioning of a financial market under the influence of external and internal factors on it, a certain level of independence of national financial markets from the world market, and the protection of financial interests at all levels of financial relations determine one of the most important principles of the functioning of the financial market – its security. The security threat of financial markets from cryptocurrency is quite high due to the lack of state regulation of cryptocurrency and cryptocurrency technologies in both Russia and in most countries of the world. The composition of these threats and risks is described in detail in the works of Russian authors (25–27). Security issues in global financial markets are devoted to researches (28, 29). Despite the breadth of the discussion of the reasons for the emergence of cryptocurrencies, their functional features and their directions of use, the tax aspects of its functioning because of the lack of legislative regulation were not enough considered. It determines the scientific value of the study.

Therefore, the main purpose of this study is to determine the possibility of security threats of modern financial markets, the uncontrolled functioning of cryptocurrencies from a tax administration perspective. In this regard, the author of this article has set the tasks– to consider the peculiarities of the functioning of financial markets, its tools, principles of operation, paying particular attention to security, identify security threats caused by cryptocurrency as a potential financial asset making transactions in the part of tax administration, to determine the priority measures which contribute to solving these problems and preventing these threats.

2. Theoretical part

The combination of relationships, resulting from lending, securities trading, currency exchange, tangible and intangible assets in economic theory is called financial markets. These relationships are carried out through the mediation of money, acting as a means of payment.

The main purpose of the financial market is to provide quick mobilization of monetary funds in order to satisfy the needs of economic entities in them. Mobilization consists in attracting private investors, i.e. ensuring the participation of people's savings in the incomes of enterprises. The growth of economic potential and production capacity of the country occurs by stimulating the development of enterprises, provided with the rapid mobilization of temporarily available cash assets and their investment in production. At the same time, investors receive certain income from this. Thus, the financial market is one of the effective ways of market self-regulation, which allows changing the proportions of reproduction in accordance with the changing structure of the needs of society.

In addition, the financial market allows, to a certain extent, to ease the pressure on the country's budget deficit.

According to funding sources, there are two main models of financial markets:

- continental model based on bank financing (bank based financial system);
- the Anglo-American model, based on the securities market and on the institutional market investors (market based financial system).

The continental model is distinguished by a less developed secondary market and non-public placement of securities (a relatively small number of shareholders and, accordingly, a high degree of concentration of stock capital). In the Anglo-American model, on the contrary, the secondary market is much more developed and there is a strongly pronounced tendency to a public placement of securities. In a globalized economy, these two models are interconnected and the boundaries between them are gradually blurred.

Financial markets exist in the form of an organizational structure (in the form of exchange market, where deal-making process occurs according to strict established rules), in the form of direct agreements (interbank market) and in the form of banking services for the population (retail).

According to the financial instrument used in the market, the financial market can be structured and presented as follows: (Fig. 1).

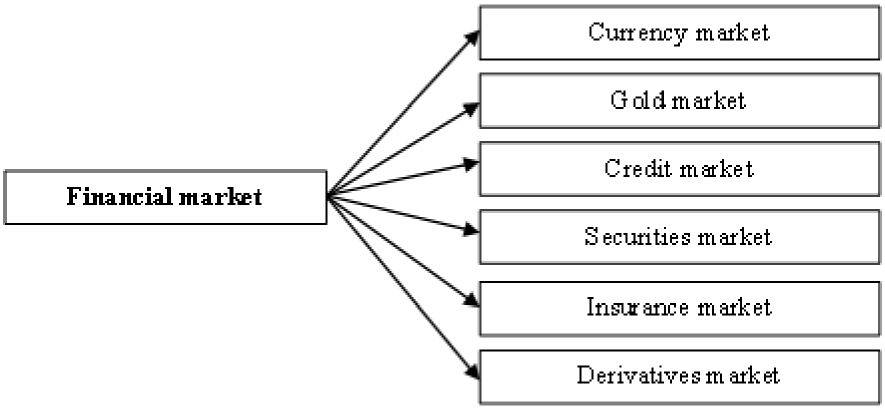

Figure 1. The structure of finance market according to the financial instruments.

The functioning of the financial market is provided for various financial institutions: banks, insurance organizations, non-governmental pension funds, stock exchanges, etc. Stock exchanges are the main ones. There are three types of stock exchanges:

- closed (only its members can participate in auctions);
- stock exchanges with free access (operations are carried out only by intermediaries);
- stock exchanges, consisting of a wide range of persons working under state control.

Trading on the stock exchanges is organized according to a special regulation in order to protect trading participants from various types of manipulations.

In order to let the financial market function regularly and fulfill its mission, it is necessary to follow a number of principles, such as: centralization, accountability, security, controllability, juridical orderliness, etc.

Most of these principles do not work without the legislative implementation of the status of financial assets traded on financial markets: currencies, precious metals, securities, etc.). The circulation on the financial asset market is strictly regulated (registration of the issue prospectus, listing, etc.) the rights and obligations of issuers, investors, intermediaries are clearly defined. It is done on the one hand in order to protect all market participants from fraud, on the other – a clear regulation of organizational procedures allows the state to regulate the market. As a rule, all these procedures are regulated by the Central Bank.

Financial market security is the security of financial interests at all levels of financial relations; a certain level of independence, stability and functioning of the financial market under the influence of external and internal destabilizing factors on it, which constitute a threat to financial security; the ability of the financial market to provide with the effective functioning of the national economy and its growth.

To ensure an effective financial security system at the present stage, a complex of interrelated measures is needed in all sectors of the financial market. Improving the regulation of financial markets should be carried out with due regard for ensuring the security of the finances of individuals and legal entities accredited in credit institutions, which, in turn, helps to ensure the stability of the banking system and thus achieve the financial security of the state. To prevent crimes and administrative offenses in financial relations (including laundering of proceeds from crime). Financial security of a financial market implies an optimal amount of its capitalization. This level should ensure a stable financial situation of issuers, owners, buyers, trade organizers, traders, general investment institutions, brokers, consultants, registrars, depositories, custodians and the state in general. Assessing the security of the financial market as a whole, we must talk about the security of its segments. If we consider cryptocurrency as a new financial (asset) tool, as evidenced by the large number of cryptocurrency exchanges operating around the world, then the problem of security of this segment is becoming even more burning.

The growth in demand for cryptocurrency is caused by its use as a financial asset (instrument). In many countries of the world cryptocurrency exchange began to function, which in fact means the formation of a new segment of the financial market — the market of crypto-currencies. The security threat of financial markets has increased due to the increase in the volume of trading in digital assets, caused by the release of Bitcoin to futures trading. Thanks to this, confidence in investments in virtual currency has also increased among conservative investors. Experts believe that some investors sell gold in favor of Bitcoin. It can be concluded that the trend of changing the preferences of investors from raw materials to the digital economy is emerging. This confirms the statistics of the outflow of foreign investment from funds that invest in the shares of domestic companies from Russia. Experts estimate that 26.5% of the volume of Local Bitcoins currently falls on Russia, which is more than 2 times greater than the volume of Venezuela, which takes the second place. As at July 2013, about 90% of the volume of Local Bitcoins was accounted for by the United States, United Kingdom and Australia. Now one share between themselves 19% and occupy the fifth place and below. It indicates the growing role of Bitcoin in developing economies.

Many experts believe that the issuance and circulation of cryptocurrencies have signs of a financial pyramid, and therefore it carries risks, including:

– lack of protection of investors' rights due to lack of legislative regulation of crypto active assets, investment guarantee system, a single issuer;

– the use of crypto active assets for illegal purposes (the anonymity of operations creates conditions for their use in financing terrorism, money laundering, trafficking in illegal goods);

– lack of market liquidity, the concentration of crypto active assets in the hands of a small circle of players (for example, 97% of bitcoins are concentrated at 4% of bitcoin addresses), high volatility of the value of crypto active assets;

– operational risks (vulnerability to cyber fraud wallets, crypto-currency exchanges);

– the acquisition of crypto active assets with leveraging of resources can create significant risks for the financial stability of investors due to the considerable cost of crypto active assets [30].

The stability of the money circulation of the state is one of the basic conditions for ensuring the security of financial markets. It is ensured by the Central Bank, which regulates the circulation of cash and non-cash money in the country. It is difficult to monitor and regulate the activities of users dispersed throughout the countries of the world. The lack of a legal status of cryptocurrencies determines the conduct of operations with them outside the field of legal regulation and control of the state. Combined with anonymity, it allows the use of cryptocurrency in illegal capital withdrawal schemes, legalization (laundering) of proceeds of crime, terror financing, drug traffic and weapons, etc. Moreover, states are not ready to lose tax revenues from cryptocurrency operations. First of all, we are talking about exchanges, which began to earn huge incomes on their commissions. Traders, miners and other participants in operations with cryptocurrencies due to high volatility have become rich. Their income is not taxable.

The high volatility of crypto active assets is caused by swing of prices, which depend on the demand for them. Prices in the financial market are determined, first of all, by the level of profitability of individual financial instruments, which is formed taking into account the average level of interest rates. Financial instruments with the highest level of profitability are in high demand in the market. These tools characterize the business activity of individual economic entities in the financial market.

The peculiarity of price formation in the financial market is the impact on the process of speculative capital. Cryptocurrency doesn’t have direct connection with the interest rate level and its issuer’s business activity as it is unknown. Therefore, only speculative demand which is not related to the real needs of the economy affects the prices of this financial instrument. The high level of the speculative component for the financial market is considered as normal, but this is typical for assets which are associated with specific subjects (the state, companies, financial institutions). In the case of cryptocurrencies, there is no such issuer, there is no binding either to a specific company, or to the industry, or to the state. Thus, speculators influence the price level in the cryptocurrency segment of the financial market. All segments of the financial market are interconnected, so the dynamics of prices in one of them affects the price level in other segments.

The economic processes in the country depend on price movements in the financial market, therefore, there is a need for state regulation of prices with the help of appropriate mechanisms. Among such mechanisms there is the establishment of the interest rate by the Bank of Russia, the rationing of reserves in commercial banks, the regulation of emission volumes and the yield of government securities (bonds), etc. The mechanism of such regulation is carried out to varying degrees in all countries through the banking system. But as mentioned above, the release and circulation of cryptocurrencies as payment instruments or financial assets is decentralized and occurs outside the banking system.

The issue of price formation is very important when it comes to establishing the tax status of a financial asset, because almost all transactions in financial markets belong to direct or indirect taxation.

The correctness of the taxation base calculation, the choice of the tax rate by the tax agent and the ability of the client to take advantage of benefits depend on accuracy of determination of the tax status or under an agreement on the avoidance of double taxation with the country of his tax residence. In case of errors in the calculation, failure with deduction or tax withholding in a smaller amount, the tax agent becomes responsible for pains and penalties in the form of recovery at his expense of the amount of tax, fine and penalty for each day of delay.

Apart from collecting a tax from a physical person, imposing fines and penalties, there is a criminal liability for abusing the tax law in the form of obtaining tax benefits or an unlawful statement of the right to benefits. The tax agent is obliged to establish the tax status of the client on each date the income is paid. In case of doubts about the veracity of personal data, the tax agent has the right not to provide benefits and consider the tax status of a resident as unconfirmed.

The use of bitcoin and other cryptocurrency for tax avoidance is a huge problem for states. Crypto actives, whose chains of anonymous tranches are very hard to track down, claim to become one of the most popular ways of crypto corruption and tax evasion: digital wallets are not subject to the jurisdiction of any of the states, and the cryptocurrency in most countries is not subject to taxation. The lack of a legislative definition of cryptocurrency status creates another threat to the security of the functioning of financial markets.

According to the Bank of Russia, there are currently more than 1,300 cryptocurrencies, whose total capitalization exceeds $ 597 billion. Bitcoin takes the first place in market capitalization ($ 259.6 billion), followed by Ethereum ($ 72.9 billion), Bitcoin Cash ($ 57.8 billion), Ripple ($ 46 billion) and others. Increasing volume of operations with the use of cryptocurrency requires a clear determination of their legal status.

The legal status of private cryptocurrencies in different countries varies, they are defined as a digital product, digital asset, financial instrument, virtual currency. In countries such as Japan, China, the Philippines, Switzerland, the United States (some states), it is common to introduce the legal status of cryptocurrency as a digital asset, product, or other property which exists in electronic form.

In most countries of the world their legal status is not defined. This is the case of our country: the draft Federal Law “On digital financial assets”, where the cryptocurrency is defined as a digital financial asset and is considered not a legal means of payment approved by the State Duma only on first reading.

At the same time, operations with Bitcoins are officially authorized in a number of countries, the work with improving control and legal regulation in this area is being developed.

Usually they are treated as a commodity or investment asset and for tax purposes and are subject to relevant legislation. World experience shows that cryptocurrency can be bought, sold, stored, invested, converted into hard currency.

In October 2015, by a decision of the European Court, transactions in bitcoins were referred to payment transactions with currencies and are not subject to VAT. In Germany, in 2013, bitcoins were classified as private money and recognized as a settlement unit, the sale of bitcoins is subject to VAT, and any profit from bitcoin transactions is income tax. In Switzerland, cryptocurrencies are subject to the same rules as foreign currencies. In Japan, since March 2016, Bitcoin is legal tender. In China, operations with Bitcoins are prohibited for banks, but allowed for individuals, while China is the leader in mining ("mining Bitcoins"). In Singapore, since 2014, bitcoin operations have been equated to operations subject to tax on goods and services. Under US law, cryptocurrency is classified as a class of physical goods, according to Chinese law, it is a digital product.

The uncertain legal status of cryptocurrency assets and the tightening of banking supervision increase the popularity of anonymous transfer of income from the issuance of cryptocurrency. Hiding personal data in the process of withdrawing funds is carried out in three ways. Each of these methods contains potential risks of fraud, which, in the process of withdrawing large sums creates threats to the functioning of payment systems integrated into the financial market:

1. Selling for cash
2. Admission to the "one-time" bank cards.
3. Enrollment on unconfirmed e-wallets.

In the first case, the user creates a new wallet for storing cryptocurrency, transfers coins and reports information to the customer checking the balance. An exchange is made at a predetermined rate, the buyer transfers digital money, access is closed. The method allows to exchange large sums, to receive various currencies without intermediaries. The disadvantage of the scheme is the difficulty of finding a reliable buyer, the risk of running into fraudsters.

Using "one-time" bank cards allows you to transfer profits to the card, after which it closes, the user's personal data is deleted from the database.

In the third case, the user registers several accounts on electronic services, displays the income from mining and closes accounts.

Most cryptocurrency exchanges support e-wallets as a way to withdraw coins. For example, EXMO has its own wallet integrated with Payeer, Perfect Money, Advcash, Skrill, OKPay: users can also withdraw their Visa or MasterCard cards to themselves. Commissions range from 1% to 3% depending on the type of currency.

WebMoney provides its own wallets for storing and earning cryptocurrencies, including Bitcoin and Bitcoin Cache. The user can transfer funds between accounts registered for one account.

Most miners avoid official registration due to high taxes. Receiving income through anonymous portals and private commercial banks does not attract the attention of monitoring institutions. The absence of a legal ban protects users from criminal liability and creates fertile ground for financial fraud.

It is possible to eliminate financial monitoring in the process of cashing mining income by dividing large amounts into small, chaotic (irregular) transfers to various payment instruments. Technically, digital currency is converted into Fiat money by linking the crypto wallet number to the payment system data through an intermediary. The role of the payment system is played by electronic wallets, bank cards or individuals (upon receipt of cash). Intermediary in the derivation of income from the mining of bitcoins (or other coins) are cryptocurrency exchanges, exchange services, thematic forums. Output services provide exchange portals, among which are popular: TierraPay, Changer, E-Scrooge.

Monitoring BestChange helps to choose a service with a minimum commission for exchanging or withdrawing your coins. The service is very convenient and popular, does not require registration. A quick way to get cash is to use all the same exchange services: belkapay, 100monet, newline, which, in addition to withdrawing to the cards offer withdrawal and cash. It is very important to specify the information in the service about its offices location. Bestchange.ru is used in order to find a suitable exchange point monitoring. For this, they contact the service in advance and agree on the transaction, after agreeing the exchange rate and commission. In this operation, the security of the transaction is most vulnerable, because it carries out personally with the courier of this service.

Tracking and regulating the activities of users dispersed throughout the world is quite difficult. The lack of a legal status of cryptocurrency causes the conduct of operations with them outside the field of legal regulation and control of the state, which creates great risks for the participants in the transaction.

Combined with anonymity, it allows the use of cryptocurrency in illegal schemes for money laundering, financing of terrorism, trafficking in drugs, weapons, etc.

For this reason, the monetary authorities of many countries are wary of recognizing cryptocurrency as a financial asset or instrument, due to the fact that the order of issuance and circulation of cryptocurrency involves a lot of risks.

An international institute was established in 1989 by the decision of the Big Seven countries. It develops international standards in the area of countering the legalization (laundering) of criminally obtained incomes and financing terrorism, known as the Financial Action Task Force FATF). The members of this organization are 35 countries and two international organizations, the observers — 20 organizations and two countries. Experts of this Group consider cryptocurrency a kind of virtual currency, which is understood as a digital representation of value, which does not have the status of legal tender in any jurisdiction. It is not issued and not guaranteed by any state and performs the above functions only by agreement of users of virtual currency within the network. A virtual currency is separated from a fiat (national) currency, which consists of coins and paper money, designated as legal tender, circulated and commonly used and accepted as a medium of exchange in the issuing country, and also separated from electronic money, which is a digital representation Fiat currency.

The group monitors and identifies the use of cryptocurrency as a money laundering tool, examines measures taken in various countries to combat this phenomenon, develops and implements its own set of measures aimed at improving the security of financial markets and fight against designated risks.

3. Practical relevance

The use of cryptocurrencies as a means of payment on financial markets, as well as the payment of taxes and fees by it at the moment is illegal, because operations with cryptocurrencies are performed outside the legal regulation, they are not guaranteed and are not provided by the Central Banks. In addition, the tax laws of many countries of the world provide for the payment of taxes only in national currencies that are legal means of payment in the territory of these countries.

The tax authorities can’t control all revenues and financial flows generated by cryptocurrency exchange. Thanks to the proliferation of cryptocurrency, many multinational companies are using technical innovations to increase profits. At the same time, their income does not include revenues to the budget of the country of residence where the income is generated not in the country of residence – receiver of income. From a legal point of view, it is absolutely legal to distribute profits depending on the location of tangible assets, without taking into account the increasing role of intangible assets in generating income. Small businesses are also actively using cryptocurrencies to avoid VAT. It is rather difficult to monitor, regulate and control the activities of users dispersed throughout the world, which creates certain risks during the transaction and does not ensure its security. However, it is not an obstacle for using cryptocurrency in illegal schemes for the withdrawal of capital, the legalization (laundering) of proceeds from crime, terror financing, drugs traffic, weapons, etc.

In Russia, for example, paying taxes is one of the pressing problems, taking into account the amount of funds that are taken offshore annually. There are services, which help cash out money for a commission through cryptocurrency and, thus, avoid VAT and other taxes. The legislative ban on operations with cryptocurrency does not work, however, operations for cashing large sums of money can be regarded as money laundering according to article 174 of the Criminal Code of the Russian Federation. But such precedents in juridical practice are rare.

Mining (the process of creating (issuing) cryptocurrencies) can be carried out by both legal entities and individuals, therefore this type of activity should be subject to taxation. Miners of cryptocurrency must register and pay taxes from the financial gain received from the purchase or sale of a crypto currency. Now practically it impossible to implement due to the lack of proper legislative support.

A number of countries, within the framework of national tax administrations are trying to solve these problems.

For example, in the United States, for example, a special group of professionals with extensive international experience in the fight against tax crimes has been created within the Internal Revenue

Service (IRS), which will investigate cases involving tax evasion through crypto actives. The question on operations on the conversion of cryptocurrency to fiat money, transfer points and its control is of greatest interest for the IRS service.

In Japan, as a result of the revision of the law on combating money laundering, all cryptocurrency exchanges are obliged to inform law enforcement authorities of any suspicious transactions. This requirement was introduced together with the recognition of Bitcoin as the legal means of payment in Japan. Nowadays, 11 cryptocurrency exchanges are licensed by local regulators and, therefore, undertake to report in accordance with the law. As reported by the Japan Times, operators reported 170 incidents of “frequent doubtful transactions”. The National Police Agency (NPA) analyzed all reports with a view to deciding on the need for further investigation. In addition, reports on alleged money laundering received from banks and insurance companies for 3 years were analyzed. A total of 1 178 112 such messages were registered. 16% of them were associated with organized crime syndicates. There were also 42 cases of money laundering using gold and precious metals. For example, in the first 7 months of 2017, residents of Japan reported 33 episodes of cryptocurrency fraud. The estimated by NPA damage from the actions of fraudsters was about $ 700,000.

The Financial Services Commission of South Korea makes demands on the exchanges, to be exact the ban on anonymous cryptocurrency trading. Thus, cryptocurrency exchange traders are obliged to use bank accounts attached to their real names. Earlier, South Korean traders had the opportunity to trade cryptocurrencies anonymously using special virtual accounts. According to the South Korean customs service, this practice allowed attackers to withdraw more than $ 600 million from the state.

But all these measures are addressed at certain segments of the cryptocurrency market. It makes impossible to protect participants from the market from fraud and to ensure the safety of the functioning of other segments of the financial market.

One of the possible ways to combat illegal circulation of cryptocurrencies is the mandatory global application of the KYC (know your customer) procedure in the process of registering electronic wallets by users of all cryptoplatforms of any jurisdiction, and, if necessary, tightening the requirements of this procedure to existing and new customers. It is also necessary globally standardize wallets that will not be able to send and receive transfers of crypto active assets without passing KYC.

For companies conducting ICO, it is necessary to apply the requirements for disclosure of information about the issuer, about the conditions of issue of tokens, as well as other requirements. At the same time, the requirements for the implementation of ICOs should be less stringent than those currently operating in the framework of the initial public offering of securities, and ensure the possibility of effectively attracting funds and developing technology while simultaneously protecting the rights and legitimate interests of investors.

4. Conclusion (summary)

In conclusion, it should be noted that the emergence of cryptocurrency is a regular consequence of the development of financial technologies. A new financial instrument is being formed, which forms a new value and allows to solve the emerging problems of the modern economy. From the standpoint of the tax system, cryptocurrency should be considered as an object of taxation and, at the same time, as a means of payment in tax administration, of course, when a number of conditions are fulfilled, the main of which is to ensure the safe operation of the financial market where cryptocurrency act as a currency of transactions, or as independent types of assets.

Modern financial markets need such a model which, on the one hand, will provide a convenient, fast, multifunctional online platform, on the other hand, guarantee the security and transparency of the trading system, safety of clients' assets and their personal data. The tax authorities of many countries are trying to adapt tax laws to cryptocurrencies, attributing them to the category of property (assets). In some states, mandatory registration and licensing of cryptocurrency exchanges is being introduced, but it is not enough. Legalization of cryptocurrency and operations with them is a universal problem, as its uncontrolled circulation threatens the security of not only national financial markets, but also the global financial system. For the full legalization and tax administration of a cryptocurrency it is necessary to make global application of customer identification procedures, standardization of exchanges, certification of OTC brokers, etc. It is impossible to avoid completely the risks associated with the circulation of any financial instrument, but we can reduce the consequences of their implementation. For this reason, further study of this phenomenon of the modern economy is necessary.

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