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CRYPTOCURRENCY IN THE NEW ECONOMY: PROBLEMS AND PROSPECTS

For a couple of years, the cryptocurrency has made a splash in the world of economy, turning from virtual money into a huge market in its size and creating a new full-fledged ideology of money-crypto-economy. Cryptocurrency has a huge potential for development. Cryptocurrency is a digital currency that uses encryption technology to transfer value over the Internet. But today cryptocurrency is trading that most meets the needs of modern society. This form of currency works independently of the banking system and can use in many countries as cash. The relevance of the study is whether cryptocurrency has a positive impact on the development of the economy. The purpose of this article is studying the impact of the process of introduction and use of cryptocurrencies in the economy of Kazakhstan. This process is intensively developing.

The key issue for a deeper understanding of the role cryptocurrency is determining their economic nature. Research methods include the stage of cryptocurrency analysis affecting the financial sector, the dynamics of the cryptocurrency market and the overall analysis of assets. For analysis, we paid attention to five cryptocurrencies with the largest capitalization and a large amount of data. The analysis revealed the main factors affecting the market price of cryptocurrency and ways to eliminate them. In addition, the main problems of introducing cryptocurrencies in Kazakhstan, such as the process of regulation of the cryptocurrency market identified and prospects analyzed. A new form of cryptocurrency uses proposed.

Key words: bank, bitcoin, blockchain, cryptocurrency, finance, economy.

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Жаңа экономикадағы криптовалюта: проблемалар мен перспективалар

Бірнеше жыл ішінде, криптовалюта экономика өлемінде нақты фурор жасады, виртуалды ақшадан өзінің көлемі бойынша үлкен нарыққа айналды және ақшаның жаңа толыққанды идеологиясын – крипто-экономика құруда. Криптовалюта үлкен даму қарқыны бар. Криптовалюта – бұл интернет арқылы құндылықтарды беру үшін шифрлау технологиясын пайдаланатын ғана цифрлық валюта. Бұл валютаны және оның нарығын мінсіз деп атауға болмайды. Бірақ бүгінгі күні криптовалюта саудасы қазіргі қоғамның қажеттіліктеріне сай келеді. Бұл валюта түрі банк жүйесіне қарамастан жұмыс істейді және көптеген елдерде қолма-қол ақша ретінде пайдаланылуы мүмкін. Зерттеудің өзектілігі – криптовалюта жаңа экономиканың дамуына оң әсерін анықтау. Мақаланың мақсаты – Қазақстан экономикасына криптовалюталарды енгізу және пайдалану процесінің әсерін зерттеу болып табылады. Қазіргі уақытта бұл процесс қарқынды дамып келеді.

Криптовалютаның рөлін терең түсіну үшін негізгі мәселе – олардың мәні экономикалық табиғатын анықтау. Зерттеу әдістері: қаржы секторына, криптовалюта нарығының даму серпініне және активтерді жалпы талдауға әсер ететін криптовалюталарды талдау кезеңін қамтиды. Талдау үшін, біз ең ауқымды капиталдандыру және деректер көлемі бар бес криптовалютаға

назар аудардық. Жүргізілген талдаудың арқасында криптовалютадың нарықтық бағасына және оларды жою жолдарына әсер ететін негізгі факторлар анықталды. Сонымен қатар, криптовалюта Қызақстанға енгізудегі негізгі проблема, криптовалюта нарығын реттеу процесі және перспективалары сарапталды. Криптовалюта қолданудың жаңа формалары ұсынылды.

Түйін сөздер: банк, биткойн, блок, криптовалюта, қаржы, экономика.

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Криптовалюты в новой экономике: проблемы и перспективы

За пару лет криптовалюта сделала настоящий фурор в мире экономики, превращаясь из виртуальных денег в огромный рынок по своим размерам и создания новой полноценной идеологии денег – криптоэкономики. Криптовалюта имеет огромный потенциал развития. Криптовалюта – это просто цифровая валюта, которая использует технологию шифрования для передачи ценности через Интернет. Нельзя назвать эту валюту и ее рынок идеальными. Но на сегодняшний день именно криптовалюта торговля больше всего отвечает потребностям современного общества. Эта форма валюты работает независимо от банковской системы и может быть использована во многих странах в качестве наличных денег. Актуальность исследования – оказывает ли криптовалюта положительное влияние на развитие экономики. Целью данной статьи является изучение влияния процесса внедрения и использования криптовалют в экономику Казахстана. В настоящее время этот процесс интенсивно развивается.

Ключевым вопросом для более глубокого понимания роли криптовалют является определение экономической природы их сущности. Методы исследования включают: этап анализа криптовалюты, влияющий на финансовый сектор, динамику развития рынка криптовалюты и общий анализ активов. Для этого авторы обратили внимание на пять криптовалют с самой большой капитализацией и большим объемом данных. Благодаря анализу были выявлены основные факторы, влияющие на рыночную цену криптовалют и способы их устранения. Кроме того, были определены основные проблемы внедрения криптовалют в Казахстане, процесс регулирования рынка криптовалют и проанализированы перспективы. Предложена новая форма использования криптовалют.

Ключевые слова: банк, биткойн, блокчейн, криптовалюта, финансы, экономика.

Introduction

The digital development of the financial system is an indicator of innovative development of the economy Republic of Kazakhstan. The financial system includes the state budget, pension fund, extra-budgetary funds, and funds of enterprises and organizations. One of the main tools to ensure the stability of the financial system at the present stage is the transition to the digital economy.

The digital economy is a production factor that determines the main keys to economic activity. Through digital data, the use of processing volumes and analysis results and increased productivity of different types of production compared to the traditional form can significantly improve the quality of storage, the sale of equipment, the supply of goods and services with new technologies (Keshelava, 2017).

E-economy or digital economy – economic activity based on e-commerce and e-money exchange. As a rule, these terms represent the

work of electronic services aimed at the sale of electronic goods and services, mainly the exchange of electronic money between the participants of electronic transactions (Yumaev, 2017).

In the virtual world, new products created to reduce the work of real tests, as the product test will be much easier. You can also learn the advantages and disadvantages of products with minimal financial costs using digital technologies, such as the Internet.

Financial institutions are experiencing the first changes on the path of globalization to the global digital economy. As a result, there have been major positive developments in the financial digital economy in the performance of its functions (Gupta, 2018).

President of Kazakhstan N. Nazarbayev in his Message to citizens «New possibilities of development in the context of the fourth industrial revolution» (from January 10, 2018) said about enhancing the competitiveness of enterprises. The country as a whole, improving the quality of life the

population requires digitalization of the economy (Mukanova, 2017).

According to experts, the Digital economy is developing in a very fast mode and has recently changed the usual economic production and traditional business. Zubarev (2017) said in his article «the digital economy as a form of expression the new economic development model» that a digital economy is a form of «new economy».

Cryptocurrencies are digital assets that use cryptography, encryption, to security. They have no intrinsic value because they are not redeemable for other commodities such as gold. Unlike traditional currencies not issued by a Central authority and not considered legal tender (Tucker, 2017). Cryptocurrency is money that exists exclusively on the Internet and has no analogues.

The research problem is the answer to the question: does cryptocurrency have a positive impact on the development of economics. The purpose of this article is to study the impact of the process of introduction and use of digital technologies in the digital economy. This process is currently under intensive development. Today, insurance, bank, tax, the pension system, enterprises transformed into a digital economy.

The need for research is the essence of the nature of electronic money is a number of cryptocurrencies, as well as models of institutionalization regulation in Kazakhstan and foreign countries will allow more detail to understand this phenomenon for financial and economic purposes modern security global financial system. A key issue for a deeper understanding of the role electronic money and cryptocurrencies are the definitions of the economic nature of their essence.

Materials and Methods

The method of fundamental research included the stage of cryptocurrency analysis in the financial sector. We focus on the five cryptocurrencies with the largest market capitalization and the largest amount of data (see table 1 below): Bitcoin Ethereum Ripple BitcoinCash Litecoin. (<https://coinmarketcap.com/>).

Basic research methods

- the first stage included the general analysis of the cryptocurrency market and assets. Market dynamics;

- the second stage included factors affecting the course of cryptocurrency.

Capitalization of cryptocurrency has certain differences from the parameters of other assets.

Shares of a real company considered from two angles:

- Market capitalization – the value of the issued shares at the current exchange rate;
- accounting capitalization is the value of the company's assets.

In the electronic market, the market capitalization of cryptocurrencies is the only criterion. No real assets that can take into account accounting, this resource has no assets.

With increasing capitalization, investments seem to be more prudent, as investors pay attention to the market during this period. When the capitalization of the entire cryptocurrency market decreases, there are already certain risks. Higher capitalization suggests that more players are investing in a cryptocurrency, or in the industry as a whole. This is good for a potential investor, as with the increase in liquidity, volatility decreases, and with it the risks of significant losses in case of wrong decisions. The result is approximate since the actual number amount of crypto coins is difficult to calculate. This is especially true of bitcoin.

In addition, the results should give an obvious answer about whether there are factors affecting the virtual currency rates.

Literature Review

As mentioned above, the cryptocurrency market existed for only a few years, and therefore only a few studies conducted. Matthew (2014) explained the term that «cryptocurrency» or «coins» used when transferring funds currencies supported by cryptogenic algorithms to ensure transactions valid and distributed over the Internet but are not in any centralized source. Schwartz (2015) mentioned, this structure used in the most important coins such as Bitcoin, Litecoin and Dogecoin. Stephen (2014) continue, they differ from «virtual currency» such as E-Gold, Amazon Tokens, fake dollars in the game second life and other currencies that exchanged exclusively over the Internet but also issued and managed from a centralized source. To avoid confusion, these terms not interchangeable, although they are in many sources. Pflaum et al. (2014) noted cryptocurrencies stored together with the «wallet», which is the address in a coin network specific to the private key. For the purposes, secured transaction, lender, escrow agent, a currency exchange, or even a debtor can hold the wallet. Grinberg (2012) made it clear, that access to the wallet based on possession of the wallet's private key and any transactions made by its individual.

The relatively recent emergence of electronic money as possible alternative existing funds significantly concerned not only economists but also ordinary citizens-active users' modern financial services in the conditions of functioning the global Internet and development of the digital economy (Pshenichnikov, 2017).

Cryptocurrency is money that exists exclusively on the Internet and has no analogues. History of the development cryptocurrency originates from the moment previously unknown group programmers under the pseudonym Satoshi Nakamoto designed the first bitcoin (Nakamoto, 2008).

Bitcoin is a digital form of currency that stored electronically by the user. The user can buy a product or service. Bitcoin not printed in any form such as banknotes or coins as a traditional currency. It circulates only in the online network. Bitcoin works on the cryptocurrency platform and it is difficult to earn. But the concept is simple and easy to use.

According to its idea, Bitcoin is the payment system of a new generation, based on 3 main principles:

- Complete anonymity of participant currency relations.
- High level of protection against fraud.
- Independence from regulatory authorities (Mashchenko, 2017).

The mechanism of the bitcoin system is that the entire money turnover described as transaction blocks. Each subsequent block carries detailed information about previous transactions, describing the meaning of operations, but not reflecting the data about the owner of the currency. Appearance new block bitcoin (mining) is possible only by creating a cryptographic signature. The developers of the system claim that the process mining is not infinite and cryptocurrency turnover cannot exceed 21 one million bitcoins (Hazi Ahmetov, 2016).

Cryptocurrency comes in a variety of non-mutually exclusive forms, and many cryptocurrencies include the integration of a few them approaches. The nature of the cryptocurrency network is likely to consider that holds the coins and the security structure agreement. The first type is proof of work. Proof of work cryptocurrencies obtained by «mining», which checks the encoding transactions in the cryptocurrency network before other miners (Volastro, 2015) buying or trading coins on the exchange. Pure proof-of-work coins do not bear interest through the network for holding the coins. The other corresponding variety of cryptocurrencies, «proof of stake», provides such interest when stored in a wallet (Buterin, 2015). The amount of interest

received, and their frequency will depend on the coins in question, but these are optional income can be either a source of income for the secured party or an incentive to the debtor to pledge the coins creditor or a combination of both.

Dynamic expansion of virtual space in areas of financial regulation inevitably leads to the emergence of new financial instruments and products. One of these financial instruments is decentralized e-currency or cryptocurrency (Tarasov, 2011).

Results

General analysis of the cryptocurrency market and assets. Market dynamics

The cryptocurrency market, as well as traditional financial and stock markets, usually evaluated in terms of economic indicators. Capitalization of cryptocurrencies is one of the most important criteria characterizing the success of electronic currency. The term means the total value of all the issued amount of crypto coins system.

According to the table, we can see that the market capitalization of Litecoin 3.092\$ cryptocurrencies is lower compared to other cryptocurrencies. The highest is in Bitcoin cryptocurrency 111.81\$.

According to this information, we see that the change in the dynamics of bitcoin capitalization as of 10.11.2018 – a decrease of 0.59%. Of these, -0.84% during the week, and for the month -0.84%. And over the last 3 months increased by 0.63% and by the end of 6 months by 2.50%. In addition, compared to the same period in 2017, the value of bitcoin decreased by 43.81%. As for other types of cryptocurrencies: The change in the capitalization dynamics for Ethereum cryptocurrency was reduced by -0.72% and by the end of 2017 the capitalization of Ethereum decreased by -75.31%. The dynamics of increase is observed only in the previous dynamics of 1 month. That is, during this time increased by 3.05%. The changing dynamics of Ripple capitalization increased by 1.57% compared with 2017, Ripple-44.35%. The dynamics of the increase can be seen in 6.89% for 1 week a week, for 10.78% of the 1 month forward and 74.56% for 3 months, to 4.78% for 6 months. It is obvious that changing capitalization dynamics of Bitcoin Cash happened by 1.24% compared with the 2017 year -56.03%. The dynamics of increase is not observed. The changing dynamics of the capitalization for the cryptocurrency Litecoin fell by -0.99% growth compared to 2017 -75.13% is observed. These indicators show the market dynamics of the cryptocurrency. As we have noticed, cryptocurrency capitalization in the market is growing.

Table 1 – Capitalization of the cryptocurrency market

Name	Bitcoin	Ethereum	Ripple	BitcoinCash	Litecoin
Market capitalization	111.81	21.788	20.027	9.806	3.092
A complete divorce market cap	135.194	21.788	49.812	11.801	4.395
Closing price	6437,8	211,33	0,49812	561,95	52,325
Coin access	17.368	103.099	40.206	17.449	59.087
Total coins	21	103.099	100	21	84
The volume of trading	4.448	1.664	535.501	766.888	394.204
% Change	-0.58%	-0.64%	1.51%	1.84%	0.78 %

Note: compiled by authors based on source (Coinmarketcap.com 2017-2018)

Table 2 – Changing of the cryptocurrency capitalization for 6 months and for a year

Name	Changes %	over a week	for the month	for the 3 months	for the 6 months	for the year
Bitcoin	- 0.59%	- 0.84%	- 1.35%	0.63%	- 2.50%	- 43,81%
Ethereum	- 0.72%	- 0.53%	3.05%	- 1.85%	- 55.10%	- 75.31%
Ripple	1.57%	6.89%	10.78%	74.56%	4.78%	- 44.35%
Bitcoin Cash	- 1.24%	- 0.51%	26.39%	13.14%	- 23.16%	- 56.03%
Litecoin	- 0.99%	- 4.49%	- 2.79%	- 5.95%	- 37.18%	-75.13%

Note: compiled by authors based on source (Coinmarketcap.com 2017-2018)



Figure 1 – Changing of the cryptocurrency capitalization for 6 months and for a year
 Note: compiled by authors on the basis of table 2

In general, the capitalization of any cryptocurrency depends on the value of one coin and the total number of units in circulation. The

second is usually set by the development team and is a constant (or changes as new cryptocurrency). The first is determined by trading on the stock exchange.

Factors affecting the course of cryptocurrency.

– The Fundamental basis. Any news related to the world of cryptocurrencies can affect the value of cryptocurrencies. Previously, the events in China had a rather serious impact, as the government constantly comes up with new bans in this country.

– Experts «forecasts and experts» statements. The nature of the comments plays an important role here. If experts speak positively about a project, the capitalization of the underlying cryptocurrency may grow.

– Introduction of innovative developments. If any new technologies were used in a project, its value in the eyes of investors and the market is growing. This has an impact on the unit value of the cryptocurrency and its capitalization.

– Adoption of electronic money at the state level. News like those coming from Japan has a positive impact on the overall value of the cryptocurrency market. This country at the legislative level, says cryptocurrencies and their circulation.

– Any other positive or negative information from the cryptocurrency world. Here, both the emergence of new projects and fraudulent initial coin offering stock can an impact. The first attract investors, the second, on the contrary, scare away. Capitalization has an impact on the following processes and phenomena:

- The development of strategies of large and small exchange traders;
- Work on the creation of new cryptocurrencies;
- Short-and long-term forecasts of specialists;
- Attempts to legislatively determine the status of bitcoin and other cryptocurrencies;
- The development of the world of cryptocurrencies.

Discussion

Many people ask the question: «Why we need cryptocurrency?» And why we need real money? Cryptocurrency is a modern monetary instrument; he is equivalent to a measure of the transactions purchase and sells goods. Cryptocurrency compared to paper equivalent or bank funds have several significant advantages:

– Not subject to inflation as it is known the exact the number of cryptocurrencies, further emission impossible.

– Decentralized system – there is no single center management system, and accordingly, to amend its work, to limit the currency turnover or to destroy it at all-not seems possible.

– The anonymity of user-access to the World Wide Web, as to the payment system, everyone has. That's possible to track the date of the transaction from one purse to another and to get information about the owner – it is not easy, thanks to levels of protection and privacy (Pesharov, 2016).

If we talk about the development of cryptocurrency trade in Kazakhstan, it is directly related to the general legalization of the cryptocurrency. That is opposed by quite influential forces in the Central Bank and the Ministry of Finance of Kazakhstan and some other departments. The country gripped by a cryptocurrency boom. Various organizations are already selling equipment or real estate for bitcoin. It is quite logical that the market expects a significant growth of suppliers of goods and services that will begin to provide their services for the cryptocurrency. While bitcoin and other cryptocurrencies will grow, this trend will not end. For private investors investing in cryptocurrencies, such additional opportunities of cryptocurrency as a means of payment are clearly a good promise. In turn, suppliers are looking for new ways to sell goods and services, and it is possible that this idea will bear fruit.

However, not everything is so simple. The National Bank of the Republic of Kazakhstan is not the first-time expressing concern that transactions with cryptocurrency carry high risks for investors as well as that the means of payment in the Republic Kazakhstan Tenge (KZT). Not so long ago, the adopted amendments to the legislation, in terms of electronic money, did not affect the cryptocurrency market, respectively, in Kazakhstan, there is still no legislation regulating the issue and the circulation of cryptocurrencies. Given that currently there are no tools to control such a tool the regulator will primarily focus its efforts on creating a regulatory framework. It is difficult to say whether it will be complete legalization of cryptocurrencies, their ban or some consensus decision.

One of the main differences is the way it is used in different environments. To use ordinary money electronically, you must physically deposit it into your account through banks or payment terminals. Thus, we can say that the usual currency has several forms of physical embodiment. Cryptocurrencies, in turn, exist only in electronic form and are not tied to any country or state. As a result, we can say that cryptocurrency is only one form of electronic money.

The world of Finance is changing rapidly. There is an increase in the number of payment systems that go beyond the limits of traditional banking systems.

The results of these changes are cryptocurrencies. Cryptocurrencies widely used as a means of payment, speculation and play an important role. Their appearance is a consequence of globalization. With the advent of free Internet access, numerous

electronic equipment and at the same time availability restrictions such as fixed exchange rates the unequal taxation of cryptocurrencies become the answer of the world of technologies to the existing restrictions.

Table 3 – Advantages and disadvantages of cryptocurrency

Advantages of cryptocurrency	Disadvantages of cryptocurrency
<ul style="list-style-type: none"> – Availability. You can use electronic money at any time in any place, but in contrast to the Tenge count of the cryptocurrency cannot be frozen or deleted. – The accuracy of the operations can be checked at any time without much difficulty. – Anyone can start mining virtual coins. <p>System Blockchain, by which cryptocurrencies operate, gives complete anonymity. The only data that remains available to other users is the wallet number and limited data on the account balance.</p> <ul style="list-style-type: none"> – The system of cryptocurrencies is the most reliable in the world. It is impossible to hack, forge or carry out any fraud with virtual currency. – In comparison with operations in banks, the Commission charged for the transfer of cryptocurrencies is extremely small and has a fixed character, not interest. – Cryptocurrency is not subject to inflation due to its limitations, which attracts the attention of major investors. 	<p>It is impossible to track the movement of the cryptocurrency, which makes it possible for the development of the shadow economy in the country.</p> <ul style="list-style-type: none"> – Many countries impose restrictions on the use of such currency. For violation of the ban may be followed by a fine or an administrative case. – Cancelling the payment is impossible. – Unstable cryptocurrency exchange rate, which is changing due to the current demand, which, in turn, depends on the legislation. As a result, there is a constant price fluctuation. – The only thing that protects your savings is a personal password. If it is stolen, you will not be able to prove to anyone the illegality of the movement of your funds. No one will return you the money because there are no regulatory mechanisms in the system of crypto-wallets.
<p>Note: compiled by authors based on source (Pesharov, 2016)</p>	

The public's interest in cryptocurrencies is understandable. It is quite an interesting and innovative tool that, despite its high volatility, can allow investors to make a good profit. Given that the cryptocurrency market is a new and popular phenomenon, it attracts numerous investors around the world. In particular, after the all in the stock market, a fairly large percentage of the population became interested in cryptocurrency. The popularity of cryptocurrency does not speak about the perfection of this product. Some problems need to be noted:

1. The monetary unit has no real value security;
2. The monetary unit is not tied to the bank to cancel transactions, increasing crime;
3. The difficulty of cashing out bitcoins;
4. Corruption actions remain anonymous.

But it is worth noting that thanks to the blockchain system, cryptocurrencies have a powerful security system, respectively, and note the positive sides:

1. Solution to digital signature system problems;
2. The solution for remote user authentication;

3. Maintaining the register of real estate objects;
4. Maintenance of land cadaster;
5. Can be considered as a modern model of information transfer at the state level.

The main problem that even blockchain technology cannot fix is the regulation of cryptocurrency.

Today, the regulation of cryptocurrencies in many countries is based on the example of a complete ban (Ecuador, Bolivia), but there is an alternative position. For example, some developed countries seek to adopt innovation to the classical economy. In recent years, the Russian media reported about the ambiguous position of the authorities regarding cryptocurrencies. This led to the fact that any discussions on the topic of Blockchain and cryptocurrencies necessarily sound statements that this system should be banned. According to the statements made at the meeting, it can be concluded that the mood of the authorities regarding the use and production of cryptocurrencies

has undergone significant changes. Also, the experts considered key issues related to the situation in the Russian Federation: The Expansion of laws aimed at regulating electronic payments, introduction of point changes to the existing legal and regulatory complex, development and approval of framework acts.

Very large support for the cryptocurrency market is provided in Japan, South Korea and Singapore. Regulation of cryptocurrency exchanges is still impossible to compare by the degree of organization with the stock and currency markets, but progress is noticeable. Although cryptocurrencies in Japan are not yet recognized as full-fledged money but are considered digital assets, legalization of their status inevitably affected the growth of trust in cryptocurrencies. Indeed, there is every reason to predict the further rapid development of the market digital currency. (Molchanov, 2014).

In the process of studying the experience of cryptocurrency regulation in Kazakhstan and foreign countries identified similar features.

– First, each country seeks to create a favorable climate for the development of the latest in the private but also public sector.

– Secondly, today there are more than one thousand different cryptocurrencies, it is necessary to develop common standards for their regulation.

Also, most countries declare the creation of a national cryptocurrency hence the two parallel scenarios: on the one hand, you need to regulate the circulation of previously issued cryptocurrencies and identify them in the legal field as a «digital product/instrument», on the other – to reveal and explore the benefits of imitation of national cryptocurrency.

Since cryptocurrencies will become increasingly popular and influential in the world, much stronger competition between market leaders is possible in the future. This can lead to the following perspectives:

1. Empowerment due to the need to attract new and retain old users;
2. Increasing the speed of operations;
3. Increase transaction security;
4. Reduction of transfer fees.

Conclusion

Currently, there is a process of introduction and use of cryptocurrencies in the economy of many countries. This process is intensively developing, and Kazakhstan is no exception. For a deep understanding of the market, we analyzed cryptocurrencies affecting the financial sector. Since cryptocurrency is developing rapidly and every day there are new

types of cryptocurrency, we followed the market and found the largest and at the same time stable five types of cryptocurrency. These cryptocurrencies: Bitcoin, Litecoin, Ethereum Ripple Bitcoin Cash. They have a large capitalization and a large amount of data. We paid attention to the change of these cryptocurrencies in the market and in the process of their capitalization. Using all kinds of analysis such as cryptocurrency market dynamics and General asset analysis, we identified the main factors influencing the market price of cryptocurrencies and ways to eliminate them. We found out that capitalization has an impact on the following processes and phenomena: the development of strategies of large and small stock traders, work on the creation of new cryptocurrencies, the development of the world of cryptocurrencies. In addition, we compared tenge and cryptocurrency.

In the process of studying and comparing the nature of these currencies and the use of cryptocurrencies in different countries of the world, we found the main problem and prospects when working with cryptocurrencies. This problem is regulation.

Comparing all the strengths and weaknesses, we can conclude that the place of cryptocurrency in the economy of Kazakhstan requires in-depth analysis. The system contrasts with the traditional system of currency issue, but it should not be banned on the territory of Kazakhstan. We need to find ways to regulate technologies. To do this, Kazakhstan needs to adopt a law on cryptocurrencies, which implies the creation of a legal framework for regulating payments, transactions and other actions related to this type of virtual money.

In our opinion, to resolve problems related to cryptocurrency with the help of the legal framework.

The first is revision of the legislation on the payment system and changing certain aspects of the existing legislation on the payment system, licensing certain types of activities, tax and banking legislation. Need to authenticate users, miners, exchange, exchange points, control zones should be exchange platforms and exchanges, operating under license Bank of Kazakhstan. Also, clear recommendations should be developed for the cashing of cryptocurrencies, following the requirements of an intergovernmental organization that is engaged in the development of international standards in the field of combating money laundering and financing of terrorism.

The next is development of a special law «on the basics of cryptocurrency regulation», reflecting the legislative definition of cryptocurrency, its features,

subjects of relations, measures to counter the use of currency for criminal purposes. It is necessary to take under state control the turnover of virtual currencies with a systemic nature, fundamental scientific research, close cooperation at the international level, improving the legal framework for regulating this sphere of life.

In Kazakhstan, it is necessary to take advantage of the current scientific and technological situation in the world economy to ensure a globally competitive position in the rapidly emerging market

of the digital economy. Since cryptocurrencies will become increasingly popular and influential in the world, much stronger competition between market leaders is possible in the future.

In General, there is an objective probability that the cryptocurrency in Kazakhstan will be a harbinger of the country's economic growth. Since the introduction of legislation on regulation will open prospects for the development of cryptocurrencies in Kazakhstan and the financial system as a whole will change.

References

- Кешлава А.Б. Введение в цифровой экономике / Книга первая. На пороге «цифрового будущего». – НИИ Геосистем. – 2017, с.28.
- Юмаев Е. Инновационно-промышленная политика в свете перехода к Индустрии 4.0: зарубежные тенденции и вызовы для России // Журнал экономической теории. – 2017. – № 4, С. 181-185.
- Gupta S. The New Digital Reality of Corporate Finance // Digitalistmag. – 2018, <https://www.digitalistmag.com/finance/2018/06/18/new-digital-reality-of-corporate-finance-06175835>
- Муканова А. Цифровизация как путь к успеху// Газета Казахстанская правда. – 2017. – № 79, с. 6
- Зубарев А.Е. Цифровая экономика как форма проявления новой экономики // Экономика и управление народным хозяйством. Вестник ТОГУ. – 2017. – № 4 (47).
- Tucker J., Foldes J., Roos A., Rodt M. Finance function excellence digital transformation. – 2017, www.bcg.com/publications/2017/function-excellence-how-digital-cfo-transforming-finance.aspx
- Matthew K. Coining Bitcoin's «Legal Bits:» Examining the Regulatory Framework for Bitcoin and Virtual Currencies // HARV. J. LAW & TEC. – 2014, pp. 587-590.
- Schwartz D. Noah Youngs & Arthur Britto // Consensus Whitepaper. – 2014, <https://ripple.com/consensus-whitepaper>
- Buterin V. What Proof of Stake Is and Why It Matters // Bitcoin Magazine. – 2015, <https://bitcoinmagazine.com/articles/what-proof-of-stake-isand-why-it-matters-1377531463>.
- Stephen T. Middlebrook & Sarah Jane Hughes, Regulating Cryptocurrencies in the United States: Current Issues and Future Directions // WM. MITCHELL REV. – 2014, pp. 813, 819-21
- Pflaum I., Hatley E. A Bit of a Problem: National and Extraterritorial Regulation of Virtual Currency in the Age of Financial Disintermediation // GEO. J. INT'L L. – 2014, pp. 1169, 1176-77
- Grinberg R. Bitcoin: An Innovative Alternative Digital Currency // HASTINGS SCI. & TECH. L.J. – 2012, pp. 159, 165.
Электронный ресурс <https://coinmarketcap.com/>
- Пшеничников В.В., Бабкин А.В. Электронные деньги как фактор развития цифровой экономики // Научно-технические ведомости СПбГПУ. Экономика. – 2017. – Том 10. – № 1, С. 32-42.
- Nakamoto S. Bitcoin: A Peer-to-Peer Electronic Cash System. – 2008, <https://bitcoin.org/bitcoin.pdf>.
- Машенко П.Л., Пилипенко М.О. Технология Блокчейн и ее практическое применение // Наука, технологии, образование. – Олимп. – 2017. – №32, С. 61-64.
- Хазиахметов Е.С. Криптовалютные деньги XXI века. Новая наука: от идеи к результату // Международное исследовательское агентство. – 2016. – № 11-2, С. 177-179.
- Volastro A. CNBC Explains: How to Mine Bitcoins on Your Own. – 2014, <http://www.cnn.com/id/101332124.20>.
- Megan T. 6 Reasons Your Business Should Accept Cryptocurrency. – 2018. <https://www.business.com/articles/6-reasons-to-accept-cryptocurrency/>
- Тарасов М.А. Криптография и электронная цифровая подпись: правовые и организационные аспекты // Теория и практика. – 2011. – № 22, С. 9-11.
- Пешеров А.И. Понятие и место криптовалюты в системе денежных средств // Правовая мысль. – 2016. – Том 95. – № 3, С. 130-138
- Молчанов М. В. Криптовалюта: понятие и проблемы // Наука времени. – 2014. – №10, С. 300-303.

References

- Buterin V. (2015) What Proof of Stake Is and Why It Matters. Bitcoin Magazine, <https://bitcoinmagazine.com/articles/what-proof-of-stake-isand-why-it-matters-1377531463>.
- Electronic resource <https://coinmarketcap.com/>
- Grinberg R. (2012) Bitcoin: An Innovative Alternative Digital Currency, HASTINGS SCI. & TECH. L.J., pp. 159, 165
- Gupta S. (2018) The New Digital Reality Of Corporate Finance Digitalistmag.

- Haziahetov E.S. (2016) Kriptoalutnye dengy XXI veka. Novaya nayka: ot idey k rezultatu [Cryptocurrency money of the XXI century. New science: from idea to result]. International research Agency, № 11-2, pp. 177 – 179.
- Keshalava A.V. (2017) Vvedeniye v tsifrovoi ekonomike [Introduction to the Digital economy]. On the threshold of «digital future». Book one. Vniigeosystem, p. 28.
- Mashchenko P.L., Pilipenko M.O. (2017) Technologiya blockchain i ee prakticheskoe primeneniya [Blockchain Technology and its practical application]. Science, technology, education, Olympus, vol. 32, pp. 61-64.
- Matthew K. (2014) Coining Bitcoin's «Legal Bits:» Examining the Regulatory Framework for Bitcoin and Virtual Currencies. HARV. J. LAW & TEC, pp. 587, 590
- Megan T. (2018) 6 Reasons Your Business Should Accept Cryptocurrency, <https://www.business.com/articles/6-reasons-to-accept-cryptocurrency>
- Molchanov M.V. (2014) Cryptoaluta: ponyatyie i problemy [Cryptocurrency: concept and problems]. Science Time, №10, pp. 300-303.
- Mukanova A. (2017) Tsifrovizatsiya kak put k uspechu [Digitalization as a way to success]. Newspaper «Kazakhstanskaya Pravda», issue 79, p. 6.
- Nakamoto S. (2008) Bitcoin: A Peer-to-Peer Electronic Cash System. <https://bitcoin.org/bitcoin.pdf>.
- Peshеров A.I. (2016) Ponyatyie i mesto v sisteme denezhnyh sredstv [The concept and place of cryptocurrency in the system cash]. Legal thought, vol. 95, № 3, pp. 130-138
- Pflaum I., Hatley E. (2014) A Bit of a Problem: National and Extraterritorial Regulation of Virtual Currency in the Age of Financial Disintermediation. GEO. J. INT'L L., pp. 1169, 1176-77
- Pshenichnikov V.V., Babkin A.V. (2017) Elektronnyye dengy kak faktor razvitiya tsifrovoi ekonomiki. [Electronic money as a factor of development of digital economy]. Scientific and technical sheets of SPbGPU. Economics, vol. 10, № 1, pp. 32-42.
- Schwartz D. (2014) Noah Youngs & Arthur Britto. Consensus Whitepaper <https://ripple.com/consensus-whitepaper>
- Stephen T. (2014) Middlebrook & Sarah Jane Hughes, Regulating Cryptocurrencies in the United States: Current Issues and Future Directions. WM. MITCHELL L. REV., pp. 813, 819-21
- Tarasov M.A. (2011) Kriptografiya i elektronnyaya tsifrovaya podpis: pravovyye i organizatsionnyye aspekty [Cryptography and electronic digital signature: legal and organizational aspects]. Theory and practice, vol. 22, pp. 9-11.
- Tucker J., Foldes J., Roos A. (2017) Finance function excellence digital transformation, www.bcg.com/publications/2017/function-excellence-how-digital-cfo-transforming-finance.aspx
- Volastro A. (2014) CNBC Explains: How to Mine Bitcoins on Your Own, <http://www.cnn.com/id/101332124>
- Yumaev E. (2017) Innovatsionno-promyshlennaya politika v svete k industrii 4.0: zarubezhnyye tendentsyi i vyzovy glyya Rossii [Innovation and industrial policy in the light of the transition to industry 4.0: Foreign trends and challenges for Russia]. Journal of economic theory, vol. 2, pp. 181-185.
- Zubarev A.E. (2017) Tsifrovaya ekonomika kak forma proyazvleniya novoi ekonomiki [Digital economy as a form of manifestation of the new economy]. Economy and management of the national economy. Bulletin TOGU, № 4 (47).