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## **CRYPTOCURRENCY IN WORLD ECONOMY**

*Аннотация: в статье рассмотрены основные криптовалюты и рынок ICO, а также классификация систем блокчейн (Blockchain). Автором обозначены основные задачи технологии блокчейн на экономическом рынке.*

*Ключевые слова: криптовалюта, цифровая валюта, ICO, рынок ICO, блокчейн, система блокчейн.*

*Abstract: this article discusses the main cryptocurrencies, ICOs and the ICO market, as well as the classification of the world Blockchain system and its main tasks in the economic market.*

*Keywords: cryptocurrency, digital currency, ICO, ICO market, Blockchain, Blockchain system.*

Security is one of the most important principles of working with digital money. Cryptocurrency is guaranteed to be protected from fakes, it can be stored electronically, and it can transfer money from one account to another without risk. At first, it seems that cryptocurrency is an ordinary electronic payment system, but after understanding it more seriously, you see the fundamental differences from ordinary electronic money.

*Cryptocurrency.* In the 21st century, new financial instruments appear that open up a large number of opportunities in the economic sphere. However, even using cryptocurrencies almost every day, many have no idea what «cryptocurrency» is.

In simple terms, it is a digital asset created for the purpose of mediation in the exchange of value, using cryptography to ensure transaction security and control emissions. It has legal status in several states.

It is important not to confuse: «electronic money» and «cryptocurrencies», because:

- electronic money can appear on your account only if it is deposited into your account in its real, physical form, for example, through payment terminals, so electronic form can be called only one of the forms;
- cryptocurrency or digital money is not exactly the same as electronic money, although in both cases it refers to payments within the Internet. The main difference is that cryptocurrency does not have a paper money supply as it is originally mined, and cryptocurrency is in no way connected with the state system.

Speaking about the main types of cryptocurrencies, it is worth noting that at the moment there are more than 1200 cryptocurrencies with a total value of about \$ 200 billion, more than half of the cost is bitcoin. The volume of daily trading is about \$ 3–10 billion.

It is worth considering all the major cryptocurrencies today:

1. Bitcoin (BTC) – the cryptocurrency with the highest capitalization, more than \$ 100 billion. It appeared in 2009, at a price of less than one cent, in October 2017, the value of bitcoin exceeded \$ 7000. Over the past 3 months, he went through 2 hard forks, creating alternative blockchain networks, Bitcoin Cash and Bitcoin Gold.

2. Etherium (ETH) – a decentralized platform for launching smart contracts – applications that work according to the rules laid down in the program code without the risk of disconnection, censorship, third-party interference and fraud. Ether, the cryptocurrency of the platform, plays the role of «fuel» for computing power serving smart contracts. Capitalization is about \$ 30bn.

3. Ripple (XRP) offers fast and cheap money transfer services. Providing access to its infrastructure, thus combining banks in its network, builds a network alternative to correspondent accounts. Offers the purchase of cryptocurrency, XRP, instead of funding nostro accounts. XRP provides currency exchange with lower fees. Capitalization is about \$ 8 billion.

4. Litecoin (LTC) – a cryptocurrency, like Bitcoin, created with the aim of exchanging value. It was created in 2011, in 2012 it cost about 3 cents, now the price of

1 lightcoin is approximately equal to \$ 55. Capitalization is about \$ 3 billion. It has several differences from bitcoin, for example, various cryptographic algorithms, time for block formation and transaction validation (2,5 min for LTC versus 10 min for BTC).

*ICO and ICO market.* Understanding the basis of cryptocurrencies, it is equally important to know and understand what ICO (Initial coin offering) is. And so, the ICO and the «Initial Coin Offering» is a form of crowdfunding in which the organization issues digital tokens that technologically provide the subject with the right to own a share of the company and other financial advantages. Tokens are a digital asset, the value of which is determined by the issuer.

The excitement around ICO investments is explained by the desire of people to make money on innovative technologies, it is also worth noting that ICO often attracts people who are not aware of cryptocurrencies in principle.

1. At present, ICO is becoming more popular in Russia than venture capital investment. In 2016, the amount of funds raised by Russian companies through ICOs exceeded the amount of venture capital invested in Russian companies by more than 2 times, \$ 293 billion and \$ 128 billion, respectively.

2. The amounts collected through ICOs are becoming more and more both in the world and in Russia, because since the beginning of 2019, the global top 5 ICO has raised more than \$ 1,1 billion, and the Russian top 5 ICO has raised a total of about \$ 190 million.

3. ICOs have been banned in China and South Korea, as regulators believe that most ICO projects are fraud. Many companies entering the ICO declare extremely ambitious goals without a plan for their implementation.

*Blockchain system.* Blockchain is a multi-level and multi-functional technology, which is the basis for Bitcoin, and also solves the main task of decentralized secure database formation. Many people believe that blockchain is the main technological breakthrough since the creation of the Internet. A blockchain is a sequence of digital records that have been encrypted and combined into blocks, which are then connected in a chronological chain, linked together using sophisticated mathematical algorithms.

For the first time, the blockchain system was created and implemented in 2009 in the cryptocurrency system Bitcoin. Already at that time, the market price reached \$ 4357, and the number of transactions due to this currency was more than \$ 260000, amounting to more than \$ 709,3 million in the first 24 hours.

It is worth frankly admitting and voicing the main advantages in the Blockchain system: trust in the algorithm, decentralization of the system, invariability of data, lack of intermediaries between participants, transparency of the system.

In 2017, about \$ 3 billion was invested in startups of the blockchain system. This figure is considered the highest in the history of such investments. Most investments are in the field of IT-technologies. Also, according to Frost & Sullivan, the introduction of blockchain in medicine, energy and industry is especially promising. Indeed, in the field of healthcare, blockchain is useful for maintaining electronic medical archives, remote monitoring of the patient's condition. In the energy sector, blockchain can solve the problems of organizing intelligent accounting systems in enterprises.

There are several main blockchain projects that have entered the ICO market:

1. WAVES. Blockchain platform that performs the function of decentralized crowdfunding and trading through tokenization. Similar to Ethereum, using WAVES it is possible to issue your own tokens. However, the process of launching an ICO through WAVES is much simpler than through Ethereum. The platform is often used by businesses that are not related to blockchain technology.

2. Bancor. A decentralized exchange of digital assets with high liquidity and no commissions. When buying assets on the bancor exchange, the user receives the so-called «smart token», which is created at the time of purchase of the assets and liquidated at the time of their sale. In this case, a smart token is nothing more than an analogue of ETF (Exchange Traded Fund).

3. Golem. A decentralized supercomputer project. By connecting computers (from a laptop to a data center) to a computing p2p (peer-to-peer) network, the Golem team seeks to form a global computing market. In fact, the project is a competitor to cloud services.

4. TenX. A service that provides a multi-currency wallet and a plastic card that allows you to convert and spend cryptocurrency, paying it in the usual places.

In conclusion, I would like to note several particularly important reasons why modern money still remains in demand to this day. Firstly, in the modern world, cryptocurrency is an innovative development, the appearance of which influenced the development of global technologies for high-speed data transmission, when the Internet has grown to a huge scale, and decentralized networks have gained great popularity. Secondly, interest in cryptocurrency is growing very rapidly due to the demand in the world of safe money, which have complete anonymity and also have protection against fakes. In our study, we proceeded from the definition of cryptocurrency, in which we examined its essence. However, cryptocurrencies in the global financial markets should already be noted. As a result of this study, we were able to prove that Bitcoin is a currency whose movement is secured by supply and demand, as well as a range of services by electronic payment systems, trading companies, which is why we can consider it the most reliable.

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