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## CRYPTOCURRENCY AS A NEW ECONOMIC REALITY OF THE SOCIO- ECONOMIC SYSTEM

ABRAMOVA MARINA (ORCID 0000-0001-9338-8478)<sup>1</sup>

<sup>1</sup>Financial University under the Government of the Russian Federation

**Abstract.** The relevance of the research is determined by the fact that innovative technologies have made corrections to the existing ideas about the day. The goal is to consider the crypto currency as a new economic reality of the socio-economic system in terms of the objects, subjects and types of transactions conducted on their basis, with an emphasis on assessing the practice and prospects for applying crypto-currencies in the emerging digital economy. The tasks are to investigate the role and place of the crypto currency in the modern economy, taking into account the transformation of the form and mechanisms of money turnover in the era of widespread use of information networks, the spread of computer technology. Methods: the evaluation is conducted on the basis of SWOT analysis of the advantages and risks of using crypto currency in the monetary sphere, the payment industry and the banking business. Result - advantages (strengths) and weaknesses of both the creep-goods and the technologies of its creation and transfer are formulated. Perspectives: the possibilities of using at the level of micro- and macroeconomic processes in the national economy are shown.

**Keywords:** money, financial innovation, crypto currency, the digital economy.

Today they talk a lot and write about the Crypto currency as a really “new reality”. At the same time, the need has arisen for its ostensivnom its definition, i.e. directly indicate the object or phenomenon being determined. The attempt to define a virtual currency is ostensibly, in our opinion, connected with the definition of money within the framework of institutional theory. Institutions in this case are understood to be certain formal (enshrined in the rules of law) and informal (generally accepted) rules or behavior stereotypes that contain information about collectively accepted rational decisions. Instituts, possessing property of cognitivesti, i.e. ability to mental perception and processing of external information can be formed initially on an informal basis in the form of an agreement between people (and this is true of the emergence of the crypto currency in the market), but in the future, if they acquire mass character and prove their rationality, as a rule, fixed in a formalized form, acquiring the status of formal regulations and behavior stereotypes [1, c.130-133].

Recognizing the logical construction of the “construction” of money as an institution, we note that the formation of both an informal and a formal institution of money is based on the development of economic relations. Money cannot appear as informal institutions (and virtual currencies, including creep-commodities, are appropriate to consider in this way) without forming a certain level of economic relations. We believe that the emergence of virtual money, including crypto-currency, is due to the process of technological development, which is part of the overall economic development.

But the explanation of the appearance and handling of virtual currencies, including crypto-currencies, does not allow them to be used in the practice of economic turnover without including them in the “legal field”.

At the moment, there is no single approach to determining the nature of virtual currencies both between different jurisdictions and within the same jurisdiction, which is expressed in the absence of “closed” definitions of the virtual currency. The existing set of definitions allows, within

the limits of one jurisdiction, in relation to various types of legal relations arising in connection with the turnover of virtual currencies, to refer the latter to “private money”, a payment facility, a financial asset [2], a commodity, property, property law, etc.

The analysis revealed the following features of the crypto currency and its turnover, which are essential for determining its status: transactions are irrevocable and P2P (“re-to peer” - from the client to the client) is carried out; information about transactions is publicly available; the emission of crypto currency is decentralized; a finite number of currencies are known in advance, and the creation of each new block is accompanied by the solution of an increasingly complex mathematical problem, which artificially limits the rate of growth of the supply of currency; in respect of the crypto currency, there is no problem of restricting liquidity even when developing the entire amount of the crypto currency, since the currency unit is divisible into smaller parts; Crypto currency is not anybody’s obligation, it is not secured, and its value is based only on the expectations of the market players (ie while it acts as an informal institution of money); crypto-currencies are used by an unlimited circle of persons for committing transactions for the purchase and sale of goods and services, payment for works, as well as for investment purposes.

The analysis showed that the crypto currency payment function is performed on the basis of its following properties: high liquidity, which allows it to be used as a means of circulation, payment and accumulation, the ability to create and transfer using the advanced technology of the register of information blocks (block), the possibility of using an unlimited range of persons when making transactions.

A distinctive feature of the system of turnover of bitcoins is the absence of the mechanism of re-emission, which would allow one or other bitcoins to be withdrawn from circulation. In this regard, it is not possible to re-issue defective bitcoins (for example, bitcoins that arrived in favor of addresses that have been lost access) in this system.

As noted above, the creep-goods as an informal institution appear at a certain level of economic and technological relations and arise on their basis. Strictly speaking, the state, as a joint economic entity, economic entities (business) and the public must come to an understanding of the need to use crypto-currencies in their activities, to realize the prospects for their use. Only if all participants in the economic activity are aware of the possible ways and forms of using the Crypto-currency in circulation, the establishment of the Crypto-currency will coincide with their awareness as an informal institution, after which it will become necessary to consolidate them as a formal institution.

Otherwise (for example, if the state refuses to recognize crypto-currencies), the role of money as an information guide will be distorted, the behavior of economic agents, the population, their motivation will objectively violate established norms and prescribed regulations, e. in the case of obtaining certain “benefits” from the use of crypto currency, economic entities will still strive to use it.

It is expedient to make a decision on legalization of crypto-currency on the basis of SWOT-analysis. SWOT analysis of the advantages and risks of using crypto-lute in the monetary sphere made it possible to identify the following advantages (forces) in the crypto currency, the technologies of its creation and transfer, and the possibilities of using it at the level of micro- and macroeconomic processes in the national economy: crypto currency is used by an unlimited circle of persons when making transactions; It is defined as a means of conversion, applied analogously to the language in certain communities; a finite number of currencies is known in advance, and the creation of each new block is accompanied by the solution of an increasingly complex mathematical problem, which artificially limits the rate of growth in the supply of currency; performs the function of a means of payment on the basis of its high liquidity, which makes it possible to use it as a means of circulation, payment and accumulation; there is no problem of restricting liquidity, even when

the total amount is being developed, since the currency unit is divisible into smaller parts; is produced and transmitted using the advanced technology of the register of blocks of information (block); the decentralized mechanism for the circulation of the Crypto currency is controlled by peer-to-peer participants in the peer-to-peer network, hence the independence from risks (including credit risks and liquidity risks); transparency of the turnover mechanism, all elements of which are under the control of a large number of independent entities; the breakdown of the operation of the mechanism of rotation, due to the low probability of simultaneous failure of all the sub-projects; adaptability of the turnover mechanism to changes in the external environment, which is due to the independence of the subjects of the mechanism in terms of changing their behavior under the influence of external factors; non-dependence of emissions on political preferences and economic views of the subjects of the system, which allows one to consistently adhere to the economic model embedded in the emission algorithm; openness of information on transactions and their volumes; transactions are carried out by P2P ("re-to peer" - from the client to the client) and are irrevocable.

The shortcomings (weaknesses) of the creep-goods, technologies for its creation and transfer are as follows: in no jurisdiction does not have the status of a legal tender; does not have a full set of signs of real currencies; is not anybody's obligation, is not provided with anything, its value is based only on the expectations of market players to convert to other currencies or to implement exchange directly for goods and services; there are risks of a state that does not control the export of capital abroad; the personal data of the parties to the transaction may be hidden, which makes it possible to use it for criminal purposes; transactions are carried out by P2P ("re-to peer" - from the client to the client), which limits their universal distribution, as participants must be assured of the good conscience of the parties.

The revealed advantages (forces) allowed to formulate a number of opportunities that the national economy will receive, subject to the legalization of the crypto-

currency. For the government, these opportunities are as follows: stimulating the development of national jurisdiction, innovative technologies that accompany the development of the crypto-currency market (in particular, the use of blocking technologies in various industries); a new tool for attracting investment; the source of income to the national budget from entrepreneurial activities related to the turnover of crypto-currencies and trade; sales to enterprises involved in the mining of virtual currencies, public services in the electric power industry; means of creating new jobs, the potential leadership of the state in the use of new technologies in the financial sphere.

For the population and business, the use of crypto-currencies has the following possibilities: the source of income generation in connection with the use of crypto-currencies (at present, the means of circulation, payment and accumulation, investments), mining, participation and attraction of capital through ICO, operations on the stock exchange; a new format for the transfer of funds, which, due to the absence of banks as intermediaries, significantly reduces the amount of fees for transactions and increases their speed; the ability to conduct settlements with a much greater degree of confidentiality than with the use of fiat currencies; in the integration with the technologies of smart contracts and other technologies on the platform of blocking, as well as with the technologies of the Internet of things, creates new opportunities for business and consumption of goods and services; exchange of virtual currencies to the currency of foreign countries that is not available for purchase in national jurisdiction or through a virtual currency can be purchased at a more favorable rate; activity on mining as a way of self-employment of citizens.

In addition to new opportunities for business and the public, the use of creep-goods also carries significant risks. For the state in use crypto-currencies there are following threats: use for the purposes of laundering (legalization) of the incomes received by the path; use for the purpose of financing terrorism and other forms of

criminal activity; fraudulent transactions in order to evade taxation; uncontrolled export of capital from the country.

As threats to business and the population, it can be noted that operations with the crypto currency as a subject of exchange, settlement operations, and also as an object of investment activity are inherently risky; there is a possibility of involvement in criminal schemes because of a low level of financial literacy; legislative insecurity in the absence in most countries of legislative regulation as an object of investment, as well as the uncertainty of using as a means of payment.

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