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ИНФОРМАЦИЯ ОБ АВТОРЕ

Бровко Наталия Ивановна – кандидат юридических наук, доцент, заведующий кафедрой истории, теории государства и права и государственного строительства Белоцерковского национального аграрного университета;

INFORMATION ABOUT THE AUTHOR

Brovko Nataliia Ivanovna – PhD (Law), Associate Professor, Head at the Department of History, State and Law Theory, and State Building Bila Tserkva National Agrarian University;

09101959nb@gmail.com

UDC 336.743

MODERN TRENDS, PROBLEM ISSUES AND PECULIARITIES OF THE CRIPPLING CURRENCY

Maksim HREBENIUK

PhD in Law, Associate Professor, Honored Lawyer of Ukraine, Head of the Interagency Scientific and Research Center on problems of combating organized crime under the National Security and Defense Council of Ukraine

Ruslan LUKIANCHUK,

PhD in Public Administration, Senior Researcher of the Interagency Scientific and Research Center on problems of combating organized crime under the National Security and Defense Council of Ukraine

SUMMARY

The sponsorship of international terrorism and transnational criminal activity poses a significant threat to the financial system, and as a result of the rapid expansion of online payment capabilities, the associated risks have increased substantially, which calls for the study of foreign legal expertise and the development of a law enforcement strategy to ensure control over turning crying out. Cryptocurrency as a completely innovative payment tool in the modern conditions of computer technology development is rapidly integrated into an everyday life of people, therefore the issue of development and using of this payment instrument in the world becomes of special importance. In this article the focus is on the bitcoin – the most common modern digital currency. It is argued that cryptocurrency (information-money symbols) is an attribute of the global matrix of information age.

Key words: electronic money, crypto currency, virtual currency, Bitcoin, the drivers.

СОВРЕМЕННЫЕ ТЕНДЕНЦИИ, ПРОБЛЕМНЫЕ ВОПРОСЫ И ОСОБЕННОСТИ ОБРАЩЕНИЯ КРИПТОВАЛЮТ

Руслан ЛУКЬЯНЧУК,

кандидат наук по государственному управлению, старший научный сотрудник Межведомственного научно-исследовательского центра по проблемам борьбы с организованной преступностью при Совете национальной безопасности и обороны Украины

Максим ГРЕБЕНЮК,

кандидат юридических наук, доцент, заслуженный юрист Украины, руководитель Межведомственного научно-исследовательского центра по проблемам борьбы с организованной преступностью при Совете национальной безопасности и обороны Украины

АННОТАЦИЯ

Спонсорство международного терроризма и транснациональной преступной деятельности составляют существенную угрозу финансовой системе, а вследствие стремительного расширения платежных возможностей в сети Интернет эти риски существенно увеличились, в связи с чем необходимо изучение зарубежного правового опыта и разработка стратегии правоохранительной деятельности для обеспечения контроля над оборотом криптовалют. Криптовалюта как абсолютно инновационный платежный инструмент в современных условиях развития компьютерных технологий значительно интегрируется в повседневную жизнь людей, поэтому вопрос развития и использования этого платежного средства в мире приобретает особое значение. Основным объектом исследования в данной статье является bitcoin – самая распространенная современная цифровая валюта.

Ключевые слова: электронные деньги, криптовалюта, виртуальная валюта, Bitcoin, майнеры.



REZUMAT

Sponsorizarea terorismului internațional și a activităților criminale transnaționale constituie o amenințare semnificativă pentru sistemul financiar, ca urmare a expansiunii rapide a posibilităților de plată ale internetului, aceste riscuri sunt crescute în mod semnificativ, și, prin urmare, studiul necesar experienței juridice străine și să dezvolte strategii de aplicare a legii pentru a asigura controlul asupra circulației Criptomonedă. Criptomonedă ca instrument de plată absolut inovatoare în condiții moderne de dezvoltare a tehnologiei de calculator foarte mult integrate în viața de zi cu zi a oamenilor, astfel încât problema dezvoltării și utilizarea acestui mijloc de plată în lume este de o importanță deosebită. Obiectul principal al cercetării din acest articol este bitcoin - cea mai comună monedă digitală modernă.

Cuvinte cheie: bani electronici, valută cripto, monedă virtuală, Bitcoin, mineri.

An introduction and a brief overview of the literature. The dynamics of today's changes is due to the emergence of the latest definitions in the XXI century. The financial systems of individual countries are being improved and progressing in the context of the development of IT technologies and the general computerization of the economy. There are new financial institutions, tools and forms of interaction between people. Thus, there was an analogue of traditional currencies – cryptocurrency. Today there are about 1600 types of cryptocurrency (Bitcoin, Litecoin, Ethereum, Peercoin) in the world, but the best known is Bitcoin due to the rapid development.

Cryptocurrency (or cryptic currency) is a digital resource intended for work as an exchange tool that uses cryptography to secure its transactions, control the creation of additional units, and test the transfer of assets [1]. The functioning of system is decentralized in a distributed computer network [2].

An economic nature of cryptocurrency is actively investigated by the world scholars. A particular attention should be paid to Matthew Ponsford's article «Comparative analysis of bitcoin and other decentralized virtual currencies: legal regulation in the People's Republic of Korea, Canada and the United States» [3], in which the author considers diametrically opposed approaches to the circulation and regulation of cryptocurrency. A group of Polish scientists conducted a study called «Fluctuations in prices and the use of bitcoin», which clearly highlighted all the functionalities of the new form of money, their features and pricing [4].

The problems of cryptocurrency circulation were investigated by domestic scientists, in particular: S.V. Vasilchak, M.V. Kunitskaia-Iliash, M.P. Dubina, S.V. Shapochka, A.V. Koldovskyi, K.V. Chernega, E.Y. Molchanova, Y.M. Solodkovskyi and others. At the same time, the issues of economic analysis of the use of cryptocurrency in the sphere of economic activity by criminal

groups (in order to legalize (laundering) of funds and other property obtained by criminal means are not sufficiently highlighted, as well as the use of electronic payments in the course of trafficking in human beings and drug trafficking.

The purpose of the article is a disclosure of economic essence of cryptocurrency, a consideration of the legal foreign experience of cryptocurrency circulation and formation of theoretical provisions on some issues of the using of cryptocurrency by transnational criminal groups, as well as ways of minimizing the corresponding negative consequences for Ukraine.

Results of the research. Bitcoin first appeared in 2009 and became a decentralized convertible currency and the first cryptocurrency [5]. Decentralized virtual currencies are distributed, based on mathematical principles, convertible virtual currencies with a source code, the use of which does not involve the presence of a «trusted third party» for verifying operations and maintaining (reconciling) the registry of operations. Bitcoin became the first cryptographic protocol for cryptocurrency, creating the world first payment mechanism in a decentralized virtual currency [6].

Selling bitcoin is made by users in digital form with a high degree of anonymity and with a possibility of exchange (purchase or sale) for US dollars, Euros and other currencies. Someone can download a free open source software application from the website for sending, receiving and storing bitcoin, as well as for monitoring operations bitcoin are not issued by the central banks of the states and do not depend on the monetary policy of the country. The emission of this cryptographic currency is exclusively in digital form. Somebody can get cryptocurrency (engage Mining) using computer technology capabilities. Bitcoin has a rather high volatility, that is, significant amplitude of the fluctuation of value in the equivalent of convertible currencies of the world, which confirms the unstable nature

of the nominal value of this cryptocurrency. The increase and decrease of the value of the bitcoin is directly dependent on the balance of demand and supply [6].

On September 1, 2017 the world market volume cryptocurrency exceeded 160 billion dollars. On August 1, of this year, cryptocurrency Bitcoin distributed into two separate currencies: Bitcoin (Original) and Bitcoin Cash, because of disagreements software [7]. The scientist of Norwegian University of Science and Technology H. Kalstrom defines the following common features of bitcoin:

1) a control over the money supply is carried out with a help of open algorithm and does not depend on monetary policy of the central bank; 2) a verification of all transactions is decentralized and public; 3) an electronic wallet is not directly related to identifying information about their owners (users are complete anonymous) [8].

On October 22, 2015, the European Court released the bitcoin from taxation, what should in fact be considered a complete monetary unit. The relevant decision was made in the case of *Skatteverket v. David Hedqvist* (C-264/14). «The court clarified that cases of purchasing the virtual cryptocurrencies should be governed by the European VAT Directive (VAT Directive), which provides for an exemption from taxation of transactions involving currency, banknotes and coins used as a legal tender in payment. That is, the European jurisprudence essentially has equated bitcoin to a legal tender and exchange of money for bitcoin to «foreign exchange transactions».

At the present stage of the world economy the using of cryptocurrency as the means of payment significantly expanded. For example, the UK is the most progressive country on the use of cryptocurrency (over 30 bitcoin-ATM). Denmark openly stated desire to quickly eliminate a paper money because non-cash transactions and digital currency in the country are common. German Finance Ministry officially recognized bitcoin as a financial means and has made appropriate changes



to the Banking Code. Finland considers «bitcoin» not as «currency» but as a «commodity». Estonia refuses to work with bitcoin, like the largest Scandinavian «SEB Bank». In the USA, bitcoin is seen as a means of payment in electronic commerce. In Vienna (Austria) opened the world's first «Bitcoin bank» which specializes in the sale of cryptocurrency. In this bank there are special ATMs that allow exchange of bitcoin to the euro and vice versa. In Japan, a law has been adopted; according to which, from April 2017, bitcoin and other cryptocurrencies is legal tender of payment. In New Zealand, in November 2017, the Office of Financial Control and Supervision has equated the digital currency transactions to the security transactions. Australia has enacted a law that regulates the activity of cryptocurrency exchangers. Thus, in accordance with regulatory requirements, all cryptocurrency exchangers must be registered with the Australian Center for analysis and reporting transactions. In India, the government is considering launching its own cryptocurrency called «Lakshmi». In November 2017, Venezuelan President Nicolas Maduro announced the intention of the state to create its own cryptographic currency called «El Petro» to combat the effects of the economic crisis under US sanctions, which will be secured with oil, gas and diamond available stockpiles.

Thus, cryptocurrencies are valuable means of payment and investment asset in most countries of the world. The interest of using of cryptocurrency contributes to the investment attractiveness of payment infrastructures. However, bitcoin and other digital currency are adapted for use by organized criminal groups, since they are widely used in the international circulation and provide the necessary level of anonymity.

With the special technical skills and capabilities international terrorist groups can use virtual currencies to finance terrorist activities. The assessment of the threat of money laundering associated with virtual currencies demonstrates that the criminal world can use virtual currencies to access «clean cash». When using the virtual currencies, organized criminal groups can anonymously access to cash and hide traces of transactions. There are no common rules to ensure that virtual currency providers apply anti-money laundering and terrorist financing requirements in the EU. So the potential way

of solving this problem is to create and implement European legal framework to regulate the issue of control over the circulation cryptocurrency and transactions by using digital currencies.

The Royal United Services Institute (RUSI) report [10] states that the role of bitcoin in the financing of terrorism is excessively exaggerated, but a prospect of using digital currencies to finance international terrorist activities has raised a concern in many governments.

Since 2015 the US Tax Service has been using software to track the movement of cryptocurrency to identify its origin and the owner. In Japan, cryptocurrency is fully legalized and the Financial Services Agency carries out a control over its circulation. Consequently, the world practice shows that the issue of regulating cryptocurrency is necessary. Cryptocurrency is getting popularity worldwide. It is technically impossible and economically impractical to prohibit its development.

Decentralized systems are especially vulnerable to the risk of anonymity. For example, bitcoin addresses, functioning as accounts contain no names or other identifying information about customers, and the system is no central server (service provider), the central controlling authority and the software allows you to monitor and detect suspicious transactions schemes.

Law enforcement agencies are not able to identify a specific person or institution to conduct investigations or seizure of assets. Virtual currency systems are available through the Internet (from mobile phones) and can be used to make cross-border payments and transfers of funds, which also presents a certain risk.

The law enforcement agencies track the cases of illegal using of virtual currency for money laundering. In May 2013, the US Department of Justice accused the company «Liberty Reserve» (a Republic of Costa Rica electronic transfer system) of unregistered commercial services for money transfer services and money laundering by facilitating the movement of illicit proceeds to more than \$ 6 billion.

In the course of the Western Express Cybercrime Groups investigation on the criminal activities of the cyber-crime group the judge pronounced the verdict to 16th participants. They had used the fraudulent schemes and stolen personal data. This organized crime group consisted of sellers, buyers, providers of cy-

bercrime services and persons involved in the transferring of money in different countries: from Ukraine and Eastern Europe to the United States. Sellers have implemented almost 100,000 stolen credit card numbers and other personal identifying information via the Internet, taking as a means of payment unit mainly e-Gold and WebMoney. Customers have been using the stolen identity to forge credit cards and purchase expensive goods they bought, thus carrying out more crimes, such stealing, misappropriation of property and fraud.

In order to prevent any forms of terrorist financing using cryptocurrency, American law enforcement agencies interact with specialized Bitcoin companies in order to detect an illicit activity on blockchain platforms. According to the Australian Government bitcoin promote to organized crime, as they are widely used in the on-line casinos and potentially can be used for trafficking in human beings [6]. However, the report of the National Treasury of the United Kingdom «National Risk Assessment of Money Laundering and Terrorist Financing 2017 (NRA) » of October 26, 2017 is defined that the financing of terrorism through cryptocurrency is limited to the lack of widespread using of digital assets. Therefore, in the future, the authors predict there will not be a problem of large-scale using of cryptocurrency for the purpose of financing terrorism [11].

June 2017, in Ukraine law enforcement officers eliminated the international scheme of cybercrime and legalization of funds with the using of cryptocurrency. The participants of the organized crime group recruited the poorly inhabitants of the Poltava region and sent them to work in Moscow (the Russian Federation), where they have been following the instructions from criminals to receive cash and distribute Bitcoin in the territory of the Russian Federation. Thus, the legalization of various cryptocurrencies was carried out through the transfer of US dollars or Russian rubles. In the future, funds received from this activity were redirected to Poltava, where they were distributed among the members of the criminal group [12].

In August 2017, the Security Service of Ukraine jointly with the National Police of Ukraine conducted a special operation, according to which 200 computers were discovered on the territory of the



health-improving complex of the E.O. Paton's Electric Welding Institute of the National Academy of Sciences of Ukraine, which had been generating cryptocurrency bitcoin and working in violation of current legislation. The cryptocurrency was used as means of payment through exchange transactions for electronic money of an official payment system [13].

The issue of cryptocurrency circulation in Ukraine has been repeatedly raised at the state level. On November 10, 2014, on the website of the National Bank of Ukraine, an explanation was published «Concerning the legality of using the virtual currency/ crypto-currency» Bitcoin in Ukraine» [14]. Thus, according to the NBU's position, the virtual currency (crypto-currency) Bitcoin is a monetary surrogate that is not provided with a real value and cannot be used by individuals and legal entities on the territory of Ukraine as a means of payment, as this contradicts the norms of Ukrainian legislation. Also, the National Bank of Ukraine has declared its position that it has no liability for citizens for all exchange rate fluctuations and their consequences associated with Bitcoin. At the same time, an international distribution of such payments makes this category of services which attractive for illegal actions, including money laundering or terrorist financing.

According to the results of the meeting of the High Council of Experts under the NBU Council in October 2017, it was emphasized that the state bodies with the powers of control and regulation of financial markets have not yet decided on the framework for the functioning of the cryptocurrency market [15]. As a result, the recommendations were formulated to minimize such potential risks: a possible decrease in confidence in the national monetary unit, which is the only legal means of payment in Ukraine; the probability of using cryptocurrency in the shadow economy. The unregulated using of cryptocurrency could create conditions for increasing the share of the shadow economy and lead to a reduction of taxes to the State Budget. The tax code obliges to declare the income received on the territory of Ukraine and to pay the corresponding taxes. Tax evasion is an offense and a law provides to bring the perpetrators to justice.

There is a legal conflict – cryptocurrency is actively used for payment in our country and it hasn't a legal status. Here is a threat of the use cryptocurrency during illegal financial transactions and money laun-

dering; crimes including those are used in corruption schemes. There is an opportunity to finance smuggling operations, illegal operations with narcotic substances, antiques, objects of art and historical heritage, etc. with the help of cryptocurrency. It should be noted that the unregulated functioning of the cryptocurrency market creates the favorable conditions for their use in order to finance illegal military groups operating in the territories of Donetsk and Lugansk regions temporarily uncontrollable in Ukraine. These facts are direct threat to the financial stability and security of the state.

Given the relevance of this issue in our country it have been prepared a draft law «On Circulation cryptocurrency in Ukraine» № 7183 of 06.10.2017 [16], which legalizes an approval of bitcoin and create a legal framework for its circulation as an official means of payment. The bill defines the conditions under which cryptocurrency could not be used, particularly in the case of its application against a national security, incitement to overthrow the constitutional order, violation of territorial integrity of Ukraine, acts of terrorism, financing of terrorism, the legalization of money laundering, narcotic drugs, psychotropic substances, their analogues or precursors and other illegal acts.

Conclusions. 1. The use of cryptocurrency is a promising way for economic development with the applying of modern accounting and information technologies. A specific feature of the circulation of Bitcoin is the lack of intermediaries (third parties), users interact directly with each other, which guarantees investors a phenomenal increase in profits. However, there are complexities of criminal law regulation of cryptocurrency operations, due to the scale of their circulation.

2. The international experience clearly demonstrates the importance and role of cryptocurrency in the activities of transnational criminal groups for the financing of terrorism and trafficking in human beings. Virtual currency can be sold on the Internet anonymously, without any inking to a particular bank or financial institution while conducting transactions.

3. In Ukraine in the context of globalization and implementation of the European integration course, the circulation of cryptocurrency needs to be regulated at the legislative level, in connection with which it is necessary to accelerate the approval of the draft law on the circu-

lation of cryptographic goods in Ukraine No. 7183 dated 06.10.2017.

4. In Ukraine, the miners are actively using cryptocurrency as a means of payment. They carry out exchange transactions on electronic money of official payment systems, and then obtained «currency» is converted and transferred to bank accounts of enterprises with signs of fictitiousness. Then, this currency is converted to card accounts, becoming cash, that is, the shadow scheme is used by analogy with conversion centers. Law enforcers, revealing the criminals' miners, mostly accuse them of illegally connecting to the electricity grids, false entrepreneurship, and tax evasion. Under these circumstances, it is necessary to develop a strategy of joint law enforcement activities for ensuring a control over the circulation of cryptocurrency that will strengthen the legal possibilities of special security forces in the fight against money laundering, human trafficking and terrorist financing.

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INFORMATION ABOUT AUTHORS

Lukianchuk Ruslan Valeryevich – PhD in Public Administration, Senior Researcher of the Interagency Scientific and Research Center on problems of combat-

ing organized crime under the National Security and Defense Council of Ukraine;

Hrebenuk Maksim Vasilyevich – PhD in Law, Associate Professor, Honored Lawyer of Ukraine, Head of the Interagency Scientific and Research Center on problems of combating organized crime under the National Security and Defense Council of Ukraine.

ИНФОРМАЦИЯ ОБ АВТОРАХ

Лукьянчук Руслан Валерьевич – кандидат наук по государственному управлению, старший научный сотрудник Межведомственного научно-исследовательского центра по проблемам борьбы с организованной преступностью при Совете национальной безопасности и обороны Украины;

Гребенюк Максим Васильевич – кандидат юридических наук, доцент, заслуженный юрист Украины, руководитель Межведомственного научно-исследовательского центра по проблемам борьбы с организованной преступностью при Совете национальной безопасности и обороны Украины;