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Juridical challenges regarding bitcoin

Short introduction

For the entire economy of a state the payment instruments are indispensable. Payment instruments have been defined as tools or set s of procedures enabling the transfer of founds from the payer to the payee[1]. Payment instruments have various forms. The most common distinction is between cash and non-cash payment instruments.

The most frequent are cash payments (banknotes and coins), which are "usually associated with face to face transactions of low value between individuals or between an individual and a merchant"[2]. Specific to this kind of payment is that an immediate and final transfer of value occurs, and the cash received can be used for further payments. In most countries, cash represents the legal tender, as long as the legislation requires that the banknotes and coins must be accepted as payment for all types of transactions.

Non cash payments involve a transfer of funds between accounts, that needs an authorization coming from a person in order for its bank to transfer funds or to collect funds from a payer.

The scriptural currency or the bank currency is, in fact, a simple change of papers. M. Ansiaux, the one that first used this notion, defined in 1912 the scriptural currency as a currency that passes from an account to another, instead of passing from one hand to another[3].

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1 The European Central Bank, *The payment system*, Frankfurt on Main 2010, p. 28.

2 *Ibidem*.

3 V. Turliuc, V.Cocris, *Moned*ă şi credit, „Alexandru Ioan Cuza" University Publishing House, Iaşi 2007, p. 30.

Georg Friedrich Knapp, in his well-known treaty *Staatliche Theorie dees Geldes*, defines currency as being "a creation of the state`s order".

By contrast, the virtual currency is an electronic currency that isn`t government – funded nor backed by the central bank[4].

The virtual currency is gaining popularity each day, mainly because of the lower transaction fees and faster transfer of funds.

According to the Financial Crimes Enforcement Network, the virtual currency is "a medium of exchange that operates like a currency in some enviroments, but does not have all the atributes of real currency. In particular, virtual currency does not have legal tender status in any jurisdiction"[5].

Criptocurrencies are popular convertible virtual currencies, as they use security mechanisms such as cryptography for creating units of the currency and controlling the transaction. The main property of criptocurrencies is that they provide anonymity for the transaction, as they work based on Blockchain technology.

Bitcoin – a Troyan currency

Bitcoin is one of the most important criptocurrencies on the market. Bitcoin it was presented as a digital currency that lives on the cloud, and it can be compared to real currencies such as US Dollar and Euro[6]. Bitcoin is a computer code "that established a system permitting people to transfer money to one another online, directly, anonymously and outside government control"[7] that can be used to buy goods and services.

Bitcoin was presented to the world by Sathoshi Nakamoto (considered to be a hacker or a group of hackers), who, in 2009, wrote an article about it: *Bitcoin: A Peer to Peer Electronic Cash System*[8]. The reason why the author considered a virtual currency necessary is to eliminate the costs imposed by the financial institutions, as they are the trusted third parties that proceed

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4 S. Jafary, T. Vo-Huu, B. Jabiyev, A. Mera, R. Mirzazade*, Cryptocurrency: A Challenge to Legal System*, "SSRN Electronic Journal", January 2018, p. 3, https://www.researchgate.net/publication/325747817_Cryptocurrency_A_Challenge_to_Legal_System [accesed: 3.02.20202].

5 *Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies*, https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering [accessed: 4.02.2020].

6 R. Parveen, A. Alajmi, *An overwiev of Bitcoin`s Legal and Technical Challenges*, "Journal of Legal, Ethical and Regulatory Issues" 2019, issue 1, https://www.abacademies.org/articles/an-overview-of-bitcoins-legal-and-technical-challenges-7863.html [accessed: 4.02.2020].

7 A. Feuer, *The Bitcoin Ideology*, https://www.nytimes.com/2013/12/15/sunday-review/the-bitcoin-ideology.html [accessed: 4.02.2020].

8 S. Nakamoto, *Bitcoin: A Peer to Peer Electronic Cash System*, 2009, https://bitcoin.org/bitcoin.pdf [accesed: 3.02.20202].

the electronic payments. In the author`s opinion, the cost of the mediation increases the transaction cost. Also, the trusted based model make the merchants be more wary of their customers, "[…] hassling them for more informations than they would otherwise need. A certain percentage of fraud is accepted as unavoidable. These costs and payments uncertainties can be avoided in person by using physical currency, but no mechanism exists to make payments over a communications channel without a trusted party"[9].

Positive aspects

We can agree that we all want a payment mechanism to be fast, secure and with a low cost. So Bitcoin seems to be the perfect currency.

Many authors pointed out some of the positive aspects of using Bitcoin. One of these, is the decentralization. It creates the possibility of using a single currency worldwide, a currency that is not regulated by a single country, "but rather decentralized peer-to-peer by individual users"[10].

Also Bitcoin seems to bring the advantage of transfering the completely international banking system into a system that will allow very fast transactions to take place not only during work hours, but also rather at any time and any place, at a very reduced transactional cost. It is supposed that "his minimal transaction costs will be a help for the development of small businesses and will ease the financial access for countries with underdeveloped financial sectors"[11].

Bitcoin is appreciated also for making possible financial transactions without barriers and surveillance[12].

Finally, it is appreciated that one of Bitcoin's main advantages is that it addresses the problem of counterfeiting or the double-spending problem. So, even if Bitcoin itself can be easily copied, it will have no value. One author said that "[…] a wallet full of Bitcoin is a wallet full of addresses. When you want to buy something using Bitcoin, you submit the transaction to the network. Then, the network will double check your transaction, and make sure that your address is valid, and it has the proper value […]. Thus, the risk of counterfeiting does not exist because there is nothing to counterfeit.

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9 *Ibidem*, p. 1.

10 R. Parveen, A. Alajmi, *op. cit*.

11 R.C. Maloumby-Baka, C. Kingombe, *The Quest to Lower High Remittance Costs to Africa: A Brief Review of the Use of Mobile Banking and Bitcoins*, https://www.researchgate.net/publication/299634256_The_Quest_to_Lower_High_Remittance_Costs_to_Africa_A_Brief_Review_of_the_Use_of_Mobile_Banking_and_Bitcoins_2nd_Version [accesed: 3.02.20202].

12 See: J. Matonis, *Bitcoin Ideology and the Tale of Casascius Coins*, 17.12.2013, https://www.coindesk.com/bitcoin-ideology-casascius-coins [accesed: 3.02.20202].

Nonetheless, there is a risk of counterfeiting Bitcoins by spending them in more than one place which is called the double-spend attack. This method of counterfeiting, because of the design of bitcoin block chain and its security, can only be accomplished with a large amount of computer power[13].

Juridical challanges

Whereas we like it or not, it seems that Bitcoin has become a powerful payment system. The national Governments face now a new challenge: the necessity of regulating Bitcoin. But Bitcoin is incompatible with any kind of centralized control. We can only imagine that effective regulations can exist only through worldwide cooperation: "Bitcoin and other virtual currencies are present and growing in major economies, supporting the call for increased global cooperation"[14]. This will be probably an expensive and complex process.

As studies revealed[15], the countries are not ready for what Bitcoin brings, as they have not establish rules or regulations for virtual currencies. But there are also exceptions. China already established regulations, while Brasil has started the regulation process. Canada, Australia, Germany and Finland have also legalized the use of Bitcoin. Even so, it seems that most countries share the concern that Bitcoin will be used to found criminal activities and also tax fraud.

In a public report, FBI stated that Bitcoin "[…] provides a venue for individuals to generate, transfer, launder and steal illicit funds with some anonymity. Bitcoin offers many of the same challenges associated with other virtual currencies as WebMoney, and adds unique complexities for investigators because of its decentralized nature"[16].

In a study of the European Parliament, the biggest problem of the criptocurrencies was considered to be the anonymity, that prevents transactions from being adequately monitored, "allowing shady transactions to occur outside of the regulatory perimeter, allowing criminal organisations to use cryptocurrencies to obtain easy access to 'clean cash'"[17]. When it comes to

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13 R. Parveen, A. Alajmi, *op. cit*.

14 T. Devaney, *Carper: US should `lead way` in Bitcoin regulation*, https://thehill.com/regulation/legislation/197310-carper-us-should-lead-way-in-bitcoin-regulation [accesed: 3.02.20202].

15 *Ibidem*.

16 FBI, *Bitcoin Virtual Currency: Unique Features Present Distinct Challenges for Deterring Illicit Activity*, 24.04.2012, https://www.wired.com/images_blogs/threatlevel/2012/05/Bitcoin-FBI.pdf [accesed: 3.02.20202].

17 European Parliament Study, *Cryptocurrencies and blockchain. Legal context and implications for financial crime, money laundering and tax evasion*, http://www.europarl.europa.eu/cms-

entering into taxable criptocurrency transactions without paying taxes, tax evasion occurs. The anonymity of cryptocurrency transactions prevent tax authorities from detecting and sanctioning tax evasion.

At international level there are some initiatives that aim to prevent, diminish or eliminate the crime phenomenon facilitated by the use of cryptocurrencies. One of this initiavies is Project Titanium, a research program to support law enforcement agencies to investigate and mitigate crime and terrorism that involves virtual currencies and underground market transactions[18].

According to the European Parliament study, the project will research and develop new data-driven techniques and solutions designed to support law enforcement agencies charged with investigating criminal or terrorist activities involving virtual currencies. The Project Titanium fights against terrorist financing, money laundering and tax evasion by using cryptocurrencies. It is a tool that should be used by law enforcement agencies in order to track down such kind of criminal activities.

Instead of conclusions

As Bitcoin continues to develop, I imagine a lot of question will arise and the governments will have to overcome a lot of challenges. So, because I consider that that the Bitcoin phenomena is yet to come, I would like to point out an opinion that I rally to: "Given Bitcoin infancy, it is advisable the government not fully jump into regulation until Bitcoin is better understood. What is more, Bitcoin is truly global phenomena. Its development and regulation will not take place domestically but will be fully realized only when the world comes together to define its status"[19].

Recent reports show that cryptocurrencies are worldwide spread, "prompting more nationaland regional authorities to grapple with their regulations"[20]. The national jurisdictions are trying to manage the cryptocurrency market and we can observe some emerging patterns in the regulations.

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data/150761/TAX3%20Study%20on%20cryptocurrencies%20and%20blockchain.pdf [accesed: 3.02.20202].

18 Interpol, *Tools for Investigation of Transactions in Underground Markets*, https://www.interpol.int/Who-we-are/Legal-framework/Information-communications-and-technology-ICT-law-projects/Project-Titanium [accesed: 3.02.20202].

19 D. Sonderegger, *A Regulatory and Economic Perplexity: Bitcoin needs just a Bit of Regulation*, "Washington University Journal of Law and Policy" 2015, Vol. 27, https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1866&context=law_journal_law_policy [accesed: 3.02.20202].

20 Library of Congress, *Regulation of Cryptocurrency Around the World*, June 2018, https://www.loc.gov/law/help/cryptocurrency/cryptocurrency-world-survey.pdf [accesed: 3.02.20202].

Many countries are concerned by the fact that cryptocurrencies create opportunities for illegal activities. Some of these countries only warned the financial institutions and the public regarding this problem and expanded their national laws on the mentioned illegal activies, such as money loundering or terrorism. Other countries even banned investments and other activities involving cryptocurrencies.

But there are also countries that edicted friendly cryptocurrency-regulations. Although they do not recognize them as legal currencies, these countries see a potential in the tehnology used behind them.

Reports show that some countrie even try to develor their own system of cryptocurrencies.

In my opinion, as long as bitcoin has no legal regulation, it can not be considered to be a reliable payment instrument. As long there is no central public authority that sustains or that ensures that the use of bitcoin is safe, it cannot be considered a general accepted payment instrument. Taking this into consideration, the users of bitcoin have no adequate legal protection.

Bitcoin can be used as an inspiration for the central public authorities, for the central bank and for the entire banking system, in order to emprove the payment system and the payment instruments.

Although, sometimes the public system, the public institutions fail to accomplish properly their duties, we need the public system to set regulations and to protect us.

The payment systems and the payment instruments are very important for a state's economy. People need safe payment instruments, in order to make safe transactions. So far, bitcoin proved itself to be safe, but, in my opinion, it is a very volatile "coin". The bitcoin system can collapse at any moment. And as long as we do not even know who controls this system, we will not be able to make it responsable for our losses, for the damages. We will not be able to bring it in front of the justice. A reliable legal person should assume it's identity and it's purposes. We have no idea what the real purpose of this virtual currency is.

We do not yet have proper regulations for the virtual currencies. But relativ recently, an important regulation was set in the Fiscal code. According to the second alignment of art.114, letter m), income taxes apply also to virtual currency transfer revenue. The gain from the virtual currency transfer is determined as a positive difference between the selling price and the purchase price, including the direct costs of the transaction.

By introducing this regulation, the Romanian legislator eliminated the uncertainties that hovered over the taxation regime of these incomes. In my

opinion this comes as a necessary adaptation of the Romanian legal and fiscal context to the entry of cryptocurrencies in the mainstream of financial operations. I consider this legal measure a step made in order to set some boundaries in using the virtual currencies. I consider this an acceptation of the use in this current times of virtual currencies. I think it is a transitory, a temporary regulation that sets a certain order in the use of virtual coins, until a proper regulation is set. New regulations should follow in other areas as well, through the transposition of recent European money laundering and terrorist financing legislation. These are just general rules that create an incipient legal framework for the future use of virtual currencies, in a legal and secure framework.

Bibliography

Devaney T., *Carper: US should `lead way` in Bitcoin regulation*, https://thehill.com/regulation/legislation/197310-carper-us-should-lead-way-in-bitcoin-regulation [accessed: 3.02.20202].

European Parliament, *Cryptocurrencies and blovkchain . Legal context and implications for financial crime, money laundering and tax evasion*, http://www.europarl.europa.eu/cmsdata/150761/TAX3%20Study%20on%20cryptocurrencies%20and%20blockchain.pdf [accessed: 3.02.20202].

FBI, *Bitcoin Virtual Currency: Unique Features Present Distinct Challenges for Deterring Illicit Activity*, 24.04.2012, https://www.wired.com/images_blogs/threatlevel/2012/05/Bitcoin-FBI.pdf [accessed: 3.02.20202].

Feuer A., *The Bitcoin Ideology*, https://www.nytimes.com/2013/12/15/sunday-review/the-bitcoin-ideology.html [accessed: 4.02.2020].

FinCEN. *Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies*, https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering [accessed: 4.02.2020].

Interpol, *Tools for Investigation of Transactions in Underground Markets* https://www.interpol.int/Who-we-are/Legal-framework/Information-communications-and-technology-ICT-law-projects/Project-Titanium [accessed: 3.02.20202].

Jafary S., Vo-Huu T., Jabiyev B., Mera A., Mirzazade R., *Cryptocurrency: A Challenge to Legal System*, "SSRN Electronic Journal", January 2018, p. 3, https://www.researchgate.net/publication/325747817_Cryptocurrency_A_Challenge_to_Legal_System [accessed: 3.02.20202].

Library of Congress, *Regulation of Cryptocurrency Around the World*, June 2018 https://www.loc.gov/law/help/cryptocurrency/cryptocurrency-world-survey.pdf [accessed: 3.02.20202].

Maloumby-Baka R.C., Kingombe Ch., *The Quest to Lower High Remittance Costs to Africa: A Brief Review of the Use of Mobile Banking and Bitcoins*, https://www.researchgate.net/publication/299634256_The_Quest_to_Lower_High_Remit-

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Matonis J., *Bitcoin Ideology and the Tale of Casascius Coins*, 17.12.2013, https://www.coindesk.com/bitcoin-ideology-casascius-coins [accessed: 3.02.20202].
Nakamoto S., *Bitcoin: A Peer to Peer Electronic Cash System*, p. 1, https://bitcoin.org/bitcoin.pdf [accessed: 3.02.20202].
Parveen R., Alajmi A., *An overwiev of Bitcoin`s Legal and Technical Challenges*, "Journal of Legal, Ethical and Regulatory Issues" 2019, issue 1, https://www.abacademies.org/articles/an-overview-of-bitcoins-legal-and-technical-challenges-7863.html [accessed: 4.02.2020].
Sonderegger D., *A Regulatory and Economic Perplexity: Bitcoin needs just a Bit of Regulation*, "Washington University Journal of Law and Policy" 2015, Vol. 27, https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1866&context=law_journal_law_policy [accessed: 3.02.20202].
The European Central Bank, *The payment system*, Frankfurt on Main 2010.
Turliuc V., Cocris V., Roman A., Stoica O., Dornescu V., Chirlesan D., *Monedă și credit*, "Alexandru Ioan Cuza" University Publishing House, Iași 2007.

Abstract
Juridical challenges regarding bitcoin

Criptocurrencies are popular convertible virtual currencies, as they use security mechanisms such as cryptography for creating units of the currency and controlling the transaction. The main property of criptocurrencies is that they provide anonymity for the transaction, as they work based on Blockchain technology. Bitcoin is one of the most important criptocurrencies on the market. Whereas we like it or not, it seems that Bitcoin has become a powerful payment instrument, but also a payment system. The national Governments face now a new challenge: the necessity of regulating Bitcoin. But Bitcoin is incompatible with any kind of centralized control. We can only imagine that effective regulations can exist only through worldwide cooperation: "Bitcoin and other virtual currencies are present and growing in major economies, supporting the call for increased global cooperation"[21]. This will be probably an expensive and complex process.
Key words: Bitcoin, regulations, challenges

[21] T. Devaney, *Carper: US should `lead way` in Bitcoin regulation*, available at https://thehill.com/regulation/legislation/197310-carper-us-should-lead-way-in-bitcoin-regulation.