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LEGAL CONCEPT OF INTERNET CURRENCIES DOMINIKA KISIEL*

Abstract

Internet-based currencies play important role in current world of banking and economy. Repeatedly immense interest concerning the concept of money circling within the virtual network tends to draw an attention to its division and legal status. This paper aims to highlight the issue of ongoing condition of said currencies in digital sphere, along with their advantages and risks linked with the unreasonable usage. With the aid of research from scientific works, legal documents and personal opinion, an conclusion has been made.

Key words

Crytpocurrency; Money; Currency; Bitcoin

JEL Classification: K400, K49

1. Introduction

The Internet network is nowadays expanding in an expeditious time. As well as still improving number of users worldwide, the knowledge, along with

^{*} Dominika Kisiel is a student of European Business Administration on University of Gdansk. Currently, she is working on the bachelor thesis titled 'The Legal Status of Bitcoin'. After graduation, she is planning to take up further studies in the field of Finance and Accounting. She is interested in topics connected with cryptocurrencies, law and finance. She is focused on self-development in a scientific environment.

the brand-new possibilities, is also progressing. The change of people's lifestyles and sharing information manner results in the digitalization of societies, which leads to the creation of advanced technologies to satisfy modern needs.

One of the innovation is a divergent approach of exchanging the goods and services within the Internet. Constructing new payment methods stands for the alternative to traditional arrangements of operations within financial transactions. A hazardous and unstable sphere of the contemporary financial system contributes to the development of less regulated economic relations. On this ground the concept of currencies other than those acceptable among community has reached its top. A basic division between cryptocurrencies, digital and virtual currencies has been made, however a term of 'currency' *sensu largo* is the common element (Bala, Kopyściański, Srokosz, & Uniwersytet Wrocławski. Wydawnictwo, 2016).

As time passes by, many innovations have been made in contemporary world. Not only in the sphere of economics' development or people's attitude to improved environment. Likewise, new approaches to advancement technologies are being made on daily basis. Introduction of currencies within the Internet, despite legal either industrial obstacles connected, was the milestone for current market.

Going forward, as it can be seen from cited literature, the division of Internet currencies considers differences between them, based both on definitions from legal documents and recognition among their users. By the whole of titles shown in this paper, most recognizable, as written communications by European Central Bank 'Virtual Currency Schemes', The Financial Crimes Enforcement Network's Guidance 'Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies' or European Banking Authority 'EBA Opinion on 'virtual currencies', are pointed out.

2. Division of currencies among the Internet

To start with, the concept of the 'currency' notion *per se* is essential. The conventional nature of the definition, stressed out in Merriam-Webster Dictionary as being an object circling as a medium of exchange, can be discerned in the broader meaning. The Financial Crimes Enforcement Network interpreted previously mentioned description with reference to the country's legal tender approved by the State (Department of the Treasury – Dinancial Crimes Enforcement Network, 2013). The most popular forms are banknotes along with coins, being some sort of system of money commonly used by the particular notion.

Remarkably favoured by governments is fiat money, being not only in said tangible shape, but also in the type of credit's record or balances. Another kind of monetary system relevant to bear in mind, is commodity money, with its intrinsic value together with remaining worth and commodity-based capital, not placed on regular basis, but with value drafted from the possession (Prateek Agarwal, 2018).

However, as years are passing by and multitude approaches to development of technologies available to citizens are made, a special division into categories of 'cryptocurrency', 'virtual currency' and 'digital currency', conditioned by distant roles and components (Ewa Butkiewicz & Jacek Czarnecki, 2014), became an obvious outcome.

2.1. Virtual currency

According to the European Central Bank, 'virtual currency' is independent of any legal authority, determined regionally, non-physical as well as inherently unstable (Central Bank, 2012). Operating within the decentralized system, transactions in the corresponding type of currency are being exercised between the members of the network, who are responsible further for their verification. It is the most widely performed to purchase goods and services from any other person with the willingness to accept such form of payment. The usage is comparable to traditional and frequently recognized 'real' currency, but the course of operation preclude being a substitute the latter. The trust between people and government associating current authorized currency is not present in the case of virtual one. A distinction from classical means is obvious by the lack of legal tender status, which can be applied solely by entity obliged to do so. Regardless of a few attributions of the real currency, that virtual is generated among 'user', 'exchanger' and 'administrator' (Department of the Treasury - Dinancial Crimes Enforcement Network, 2013) without any protection from governmental bodies and hence with no statutory status. As reported by the FinCEN, those persons are not subject to regulations, as long as they are not carrying out activity characterized as 'money transmission services'. Furthermore, aforementioned bureau of the U.S. Department of the Treasury excluded such characters from being a Prepaid Access' providers and sellers nor foreign exchange dealers.

An earlier specified definition was made by the European Central Bank in its Report in 2012 (Central Bank, 2012). The principal focus on analysis to stipulate more clarity in such area. A statement where the provider is the only guardian

of a control of virtual currencies beyond any particularized framework is meant to change in the future. Such assumption is a consequence of increasing demand of accurate rules. In accordance, The European Banking Authority has given a response with strong commitment to detailed regulation. In the other words, a proposal where said providers would be treated as financial services providers and effective Anti-Money Laundering legislation would be drawn up, was declared. First issued statement from 2013 (European Banking Authority, 2014) was intended to revive credit and financial institutions from purchasing or holding aforementioned currencies. Particular exposures, like those cause both to non-users and participants of market, together with danger to financial integrity, including money laundering or other financial crimes, are intervening with profits, for instance lowered cost and increased speed of transaction.

An announcement from 2014 (European Banking Authority, 2014) furthermore mitigates risk within virtual currencies schemes and delineates a definition of such medium in digital value form without any legal authority approval. Analysing the content, central features are stated. Money being virtual is convertible so adequate to swaps or non-convertible, non-redeemable and easy to store, transfer either trade electrically. To obtain it, user need to follow one of three, different ways, like exchange, receipt or by special activities responding to for example promotion. Economic benefits resulting from commerce in virtual sphere are concluded by EBA. Starting from profits to the whole society, appearing as market growth, fewer limitations upon international businesses and faster deals, heading to gains for individuals based on certainty, security as well as autonomy from government. Still, to warn all the participants, risks are observed and ordered in line with the level of danger. Besides aforesaid division, groups of endangered are specified accordingly. Schedules, including examples of key drivers, are attached to the Report, therefore both investors and individuals can obtain vital information.

Another document relevant to advanced supervision of electronic money institutions was established as E-Money Directive (Directive 2009/110/EC of The European Parliament and of The Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC, 2009)

. The aim of amending previous directives and forming current was to enhance sustainable functioning of internal market by applicable legal foundations. When looking through it, no conjunction to virtual currency has been made.

2.2. Digital currency

A non-physical type of currency is applicable as 'digital currency'. Such term is more far-reaching than 'virtual', hence it can be even concluded that it contains the example of the later. Digital money can be either centralized or decentralized and identified as a payment system (Tasca, 2015). Principles of proof-of-concept, along with cryptography encryptions are being considered as a revolution. Moreover, there is no single digital currency, but aggregation of spare divided, which can be distinguished by process of users' agreement to alternative assigned ledger and verification procedure (Nakamoto, 2008). As it is addressed to large group of recipients, effectiveness, economical price and certainty must be guaranteed. Nevertheless, none of them has a status of 'state money', therefore monetary value is not the same as the indicated amount, and they cannot be used to realise from payment obligations (Tasca, 2015). On the other hand, digital currencies satisfy a particular purpose, namely 'utility of reward' (Tasca, 2015), which denotes the ability to market frictions' reduction. Such capability enables their users to make profitable choices.

Despite above features corresponding digital and virtual currency, reference to the term of 'cryptocurrency' need to be indicated. The concept of e-money, stressed out by David Chaum, has prompted an importunity of the structure enabled to carry out transactions without intermediaries. Such solution could contribute to reduce costs and improve speed of conduct. For the first time, the privacy within Internet transactions (David Chaum, 1998) was offered, by the means of 'blind signature' (David Chaum, 1998) relying on inability of person signing the contract to see its content, later developed and refined. Yet, there were also difficulties as 'double-spending' problem (Narayanan, 2006), a result of duplicated transactions with money allocated twice. In the course of surveys, by virtue of the high-technology proficiencies, the complication has been clarified by the establishment of a central server consisted of balances' records. As a consequence of such achievement, subsequent resolutions could be handled, which have presented innovative phenomenon. Assets expressed as 'cryptocurrencies' based on cryptography and peer-to-peer network which is effectively replacing

central authorities were proposed. No institution present, give a wide leeway to the evaluation of P2P.

2.3. Cryptocurrency

Basically, the network is an affiliation between two computers, which are engaged in sharing resources without any additional server (Nakamoto, 2008). Akin conduct may be addressed to both individual entity and large corporations. In said environment a single machine acts as client and server outside the diverse operating system, on this wise each permission is shared among participants. Everyone operates in equal manner, has similar competences and is capable of initiating the session.

Placing cryptocurrencies on market is allied with the occurrence of 'mining' process. Despite those operations, alike in typical transactions, the acquisition by the stock or currency exchange within the secondary market is also achievable. The institutions specialized in course of non-material and legal unregulated currencies are conducting their business activity using a particular, elaborated web page. Along with 'anonymity' idea of cryptocurrencies, services provided on purpose to exchange them are again unidentified. The lack of control of resources or explicit data escalate risk of trust abuse experienced by entities. Two important segments are divided from the market of cryptocurrencies, one of investments to gain profits basing on speculations and second of transaction to perform essential commercial dealings (Bala et al., 2016). Fluctuations of prices together with the absence of certainty about the value contribute to consequences such as users' reluctance.

3. Recognition of Internet currencies

Those alternative methods of payment appear to have many advantageous characteristics as global scope and no territorial limits. A transaction to be irreversible and funds secured by the public either private key, any possession of supplementary server is required, save a linkage to the whole network. While creating new economy by the use of cryptocurrency, every user acts anonymously and has no identity.

However, though benefits, such advanced concept generates risks connected with unregulated consumer protection either marketing rules. Increasing popularity, nevertheless, is not equal to the recognition as a currency unit in most of the countries, which creates obstacles of legal character. On the other hand, cryptocurrency can be comparable to traditional 'money' on grounds of analogous functions. Essentials, as constancy, rarity, divisibility, homogeneity, convenience and originality, are somehow associated with electronic form of currency. Referring to European Central Bank interpretation of 'fiat currency' as meaning of authorized legal tender (European Banking Authority, 2014) stored with equivalent, stable unit, cannot be applied to cryptocurrencies. Value is a key driver, which has basis in issuer's economic power. As it arose from law, the backup from sovereign is ensured along with territory's economy support (Guadamuz & Marsden, 2015). In the case of cryptocurrencies, value is proceeded by computers, hence only such system may give them necessary foundation without any statutory cornerstone.

3.1. Advantages

The same as every unit serving as a subject of transfer between parties, cryptocurrencies also need a sort of the public ledger, where all transactions can be visible. Through a combination of modern technologies such as cryptography, 'blockchain' has been created. It performs as a type of marketplace with the possibility of settling low-priced trades in conjunction with a solution designed to proper functioning of security. Digitalization lead to reduce operational costs close to zero (Catalini & Gans, 2016). A specific feature like decentralization stands apart legal entity verification, notwithstanding ledger is adequate to peer examination and transparent to high degree (Peters, Panayi, & Chapelle, 2015). Removed commitment of third party involvement is guaranteeing a secured openness for all users. Immutability of such system approves the trust-worthiness of made transactions, despite the lack of body other than principal. Closely associated with 'smart contracts' (Raskin, 2017), Internet-based technology allows recording and maintaining entitlements by traceable, web-stipulated operations without the requirement of user's identity disclosure.

Freedom of payment allows bitcoins to be sent either received at any time, without adversities resulting from crossing borders, as in the case of traditional money. What is more, fees are comparatively low, not associated with taxation on the ground of abroad payment. Bitcoin can be recognized internationally, however with a little knowledge about said Internet trade, average user may be exposed to lots of threats.

3.2. Disadvantages

Downsides of a decentralization of akin electronic payment system are reflected in inadequate regulations not satisfying requirements either improper guidance. Consumer marketplaces may be aching as illegal actions' consequence conducted within the blockchain, which cannot be secured by any public authority. Regulatory challenges leave the space to plenty of criminal activities, likewise particular attributes of above technology.

Anonymity gives the green light to hide information about the user, which can result in complicated potential culprit's course of recognition. Nothing but network's records is published, merely automatically generated description of trade. By virtue of unregulated regime yet prior stated, cyber-attacks became progressively attractive among Internet society. Downturns in value, caused by 'cyber-thieves' who collect cryptocurrencies at the time of their topmost monetary worth, spread panic within the public (Ogunbadewa, 2014). Plurality of such violations, enabled by simple encrypted communication, concerns also a fraud. Model example is the case of *Brian Cartmell et al vs. Bitcoinica LP* (Superior Court of California, 2012) held on 6th August 2012 in Superior Court of California. In said instance, plaintiffs were users of Bitcoinica, a platform of bitcoin currency exchanges, who as a result of hackers' attack, lost their funds located there. Concerning legal challenges of corresponding currency, the jurisdiction was complicated to provide, so as guidance from public.

Again, nothing can be done as long as users are left alone with protection of themselves and regulation on the legal ground. Ambiguities are on day-to-day basis in majority of digital transactions. Lacunas in running mechanism are not fully covered nor fixed. The law enforcement's inability constructs a perfect opportunity to disguise exercises from local governments and locate funds in tax heavens. By means of cryptocurrency, money laundering may be facilitated due to shortened 'integration' process of turning dirty funds into clean (Ogunbadewa, 2014). The Financial Crimes Enforcement Network to combat such activities has stipulated a provision for cryptocurrency exchanges and third-party services to register as money service business (Ogunbadewa, 2014). To prevent money laundering and financing of terrorism a proposal of directive has been made by the European Union (Directive (EU) 2015/849 of The European Parliament and Of The Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, 2015). Along with Know Your Customer, also known as KYC rules designed to customer due diligence, a new

framework would monitor and investigate suspicious actions more efficient by means of every exchange services registration.

A development of above mentioned offences can came into sight as tax evasion and tax avoidance. Failure in legislation make cryptocurrency-transactions uncountable in precise manner. Additionally, like any other investments made be people, Internet currencies is imperilled by lost of confidence by changes in inflation rates.

3.3. Conclusion

A well-known application of cryptocurrencies as a common object of exchange is not identified with its classification into money, payment mean either instrument circling in the traditional trade (Dąbrowska, 2017). On the grounds of unregulated nature, both in international, European other Polish law, despite growing recognition, a judicial analysis is still delicate to specify.

Nowadays more and more governments wish to have control over developing cryptocurrencies. As it is in Russia, greater extent of restrictions is probable to be introduced. Argument of decreasing productivity and economy of State is stated, underlining 'mining' of Internet-based currencies as a massive danger. As a result of an conflict of interest between the Ministry of Finance and the Ministry of Economic Affairs, bitcoin, one of the most popular virtual money, cannot be used legally in enormous area of country. Such prohibition is argued that it constitutes some sort of competition for Russian ruble and immense method of funds removal from State along with the avoidance of due taxes payment.

Russian public authorities together with Informational Democracy Fund have taken into account potential recommendations aimed at preventing bitcoin production in private houses. In the view of the Fund's President, Ilyi Massukha, said activity brings losses for country's work rate. As consequence of difficulties with cooling systems dealing with heat management, mining may turn out to be threading without a doubt. According to Vladimir Popov: 'Society is ready to accept blockchain technology; the state is not' (Shannon Liao, 2017).

It is not surprising that Russian government had attempted to repel against actions linked with digital money and restrict their use either supply. Other countries, especially those with even more restrictive regime, are inclined to prohibit the majority of cryptocurrency's undertakings in every field. So by that rationale, the standpoint of China is one of the examples of said States.

Cryptocurrencies could be capped in the current quarter ahead of G20 meeting in March, where policymakers could discuss tighter regulations' (Samuel Gibbs, 2018) said Shuhei Fujise, chief analyst at Alt Design, about Chinese approach. Scared about increasing popularity among virtual money comparing to decreasing demand of yuan, traditional currency in China, forced public authorities to make proposals aimed at shutting down digital exchanges as well as mining process. Back in 2013, an abovesaid government prohibit financial institutions to apply cryptocurrencies because of illegal undertakings' danger . As long as individuals are aware of risk associated with commercial use of Internet-based currency, such activity does not fall within the scope of ban presented in issued by The People's Bank of China's official statement. Unfortunately, starting from blocking Initial Coin Offering in country, public authorities are going to put an end to that practice.

Profits from the use of Internet as the main source of digital funds may not be eminently satisfactory due to their unregulated character. Many inconveniences, like the lack of protection from the government along with complex legal nature, often result in conflict with law.

This short overview concerning the contrast between currencies within Internet network, which are undoubtedly related to number of threats, despite many advantages, brought food for thought about such fresh concept. All deliberations may be finished by the quote by Anton Siluanov, Finance Minister: *'There is no sense banning [digital currencies], there is a need to regulate them.'* (Kyree Leary, 2017).

References

- Agarwal P.: *Types of Monetary Systems*, Intelligent Economist, 2018, https://www.intelligenteconomist.com/monetary-systems/ (access: 19.04.2018).
- Bala S., Kopyściański T., Srokosz W.: Kryptowaluty jako elektroniczne instrumenty płatnicze bez emitenta. Aspekty informatyczne, ekonomiczne i prawne, Wydawnictwo Uniwersytetu Wrocławskiego, Wrocław 2016.
- Butkiewicz E., Czarnecki J.: Wirtualne waluty, Wardyński i Wspólnicy, Warszawa 2014.
- Catalini C., Gans J.S.: Some Simple Economics of the Blockchain, National Burneu of Economic Research, Cambridge 2016.
- Chaum D.: *Blind signatures for untraceable payments*, University of California, Santa Barbra, 1998.
- Dąbrowska J.: Charakter prawny bitcoin in Człowiek w cyberprzestrzeni 1/2017, Wydział Prawa i Administracji Uniwersytetu Kardynała Stefana Wyszyńskiego w Warszawie, 2017.
- European Banking Authority: EBA Opinion on 'virtual currencies' (EBA/Op/2014/08), 4 July 2014.

- European Central Bank: Virtual Currency Schemes, October 2012.
- Gibbs S., *Bitcoin continues rapid slide as Russia and China stoke regulatory fears*, The Guardian, 2018, https://www.theguardian.com/technology/2018/jan/17/bitcoin-continues-slide-drop-russia-china-regulatory-fears-cryptocurrency (access: 23.03.2018).
- Guadamuz A., Marsden C.: *Blockchains and Bitcoin: Regulatory Responses to Crypto-currencies* in First Monday, Volume 20, Number 12 7 December 2015, University of Sussex, 2015.
- Leary K.: *Russia moves to block cryptocurrency exchanges*, Futurism, 2017, http://www.businessinsider.com/russia-blocks-cryptocurrency-exchanges-2017-10?IR=T (access: 6.04.2018).
- Liao S., *Inside Russia's love-hate relationship with bitcoin*, The Verge, 2017, https://www.theverge.com/2017/10/31/16387042/russia-putin-bitcoin-regulation-ethere-um-blockchain-technology (access: 22.03.2018).
- Nakamoto S.: Bitcoin: A Peer-to-Peer Electronic Cash System, 2008.
- Narayanan A., Bonneau J., Felten E.: *Bitcoin and Cryptocurrency Technologies*, Princeton University Press, 2016.
- Ogunbadewa A.: *The Virtues and Risks Inherent in the 'Bitcoin' Virtual Currency*, Cardiff University, 2015.
- Perugini M.L., Dal Checco P.: *Smart Contracts: a preliminary evaluation*, University of Bologna, Italy 2015.
- Peteres G.W., Panayi E.: Trends in Crypto-Currencies and Blockchain Technologies: A Monetary Theory and Regulation Perspective, University College London, 2015.
- Raskin M.: *The Law and Legality of Smart Contracts* in 1 Georgetown Law Technology Review 304 (2017), New York University School of Law, 2016.
- Superior Court of California: CGC-12-522983, 2012.
- Tasca P.: Digital Currencies: *Principles, Trends, Opportunities, and Risks*, Deutsche Bundesbank and ECUREX Research, 2015.
- The Financial Crimes Enforcement Network's Guidance, Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies, 2013.

Legal acts

- Directive (EU) 2015/849 of The European Parliament and Of The Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC, OJ L 141 of 05.06.2015.
- Directive 2009/110/EC of The European Parliament and of The Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC, OJ L 267 of 10.10.2009.