

## BITCOIN: LEGAL DEFINITION AND ITS PLACE IN LEGAL FRAMEWORK

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#### Abstract:

Present paper explains role of the Bitcoin and its involvement in economic activity worldwide, using practical examples of real business models, reflects the modern views of legislators and judicial bodies on local (selective countries legislation and court practice) and international level (European Union legislation and international court practice), which are formed after Bitcoin's fast widespread in 2012. Current research examines in details various definition of the Bitcoin, used by legislators to place Bitcoin in already existing legal frames — virtual money, property, commodity or financial instruments, which has significant importance to legislators worldwide to regulate business activity related to Bitcoin: licensing of institutions issuing Bitcoin, if it is defined as virtual money; Bitcoin's place in stock market, if it is defined as security or financial instrument; or transfer of property rights, if Bitcoin is defined as commodity or property. Moreover this paper underlines importance of amendments acceptance, based on certain Bitcoin's definition, to prevent money laundering financial support providing to terrorism, to straighten financial market and consumer protection procedures.

## **Keywords:**

Bitcoin, Digital Currency, Property, Financial Instrument, Securities

#### 1. Introduction

Discovering the official description of Bitcoin as an "innovative payment system", everything might sound unbelievable or even to seem like a modern utopia. The Bitcoin grants not only global accessibility, high level of security, which provides fraud protection, but also simplicity in its usage in everyday life activities, such as: charity and donation proceedings, crowdfunding campaigns, intercorporate decision making, even dispute resolution and mediation procedures. More on this topic is explained in Part I of this paper.

Such virtual currency or payment system as Bitcoin is not a new idea, in the prism of virtual payment system. We can remember Flooz.com, whose usage in frauds was under the F.B.I. investigation -in the end company was closed in 2001 - more modern systems like Litecoin, Darkcoin, Peercoin, Dogecoin, Primecoinetc , which are still in usage, but their technical characteristics, centralization and exchange rate are different from Bitcoin. We shall consider that there were some attempts in doctrine to discover and analyze what is Bitcoin from legal aspect and to understand where is the place of Bitcoin in existing legal regimes and legal frames.

We can agree that Satoshi Nakamoto's idea (most probably a pseudonym of a person or group of people - recently the Australian entrepreneur Craig Wright claim that he is Satoshi Nakamoto, but such claim was taken very skeptically) of Bitcoin is itself amazing: an autonomous, decentralized payments system, a virtual currency which can be globally used for any payments in one-click. No banks, no credit unions, no lenders. The only weak point of Bitcoin is about the network of users: to proceed any payment in Bitcoins your counteragent should be able to accept this payment method. Nevertheless, nowadays the number of companies that understood all Bitcoin's preferences is developing and widening every day; Bitcoin integrates itself more and more in our everyday life. It might look like, after Bitcoin boom in 2012-2013, this topic is not under consideration of legislators and society but the situation is completely the opposite. Therefore present paper will reflect the modern views of legislators and judicial bodies on local (selective countries legislation and court practice) and international level (European Union legislation and international court practice), which are formed after Bitcoin's fast widespread in 2012. Therefore in

Part II of present paper is explained legal background of Bitcoin definition used by legislators worldwide (currency, property or security).

Besides Bitcoins' constant usage in everyday life activities like buying a coffee, having a haircut, purchasing property or booking a taxi ride, which are explained in Part I, Bitcoin is also used in DarkNet, money laundering or terroristic attacks .For example in April 2012 the F.B.I. published a report underlining the absence of a legal regulation on Bitcoin, the absence of a certain centralized base or controlling authority which can be part of financial market, the absence of special software to detect money laundering schemes via Bitcoin, the difficulties to identify the real source of funds exchanged for Bitcoins, proceeding of Bitcoin trade through third parties based all around the world, that makes Bitcoin an attractive instrument for criminal activities, like reported illegal drugs purchase through Silk Road online platform in 2011 using Bitcoin, or usage of first malware "Infostealer.Coinbit" designed to steal Bitcoins in same year .

In Russia, for example, government is considering to forbid and to penalize Bitcoin usage, which is considered as "money surrogate" according to suggested amendments to Russian legislation, and therefore it falls under provisions about money regulation and financial market, in the territory of Russian Federation for last 2 years, but still such law (including as punishment deprivation of liberty up to 4 years and for persons on high managing position up to 7 years for Bitcoin issue and distribution) is just in consideration.

In the same time the European Union underlines the importance of putting the Bitcoin under anti-money laundering and counter terrorism regulation not just on Union level (Anti-Money Laundering Directive and Payment Services Directive) but also in national legislation of member states, and proposes to apply a licensing to the Bitcoin exchange platforms. Moreover, according to the Europea's information, Bitcoin is mostly used as a single common currency by cybercriminals within territory of the European Union. Therefore in Part III are explained main aspects of legal regulations on anti-money laundering and counter terrorism considering Bitcoin's usage.

Therefore, as we can see, firstly, to provide any legal regulations and to penalize Bitcoin's usage in money laundering and terrorism, the global definition of Bitcoin should be accepted.

Considering mentioned above and the recent development of terrorism in Western Europe and in the rest of the World, providing to the Bitcoin a certain status and defining Bitcoin's place in national and international legal framework is important to make a more effective system of anti-terroristic control and money laundering prevention.

# 2. Bitcoin and its Involvement in Multinational and National Trade

In the modern World the new technologies are becoming more and more integrated in our lives: almost every person has a phone, or a PC, or a tablet, or each of them. Therefore many transactions are made in few seconds and few clicks on the Internet surface and sometimes with usage of unconventional currencies such as Bitcoin.

Nowadays many multinational corporations and media "giants" like Microsoft 1, Time Inc. 2, Taz 3, Dell 4 declared their use of the Bitcoin system.

In the modern World having a Bitcoin wallet means no need of a bank account - anyone can proceed in any place on the Earth, using just a computer, actions as:

<sup>&</sup>lt;sup>1</sup> https://commerce.microsoft.com/PaymentHub/Help/Right?helppagename=CSV\_BitcoinHowTo.htm, (accessed 13.10.2016);

<sup>&</sup>lt;sup>2</sup> Press Release, Time Inc. Partners with Coinbase to Become the First Major Magazine Publisher to Accept Bitcoin Payments, Time Inc., 16.12.2014, available at: <a href="http://www.timeinc.com/about/news/press-release/time-inc-partners-with-coinbase-to-become-the-first-major-magazine-publisher-to-accept-bitcoin-payments/">http://www.timeinc.com/about/news/press-release/time-inc-partners-with-coinbase-to-become-the-first-major-magazine-publisher-to-accept-bitcoin-payments/</a>, (accessed 13.10.2016);

<sup>3</sup>http://www.taz.de/Unterstützung/!142454/, (accessed 13.10.2016);

<sup>4</sup> http://www.dell.com/learn/us/en/uscorp1/campaigns/bitcoin-marketing?c=us&l=en&s=corp, (accessed 13.10.2016);

- booking a hotel (travel agencies like Expedia, CheapAir and TravelKeysare accepting Bitcoins<sup>5</sup>. Expedia's vice-president, Michael Gulmann, explained that the company was "in a unique position to solve travel planning and booking for our customers and partners alike by adopting the latest payment technologies"6),
- purchasing a flight tickets (AirBaltic, air company with headquarter in Latvia, focused on proceeding flights around Baltic countries, Scandinavia and Europe, has become the first airline in the world to accept the Bitcoin as tickets payment. Chief Executive Officer of AirBaltic, Martin Gauss, underlined: "AirBaltic has been ranked among TOP 10 most innovative airlines globally. Introducing the Bitcoin payment option is a part of our innovative approach to the service with a central focus on our customer."7),
- paying university tuition fees (the University of Nicosia in Cyprus announced Bitcoin acceptance as a tuition fee payment. "What we aim to explore in this program is the likely development pathway of digital currency and to give our students the insights that they can bring to bear in their professional careers." 8 said Dr. Andreas Polemitis, Senior Vice Rector at the University of Nicosia.),
- buying a computer or any software (for example Dell is accepting Bitcoin for payment proceedings in USA, UK and Canada<sup>9</sup>. According to data, on February 2015 company declared their largest transaction in Bitcoins in amount exceeding \$50 000<sup>10</sup>.),
- purchasing furniture, bed leanings, clothes, watches, perfumes or any retail products (such huge retailer like Overstock.com<sup>11</sup>, on date of August 2014, reported Bitcoin sales over \$2 million (1% of total sales), with about \$15,000 per day, or \$300,0000 per month<sup>12</sup>, besides one of the biggest retailers in Europe, Paris based Showromprive.com<sup>13</sup>, or Monoprix<sup>14</sup> also declared Bitcoin acceptance as a payment system).

Apart of the most popular Bitcoin markets like online shopping and gift cards purchase, which are easy accessible by a computer or a smartphone, nowadays different local business are trying to go with the flow and use Bitcoin system in coffee shops, restaurants, jewelry shops etc.

For example, in Prague it is very easy to find Paralelni Polis<sup>15</sup>, an espresso bar where you can have a cup of good coffee in exchange of a reasonable amount of Bitcoins. Payment proceeding is very easy: even if you do not have Bitcoin wallet, you can create it directly on the spot and exchange your currency in Bitcoin ATM to enjoy your fresh espresso<sup>16</sup>.

<sup>&</sup>lt;sup>5</sup> News report, Expedia to accept Bitcoin payments for hotel bookings, BBC, 12.06.2014, available at: http://www.bbc.com/news/technology-27810008, (accessed 15.10.2016);

<sup>&</sup>lt;sup>6</sup> News report, Expedia to accept Bitcoin payments for hotel bookings, BBC;

<sup>&</sup>lt;sup>7</sup> Press Release, AirBaltic - World's First Airline to Accept Bitcoin, AirBaltic, 22.07.2014, available at: <a href="https://www.airbaltic.com/airbaltic-worlds-first-airline-to-accept-bitcoin">https://www.airbaltic.com/airbaltic-worlds-first-airline-to-accept-bitcoin</a>, (accessed 15.10.2016);

<sup>&</sup>lt;sup>8</sup> Press release, University of Nicosia in Cyprus to be the First University in the World to Accept Bitcoin: Offers Master's Degree in Digital Currency, University of Nicosia, 21.11.2013, available at: <a href="https://www.unic.ac.cy/about-us/university-nicosia-digital-currency-initiative/press-release">https://www.unic.ac.cy/about-us/university-nicosia-digital-currency-initiative/press-release</a>, (accessed 15.10.2016);

<sup>9</sup> http://www.dell.com/learn/us/en/uscorp1/campaigns/bitcoin-marketing?c=us&l=en&s=corp, (accessed 15.10.2016);

<sup>&</sup>lt;sup>10</sup>Pevehouse, Laura, (2016), We're Now Accepting Bitcoin in the UK and Canada, Dell, 19.02.2015, available at: http://en.community.dell.com/dell-blogs/direct2dell/b/direct2dell/archive/2015/02/19/dell-now-accepting-bitcoin -in-uk-and-canada, (accessed 15.10.2016);

<sup>11</sup>https://www.overstock.com/bitcoin, (accessed 15.10.2016);

<sup>&</sup>lt;sup>12</sup> Chavez-Dreyfuss, Gertrude, (2016), Exclusive: Overstock CEO says bitcoin sales to add 4 cents to 2014 EPS, Reuters, 13.08.2014, available at: <a href="http://www.reuters.com/article/us-overstock-com-bitcoin-idUSKBN0GD21220140813">http://www.reuters.com/article/us-overstock-com-bitcoin-idUSKBN0GD21220140813</a>, (accessed 15.10.2016):

<sup>&</sup>lt;sup>13</sup>http://www.showroomprive.com/ContratCGV.aspx, (accessed 15.10.2016);

<sup>14</sup>http://www.numerama.com/magazine/33462-monoprix-bitcoins.html, (accessed 15.10.2016);

<sup>15</sup>https://www.paralelnipolis.cz/koncepty/bitcoin-coffee-en/, (accessed 15.10.2016);

<sup>&</sup>lt;sup>16</sup> Nguyen, Tuan, (2014), I bought coffee at the Prague cafe that only accepts bitcoin. Here's what it was like, the Washington Post, 05.11.2014, available at: https://www.washingtonpost.com/news/ innovations/wp/2014/11/05/i-bought-coffee-at-the-prague-cafe-that-only-accepts-bitcoin-heres-what-it-was-like/, (accessed 16.10.2016);

After Bitcoin boom, in 2014 so-called Bitcoin Boulevards, streets or areas dedicated to local business which accept Bitcoin payment became popular in the world. Similar boulevard, for example, was opened in Cleveland Heights, Ohio, USA<sup>17</sup>, but lately after the Ohio Department of Public Safety banned alcohol sale in exchange of crypto currency<sup>18</sup>, Bitcoin payments were proceeded not so often and business went down.

So far the Netherlands are considered as the most Bitcoin friendly country, the Hague was the first city where such Bitcoin Boulevard<sup>19</sup> was opened, besides that a new Bitcoin city is on development<sup>20</sup>. Moreover in the Netherlands you can simply rent a bike<sup>21</sup>, have a boat ride<sup>22</sup> exploring Amsterdam channels, and have a drink<sup>23</sup> or even a haircut<sup>24</sup> using Bitcoins. A new Dutch startup Biccur is working on implementing an idea of part-ownership in real estate using Bitcoin system<sup>25</sup>.

Bitcoin ATM network is growing every day: you can easily find Bitcoin ATM in many European capitals like London, Copenhagen, Amsterdam, Prague etc<sup>26</sup>. On the current date in Denmark, the first real estate, a house in a town Mørkøvin north-western part of Denmark, worth 117 Bitcoins (over \$ 50 000)<sup>27</sup> was sold using Bitcoin via Coinfy startup<sup>28</sup>. In Milan the first taxi driver accepts Bitcoins for transportation services<sup>29</sup>.

In Ukraine, the official banking authority, "PrivatBank", which de facto has monopoly on financial transactions in Ukraine and, according to recent news, is on the way to its nationalization by government<sup>30</sup>, since January 2016 proceeds money exchange for Bitcoins by using absence of legislation or control from National Bank of Ukraine or any other bodies<sup>31</sup>.

The picture of how much virtual payment system, or so-called crypto currency, integrated itself in real life becomes very global and such integration is becoming deeper with technological progress. Considering mentioned above, notwithstanding of Satoshi Nakamoto's idea of regulation absence on Bitcoins, in reality modern government policy, local and international legislation demand such legal regulation.

<sup>18</sup> Pick, Leon, (2014), Ohio Bans Alcohol Sales with Crypto on Bitcoin Boulevard, Finance Magnates, 28.04.2014, available at: <a href="http://www.financemagnates.com/cryptocurrency/news/ohio-bans-alcohol-sales-with-crypto-on-bitcoin-boulevard/">http://www.financemagnates.com/cryptocurrency/news/ohio-bans-alcohol-sales-with-crypto-on-bitcoin-boulevard/</a>, (accessed 16.10.2016);

<sup>&</sup>lt;sup>17</sup>http://bitcoinboulevard.us, (accessed 16.10.2016);

<sup>&</sup>lt;sup>19</sup>Sardesai, Neil, (2014), Bitcoin Boulevard: Bitcoin a part of everyday life in this Dutch neighborhood, Cryptocoinsnews, 03.11.2014, available at: https://www.cryptocoinsnews.com/ bitcoin-boulevard-bitcoin-part-everyday-life-dutch-neighbour hood/, (accessed 16.10.2016);

<sup>&</sup>lt;sup>20</sup>http://www.arnhembitcoinstad.nl/#deelnemers, (accessed 16.10.2016);

<sup>&</sup>lt;sup>21</sup>http://www.starbikesrental.com, (accessed 16.10.2016);

<sup>&</sup>lt;sup>22</sup>http://www.amsterdamboatevents.nl, (accessed 16.10.2016);

<sup>&</sup>lt;sup>23</sup>http://www.cafekobalt.nl/en/nieuws, (accessed 16.10.2016);

<sup>&</sup>lt;sup>24</sup>http://www.cutthroatbarber.nl, (accessed 16.10.2016);

<sup>&</sup>lt;sup>25</sup>http://biccur.com/blog/portfolio/blandlord-com/, (accessed 16.10.2016);

<sup>&</sup>lt;sup>26</sup>https://coinatmradar.com, (accessed 16.10.2016);

<sup>&</sup>lt;sup>27</sup> Maras, Elliot, (2016), A First In Denmark: Miner Buys House With Bitcoin Using Coinify, Cryptocoinsnews, 14.03.2016, available at: <a href="https://www.cryptocoinsnews.com/a-first-in-denmark-miner-buys-house-with-bitcoin-using-coinify/">https://www.cryptocoinsnews.com/a-first-in-denmark-miner-buys-house-with-bitcoin-using-coinify/</a>, (accessed 16.10.2016);

<sup>&</sup>lt;sup>28</sup> Aitken, Roger, (2016), Danish Blockchain Startup Coinify Scores \$4 Million Early-Stage Investment, Forbes, 03.08.2016, available at: http://www.forbes.com/sites/rogeraitken/2016/08/03/sebs-vc-unit-invests-4m-in-blockchain-payments-operator-with-seed-capital/#33e495b01ea1, (accessed 16.10.2016);

<sup>&</sup>lt;sup>29</sup>Cavadini, Federica, (2014), Dallabistecca a palestra e taxi qui sipaga con moneta virtual, Corrieredella sera, 02.02.2014, available at: http://milano.corriere.it/ milano/notizie/cronaca/14\_febbraio\_02/dalla-bistecca-palestra-taxi-qui-si-paga-moneta-virtuale-f1ab0942-8bf1-11e3-a29b-8636964bc663.shtml, (accessed 16.10.2016);

News report, Nazionalizatsiya PrivatBanka: vse podrobnosti, Correspondent, 19.12.2016, available at http://korrespondent.net/ukraine/3788705-natsyonalyzatsyia-pryvatbanka-vse-podrobnosty, (accessed 06.01.2017);

<sup>&</sup>lt;sup>31</sup> Gadomskiy, Dmitriy, (2016), Early adopters: mozhet li PrivatBank rabotat s bitcoin v Ukraine i kogda NBU opredelitsa s resheniyem po kriptovalute, Forbes, 21.01.2016, available at: <a href="http://forbes.net.ua/opinions/1409465-early-adopters-mozhet-li-privatbank-rabotat-s-bitkoin-v-ukraine">http://forbes.net.ua/opinions/1409465-early-adopters-mozhet-li-privatbank-rabotat-s-bitkoin-v-ukraine</a>, (accessed 22.11.2016);

To summarize, I would like to underline that nowadays Bitcoin is used for:

- Purchase agreements (including real estate),
- Service provisions agreements (including transportation services),

which are legally regulated by national legislation or internationally, including:

- o Tax regulations,
- o Customer protection,
- o Licensing,
- o Anti-money laundering and counterterrorism.

#### 3. The Meaning of Bitcoin

In present paper I will not stop on technical characteristics of Bitcoin and blockchain technology or will not try to explain how peer-to-peer network works. Detailed description on this subject can be found on official web site of Bitcoin system<sup>32</sup> or in research papers, for example, in work of Nikolei M. Kaplanov "Nerdy Money: Bitcoin, The Private Digital Currency, And The Case Against Its Regulations"<sup>33</sup>. Instead I would like to focus on the legal aspect of such phenomenon as a Bitcoin. Is it a currency? Is it a payment system? Maybe it can be considered as a property? Or as a type of security? Legislators in various countries were trying to answer on these questions and therefore several views on problem of Bitcoin's definition exist. Let us have a look.

#### 3.1. Bitcoin as a Money

Money definition by itself is changing from time to time; let us remember such ancient currencies as mina, talent or denarius, which were made from gold or other metals, using them in modern times now might seem impossible or inconvenient. Bringing with you a brick of gold to exchange for tools in modern world – who can imagine it? Nowadays with fast technological progress and "cash-free" movements around Europe (for example in Norway cash makes just 5 % of total payments and rates in UK and Sweden are even lower<sup>34</sup>, in Sweden you can even buy a newspaper sold on street by homeless people using your bankcard<sup>35</sup>, Danish government is insisting for moving country to "cash-free" economy<sup>36</sup>, besides Bill and Melinda Gates underline importance of digital economy for development<sup>37</sup>).

Money, notwithstanding of their form, has three different functions: they work as a medium of exchange - a means of payment with a value that everyone trusts, as a unit of account allowing goods and services to be priced and as a store of such value<sup>38</sup>. Money also can be considered as the cost to acquire financial resources<sup>39</sup>.

<sup>32</sup> https://bitcoin.org, (accessed 06.01.2017);

<sup>&</sup>lt;sup>33</sup>Kaplanov, Nikolei M., (2012), Nerdy Money: Bitcoin, The Private Digital Currency, And The Case Against Its Regulations, available at: https://poseidon01.ssrn.com/delivery.php?ID=127087120097029 1160790831040870070300220410170310270780 99093025106009077127117007030001121005122042126107027084094099025020064046034013064088072028064087111018028 100086036012092019023110091027124065109087117124127029025024069089092004106080077024084095&EXT=pdf, (accessed 06.01.2017);

<sup>34</sup>http://www.norwaypost.no/index.php/business/general-business/29983, (accessed 02.12.2016);

<sup>&</sup>lt;sup>35</sup> Harrison, Virginia, (2015), This could be the first country to go cashless, CNN, 02.06.2015, available at: <a href="http://money.cnn.com/2015/06/02/technology/cashless-society-denmark/">http://money.cnn.com/2015/06/02/technology/cashless-society-denmark/</a>, (accessed 02.12.2016);

<sup>&</sup>lt;sup>36</sup>Tange, Alexander, (2015), Denmark proposes cash-free shops to cut retail costs, Reuters, 06.05.2015, available at: <a href="http://www.reuters.com/article/denmark-cash-idUSL5N0XX2ZQ20150506">http://www.reuters.com/article/denmark-cash-idUSL5N0XX2ZQ20150506</a>, (accessed 02.12.2016);

<sup>&</sup>lt;sup>37</sup>http://www.gatesfoundation.org/Media-Center/Press-Releases/2013/09/Digital-Payments-Can-Benefit-the-Poor, (accessed 02.12.2016);

<sup>&</sup>lt;sup>38</sup> European Central Bank, What is money?, 24.11.2015, <a href="https://www.ecb.europa.eu/explainers/tell-me-more/html/what is money.en.html">https://www.ecb.europa.eu/explainers/tell-me-more/html/what is money.en.html</a>, (accessed 02.12.2016);

<sup>&</sup>lt;sup>39</sup>Smithin, John N., (1994), Controversies in Monetary Economics, 1994, p. 2, 34, available at: https://books.google.com.ua/books?id=Ri\_TvUojGtcC&pg=PA1&lpg=PA1&dq=What+is+Money?+John+N.+Smithin&sour ce=bl&ots=spi7\_U2gEa&sig=QDqMZUbg5HkKgPLax9u4wQ8EtN0&hl=ru&sa=X&ved=0ahUKEwjE5Y7XstXQAhVLvxQ KHaOpAqEQ6AEIOzAF#v=onepage&q=What%20is%20Money%3F%20John%20N.%20Smithin&f=false, (accessed 02.12.2016);

Besides electronic money can be defined as electronically (in a smart card or the computer memory), including magnetically, stored monetary value, which represents a claim on the issuer, is issued on receipt of funds for the purpose of making payment transactions, is used as a means of payment and is accepted by a natural or a legal person other than the electronic money issuer<sup>40</sup>.

Considering mentioned above, let us have a look on specific regulations to understand if Bitcoin payment system can fall under definition of "electronic money".

In case State of Florida vs. Michell Abner Espinoza (Case #F14-2923), the Judge Teresa Pooler underlines that Bitcoin definition does not fall under definition of "payment instrument" under federal laws of the U.S.A. and the actions of the defendant does not fall into definition of "money transmitter" because he was not charging a fee for Bitcoin transactions and "a money transmitting business transmits money from a customer and then, for a fee, paid by a customer, transmits that money to a recipient"<sup>41</sup>. The court noticed that Bitcoin might have some attributes in common with what we call "money", but Bitcoin differs on some important aspects<sup>42</sup>. While Bitcoin can be exchanged for money (accepted just by some businesses), its value is uncertain and mechanism of stabilization does not exists, there is no issuing authority or reserve, therefore Bitcoin can be considered as "money"<sup>43</sup>.

In the same time the Financial Crimes Enforcement Network of the United States Department of Treasury underlines that virtual currency (including Bitcoin) is a medium of exchange that operates like a currency in some environments, but does not have all the attributes of real currency<sup>44</sup>.

The Danish Assessment Board in the case of SKM2014.226.SR on 25 March 2014 relied that Bitcoin cannot be considered an official currency for tax and the V.A.T. purposes, as Bitcoin is not regulated by authorized authority in global market, not regulated by any central bank and cannot be withdrawn from circulations. Therefore, neither invoice nor tax return cannot be prepared in Bitcoin, and traditional Bitcoin trade is not considered as financial contract for tax purposes according to the Danish law<sup>45</sup>. Moreover the Danish Central Bank on March 2014 declared that "Bitcoin does not have any real trading value compared to gold and silver, and thus is more similar to glass beads", besides Bitcoins are not protected by any national laws or guarantees, such as a deposit guarantee<sup>46</sup>.

In 2013 the People's Bank of China issued a notice prohibiting financial institutions from concluding contracts in Bitcoins, as by its nature Bitcoin is not a currency and should not be circulated and used in the market as a currency in order to "protect the status of the statutory currency, prevent risks of money laundering, and protect financial stability"<sup>47</sup>. Nevertheless on current date China takes first place from the most widespread Bitcoin markets all around

E-Money Directive, 2009/110/EC, 16.09.2009, available at: <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0110&from=EN">http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0110&from=EN</a>, (accessed 02.12.2016); Law on Payment Services and Electronic Money, available at: <a href="http://www.fktk.lv/texts\_files/0\_Law\_Payment\_Services\_Electronic\_Money.pdf">http://www.pdf</a>, (accessed 02.12.2016); Electronic money rules of commerce, Appendix 1, available at: <a href="https://www.occ.gov/topics/bank-operations/bit/intro-to-electronic-money-issues-appendix.pdf">https://www.occ.gov/topics/bank-operations/bit/intro-to-electronic-money-issues-appendix.pdf</a>, (accessed 02.12.2016); Ödeme ve Menkul Kıymet Mutabakat Sistemleri, Ödeme Hizmetleri ve Elektronik Para Kuruluşları Hakkında Kanun No. 6493, 20.06.2013, (R.G. 27.06.2013/28690), available at: <a href="http://www.resmigazete.gov.tr/eskiler/2013/06/20130627-14.htm">http://www.resmigazete.gov.tr/eskiler/2013/06/20130627-14.htm</a>, (accessed 02.12.2016);

<sup>&</sup>lt;sup>41</sup>State of Florida vs. Michell Abner Espinoza, Case # F14-2923, 22.07.2016, available at: http://www.miamiherald.com/latest-news/article91701087.ece/BINARY/Read%20 the%20ruling%20(.PDF), (accessed 20.10.2016);

<sup>&</sup>lt;sup>42</sup>State of Florida vs. Michell Abner Espinoza, Case # F14-2923;

<sup>&</sup>lt;sup>43</sup>State of Florida vs. Michell Abner Espinoza, Case # F14-2923;

<sup>&</sup>lt;sup>44</sup> Financial Crimes Enforcement Network of the United States Department of Treasury, Request for Administrative Ruling on the Application of FinCEN's Regulations to a Virtual Currency Payment System, 27.10.2014, available at: <a href="https://www.fincen.gov/sites/default/files/shared/FIN-2014-R012.pdf">https://www.fincen.gov/sites/default/files/shared/FIN-2014-R012.pdf</a>, (accessed 18.12.2016);

<sup>&</sup>lt;sup>45</sup>Skatterådet #SKM2014.226.SR, 25.03.2014, available at: http://www.skat.dk/ skat.aspx?oId=2156173&vId=0, (accessed 20.10.2016);

<sup>&</sup>lt;sup>46</sup>Press Release, Danish Central Bank (Nationalbanken), Bitcoin erikkepenge, 18.03.2014, available at: <a href="http://www.nationalbanken.dk/da/presse/Documents/2014/03/PH">http://www.nationalbanken.dk/da/presse/Documents/2014/03/PH</a> bitcoin.pdf#search=Bitcoin, (accessed 23.10.2016);

<sup>&</sup>lt;sup>47</sup>Mullany, Gerry, (2013), China Restricts Banks' Use of Bitcoin, The New York Times, 05.12.2013, available at: <a href="http://www.nytimes.com/2013/12/06/business/international/china-bars-banks-from-usingbitcoin.html">http://www.nytimes.com/2013/12/06/business/international/china-bars-banks-from-usingbitcoin.html</a>, (accessed 23.10.2016);

the world. For example according to an analysis performed for The New York Times by <u>Chainalysis</u>, Chinese exchanges have accounted for 42 percent of all Bitcoin transactions for 2016 year<sup>48</sup>.

Central Bank of Brazil on 09 October 2013 issued law No. 12,865 basically legalized the possibility of electronic money (resources stored in device or electronic system that allow the final user to perform a payment transaction) usage, including Bitcoins, in national money transferring system<sup>49</sup>. According to mentioned above Bitcoin considered as currency in Brazil.

German Federal Financial Supervisory Agency classified Bitcoins as "digital currencies" units of account in the sense of the German Banking, therefore Bitcoin operators established in Germany or those, who serve German customers are obliged to obtain a license from the German Federal Financial Supervisory Agency under the German law<sup>50</sup>.

According to the new proposed amendments to Russian legislation and its Federal Law "On money surrogates", the Bitcoin is considered as a money surrogate, falls under provisions of Russian legislation about money emission and therefore all Bitcoins emission on the Russian territory should be made just by licensed financial authority or punished by law <sup>51</sup>. Whereas how Russian authorities will define in the scope of Internet surface where certain Bitcoin was issued, or de facto coded, is not specified in mentioned law.

In Turkey, according to Law on Payment and Securities Reconciliation Systems, Payment Services, and Electronic Money Institutions #6493, Bitcoin is not falling within the scope of "electronic money" definition<sup>52</sup>. Despite absence of regulation, the platform BTCTurk, which provides Turkish Lira-Bitcoin exchange<sup>53</sup>, successfully provides its services, but recently accounts of BTCTurk have been stopped, according to information reported by Webrazzi.com<sup>54</sup>, Turkish information platform on web innovations and Bitcoin news.

Considering that the legislation of the European Union is trying to define Bitcoin status, first we need to mention Virtual Currency Schemes, issued by European Central Bank in 2012, in which stated Bitcoin cannot be defined as "electronic money" according to Electronic Money Directive (2009/110/EC)<sup>55</sup>, because in this context electronic money is just a different form of traditional money, but with Bitcoin system traditional money are exchanging for Bitcoins<sup>56</sup>.

According to Virtual Currency Schemes – a further analysis issued by European Central Bank in 2015, such virtual currencies like Bitcoin obtained ad-hoc definition as "a digital representation of value, not issued by a central bank, credit institution or e-money institution, which in some circumstances can be used as an alternative to money"<sup>57</sup>.

<sup>&</sup>lt;sup>48</sup> Popper, Nathaniel, (2016), How China Took Center Stage in Bitcoin's Civil War, The New York Times, 29.06.2016, available at: http://www.nytimes.com/2016/07/03/ business/dealbook/bitcoin-china.html, (accessed 23.10.2016);

<sup>&</sup>lt;sup>49</sup>Central Bank of Brazil, Law No. 12,865, 09.10.2013, available at: <a href="https://www.bcb.gov.br/Pom/Spb/Ing/Institucional/Aspects/Law12865.pdf">https://www.bcb.gov.br/Pom/Spb/Ing/Institucional/Aspects/Law12865.pdf</a>, (accessed 23.10.2016);

<sup>&</sup>lt;sup>50</sup> Boehm, Franziska and Pesch, Paulina, Bitcoin: A First Legal Analysis - with reference to German and US-American law, available at: http://www.uni-muenster.de/Jura.itm/hoeren/materialien/boehm\_pesch/ BTC\_final\_camready.pdf, (accessed 23.10.2016);

<sup>&</sup>lt;sup>51</sup>Proekt Federalnogo Zakona "O denezhnih surrogatah";

<sup>52</sup>Ödeme ve Menkul Kıymet Mutabakat Sistemleri Hakkında Kanun. № # 6493;

<sup>53</sup>https://www.btcturk.com, (accessed 24.10.2016);

<sup>&</sup>lt;sup>54</sup> Kara, Merve, (2016), BTCTurk, TL yatırma işlemlerini durdurdu, Webrazzi, 18.08.2016, available at http://webrazzi.com/2016/08/18/hacklendigi-iddia-edilen-btcturk-tl-yatırma-islemlerini-durdurdu/, (accessed 24.10.2016); <sup>55</sup> Electronic Money Directive, 2009/110/EC;

<sup>&</sup>lt;sup>56</sup>European Central Bank, Virtual Currency Schemes, 2012, available at: <a href="http://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf">http://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf</a>, (accessed 24.10.2016);

<sup>&</sup>lt;sup>57</sup>European Central Bank, Virtual Currency Schemes- a further analysis, 2015, available at: <a href="https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemesen.pdf">https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemesen.pdf</a> (accessed 15.12.2016); Scheinert, Christian, (2015), Virtual currencies, Challenges following their introduction, available at: <a href="http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579110/EPRS\_BRI(2016)579110\_EN.pdf">http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579110/EPRS\_BRI(2016)579110\_EN.pdf</a>, (accessed 15.12.2016);

Besides case C-264/14, which was ruled in the Court of Justice, is worth to mention for our purposes. According to fabula of present case, Mr Hedqvist, Swedish national, carried out electronic transactions via his company's website; that company purchased Bitcoins directly from private individuals and companies, or from an international exchange site and then resoled Bitcoins to private individuals or to companies on such an exchange site, or just stored them<sup>58</sup>. In this situation, the Supreme Administrative Court of Sweden applied to the Court of Justice with a request for preliminary ruling asking if such transaction with Bitcoins should be a subject on the Value Added Tax.

The Court of Justice underlined that, according to mentioned above Virtual Currency Schemes by European Central Bank, Bitcoin was explained as virtual currency used, principally, for payments made between private individuals via the internet and in certain online shops that accept Bitcoins<sup>59</sup>. Such virtual currency as Bitcoin does not have a single issuer and instead is created directly in a network by a special algorithm, such system allows anonymous ownership and the transfer of Bitcoin amounts within the network by users who have Bitcoin addresses or so called "Bitcoin wallets", which may be compared to a bank account number<sup>60</sup>.

The Court of Justice in this case states that a virtual currency can be defined as a type of unregulated, digital money, which is issued and controlled by its developers and accepted by members of a specific virtual community<sup>61</sup>. The "Bitcoin" virtual currency is one of the virtual currency schemes with "bidirectional flow", which users can purchase and sell on the basis of an exchange rate and are analogous to other convertible currencies as regards their use in the real world; they allow both real and virtual goods and services to be purchased<sup>62</sup>. Virtual currencies differ from electronic money within the scope of Directive 2009/110/EC <sup>63</sup>, in so far as, unlike that money, for virtual currencies the funds are not expressed in traditional accounting units, such as in Euro, but in virtual accounting units, such as the Bitcoin.

Besides within the scope of C-264/14 case the Advocate General has observed that virtual currency has no purpose other than to be a means of payment and the Court of Justice mentioned that Bitcoin transaction are considered as supply of services not goods, Bitcoin can be considered as non-traditional currency on which both parties of such transaction agreed, therefore Bitcoin transactions can be called exempted from V.A.T. financial transactions <sup>64</sup>. Considering mentioned above worldwide accepted definitions and specific characteristics of money and electronic money particularly:

- a medium of exchange with a value that everyone trusts (Notwithstanding on widening of Bitcoin's application in specific areas, still its usage is very limited, therefore even though Bitcoin can be a medium of exchange but still cannot be considered as a value that everyone trusts. That is why Bitcoin's characteristics do not fall under this feature of money.);
- a unit of account allowing goods and services to be priced and as a store of such value (Whereas, as it was shown in Part I, some businesses around the globe do price their services in Bitcoins, therefore Bitcoin's characteristics do fall under this feature of money.);
- the cost to acquire financial resources (Whereas Bitcoin can be exchanged for other kind of currency, depositedor stored, therefore Bitcoin's characteristics do fall under this feature of money.);
- electronically (in a smart card or the computer memory), including magnetically, stored monetary value (Whereas Bitcoin stored just electronically (on computer or flash drive using electronic encryption) and does not have any other form, therefore Bitcoin's characteristics do fall under this feature of electronic money.);

<sup>58</sup> the Court of Justice, C-264/14, 22.10.2015, available at: http://curia.europa.eu/juris/document/document.jsf; jsessionid=9ea7d2dc30d5a4270d3ebea146d391c3cd2b45e5f395.e34KaxiLc3qMb40Rch0SaxyKb3j0?text=&docid=170305&pageI ndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=1761157, (accessed 23.11.2016);

<sup>&</sup>lt;sup>59</sup> the Court of Justice, C-264/14;

<sup>60</sup> the Court of Justice, C-264/14;

<sup>61</sup> the Court of Justice, C-264/14;

<sup>62</sup> the Court of Justice, C-264/14;

<sup>63</sup> Electronic Money Directive, 2009/110/EC;

<sup>64</sup> the Court of Justice, C-264/14;

- represents a claim on the issuer (Whereas Bitcoin basically does not have common issuer or any controlling body, Bitcoin transactions work as peer-to-peer network, but as services or goods can be purchased with Bitcoin and Bitcoin ATM system helps to make further exchange easier, therefore Bitcoin's characteristics do not fall under this feature of electronic money.);
- issued on receipt of funds for the purpose of making payment transactions (Whereas to obtain Bitcoin common used currencies are involved and Bitcoin is exchangeable for goods and services, therefore Bitcoin's characteristics do fall under this feature of electronic money.);
- accepted by a natural or a legal person other than the electronic money issuer (Whereas, as mentioned in Part I, Bitcoin is accepted by limited network of legal entities and also can be accepted by natural person, therefore Bitcoin's characteristics do fall under this feature of electronic money.)

Considering mentioned above, on present stage of limited Bitcoin's acceptance by businesses and population, Bitcoin's characteristics does not totally fall under all electronic money features. In case when certain countries legislation took Bitcoin under electronic money framework, contracts including Bitcoins should be considered as contracts including other type of payment (like foreign currency, which is not used commonly as national means of payment in such state) and should be regulated subsequently.

#### 3.2. Bitcoin as a Property

According to Blackstone's famous statement – property is that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe<sup>65</sup>.

In doctrine in many cases property rights are considered as decision rights (right to hold, lend, sell, permit to use etc) over some objects or assets, which provide right to take certain action (rights to access) and right to prevent others from certain actions (right to exclude), including same right to access and right to exclude over income or profit obtained from mentioned above asset or object<sup>66</sup>. Property rights are not considered as physical object or event but are abstract social relations<sup>67</sup>.

Looking at mentioned definitions in prism of Bitcoin essence, Bitcoin can be accepted as such object or asset (even though Bitcoin is stored as file on computer, sever or flash drive), over which concrete real or legal person can have property rights: right to permit access (to sell, to give as present Bitcoins to other real or legal person) or right to exclude (Bitcoin is encrypted and without personal encryption key of owner it is almost not possible to copy or to use Bitcoin by real person or legal entity other than owner).

azOXyB1iw&hl=ru&sa=X&ved=0ahUKEwjPqs2SlPbQAhWBPxQKHehUCi4Q6AEIHTAA#v=onepage&q=J.W.%20EHRLI CH%2C%20ERLICH'S%20BLACKSTONE%20113%20(1959).&f=false, (accessed 15.12.2016);

<sup>65</sup> Malloy, Robin Paul and Diamond, Michael, (2011), The Public nature of Private property, p. 47, available at: https://books.google.com.ua/books?id=LhqgCwAAQBAJ&pg=PA47&dq=J.W.+EHRLICH,+ ERLICH%27S+BLACKSTONE+113+(1959).&source=bl&ots=wGJMNvE4\_I&sig=kPHmLa-prZRPURI9Rb

<sup>66</sup> Segal, Ilya and Whinston, Michael D., (2010), Property Rights, Stanford University, 07.08.2010, available at: <a href="http://web.stanford.edu/~isegal/prights.pdf">http://web.stanford.edu/~isegal/prights.pdf</a> (accessed 17.12.2016); Grossman, S.J. and Hart, O.D., (1994), The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration, Journal of Political Economy 94, p. 691;

<sup>&</sup>lt;sup>67</sup>Pejovich, Svetozar, (1990), The Economics of Property Rights: Towards a Theory of Comparative Systems, p. 27, available at: https://books.google.com.ua/books?id=MUfIr6kBxAQC&pg=PA27&lpg=

PA27&dq=property+rights+definition&source=bl&ots=gq5D\_Kelj5&sig=Yshvmv-COOJ59ZYzi8k7yiZmx

 $<sup>10\&</sup>amp;hl=ru\&sa=X\&ved=0\\ahUKEwjQqOSM7\_vQAhVGuhQKHSitBeU4ChDoAQhMMAc\#v=onepage\&q=property\%20\\rights \%20\\definition\&f=false, (accessed 17.12.2016);$ 

Whether Bitcoin can be an object of property rights or not should be decided by legislators. For example in some countries object of property rights can be just tangible things and in others intangible things like idea or energy also recognized as property rights' object<sup>68</sup>.

For example, the Internal Revenue Service in the U.S.A. in its Notice #2014-21 stressed out that Bitcoin In some businesses can function like currency but it does not have legal status in any jurisdiction. It can be considered as asset same like stocks, bonds, shares in property. "The sale or exchange of convertible virtual currency, or the use of convertible virtual currency to pay for goods or services in a real-world economy transaction, has tax consequences that may result in a tax liability. For tax purposes in the U.S.A., virtual currency should be treated as property. General tax principles applicable to property transactions apply to transactions using virtual currency"<sup>69</sup>.

Besides, in the same U.S.A. Bankruptcy court of the Northern District of California, hearing case on bankruptcy of Bitcoin mining firm HashFast's trustee (HashFast Technologies L.L.C and HashFast L.L.C v. Marc A. Lowe, Case No. 14-30725DM), declared that Bitcoins are not U.S. dollars and should be considered as intangible property or commodity for bankruptcy procedures<sup>70</sup>.

One of the arguments, pro Bitcoin's consideration as property, is the constant change of the Bitcoin's money equivalent, for example on the date of 06.01.2017 Bitcoin's price was equal 1026,08 U.S. dollars, on date of 18.12.2016 equal 789,83 U.S. dollars, on the date of 26.11.2016 it was equal 753,40 U.S. dollars<sup>71</sup>, one year ago on the date of 20.12.2015 it was equal 457,53 U.S. dollars, two years ago on the date of 17.12.2014 it was equal 331,92 U.S. dollars, on 30.11.2013 one Bitcoin was equal 1108,80 U.S. dollars<sup>72</sup> and in June 2011 Bitcoin price fall to 2 U.S. dollars<sup>73</sup>.

In the above mentioned bankruptcy case No. 14-30725DMthe judge underlined, that for purposes of section 550(a) of the Bankruptcy Code (the U.S.A. legislation) the 3,000 Bitcoin transferred constitute a commodity, not currency, and if the subject transfers are avoided the estate is entitled to either the Bitcoin or the value of the Bitcoin as of the transfer date or time of recover, whichever is greater<sup>74</sup>. It means that under the court ruling the defendant is obliged compensate the value of Bitcoins on the date of hearing not on the date when he purchased them in 2013.

Generally term "commodity" is used (mostly in the U.S.A. legislation) in trade agreements to define tangible things which move in commerce and commit governmental measures (like quotas, rates of duty etc); in most cases term

<sup>&</sup>lt;sup>68</sup>Mattei, Ugo, (2000), Basic Principles of Property Law: A Comparative Legal and Economic Introduction, p. 75, available at: https://books.google.com.ua/books?id=14dD7X\_5YIQC&pg=PA75&dpg=PA75&dpg

<sup>=</sup>property+right+object&source=bl&ots=aRynb3cUD\_&sig=VCmKFxl7B-\_MEFyiGN42oLBaVNg&hl=ru&

sa=X&ved=0ahUKEwiP6\_qHoP3QAhWKIcAKHQlTDjEQ6AEIGzAA#v=onepage&q=property%20right%20object&f=false, (accessed 18.12.2016);

<sup>&</sup>lt;sup>69</sup> The Internal Revenue Service of the U.S.A., Notice #2014-21, available at: <a href="https://www.irs.gov/pub/irs-drop/n-14-21.pdf">https://www.irs.gov/pub/irs-drop/n-14-21.pdf</a>, (accessed 20.10.2016);

<sup>&</sup>lt;sup>70</sup>Reingold, Steven C. and Durken, Timothy J., Bitcoins are not U.S. Dollars: What Does the Ruling in the HashFast Bankruptcy Mean?, available at: <a href="http://www.jagersmith.com/downloads/pdf/Bitcoins-Are-Not-US-Dollars.pdf">http://www.jagersmith.com/downloads/pdf/Bitcoins-Are-Not-US-Dollars.pdf</a>, (accessed 18.12.2016);

<sup>71</sup>http://www.coindesk.com/price/, (accessed 06.01.2017);

<sup>&</sup>lt;sup>72</sup>https://www.coinbase.com/charts, (accessed 18.12.2016);

<sup>&</sup>lt;sup>73</sup> Malone, J. Anthony, (2014), Bitcoin and Other Virtual Currencies for the 21st Century, 2014, p. 7, available at: https://books.google.com.ua/books?id=\_EtXCAAAQBAJ&pg=RA1-PR58&lpg=RA1PR58&dq=guidance+ on+the+application+of+FinCEN+regulations+to+transactions+in+virtual+currencies&source=bl&ots=Z642cGNMik&sig=5 Uc94IuAL0qWuBwZ40xhFBDeg1A&hl=ru&sa=X&ved=0ahUKEwi987eLif7QAhWEWBQKHTRrAawQ6AEIRDAF#v=one page&q=guidance%20on%20the%20application%20of%20FinCEN%20regulations%20to%20transactions%20in%20virtual%20 currencies&f=false, (accessed 18.12.2016);

<sup>&</sup>lt;sup>74</sup> News Report, California Bankruptcy Court To Decide Whether Bitcoin Is A Currency Or Commodity, EconoTimes, 10.02.2016, available at: http://www.econotimes.com/ California-Bankruptcy-Court-To-Decide-Whether-Bitcoin-Is-A-Currency-Or-Commodity-158333, (accessed 18.12.2016); Higgins, Stan, US Bankruptcy Court Set to Weigh in on Bitcoin's Currency Status, CoinDesk, 09.02.2016, <a href="http://www.coindesk.com/bankrupt-bitcoin-mining-firm-trustee-seeks-return-of-funds-from-former-promoter/">http://www.coindesk.com/bankrupt-bitcoin-mining-firm-trustee-seeks-return-of-funds-from-former-promoter/</a>, (accessed 18.12.2016);

"commodity" can be interchangeable with "asset", "articles", "goods", "products" 75. As Bitcoin is intangible object and for now most of governments do not apply any quotas or rates for Bitcoin transactions such term cannot be used in most cases to define its status, but the same as commodity Bitcoin is an object for trade agreements and can move freely in commerce.

Not just American regulating and judicial bodies stress out Bitcoin's belonging to property objects, according to the Principle Statement of Norwegian Tax Authority, Bitcoins are treated as capital property for tax-related purposes<sup>76</sup>. Hans Christian Holte, director general of taxation in Norway, says "Bitcoins don't fall under the usual definition of money or currency"<sup>77</sup>.

In the same way, recently stepped on the way to cash-free economy Denmark<sup>78</sup>- Denmark's Ministry of Finance has come up with an idea to allow certain businesses (it will be limited to gas stations, clothing stores, and restaurants) to turn away customers who cannot pay electronically<sup>79</sup> - using Bitcoin on same level with electronic payments can become beneficial. As mentioned in previous chapter of present paper, in Denmark Bitcoin is not considered as currency and Bitcoin involving transactions are officially tax free.

The Australian Taxation Office in its guidance on 18 December 2014 stated that Bitcoin is neither money, nor a foreign currency, however it is an asset. Therefore transactions with Bitcoins are considered as barter agreement<sup>80</sup>. Besides, can be also found some views that Bitcoin, especially its private key, should be considered as intellectual property<sup>81</sup>, in this case authors stress out that operations with Bitcoins are less like transfer of property but more like operations with assignment of rights to receive any benefits associated with Bitcoin's ownership<sup>82</sup>.

Therefore in attempts to qualify Bitcoin's status in legal framework, many countries come to conclusion that Bitcoin cannot be considered as money, some legislators went further and defined Bitcoin as a property and Bitcoin involving operation as barter agreements (transferring certain amount of Bitcoins to someone's property in exchange for transfer certain amount of property rights for other object or services).

## 3.2. Bitcoin as a Security

Besides two main views on Bitcoin's place in legal system: as money and as property, there is one more view – to consider it as a security.

<sup>&</sup>lt;sup>75</sup> Walker, Herman, The International Law of Commodity Agreements, Duke University, available at http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=2960 &context=lcp, (accessed 18.12.2016);

http://www.skatteetaten.no/no/Radgiver/Rettskilder/Uttalelser/Prinsipputtalelser/Bruk-av-bitcoins--skatte--og-avgiftsmessige-konsekvenser/, (accessed 23.10.2016);

<sup>&</sup>lt;sup>77</sup> Webb, Sam, (2013), 'Bitcoin isn't real money': Norwegian government refuses to recognize digital currency, Dailymail, 16.12.2013, available at: <a href="http://www.dailymail.co.uk/sciencetech/article-2524672/Bitcoin-isnt-real-money-Norwe\_gian-government-refuses-recognise-digital-currency.html">http://www.dailymail.co.uk/sciencetech/article-2524672/Bitcoin-isnt-real-money-Norwe\_gian-government-refuses-recognise-digital-currency.html</a>, (accessed 23.10.2016);

<sup>&</sup>lt;sup>78</sup> Russell, Helen, (2015), No wallet, no worries: Denmark considering cash-free shops, the Guardian, 14.05.2015, available at: <a href="https://www.theguardian.com/world/2015/may/14/no-wallet-no-worries-denmark-considering-cash-free-shops">https://www.theguardian.com/world/2015/may/14/no-wallet-no-worries-denmark-considering-cash-free-shops</a>, (accessed 18.12.2016);

<sup>&</sup>lt;sup>79</sup>Hannestad, Adam, (2014), Bitcoin-gevinster kanstikkes direct eilommen, Politiken, 25.03.2014, available at: <a href="http://politiken.dk/oekonomi/dkoekonomi/article5508292.ece">http://politiken.dk/oekonomi/dkoekonomi/article5508292.ece</a>, (accessed 18.12.2016);

<sup>80</sup> Guidance, the Australian Taxation Office, 18.12.2014, available at: <a href="https://www.ato.gov.au/General/Gen/Tax-treatment-of-crypto-currencies-in-Australia---specifically-bitcoin/">https://www.ato.gov.au/General/Gen/Tax-treatment-of-crypto-currencies-in-Australia---specifically-bitcoin/</a>, (accessed 23.10.2016);

<sup>81</sup> Brito, Jerry, (2005), The Law of Bitcoin, p.34, available at: https://books.google.com.ua/books?id=YVQjCgAAQBAJ&pg=PT6&dq=bitcoin+private+key+intellectual+property&source=bl&ots=PewWxrudVH&sig=2d\_Y9HB0g-7\_U2PDBNdLRJbut1c&hl=ru&sa=X&ved=0ahUKEwiUpM-C1P7QAhUCP

xQKHRGdCKkQ6AEINTAD#v=onepage&q=bitcoin%20private% 20key%20intellectual%20property&f=false, (accessed 19.12.2016);

<sup>82</sup> Berta, Michael A. and Noonan, Willow W., (2015), The property-contract duality of Bitcoin, Financeworldwide, available at: <a href="https://www.financierworldwide.com/the-property-contract-duality-of-bitcoin/#.WFb1ZnSg\_IU">https://www.financierworldwide.com/the-property-contract-duality-of-bitcoin/#.WFb1ZnSg\_IU</a>, (accessed 19.12.2016);

Generally security can be defined as financial instrument or interest<sup>83</sup>, can be in shape of note, stock, treasury stock, security future, bond, debenture, evidence of indebtedness, certificate of interest or participation of any profit-sharing agreement, investment contract, certificate of deposit for a security<sup>84</sup>.

In the European Union securities defined as financial instruments and this term is used in the European legislation<sup>85</sup>, according to the Hague Securities Convention "securities" means any shares, bonds or other financial instruments or financial assets (other than cash), or any interest therein<sup>86</sup>. According to legislation of the United Kingdom securities were first defined in 2000 and considered as forms of investment the issuing and trading of which, as "regulated activities", must be conducted by an authorized person or by an exempted person<sup>87</sup>.

As mentioned in Part I certain businesses use Bitcoins as means of payment and in some part as investment actives. We can remember that after Visa, MasterCard, Bank of America, and PayPal stopped providing donations to WikiLeaks, the web site claimed using Bitcoin as donations<sup>88</sup>. Moreover there were several attempts to create platforms for Bitcoin trading, like Bitcoinica, which provides contract-for-difference trading against the Bitcoin/U.S.D. exchange rate<sup>89</sup>.

Besides many people accept Bitcoin not just as instrument of investment but also as an investment by itself, especially considering Bitcoin's always changing value<sup>90</sup>. A research note from the Bank of America suggested an idea that one day Bitcoin takes a 10 percent share of money transfers and e-commerce transactions<sup>91</sup>. In Poland some members of Parliament follow view that if derivatives (such as options or futures) were created based on Bitcoin's value, they would have a status of financial instruments<sup>92</sup>. The Austrian Financial Market Authority shares opposite view on Bitcoin's status and underlines that Bitcoin cannot be considered as financial instrument in any case<sup>93</sup>.

Considering the role of Bitcoin in investment activity, its involvement in future contracts, in particular cases Bitcoin can be accepted as security.

For example the U.S. Securities and Exchange Commission charged a man from Texas and its company for defrauding investors in a Ponzi scheme (an investment scam that involves the payment of purported returns to existing investors from funds contributed by new investors<sup>94</sup>) involving Bitcoins; in mentioned case Bitcoin is

<sup>83</sup>Kaplanov, Nikolei M., Nerdy Money: Bitcoin, The Private Digital Currency, And The Case Against Its Regulations;

<sup>84</sup> The Securities Act of the U.S.A. of 1933, available at: <a href="https://www.sec.gov/about/laws/sa33.pdf">https://www.sec.gov/about/laws/sa33.pdf</a>, (accessed 20.12.2016);

<sup>85</sup> Directive 2004/39/EC of 21 Apr 2004 (MiFiD) OJ 2004 L 145/1, Annex I, available at: <a href="http://www.fond-fci.ro/en/docs/Directive-39-2004-EN.pdf">http://www.fond-fci.ro/en/docs/Directive-39-2004-EN.pdf</a>, (accessed 20.12.2016);

<sup>86 36.</sup> Convention On The Law Applicable To Certain Rights In Respect Of Securities Held With An Intermediary, 05.07.2006, available at: https://assets.hcch.net/docs/3afb8418-7eb7-4a0c-af85-c4f35995bb8a.pdf, (accessed 20.12.2016)

<sup>87</sup> Castellano, Giuliano G., (2012), Towards a General Framework for a Common Definition of "Securities": Financial Markets Regulation in Multilingual Contexts, p.19, available at: https://www.lse.ac.uk/ collections/law/staff%20 publications %20full%20text/castellano/Offprint-Castellano-2012-3.pdf, (accessed 21.12.2016);

<sup>&</sup>lt;sup>88</sup> Greenberg, Andy, (2011), WikiLeaks Asks For Anonymous Bitcoin Donations, Forbes, 14.07.2011, available at: http://www.forbes.com/sites/andygreenberg/2011/06/14/wikileaks-asks-for-anonymous-bitcoindonations/, (accessed 17.12.2016);

<sup>89</sup> Brito, Jerry et al., (2014), Bitcoin Financial Regulation: Securities, Derivatives, Prediction Markets, And Gambling, available at: https://poseidon01.ssrn.com/delivery.php?ID=69700112712607412712611507812008007410302403604408600310007510212 51240890231250880291100320530221090490031200050660961090681161160830940220861250721111171160271040600170670 21020094115113105024004070093023023092120030005088005111120079073117065120009&EXT=pdf, (accessed 20.12.2016);

<sup>90</sup> Brito, Jerry et al., (2014), Bitcoin Financial Regulation: Securities, Derivatives, Prediction Markets, And Gambling;

<sup>&</sup>lt;sup>91</sup> Woo, David et al., (2013), Bitcoin: A First Assessment, 05.12.2013, available at: <a href="https://ciphrex.com/">https://ciphrex.com/</a> archive/bofa-bitcoin.pdf, (accessed 20.12.2016);

<sup>&</sup>lt;sup>92</sup> Pick, Leon, (2014), Poland: Bitcoin derivatives are financial instruments, Bitcoin isn't currency, Financemagnates, 09.07.2014, available at: http://www.financemagnates.com/ cryptocurrency/news/poland-bitcoin-derivatives-are-financial-instruments-bitcoin-isnt-currency/, (accessed 20.12.2016);

<sup>93</sup>https://www.fma.gv.at/fma-themenfokusse/bitcoin/, (accessed 20.12.2016);

<sup>&</sup>lt;sup>94</sup> The U.S. Securities and Exchange Commission, Investor Alert, No. 153 (7/13), available at: <a href="https://www.sec.gov/investor/alerts/ia virtualcurrencies.pdf">https://www.sec.gov/investor/alerts/ia virtualcurrencies.pdf</a>, (accessed 18.12.2016);

considered as security by the U.S. Securities and the Exchange Commission and is a subject of licensing requirements<sup>95</sup>.

Further on request of the US Securities and Exchange Commission on mentioned case (Ponzi scheme case - U.S. v. Shavers, case # 15-cr-00157) a federal judge ruled that Bitcoin fits definition of security under the Security Exchange Act (the U.S. legislation)<sup>96</sup>. According to the final judgment on this case, following information provided by the U.S. Attorney's Office of the Southern District of New York, the defendant was sentenced to 18 months in prison for one count of securities fraud stemming from his involvement in a Bitcoin-related Ponzi scheme<sup>97</sup>.

Moreover The New York Stock Exchange have launched a Bitcoin price index since 2015: the new index tracks the price of one Bitcoin in U.S. dollars by looking at transactions processed through various Bitcoin exchanges 98.

In most cases security represents a legal ownership interest like, for example, a share in corporation, nevertheless Bitcoin does not represent such interest. Whereas Bitcoin's role in financial instrument's market is limited to future contracts and investment activity, Bitcoin cannot be fully considered as security.

Considered mentioned above, we can underline, many legislators even inside the European Union, connected with same money market, treat Bitcoin in different way and there is no common view or common legal status for Bitcoin in the World. The picture of legislation on Bitcoin can be described with different points: some legislators states, Bitcoin cannot be considered as money or electronic money, other countries go further and consider Bitcoin as property, few legislators accept Bitcoin as virtual currency, some did not provide any legal status to it and in doctrine there are few views that Bitcoin can be considered as intellectual property. Just in the U.S.A. different regulators put Bitcoin under property, currency and security regulation schemes.

I can make conclusion systemizing the most common points in worldwide legislation—the best option is to consider Bitcoin as a property, whose monetary value can change, therefore operations with Bitcoins are barter agreements and Bitcoin purchases should fall under legislation (including taxation) about barter agreements.

# 4. International Legislation on Bitcoin Concerning Money Laundering and Bitcoin's Involvement in Terrorism

Considering Bitcoin's nature: its independence from controlling authority, tax free status, anonymity and simplicity of transactions with Bitcoins, - it is not surprising that in some cases Bitcoin is considered as instrument for such activity as money laundering or terrorism.

Therefore Bitcoin attracted attention of such international agencies like Europole or Interpole, numerous educational seminars, conferences briefings on Bitcoin's subject are organized all around the World. For example in 2015 the Virtual Currencies Conference was organized by Europol's European Cybercrime Centre (E.C.3) and the U.S. I.C.E. Homeland Security Investigations (H.S.I.) for the second time and held at Europol's Headquarters in the

<sup>95</sup> Press Release, SEC Charges Texas Man With Running Bitcoin-Denominated Ponzi Scheme, 23.07.2013, available at: https://www.sec.gov/News/PressRelease/Detail/ PressRelease/1370539730583, (accessed 18.12.2016); The U.S. SEC, Investor Alert:

<sup>96</sup> Malone, J. Anthony, Bitcoin and Other Virtual Currencies for the 21st Century;

<sup>&</sup>lt;sup>97</sup> Press Release, Texas Man Sentenced For Operating Bitcoin Ponzi Scheme, Department of Justice, the U.S. Attorney's Office, Southern District of New York, 21.07.2016, available at: <a href="https://www.justice.gov/usao-sdny/pr/texas-man-sentenced-operating-bitcoin-ponzi-scheme">https://www.justice.gov/usao-sdny/pr/texas-man-sentenced-operating-bitcoin-ponzi-scheme</a>, (accessed 18.12.2016);

<sup>&</sup>lt;sup>98</sup> Hackett, Robert, (2015), New York Stock Exchange Gives Bitcoin Some Mainstream Love, Time, 19.05.2015, available at: <a href="http://time.com/3889775/new-york-stock-exchange-gives-bitcoin-some-mainstream-love/">http://time.com/3889775/new-york-stock-exchange-gives-bitcoin-some-mainstream-love/</a>, (accessed 18.12.2016);

Hague with a view to further strengthening the international cooperation and operational focus against the abuse of virtual currencies, such as Bitcoin, for criminal transactions and money laundering<sup>99</sup>.

In 2016 Europol, Interpol and the Basel Institute on Governance established partnership to create a working group on money laundering with digital currencies to benefit from the exchange of information and knowledge with peers from other jurisdictions<sup>100</sup>.

After attack in Paris and Brussels, the European Union bodies raised their concern about virtual currencies' involvement in terrorism, as according to investigations, mentioned terroristic attack was financed anonymously via payments made online or pre-paid cards<sup>101</sup>.

But not all countries look at Bitcoin as at dangerous instrument for money laundering and terrorism. In the U.K. Home Office report on the U.K. national risk assessment of money laundering and terrorist financing, money laundering risk involving such digital currency as Bitcoin described as "low" 102.

According to Europole's report, the financing of terrorist operations by the Islamic State are largely unknown: it is obvious that the costs of travel, the renting of cars and safe houses and the acquisition of means of communication and of weapons and explosives may involve considerable sums of money, but there is no evidence however of the Islamic State financing networks in existence, besides despite third party reporting suggesting the use of anonymous currencies, like Bitcoin, by terrorists to finance their activities, this has not been confirmed by law enforcement <sup>103</sup>. Considering situation with terrorism nowadays and fast technological development, the European Union is trying to keep its legislation updated. In a Proposal for amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing and amending the Directive 2009/101/EC, the European Commission is willing:

- to extend strict anti-money laundering regulation to both virtual currency exchange services and custodial wallet providers;
- to restrict the anonymous use of virtual currencies;
- to apply customer due diligence controls when exchanging virtual for real currencies;
- to oblige Bitcoin companies to collect their customers' identity documents;
- to oblige Bitcoin companies to monitor transactions on their platforms and report suspicious activity;
- to address national Financial Intelligence Units to provide measures to be able to associate virtual currency addresses to the identity of the owner of virtual currencies;

<sup>&</sup>lt;sup>99</sup> Press Release, US Authorities & Europol Focus On Combating The Abuse Of Virtual Currencies, 24.06.2015, available at: <a href="https://www.europol.europa.eu/newsroom/news/us-authorities-europol-focus-combating-abuse-of-virtual-currencies">https://www.europol.europa.eu/newsroom/news/us-authorities-europol-focus-combating-abuse-of-virtual-currencies</a>, (accessed 21.12.2016);

<sup>100</sup> Press Release, Money Laundering With Digital Currencies: Working Group Established, 09.09.2016, available at: https://www.europol.europa.eu/newsroom/news/money-laundering-digital-currencies-working-group-established, (accessed 21.12.2016);

<sup>&</sup>lt;sup>101</sup>Guarascio, Francesco, (2015), EU clamps down on bitcoin, anonymous payments to curb terrorism funding, Reuters, 19.11.2015, available at: http://www.reuters.com/article/us-france-shoooting-eu-terrorism-funding-idUSKCN0T81 BW20151 119, (accessed 21.12.2016);

<sup>102</sup> The UK national risk assessment of money laundering and terrorist financing report, the UK Home Office, 2015, available at: https://www.gov.uk/government/uploads/system/uploads/attachment\_data/ file/468210/UK\_NRA\_October\_2015\_final\_web.pdf, (accessed 21.12.2016);

<sup>&</sup>lt;sup>103</sup> Changes in modus operandi of Islamic State terrorist attacks, Europol report, 18.01.2016, available at: https://www.europol.europa.eu/publications-documents/changes-in-modus-operandi-of-islamic-state-terrorist-attacks, (accessed 21.12.2016);

to allow users to self-declare to designated authorities on a voluntary basis should be further assessed104.

According to mentioned above, considering Bitcoin's nature, its anonymity, involvement in many transactions in Internet surface, absence of governmental control, many international enforcement bodies, national legislators are trying to amend legislation or organize international data exchange to prevent crimes connected with terrorism and money laundering using Bitcoin. Therefore to implement any changes successfully and to criminalize Bitcoin's usage in illegal actions properly, first of all, such regulators should define the legal nature of Bitcoin.

#### 4. Conclusion

In present paper was explained role of the Bitcoin and its involvement in economic activity worldwide, using such practical examples on real business as: AirBaltic, Microsoft, Dell etc. Therefore it can be seen that Bitcoin is used not just illegal transactions in DarkWeb but also for completely legal business: bike rent, coffee sale, haircut services provision and even property sale. According to mentioned above Bitcoin usage for legal transaction raised many questions from legislators - should such transactions or Bitcoin's issue be licensed; how consumer rights can be protected; how to proceed taxations of sale or services provision in exchange of Bitcoin etc. To put businesses which operate Bitcoin in certain legal frames, first of all the legal nature of Bitcoin should be defined.

Considering views of legislators on national (selective countries legislation and court practice) and international level (the European Union legislation and international court practice), there are 3 main views on Bitcoin's definition:

- Bitcoin is a virtual currency;
- Bitcoin is a financial instrument;
- Bitcoin is a property.

Determination of Bitcoin's nature has significant importance to legislators worldwide to regulate business activity related to Bitcoin: licensing of institutions issuing Bitcoin if it is defined as virtual money; Bitcoin's place in stock market if it is defined as security or financial instrument; or transfer of property rights if Bitcoin is defined as commodity or property.

Analyzing mentioned in present paper legislation and court practice, it become clear that many legislators even inside the European Union, connected with same money market, treat Bitcoin in different way and there is no common view or common legal status for Bitcoin in the World. The picture of legislation on Bitcoins can be described with different points: some legislators states, Bitcoin cannot be considered as money or electronic money, other countries go further and consider Bitcoin as property, few legislators accept Bitcoin as virtual currency, some did not provide any legal status to it and in doctrine there are few views that Bitcoin can be considered as intellectual property. Just in the single U.S.A. different regulators put Bitcoin under property, currency and security regulation schemes.

However, considering Bitcoin's role in financial instrument's market is limited to future contracts and investment activity, Bitcoin cannot be fully considered as security. Moreover, on current stage of limited Bitcoin's acceptance by businesses and population, Bitcoin's characteristics cannot fall fully under all electronic money features. In case when certain countries legislation took Bitcoin under electronic money framework, contracts including Bitcoin should be considered as contracts including other type of payment (like foreign currency, which is not used commonly as national means of payment in such state) and should be regulated subsequently.

Notwithstanding mentioned above, in attempts to qualify Bitcoin's status in legal framework, many countries come to conclusion that Bitcoin cannot be considered as money, some legislators went further and defined Bitcoin as a property and Bitcoin involving operation as barter agreements (transferring certain amount of Bitcoins to someone's property in exchange for transfer certain amount of property rights for other object or services).

<sup>104</sup> Proposal for amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing and amending Directive 2009/101/EC, available at: http://ec.europa.eu/ justice/criminal/ document/files/aml-directive\_en.pdf, (accessed 21.12.2016);

Systemizing the most common points in worldwide legislation, we can make conclusion - Bitcoin should be considered as a property, whose monetary value can change, therefore operations with Bitcoins would be considered as barter agreements and Bitcoin purchases should fall under legislation (including taxation) about barter agreements. Basing on legal definition of Bitcoin in specific country or on international level, subsequent regulations should apply in area of taxation, customer protection, licensing and the most important in level of money laundering prevention and anti-terroristic measures.

#### References

- Aitken, Roger (2016), "Danish Blockchain Startup Coinify Scores \$4 Million Early-Stage Investment", Forbes, 03.08.2016, available at: http://www.forbes.com/sites/rogeraitken/2016/08/03/sebs-vc-unit-invests-4m-in-blockchain-payments-operator-with-seed-capital (accessed 16.10.2016)
- Berta, Michael A. and Noonan, Willow W. (2015), "The property-contract duality of Bitcoin", Financeworldwide, available at: https://www.financierworldwide.com/the-property-contract-duality-of-bitcoin/, (accessed 19.12.2016)
- Boehm, Franziska and Pesch, Paulina (2014), "Bitcoin: A First Legal Analysis with reference to German and US-American law", University of Munster, 22.04.2014, available at: http://www.uni-muenster.de/Jura.itm/hoeren/materialien/ boehm\_pesch/BTC\_final\_camready.pdf (accessed 23.10.2016)
- Brito, Jerry et al. (2014), "Bitcoin Financial Regulation: Securities, Derivatives, Prediction Markets, And Gambling", New York Law School, available at: <a href="https://poseidon01.ssrn.com/delivery.php">https://poseidon01.ssrn.com/delivery.php</a> (accessed 17.12.2016);
- Brito, Jerry (2015), "The Law of Bitcoin", iUniversity, Bloomington, the U.S.A, 17.06.2015, available at: <a href="https://books.google.com.ua/books">https://books.google.com.ua/books</a> (accessed 19.12.2016);
- Cavadini, Federica (2014), "Dallabistecca a palestra e taxi qui sipaga con moneta virtual", Corrieredella sera, 02.02.2014, available at: http://milano.corriere.it/milano/notizie/cronaca/14\_febbraio\_02/dalla-bistecca-palestra-taxi-qui-si-paga-moneta-virtuale-f1ab0942-8bf1-11e3-a29b-8636964bc663.shtml, (accessed 16.10.2016)
- Communication from the Commission to the European Parliament and the Council, on an Action Plan for strengthening the fight against terrorist financing, available at: http://ec.europa.eu/justice/criminal/files/com\_2016\_50\_en.pdf, (accessed 22.11.2016)
- Changes in modus operandi of Islamic State terrorist attacks, Europol report, 18.01.2016, available at: https://www.europol.europa.eu/publications-documents/changes-in-modus-operandi-of-islamic-state-terrorist-attacks, (accessed 21.12.2016)
- Chavez-Dreyfuss, Gertrude (2014), "Exclusive: Overstock CEO says bitcoin sales to add 4 cents to 2014 EPS", Reuters, 13.08.2014, available at: <a href="http://www.reuters.com/article/us-overstock-com-bitcoin-idUSKBN0GD21220140813">http://www.reuters.com/article/us-overstock-com-bitcoin-idUSKBN0GD21220140813</a>, (accessed 15.10.2016)
- Chen, Adrian (2016), "We Need to Know Who Satoshi Nakamoto Is", the New Yorker, 09.05.2016, available at: http://www.newyorker.com/business/currency/we-need-to-know-who-satoshi-nakamoto-is, (accessed 18.12.2016)
- Case # C-264/14, the Court of Justice, 22.10.2015, available at: <a href="http://curia.europa.eu/juris/document/">http://curia.europa.eu/juris/document/</a> (accessed 23.10.2016)
- Castellano, Giuliano G. (2012), "Towards a General Framework for a Common Definition of "Securities": Financial Markets Regulation in Multilingual Contexts", Uniform Law Review, 2012, available at: <a href="https://www.lse.ac.uk/collections/law/staff%20publications%20full%20text/castellano/Offprint-Castellano-2012-3.pdf">https://www.lse.ac.uk/collections/law/staff%20publications%20full%20text/castellano/Offprint-Castellano-2012-3.pdf</a> (accessed 21.12.2016)
- Directive 2004/39/EC of 21 Apr 2004 (MiFiD) OJ 2004 L 145/1, Annex I, available at: <a href="http://www.fond-fci.ro/en/docs/Directive-39-2004-EN.pdf">http://www.fond-fci.ro/en/docs/Directive-39-2004-EN.pdf</a>, (accessed 20.12.2016)
- Electronic money rules of commerce, Appendix 1, available at: <a href="https://www.occ.gov/topics/bank-operations/bit/intro-to-electronic-money-issues-appendix.pdf">https://www.occ.gov/topics/bank-operations/bit/intro-to-electronic-money-issues-appendix.pdf</a>, (accessed 02.12.2016)
- European Central Bank, What is money?, 24.11.2015, available at: <a href="https://www.ecb.europa.eu/explainers/tell-memore/html/what">https://www.ecb.europa.eu/explainers/tell-memore/html/what is money.en.html</a> (accessed 02.12.2016)
- European Central Bank, Virtual Currency Schemes, 2012, available at: <a href="http://www.ecb.europa.eu/pub/pdf/other/virtualcurren-cyschemes201210en.pdf">http://www.ecb.europa.eu/pub/pdf/other/virtualcurren-cyschemes201210en.pdf</a> (accessed 24.10.2016)

- European Central Bank, Virtual Currency Schemes a further analysis, 2015, available at: https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemesen.pdf (accessed 15.12.2016)
- E-Money Directive, 2009/110/EC, 16.09.2009, available at: <a href="http://eur-lex.europa.eu/legal-content">http://eur-lex.europa.eu/legal-content</a> (accessed 02.12.2016)
- Financial Crimes Enforcement Network of the United States Department of Treasury, Request for Administrative Ruling on the Application of FinCEN's Regulations to a Virtual Currency Payment System, 27.10.2014, available at: https://www.fincen.gov/sites/default/files/shared/FIN-2014-R012.pdf, (accessed 18.12.2016)
- Gadomskiy, Dmitriy (2016), "Earlyadopters: mozhet li Privatbank rabotat c bitcoin v Ukraine i kogda NBU opredelitsa s resheniem po kriptovalute", Forbes, 21.01.2016, availableat: <a href="http://forbes.net.ua/opinions/1409465-early-adopters-mozhet-li-privatbank-rabotat-s-bitkoin-v-ukraine">http://forbes.net.ua/opinions/1409465-early-adopters-mozhet-li-privatbank-rabotat-s-bitkoin-v-ukraine</a>, (accessed 22.11.2016)
- Greenberg, Andy (2011), "WikiLeaks Asks For Anonymous Bitcoin Donations, Forbes", 14.07.2011, available at: http://www.forbes.com/sites/andygreenberg/2011/06/14/wikileaks-asks-for-anonymous-bitcoindonations/, (accessed 17.12.2016)
- Grossman, S.J. and Hart, O.D., (1994), "The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration", Journal of Political Economy 94, p. 13
- Guarascio, Francesco (2015), "EU clamps down on bitcoin, anonymous payments to curb terrorism funding", Reuters, 19.11.2015, available at: http://www.reuters.com/article/us-france-shoooting-eu-terrorism-funding-idUSKCN0 T81BW 2015 1119, (accessed 18.12.2016)
- Guidance, the Australian Taxation Office, 18.12.2014, available at: <a href="https://www.ato.gov.au/General/Gen/Tax-treatment-of-crypto-currencies-in-Australia---specifically-bitcoin/">https://www.ato.gov.au/General/Gen/Tax-treatment-of-crypto-currencies-in-Australia---specifically-bitcoin/</a>, (accessed 23.10.2016)
- Hackett, Robert (2015), "New York Stock Exchange Gives Bitcoin Some Mainstream Love", Time, 19.05.2015, available at: http://time.com/3889775/ new-york-stock-exchange-gives-bitcoin-some-mainstream-love/, (accessed 18.12.2016)
- Hannestad, Adam (2014), "Bitcoin-gevinster kanstikkes direkteilommen", Politiken, 25.03.2014, available at: http://politiken.dk/oekonomi/dkoekonomi/article5508292.ece, (accessed 18.12.2016)
- Harrison, Virginia (2015), "This could be the first country to go cashless", CNN, 02.06.2015, available at: http://money.cnn.com/2015/06/02/technology/ cashless-society-denmark/, (accessed 02.12.2016)
- Higgins, Stan (2016), "US Bankruptcy Court Set to Weigh in on Bitcoin's Currency Status", CoinDesk, 09.02.2016, available at: http://www.coindesk.com/bankrupt-bitcoin-mining-firm-trustee-seeks-return-of-funds-from-former-promoter/, (accessed 18.12.2016)
- Kaplanov, Nikolei M. (2012), "Nerdy Money: Bitcoin, The Private Digital Currency, And The Case Against Its Regulations", 25 Loy. Consumer Law Review # 111, 2012, available at: https://poseidon01.ssrn.com/ delivery (accessed 02.12.2016)
- Kara, Merve (2016), "BTCTurk, TL yatırma işlemlerini durdurdu", Webrazzi, 18.08.2016, available at: <a href="http://webrazzi.com/2016/08/18/hacklendigi-iddia-edilen-btcturk-tl-yatırma-islemlerini-durdurdu/">http://webrazzi.com/2016/08/18/hacklendigi-iddia-edilen-btcturk-tl-yatırma-islemlerini-durdurdu/</a>, (accessed 24.10.2016)
- Law on Payment Services and Electronic Money, available at: http://www.fktk.lv/texts\_files/ 0\_Law\_Payment\_Services\_ Electronic\_Money.pdf, (accessed 02.12.2016)
- Law No. 12,865, Central Bank of Brazil, 09.10.2013, available at: https://www.bcb.gov.br/Pom/Spb/Ing/InstitucionalAspects/Law12865.pdf, (accessed 23.10.2016)
- Malone, J. Anthony (2014), "Bitcoin and Other Virtual Currencies for the 21st Century", Lulu Press, the U.S.A. 01.05.2014, available at: <a href="https://books.google.com.ua/books">https://books.google.com.ua/books</a>? (accessed 18.12.2016)
- Malloy, Robin Paul and Diamond, Michael (2011), "The Public nature of Private property", Ashgate Publishing, The U.S.A., 28.08.20122, available at: <a href="https://books.google.com.ua/">https://books.google.com.ua/</a> (accessed 15.12.2016)
- Maras, Elliot (2016), "A First In Denmark: Miner Buys House With Bitcoin Using Coinify", Cryptocoinsnews, 14.03.2016, available at: <a href="https://www.cryptocoinsnews.com/a-first-in-denmark-miner-buys-house-with-bitcoin-using-coinify/">https://www.cryptocoinsnews.com/a-first-in-denmark-miner-buys-house-with-bitcoin-using-coinify/</a>, (accessed 16.10.2016)
- Mattei, Ugo (2000), "Basic Principles of Property Law: A Comparative Legal and Economic Introduction", greenwood Publishing Group, 2000, available at: <a href="https://books.google.com.ua/books">https://books.google.com.ua/books</a> (accessed 18.12.2016)

Mullany, Gerry (2013), "China Restricts Banks' Use of Bitcoin", The New York Times, 05.12.2013, available at: http://www.nytimes.com/2013/12/06/business/international/china-bars-banks-from-usingbitcoin.html, (accessed 23.10.2016)

- Notice #2014-21, The Internal Revenue Service of the U.S.A., available at: <a href="https://www.irs.gov/pub/irs-drop/n-14-21.pdf">https://www.irs.gov/pub/irs-drop/n-14-21.pdf</a>, (accessed 20.10.2016)
- Nguyen, Tuan (2014), "I bought coffee at the Prague cafe that only accepts bitcoin. Here's what it was like", the Washington Post, 05.11.2014, available at: https://www.washingtonpost.com/news/innovations/wp/2014/11/05/i-bought-coffee-at-the-prague-cafe-that-only-accepts-bitcoin-heres-what-it-was-like/, (accessed 16.10.2016)
- News Report (2016), "California Bankruptcy Court to Decide Whether Bitcoin Is a Currency or Commodity", EconoTimes, 10.02.2016, available at: <a href="http://www.econotimes.com/California-Bankruptcy-Court-To-Decide-Whether-Bitcoin-Is-A-Currency-Or-Commodity-158333">http://www.econotimes.com/California-Bankruptcy-Court-To-Decide-Whether-Bitcoin-Is-A-Currency-Or-Commodity-158333</a>, (accessed 18.12.2016)
- News report (2014), "Expedia to accept Bitcoin payments for hotel bookings", BBC, 12.06.2014, available at: <a href="http://www.bbc.com/news/technology-27810008">http://www.bbc.com/news/technology-27810008</a>, (accessed 15.10.2016)
- News report (2016), "Ten arrested in Netherlands over bitcoin money-laundering allegations, the Guardian, available at: https://www.theguardian.com/technology/2016/jan/20/bitcoin-netherlands-arrests-cars-cash-ecstasy, (accessed 22.11.2016)
- News report (2016), "Vlasti RF otkazalis vvodit ugolovnuyu otvetstvennost za oborot bitcoinov", Interfax, 12.08.2016, available at: <a href="http://www.interfax.ru/business/523262">http://www.interfax.ru/business/523262</a>, (accessed 22.11.2016)
- News report (2016), "Nazionalizatsia PrivatBanka: vse podrobnosti", Correspondent, 19.12.2016, available at: http://korrespondent.net/ukraine/ 3788705-natsyonalyzatsyia-pryvatbanka-vse-podrobnosty, (accessed 06.01.2017)
- State of Florida vs. Michell Abner Espinoza, Case # F14-2923, 22.07.2016, available at: <a href="http://www.miamiherald.com/latest-news/article91701087.ece/BINARY/">http://www.miamiherald.com/latest-news/article91701087.ece/BINARY/</a> (accessed 20.10.2016)
- The Securities Act of the U.S.A. of 1933, available at: <a href="https://www.sec.gov/about/laws/sa33.pdf">https://www.sec.gov/about/laws/sa33.pdf</a>, (accessed 20.12.2016)
- The U.K. national risk assessment of money laundering and terrorist financing report, the UK Home Office, 2015, available at: https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/468210/UK\_NRA\_October\_2015\_final\_web.pdf, (accessed 21.12.2016)
- The U.S. Securities and Exchange Commission, Investor Alert, No. 153 (7/13), available at: https://www.sec.gov/investor/alerts/ia\_virtual currencies.pdf, (accessed 18.12.2016)
- Pejovich, Svetozar (1990), "The Economics of Property Rights: Towards a Theory of Comparative Systems", Kluwer academic publishers, Boston, the U.S.A., 1990, available at: <a href="https://books.google.com.ua/">https://books.google.com.ua/</a> (accessed 14.12.2016)
- Pevehouse, Laura (2015), "We're Now Accepting Bitcoin in the UK and Canada", Dell, 19.02.2015, available at: http://en.community.dell.com/dell-blogs/direct2dell/b/direct2dell/archive/2015/02/19/dell-now-accepting-bitcoin-in-uk-and-canada, (accessed 15.10.2016)
- Pick, Leon (2014), "Ohio Bans Alcohol Sales with Crypto on Bitcoin Boulevard", FinanceMagnates, 28.04.2014, available at: http://www.financemagnates.com/cryptocurrency/news/ohio-bans-alcohol-sales-with-crypto-on-bitcoin-boulevard/, (accessed 16.10.2016)
- Pick, Leon (2014), "Poland: Bitcoin derivatives are financial instruments, Bitcoin isn't currency", FinanceMagnates, 09.07.2014, available at: http://www.financemagnates.com/cryptocurrency/news/poland-bitcoin-derivatives-are-financial-instruments-bitcoin-isnt-currency/, (accessed 20.12.2016)
- Prableen, Bajpa (2014), "The 5 Most Important Virtual Currencies Other Than Bitcoin", Investopedia, 10.12.2014, available at: http://www.investopedia.com/articles/investing/121014/5-most-important-virtual-currencies-other-bitcoin.asp, (accessed 13.10.2016)
- Press Release (2014), "AirBaltic World's First Airline to Accept Bitcoin", AirBaltic, 22.07.2014, available at: <a href="https://www.airbaltic.com/airbaltic-worlds-first-airline-to-accept-bitcoin">https://www.airbaltic.com/airbaltic-worlds-first-airline-to-accept-bitcoin</a>, (accessed 15.10.2016)
- Press Release (2012), Bitcoin virtual currency: Unique features present distinct challenges for deterring illicit activity, F.B.I., 22.04.2012, available at: <a href="http://cryptome.org/2012/05/fbi-bitcoin.pdf">http://cryptome.org/2012/05/fbi-bitcoin.pdf</a>, (accessed 22.11.2016)

- Press release (2016), "Commission presents Action Plan to strengthen the fight against terrorist financing", European Commission, 02.02.2016, available at: <a href="http://europa.eu/rapid/press-release IP-16-202">http://europa.eu/rapid/press-release IP-16-202</a> en.htm, (accessed 22.11.2016)
- Press Release (2012), Bitcoin virtual currency: Unique features present distinct challenges for deterring illicit activity, F.B.I., 22.04.2012, available at: <a href="http://cryptome.org/2012/05/fbi-bitcoin.pdf">http://cryptome.org/2012/05/fbi-bitcoin.pdf</a>, (accessed 22.11.2016)
- Press Release (2014), "Bitcoin erikkepenge", Danish Central Bank (Nationalbanken), 18.03.2014, available at: http://www.nationalbanken.dk/da/presse/Documents/2014/03/PH\_bitcoin.pdf#search=Bitcoin, (accessed 23.10.2016)
- Press Release (2016), "Texas Man Sentenced for Operating Bitcoin Ponzi Scheme", Department of Justice, the U.S. Attorney's Office, Southern District of New York, 21.07.2016, available at: <a href="https://www.justice.gov/usao-sdnv/pr/texas-man-sentenced-operating-bitcoin-ponzi-scheme">https://www.justice.gov/usao-sdnv/pr/texas-man-sentenced-operating-bitcoin-ponzi-scheme</a>, (accessed 18.12.2016)
- Press Release (2016), "Money Laundering with Digital Currencies: Working Group Established", Europol, 09.09.2016, available at: https://www.europol.europa.eu/newsroom/news/money-laundering-digital-currencies-working-group-established, (accessed 21.12.2016)
- Press Release (2013), "SEC Charges Texas Man with Running Bitcoin-Denominated Ponzi Scheme", SEC, 23.07.2013, available at: <a href="https://www.sec.gov/News/PressRelease/Detail/PressRelease/1370539730583">https://www.sec.gov/News/PressRelease/Detail/PressRelease/1370539730583</a>, (accessed 18.12.2016)
- Press Release (2014), "Time Inc. Partners with Coinbase to Become the First Major Magazine Publisher to Accept Bitcoin Payments", Time Inc., 16.12.2014, available at: <a href="http://www.timeinc.com/about/news/press-release/time-inc-partners-with-coinbase-to-become-the-first-major-magazine-publisher-to-accept-bitcoin-payments/">http://www.timeinc.com/about/news/press-release/time-inc-partners-with-coinbase-to-become-the-first-major-magazine-publisher-to-accept-bitcoin-payments/</a>, (accessed 13.10.2016)
- Press release (2013), "University of Nicosia in Cyprus to be the First University in the World to Accept Bitcoin: Offers Master's Degree in Digital Currency", University of Nicosia, 21.11.2013, available at: <a href="https://www.unic.ac.cy/about-us/university-nicosia-digital-currency-initiative/press-release">https://www.unic.ac.cy/about-us/university-nicosia-digital-currency-initiative/press-release</a>, (accessed 15.10.2016)
- Press Release (2015), "US Authorities & Europol Focus on Combating the Abuse of Virtual Currencies", Europol, 24.06.2015, available at: <a href="https://www.europol.europa.eu/newsroom/news/us-authorities-europol-focus-combating-abuse-of-virtual-currencies">https://www.europol.europa.eu/newsroom/news/us-authorities-europol-focus-combating-abuse-of-virtual-currencies</a>, (accessed 21.12.2016)
- Proposal for amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing and amending Directive 2009/101/EC, available at: <a href="http://ec.europa.eu/justice/criminal/document/files/aml-directive\_en.pdf">http://ec.europa.eu/justice/criminal/document/files/aml-directive\_en.pdf</a>, (accessed 21.12.2016)
- Proekt Federalnogo Zakona «O denezhnih surrogatah", available at: <a href="http://www.slideshare.net/temychk/ss-44540975">http://www.slideshare.net/temychk/ss-44540975</a>, (accessed 22.11.2016)
- Popper, Nathaniel (2016), "How China Took Center Stage in Bitcoin's Civil War", The New York Times, 29.06.2016, available at: http://www.nytimes.com/ 2016/07/03/business/dealbook/bitcoin-china.html, (accessed 23.10.2016)
- Reingold, Steven C. and Durken, Timothy J., "Bitcoins are not U.S. Dollars: What Does the Rulling in the HashFast Bankruptcy Mean", available at: http://www.jagersmith.com/downloads/pdf/Bitcoins-Are-Not-US-Dollars.pdf, (accessed 18.12.2016)
- Reitman, Rainey (2011), "Bitcoin a Step Toward Censorship-Resistant Digital Currency", Electronic Frontier Foundation, 20.01.2011, available at: <a href="https://www.eff.org/deeplinks/2011/01/bitcoin-step-toward-censorship-resistant">https://www.eff.org/deeplinks/2011/01/bitcoin-step-toward-censorship-resistant</a>, (accessed 13.10.2016)
- Russell, Helen (2015), "No wallet, no worries: Denmark considering cash-free shops", the Guardian, 14.05.2015, available at: https://www.theguardian.com/world/2015/may/14/no-wallet-no-worries-denmark-considering-cash-free-shops, (accessed 18.12.2016)
- Ödeme ve Menkul Kıymet Mutabakat Sistemleri, Ödeme Hizmetleri ve Elektronik Para Kuruluşları Hakkında Kanun No. 6493, 20.06.2013, (R.G. 27.06.2013/28690), available at: http://www.resmigazete.gov.tr/eskiler/2013/06/20130627-14.htm, (accessed 02.12.2016)
- Sardesai, Neil (2014), "Bitcoin Boulevard: Bitcoin a part of everyday life in this Dutch neighborhood", Cryptocoinsnews, 03.11.2014, available at: <a href="https://www.cryptocoinsnews.com/">https://www.cryptocoinsnews.com/</a> bitcoin-boulevard-bitcoin-part-everyday-life-dutch-neighbourhood/, (accessed 16.10.2016)

Scheinert, Christian, (2015), "Virtual currencies, Challenges following their introduction", available at: <a href="http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579110/EPRS\_BRI(2016)579110\_EN.pdf">http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579110/EPRS\_BRI(2016)579110\_EN.pdf</a> (accessed 15.12.2016)

Segal, Ilya and Whinston, Michael D. (2010), "Property Rights", Stanford University, 07.08.2010, available at: http://web.stanford.edu/~isegal/ prights.pdf, (accessed 17.12.2016)

Skatterådet #SKM2014.226.SR, 25.03.2014, available at: http://www.skat.dk/ skat.aspx? oId=2156173&vId=0, (accessed 20.10.2016)

Smithin, John N. (1994), "Controversies in Monetary Economics", Edward Elgal Publishing, the U.S.A., 1994, available at: <a href="https://books.google.com.ua/books">https://books.google.com.ua/books</a> (accessed 02.12.2016)

Tange, Alexander (2015), "Denmark proposes cash-free shops to cut retail costs", Reuters, 06.05.2015, available at: <a href="http://www.reuters.com/article/denmark-cash-idUSL5N0XX2ZQ20150506">http://www.reuters.com/article/denmark-cash-idUSL5N0XX2ZQ20150506</a>, (accessed 02.12.2016)

Tedeschi, Bob (2001), "E-Commerce Report: Seller of Online Currency May Have Been Victim of Fraud", the NewYork Times, 27.08.2001, available at: <a href="http://www.nytimes.com/2001/08/27/business/e-commerce-report-seller-of-online-currency-may-have-been-victim-of-fraud.html?r=0">http://www.nytimes.com/2001/08/27/business/e-commerce-report-seller-of-online-currency-may-have-been-victim-of-fraud.html?r=0</a>, (accessed 13.10.2016)

Walker, Herman (1963), "The International Law of Commodity Agreements", Law and Contemporary problems, Duke University, 04.1963, available at: http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article= 2960&context=lcp, (accessed 18.12.2016)

Webb, Sam (2013), "Bitcoin isn't real money": Norwegian government refuses to recognize digital currency", Dailymail, 16.12.2013, available at: <a href="http://www.dailymail.co.uk/sciencetech/article-2524672/Bitcoin-isnt-real-money-Norwegian-government-refuses-recognise-digital-currency.html">http://www.dailymail.co.uk/sciencetech/article-2524672/Bitcoin-isnt-real-money-Norwegian-government-refuses-recognise-digital-currency.html</a>, (accessed 23.10.2016)

Woo, David et al. (2013), "Bitcoin: A First Assessment", 05.12.2013, available at: <a href="https://ciphrex.com/archive/bofa-bitcoin.pdf">https://ciphrex.com/archive/bofa-bitcoin.pdf</a>, (accessed 20.12.2016)

 Convention on the Law Applicable to Certain Rights in Respect of Securities Held with an Intermediary, 05.07.2006, available at: https://assets.hcch.net/docs/3afb8418-7eb7-4a0c-af85c4f35995bb8a.pdf, (accessed 20.12.2016)

http://www.amsterdamboatevents.nl, (accessed 16.10.2016)

http://www.arnhembitcoinstad.nl/#deelnemers, (accessed 16.10.2016)

http://biccur.com/blog/portfolio/blandlord-com/, (accessed 16.10.2016)

http://bitcoinboulevard.us, (accessed 16.10.2016)

https://bitcoin.org/en/innovation, (accessed 13.10. 2016)

https://www.btcturk.com, (accessed 24.10.2016)

http://www.cafekobalt.nl/en/nieuws, (accessed 16.10.2016)

https://www.coinatmradar.com, (accessed 16.10.2016)

https://www.coinbase.com/charts, (accessed 18.12.2016)

http://www.coindesk.com/price/, (accessed 06.01.2017)

http://www.cutthroatbarber.nl, (accessed 16.10.2016)

https://commerce.microsoft.com/PaymentHub/Help/Right?helppagename=CSV\_BitcoinHowTo.htm, (accessed 13.10.2016)

http://www.dell.com/learn/us/en/uscorp1/campaigns/bitcoin-marketing?c=us&l=en&s=corp, (accessed 13.10.2016)

https://www.europol.europa.eu/iocta/2015/key-findings.html, (accessed 22.11.2016)

https://www.fma.gv.at/fma-themenfokusse/bitcoin/, (accessed 20.12.2016)

http://www.gatesfoundation.org/Media-Center/Press-Releases/2013/09/Digital-Payments-Can-Benefit-the-Poor,

http://www.norwaypost.no/index.php/business/general-business/29983,

http://www.numerama.com/magazine/33462-monoprix-bitcoins.html, (accessed 15.10.2016)

https://www.overstock.com/bitcoin, (accessed 15.10.2016)

https://www.paralelnipolis.cz/koncepty/bitcoin-coffee-en/, (accessed 15.10.2016)

http://www.showroomprive.com/ContratCGV.aspx, (accessed 15.10.2016)

http://www.skatteetaten.no/no/Radgiver/Rettskilder/Uttalelser/Prinsipputtalelser/Bruk-av-bitcoins--skatte--og-avgiftsmessige-konsekvenser/,(accessed 23.10.2016)

http://www.starbikesrental.com, (accessed 16.10.2016)

http://www.taz.de/Unterstützung/!142454/, (accessed 13.10.2016)