

## CRYPTOCURRENCY IN THE CONTEXT OF DEVELOPMENT OF DIGITAL SINGLE MARKET IN EUROPEAN UNION \*

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### ABSTRACT

*The 21st century – is the century of technologies, destroying of economic barriers, unification and globalization. Nowadays, post-industrial society, where market forces have become quite complex the traditional economic transactional mechanisms including newly introduced credit cards, debit cards, ATM and other electronic systems are insufficient to cope with the new economic pressures and demands of the society. Europe requires free movement of people, data, goods, funds. Paper is devoted to implementing cryptocurrency in the context of development of digital single market in EU. Aim of the paper is to investigate cryptocurrency, namely, bitcoin, define its notion, explain its operation, examine its legal basis in the world and in EU and offer future steps for achieving the main goals of the Digital Single Market Strategy. Paper concludes, that the lack of legal foundation of bitcoin exists and proves the necessity of adopting an adopt single Virtual Currency Act, creation of the body, which will be authorized to issuing licenses, exemption the transactions with virtual currency from taxation, spreading ideas concerning using of virtual currency in modern society.*

*Key words: virtual currency, bitcoin, e-money, mining, Digital Single Market Strategy.*

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## 1. INTRODUCTION

The internet and digital technologies are transforming our world. However, existing online barriers mean that citizens miss out on goods and services, internet companies and start-ups have their horizons limited, and businesses and governments cannot fully benefit from digital tools. It's time to make the EU's single market fit for the digital age by tearing down regulatory walls and moving from 28 national markets to a single one<sup>1</sup>. The economy and society of Europe need to make the most out of digital<sup>2</sup>. Thus, The European Commission announced its long-awaited Digital Single Market strategy last spring in an effort to strengthen Europe's role in a global economy driven increasingly by technology and innovation<sup>3</sup>. Europe needs new economic momentum to help its economies to exit from the economic and financial crisis and to boost long-term growth rates and competitiveness<sup>4</sup>. One of the factors, which can lead to development of EU single market is digital currency, namely, bitcoins.

Changes in different fields of society ranging from economy, society, politics, family and culture are so multi-directional that it becomes really complicated to get a coherent picture from jungle of changes.

It should be looked for such a necessary futuristic new holistic currency system, which could take care of not only on the routine transactional business and market exchanges but also penetrate deeper into the bizarre realities of postmodern life like unaccounted money leading to large scale corruption, cyber economic crimes, funding of terrorist operations, social evils...

In the fast globalizing economy, the traditional national currency systems have become, in fact, a kind of 'regional currency system' and the void at the international level is filled by, "the super national currency system", which is a kind of "stateless currency" like "Euro Dollars- Dollars outside the United States".

A cryptocurrency is a medium of exchange like normal **currencies such as USD, but designed for the purpose of exchanging digital information through a process made possible by certain principles of cryptography. Cryptography is used to secure the transactions and to control the creation of new coins.**

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<sup>1</sup> <[https://ec.europa.eu/priorities/digital-single-market\\_en](https://ec.europa.eu/priorities/digital-single-market_en)>, last accessed on 05/19/16.

<sup>2</sup> <<https://ec.europa.eu/digital-single-market/node/78517>>, last accessed on 05/19/16.

<sup>3</sup> <<http://www.brookings.edu/blogs/up-front/posts/2015/09/22-european-union-digital-single-market-sapiro>>, last accessed on 05/19/16.

<sup>4</sup> Tanel Kerikmae, *Regulating eTechnologies in the European Union: Normative Realities and Trends*, Tallinn, 2014, p. 26.

## **2. NOTION AND ORIGIN OF BITCONS**

The man, who started Bitcoin in 2009 is a shadowy figure called Satoshi Nakamoto, who once said in a profile that he came from Japan. He once wrote on a computer program: «Governments are good at cutting, off the heads off centrally controlled networks like Napster, bur pure P2P networks are holding their own so that it's very attractive to the libertarian viewpoint». Satoshi Nakamoto defines an electronic coin as a chain of digital signatures. Each owner transfers the coin to the next by digitally signing a hash of the previous transaction and the public key of the next owner and adding these to the end of the coin. A payee can verify the signatures to verify the chain of ownership<sup>5</sup>.

Since 2008, bitcoin adoption has been influenced by a diverse range of factors that have made it one of the most volatile currencies in the world. Yet, despite such volatility, more than 100,000 bitcoin transactions are taking and the volume continues to grow due to the 'permissionless innovation' provided by bitcoin's underlying technology - the blockchain.

In May 2010, a programmer living in Florida named Laslo Hanyecz sends 10,000BTC to a volunteer in England, who spent about \$25 to order Hanyecz a pizza from Papa John's. Today that pizza is valued at £1,961,034 and stands as a major milestone in Bitcoin's history<sup>6</sup>.

“The Bitcoin Primer” states that bitcoin is a peer-to-peer decentralized digital currency that makes use of advanced elliptic curve mathematics and cryptography, as well as a globally replicated public ledger called the blockchain (a history of all transactions). In simpler terms, bitcoin is a digital currency that the bearer has complete control over, that is, until it is given to another party. When the other party receives bitcoin (the receiver), the transaction becomes irreversible.

The price of a Bitcoin surged from less than a dollar to over \$30 as a new demographic became interested: speculators. Geeks who had casually collected Bitcoin as a curiosity in 2009 found themselves sitting on tens, or even hundreds, of thousands of dollars. Over the next several months, Bitcoin prices were extremely volatile, dropping suddenly after each of a half dozen high profile incidents. Exchanges were hacked, Bitcoins were lost from carelessness, viruses popped up which stole any Bitcoin it could find, and some services closed without warning, disappearing with their customers' money<sup>7</sup>.

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<sup>5</sup> Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System, 2009, p. 2

<sup>6</sup> <<http://thenextweb.com/insider/2015/03/29/a-brief-history-of-bitcoin-and-where-its-going-next/>>, last accessed on 05/19/16.

<sup>7</sup> Chris Koss, Mike Koss, A Bitcoin Primer, CTO, CoinLab, (1) 2012, p. 1

### **3. HOW DOES BITOCOIN OPERATE?**

The operation of Bitcoin can be demonstrated on simple contract of sale. One party would like to buy a good for 3 bitcoins from another party. As a new user, you can get started with Bitcoin without understanding the technical details. Once you have installed a Bitcoin wallet on your computer or mobile phone, it will generate your first Bitcoin address. The first party opens its bitcoin wallet (input)<sup>8</sup>.

After that, the buyer scans/copies address of the seller in order to pay for the good and fills in an amount of money (3 bitcoins). If you want to send bitcoins, you need two things: a bitcoin address and a private key. A bitcoin address is generated randomly, and is simply a sequence of letters and numbers. The private key is another sequence of letters and numbers, but unlike your bitcoin address, this is kept secret<sup>9</sup>.

Later, the party sends bitcoins from its bitcoin wallet out to the wider bitcoin network, where the transaction is propagated and validated by the network nodes. Mining is a system that is used to confirm waiting transactions by including them in the block chain. It enforces a chronological order in the block chain, protects the network, and allows different computers to agree on the state of the system. To be confirmed, transactions must be packed in a block that fits very strict cryptographic rules that will be verified by the network. These rules prevent previous blocks from being modified because doing so would invalidate all following blocks. This way, no individuals can control what is included in the block chain or replace parts of the block chain to roll back their own spends. Thus, miners include the transaction to the next block to be mined.

Emission of bitcoins was named “Mining” as it resembles other forms of mining (for instance, gold from the rock) - require production resources and takes considerable time.

During the next step, the nodes verify the result and propagate the block. After that, the seller sees the first confirmation. As a result, new confirmations appear with each new block that is created.

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<sup>8</sup> <<http://www.economist.com/bitcoinexplained>>, last accessed on 05/19/16.

<sup>9</sup> Benjamin Guttman, *The Bitcoin Bible Gold Edition: All you need to know about bitcoins and more*, Norderstedt, 2013, p.22

#### **4. E-MONEY VS. BITCOIN**

E-money is an electronic component of currency systems, and still trades in familiar units such as dollars, euros, pesos, or yen. E-money is typically regulated and controlled within the framework of a government's central banking system. The customers of such transactions are identified under Financial Action Task Force standards and as a result are not anonymous<sup>10</sup>. Despite the fact that both e-money and bitcoins are in digital format, there is plethora differences between them.

**Table 1 Differences between E-money and Bitcoin**

<b>Criterion</b>	<b>E-money</b>	<b>Bitcoin</b>
Value	Equal to amount of fiat currency exchanged into electronic form	Determined by supply and demand, and trust in the system
Accessibility	Access to electronic devices such as mobile phones, and on agent network	Largely limited to Internet connection
Customer ID	Financial Action Task Force standards apply for customer identification (though such standards permit simplified measures for lower risk financial products)	Anonymous
Production	Digitally used against receipt of equal value of fiat currency of central authority	Mathematically generated ("Mined") by peer network
Issuer	Legally established e-money issuer	Community of developers, called "miners"

Bitcoin is a decentralized electronic currency that derives its value from supply and demand as well as trust in the system. The network uses complex math to verify transactions, and the people that volunteer their computing power to the network, or "miners", are generated bitcoins as a reward for their efforts.

In contrast to Bitcoin, e-money is not a separate currency and is overseen by the same central authority as the underlying national currency<sup>11</sup>. In addition, the value of Bitcoin is determined by supply and demand, and trust in the

<sup>10</sup> <<http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf>>, last accessed on 05/19/16.

<sup>11</sup> Sarah Rotman, Bitcoin Versus Electronic Money, CGAP, January 2014, p. 2

system, meanwhile the value of e-money is equal to amount of fiat currency exchanged into electronic form.

The most important difference between Bitcoin and e-money is that the last is regulated and issued by legally established institution, fixed in legislation, meanwhile bitcoin is issued by community of developers, called “miners” and is not fixed at the level of Law in majority of states.

## **5. WORLDWIDE REGULATION OF VIRTUAL CURRENCY**

First of all, we should start with high-developed legislation in Brazil. On October 9, 2013, Brazil enacted the Law No. 12,865, which provided the possibility for the normalization of mobile payment systems and creation of electronic currency, including the bitcoin<sup>12</sup>. Among other things, the Law fixes payment arrangements and payment institutions that comprise the Brazilian Payment System (Sistema de Pagamentos Brasileiro, SPB). The Law No. 12,865 defines “payment arrangement” as a set of rules and procedures that regulate the rendering of a particular service to the public that is accepted by more than one recipient, through direct access by end users, payers, and recipients. “Payment institution” is defined as a legal entity that, by adhering to one or more payment arrangements, has as a principal or secondary activity, alternatively or cumulatively, one of the activities listed in article 6(III). “Electronic currency” is defined as resources stored on a device or electronic system that allow the end user to perform a payment transaction.

According to the legislation of China, we should mention that on December 3, 2013, the central Bank of China and four other central government ministries and commissions jointly issued the Notice on Precautions Against the Risks of Bitcoins. Defining it as a special “virtual commodity,” the Notice stated that bitcoin is not a currency by its nature. Moreover, it should not be circulated and used in the market as a currency. Banks and payment institutions in China are prohibited from dealing in bitcoins. The Notice required that, at this stage, financial and payment institutions may not use bitcoin pricing for products or services, buy or sell bitcoins, or provide direct or indirect bitcoin-related services to customers, including registering, trading, settling, clearing, or other services; accepting bitcoins or using bitcoins as a clearing tool; and trading bitcoins with Chinese yuan or foreign currencies<sup>13</sup>.

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<sup>12</sup> <<http://www.bcb.gov.br/Pom/Spb/Ing/InstitucionalAspects/Law12865.pdf>>, last accessed on 05/20/16

<sup>13</sup> <<http://www.loc.gov/law/help/bitcoin-survey/>>, last accessed on 05/20/16

In addition, we should notice such a new developing system of virtual currency legislation in Japan. A set of regulations was approved by Japan's Cabinet on 4 March, 2016, recognizing virtual currencies as a legal form of payment with the same functions as fiat money<sup>14</sup>. The main aim is to fight against money laundering and protect customers of virtual currency exchanges. The new regulations place bitcoin exchanges under the authority of the Japanese Financial Services Agency. It is obliged to register bitcoin exchanges with the Agency, have a minimum capital of \$88,000, submit annual financial reports and undergo auditing by certified accountants.

We would like to emphasize that the most effective governmental actions were accomplished in USA. In June 2015, New York Department of Financial Services issued the world's first specialized set of regulatory standards of cryptocurrency called "BitLicense". The document contains the conditions of the activities of the companies with a "virtual currency" in the state of New York. After approval of the bill, Bitfinex Kraken announced his decision to leave New York due to the need for obtaining licenses. On September 22, 25 companies have applied for a license in NYDFS. However, only one, namely, Circle Internet Financial, has managed to get it without further obstacles. Some financial institutions have gone to bypass and obtained a license as a public trust companies. For instance, it was made by itBit Trust Company and Gemini Trust Company, LLC.<sup>15</sup>

Concerning California legislation, in January 2015, California became the first US state, which officially authorized the use of Bitcoin, but with significant limitations. On June 28, 2014, California passed Assembly Bill 129 to permit the issuance and use of alternative currencies by repealing an existing law that prohibited issuing or putting in circulation, as money, anything but the lawful money of the United States. California's "BitLicense" has failed to pass in the Legislature.<sup>16</sup>

On 19 February, 2016, bankruptcy Judge Dennis Montali, in the Northern District of California, found that the Bitcoin at issue should be classified as "intangible personal property", but not a currency.<sup>17</sup>

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<sup>14</sup> <<http://www.coinfox.info/news/5020-japanese-government-approves-new-bitcoin-regulations>>, last accessed on 05/20/16

<sup>15</sup> <<http://fortune.com/tag/bitcoin-regulation/>>, last accessed on 05/20/16

<sup>16</sup> <<http://www.digitalcurrencycouncil.com/legal/california-virtual-currency-legislation/>>, last accessed on 05/20/16

<sup>17</sup> <<http://www.coindesk.com/bankruptcy-judge-bitcoin-property-currency/>>, last accessed on 05/20/16

The Bill 1326 defines “virtual currency” broadly to mean “any type of digital unit that is used as a medium of exchange or a form of digitally stored value or that is incorporated into payment system technology,” including digital units of exchange that have a centralized repository or administrator, are decentralized and have no centralized repository or administrator, or may be created or obtained by computing or manufacturing effort.

On April, 25 2016 Bitstamp announced that Luxembourg has granted it payment institution license, making the company the first nationally licensed Bitcoin exchange in the world. Under the European Union’s “passport” program, which allows financial services providers legally established in one member state to operate in others, Bitstamp, the third-largest Bitcoin exchange, will also be licensed across all 28 European Union countries. The license goes into effect July 1, when Bitstamp will be operational in Luxembourg. Bitstamp also announced the launch of euro-Bitcoin trading. Consumers in all EU countries wanting to exchange euros for Bitcoin and vice versa will be able to do so through a fully licensed Bitcoin exchange.<sup>18</sup>

Summing up the results, we can see every day changing in legislation about Bitcoin regulation, including impact of leading countries on legislation for development of EU legislation.

## **6. REGULATION OF BITCOIN IN EU MEMBER STATES**

The majority of EU Member States, namely, Belgium, Cyprus, Denmark, Netherlands, Portugal and Spain have no regulation concerning cryptocurrency, warnings have been made with regards to their potential threats. Nevertheless, some Member States, such as Germany, France and others have undertaken steps in order to regulate cryptocurrency. The author has carried out an analysis on Bitcoin’s legal status in those states, where bitcoins are popular and fixed in some governmental or official opinion on bitcoin.

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<sup>18</sup> <<http://www.forbes.com/sites/laurashin/2016/04/25/7886/#37923897518d>>, last accessed on 05/20/16



**Table 2 The regulatory basis for Bitcoin in some EU Member States**

EU Member State	Regulation	Official opinion
Croatia	On December 6, 2013, the Croatian National Bank reportedly conducted a discussion on the circulation of digital currencies and concluded that the Bitcoin is not illegal in Croatia. <sup>19</sup>	CNB stated that it is not electronic money since it's not debt to the issuer and that it is not legal tender in Croatia but can be legally used.
Estonia	In March 2014, Estonian Tax Authority defined the official government position that Bitcoin is an alternative means of payment and income derived from Bitcoin transactions constitutes capital gain subject to taxation. <sup>20</sup>	Bitcoin is widely spread in Estonia. However, there is no government regulation concerning this issue.
Finland	Ruling 034/2014 by the Finnish Central Board of Taxes (CBT) stated that commission fees charged on bitcoin purchases by an exchange market were, under the EU VAT Directive, banking services and therefore VAT exempt. <sup>21</sup>	The Bank of Finland concluded that bitcoin simply doesn't meet the legal conditions required to be considered a form of electronic payment, either.
France	In June 2014 France's central bank released a report on the Bitcoin, warning about the dangers of such "virtual currencies." <sup>22</sup>	Bitcoin cannot be considered a real currency or means of payment under current French laws.
Germany	The communication on bitcoin issued by Federal Financial Supervisory Authority on 19 December 2013 defines bitcoins are legally binding financial instruments that fall into the category of units of account, in accordance with the first sentence of section 1(11) of the German Banking Act.	BaFin (the German ministry of finance) announced it does not consider bitcoin to be e-money or a functional currency. Instead, it referred to it as "private money" and a "financial instrument". <sup>23</sup> This does require an authorization under the German Banking Act if the purchasing or selling of Bitcoins is provided on a commercial scale.
Slovenia	On December 23, 2013, the Ministry of Finance of the Republic of Slovenia issued a formal opinion about the status of the bitcoin and other virtual currencies in response to a request from the Tax Administration of the Republic of Slovenia. <sup>24</sup>	The opinion states that the bitcoin is not a monetary means under Slovenian law and not a financial instrument.

<sup>19</sup> <[http://www.reddit.com/r/Bitcoin/comments/1sjgby/croatian\\_central\\_bank\\_establishes\\_that\\_bitcoin\\_is/](http://www.reddit.com/r/Bitcoin/comments/1sjgby/croatian_central_bank_establishes_that_bitcoin_is/)>, last accessed on 05/20/16

<sup>20</sup> <<http://www.dv.ee/article/2013/12/19/chtobank-jestonii-dumaet-o-bitkoine>>, last accessed on 05/20/16

<sup>21</sup> <[http://www.vero.fi/sv-FI/Detaljerade\\_skatteanvisningar/Inkomstbeskattning\\_av\\_personkunder/Inkomstbeskattning\\_av\\_virtuella\\_valutor%2828454%29](http://www.vero.fi/sv-FI/Detaljerade_skatteanvisningar/Inkomstbeskattning_av_personkunder/Inkomstbeskattning_av_virtuella_valutor%2828454%29)>., last accessed on 05/20/16

<sup>22</sup> <[http://www.banque-france.fr/fileadmin/user\\_upload/banque\\_de\\_france/publications/Focus-10-stabilitefinanciere.pdf](http://www.banque-france.fr/fileadmin/user_upload/banque_de_france/publications/Focus-10-stabilitefinanciere.pdf)>., last accessed on 05/20/16

<sup>23</sup> <<http://www.gesetze-im-internet.de/kredwg/index.html>>, last accessed on 05/20/16

<sup>24</sup> <[http://www.durs.gov.si/si/davki\\_predpisi\\_in\\_pojasnila/dohodnina\\_pojasnila/dohodek\\_iz\\_kapitala/dobicek\\_iz\\_kapitala/vrednostni\\_papirji\\_in\\_delezi\\_v\\_gospodarskih\\_druzbah\\_zadrukah\\_in\\_drugih\\_oblikah\\_organiziranja\\_ter\\_investicijski\\_kuponi/davcna\\_obravnavna\\_poslovanja\\_z\\_virtualno\\_valuto\\_p\\_o\\_zdoh\\_2\\_in\\_zddpo\\_2/](http://www.durs.gov.si/si/davki_predpisi_in_pojasnila/dohodnina_pojasnila/dohodek_iz_kapitala/dobicek_iz_kapitala/vrednostni_papirji_in_delezi_v_gospodarskih_druzbah_zadrukah_in_drugih_oblikah_organiziranja_ter_investicijski_kuponi/davcna_obravnavna_poslovanja_z_virtualno_valuto_p_o_zdoh_2_in_zddpo_2/)>, last accessed on 05/20/16

Consequently, Member States' legislative approaches on regulation virtual currencies are much diversified and have numerous imperfections and gaps. Thus, we can assume that the regulation of Bitcoin requires the implementation of conceptually new legislation.

According to our survey, the Dutch model can be implemented in other EU Member States: entities, which are involved in commercial trade of cryptocurrency, require a license as they are considered to deal with financial instruments.

## **7. ANALYSIS OF LEGAL FOUNDATION FOR BITCOIN**

This section includes analysis of legal foundation for Bitcoin's functionality is carried out from the perspective of relevant EU supranational legislation and underlying conceptual framework. The main aim of abovementioned analysis is to demonstrate the applicability of relevant legislation to Bitcoin.

Bitcoin's legal framework is extremely unclear. Such course of events led to the fact that none of the regulatory bodies in the EU have achieved sufficient clarity in the context of legal treatment of Bitcoin and its stakeholders. Therefore, there is an urgent need for a precise strategy of Bitcoin's regulation in order to establish the maximal possible balance between the interests of Bitcoin stakeholders, who strain after the Bitcoin's benefit and decreasing of the relevant risks, and the interests of regulators.

Despite the fact that the concept of Bitcoin lacks clear legal framework, the EU regulatory bodies tend to agree that Bitcoin is legal. Nowadays, there is no specific legislation related to the status of Bitcoin in the EU that would protect consumers from financial losses in case of failure of exchanges virtual currencies. However, there are a few legal acts devoted to Virtual Currency issue.

First of them is the European Banking Authority (EBA) 'Consumer Trends Report 2014'<sup>25</sup>. The EBA publishes an annual Consumer Trends Report to collect, analyse and report on consumer trends. In particular, trends and issues identified for 2014 include virtual currencies. This report contains an analysis of level and reasons of Bitcoin's spreading. In addition, it includes provisions concerning the risks related to virtual currencies. It is aimed at establishing a taskforce in order to decide whether virtual currencies ought to be regulated.

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<sup>25</sup> <<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKewiA88GW1e3MAhUDDiwKHbQp-BjsQFggdMAA&url=http%3A%2F%2Fwww.eba.europa.eu%2Fdocuments%2F10180%2F534414%2FEBA%2BConsumer%2BTrends%2BReport%2B2014.pdf&usq=AFQjCNE3ZdQAXAhv-g7ZkZwKqwbrHF3Dtg>>, last accessed on 05/20/16

The second one is European Banking Authority (EBA) Opinion on ‘Virtual Currencies 2014’<sup>26</sup>. On the 4th July 2014, EBA issued an Opinion on “virtual currencies”, following an analysis of the risks that could present as long as there are not regulated:

- Gives a definition of ‘virtual currencies’;
- Defines potential benefits of using VC;
- Determines different kind of risks (to users, financial integrity, etc.);
- Propose key risks drivers, regulatory approach for long and short term.

The EBA Opinion is an appropriate tool, which can build EU legislation concerning cryptocurrency in future.

The third one is European Central Bank (ECB) Report on ‘Virtual Currencies Schemes – a Further Analysis 2015’<sup>27</sup>. This report recognizes growth of virtual currencies recently and analyses some of their dynamics and challenges:

- Describes the notion “virtual currency schemes”;
- Includes new categories of the most relevant actors of VCS such as inventors, issuers, miners, processing service providers, users, wallet providers, exchanges, trading platforms, and others;
- Fixes the diversity of VCS;
- Clarifies VCS’s impact on the tasks of the Eurosystem. A significant part of the analysis addresses how risks associated with VCS can affect central bankers’ tasks, such as monetary policy, price stability, financial stability, supervision and the operation of payment systems.

In 2012, the European Central Bank defined virtual currencies, including Bitcoin, as ‘a type of unregulated, digital money’, which ‘act[s] as a medium of exchange and as a unit of account within a particular virtual community’, but does not clearly ‘fulfil the ‘store of value’ function in terms of being reliable

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<sup>26</sup> <[https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKewiG7dS71e3MAhXKORQKHRsgC9AQFggc-MAA&url=https%3A%2F%2Fwww.eba.europa.eu%2Fdocuments%2F10180%2F657547%2FEBA-Op-2014-08%2BOpinion%2Bon%2BVirtual%2BCurrencies.pdf&usg=AFQjCNHkk1caDiVORBQXlCknjBgC\\_keYgA&bvm=bv.122448493,d.bGg](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKewiG7dS71e3MAhXKORQKHRsgC9AQFggc-MAA&url=https%3A%2F%2Fwww.eba.europa.eu%2Fdocuments%2F10180%2F657547%2FEBA-Op-2014-08%2BOpinion%2Bon%2BVirtual%2BCurrencies.pdf&usg=AFQjCNHkk1caDiVORBQXlCknjBgC_keYgA&bvm=bv.122448493,d.bGg), last accessed on 05/20/16

<sup>27</sup> <[https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKewi\\_v9Dh1e3MAh-WIPRQKHwxFD3kQFggcMAA&url=https%3A%2F%2Fwww.ecb.europa.eu%2Fpub%2Fpdf%2Fother%2Fvirtualcurrencyschemesen.pdf&usg=AFQjCNHYIvtPVD-vu\\_a1IJTDN6RSSOXrmYg&bvm=bv.122448493,d.bGg](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKewi_v9Dh1e3MAh-WIPRQKHwxFD3kQFggcMAA&url=https%3A%2F%2Fwww.ecb.europa.eu%2Fpub%2Fpdf%2Fother%2Fvirtualcurrencyschemesen.pdf&usg=AFQjCNHYIvtPVD-vu_a1IJTDN6RSSOXrmYg&bvm=bv.122448493,d.bGg), last accessed on 05/20/16

and safe'. The European Central Bank in its comprehensive research on virtual currencies has defined Bitcoin as 'unregulated digital money, which falls within central banks responsibility as a result of characteristics shared with payment systems that give rise to the need for at least an examination of developments and the provision of an initial assessment'.<sup>28</sup>

Earlier the European Banking Authority has designated virtual currency, including Bitcoin, as a form of unregulated digital money that is not issued or guaranteed by a central bank and that can act as means of payment<sup>29</sup>. The EBA pointed out that since the bitcoin is not regulated, consumers are not protected and are at risk of losing their money and that consumers may still be liable for taxes when using virtual currencies.<sup>30</sup>

Moreover, there are certain unclear issues stemming from the consumer's payment in bitcoins. For instance, it is unclear, how to apply taxation rules to such Bitcoin transactions. Though certain national regulatory authorities within the EU have argued that Bitcoin transactions are subject to taxation under the relevant tax law, none of these regulatory bodies have clarified the way of such taxation, which should be implemented.<sup>31</sup>

The Court of Justice of the European Union has ruled that the services of a Bitcoin exchange in exchanging Bitcoin for a traditional currency is exempt from VAT on the basis of the 'currency' exemption (*Skatteverket v David Hedqvist Case C-264/14*).<sup>32</sup>

The Court was asked to consider how an exchange, which sold Bitcoin for traditional currencies, would be taxed.

Mr. Hedqvist wishes to provide, through a company, services consisting of the exchange of traditional currency for the 'bitcoin' virtual currency and vice versa.

Before carrying out such transactions, Mr. Hedqvist requested for a preliminary decision from the Revenue Law Commission in order to establish whether VAT must be paid on the purchase and sale of 'bitcoin' virtual currency units.

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<sup>28</sup> [www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf](http://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf), last accessed on 05/20/16

<sup>29</sup> [www.eba.europa.eu/documents/10180/598344/EBA+Warning+on+Virtual+Currencies.pdf](http://www.eba.europa.eu/documents/10180/598344/EBA+Warning+on+Virtual+Currencies.pdf), last accessed on 05/20/16

<sup>30</sup> <http://www.eba.europa.eu/-/eba-warns-consumers-on-virtual-currencies>, last accessed on 05/20/16

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The Skatteverket appealed against the Revenue Law Commission's decision to the Högsta förvaltningsdomstolen (Supreme Administrative Court) arguing that the service to which Mr. Hedqvist's request refers is not covered by the exemption.

Having doubts as to whether one of those exemptions applies to such transactions, the Högsta förvaltningsdomstolen (Supreme Administrative Court) decided to stay the proceedings and refer to the Court of Justice for a preliminary ruling.

Court decision confirms that an exchange of Bitcoin for a traditional currency is a supply of services. The Court enacted that an exchange of Bitcoin fell within the exemption in Article 135(1)(e) of the VAT Directive<sup>33</sup>. This exempts transactions 'concerning currency, bank notes and coins used as legal tender' from VAT.

The decision that supplies Bitcoin should be exempt from VAT provides an important degree of certainty and should help virtual currency exchanges to set up in Europe.

## **8. BENEFITS AND RISKS OF USING BITCOIN**

Analyzing abovementioned legal basis for virtual currency we can define such main strengths, weaknesses, opportunities and threats of bitcoin.

<b>STRENGTH:</b>	<b>WEAKNESESS:</b>
<ul style="list-style-type: none"><li>• Lower transaction cost: there are no bank or other fees;</li><li>• Speed Transaction proceeding time: for Bitcoin the total process time is between 10-60 minutes. Also it works at 24/7 basis unlike payments made through traditional payment systems;</li><li>• Certainty of payment received;</li><li>• The absence of intermediaries;</li><li>- Financial inclusion outside the EU;</li><li>• Security of personal data: customers using Bitcoin leave no data behind which can be stolen</li><li>• Limited interference by public authorities.</li></ul>	<ul style="list-style-type: none"><li>• Bitcoin exchanges vulnerable to hacking;</li><li>• Pure consumer experience;</li><li>• Uncertainty about regulation;</li><li>• Bitcoins are not widely accepted;</li><li>• No buyer protection;</li><li>• No Valuation Guarantee;</li><li>• Uncertain Future.</li></ul>

<sup>33</sup> <<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3A131057>, last accessed on 05/20/16

<b>OPPORTUNITIES:</b> <ul style="list-style-type: none"><li>• Bitcoin accounting transparency eliminates the need for businesses to produce documents about activities;</li><li>• Contributing to economic growth;</li><li>• Elimination of obstacles in the context of creating Digital Single Market in EU;</li><li>• Investment in Bitcoin.</li><li>• It will be more consumer and business friendly.</li></ul>	<b>THREATS:</b> <ul style="list-style-type: none"><li>• Criminals are able to launder proceeds of crime because they can deposit/transfer VC anonymously;</li><li>• Criminals are able to launder proceeds of crime because they can deposit/transfer VC globally, rapidly and irrevocably (it might be used for money laundering)</li><li>• Criminals might use VC exchanges to trade illegal goods;</li><li>• Criminals/terrorists use the VC remittance systems and accounts for financing purposes. ( it can be used for financing criminals or terrorist activities)</li></ul>
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## 9. CONCLUSION

Analyzing the issue related to the regulation of Bitcoin, the author has carried out the technical analysis of the functionality of Bitcoin and the legal analysis of Bitcoin and the Bitcoin stakeholders. The technical analysis has shown that Bitcoin is a novel decentralized payment mechanism functioning under the Bitcoin protocol, which is practically impossible to amend in a way that contradicts the interests of the majority of Bitcoin stakeholders. The legal analysis has demonstrated that Bitcoin shares common properties with a number of existing conceptual and statutory categories. However, regardless of this fact, it is impossible to bring Bitcoin under the scope of current legislation, since the current legal framework is based on the centralized approach to money, payments, and financial services, and does not imply the existence of decentralized payment mechanisms.

Thus, it is necessary to adopt single Virtual Currency Act, which includes definition of “virtual currency” means any type of digital unit that is used as a medium of exchange or a form of digitally stored value. This Act should include provisions, which would regulate rules of taxation the Bitcoin transactions.

The clear advantage of action being taken at European Union level in respect of VCs is the possibility to implement a consistent level of regulation, which ensures that the risks identified are mitigated for all market participants in the European Union. Without a Union response, national regimes are likely to take differing forms. The nature of VCs is that they can be provided from one Member State but used across the European Union (and beyond) with little or no local infrastructure needed. Differing levels or forms of regulation in one

Member State could therefore lead to the VC industry shopping for the most convenient approach to the regulation, with European Union consumers receiving accordingly different levels of protection. Only regulation at European Union level can ensure removal or minimization of any barriers, cross-border provision of services or cross-border establishments.

It is important to consider a license to be obligatory and to create the Body, which will be authorized to issuing such licenses. It should be fixed that no Person shall obtain the superintendent engagement in Virtual Currency Business Activity without a license. The first company, which has got a license and became the first-fully-licensed bitcoin exchange in Europe is Bitstamp. The license will come into effect on July 1, 2016. The license has been signed by Luxembourg's Minister of Finance. This is the first time that a bitcoin exchange has been regulated by a state. In this case it has been passported to the entire continent of the EU. No other exchange has been able to get a national registration. Thus, this is a great achievement. We can predict that other exchanges will make the same steps in order to get licenses and to bring stability to the industry.

One of the key ideas of our research is to spread ideas concerning using of virtual currencies, namely Bitcoin in modern society. Bitcoin is the best tool, which can bring cryptocurrency to the masses. The reality is, the general public is still largely wary, or ignorant, of crypto. Why? The reason is that many people don't understand the mechanism of operation of Bitcoin. They are not ready to renounce usual, physical currency in classical meaning. There should be carried out a lot of work devoted to explanation of the benefits of Bitcoins. We hope that enlightenment among people will overcome the fear of using Bitcoin.

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