

Committee: Legal

Issue: Adopting uniform regulations on digital currencies

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WORDS OF WELCOME

Distinguished delegates of the Legal Committee,

I am Ariadne Panagiota Fatsi, undergraduate student at the Faculty of law in NKUA, and I will be honoured to serve as your Deputy President for this simulation. My main field of interest is international law and human rights, but for this edition of ATSMUN, I had to venture in the world of finance and come up with this part of the study guide, which covers one of the most challenging topics for modern day legislators. As I always say, a conference is all about the experience you want to create for yourselves and the delegate you want to be. Thus, my wish for all of you is to set your own goals for this conference and make your experience unforgettable. My tips for a successful performance: Be well prepared, be original, be daring!

Let the games begin!

INTRODUCTION

Although digital currencies have been around since the late eighties and became more widespread in the early nineties, governing bodies, such as the EU, have yet to produce and approve a set of common regulations concerning digital currency (and especially cryptocurrency) in all of its brands and forms and in all nations which regularly use it. This study guide aims to assist your understanding of the fundamentals of digital currency and its history as well as the problematic aspects of its nature, which are, after all, the reason why uniform regulations are rendered indispensable.

DEFINITION OF KEY TERMS

Currency

A currency is a generally accepted form of money which is issued by a government and circulated within an economy.

Digital Currencies

A digital currency, also referred to as digital money, electronic currency or cybercash, is a medium of exchange available only in digital form. As of that, it is not a tangible currency, as it is not accessed in physical form (e.g. banknotes, coins). These currencies share the characteristic that they have a value in the real world and can be used to afford products and services. Digital currencies are generated, stored and transferred in the digital world and they are for the most part not associated with the government of any country. They can be accessed or transferred through devices such as but not limited to computers, smartphones, tablets etc. Their ownership can be transferred instantaneously regardless of borders.

Digital currencies can be divided into soft and hard ones. On the one hand, soft digital currencies are the ones on which transactions can be cancelled and payments can be reversed. This is how PayPal and credit cards work. On the other hand, hard digital currencies work more like cash, are cheaper to operate, but unless “softened” by a third party service they offer no ability to reverse payments or dispute a transaction.

Cryptocurrencies

Cryptocurrencies fall under the category of digital currencies, but there are substantial differences between these two. A cryptocurrency is based on cryptography, which includes a significant amount of algorithms and mostly mathematics to keep communications secure. While attempts on legislation concerning digital currencies have already begun in both the EU and the US, cryptocurrencies have not yet been addressed in regulations, mainly because of their volatile, partially anonymous and decentralized nature.

Mining

The concept of mining is central to understanding how cryptocurrencies work. Mining is the way of ensuring scarcity for the cryptocurrency by making the acquisition of it a hard and time-consuming endeavour. For instance, the Bitcoin program is designed to only make 21 billion Bitcoins available for mining (of which about 17 billion were already mined

in December 2017). Meanwhile, mining a new Bitcoin is becoming increasingly difficult; therefore, the 21 billion mark will, according to calculations, be hit in 2140.

Virtual currencies

Virtual currencies, which appeared much earlier than the former two, are not to be confused with digital currencies. The main difference between the two is that a digital currency can be existent only in digital form -although it has an effect on the real world- as it can be used to purchase goods and services, while a virtual currency can be used in virtual worlds e.g. an in-game currency, which can be used to purchase certain traits on a server game. Nevertheless, the messenger company Tencent QQ in China reached so great popularity that the virtual QQcoins started getting used in minor transactions in the physical world, making the People's Bank of China consider suspending the virtual coin in fear of inflation.

Tangible and Intangible assets

Tangible assets are existent and measurable in the physical world. Such assets are land, property, vehicles, machinery, equipment etc.

Intangible assets are *“typically nonphysical assets used over the long-term. Intangible assets are often intellectual assets, and as a result, it's difficult to assign a value to them because of the uncertainty of the future benefits¹”*.

An asset can be described as intangible, according to the International Accounting Standards' (IASs) article 38, if it is identifiable, non-monetary (cash and cash equivalents) and without physical substance. Therefore, digital currencies would certainly belong to the intangible assets category.

Depreciation

Depreciation is an accounting method of allocating the cost of a tangible asset over its useful life. It is used to account for declines in value over time. Businesses depreciate

¹ Murphy, Chris B. “How Do Tangible and Intangible Assets Differ?” Investopedia, Investopedia, 5 June 2018, www.investopedia.com/ask/answers/012815/what-difference-between-tangible-and-intangible-assets.asp.

long-term assets for both tax and accounting purposes. For tax purposes, businesses can deduct the cost of the tangible assets they purchase as business expenses.

Revenue

Revenue is the amount of money that a company actually receives during a specific period, including discounts and deductions, for returned merchandise. Revenue is calculated by multiplying the price at which goods or services are sold with the number of units or the amount sold. Revenue is also known as sales on the income statement.

BACKGROUND INFORMATION

Digital Currencies – A Brief History Review

Contrary to popular belief, digital currencies have been around before PayPal and Bitcoin. It was before the 1990s, when David Chaum, an American computer scientist, developed the Blind Signature, a system which would tackle the double spend problem in online purchases and guarantee the privacy of the users. His company, DigiCash, was founded in 1989 and it was an ambitious project which planned to keep consumers anonymous (or pseudonymous) when they made their purchases and in the same time to have merchants report their transactions to the banks. Chaum's company failed to persuade the banks and merchants to use it and in 1998, it filed for bankruptcy.

Meanwhile, the 1990s found consumers more suspicious to give their credit card details online than ever and thus, new companies promising secure online payments bloomed. The most notable amongst them were E-gold (1996), which was widely used until 2013, and PayPal (found as Confinity in 1998), which remains to this day one of the most resilient digital currencies worldwide.

Furthermore, it is deemed necessary to mention Liberty Reserve (2006), which allowed user-to-user transactions and even enabled the interacting users to remain anonymous to each other. Liberty Reserve and E-gold were - because of their anonymous nature - widely used for extortions, money laundering and other criminal transactions. They will be of particular interest during the discussion of the problem, as experts can already see that Bitcoin seems to be having similar issues, which could make it have the fate of its predecessors.

Lastly, Bitcoin, founded in 2008, took advantage of Chaum's blind signature system and "succeeded where many other digital currency ventures failed. It was precisely those

failures that finally led to the wild success and popularity of Bitcoin.”² Indeed, Bitcoin has made user-to-user interaction simple; it has maintained a high level of anonymity for all users and through the “mining” process has ensured to make its currency scarce to find and thus, a backing for money, like oil and gold.

Way of operation – Digital currencies vs. Cryptocurrencies

Legislation attempts have been made to harness the world of digital transactions, but cryptocurrencies are still a heated topic of discussion and adopting uniform regulations on any aspect of the digital currencies spectrum can definitely be a challenge. Before we proceed to the criticism and the discussion of the issues which have occurred, let us go over some core differences between digital currencies and cryptocurrencies.

Digital currencies are centralized. This means that they are ran by a central system, a group of people and computers who can guarantee the service (bank, company, etc.) and provide solutions in case of dispute. Cryptocurrencies are decentralized. They are based on a transaction chain (also found as Blockchain) where all the transactions are recorded and the community makes the regulations.

Digital currency services require identification. It is very common that the user will have to provide ID details, picture, address, phone number and other personal data to be able to use the service. Cryptocurrencies are not completely anonymous, as all transactions are recorded, but confidential information is not necessary to use the service. Digital currencies are, however, not transparent, as some information is confidential. On the Blockchain, one can access all the transactions. However, one could argue that cryptocurrencies are not that transparent either, because one can see the transactions. There is no connection, however, to a name or any personal data.

Transaction disputes are an area in which digital currencies still rule supreme, as the central authority can deal with a number of arising issues and cancel payments upon the request of the user or the authorities. With cryptocurrencies, however, the Blockchain cannot be erased without the consent of a majority of users and it is highly unlikely that they

² Kim, Daniel. “The Early History of Virtual Currency and Cryptocurrency.” Medium, Augmenting Humanity, 5 Oct. 2017, medium.com/@danielsfskim/the-early-history-of-digital-cash-and-cryptocurrency-b87436711de0.

will consent to changes, as even in significant hacking cases like “The hack of DAO”³ the response was mixed and no actual decision was made. Due to this fact cryptocurrencies are ideal to host money laundering, fraud and other criminal transactions and these are the biggest concerns when discussing about whether the cryptocurrencies of today will survive, even though they face the same problems their predecessors did.

Criticism

- **Volatility:** The Bitcoin is, by its own definition and nature, unstable as a currency. The value of Bitcoins has fluctuated considerably since their introduction to the digital currency market, reaching the peak of their value in 2013. It is possible that this is caused by the infancy of the currency and we can speculate that its value will eventually stabilise, but it could also be suggestive of a idiosyncratic and innate weaknesses, such as the lack of a central regulatory authority that would work as a steadying factor. This problematic nature could be considered the primary common denominator of all cryptocurrency.
- **Non-regulatory system:** Given the currency is not regulated by a consolidated body, it creates concerns regarding law enforcement and taxation authorities due to its obscurity and lack of digital footprints, and therefore the ease with which it can be exploited for money laundering and various illegal deeds. This is exhibited in the case of Liberty Reserve, which basically put forward a predecessor-product to popular crypto currencies of the present. Liberty Reserve was forced out of business by U.S. federal prosecutors in May 2013 who charged its creator, Arthur Budovsky, and six accomplices with money laundering. Liberty Reserve was alleged to have been the medium/means to launder the sum of more or less \$6 billion in criminal proceeds during its short-lived history of operations. A foremost present-day dispute over crypto currencies like Bitcoin is on transparency. Since the data of the transactions are absolutely transparent (the procedure, the hows and the whats), the persons associated to any given transaction, as with cash transactions, cannot be straightforwardly pinpointed. A paper published in 2011 in the U.S. aimed to answer to this and establish whether the anonymity of users can be worn. It was maintained that “public keys can be attached to users by transacting with them and logging the related address. Whilst this may be possible for established services within the

³ Read more at: <https://www.coindesk.com/understanding-dao-hack-journalists/>

Bitcoin economy, it is not clear if this could be used to deter criminal activity. One simple circumnavigation of the control would be for a user to create multiple addresses and prevent transactions being linked together.”⁴ There has been substantial debate at a governmental frame on the usage of crypto currencies.

- **Technological complexity:** The intricate technology and functional system sustaining a crypto currency leads to many people feeling unavoidably distrustful towards this modern financial concept that they do not entirely comprehend. This wariness has only been enhanced by “cryptocurrencies experiencing glitches in the which has resulted in transactions being halted and improper transactions being allowed to occur, for example using the same Bitcoins to make two separate payments (this has also occurred when using different brands of cryptocurrency)”⁵. Likewise, the legal framework around implementing this complicated technology is ambiguous. For instance, to acquire Bitcoins an individual must mine for them using particular software which obliges them to possess adequate computing resources; it is normal for users to enter mining pools to merge their resources for this objective. It is conceivable, in an organisation without sufficient security measures in place, that a user could achieve access to several company computers and use them to mine for Bitcoins whilst they are inactive. This lies within a grey area concerning whether actions that could be characterised as illegal (or even unethical/inappropriate) have been undertaken and would probably come down to the organisation’s specific information systems policy. It is unsure whether such action should be called theft; nevertheless, it could be considered a felony in accordance to the Computer Misuse Act of 1990, if unsanctioned access has been gained.

- **Revenue recognition and taxation policies:** If digital currencies become more popular, it would necessitate the consideration of revenue recognition in regards to any transactions undertaken with their usage, the accompanying measurement criteria and possible taxation implications, the category within which they would fall (cash or non-cash assets), and consequently the accounting policies that should apply (depreciation). If the acquisition of a digital currency is considered an asset, it should be deliberated how one would account it for in book-keeping and records, for

⁴ ‘Undisputed, Digital, Virtual and Crypto currencies: issues and accounting risks’, Grant Thornton, [www.grant-thornton.co.uk](https://www.grantthornton.co.uk/globalassets/1.-member-firms/united-kingdom/pdf/publication/2016/undisputed-may-2016-crypto-currencies.pdf), <https://www.grantthornton.co.uk/globalassets/1.-member-firms/united-kingdom/pdf/publication/2016/undisputed-may-2016-crypto-currencies.pdf>

⁵ Ibid

instance what follows when an accounts receivable entry is paid via cryptocurrency (e.g. Bitcoins).

MAJOR COUNTRIES AND ORGANISATIONS INVOLVED

European Union (EU)

The European Union has taken measures to regulate digital currencies and is currently a legislative pioneer in the field of cryptocurrency regulation, as in January it reached the 4th AMLD (Against Money Laundering Directive) amendment which became the first document to introduce a binding regulation on currencies based on Blockchain. The EU has not taken actions to impede Blockchain's function and is embracing the innovation, but the measures are mostly aimed at less anonymity and more traceability of the users who make specific kinds of transactions. In November 2017, the EC launched a €250,000 study to assess the opportunity and feasibility of an EU Blockchain Infrastructure.

United States of America (USA)

Though many States have tried to implement their own measures on digital currencies with better or worse success rates⁶, a federal approach is not yet the case. In July 2017, nevertheless, the Uniform Laws on Virtual Currency Businesses Act were adopted by all the States of America, with provisions which were rather oriented towards regulating the businesses which operate in the field of virtual currencies than virtual currency itself, but however provided some quite solid definitions on what can be characterized as a virtual currency. Sources from February 2018 report that the government is trying for a collective approach to digital currencies and cryptocurrencies. A month later, in March 2018, the US Securities and Exchange Commission (SEC) claimed that if certain platforms offer a type of asset which could be characterized as a security, they should register with the SEC or there could even be some sub-penalties. Analysts estimate that this could make the public more suspicious of entities which do not implement the federal security laws. In the aftermath of this statement, Bitcoin's price dropped below the 10.000\$ mark, which is considered to be a psychologically key number.

⁶ Read more about this at <https://www.cga.ct.gov/2018/rpt/pdf/2018-R-0027.pdf> about the regulations of Bitcoin in a number of States and the bills proposed.

United Kingdom (UK)

Currently in the UK there is no specific accounting guidance in relation to transactions undertaken in a digital currency. The UK is fully supportive of the EU's attempts to regulate digital currencies and is expected to further negotiate with the EU on this matter within 2018. The Treasury Committee launched an inquiry into cryptocurrencies and Blockchain technology in February, trying to find a compromise between innovations and secure online transactions. Sources close to the UK report that the government wishes to reach a solution which will attract digital currency companies and not fall behind their EU counterparts.

China – Japan – Asian states

After the spectacular success of the QQCoin in 2005, the last thing the People's Bank of China would wish for is more virtual currencies which it has no control over. While the blooming businesses of Shanghai pioneer the crypto world, the government is hunting them down, unwilling to find a compromise. Strangely enough, the first government which banned cryptocurrencies is also the first one which has provided a rating for a few of them, including Bitcoin and Ethereum. Analysts recognize the danger of criminal transactions with cryptocurrencies, but still encourage a proper regulation instead of a ban.

On the contrary, Japan is already using Bitcoin and other cryptocurrencies as a norm payment method, while other Asian states such as Singapore, Thailand, India, Vietnam, Indonesia and Philippines have no regulations whatsoever on the issue.

Russian Federation

A few months after planning to completely ban cryptocurrencies in order to combat terrorist funding and money laundering, the Russian ministry of finance decided to come to a compromise and find a way to regulate cryptocurrencies in January 2018. Transactions in cryptocurrency are still not encouraged by the State, but since the City Court of Saint Petersburg revoked the blocking of 40 Bitcoin related websites in 2017, the government

settled with regulating the digital currencies, though it is still occasionally backing out, causing the price of Bitcoins to slide, especially when China is supporting the eradication of cryptocurrencies too.

TIMELINE OF EVENTS

<p>1989</p>	<p>DigiCash is possibly the original company to innovate schemes and practices in the online payments landscape. The actual money in Digicash’s system was baptised Ecash. This happened in the 1990s, a decade prior to Bitcoin. DigiCash specifically, did not manage to convince the banks and the merchants to espouse it. In those times, Ecash was still a comparatively novel notion for the majority of people, particularly merchants.</p>
<p>1994</p>	<p>FirstVirtual is founded by First Virtual, Inc. in San Diego, CA, USA. In 1998, First Virtual abandoned the online payments industry to focus on other Internet services. The company's e-commerce merchants and dealings were taken over by CyberCash, its one-time competitor, which persisted until its bankruptcy announcement in 2001 and was obtained by VeriSign, Inc.</p>
<p>1994</p>	<p>Stanford Federal Credit Union becomes the first bank to introduce internet banking systems, allowing its members to handle their monetary assets online.</p>

1996	E-gold: started by Douglas Jackson, it managed to have over 5 million user accounts by 2009. E-gold grew so large, that even merchants begun adopting it. The digital currency was supported by gold and it came to be quite a fruitful endeavour until it was targeted and exploited by criminals and hackers. Constant attacks on the website by cybercriminals and the usage of e-gold as preferred currency by extortionists and money launderers resulted in its collapse.
1998	WebMoney is started. Except for the subsidiarity factor, WebMoney is a form of digital currency for a whole range of real-world purposes. WebMoney developed into the next best thing after E-gold and appealed to plenty of E-gold's users, after the latter was dissolved. Nonetheless, WebMoney implemented significant alterations to its amenities soon afterwards, to inhibit its usage for unlawful undertakings. WebMoney presently backs a variety of world-wide currencies including GBP, USD, Russian Rubles and even Bitcoin.
1998	PayPal (founded as Confinity) aimed to provide secure software for financial transactions on individually owned devices. PayPal, as we know it, kicked off in October of 2000.

2002	PayPal joined the world of publicly traded companies. In the same year, PayPal's stock grew to 55% on NASDAQ. In July of 2002, eBay Inc. acquired PayPal for the fine price of \$1.5 billion. Ever since PayPal became eBay's users' first choice for money transfers.
2006	Liberty Reserve was an attempt towards creating a centralized but pretty much anonymous money transfer business. User accounts were not verified and users were perfectly able to hide their identity even when making a transaction. Liberty Reserve was forced out of business by authorities from multiple countries and its founders were imprisoned for money laundering and supporting illegal activities. By May 2013, the platform was shut down.
2009	Bitcoin was first introduced as a working decentralized digital currency platform, which utilized much of David Chaum's technology. Unlike all previous digital currencies, Bitcoin has an advantage in the form of its decentralized nature, which leaves the whole platform in charge of a larger community than an individual or corporation. Nevertheless, Bitcoin is definitely not flawless, as becomes apparent by the criticisms analysed above.

2014	Carl Icahn, an activist and an investor of PayPal, carried out a massive public campaign by demanding a PayPal split from eBay. In July of 2014, PayPal was officially a public company again. PayPal's market value climbed to \$49 billion on its first official day trading as a public company again.
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UN INVOLVEMENT: RELEVANT RESOLUTIONS, TREATIES AND EVENTS

Even though the UN hasn't taken measures in the form of a resolution, it has investigated many aspects of the topic. The organization itself seems more than willing to embrace both Bitcoin and Ethereum as soon as possible, as the World Food Program (WFP) has been experimenting with various digital currencies over the past three years. Currently, there are a lot of offers for donations with cryptocurrencies and the WFP is actively researching whether a Blockchain would prove useful for providing humanitarian aid.

Meanwhile, the UNODC has already in 2017 launched training programmes for law enforcement officers from 22 different countries, focused in teaching them how to detect fraud and illegal transactions on cryptocurrencies. The UNRISD, UNESCAP and IMF have all produced very informative and enlightening essays about the issue.

PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

Uniform regulations on a global scale have not been the case to this day, as most Member States have been struggling with regulating digital currencies within their own borders. However, a step to the right direction would be the AML Directive of the EU, especially after the 4th amendment. The AMLD has been welcome with much relief by analysts worldwide and is the first common regulation on digital currencies. Another document of much interest is the 2016/2007(INI) Resolution of the European Parliament of May 2016, which provides a set of tools and regulations regarding virtual and digital

currencies. Last but not least, the Uniform Laws VCBA between all of the United States of America is an honest attempt at uniform regulations, from a business perspective.

POSSIBLE SOLUTIONS

It is common ground both in 2016/2007(INI) and the report of the IMF that any uniform legislation attempts should take into consideration the risks of digital currencies and their specific characteristics and act in proportion to that, so as not to cripple innovation. Moreover, it remains to be seen whether the grade of integration of virtual currencies and conventional financial systems will be full, gradual or non-existent. Therefore it is important to establish a common framework for international standards, like the ones already established by the EU.

Many international bodies have already published reports to educate the public and proved to be fora of discussion, but still it would seem like the understanding of the international community towards the new currencies is not up to par. Further research is needed to evaluate the risks and the special models of the virtual currencies landscapes. The people need to be further informed and awareness must be raised about the possible benefits, implications, risks and investments. Customer protection is also a field which would have to work on new regulations, especially as far as transparency is concerned.

As mentioned above, digital currencies and cryptocurrencies have different levels and grasps on the notion of transparency. A Blockchain contains each and every transaction, but it is highly improbable to locate an individual behind it, while a digital currency company, like PayPal, would have all the necessary data about the users, but the transactions would be visible only to specific people. The EU and the UK have both expressed a wish for Bitcoin and other similar currencies to become far less anonymous, but a uniform regulation would have to answer to whether this would be acceptable in full scale or only under specific circumstances. Many analysts find that Bitcoin and other current cryptocurrencies have the same drawbacks as their predecessors and are destined to fail in the same way. Special attention would have to be paid to the fact that digital currencies are borderless and thus the go-to law in dispute would have to be decided beforehand if we want to talk about uniform regulations. The issue of Blockchain as an algorithm which makes transaction dispute futile and cancelling payments impossible is also a matter of paramount importance if cryptocurrencies are to be widely accepted in everyday purchases.

Last but not least, the delegates acting on behalf of the United Nations should always keep in mind that sustainability is one of the primary concerns of the UN. Not only should the part digital currencies come to play in modern-day finance be evaluated, but also there must be a prediction for sustainability regarding the currencies in themselves. Are digital currencies with their even more innovative offspring, cryptocurrencies, a way to the future or are they going to collapse with fatal results for the global economy? Are governments well-equipped in skills and tools to fight illegal use of digital currencies or will the uniform legislation be a door open to online black markets and fraud? And how will countries which welcome digital currencies find common ground with states which wish to ban them once and for all?

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