SHOULD CRYPTOCURRENCY BE REGULATED AS MONEY OR ASSET FOR EFFECTIVE TAXATION? THE NEED FOR A NEW REGULATORY FRAMEWORK

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TABLE OF CONTENTS

ABSTRACT

Cryptocurrency can be defined either as money or as an asset. Governments worldwide take different regulatory approaches.[1] Lack of common approach creates legal uncertainty and confusion[2], which in the end, decreases the attractiveness of this market among potential investors. Thus, regulation is much needed to develop and increase the crypto market.[3] This paper argues that Cryptocurrency does not fall either entirely under the concept of money or fully under asset but requires a new regulatory framework.

To claim this, the thesis is discussing: 1) The concept of money, under which, history; types; functions; different characteristics of money will be addressed; 2) Concept of Cryptocurrency, history, what is and how does blockchain technology apply to Cryptocurrency; 3) Comparative characteristics of Cryptocurrency and money, matching and analyzing traits of fiat (fiat is a Latin word and means “let it be done”[4]) currency, gold and bitcoin; 4) Present regulations under United States, United Kingdom and German law, how do they identify Cryptocurrency, comparing taxation approaches, analyzing which one is more comfortable for consumer and how; 5) Concluding what types of suggestions states must consider for creating efficient tax legislation for Cryptocurrency that will develop this field and earn more revenue to the state.

The normative analysis is based on a comparative examination of tax legislation. The idea behind choosing this concrete field of law is that tax legislation is considered the core decision-making factor for engaging in this field. Well regulated, clear and organized tax norms mainly

[1] 'Regulation Of Cryptocurrency Around The World' (Loc.gov) <https://www.loc.gov/law/help/cryptocurrency/world-survey.php> accessed 20 January 2021

[2] Chuang T, 'When Cryptocurrency And Regulators Collide, Blockchain Startups Just Want Clarity – The Denver Post' (Denverpost.com, 2021) <https://www.denverpost.com/2018/06/07/cryptocurrency-regulation-blockchain-startups/> accessed 20 January 2021

[3] Obie S, and Rasmussen M, 'How Regulation Could Help Cryptocurrencies Grow' (Harvard Business Review, 2021) <https://hbr.org/2018/07/how-regulation-could-help-cryptocurrencies-grow.> accessed 20 January 2021

[4] 'Fiat | Origin And Meaning Of Fiat By Online Etymology Dictionary' (Etymonline.com) <https://www.etymonline.com/word/fiat> accessed 20 January 2021

attract people to invest in Cryptocurrency, and their current concerns are caused by lack of it.[5] As of January 2021, there are 8,289 Cryptocurrencies in the market. For the purpose of this thesis discussion, the first Cryptocurrency to ever exist, “Bitcoin” is used as a model of reference.

[5] Obie S, and Rasmussen M, 'How Regulation Could Help Cryptocurrencies Grow' (Harvard Business Review, 2021) <https://hbr.org/2018/07/how-regulation-could-help-cryptocurrencies-grow.> accessed 20 January 2021

INTRODUCTION

The financial crisis, market instability and distrust of centralized government commenced the creation of the first Cryptocurrency, "Bitcoin"[6]. Due to its ability to evade centralized governments interruption by being a "Peer-to-Peer Electronic Cash System"[7] Number of users rapidly raised throughout the previous decade and sustainably continues in the present[8]. Such demand caused a rapid increase in Bitcoin's value[9], thus boosted its influence on the modern financial system and agenda. After years of ignoring Cryptocurrencies existence and underestimating its capabilities[10], governments started to regulate. States such as U.S., U.K. and Germany chose different approaches. However, Cryptocurrency is either unjustly or barely regulated; currently, governments take two main approaches. The first one restricts, limit Cryptocurrency so much that it does not worth for interested individuals to invest in this field (U.S. and U.K.) or scarcely regulate it and wait for the market to regulate itself or state that Cryptocurrency does not have the future or potential to overcome current financial system and have major legislative loopholes (Germany). At the same time, both non-regulation and strict, wrongful regulation led to massive uncertainty unattractiveness of the Cryptocurrency market.

This paper argues that those malfunctioning regulations, in general, are caused by the fact that the Cryptocurrency concept is not understood correctly. Governments are trying to regulate a novel concept, (Peer-to-Peer currency - Cryptocurrency) by applying legislation of existing notion (fiat money or an asset) and this caused problem, because invention of Cryptocurrency required conception of new approaches instead of modifying existing ones. For example, in the

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6 Nakamoto S (Bitcoin.org, 2008) <https://bitcoin.org/bitcoin.pdf> accessed 20 March 2021
7 Nakamoto S (Bitcoin.org, 2008) <https://bitcoin.org/bitcoin.pdf> accessed 20 March 2021
8 'Blockchain Wallets 2011-2021 | Statista' (Statista, 2021) <https://www.statista.com/statistics/647374/worldwide-blockchain-wallet-users/> accessed 20 March 2021
9 'Bitcoin's Price History' (Investopedia, 2021) <https://www.investopedia.com/articles/forex/121815/bitcoins-price-history.asp> accessed 02 June 2021
10 (Fincen.gov, 2013) <https://www.fincen.gov/sites/default/files/shared/FIN-2013-G001.pdf> accessed 20 March 2021

jurisdictions of the U.K., the U.S. and many others, Cryptocurrency is regulated as an asset, commodity, while in reality, Cryptocurrency is money and must be regulated as such. However, this paper argues that even though Cryptocurrency is money, it cannot fall under the current regulation of money because present legislation applies to fiat money and tackles its challenges while failing to do so in the case of Cryptocurrency. Hence, new legislation is needed, where Cryptocurrency will be defined as money, but regulation of the money will be different and appropriate to Cryptocurrency challenges.

Therefore, based on the scholarly articles, legislation and statistics, this thesis structurally explains the concept of money and what subject people called money throughout history (Commodity and fiat). The thesis explores characteristics of money and applies them to Cryptocurrency, which demonstrates that Cryptocurrency not only matches the exact characteristics of current money (fiat), but it also outperforms both past (commodity) and current (fiat) subjects in matching every characteristic and fulfilling most functions that money should be able to do in an ideal world, which humankind was always eager to strive towards.

The second chapter examines main regulatory approaches in different jurisdictions such as U.S. U.K. and Germany and exposes that neither strict nor liberal (loose) approach is practical and needs to be changed. In the U.S. and U.K. who chose a relatively strict approach, tax regulatory problems are caused by the fact that legislation does not identify the concept of Cryptocurrency correctly; they treat Cryptocurrency as an asset, which this thesis argues is the wrong method as it is money. Although Germany chose a liberal approach and regulated Cryptocurrency as money, legislation is still not sufficient and does not offer stability to Cryptocurrency investor. The reason here is that the liberal approach left legislative loopholes that are unilaterally advantageous for Cryptocurrency investors and not for the state; hence it is not efficient, and politicians debate to block Cryptocurrency in general rather than finding the ultimate solution.

The end of the chapter is a comparative analysis of those jurisdictions that help to identify which one is better for individuals, companies or governments. Identifying it is vital to convey problems or benefits of each and structure ultimate legislation based on those different approaches.

The third chapter considers what the current legislative problem is, what would be the solution for it, and what should be tax regulated, and the thesis suggest different approaches that should be taken.

The paper concludes that Cryptocurrency is money, current regulation is neither efficient nor prudent and suggests a way of improving present legislation.

CHAPTER 1- CRYPTOCURRENCY MONEY OR AN ASSET?

Introduction

To understand Cryptocurrency's concept, it is essential to know what lead to its creation and what idea stands behind it.

It brings us back to 2008 when the global financial crisis occurred. This colossal threat to the world's economy caused a big recession and it has been evaluated by Ben S Bernanke, the chairman of the Board of US Federal Reserve System, to have had equivalent potential to cause a 1930's global financial, economic meltdown with catastrophic implications.[11] The crisis demonstrated structural flaws of the present financial system and encouraged people for the first time to reconsider whether the current approach was justified and if it was effective or not.[12] This crisis's basic premise was that the banking system had failed; this conditioned distrust towards the centralized middleman throughout society.[13] Concerns towards a new financial architecture arose that, it was built on a fragile theoretical foundation; had extensive wicked incentives that created unnecessary risk, exacerbated booms and generated crises; Created important financial products were so complex and opaque they could not be priced correctly; they, therefore, lost liquidity when the rush desisted; the claim that commercial banks distributed almost all risky assets to capital markets and hedged whatever risk remained was false; heavy reliance on complex financial products in a tightly integrated global financial system created channels of contagion that raised systemic risk; The NFA facilitated the growth

11 Crotty J, 'Structural Causes Of The Global Financial Crisis: A Critical Assessment Of The 'New Financial Architecture' (2009) 33 Cambridge Journal of Economics <https://doi.org/10.1093/cje/bep023> accessed 20 January 2021
12 Crotty J, 'Structural Causes Of The Global Financial Crisis: A Critical Assessment Of The 'New Financial Architecture' (2009) 33 Cambridge Journal of Economics <https://doi.org/10.1093/cje/bep023> accessed 20 January 2021
13 Bis.org, 2021) <https://www.bis.org/review/r100929a.pdf> accessed 20 January 2021

of dangerously high system-wide leverage.[14] While evaluating the 2008 financial crisis, the Financial Crisis Inquiry Commission report wrote that the crisis was the result of human action and not of mother nature or computer models having gone haywire.[15] According to them, the financial system ignored warnings and failed to question, understand and manage evolving risks within a system essential to the well-being of the American public.[16] They also paraphrased Shakespeare's words "The fault lies not in the stars, but in us." and concluded that the 2008 financial crisis was avoidable.[17]

In the light of the background of financial crisis and total distrusts towards centralized middlemen, anonymous developer or group of developers named Satoshi Nakamoto appeared on 18th of August 2008 and put a name to the domain "https://bitcoin.org/". Prior to that in the November of the same year, a document called "Bitcoin: A Peer-to-Peer Electronic Cash System" was published, where first details were described of how it would work.[18] The central concept behind it can be described under the hypothetical question "why do we need a bank or a third party in order for two different persons to pay each other? Why should people trust middlemen?" Bitcoin itself was released in 2009. It ultimately ruled out the engagement of centralized middlemen and relied on decentralized blockchain to establish digital currency.[19] Unlike the US dollar Cryptocurrency does not rely on any bank or government. According to

[14] Crotty J, 'Structural Causes Of The Global Financial Crisis: A Critical Assessment Of The 'New Financial Architecture' (2009) 33 Cambridge Journal of Economics <https://doi.org/10.1093/cje/bep023> accessed 20 January 2021

[15] (National Commission on the Causes of the Financial and Economic Crisis in the United States, 'THE FINANCIAL CRISIS INQUIRY REPORT' (2011) <https://www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf> accessed 20 January 2021

[16] (National Commission on the Causes of the Financial and Economic Crisis in the United States, 'THE FINANCIAL CRISIS INQUIRY REPORT' (2011) <https://www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf> accessed 20 January 2021

[17] (National Commission on the Causes of the Financial and Economic Crisis in the United States, 'THE FINANCIAL CRISIS INQUIRY REPORT' (2011) <https://www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf> accessed 20 January 2021

[18] Nakamoto S (Bitcoin.org, 2008) <https://bitcoin.org/bitcoin.pdf> accessed 20 January 2021

[19] Wright, Aaron and De Filippi, Primavera, Decentralized Blockchain Technology and the Rise of Lex Cryptographia (March 10, 2015). Available at SSRN: **https://ssrn.com/abstract=2580664** or **http://dx.doi.org/10.2139/ssrn.2580664**

Nagatomo, the system is "completely decentralized, with no central server or trusted parties, because everything is based on crypto proof instead of trust".[20] These details are discussed in depth in the 1.2. subchapter.

However, it is comical that this paper is discussing the essentiality of regulating something (Cryptocurrency) that was initially created not to be regulated. The trickiest part of regulating Cryptocurrency, which makes legislators and society evaluate the past and encourage seeing the financial system from an entirely new perspective, is that creators have done their best to avoid third-party regulations, exclude governments and banks from it. Complex nature of Cryptocurrency and its transactions is the main reason why governments urge citizens to avoid dealing with Cryptocurrency.[21] Although investors are concerned about legal uncertainty and vague nature of this field,[22] which in the end reduces the capacity of this market with great potential.

1.1 The Concept of Money

Introduction

To understand Cryptocurrency is money or not, the first concept of money should be clear. Highlighting items that, through history, were called money, functions that they fulfilled, and characteristics they had will help define the concept of money.

[20] Satoshi Nakomoto, Bitcoin Open Source Implementation of P2P Currency, P2P FOUNDATION (Feb. 11, 2009), http://p2pfoundation.ning.com/forum/topics/bitcoin-opensource.
[21] 'Regulation Of Cryptocurrency Around The World' (Loc.gov) <https://www.loc.gov/law/help/cryptocurrency/world-survey.php#georgia> accessed 20 January 2021
[22] Chuang T, 'When Cryptocurrency And Regulators Collide, Blockchain Startups Just Want Clarity – The Denver Post' (Denverpost.com, 2021) <https://www.denverpost.com/2018/06/07/cryptocurrency-regulation-blockchain-startups/> accessed 20 January 2021

What is money? If one will search for the word "money" in different dictionaries, you will get different types of definition. It is not just noun that is defined differently from Cambridge (noun, coins or notes (special pieces of paper) that are used to buy things, or an amount of these that a person has)[23] or Oxford (noun, what you earn by working or selling things, and use to buy things)[24] dictionaries. Central aspects of it, functions, characteristics types can still be common. It is a medium of exchange by which people can trade without the essentiality of needing other wants. In other words, money acts as an intermediary, which makes indirect trade possible instead of making direct one.[25]

In this subchapter, I discuss the most common subjects that people have called money throughout history, under what types can we divide them. What are the main functions that the subject needs to fulfil to call it money, which different characteristics of money are known and determine failure or success of currency.

1.1.1 The History; and Types of Money

To tell what is the history of money, first of all, we should know what people used to call “money”. If somebody asks one what money is, it is clear cut from today’s perspective; one can simply point to paper money that we use in the present-day either it will be dollar, euro or other currency. However, this was not always the case, money used to be called different thing starting from the oldest coin called “Lydian Lion”, which is dated from 610 – 600 BCE[26] to the modern US dollar. Even before coins, people used different subjects with the same purposes

23 'MONEY | Meaning In The Cambridge English Dictionary' (Dictionary.cambridge.org) <https://dictionary.cambridge.org/dictionary/english/money> accessed 20 January 2021

24 'Money Noun - Definition, Pictures, Pronunciation And Usage Notes | Oxford Advanced Learner's Dictionary At Oxfordlearnersdictionaries.Com' (Oxfordlearnersdictionaries.com) <https://www.oxfordlearnersdictionaries.com/definition/english/money?q=money> accessed 20 January 2021

25 'Types Of Money | Commodity | Fiat | Commercial Bank | Boycewire' (Boycewire.com, 2020) <https://boycewire.com/types-of-money/> accessed 20 January 2021

26 Neil S and others, '7 Oldest Coins That Ever Existed | Oldest.Org' (Oldest.org) <https://www.oldest.org/culture/coins/> accessed 20 January 2021 that we use currencies today. To define whether subject falls under the concept of money or not, it should qualify different functions, from which being medium of exchange can be most common and essential, those functions are discussed in next 1.2. subchapter. The historical evolution of money can be divided into many different paths. First was an evolution of commodity, the second was an evolution of representative money, the third one is an evolution of fiat money, and I believe that we are in a crossroad of fiat and crypto money. Those are called types of money, and there are various approaches of dividing them, but for this thesis's purpose, I think that those three are core determining factors to explain why we are at the beginning of the new era. I will try to simply explain what each of them means and what made people move from one to another.

Determining historical origins of Commodity money is almost impossible, history of it consists of millennia. The commodity can be defined as basic good used in commerce that is interchangeable with other commodities of the same type.[27] Nowadays commonly trade commodities can be divided into two different groups, the ones that have been for a decent period of the history of humanity, almost forever, those are gold, beef, lumber, and the ones that are the result of evolution such as oil or natural gas, but people used to trade with various objects. The Original idea of commodities was that the price of one object was simply expressed by the other; for example, a knife or bow was changed into animal skins, pets for ceramics, etcetera. Slowly goods (commodities) that had more significant value and could have been used as a measuring point for another commodity have arisen, those were salt, fur, cattle skin, this was caused by challenges of the period where people lived, such as cold and wild nature. As soon as the trade went beyond the borders of one tribe and intra-tribal trade began, a single commodity that would act as a universal equivalent in trade was needed. This

[27] 'How Commodities Work' (Investopedia) <https://www.investopedia.com/terms/c/commodity.asp> accessed 20 January 2021

commodity should have been acceptable, durable, portable, divisible; those became first characteristics of money, which have been further improved and are discussed under 1.1.3. subchapter. Precious metals such as gold and silver were the ones that met listed requirements. This process of separating gold and silver as universal equivalents for the rest of the commodity has risen to money circulation. The earliest form of money, appeared near the end of Stone Age around 1000 BC in China, metal money, which was initially represented by various bars.[28] In other parts of the world, round coins started to develop out of silver lumps and stamped with different gods and emperors depending on the location.[29] Earliest silver coins were found on modern-day Turkey's territory called “Lydian Lion”, which is dated from 610 – 600 BCE.[30]

Around 806 AD, the first paper money (banknotes)started to appear in China and had been in use from around the 9th to 15th century. However, as they were vastly produced inflation emerged, their value over time, diminished. It disappeared in China around 1455. [31]

Unlikely from unsuccessful first attempts of changing commodity with paper money representative money was effective in it. It can be defined as a certificate that can be exchanged for something of value. It was literally claimed to gold or silver somewhere. It is called "The Gold Standard". In 1792 the US attempted to tie its currency to precious metals with mint and coinage act, but 1816 had a more significant impact on the world as England adopted gold as the first standard of value.[32] 1930’s The Great Depression is considered to be the beginning of

28 'The History Of Money – A Walk Through Time' (Provident Metals) <https://www.providentmetals.com/knowledge-center/precious-metals-resources/history-of-money.html> accessed 20 January 2021

29 'The History Of Money – A Walk Through Time' (Provident Metals) <https://www.providentmetals.com/knowledge-center/precious-metals-resources/history-of-money.html> accessed 20 January 2021

30 Neil S and others, '7 Oldest Coins That Ever Existed | Oldest.Org' (Oldest.org) <https://www.oldest.org/culture/coins/> accessed 20 January 2021

31 'The History Of Money – A Walk Through Time' (Provident Metals) <https://www.providentmetals.com/knowledge-center/precious-metals-resources/history-of-money.html> accessed 20 January 2021

32 'The History Of Money – A Walk Through Time' (Provident Metals) <https://www.providentmetals.com/knowledge-center/precious-metals-resources/history-of-money.html> accessed 20 January 2021 the end of The Gold Standard.[33] It caused conflict between individual gold holdings and increased golds price, which devalued paper currency that represented the gold. For years gold was the majoring stick of value; it was like a physical guarantee that kept money in check and governments responsible. It all came to an end in 1971 when US president Richard Nixon announced that US would no longer convert dollars to gold at a fixed value[34] which made money elastic and gave US dollar more significant role than ever before, as it backs other currencies as a reserve currency. The year 1971 caused that money as we knew before evolved into fiat money. Basically, if before money represented precious metal somewhere, it became paper, which represented simply trust towards the government that it (paper) would be worth something. This action brought one of the most decisive factors for this thesis "the centralized middleman" a central bank that should regulate paper money value. This thesis will not engage in politic discussions, but it needs to be said that International monetary regulations are tricky at best and downright impossible to understand at worst which makes many feel that this standard has brought unbridled monetary expansion, eroding value, stagnant wages and more.[35] Future uncertainty caused the popularity of investing in precious metals.

While it is argued whether Cryptocurrency should be regulated as money or not, I argue that Cryptocurrency is "the next step" and should be discussed under the history of money either as a present or as a future medium of exchange. It is chance neither to go back to the "gold standard", as humanity has seen its collapse nor to stay under vague present regulations and politic games that determine our currency's value. This evolution cannot be done without

[33] 'The History Of Money – A Walk Through Time' (Provident Metals) <https://www.providentmetals.com/knowledge-center/precious-metals-resources/history-of-money.html> accessed 20 January 2021

[34] Ghizoni S, 'Nixon Ends Convertibility Of US Dollars To Gold And Announces Wage/Price Controls | Federal Reserve History' (Federalreservehistory.org, 2013) <https://www.federalreservehistory.org/essays/gold-convertibility-ends> accessed 20 January 2021

[35] 'The History Of Money – A Walk Through Time' (Provident Metals) <https://www.providentmetals.com/knowledge-center/precious-metals-resources/history-of-money.html> accessed 20 January 2021

regulation and governments engagement; this field needs to be regulated to offer some guarantees, protection from fraud, and flexible taxation for people to invest actively and develop this field, as regulations are demanded from investors themselves.[36]

1.1.2. The Functions of the Money

All of the subjects, characterized in the previous subchapter, people used to call money throughout history, had three common characteristics. Hence, to name some object, in the future, money it should perform all of the core functions, such as to be a: 1) Store of value; 2) Unit of account and 3) Medium of exchange.

Definition of the store of value is that an asset maintains its value, rather than depreciating.[37] The function of being a store of value can be described as a guarantee for consumers that the currency they are using will more or less maintain its value and will not deprive as time passes. A stable currency is a cornerstone for a healthy economy. State's currency, that is trustworthy, for maintaining value over time, enables its citizens to engage in trade, labor, saving or spending money.[38] What comprises a store of value is vastly contrasting; it depends on states and cultures as well.[39] In the worst scenario, at least local currency can be counted on as a store of value. The influence that steady currencies, such as the US or Singaporean Dollar, Norwegian Krone, Japanese Yen[40], had on domestic economies are enormous. In simple terms,

36 Obie S, and Rasmussen M, 'How Regulation Could Help Cryptocurrencies Grow' (Harvard Business Review, 2021) <https://hbr.org/2018/07/how-regulation-could-help-cryptocurrencies-grow.> accessed 20 January 2021
37 'What Is A Store Of Value?' (Investopedia, 2020) <https://www.investopedia.com/terms/s/storeofvalue.asp> accessed 22 January 2021
38 'What Is A Store Of Value?' (Investopedia, 2020) <https://www.investopedia.com/terms/s/storeofvalue.asp> accessed 22 January 2021
39 'What Is A Store Of Value?' (Investopedia, 2020) <https://www.investopedia.com/terms/s/storeofvalue.asp> accessed 22 January 2021
40 'The Most Stable International Currencies In Terms Of Exchange Rate | Xpress Money - Money Transfer & Foreign Exchange Blog' (Xpress Money - Money Transfer & Foreign Exchange Blog, 2019) <https://www.xpressmoney.com/blog/industry/the-most-stable-international-currencies-in-terms-of-exchange-rate/> accessed 22 January 2021

one does not necessarily need to spend money instantly fearing that it will rot, as it happened during the first stages of trading with commodities, such as fish or meat.

The name of the second function “Unit of account” speaks itself, it means that money can be used as a measuring stick, tool that gives value to everything. It means that money can be used to assign price to all types of goods or services, to keep in charge of gained or lost wealth, compare different types of subjects and evaluate whether engaging in certain types of transactions worth it or not.[41] The function of being a store of value is the reason for balancing a budget, accounting for profit and loss, or valuing the total assets of a company is possible. Money equalizes the playing field; it is a tool to measure the number of units needed to purchase something.

The function of being Medium of exchange can be the primary function of the money. According to the definition,[42] it is an intermediary instrument or system used to facilitate the sale, purchase, or trade of goods between parties. This function is what makes trade available, and one is confident that used money will be accepted. For example, in classic barter, the desire for the item, that the other party has, is essential; otherwise, the transaction will not happen. Being Medium of exchange means that the transaction can occur without overlapping desire of each other’s items. One can use money (unit of account), offered by another party to buy a desirable item in the future, or save it, rule as one wishes.

41 'Money Definition' (Investopedia) <https://www.investopedia.com/terms/m/money.asp> accessed 22 January 2021

42 'Medium Of Exchange Definition' (Investopedia) <https://www.investopedia.com/terms/m/mediumofexchange.asp> accessed 20 January 2021

1.1.3. The Different Characteristics of Money

The most known critical characteristics of money are six: 1. Durability; 2. Portability; 3. Divisibility; 4. Uniformity; 5. Limited Supply and 6. Acceptability.[43] Most of the names of those characteristics speak for themselves. However, each of them is discussed below and explained by using examples of commodity as the ancient type of money, from which humanity has developed because it saw flaws. Hence, it is most well-researched and perfectly shows the concept of each characteristic.

The durability of the money means that it should stand time and be used repeatedly.[44] In the early stages of humanity's history, while people used the commodity as money, durability was a significant problem. If two individuals will use beef as a medium of exchange, it is most likely that it will not be used in other transactions, as after a certain period of time, it will rot and be useless.

The portability of the money is a guarantee that it can easily be transported without much effort. For example, if one uses the horse as a medium of exchange, it lacks portability while it is significantly durable. It requires lots of effort, space and time to take from one place to another, especially if the distance is long. Obviously, it cannot fit in a pocket.

Divisibility is in a strong bond with portability and, if not thoroughly guarantees, plays a significant role in it. It means that the nature of the medium of exchange should give the possibility to be divided. If we take the same example of using the horse as a medium of

[43] 'Functions Of Money, Economic Lowdown Podcasts | Education | St. Louis Fed' (Stlouisfed.org) <https:// https://www.stlouisfed.org/education/economic-lowdown-podcast-series/episode-9-functions-of-money#:~:text=The%20characteristics%20of%20money%20are,%2C%20limited%20supply%2C%20and%20acceptability..> accessed 20 March 2021

[44] '6 Characteristics Of Money For Business Success' (Unlocked Success, 2016) <https://www.unlockedsuccess.com/money/6-characteristics-of-money-for-business-success/#:~:text=for%20successful%20business%3F-,Durability,and%20tear%20for%20long%20periods.&text=In%20other%20words%20the%20fact,greater%20durability%20through%20online%20transactions> accessed 20 March 2021

exchange, its nature does not allow it to be separated while alive. As a horse has a high value, one will not be able to buy a single, any type of cheap product without financial sacrifice. A person either has to buy more amount of the item than needed or suffer financial loss. Neither of those options is attractive and profitable.

Uniformity should be indicated in every single aspect of money. Shape, size and value must be identical. Using the same example of a horse, obviously, none of them is indistinguishable, weigh the same and have identical cost. Uniformity is also called standardization of the money. It means setting one standard that must be followed by every medium of exchange of the same type (currency) and value.

Limited supply is what determines the value of the money. Having way more supply than demand causes devaluation of any type of good. When the same is the case with the money, it causes inflation[45]. Hence, this is one of the most significant characteristics of money. This is why people have chosen gold, silver, or other precious metals to use as a commodity and not leaves or any other good that is accessible for everyone. The more rear item implies, the more significant value that is how human's psychology works. If Mona Lisa had unlimited copies, nevertheless unique work of Leonardo da Vinci, it would have been worthless. While now, it is priceless because it is one of a kind. Supply and demand are issues that government officials have to evaluate when avoiding inflation of the national currency. Money needs to maintain its value by being limited. A certain amount of effort must be required to be performed to extract money.

[45] Pettinger T, 'The Link Between Money Supply And Inflation - Economics Help' (Economics Help, 2019) <**https://www.economicshelp.org/blog/111/inflation/money-supply-inflation/#:~:text=Increasing%20the%20money%20supply%20faster,firms%20to%20put%20up%20prices**.> accessed 20 March 2021

Acceptability has already been discussed while examining the concept of the medium of exchange. This is a characteristic that makes trading by using a specific type of item available. Money must be widely accepted. For example, if one goes to buy a house and offers a hundred horses, it is most likely that the deal will not occur, as the seller might not want horses. Money should play the role of intermediary between a person and needed good.

1.2. The Concept of Cryptocurrency

Introduction

To argue, Cryptocurrency is money or not, it is essential to know the notion of both. After determining the money concept in the previous subchapter, it is time to ascertain what Cryptocurrency is, its history, what is blockchain, and what those two have in common.

Although we have had Cryptocurrency for over a decade, it is still considered a novelty. A large number of societies is still looking at it sceptically. However, it gets more popular and commonly used. The fact that in Spain, there has already occurred first entirely Cryptocurrency financed transfer by professional football team, [46] and cases of athletes getting paid in Cryptocurrency[47] prove that there is demand on it on the market, and it should have a great future. But what is Cryptocurrency?

In this subchapter, I discuss the history of the first Cryptocurrency, Bitcoin, when and by whom it was created, the notion of crypto, how it developed over time, and how it operates. Concept

[46] Alper T, 'Spanish Football Club Says It Has Made World-First Crypto Pro Transfer' (Cryptonews.com, 2021) <**https://cryptonews.com/news/spanish-football-club-says-it-has-made-world-first-crypto-pr-8929.htm**> accessed 20 March 2021

[47] Fadilpašić S, 'Professional Athletes Paid In Crypto: A New Era?' (Cryptonews.com, 2018) <**https://cryptonews.com/news/professional-athletes-paid-in-crypto-a-new-era-1192.htm**> accessed 20 March 2021

of blockchain, what information does it carry, its advantages and disadvantages, and what influence it might have on the regulatory system.

1.2.1. The History of the Cryptocurrency

The history of Cryptocurrency started in the November of 2008, when a person or group of persons uploaded a document in an online cryptography forum, introducing Bitcoin and describing it as a peer-to-peer electronic cash system.[48]

The identity of the mastermind creator of Bitcoin is one of the continuing mysteries of modern times, a riddle for the digital age. As the popularity of Bitcoin grew, there have been lots of investigations. However, it gave nothing but conspiracy theories. Hence, it is not worth discussing in detail. Nevertheless, the fact that the creator preferred to stay incognito, the timing of the Bitcoins creation and the first file uploaded on the web, revealing the first details of how Bitcoin would work, all together must give an understanding of what caused its creation, what was the goal for creating it and whether it can be regulated or not.

The goal of the whitepaper was to describe how Bitcoin would operate and kept secure. While reading it, one will feel a lack of trust and suspicion towards a centralized financial system. As already stated, the creators' approach can be explained in simple words: "why do we need a bank or a third party for two different persons to pay each other? Satoshi Nakamoto created a new type of database called blockchain to achieve this goal. It will be discussed in the following sections.

[48] Nakamoto S (Bitcoin.org, 2008) <**https://bitcoin.org/bitcoin.pdf**> accessed 20 March 2021

After its release in 2009, The initial value of Bitcoin was nothing; it was free. While, at its peak in March 2021, one Bitcoin was worth 61 732 $.[49] The first payment with Bitcoin occurred on May 22, 2010. The programmer named Laszlo Hanyecz paid 10 000 bitcoins for two pizzas.[50] Little did he know that the same number of Bitcoins would have cost 617 320 000 $ after a decade. There are a couple of examples of how frivolous people thought Bitcoins were. One of which is Stefan Thomas, a programmer from Germany, who forgot the password of the hard drive on which he has 7 002 Bitcoins,[51] or James Howells, a man from the UK, who accidentally threw hard drive, holding 7 500 bitcoins, in the trash, did not pay much attention then, but eight years later, when prices raised asks permission of local authorities to look for the device in a landfill site.[52] Examples like those prove that Bitcoin has a great future, and it must not be underestimated.

I have already addressed Cryptocurrency's present situation while mentioning the first entirely crypto-based football transfer by a professional team, Cryptocurrency as a salary or recently recorder peak prices. However, future of Cryptocurrency has not been discussed. To do that, we need to get back to Satoshi Nakamoto's whitepaper and the background on which Cryptocurrency was created.

It is no coincidence that Bitcoin was released at the beginning of 2009, while the 2008 financial crisis was raging. This crisis and the ways it was solved caused massive distrust of

[49] DeCambre M, 'Bitcoin Price Hits New Record, Clears $60,000 Milestone' (MarketWatch, 2021) <https://www.marketwatch.com/story/bitcoin-price-hits-new-record-clears-60-000-milestone-11615648314> accessed 20 March 2021

[50] 'Bitcoin's Surge Beyond $60,000 Means The Famed Programmer Laszlo Hanyecz Effectively Paid $613 Million For 2 Pizzas' (Business Insider, 2021) <https://www.businessinsider.com/bitcoin-surge-means-laszlo-hanyecz-paid-316-million-two-pizzas-2021-3?r=DE&IR=T> accessed 20 March 2021

[51] 'Lost Passwords Lock Millionaires Out Of Their Bitcoin Fortunes' (Nytimes.com, 2021) <https://www.nytimes.com/2021/01/12/technology/bitcoin-passwords-wallets-fortunes.html> accessed 20 March 2021

[52] 'Man Wants To Dig Up Hard Drive With Bitcoin Worth $280 Million He Threw Away 8 Years Ago' (News18.com, 2021) <https://www.news18.com/news/buzz/man-wants-to-dig-up-hard-drive-with-bitcoin-worth-280-million-he-threw-away-8-years-ago-3310391.html> accessed 20 March 2021

Governments and financial institutions among society. They understood that something was wrong with the present economic system and started looking for options. Therefore, society began to claim more financial freedom and force out the middleman from their transactions. Bitcoin is based on the same mindset. "Commerce on the Internet has come to rely almost exclusively on financial institutions serving as trusted third parties to process electronic payments. While the system works well enough for most transactions, it still suffers from the inherent weaknesses of the trust-based model."[53] Hence, it must be believed that this model is perfectly designed for situations during the financial crisis and massive inflations.

It can never be predicted to give a guarantee, but there are many signs of upcoming massive inflation.[54] The process was already in progress, before the covid pandemic. Ongoing activities worldwide, unexperienced new investors joining money market for the first time, due to covid, concentrated value in a very few companies etc., accelerated the process. The Schiller S&P P/E ratio, inflation-adjusted value metric, shows 36.68 on April 5, 2021, while the average ratio through 150 years is 15.82.[55] Michael Burry investor, who predicted the 2008 financial crisis,[56] has been sounding the alarm for the upcoming financial crisis for months already.[57] Based on all reasons stated above, it is most likely that a crisis will happen. The Crypto market will be the one that will attract most people, and it needs to be well regulated, to handle all those pressure and to avoid damaging peoples interests.

[53] Nakamoto S (Bitcoin.org, 2008) <**https://bitcoin.org/bitcoin.pdf**> accessed 20 March 2021

[54] 'Massive Inflation May Be Coming, Because The US Government Has Cornered Itself Into A Fiscal End Game | Antony Davies, James R. Harrigan' (Fee.org, 2020) <https://fee.org/articles/massive-inflation-may-be-coming-because-the-us-government-has-cornered-itself-into-a-fiscal-end-game/> accessed 20 March 2021

[55] 'Shiller PE Ratio' (Multpl.com, 2021) <**https://www.multpl.com/shiller-pe**> accessed 5 April 2021

[56] GmbH f, 'Big Short' Investor Michael Burry, Who Predicted The 2008 Housing Collapse, Dumped These 5 Stocks From His Portfolio In The 3Rd Quarter' (markets.businessinsider.com) <**https://markets.businessinsider.com/news/stocks/big-short-investor-michael-burry-ditched-stocks-13f-q3-2020-11-1029824152**> accessed 20 March 2021

[57] GmbH f, 'Big Short' Investor Michael Burry Says The Stock Market Is 'Dancing On A Knife's Edge' - And Fears He's Being Ignored Again' (markets.businessinsider.com, 2021) <**https://markets.businessinsider.com/news/stocks/big-short-michael-burry-warns-stock-market-huge-risk-crashing-2021-2-1030106969**> accessed 20 May 2021

The main advantage of Bitcoin is that it does not require any centralized authority or institution to operate. This is in contrast to today's centralized financial systems that depend on a middleman's existence (usually banks). Its advantage is that fiat money maintains its value only because governments exist and they control it. However, if, for any reason, there will not be any central authority, the fiat money that we currently use will become worthless. Contrary to it, Bitcoin does not require the existence of any middleman, and it will continue operating as long as members will be in its peer-to-peer network.

1.2.2. Concept of blockchain technology and its use in Cryptocurrency

Explaining the entire concept of blockchain will require extreme IT knowledge and will be exceedingly technical. Therefore, this subchapter focuses only on those parts that are essential for the purposes of this thesis, particularly ones that help to realize that Cryptocurrency is designed to avoid government interruption.

Knowing that anything is authentic, such as a dollar bill, diploma, birth certificate, or another certificate, in today's system is dependent on "keeping the record," such as serial numbers of bills that can be checked with the appropriate authority. All of them have one thing in common: they are all centralized. There is a central authority, a state office, a ministry, a bank, or any other place where information may be checked. As a result, authorities wield a great deal of power, which can be abused at times. The concept of dividing government is based on the idea that no single person or group should have too much power and that dividing it is healthier for society. When it comes to economics, however, as previously stated, power is frequently centralized. People in positions of power have a tendency to misrepresent the truth. The financial crisis of 2008 is a good example of this. Even while some rationalize this method, it taught society that rewriting records required nothing more than the approval of those in authority. For bail out corporations, billions of dollars were produced, money that had never existed before, and other companies had their debts completely deleted. Because every act is public and can be confirmed by everyone, the risks of fraud, corruption, and manipulation are reduced when the system is decentralized. Decentralization can be accomplished in a variety of ways, including using blockchain technology. Without the need for a centralized middleman, blockchain allows anybody to retain records and verify them. It's also worth noting that forging blockchain ledges is almost impossible.

Everyone can create, verify, and update records using blockchain technology. Although it is often assumed that Satoshi Nakamoto invented blockchain, he refers to the "chain of blocks" rather than blockchain in the Bitcoin whitepaper. Bitcoin's creator, not the Blockchain system itself, built the first deployment of Blockchain technology. The name itself indicates information about blockchain. It is a chain of blocks that contains information. It is the system that allows creation verification and updating the record by everybody, as every "element of block" is equally privileged. Blockchain also uses Cryptography, which is an ancient way of secret communication and has been used by Julius Caesar[58] himself and allows users to verify and prove the authenticity of their own transactions. Each block is linked to the data of the previous block. Bitcoin uses a consensus algorithm (Proof of Work),[59] which to state simply is calculating math problems. This calculation is the main reason why Cryptocurrency cannot be printed or created easily. After solving, it will be displayed in the network and is public so that everyone can verify. Blockchain also has the punishment and reward function; the reward function is earning Cryptocurrency while acting in bad faith will be punished by losing Cryptocurrencies.

58 'Caesar Cipher - An Overview | Sciencedirect Topics' (Sciencedirect.com, 2014) <https://www.sciencedirect.com/topics/computer-science/caesar-cipher> accessed 19 May 2021

59 'Proof Of Work (Pow)' (Investopedia, 2021) <https://www.investopedia.com/terms/p/proof-work.asp> accessed 21 May 2021

To conclude, it is evident that Cryptocurrency is controlled equally by all its users and not by a single authority. As long as people will be involved in it, blocking is worthless and cannot be efficient as it was meant to survive in the most hostile environment.

1.3. The Comparative characteristics of Cryptocurrency and money

The best way to prove that Cryptocurrency is money rather than an asset is to compare characteristics of the items (Gold, fiat) that we call money to Cryptocurrencies ones. As stated in the 1.1.3 subchapter, the most known critical characteristics of money are six.[60] However, there are additional characteristics that money must have, based on the modern challenges. Table [61] below provides all characteristics (traits) of the money and reflects how Cryptocurrency (Bitcoin), fiat money and gold qualify each.

[60] 'Functions Of Money, Economic Lowdown Podcasts | Education | St. Louis Fed' (Stlouisfed.org) <https:// **https://www.stlouisfed.org/education/economic-lowdown-podcast-series/episode-9-functions-of-money#:~:text=The%20characteristics%20of%20money%20are,%2C%20limited%20supply%2C%20and%20acceptability**..> accessed 20 March 2021
[61] 'Fiat V. Gold V. Bitcoin' (Medium, 2019) <**https://medium.com/coinmonks/fiat-v-gold-v-bitcoin-706a03332f2b**> accessed 20 March 2021

Traits of Money	Bitcoin	Gold	Fiat
Verifiable	High	Moderate	Moderate
Fungible	High	High	High
Portable	High	Low	High
Durable	Moderate	High	Low
Divisible	High	Low	Moderate
Scarce	High	Moderate	Low
Established History	Low	High	Low
Censorship resistant	High	Moderate	Low
Unforgeable Costliness	High	High	Low
*Openly Programmable	High	Low	Low
*Decentralized	High	Moderate	Low

Figure 1. Traits of Money
Source: 'Fiat V. Gold V. Bitcoin' (Medium, 2019) <https://medium.com/coinmonks/fiat-v-gold-v-bitcoin-706a03332f2b>

As argued in 1.1. subchapter, gold is money from the past, fiat is present, and Cryptocurrency is for the future. However, as you may see on the table, fiat currency, which we use as money, fails to match most of the money's characteristics. I will discuss each separately.

The first characteristic is Verifiable. It is possible to verify the authenticity of all of those three types of money. However, gold can be melted with different metals, and it can be less than 100% pure or falsely identified as a bar of gold, as happened in 2019[62]. Fiat money can also be counterfeit[63], while Bitcoin cannot be fake, because as stated, transactions are part of the public ledger and checked by mining.

[62] Hobson P, 'Exclusive: Fake-Branded Bars Slip Dirty Gold Into World Markets' (U.S., 2019) <https://www.reuters.com/article/us-gold-swiss-fakes-exclusive-idUSKCN1VI0DD> accessed 21 March 2021
[63] 'Kings Of Counterfeiting' (Numismatics.org, 2021) <http://numismatics.org/kings-of-counterfeiting/> accessed 20 March 2021

The second characteristic is Fungibility, "Fungibility is the ability of a good or asset to be interchanged with other individual goods or assets of the same type"[64]. All of them can be interchangeable and medium of exchange.

The third characteristic is portability. The portability of the commodity is addressed in the previous subchapter on the example of the horse. The gold has the same problem, as they differ in weight and size; using them as a medium of exchange is not always comfortable because of the portability issue. While Cryptocurrency and fiat are highly portable. For Bitcoin, you may not need to carry anything around; just memorizing specific codes to access them from different places would be enough, as long as the internet covers the area.

The reason why Bitcoin has the moderate in the fourth characteristic, "Durability", is that things that it will be stored on (USB, External hard drive etc.) may disintegrate over time or get damaged. However, it is up to the owner's decision. Gold is highly durable, while fiat currency may rip apart just by placing it into the wallet.

The fourth characteristic is divisibility. While dividing gold will require lots of effort, and fiat currency cannot be divided by more than the government has issued bills, Cryptocurrency is highly divisible. One Bitcoin can be divided by 100 000 000 Satoshi's[65].

The fifth characteristic is scarcity. This characteristic is fundamental because as we have no idea how much gold earth has and fiat currency has almost zero scarcity (it can be printed as many as government officials decide), there can only be 21 000 000 Bitcoins[66] that makes Cryptocurrency so unique.

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[64] 'Fungibility: When Interchangeability Matters' (Investopedia, 2021) <**https://www.investopedia.com/terms/f/fungibility.asp**> accessed 20 March 2021

[65] 'Satoshi' (Investopedia, 2020) <**https://www.investopedia.com/terms/s/satoshi.asp**> accessed 20 March 2021

[66] 'What Happens To Bitcoin After All 21 Million Are Mined?' (Investopedia, 2021) <**https://www.investopedia.com/tech/what-happens-bitcoin-after-21-million-mined/**> accessed 20 March 2021

The sixth characteristic is established history. As gold has been around for centuries, fiat money and even more Cryptocurrency is relatively novel and do not have established history.

The seventh characteristic is censorship-resistant. While fiat money (bank account) can be controlled by the government and gold can be confiscated, Cryptocurrency is highly censorship-resistant. The case of the German man whose Bitcoins were confiscated by the police, but they could not access Cryptocurrency because the owner would not disclosure password is the perfect argument regarding censorship resistance.[67]

The eighth characteristic is unforgeable costliness. While lots of time and effort is needed to mine Cryptocurrency or gold, fiat money can be printed within seconds. Therefore, two of them have a high level, and fiat has a low.

The ninth (openly programmable) and tenth (decentralized) characteristics reflect modern society's expectations from money, as they have seen shortcomings of not having those options. This issue is covered in 1.2. subchapter. While it is impossible for fiat and gold, Cryptocurrency is highly programmable. Regarding decentralization, as already stated, the main goal of creating a Cryptocurrency peer to peer network was decentralization, and it has been achieved. On the other hand, gold is being accumulated by the central banks or federal reserves, and it is getting more and more centralized[68]. Fiat is of the central banks and completely centralized.

As seen from this assessment, Cryptocurrency meets almost every single criteria of the essential characteristics of money on a very high level, while others failed in most of them. Yet, most of the current legislations do not classify Cryptocurrency as money. While if they

[67] O'Donnell J, 'German Police Seize Bitcoin Worth Millions From Man Who Won't Give Up His Password' (CTVNews, 2021) <**https://www.ctvnews.ca/world/german-police-seize-bitcoin-worth-millions-from-man-who-won-t-give-up-his-password-1.5297495**> accessed 20 May 2021

[68] 'Gold Vault - FEDERAL RESERVE BANK Of NEW YORK' (Newyorkfed.org) <**https://www.newyorkfed.org/aboutthefed/goldvault.html**> accessed 6 March 2021

did, inflation and financial crises caused by printing fiat money or creating artificial reserves would have been avoided.

Conclusion

This chapter argues that Cryptocurrency is money and not an asset. It analyses what subjects were known as money throughout history, compares characteristics of old current or potentially future and states that Cryptocurrency outperforms all of them to be used as money. This analysis is vital to understand why the state's current approaches (discussed in the second chapter) are not efficient and why it is unjustified of them to identify Cryptocurrency as an asset. It also helps to realize why a strict or radical (blocking) approach towards Cryptocurrency will never work and incentivize people to avoid tax authorities because Cryptocurrency is designed to work under such circumstances.

CHAPTER 2- PRESENT REGULATION OF CRYPTOCURRENCY.

Introduction

To regulate something, one needs to understand how it functions and know its authentic nature. After arguing regarding the genuine concept (nature) of Cryptocurrency, it is time to study whether the world's major jurisdictions, representing different legal systems, treat Cryptocurrency based on its genuine essence or not.

Analyzing and comparing diverse jurisdictions is the way of studying which approach is more efficient, where there is room for improvement and what does not work. So those essential adjustments will be made that will guarantee effectiveness and ultimately lead to the common welfare.

For comparison, I chose the State jurisdiction with the world's biggest economy, the U.S.[69]; also, two jurisdictions that treat Cryptocurrency differently U.K. and Germany, from different common and civil law systems.

In this chapter, I critically challenge current regulations of Cryptocurrency in the U.S. U.K. and the German jurisdictions. Tackle the shortcomings of each of them individually. Argue what those flaws cause or is going to cause in the future. Focus on the positive differences in legislation. At the and I compare all three different jurisdictions together and focus on which one addresses the nature of Cryptocurrency the best.

[69] 'World GDP Ranking 2021 - Statisticstimes.Com' (Statisticstimes.com, 2021) <**https://statisticstimes.com/economy/projected-world-gdp-ranking.php**> accessed 10 May 2021

2.1. Regulations of Cryptocurrency in the United States

The Internal Revenue Service hereinafter (IRS) is the U.S. government agency administrating the federal tax laws taken by Congress[70]. According to the Notice 2014-21[71], issued in 2014, Cryptocurrency is treated as property and not as money for tax purposes[72]. This approach means that if one receives goods or services in exchange for Cryptocurrency, it will not constitute a "classical payment"; this will be identified as the property received for goods or services[73] and therefore should be taxed by Capital Gains and Losses. On the other hand, earning Cryptocurrency (from a job or mining, interest reward etc.) is taxed as ordinary income[74] under Federal Income Tax[75]. "Federal income taxes are applied to all forms of earnings that make up a taxpayer's taxable income, such as employment earnings or capital gains."[76] In this subchapter, address tax on selling or disposing at first and then mining (earning).

A taxable event for Cryptocurrency is selling or disposing of it, for example, trading one Cryptocurrency for another and using Cryptocurrency in exchange for goods or services. After such an event, a person pays a percentage of the capital gain only from the profit, not from the total price. For example, if a person buys Cryptocurrency for 20 000$ and sells it for 50 000$ only 30 000$ will be taxed by Capital Gains and Losses tax, not the whole 50 000$. Tax

[70] 'What Does The IRS Do And How Can It Be Improved?' (Tax Policy Center) <https://www.taxpolicycenter.org/briefing-book/what-does-irs-do-and-how-can-it-be-improved#:~:text=The%20IRS%20administers%20the%20federal,%2C%20taxpayer%20service%2C%20and%20enforcement.> accessed 5 May 2021
[71] (Irs.gov) <https://www.irs.gov/pub/irs-drop/n-14-21.pdf> accessed 5 May 2021
[72] 'Frequently Asked Questions On Virtual Currency Transactions | Internal Revenue Service' (Irs.gov) <https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions> accessed 5 May 2021
[73] (Irs.gov) <https://www.irs.gov/pub/irs-pdf/p551.pdf> accessed 5 May 2021
[74] Kemmerer D (2021) <https://cryptotrader.tax/blog/the-traders-guide-to-cryptocurrency-taxes> accessed 6 May 2021
[75] (Forbes.com, 2021) <https://www.forbes.com/advisor/investing/cryptocurrency-taxes/> accessed 6 May 2021
[76] 'Understanding The Federal Income Tax' (Investopedia, 2021) <https://www.investopedia.com/terms/f/federal_income_tax.asp#citation-1> accessed 6 May 2021

percentage varies from 0% to 37%, which depends on different circumstances, mainly whether an investment is short term or long term and persons marital status[77]. Short term capital gains befall when holding time; the period from securing to disposing of an asset is no longer than one year, while long term capital gains are contrary to it[78]. This differentiation is positive discrimination towards married people because their marital status with the amount of the income lowers the tax, they must pay[79]. I argue that in the case of Cryptocurrency, this approach is insufficient. Based on the Gemini State of U.S. Crypto report, "average" Cryptocurrency owner is a 38-year-old male making approximately $111k a year"[80]. This is the age where the average percentage of married U.S. citizens is relatively high and almost equal in both genders, male-59.2%; female-61.1%[81]. Hence, it is a high probability that the tax rate average U.S. Cryptocurrency owner, who is most likely married, has to pay amounts only 22% if the investment is short term and even less-15% in case of long-term investment[82]. What is more, "The majority (74%) of Cryptocurrency owners today fall between the ages of 25 and 44, with another 19% between the ages of 45 and 55"[83] those are year gaps when most of the U.S.

[77] TurboTax – Taxes I, 'A Guide To The Capital Gains Tax Rate: Short-Term Vs. Long-Term Capital Gains Taxes - Turbotax Tax Tips & Videos' (Turbotax.intuit.com, 2020) <**https://turbotax.intuit.com/tax-tips/investments-and-taxes/guide-to-short-term-vs-long-term-capital-gains-taxes-brokerage-accounts-etc/L7KCu9etn**> accessed 6 May 2021

[78] TurboTax – Taxes I, 'A Guide To The Capital Gains Tax Rate: Short-Term Vs. Long-Term Capital Gains Taxes - Turbotax Tax Tips & Videos' (Turbotax.intuit.com, 2020) <**https://turbotax.intuit.com/tax-tips/investments-and-taxes/guide-to-short-term-vs-long-term-capital-gains-taxes-brokerage-accounts-etc/L7KCu9etn**> accessed 6 May 2021

[79] TurboTax – Taxes I, 'A Guide To The Capital Gains Tax Rate: Short-Term Vs. Long-Term Capital Gains Taxes - Turbotax Tax Tips & Videos' (Turbotax.intuit.com, 2020) <**https://turbotax.intuit.com/tax-tips/investments-and-taxes/guide-to-short-term-vs-long-term-capital-gains-taxes-brokerage-accounts-etc/L7KCu9etn**> accessed 6 May 2021

[80] 'State Of Crypto: 2021 US Report | Gemini' (Gemini, 2021) <**https://www.gemini.com/state-of-us-crypto**> accessed 6 May 2021

[81] 'The Demographic Statistical Atlas Of The United States - Statistical Atlas' (Statisticalatlas.com, 2018) <**https://statisticalatlas.com/United-States/Marital-Status**> accessed 6 May 2021

[82] TurboTax – Taxes I, 'A Guide To The Capital Gains Tax Rate: Short-Term Vs. Long-Term Capital Gains Taxes - Turbotax Tax Tips & Videos' (Turbotax.intuit.com, 2020) <**https://turbotax.intuit.com/tax-tips/investments-and-taxes/guide-to-short-term-vs-long-term-capital-gains-taxes-brokerage-accounts-etc/L7KCu9etn**> accessed 6 May 2021

[83] 'Yahoo Is Now A Part Of Verizon Media' (Finance.yahoo.com, 2021) <**https://finance.yahoo.com/news/study-reveals-crypto-biggest-investors-132102315.html#:~:text=These%20individuals%20say%20they%20are,ages%20of%2045%20and%2055**.> accessed 6 May 2021

citizens are married[84]. Thus, instead of taxing the most significant number of Cryptocurrency efficiently, the U.S. is wasting huge revenue that should have been paid on the almost absolute amount of the entire Cryptocurrency in the state. This is caused by the fact that legislation does not address specifically Cryptocurrencies and identifies them with another type of properties.

A taxpayer in the U.S. has to fill out IRS form 8949[85]. To report Cryptocurrency for Capital Gains and Loses tax accurately, one needs to keep track: 1. The cost basis in USD (for how much perron has bought Cryptocurrency); 2. Fair market value in USD in the moment of sale or disposing of Cryptocurrency; 3. Gain and/or loss from the transaction in USD. This form is troublesome for Cryptocurrency owners. Cryptocurrency transactions do not always occur trade for fiat money; it is also exchanged for other Cryptocurrencies. However, form 8949 requires indicating cost basis and sale/disposal price in fiat currency value. Tracking down the U.S. $ value in all transactions is very challenging for a number of reasons 1. Cryptocurrency value in fiat money is not stable, and it changes rapidly, especially this is the case for new "smaller" Cryptocurrencies[86]; 2. sometimes transactions occur on exchange for multiple Cryptocurrencies; 3. like fiat money Cryptocurrencies are divided into multiple pieces that are designed to increase exchange liquidity[87] Satoshi's[88] etc. Taking into account that the average person trading with Cryptocurrencies does not necessarily need to be a tax expert, a combination of all those three factors cumulatively is challenging for Cryptocurrency trader. One has to track down the price in the U.S. $ for all of the Cryptocurrencies taking part in

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[84] 'The Demographic Statistical Atlas Of The United States - Statistical Atlas' (Statisticalatlas.com, 2018) <**https://statisticalatlas.com/United-States/Marital-Status**> accessed 6 May 2021
[85] (Irs.gov) <**https://www.irs.gov/pub/irs-pdf/f8949.pdf**> accessed 6 May 2021
[86] 'Bitcoin – Reasons Why Its Price Is So Unstable | Codecondo' (Codecondo.com, 2020) <**https://codecondo.com/bitcoin-reasons-why-its-price-is-so-unstable/#:~:text=Bitcoin%20can%20be%20used%20for,per%20the%20fiat%20stock%20markets.&text=Bitcoin%20has%20some%20major%20elements,to%20have%20gold%2Drelated%20exchanges**.> accessed 6 May 2021
[87] 'Cryptocurrency Exchange Tokens: Blockchain Tokens | Gemini' (Gemini, 2021) <**https://www.gemini.com/cryptopedia/cryptocurrency-exchange-tokens-bnb-token**> accessed 6 May 2021
[88] 'Satoshi' (Investopedia, 2020) <**https://www.investopedia.com/terms/s/satoshi.asp**> accessed 20 March 2021

transactions, calculate the price of the Satoshi's or other parts of the Cryptocurrencies if they were part of the transaction, analyze gain and loss… Loading Cryptocurrency owners with so many burdens slow down the speed of transactions that might be decisive for profitable crypto trade, increases the risk of breaching the law, requires high knowledge of tax law from regular traders and entails too much commitment. Considering everything needed just for tax report, regardless the average person's interest, he/she might refrain from investing in Cryptocurrency. This type of regulatory approach might be justified in the real estate sector because buying it requires a lot of presale actions, and the price in U.S. $ is known to sellers as well. However, regulating Cryptocurrency, where transactions occur much faster than real estate business, as a property is unjustifiable and, as seen in the previous example, is troublesome for present investors and fails to meet the expectations of new ones.

One of the main reasons why Cryptocurrency and property trade must not be regulated as one is that leading trading platforms "online brokers" for stock, real estate etc. trade must[89] give a customer a form 1099-B[90], which includes all the essential information "1. Cost basis in USD; 2. Fair market value in USD in the moment of sale or disposing of Cryptocurrency; 3. Gain and/or loss from the transaction in USD". However, none of the main Cryptocurrency exchanges[91] has the ability to provide accurate tax reports for their users[92]. It is caused by the fact that transferring Cryptocurrency from one wallet to another is not a taxable event, it occurs relatively often, and crypto exchanges cannot track down other than their wallets. "The second you transfer crypto into or out of an exchange, that exchange loses the ability to give you an

[89] 'About Form 1099-B, Proceeds From Broker And Barter Exchange Transactions | Internal Revenue Service' (Irs.gov, 2020) <**https://www.irs.gov/forms-pubs/about-form-1099-b**> accessed 6 May 2021
[90] (Irs.gov, 2020) <**https://www.irs.gov/pub/irs-pdf/f1099b.pdf**> accessed 6 May 2021
[91] '8 Best Crypto Exchanges With Low Fees And Good Customer Service: The Top Cryptocurrency Trading Platforms For Altcoins, Bitcoin, And Ethereum - Dbottrading' (GlobeNewswire News Room, 2021) <**https://www.globenewswire.com/news-release/2021/04/21/2214651/0/en/8-Best-Crypto-Exchanges-with-Low-Fees-and-Good-Customer-Service-The-Top-Cryptocurrency-Trading-Platforms-for-Altcoins-Bitcoin-and-Ethereum-Dbottrading.html**> accessed 6 May 2021
[92] Kemmerer D (2021) <**https://cryptotrader.tax/blog/cryptocurrency-tax-problem**> accessed 6 May 2021

accurate report detailing the cost basis and fair market value of your Cryptocurrencies, both of which are mandatory components for tax reporting."[93]

Cryptocurrency can be earned in many ways[94]. Unlikely from Capital Gains and Losses tax, Federal Income Tax has not filled in a single tax report form. Tax forms differ based on the event caused by earning Cryptocurrency[95]. If Cryptocurrency is earned as an interest reward or from staking, it must be reported in IRS Schedule B "Interest and Ordinary Dividends"[96]. If a person is mining Cryptocurrency, it is most likely that his/her income will qualify as a self-employment income and therefore has to fill out IRS Schedule C "Profit or Loss From Business"[97]. Any other types of earning Cryptocurrency requires filling up the IRS Schedule 1 "Additional Income and Adjustments to Income"[98].

I argue that this type of regulation is nothing but a heavy burden on Cryptocurrency earners. To accurately fill out every form without breaching the law requires adequate knowledge of tax law from Cryptocurrency owner and even in that case, there is an element of uncertainty as ways of earning Cryptocurrency differ, this field is developing, and current systems do not clarify what type of earning should be filled in which IRS form. Such a high knowledge of tax law must not be expected from an average Cryptocurrency owner.

This statement made by IRS in their document Notice 2014-21 is controversial and proves the point of this thesis, that states are confused, and modern legislation is under no sense applicable to Cryptocurrency. "Virtual currency is a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value. In some environments, it

[93] (2021) <**https://cryptotrader.tax/blog/cryptocurrency-tax-problem**> accessed 6 May 2021
[94] 'How To Earn Cryptocurrency - 12 Safe & Effortless Methods' (Coinzilla Academy, 2020) <**https://academy.coinzilla.com/how-to-earn-cryptocurrency/**> accessed 6 May 2021
[95] Kemmerer D (2021) <**https://cryptotrader.tax/blog/the-traders-guide-to-cryptocurrency-taxes**> accessed 6 May 2021
[96] (Irs.gov) <**https://www.irs.gov/pub/irs-pdf/f1040sb.pdf**> accessed 6 May 2021
[97] (Irs.gov) <**https://www.irs.gov/pub/irs-pdf/f1040sc.pdf**> accessed 6 May 2021
[98] (Irs.gov) <**https://www.irs.gov/pub/irs-pdf/f1040s1.pdf**> accessed 6 May 2021

operates like "real" currency -- i.e., the coin and paper money of the United States or of any other country that is designated as legal tender circulates and is customarily used and accepted as a medium of exchange in the country of issuance -- but it does not have legal tender status in any jurisdiction"[99]. Stating that Cryptocurrency has all characteristics of the money and operates like "real" currency, but for tax purposes is seen as property means that legislation is not up to date and the only reason why Cryptocurrency is taxed as a property is that legislators have not taken any precautions to efficiently tax something like Cryptocurrency while drafting code and property taxation rules was closest they came up with when they saw great potential in this novel technology. Even though from 2008 (the time of creating Bitcoin) to 2014 was more than enough time for legislators to create proper legislation, one might explain legislation not being ready by saying that it was only at the beginning of the 2010s when Cryptocurrency showed its potential and therefore legislators had no time or experience of working on such phenomenon. However, the reality that roughly after 13 years from 2008 to 2021, there still is no proper legislation; IRS's approach is yet ambiguous, and it primarily damages Cryptocurrency owners; is nothing but inadequacy and indifference towards such a promising, developing field.

To sum up, U.S. regulation of Cryptocurrency is outdated and does not tackle modern challenges. Even though legislators admit that Cryptocurrency has some (main) characteristics of money, they have tried to regulate it as a property, which apparently was not the right decision because the U.S. is wasting a considerable amount of revenue that should have been paid from Cryptocurrencies. What is more, unreliable regulation wasted not only revenue but toughened taxpayers' liability to precisely fill tax form and overburdened them. Present

[99] (Irs.gov) <**https://www.irs.gov/pub/irs-drop/n-14-21.pdf**> accessed 5 May 2021

regulation does not regulate the true nature of Cryptocurrency, but only some fragments of it, making this field hazardous, unpredictable, and undesirable for potential investors.

2.2. Regulations of Cryptocurrency in the United Kingdom

Regulation of Cryptocurrency in UK law is vague and problematic. Even Mark Carney[100], while being the governor of the Bank of England, has asked for effective Cryptocurrency regulation. In his speech, the words he said clearly show that the UK's approach to regulating Cryptocurrency is far from perfect or efficient: "The time has come to hold the crypto-asset ecosystem to the same standards as the rest of the financial system. Being part of the financial system brings enormous privileges but with them great responsibilities"[101].

Her Majesty's Revenue Service's, hereinafter (HMRC), note that "cryptocurrencies have a unique identity and cannot, therefore, be directly compared to any other form of investment activity or payment mechanism"[102] confirm the idea I want to state by writing this thesis: Cryptocurrency is money rather than an asset; however, it cannot be regulated neither as money nor as an asset under the current approaches for both, new legislation is needed, the one that will tackle modern challenges.

None of the laws in the UK exclusively regulate Cryptocurrencies[103]. The Bank of England, hereinafter (The Bank), is the protector and enhancer of the UK's financial system; its work should pursue the Financial Stability of the UK. "An objective of the Bank shall be to protect

[100] 'Mark Carney' (Bankofengland.co.uk) <https://www.bankofengland.co.uk/about/people/mark-carney/biography> accessed 3 April 2021

[101] (2018) <https://www.cnbc.com/2018/03/02/bank-of-england-mark-carney-cryptocurrency-regulation.html> accessed 3 April 2021

[102] 'Regulation Of Cryptocurrency Around The World' (Loc.gov) <https://www.loc.gov/law/help/cryptocurrency/world-survey.php#uk> accessed 3 April 2021

[103] 'Regulation Of Cryptocurrency Around The World' (Loc.gov) <https://www.loc.gov/law/help/cryptocurrency/world-survey.php#uk> accessed 3 April 2021

and enhance the stability of the financial system of the United Kingdom (the "Financial Stability Objective"). In pursuing the Financial Stability Objective, the Bank shall aim to work with other relevant bodies (including the Treasury and the Financial Conduct Authority)"[104]. Therefore, The Bank has studied the Cryptocurrency market and assessed a very controversial conclusion: "cryptocurrency market is not large enough for posing material risk to monetary or financial stability in the UK"[105]. Such assessment illustrates how inadequately generally governments look at the Cryptocurrencies, which causes drafting inconsistent legislations, same is the case for the UK. In previous chapters, I have already argued that Cryptocurrency has vast potential. Therefore, this assessment cannot be justified.

The UK taxation system has a tool called Individual Savings Account hereinafter (ISA) that help people (residents of the UK and a Crown servant or their spouse or civil partner if they do not live in the UK)[106] not to pay taxes on particular four of accounts: Cash, Lifetime, Innovative Finance and Stocks and shares ISAs[107]. Even though the UK approaches Cryptocurrency as an asset and it might also qualify as Cash or Innovative Finance ISA, none of those excludable four types apply. Therefore, the primary tool that works for UK residents not to pay taxes on other types of assets does not apply to Cryptocurrency and people trading with it are in an oppressed position, with relatively few mechanisms.

As the ways of extracting Cryptocurrencies differ, trade and mining "earning" so do techniques of taxing it. One is taxed by income tax, while the other is not. However, the taxability of the

[104] 'Bank Of England Act 1998, Section 2A' (Legislation.gov.uk, 1998) <**https://www.legislation.gov.uk/ukpga/1998/11**> accessed 3 April 2021

[105] 'Regulation Of Cryptocurrency Around The World' (Loc.gov) <**https://www.loc.gov/law/help/cryptocurrency/world-survey.php#uk**> accessed 3 April 2021

[106] 'Individual Savings Accounts (Isas)' (GOV.UK) <**https://www.gov.uk/individual-savings-accounts**> accessed 3 April 2021

[107] 'Individual Savings Accounts (Isas)' (GOV.UK) <**https://www.gov.uk/individual-savings-accounts/how-isas-work**> accessed 3 April 2021

profit received from Cryptocurrency is based not only on activities but also on the legal status of the involved parties[108]. Hence, they will be discussed separately.

According to the UK tax system, any Cryptocurrency that one earns as a reward for mining is an income, and therefore income tax should be paid on it. However, activity to qualify as taxable trade depends on several issues: 1. Degree of activity; 2. Organization; 3. Risk and 4. Commerciality[109]. HMRC does not provide any information regarding those aspects. Thus, it leaves Cryptocurrency owners under vagueness and insufficiency, as they should rely on "common practice" or risk breaching the law.

The percentage of income tax varies from person to person and can be up to 45%[110] it depends on how much the person earns elsewhere, the degree of activity, organization, risk, and commerciality[111]. Table[112] below illustrates tax rates.

Band	**Taxable income**	**Tax rate**
Personal Allowance	Up to £12,570	0%
Basic rate	£12,571 to £50,270	20%
Higher rate	£50,271 to £150,000	40%

108 'Regulation Of Cryptocurrency Around The World' (Loc.gov) <https://www.loc.gov/law/help/cryptocurrency/world-survey.php#uk> accessed 3 April 2021
109 'CRYPTO21150 - Cryptoassets Manual - HMRC Internal Manual - GOV.UK' (Gov.uk, 2021) <https://www.gov.uk/hmrc-internal-manuals/cryptoassets-manual/crypto21150> accessed 3 April 2021
110 'Income Tax Rates And Personal Allowances' (GOV.UK) <https://www.gov.uk/income-tax-rates> accessed 3 April 2021
111 'CRYPTO21200 - Cryptoassets Manual - HMRC Internal Manual - GOV.UK' (Gov.uk) <https://www.gov.uk/hmrc-internal-manuals/cryptoassets-manual/crypto21200> accessed 3 April 2021
112 'Income Tax Rates And Personal Allowances' (GOV.UK) <https://www.gov.uk/income-tax-rates> accessed 3 April 2021

Band	Taxable income	Tax rate
Additional rate	over £150,000	45%

Any investment in stocks and shares can be subject to capital gains tax if an ISA does not protect it. Capital gains tax applies to any gain one makes on an investment. "The HMRC has regulated Cryptocurrency transactions as capital gains for individuals, and there are different tax brackets depending on both the individual's gains and their income level. Capital losses can also offset these gains if reported within four years of the loss."[113] However, it should be noted that only profits, while selling or disposing of something that increased in value, is taxed by capital gains tax[114]. Rate may vary from 10% to 28% based on the income and legislative status of the person[115]. This tax does not apply to the total amount; it taxes only the gain, profit. Therefore, if a person buys Cryptocurrency and for any reason does not use it. He/she will not be eligible to pay capital gains tax even if the price of the bought Cryptocurrency skyrockets. However, it will be only until one will not dispose it. Disposing Cryptocurrency may be to sell, give it away as a gift, exchange for something else, get compensation[116]. Taxing the disposal of Cryptocurrency is the part when it gets particularly confusing and problematic for the Cryptocurrency owner. The majority of the Cryptocurrency trades and exchanges are quoted in other Cryptocurrencies and not in fiat currency. As the prices on the crypto market change hectically and trades or exchanges usually take places, not for the whole Bitcoin, but for Satoshi's, it is extremely hard for Cryptocurrency traders to convert every transaction in fiat

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113 McClure Z, 'How Cryptocurrency Is Taxed In The United Kingdom | Tokentax' (Tokentax.co, 2021) <https://tokentax.co/guides/crypto-taxes-in-united-kingdom/#:~:text=the%20United%20Kingdom.-,When%20you%20need%20to%20pay%20crypto%20taxes%20in%20the%20U.K.,regardless%20of%20the%20gains%20amount.> accessed 3 April 2021

114 'Capital Gains Tax' (GOV.UK) <**https://www.gov.uk/capital-gains-tax**> accessed 3 April 2021

115 'Capital Gains Tax' (GOV.UK) <**https://www.gov.uk/capital-gains-tax/rates**> accessed 3 April 2021

116 'Capital Gains Tax' (GOV.UK) <**https://www.gov.uk/capital-gains-tax**> accessed 3 April 2021 currency and keep track of it. This issue is relatively the same as debated in the subchapter "Regulations of Cryptocurrency in the United States". Therefore, it will not be argued here.

While some Cryptocurrency owners might benefit from the lack of regulation and not pay taxes, it is hazardous as consumers are not protected from crimes, such as money laundering, fraud etc.[117]

Unlike natural persons, corporations, for any participation within Cryptocurrency activities ("buying and selling exchange tokens; exchanging tokens for other assets (including other types of crypto assets); 'mining'; providing goods or services in return for exchange tokens"[118]) are taxed by a greater number of taxes. For example: "Capital Gains Tax (CGT); Corporation Tax (CT); Corporation Tax on Chargeable Gains (CTCG); Income Tax (IT); National Insurance Contributions; Stamp Taxes; VAT"[119]. Even though corporations are generally considered more knowledgeable and skilled than natural persons, HMRC leaves them in the vagueness of tax and how it will apply. The discrepancy is caused by this statement "HMRC will consider each case based on its facts and circumstances. It will apply the relevant legislation and case law to determine the correct tax treatment"[120] irrespective that the UK is a common law state and case law is considered to be hard law, leaving companies in such ambiguity with a significant room for interpretation, because Cryptocurrency market is developing hectically and so do ways of disposing or earning Cryptocurrency, simply not profitable neither for the state nor for the companies. Because one (corporations) either have to risk a lot and potentially

[117] 'Www.Bankofengland.Co.Uk' (Perma.cc, 2018) <https://perma.cc/XH6S-NHJX> accessed 3 April 2021
[118] 'CRYPTO40050 - Cryptoassets Manual - HMRC Internal Manual - GOV.UK' (Gov.uk, 2021) <https://www.gov.uk/hmrc-internal-manuals/cryptoassets-manual/crypto40050> accessed 3 April 2021
[119] 'CRYPTO40050 - Cryptoassets Manual - HMRC Internal Manual - GOV.UK' (Gov.uk, 2021) <https://www.gov.uk/hmrc-internal-manuals/cryptoassets-manual/crypto40050> accessed 3 April 2021
[120] 'CRYPTO40050 - Cryptoassets Manual - HMRC Internal Manual - GOV.UK' (Gov.uk, 2021) <https://www.gov.uk/hmrc-internal-manuals/cryptoassets-manual/crypto40050> accessed 3 April 2021

breach the law or pay extra taxes. While other, either losses lots of revenue, or damages prospective corporation.

To conclude, the UK does not provide sufficient legislation for Cryptocurrency regulation. Even government official is asking for the changes, that are obvious from their statements. Taxation approaches are often ambiguous, mainly caused by the relatively novel, developing nature of Cryptocurrency and Case law-based legislation. However, more guidance and concretism from regulating bodies, particularly HMRC, would have improved the situation. Cryptocurrency owners are discriminated against because of the defective legislation and excluded from privileges (ISA) that they should have had under normal circumstances. Yet, an insufficient approach to understanding the true nature of Cryptocurrency causes those legislative shortcomings, which affect the expanding market with great potential and do not attract new investors to engage in such activities.

2.3. Regulations of Cryptocurrency in Germany

Germany has Federal Financial Services Agency "Bundesanstalt für Finanzdienstleistungsaufsicht" hereinafter (BaFin). Its functions are much like The Bank's "BaFin operates in the public interest. Its primary objective is to ensure the proper functioning, stability and integrity of the German financial system"[121]. Hence, it has a decisive role in defining the status of Cryptocurrency. BaFin classifies Cryptocurrency as a financial instrument, a unit of account [122]. Thus, the German Federal Central Tax Office "Bundeszentralamt für Steuern" hereinafter (BZSt) follows BaFin's approach and treats

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[121] 'Functions & History' (BaFin, 2020) <**https://www.bafin.de/EN/DieBaFin/AufgabenGeschichte/aufgabengeschichte_node_en.html**> accessed 15 April 2021

[122] 'Regulation Of Cryptocurrency Around The World' (Loc.gov) <**https://www.loc.gov/law/help/cryptocurrency/world-survey.php#germany**> accessed 15 April 2021

Cryptocurrency as private money for tax purposes[123]. Based on the guidance issued by the German Federal Ministry of Finance in February 2018, "Umsatzsteuerliche Behandlung von Bitcoin und anderen sog. virtuellen Währungen" stands for the VAT treatment of bitcoin and other so-called virtual currencies[124] exchanges of Cryptocurrency for fiat money or any other transaction is a taxable event[125]. However, it should not be taxed by VAT[126]. This decision was caused by The Court of Justice of the European Union's ruling on the case "*Skatteverket v David Hedqvist Case C-264/14"*[127]*, which ruled that Cryptocurrency used as a means of payment should be treated as a regular payment and must not be taxed by VAT."* The 'bitcoin' virtual currency, being a contractual means of payment, cannot be regarded as a current account or a deposit account, a payment or a transfer. Moreover, unlike a debt, cheques and other negotiable instruments referred to in Article 135(1)(d) of the VAT Directive, the 'bitcoin' virtual currency is a direct means of payment between the operators that accept it."[128]

Income from Cryptocurrency falls under Section 23, "Private sales transactions" of the Income Tax Act (EStG)[129]. According to it, "Profits remain tax-free if the total profit generated from private sales transactions in the calendar year was less than 600 euros"[130]. Therefore, if a person

[123] McClure Z, 'How Cryptocurrency Is Taxed In Germany | Tokentax' (Tokentax.co) <**https://tokentax.co/guides/crypto-taxes-in-germany/#:~:text=In%20Germany%2C%20mining%20of%20crypto,costs%20associated%20with%20mining%20it**> accessed 15 April 2021

[124] (Bundesfinanzministerium.de, 2018) <**https://www.bundesfinanzministerium.de/Content/DE/Downloads/BMF_Schreiben/Steuerarten/Umsatzsteuer/Umsatzsteuer-Anwendungserlass/2018-02-27-umsatzsteuerliche-behandlung-von-bitcoin-und-anderen-sog-virtuellen-waehrungen.pdf?__blob=publicationFile&v=1**> accessed 15 April 2021

[125] 'Regulatory Approaches To Cryptoassets' (Loc.gov) <**https://www.loc.gov/law/help/cryptoassets/germany.php#_ftn40**> accessed 15 April 2021

[126] McClure Z, 'How Cryptocurrency Is Taxed In Germany | Tokentax' (Tokentax.co) <**https://tokentax.co/guides/crypto-taxes-in-germany/#:~:text=In%20Germany%2C%20mining%20of%20crypto,costs%20associated%20with%20mining%20it**> accessed 15 April 2021

[127] (Eur-lex.europa.eu, 2015) <**https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62014CJ0264&from=EN**> accessed 15 April 2021

[128] '7, § 42' (Eur-lex.europa.eu, 2015) <**https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62014CJ0264&from=EN**> accessed 15 April 2021

[129] '§ 23 Estg - Einzelnorm' (Gesetze-im-internet.de) <**https://www.gesetze-im-internet.de/estg/__23.html**> accessed 15 April 2021

[130] '§ 23 Estg - Einzelnorm' (Gesetze-im-internet.de) <**https://www.gesetze-im-internet.de/estg/__23.html**> accessed 15 April 2021

buys Cryptocurrency for 200 euros and sells it for 700, 500-euro profit will not be taxed. What is more, profit gained after holding Cryptocurrency for over one year is not taxed, regardless amount of the profit[131]. From a first glance, all of it attracts Cryptocurrency customers and creates the illusion of "Bitcoin Tax Heaven"[132]. However, this is not a reality, and the German tax system also has significant flaws. For example, selling Cryptocurrency in a period of less than one year, from securing it, regular Income tax will apply, percentage of which can be as high as 45% combined with "solidarity surcharge" 5.5% of the income tax[133]. In addition to it, an individual might be eligible for paying church tax varying from 8% to 9%[134]. Income tax rates in Germany, much like in the US, depends on the amount of income and persons' marital status[135]. Table[136] below illustrates tax rates for 2021.

Taxable income bracket	**Taxable income bracket**	**Tax rate on income in bracket**
From EUR	To EUR	Percent
0	9,744	0

[131] De Hoon I, 'Germany: A Surprising Bitcoin Tax Haven' (No More Tax) <https://nomoretax.eu/bitcoin-tax-haven-germany/> accessed 15 April 2021

[132] De Hoon I, 'Germany: A Surprising Bitcoin Tax Haven' (No More Tax) <https://nomoretax.eu/bitcoin-tax-haven-germany/> accessed 15 April 2021

[133] 'Germany – Taxation Of International Executives' (KPMG, 2021) <https://home.kpmg/xx/en/home/insights/2021/05/germany-taxation-of-international-executives.html> accessed 15 April 2021

[134] 'Germany – Taxation Of International Executives' (KPMG, 2021) <https://home.kpmg/xx/en/home/insights/2021/05/germany-taxation-of-international-executives.html> accessed 15 April 2021

[135] 'Germany – Taxation Of International Executives' (KPMG, 2021) <https://home.kpmg/xx/en/home/insights/2021/05/germany-taxation-of-international-executives.html> accessed 15 April 2021

[136] 'Germany – Taxation Of International Executives' (KPMG, 2021) <https://home.kpmg/xx/en/home/insights/2021/05/germany-taxation-of-international-executives.html> accessed 15 April 2021

0	19,488	0*
9,745	57,918	14-42
19,489	115,836	14-42*
57,919	274,612	42
115,837	549,224	42*
274,613	No limit	45
549,225	No limit	45*

This evaluation of income tax percentage does make "German Tax Heaven" less favourable.

The rule of not taxing profit gained after holding Cryptocurrency for over one year is not as flawless as it seems and has significant shortcomings that one needs to evaluate before making a trade. As I previously contended, Cryptocurrency transactions are not always as simple as exchanging one for fiat money or another Cryptocurrency. Sometimes trade, to be profitable, requires multiple transactions, during which a number of Cryptocurrencies are exchanged. Nevertheless, "one year rue" does not take this into account and taxes every single transaction (over 600-euro profit) within a period of one year. This approach limits Cryptocurrency owners' countless trade combination opportunities and reduces them down to only one, forcing Cryptocurrency trader to settle down on that particular first trade or pay a relatively high percentage on income tax.

Furthermore, this approach is believed to be a loophole in the German tax system and highly criticized by politicians. For example, the Social Democratic Party's candidate for German chancellor[137], ex-Deputy Chancellor and Federal Minister[138] of Finance Olaf Scholz, his interview[139] called the possibility of profiting from low tax rates for selling stocks tax loophole in Germany. Those type of appraisals from government officials mean that "loophole" is more likely to be regulated under Section 21 of EStG[140] in the future. The only reason this issue has not been addressed is that during the Covid-19 pandemic was not a priority but based on recent changes in market capacity[141], it is claiming relevance back. What is more, Moritz Schmidt, the software developer who got money from Bitcoin trade, donated a million euros to the Green Party[142] of Germany in the hope to consider banning Cryptocurrency "I believe that, in effect, bitcoin will need to be banned"[143]. He even expressed scepticism towards regulating Cryptocurrency in general and called Cryptocurrency unusable "I don't think regulation will do anything unless it crashes the price down to levels that make bitcoin uninteresting as an asset and unusable as a global currency,"[144]. Based on the number of uncertainties and vague future of Cryptocurrency in Germany, German Cryptocurrency owner-friendly legislation is perilous

137 (www.dw.com) D, 'SPD Candidate For German Chancellor: Olaf Scholz — Pragmatism Over Personality | DW | 20.04.2021' (DW.COM) < **https://www.dw.com/en/germany-spd-chancellor-olaf-scholz/a-54517533**> accessed 15 April 2021

138 'Bundesfinanzminister Olaf Scholz - Bundesfinanzministerium - Ministerium' (Bundesministerium der Finanzen) <**https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Ministerium/Leitung/Minister/Olaf-scholz.html**> accessed 15 April 2021

139 Marvin Neumann, 'Olaf Scholz Reagiert Unerwartet Emotional Auf Kritik | Teil 2' <**https://www.youtube.com/watch?v=7Mh2xqeDIgI**> accessed 15 April 2021

140 '§ 21 Estg - Einzelnorm' (Gesetze-im-internet.de) <**https://www.gesetze-im-internet.de/estg/__21.html**> accessed 15 April 2021

141 'Cryptocurrency Market Size, Share, Growth & Forecast [2020-2027' (Fortunebusinessinsights.com) <**https://www.fortunebusinessinsights.com/industry-reports/cryptocurrency-market-100149**> accessed 15 April 2021

142 'Reich Geworden Mit Bitcoins: Der Mann, Der Eine Million Euro An Die Grünen Spendete' (Rnd.de) <**https://www.rnd.de/wirtschaft/reich-geworden-mit-bitcoins-der-mann-der-eine-million-euro-an-die-grunen-spendete-PIDX4YCDWBAU5PFME6VXM3HMPI.html**> accessed 15 April 2021

143 'Bitcoin Millionaire Puts Money On Greens In German Election' (MyNorthwest.com, 2021) <**https://mynorthwest.com/2839169/bitcoin-millionaire-puts-money-on-greens-in-german-election/**> accessed 15 April 2021

144 'Bitcoin Millionaire Puts Money On Greens In German Election' (MyNorthwest.com, 2021) <**https://mynorthwest.com/2839169/bitcoin-millionaire-puts-money-on-greens-in-german-election/**> accessed 15 April 2021

for new investors and injurious for the Cryptocurrency market. It is a high risk for Cryptocurrency investor to invest money under the expectations of vital changes.

Taxation for mining "earning" Cryptocurrency differs, depending on the person's legal status based on the types of a legal or natural person. Cryptocurrency mining is taxed for individuals under the same Section 23 "Private sales transactions" of EStG[145] as an ordinary income.

In German tax law, the intent has high importance, and if it is to make a profit, action constitutes a commercial activity and therefore liable for taxes. Hence, as soon as one starts mining, he/she is essentially tax liable not just with the trade tax liability but also on the income tax liability. These arguments are based on German Federal government words "If Cryptocurrencies are acquired or manufactured in the context of a commercial activity with the intention of making a profit, profits from the sale or exchange (...) are to be recorded as part of the income from commercial operations. The costs for mining (...) are deductible as business expenses"[146]. However, there is an exemption for minor mining activities that do not profit over 256-euro[147]. Once profit exceeds 256 euros, the taxable amount is not only profit over 256-euro, but the total sum of profit, including 256-euro.

The rule of not taxing profit gained after holding Cryptocurrency for over one year does not apply for corporations, and they are taxed the same as if they sold it within one year[148]. Mining "earning" Cryptocurrency for corporations falls under the regulation of Section 23 "Income

145 '§ 23 Estg - Einzelnorm' (Gesetze-im-internet.de) <https://www.gesetze-im-internet.de/estg/__23.html> accessed 15 April 2021
146 'Kryptowährungen' (ING-DiBa, 2020) <https://www.ing.de/wissen/besteuerung-kryptowaehrung/> accessed 15 April 2021
147 'Kryptowährungen' (ING-DiBa, 2020) <https://www.ing.de/wissen/besteuerung-kryptowaehrung/> accessed 15 April 2021
148 McClure Z, 'How Cryptocurrency Is Taxed In Germany | Tokentax' (Tokentax.co) <https://tokentax.co/guides/crypto-taxes-in-germany/#:~:text=In%20Germany%2C%20mining%20of%20crypto,costs%20associated%20with%20mining%20it> accessed 15 April 2021

from commercial operations" of EStG[149] and Section 11 "Tax and Tax Measurement Amount" of Trade Tax Law "Gewerbesteuerergesetz"[150]. However, there is legislative differentiation within the Legal entities based on type. For mining Cryptocurrency, Partnerships are taxed the same as individuals, by Section 23 of EStG[151], while other types of legal entities LTD LTD "Gesellschaft mit beschränkter Haftung (GmbH)"; Joint-Stock company "Aktiengesellschaft, (AG)" etc.[152] are taxed by corporate tax[153]. Those are the rules for Companies that are exchange platforms created explicitly to mine Cryptocurrencies or companies accepting payment in Cryptocurrency in exchange for goods or services[154].

As a conclusion, it can be said that, with the German taxation system, there are too many uncertainties. 1. future of the Crypto regulation, whether it will be banned entirely or strictly regulated; 2. tax accounting method is vague and wholly based on the "common practice" "The required accounting method has not yet been clearly defined by the German tax authorities, but using the First in First Out (FIFO) accounting method[155] has been common practice."[156]; 3. While VAT's approach for taxing individuals is transparent, it is still vague and ambiguous for

[149] '§ 15 Estg - Einzelnorm' (Gesetze-im-internet.de) <https://www.gesetze-im-internet.de/estg/__15.html> accessed 15 April 2021
[150] '§ 11 Machine Translation Of "Trade Tax Law" (Germany)' (Global-regulation.com) <https://www.global-regulation.com/translation/germany/387043/trade-tax-law.html> accessed 15 April 2021
[151] '§ 15 Estg - Einzelnorm' (Gesetze-im-internet.de) <https://www.gesetze-im-internet.de/estg/__15.html> accessed 15 April 2021
[152] 'Legal Forms Of Doing Business In Germany' (IHK Region Stuttgart) <https://www.stuttgart.ihk24.de/english/services2/business-support/legal-forms-of-doing-business-in-germany-3977966> accessed 15 April 2021
[153] 'Bitcoin Taxation In Germany - Cryptocurrency Attorneys Advise' (Winheller.com) <https://www.winheller.com/en/banking-finance-and-insurance-law/bitcoin-trading/bitcoin-and-tax.html> accessed 15 April 2021
[154] McClure Z, 'How Cryptocurrency Is Taxed In Germany | Tokentax' (Tokentax.co) <https://tokentax.co/guides/crypto-taxes-in-germany/#:~:text=In%20Germany%2C%20mining%20of%20crypto,costs%20associated%20with%20mining%20it> accessed 15 April 2021
[155] 'What Is FIFO Method: Definition And Example' (FreshBooks) <https://www.freshbooks.com/hub/accounting/what-is-fifo> accessed 15 April 2021
[156] McClure Z, 'How Cryptocurrency Is Taxed In Germany | Tokentax' (Tokentax.co) <https://tokentax.co/guides/crypto-taxes-in-germany/#:~:text=In%20Germany%2C%20mining%20of%20crypto,costs%20associated%20with%20mining%20it> accessed 15 April 2021

corporations[157]. Regardless of the attempt of German Legislators to regulate Cryptocurrency's true nature and adopt the nonmainstream approach of treating it as money; as a result, not much has changed because to regulate it; one needs to understand the true nature of Cryptocurrency. Meanwhile, there are such radical and diverse debates in government officials regarding this issue that they might even ban it entirely.

2.4. Comparative analysis of whose taxation approach is more comfortable for consumer and how.

None of the studied legislations achieves this goal and balance between taxpayer-friendly yet efficient approach. Usually, the taxpayer (Cryptocurrency owner) is the one in a vulnerable position, facing uncertainties, high tax rates and discriminatory treatments (the U.K. Cryptocurrency owner's situation regarding ISA). However, none of the jurisdictions manages to efficiently tax Cryptocurrency, gain reasonable revenue from it, and use the market's full potential. Therefore, in all three states situation is such that no one is satisfied by present regulations. Instead of finding a golden balance and satisfying taxpayer and government, both are unfulfilled. These inadequacies damage States at first, Cryptocurrency owners (taxpayers), and a whole industry of Cryptocurrency.

The common shortcoming for all three jurisdictions is tax forms that require indicating Cryptocurrencies value in fiat money. As stated, it thwarts Cryptocurrency transactions and overburdens taxpayer, while there are no adequate tools for providing accurate tax reports that are possible for "other types" of assets[158]. The nature of the Cryptocurrency transactions is the

[157] McClure Z, 'How Cryptocurrency Is Taxed In Germany | Tokentax' (Tokentax.co) <**https://tokentax.co/guides/crypto-taxes-in-germany/#:~:text=In%20Germany%2C%20mining%20of%20crypto,costs%20associated%20with%20mining%20it**> accessed 15 April 2021

[158] (2021) <**https://cryptotrader.tax/blog/cryptocurrency-tax-problem**> accessed 6 May 2021

reason why tools applicable for assets or money, in general, do not apply to Cryptocurrency. I argue that this mutual legislative shortcoming is caused by not understanding the true nature of Cryptocurrency. Once states analyze Cryptocurrency's genuine concept and rather than applying rules of different notions (fiat money, assets), they will regulate Cryptocurrency as it is, legislation will be successful. The first step towards it is made by Germany while treating Cryptocurrency as private money for tax purposes[159]. This novel statement is a positive change. However, as argued in the relevant section, their approach does not answer challenges of Cryptocurrencies true nature despite trying.

Nonetheless, I think Germany's approach is favourable to regulating Cryptocurrency as money, Bundesbank assertions opposite statement, of what I argue through this thesis paper. As Dirk Schrade, the Bundesbank expert in payments, claimed, "Bitcoin is not a virtual currency,"[160] "Bitcoin does not fulfil the typical functions of a currency, nor is it part of the national monetary system"[161] none of this statement cannot be entirely acceptable as I have argued through the first chapter of this thesis. However, this type of assertions shows that regardless of Germanys attempts to regulate Cryptocurrency as it is and not as fiat money or assets that we knew before it, the genuine concept, and goals of it is still unclear not only for ordinary people but for experts as well. Dirk Schrade's words, mentioned in the same interview, "I personally would like to know, for example, on what hopes and ideas the Bitcoin was founded and whether these have been fulfilled,"[162] are a representation of this fact.

159 McClure Z, 'How Cryptocurrency Is Taxed In Germany | Tokentax' (Tokentax.co) <**https://tokentax.co/guides/crypto-taxes-in-germany/#:~:text=In%20Germany%2C%20mining%20of%20crypto,costs%20associated%20with%20mining%20it**> accessed 15 April 2021

160 '"Bitcoin Is Not A Virtual Currency"' (Bundesbank.de, 2018) <**https://www.bundesbank.de/en/tasks/topics/-bitcoin-is-not-a-virtual-currency--667600**> accessed 15 April 2021

161 '"Bitcoin Is Not A Virtual Currency"' (Bundesbank.de, 2018) <**https://www.bundesbank.de/en/tasks/topics/-bitcoin-is-not-a-virtual-currency--667600**> accessed 15 April 2021

162 '"Bitcoin Is Not A Virtual Currency"' (Bundesbank.de, 2018) <**https://www.bundesbank.de/en/tasks/topics/-bitcoin-is-not-a-virtual-currency--667600**> accessed 15 April 2021

In addition to troubling tax forms, because of the malfunctioning legislation, Cryptocurrency owners do not have the possibility to experience the privileges they would have had under normal circumstances. The best example of it is discussed in the subchapter "Regulations of Cryptocurrency in the United Kingdom", ad it was the Cryptocurrency owners' incapacity to apply for ISA[163].

To assess, from a Cryptocurrency owner's perspective (if he/she is a natural person), Germany offers the best legislation over the U.S. and U.K. Because of the flexible rules and relatively more certainties than others, but main reason should be the rule of not taxing profit gained after holding Cryptocurrency for over one year. However, as this rule is believed to be a loophole in German legislation[164], it is expected to be strictly regulated under Section 21 of EStG[165] and prospects of entirely banning Cryptocurrency in the future are relatively high. Even German "Bitcoin Tax Heaven"[166] does not have a promising future. The future for Cryptocurrency owner in Germany is full of uncertainty, but from a preset perspective, there is no better legislation for Cryptocurrency owner natural persons in Germany; it is called "Bitcoin Tax Heaven" for a reason.

While Germany is a "tax heaven" for Cryptocurrency owner natural persons, the Same is not the case for corporations. Because the decisive rule of not taxing profit gained after holding Cryptocurrency for over one year does not apply for them, the tax rate is more than 45%, and they also have to pay corporate taxes. Taking into account that the U.K. has a significant number of taxes for corporations "Capital Gains Tax (CGT); Corporation Tax (C.T.);

[163] 'Individual Savings Accounts (Isas)' (GOV.UK) <https://www.gov.uk/individual-savings-accounts/how-isas-work> accessed 3 April 2021

[164] Marvin Neumann, 'Olaf Scholz Reagiert Unerwartet Emotional Auf Kritik | Teil 2' <https://www.youtube.com/watch?v=7Mh2xqeDIgI> accessed 15 April 2021

[165] '§ 21 Estg - Einzelnorm' (Gesetze-im-internet.de) <https://www.gesetze-im-internet.de/estg/__21.html> accessed 15 April 2021

[166] De Hoon I, 'Germany: A Surprising Bitcoin Tax Haven' (No More Tax) <https://nomoretax.eu/bitcoin-tax-haven-germany/> accessed 15 April 2021

Corporation Tax on Chargeable Gains (CTCG); Income Tax (I.T.); National Insurance Contributions; Stamp Taxes; VAT"[167] and do not have a confident approach towards taxing corporations involved in Cryptocurrency trading, The U.S. legislation would be the best suited, among those three, for corporations, involved in Cryptocurrency trading or earning.

From the governments' perspective, the best approach of taxation Cryptocurrency is the U.K. one. While Germany has the legislative "loophole" that caused debates among German political elites and government officials, they are not taxing profit gained after holding Cryptocurrency for over one year at all and thus wasting lots of revenue that should have been spent on the common welfare. Sacrificing common interests over individual Cryptocurrency owners certainly is not "finding golden balance" and would not be a preferable approach. The fact that there is debate about entirely banning Cryptocurrency proves the stated point. The same is the case for the U.S., as discussed, evaluating tax rates based on marital status. While the U.K. overburdens Cryptocurrency owners with a significant number of taxes, they manage to gain more revenue from it.

In conclusion, it can be said that none of the studied legislations does find the right balance between public and individual interests regarding Cryptocurrency. While U.K. and U.S.'s approach limits customers, German provides customer-friendly legislation. However, none of them achieves the goal of efficiently taxing Cryptocurrency. Every untaxed Cryptocurrency is less wealth for the common welfare, and every extra tax imposed on Cryptocurrency owner is the reduced market.

[167] 'CRYPTO40050 - Cryptoassets Manual - HMRC Internal Manual - GOV.UK' (Gov.uk, 2021) <**https://www.gov.uk/hmrc-internal-manuals/cryptoassets-manual/crypto40050**> accessed 3 April 2021

Conclusion

This chapter analyzed current Cryptocurrency regulations in the U.S. U.K. and the German jurisdictions. Found and critically discussed shortcomings of each, misunderstanding concept of Cryptocurrency by the U.S.; overburdening taxpayer by the approach of U.K.; loophole of German legislation. I have tackled the positive sides of each approach and argued regarding the future development of each legislation and its effect on the Cryptocurrency market. I have also compared each jurisdiction and assessed which one would be preferential for different sides, taxpayer individuals, taxpayer corporations and governments.

CHAPTER 3- THE NEED FOR A NEW REGULATORY FRAMEWORK

Introduction

No human may foresee the future; it is full of ambiguity. What society can and are doing is to create the structure of rules, that's development throughout years is predictable and, most importantly, controllable. Hence, the majority of the things used today are adapted to present practices or perceptions of the world and are intended to be controlled over time. Such is the current global (U.S. dollar-based) economy, thus approaches towards concept of "money" or an "asset".

Not only decades, but even seconds may have crucial importance. In the present digital era, one invention may singlehandedly demolish and outdate legislation that was traditionally used. It happens when the law does not tackle fresh challenges no matter, entirely or partially.

When the law addresses the problem partially, it requires some amendments. However, sometimes invention or modern fact is so revolutionary that it forces legislators to demolish and restructures basic principles of the law. The invention of Cryptocurrency is from the latter category.

It is evident that, at the beginning of the 1970s, a decade prior to the internet[168], while agreeing upon the basic concepts of "money" (fiat currency) or an "asset" for U.S. dollar-based economy[169], government officials would not even consider the existence of internet-

[168] 'A Brief History Of The Internet' (Usg.edu) <https://www.usg.edu/galileo/skills/unit07/internet07_02.phtml> accessed 1 June 2021

[169] Ghizoni S, 'Nixon Ends Convertibility Of US Dollars To Gold And Announces Wage/Price Controls | Federal Reserve History' (Federalreservehistory.org, 2013) <https://www.federalreservehistory.org/essays/gold-convertibility-ends> accessed 20 January 2021

based Peer-to-Peer currency. As this (fiat currency) approach has arguably worked through years, governments are working on updating, amending it instead of changing and adopting new, potentially better methods (Peer-to-Peer currency). However, demand for change is apparent; it is coming from the society, as they came up with the concept of Cryptocurrency. Now it is the governments turn to be brave towards upcoming changes and embrace efficient measures instead of clutching old, outdated systems.

3.1 Recommendations for correcting flaws of current regulations and suggestions for creating an ultimate tax legislation

The first chapter of this paper states that Cryptocurrency has every essential characteristic of money, and it outperforms Fiat or Gold currencies, yet it is not regulated as money. This non-approval of Cryptocurrency as money is caused by the harmful habit of trying to amend, update existing approaches rather than implement a new revolutionary one, which will cause massive legislative changes and endanger existing financial institutes.

As already stated, problem is caused by the fact that Governments are trying to regulate before non-existing, unprecedented concept (Peer-to-Peer currency Cryptocurrency) by applying legislation of existing notion (fiat money or an asset), and this caused problems because the creation of Cryptocurrency required the design of new strategies instead of modifying existing ones to it. Cryptocurrency should be regulated as money because it has characteristics of it. Yet, it cannot fall under the current concept and, therefore, regulation of money. Hence, it is essential to change the understanding of money and then apply it to Cryptocurrency.

As argued, adopting the traditional concepts of either money (Germany) or an asset (U.S. and U.K.) causes different types of problems, and it does not matter which one government will choose if they will not change existing concepts. Cryptocurrency requires legislation to be adopted, specifically on it. First, its concept, then characteristics and flaws or strengths of existing legislation must be analyzed and working on reform of moving from fiat currency to Cryptocurrency era must begin.

This paper analyses what type of problems existing legislation in the U.K. U.S. and German are facing and their strengths. In order to create a new legislative approach, states must implement positive sides of each jurisdiction mentioned above, strengthen weaknesses, and generate a mix of German U.S. and U.K.s approaches.

First, new legislation should clearly state that Cryptocurrency is money and not an asset. This fact will solve the problem of high taxation rates, problematic in the U.S. As mentioned, the U.S. has exceptionally high taxation rates for Cryptocurrency because it is treated as property for tax purposes and taxed based on age, income or marital status. Declaring that Cryptocurrency is money will not apply discriminatory taxation based on age, marital status or income to Cryptocurrency. At the same time, it will stay the same for the property. Also, it will solve uncertainty caused by legislators admit that Cryptocurrency has characteristics of money but regulating it as property.

What is more, this action will allow IRS to create different types of fill out taxation forms, explicitly produced for Cryptocurrency, that will not require indicating the price of the Cryptocurrency in the U.S. $. Current tax forms that suit property are fair towards real estate owners because it is easier to display the price of your estate in tax form than write down a detailed description of the whole property. Though this form is burdensome towards Cryptocurrency owners and suggested legislative change will release them from such a heavy load as Cryptocurrency owners will not have to convert every single transaction to U.S. $, they will be able to trade within different Cryptocurrencies actively and indicate them (Cryptocurrencies) in IRS forms as money.

However, only this change will not solve the entire problem. As stated in this paper, Cryptocurrency owners call Germany "Bitcoin Tax Heaven". Nevertheless, the German approach towards taxing individuals trading with Cryptocurrency is believed to be very soft and caused massive complaints among the political elite. I consider that the reason behind objections is that the German government has not declared clearly their position towards this issue. Thus, politicians argue that a softer approach is not governmental policy towards taxing Cryptocurrency but legislative loophole. This issue is easy to solve. States should adopt the soft German approach of taxing Cryptocurrency transactions. However, I believe that they should increase the 1-year holding period up to 2-3 years so that it will attract Cryptocurrency owners, but the state will receive much more revenue. Though, the number of years is a technical issue and should be decided case-by-case depending on countries economic capabilities and needs. Noteworthy is the idea of attracting Cryptocurrency owner individuals by not taxing Cryptocurrency based transactions after some period of holding them. At the same time, it will earn more revenue than before. Governments must clarify that this is a state's politic and not a legislative loophole; therefore, it will vanish all the protests similar to German ones. Vital is that this change should be used only as of the first stage of Cryptocurrency taxation. While Cryptocurrency is still in the early stage of development, the soft approach will encourage more people to be involved and develop this field; afterwards, when Cryptocurrency will reach the more advanced level of development and will compete for substituting fiat currency. States should tax each Cryptocurrency based transaction to get revenue.

States must choose a straightforward approach towards mining Cryptocurrency; the "common practice" should not regulate it. I argue that it will be better not to tax mining Cryptocurrency at this stage, while it can be done in the future. The rationale behind it is that Not taxing mining will encourage more people to do it. The only way to benefit from mining is to use Cryptocurrency in trade. Therefore, by not taxing mining, states will get more people involved in it and earn revenue afterwards when it certainly will be used in trade. Also, Cryptocurrency mining already requires an extreme amount of electricity. Thus, miners pay electricity bills, and the government eventually gets the money.

States using ISA's or similar tools should allow Cryptocurrency owners to use it because it works as an excellent stimulator for people to inform revenue services about their trade, and also, as stated in the U.K.'s section, Cryptocurrency qualifies to be one of ISA's. Human nature always encourages them to risk when there is a high price, and this determination increases when otherwise they are overburdened. Taking into account the nature of Cryptocurrency and the ability to avoid governmental control, strict regulation encourages Cryptocurrency owners not to inform transactions to state authorities and benefit from it with relatively low risk. Tackling this problem under strict legislation will be extremely hard, nearly impossible. Therefore, by giving this lawful privilege (ISA), states will gain control over Cryptocurrency based transactions and, most importantly, with minimum effort.

I have argued what changes must be made regarding individuals owning Cryptocurrency or mining. Though, to increase Cryptocurrency's use and tax Cryptocurrency efficiently, it is vital to have a transparent and flexible legislative approach towards companies (non-natural person) Cryptocurrency owners. As this paper argues, the U.S. has the most explicit and arguably the best method of taxing companies. However, after considering all amendments proposed above, directly adopting the U.S.'s approach will not work because recommended changes create a soft approach with moderately low tax rates, while U.S. tax rates are high. The mix of those two will make an enormous difference between taxing natural and non-natural persons. The U.S.'s approach should be taken into account, especially legislative clarity. Still, some technical changes (low tax rates and simpler tax forms) must be made based on states situation case-by-case.

Conclusion

Based on the analysis in the previous chapter, this chapter suggests modifications that need to be made in existing legislation or advice that must be considered while taxing Cryptocurrency so that legislation will be efficient; states will earn more revenue and popularize Cryptocurrency. The chapter offers a mix of the U.S. U.K. and German jurisdiction founded on substantial parts of each approach and recommends modifications for strengthening weaker points.

GENERAL CONCLUSION

The first chapter of this paper argues that Cryptocurrency is money and not an asset. It analyses what subjects were identified as money throughout history, compares characteristics and states that Cryptocurrency is the best "candidate" that we ever had so far to be used as money. The analysis of the first chapter is crucial to understand why currency regulatory approaches do not work efficiently.

The second chapter of this paper is a comparison of the current legislative flaws of three different jurisdictions. It analyses problems to find solutions that are suggested in the third chapter. The second chapter also suggests which jurisdiction is better under current circumstances (if nothing changes) for Cryptocurrency mining, Cryptocurrency trading for natural and non-natural persons.

The third chapter of this paper recommends modifications countries need to undertake for creating ultimate tax regulation of Cryptocurrency, which is based on the legislative analysis done in the second chapter.

In conclusion, this paper tackles the pure nature of Cryptocurrency, considers the purpose behind its creation and its ability to work under every circumstance. Explores current legislative flaws and advises which one to use based on persons' legislative status or interest and finally offers changes states need to undertake in order to create novel or modify existing legislation and have efficient tax regulation for Cryptocurrency.

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