

## Existing Approaches to Define Cryptocurrency for Possible Legal Regulation

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### ABSTRACT

In this article, the author considers the question of how the understanding of the essence of cryptocurrency as a destructive innovative technology is built. The position of the author lies in the fact that the cryptocurrency, even though it is, by all indications, one of the types of fintech, is considered separately in science. Due to this, in various works of scientists from different countries, one can note a trend towards a completely opposite understanding of what exactly is a cryptocurrency and what is its significance for changing the modern world financial system. Based on a comparative analysis of research positions, the author evaluates several approaches to the definition of the concept of cryptocurrency. The author identifies three such approaches and evaluates some purely local theories regarding cryptocurrencies and their nature. To express an individual position, the author highlights the main characteristics of the cryptocurrency and proposes to consider them not as a type of already existing currencies, but as a separate phenomenon. The author concludes that the study of cryptocurrencies at the micro and macro levels will allow not only to assess the risks of their use at a particular moment by specific categories of technology consumers, but to assess the systemic nature of the phenomenon and its impact on the future. This, in turn, should allow answering the question of how and when it is worth starting to regulate cryptocurrencies by the law - and whether it is necessary to do this in general.

**Keywords:** cryptocurrency, legal regulation, fintech, disruptive technology, legal definition

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## 1. INTRODUCTION

Cryptocurrencies represent one of the most relevant technologies for research, known as disruptive. Let us recall that technological innovations that fundamentally change the traditional ideas about the established relationships in society and the regulation of it are called destructive.

In theory, every truly revolutionary technology has been disruptive in some way, from book printing to electricity, telephone, or radio. Thus, it is not too true to believe that contemporary disruptive technologies of the post-computer era are something radically new and unknown. They are based on yet existing technologies. Their revolutionary and destructive nature lies not in how the hardware parts were assembled and how quickly data is transferred in the space of these innovations. These technologies are changing the way the relations between mankind and states works in various combinations in the areas familiar to these parties - economics, politics, law.

In one of her core papers on fintech S. Omarova pointed out that the most important thing about fintech is how this disruptive technological innovation “beginning to change the way we think about finance” and how the “fintech phenomenon is gradually refraining our understanding of the financial system” (Omarova, 2019). Due to the fact that attention is most often focused on specific aspects of technology, the systemic changes caused by it escape the attention.

Cryptocurrency is no exception, as we have already said. Moreover, if we consider cryptocurrency as a part of fintech, then its features should be included in large-scale research on the subject and not go beyond the study of general fintech trends. However, there are circumstances, the reasons for which are very diverse, that cryptocurrencies are often studied outside the entire system of innovative financial technologies.

The reason for this exception is quite simple and lies in the fact that of all financial technologies, only cryptocurrencies encroach on one of the main state rights in the field of economics, which cannot be transferred to third parties without an imperious will – money emission.

Fintech as such, even though there is a dispute in academic and practical papers about them, the fintech types, differentiation with mobile banking and online banking, are easily adapted and included in the list of banking services and products. How and to what extent fintech is integrated into the activities of banks depends, objectively, on banks themselves, which is openly recognized<sup>2</sup>.

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<sup>2</sup> For example, the experts addressing the impact of the Covid-19 pandemic on the transition to online banking and the adaptation of fintech, they note that the expectation of a rapid leap in customer demand for such technologies was significantly exaggerated. In the UK the transfer to remote (mobile) banking services has increased only 5% higher than a year before, in 2019, from 52% to 57%. And the ability of banks to offer these technologies depends not only on financial capacity,

Moreover, a comparative study of the practice of defining fintech in law shows that competition between banks and fintech start-ups often leads to a merger of the former and the latter<sup>3</sup>. As a result, innovative banking exists within banks, and independent fintech is absorbed by banks, in some cases almost completely. Thus, most of the risks associated with fintech fall within the limits of banking regulation, and fintech itself is content with a separate legislative act or an amended part in existing laws. And even though the law is not able to change the architecture of technology, to a certain extent it can change the way we understand this technology.

In case of cryptocurrency this trend has not been confirmed.

While studying the question of how cryptocurrency should be understood, we were faced with the fact that there is not even a single opinion on whether it is worth including cryptocurrency in FinTech, not to mention what cryptocurrency is and to which category it should be classified.

During the research, the current results of which are offered to the reader in this article, we proceed from the fact that not every legal system needs a definition of cryptocurrency. However, if we want to go beyond focusing on the current features of cryptocurrencies as means of payment, on its contradictory nature and threats to various areas of society, if we want order to realize how and to what extent cryptocurrencies are destructive as technology, we should ask what they are. What place they can occupy in the already existing familiar world of finance and economics, especially when reports and statistics allows us to conclude that this issue is not going to disappear soon<sup>4</sup>.

## 2. DEFINING CRYPTOCURRENCY

The term "cryptocurrency", contrary to popular belief, came not from the science but from mass media. It arose in 2011 as the title of an article in the economic magazine that described the phenomenon of "electronic currency" the technical characteristics of which made it something unseen on the market

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technological development and demand, but also on the desire of the banks themselves. See: Kevin Martin, Chief Operating Officer, Wealth and Personal Banking, HSBC How banking will change after COVID-19 // <https://www.hsbc.com/insight/topics/how-banking-will-change-after-covid-19>

<sup>3</sup> The example of this may be found in case with online banking and fintech in Russia where banks are very open to implement fintech in online banking services, so banks are highly competitive in this field and, what is very important for the customers, such products and services are regulated by the law, including Customers Protection Act. See the article on this matter: Kuchina, Y. O. (2021). Regulating fintech in Russia: problems arising from the lack of its legal definition. *Justice*, 3(2), 80-102.

<sup>4</sup> According to the statistics, global investment in financial technology ventures has more than tripled during the last five years – from under \$930 million in 2008 to more than \$2.97 billion in 2013, and to more than 213 billion in 2019. It is one of the fastest and rapidly grown industry in the world.

finance<sup>5</sup>. At that time, the object of journalistic interest - Bitcoin – was more theory than practice, although it counted for several years and was by no means the first of the cryptocurrencies.

The rise of interest in Bitcoin, as well as in cryptocurrencies in general, came much later, and, in our opinion, this growth is related not only to the instantly increased popularity of blockchain technologies, part of which implemented into cryptocurrencies, but also with the rapid growth of the exchange rate of Bitcoin.

In this period domestic regulators turned the attention to cryptocurrencies, since some of technical characteristics do allow to consider them as a possible part of illegal activity. Special attention is paid to cryptocurrencies in terrorism financing crimes, drug or weapon trafficking, money laundering, etc. But, with all this, still there is no unified definition of cryptocurrency and, in some domestic researchs there is no even a single approach to understand it. This, in our opinion, may be the reason for the doctrinal problems in reflecting cryptocurrencies through the prism of law.

In certain national legal systemes this absence doesn't cause much problems allowing to implement the technical characteristics on case-by-case basis. In others the definition – both as a part of law and in academic papers – is a base, starting point allowing to built a unified structure of legal understanding.

We see this in almost every legal system. Explaining the urgent need of defining cryptocurrencies, the academics insists that the technical definition does not allow “revealing the essence of this economic category, and also prevents the prompt creation of adequate norms governing the procedures for issuing and circulation” of them (Vahrushev, Zhelezov, 2014). They suggest that when economic development is faster than the law amendments, such situation may cause different types of risk on micro and macrolevels. They also can discuss not only the need in total regulation, but concentrate on a particular areas. For example, some proponents insist on regulating the transfer of cryptocurrencies by intermediaries who serves these transfers, like operators of online wallets, exchanges, and gateways. The reasons are the same, the “missing link in the regulation of cryptocurrency transactions” (Hughes, Middlebrook, 2015).

Others highlight the sectoral problems, like the fact that decentralized cryptocurrencies do not have a specific legal entity that is responsible for consumer protection (Hughes, 2017). These authors refer to the fact that virtualised nature of cryptocurrencies makes the application of traditional legal frameworks

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<sup>5</sup> «Bitcoin is different: It wholly replaces state-backed currencies with a digital version that's tougher to forge, cuts across international boundaries, can be stored on your hard drive instead of in a bank». Greenberg A. Crypto Currency. Forbes, April 20, 2011.

weak, and the absence of a specific legal entity makes so the enforcement of any new legal framework. In general, we cannot consider these reasons as insignificant. The main purpose of cryptocurrencies is to act as a substitute for money, and their unregulated use contains all the same threats that can come from money if they have not being regulated. Accordingly, the concern of experts in the field of tax law, consumer protection, anti money-laundering, etc. is understandable and justified. Such examples as the failure of the Mt. Gox Bitcoin exchange based in Tokyo, Japan, and the public prosecutions in the United States and Australia for Bitcoin-related transactions of illicit goods on the Silk Road marketplace also proof the position. This is also explain why different states behave differently in case of cryptocurrencies, from the total ban through the limited forms of regulation to the emission of centralised cryptocurrency of the state.

When defining a cryptocurrency, one of the following approaches is usually chosen:

- technical description of the cryptocurrency;
- to outline its financial function;
- combine technical and financial characteristics, trying to derive a legal concept based on the usual technique of law writing.

The choice between technology, finance and law is deeply explained in the papers on Fintech Trilemma issues, so we are not going to repeat it there. Instead we concentrate on the main consequences of them.

Most of the analyzed authors chose a technical description as the essence of cryptocurrencies, noting that this is, for example, “the newest type of monetary currency, which is a decentralized accounting of digital assets based on blockchain technology and using cryptography methods in the process of functioning” (Kalinin, 2017). In the quoted passage, the author actually stated the technical characteristics (which, however, is not entirely true), adding the component “currency”.

The problem with technical description of cryptocurrencies outside of its specific type<sup>6</sup> is that such an approach does not take into account the difference in technical architecture of it. Along with it, the market prospects of a cryptocurrency also escape attention. Obviously, not every cryptocurrency can compete with Bitcoin, but each can become obsolete at any moment, like any technology. This, among others, is the reason of the principle of technological neutrality, which, for example, UNCITRAL follows

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<sup>6</sup> Means Ethereum (ETH), Litecoin (LTC), Cardano (ADA), Polkadot (DOT), Bitcoin Cash (BCH), Stellar (XLM), etc.

in its papers. So we suggest that as the legal act of a state is not usually a soft law, the legislator also should follow the principle to make this law works. Otherwise can cause the issues of implementation.

The economics approach of cryptocurrency defines it in contrary with the system of money, mostly fiat. Fiat money nowadays is understood as the prevalent monetary system, in which the medium of exchange consists of unbacked government liabilities, which are claims to nothing at all (Velde, 1998). So such approach can be named as “contrast”, when the description of cryptocurrency is given as the opposite to fiat money.

This contrast, on the one hand, allows to demonstrate that the possible and very debatable transition from fiat monetary system to cryptocurrency may be a logic part of financial evolution, at least, if to research this through the example of transition from commodity money to fiat money. Some authors who analysed this transition proofed that it was not so dramatic as suggested, mostly because this process was under control of the governments (Redish, 1993). On the other hand sometimes this position or rather, the difficulty in determining what exactly is fiat money and what are their features leads to significant confusion.

The question arises - what is the essence of cryptocurrency, if it cannot be attributed to any of the already existing financial and monetary categories? We believe that it is possible to answer this question only after considering the technical nature of the cryptocurrency and, most importantly, the features of its origin.

### 3. CHARACTERISTICS OF CRYPTOCURRENCY

As it already mentioned, the term “cryptocurrency” appeared after being published in a financial magazine. Andy Greenberg, the author of the article, describing the phenomenon of Bitcoin as the first cryptocurrency, noted that it is a non-profit project “that seeks to create a new currency from something more than cryptography, network technologies and open source software” (Narayan et al, 2017). It is the remark about the non-commercial nature of Bitcoin, in our opinion, is the starting point that should serve as a categorization of cryptocurrencies in general.

Bitcoin was not just an attempt to create a digital expression for already existing national currencies, differing from the PayPal system only in the cryptographic methods used. Bitcoin was the attempt to create a currency that is accepted by non-state market participants (Swartz, 2018), free from national financial systems, financial regulations, treasuries and currency collateral.

From a legal point of view, the goal of creating Bitcoin was to replace the state-backed currency with something that would be supported by the goodwill of the participants in the exchange process. And the current position of Bitcoin in the foreign exchange market, as well as the duration of its existence as an element of exchanging, allows to conclude that this attempt was a success.

At this stage of development of the digital currency market, we can talk about four types of digital currencies, the existence of which is confirmed by the law and contractual practices. We suggest these types of currencies, chosen according to the purpose of their foundation and the peculiarities of their regulation:

- 1) private digital (electronic) currencies;
- 2) virtual currencies;
- 3) national digital currencies;
- 4) cryptocurrencies.

We can conclude that these four types are an addition to the already globally recognized cash and non-cash currencies, but, at the same time, they are not equal in content. We believe that the fourth of the types - cryptocurrencies - cannot be attributed to any of them, but should be singled out as a separate, unique type, and here's why.

Firstly, the most important difference between a cryptocurrency and other types of currencies is its complete independence from national currency systems, which is often referred to as the autonomy of a cryptocurrency. It is wrong to understand the existence of an exchange rate for cryptocurrencies as a dependence, since this rate is an effect derived from the recognition of cryptocurrency as part of the currency exchange process.

We suggest, that autonomy of cryptocurrencies consists in their complete legal independence at any stage: independence from the will of a regulator and a state, expressed in black letter law; independence from the will of the issuer - the emission of cryptocurrency is provided by technology functions, and it is difficult to predict the outcome of the emission. Thus, the technology ensures that there is no legal dependence on the will of a person and on person's interference in the process.

If we describe the emission of cryptocurrencies in a simplified way, without going into technical details of a particular type, then the process consists in the algorithm performing a series of calculations with enumeration of parameters to achieve a certain result. Even such a description allows us to conclude that legal or powers intervention in the process of issuing cryptocurrencies is impossible, because this emission, in fact, is not totally controlled by a human. The control over the emission literally is the control over the technical parts (hardware) of mining process. It can be stopped (by switching off) but can it be influenced by interaction with a legal power in the work of software? No.

Therefore, it is impossible to guarantee in advance the result of the emission, in whole or in part, exactly as it is required by the provisions of the law. In this feature of the cryptocurrency emission was named among the reasons why a ban is imposed on ICO procedures in some states. ICO is regularly mistaken for another way of cryptocurrency emission, along with mining and forging, while in terms of its legal content, the concept of ICO is much more complicated. Countries restricting ICO procedures (Canada, USA) or ban them (China) (Panova et al, 2019), as a rule, refer to the lack of legislative regulation, standardization and additional guarantees of the procedure (Chudinovskikh, Sevryugin, 2019). This lack exists in the area we described – the inability of a human will in any form of it to interfere in the cryptocurrency emission process on the same level it is possible to interfere in the emission of official currencies known as “money”.

We see that the non-centralized nature of the cryptocurrency is important for its existence and acceptance. The inability to intervene in the emission process, the almost complete incapability to influence in any way with power - and this factor cannot be ignored - affects the recognition of cryptocurrencies. Moreover, contrary to popular belief about the criminal potential of cryptocurrencies, we insist that independence of them is valuable in itself, and not as a guarantee of the ability to hide criminal activity. This conclusion is also confirmed by data on the decline in interest and demand for cryptocurrencies in states where the circulation of cryptocurrencies has been banned or restricted (Borri, Shakhnov, 2020).

#### **4. CURRENCY – NOT CURRENCY: LACK OF TERMINOLOGY**

In this situation, we think that the use of the initial concept is debatable, especially in those states where the term “currency” legally can be used only as equivalent to the word “money”, either in cash or



non-cash. This is obvious why Bitcoin and similar technologies were named “cryptocurrency” – to distinguish them from the already named and well-known types of currency but to highlight the equivalence of the function these two concepts share. Normally, “currency” is understood as a specific monetary unit of any national payment system, for example, the Russian ruble in the Russian Federation. Of course, in some studies on the issues of the world economy, this term is used to describe any objects of market exchange (Barakina, 2018), but we still believe that in legal terminology, and in jurisprudence in general, such a multiplication of terms and etitites is meaningless.

Also in some states this may cause the massive amending of existing law, close to reformation. This conclusion can be confirmed by the example of Art. 1 of the Federal Law on Currency Regulation and Currency Control (December 10, 2003 N 173-FZ), where the currency is:

A) money in the form of banknotes and coins that are in circulation as a legal means of cash payment, as well as banknotes withdrawn or withdrawing from circulation, that still can be exchanged;

B) funds in bank accounts and bank deposits.

We think that such a stable interpretation excludes even the possibility of considering cryptocurrencies as a type of currency, something as a new form (type) of money other than cash or non-cash. The basis for this conclusion is the narrow focus of the use of funds: it is only a means of payment that has no other functions, which is confirmed not only by domestic, but also international law.

That is why we didn't agree with the position of the Central Bank of the Russian Federation, which in its well-known clarifications from 2014 and 2017 called cryptocurrencies as “private virtual currencies” . Moreover, we generally consider it a wrong decision to equate cryptocurrencies exclusively with a currency, and we consider “cryptocurrencies” to be nothing more than a play on words that has become an established definition. Equating cryptocurrencies only with foreign exchange means, in our opinion, significantly reduces their technical, legal, economic, political perception as a phenomenon of the post-computer era.

The same problems come with identifying cryptocurrencies as a “currency surrogate” (Maramygin et al, 2016).

A currency surrogate is a substitute for legal tender or money in general, which performs all or part of their functions, such as a medium of exchange, payment or savings (Dudina, Kremleva, 2016). In

some legal systems, illegitimate funds are understood as a currency (or money) surrogate. For example, Art. 27 of the Federal Law (July 10, 2002 N 86-FZ) on the Central Bank of the Russian Federation (Bank of Russia) states that “the introduction of other monetary units on the territory of the Russian Federation and the issuance of monetary surrogates are prohibited.” There are no other references to currency surrogates at the moment in the legislation of the Russian Federation.

At the same time, experts identify cryptocurrencies and currency surrogates, usually not explaining what the latter are (Kharaeva, 2018). This term acquired legal meaning because of the speech of the Deputy Chairman of the Central Bank in 2018, where he quoted Art. 27 of Act N 86-FZ and noted that, in general, the Central Bank of the Russian Federation perceives cryptocurrency as monetary surrogates and does not support its circulation in any form. However, in fact, the meaning of the concept “monetary surrogate” is much deeper than it is commonly believed.

The concept of money surrogates has been known for a long time. At the beginning of the XX century, L.A. Lunts described this as “securities that, by the property of their negotiability, can receive the value of banknotes”(Lunts, 1999). At that time, promissory notes, bonds, and sometimes shares were classified as monetary surrogates, albeit L.A. Luntz preferred to use the term “private currencies”.

Nowadays, the list of objects classified as monetary (currency) surrogates has expanded. So, it could be understood as “objects used as means of payment that are not obligatory for acceptance by everyone and do not meet the signs of legal or special means of payment, the release of which into circulation by the state was not carried out and was not authorized, and their production is prohibited and punishable in accordance with the law”(Kucherov et al, 2016). Others describes them that as money substitutes “used as a means of payment” (Arzumanova, 2014), which can be used for payments between parties if there is an agreement on this.

Another interpretations can be found in the economic papers. For example, Klistorin and Cherkassky indicate that currency surrogates perform the function of a means of payment, but do not serve as a store of value and, moreover, do not determine the proportions of the exchange of goods, and their features are formed through the non-market nature of their circulation (and gave as an example promissory note) (Klistorin,Cherkassky, 1997).

The most famous expert in currency surrogates O.Krylov considers them as a financial instrument capable of simultaneously performing, in whole or in part, the functions of the currency of the state

(Krylov, 2011). In his opinion, a monetary surrogate can simultaneously be a measure of value; means of circulation; means of payment; means of accumulation; world money.

Giving examples of currency surrogates T. Deltsova names foreign currency, securities, treasury tax exemptions, bullions of precious metals, tax benefits, deposit and savings certificates, receipts, travel coupons, etc. (Deltsova, 2017) That is, in other words, any means of payment or payment exchange, except for the national currencies of a state, which, of course, allows to consider cryptocurrency as monetary surrogates.

However, the main issue on this definition is those that in international sources the term “money surrogates” does not exist.

From all that has been said, it becomes obvious that the parallels drawn by some authors (Shildina, 2016) between currency surrogates and cryptocurrencies are based on a simple statement that everything except the national currency of a state belongs to category “monetary surrogates”. From economic point of view, this position, probably, can be accepted, but jurisprudence, which considers the essence and content of such extremely heterogeneous concepts as tax benefits, certificates of deposit, precious metal ingots, receipts, metro coupons, cannot apply such a general term to a completely unique phenomenon in its legal sense - cryptocurrencies. For a lawyer all the object that can be included in the concept “monetary surrogates” are based on completely different criteria comparing to cryptocurrencies.

Therefore, as in the case of money, we consider monetary surrogates to be a definition that is not suitable for use in lawmaking and law enforcement. The only possible analogy between cryptocurrencies and monetary (currency) surrogates is admissible only if the issue of their legitimacy is considered, which, however, is doubtful due to the conflict between the cross-border nature of the first and the purely domestic nature of the second concept.

Other points of view on the cryptocurrency in typologies and classifications are expressed from the position of searching for similarities between cryptocurrency and other currency, payment systems and means of material compensation. During the research we have seen attempts to make comparisons between cryptocurrency and electronic money, cryptocurrency and electronic payment systems, and even with payment services like PayPal, Webmoney, Qiwi, Yandex.Money, etc., which also are sometimes mistaken for currency surrogates (Maramygin, Tereshkin, 2017).

We think that this issue is not even debatable: electronic currency and electronic means of payment, as well as payment systems, are quite exhaustively regulated by domestic legislation, at least at the definitive level. For example in Art. 3 of the Federal Law of the Russian Federation (June 27, 2011 N 161-FZ) on the National Payment System, the following definitions are given:

A) electronic money - money that is previously provided by one party (the party provided the funds) to another party, taking into account information on the amount of funds provided without opening a bank account (obliged party), for the fulfillment of monetary obligations of the party provided the funds, to third parties and in respect of which the party who provided the funds has the right to transfer orders exclusively using electronic means of payment (clause 18);

B) electronic means of payment - a means and (or) method that allows the client of the money transfer operator to draw up, certify and transmit orders in order to transfer funds within the framework of the applicable forms of cashless payments using information and communication technologies, electronic media, including payment cards, as well as other technical devices (clause 19);

C) payment system - a set of organizations who interact according to the rules of the payment system in order to transfer funds, including the payment system operator, payment infrastructure service providers and payment system participants, of which at least three organizations are money transfer operators (clause 20 ).

According to the letter of this law, electronic payment systems are a subspecies of payment systems where transactions are carried out using the Internet or using other methods of data transmission. Moreover, none of these concepts is new, most of them in one form or another were defined back in 2007 in State Standardising Act (GOST) R ISO / TO 13569-2007 titled “Financial services. Information Security Recommendations” and Act N 161 just legitimated its provisions.

We suggest, that none of these concepts can be applied to the description of the cryptocurrency, just as the cryptocurrency cannot be attributed to them. The main reason is that all these phenomena interact with currencies and, in fact, are either a new type of money or an organized means of money transfer.

Accordingly, the interpretation of cryptocurrency as an element of currency transfer, that was made only on the basis of a part “currency” in the composition of the term, is absolutely incorrect. Such approach leads the doctrine and research (due to the lack of a norm) to an incorrect conclusion regarding its essence

and financial role, which entails an incorrect assessment of cryptocurrencies' characteristics, possibilities of application and other related issues.

## 5. CONCLUSION

Thus, we believe that cryptocurrencies in their true sense can only be considered those types of digital currencies that are received by non-state actors as a result of the actions we have described, and not issued by any state with their mandatory inclusion in the national money circulation. We believe that the peculiarity of the regulation of cryptocurrencies, due to the legal custom that has already developed since the beginning of the issuance of Bitcoin, lies in the free contractual basis for their creation.

At the same time, the one fact is missed. The variety of cryptocurrencies (there are already about two thousand of them), the variety of combinations of their technological architecture, methods of creation (emission), not to mention the goals, tasks, functions, will make legal definition meaningless. It will suffice to give an example regarding Bitcoin as the most famous type. Supporters of the regulation of Bitcoin often do not mention the problem known as "final emission". It is widely known that the creator initially laid down the opportunity to issue only 21 million Bitcoins, after which the process will stop. It is currently impossible to predict the consequences of this end for Bitcoin itself, as well as for the entire cryptocurrency market. But it is already obvious that such a law will immediately lose its significance, because the object of regulation will independently, without regulator's will and intervention, terminate itself.

The fallacy of this position is that the technologies underlying species cryptocurrencies differ from each other, and legal characteristics derived from this make them objects of inherently different legal relations, many of which turn the term "currency" into nothing more than a metaphor. So, one of the species, ether exchange unit of the Ethereum platform, combines the characteristics of money, non-documentary non-nominal shares and bills, and the system itself allows you to perform many functions, i.e. its signs speak of the undoubted uniqueness of the technology. But when this cryptocurrency is taken out of the platform, it, from a legal point of view, acquires a greater resemblance to Bitcoin than when it is used internally platforms. This variations of cryptocurrencies often ignored when considering issues on cryptocurrencies regulation. And this makes us to think about: does this mean that for hypothetical actions with the ether using platform and beyond will require separate legal acts?

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Cryptocurrency, as the most striking and difficult concept of the post-computer era, once again confirms the complexity of perceiving technology as an object and subject of a crime. Law has dealt with this repeatedly, from vehicles and weapons to computer information. The more complex the structure of an object, the more areas of regulation that its architecture affects, the larger the discussion in space between *de lege ferenda* and *de lege lata*. Speaking about such technologies, legal scholars are accustomed to mention previous precedents that can be spread (like it happened in Telegram case), but we believe it is important not to forget that in the case of technologically innovations of such kind, their nature, and not the regulatory norm, will become the primary source for the law enforcer if the legislator makes a mistake in the definition. Moreover, as practice shows, at the stage of law enforcement, expert opinion is important both in the presence and in the absence of the rule.

This, in turn, leads to a transition from the macro level of perception of the problem, including its assessment as a problem, to the micro level of private professional opinions. And it does not allow to form an unambiguous impression of the degree of destructiveness of the technology. Returning to what we talked about in the introduction to the article, this will mean the impossibility of understanding whether the system, in this case the financial one, is really facing changes similar to those that have already happened. And the paradox of innovative technologies is that if they miss the opportunity to realize their commonality, society may also miss the moment when the actual nature of the technology and its understanding will differ too dramatically.

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