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# Money as an Economic Category and Its Relationship With Crypto Assets

This brief discusses money in its general definition and describes new types of money arising in the modern era of digitalization, such as electronic money, cryptocurrencies, Central Bank Digital Currencies (CBDC), etc. It provides an overview of some of the legislative approaches trying to deal with new types of money, and outlines the benefits and shortcomings arising from allowing for financial operations with digital currency. It also stresses the necessity of a new integrated approach in national and international regulation of cryptocurrencies.



## Introduction

Cryptocurrencies have existed for more than 10 years. During this period the interest towards this type of digital money has seen its ups and downs. However, by now, they have become part of modern financial markets. Today, more and more central banks consider the possibility of introducing national digital cash and try to create easy-to-understand and clear regulation for new payment methods. We can observe the rapid transformation of the traditional monetary system. At the same time, there is no clear understanding of how the new monetary system should look like. An essential step towards this understanding is developing a clearer systematization and definition of money, financial funds, cryptocurrencies, fiat money in the traditional and the modern sense. Explaining these concepts is necessary to facilitate effective regulation, the development and supervision of financial markets. Indeed, during rapid financial markets transformation, well-developed regulation is necessary to avoid excessive financial risks and speed up financial sector development.

## The Place of Money in the Modern Financial System

Financial resources play an extremely important role for the economy: Monetary systems are like the blood circulation for the body. While there is a common understanding of what money is in the traditional sense, this concept does not take into account the recent development of the financial sector, the penetration of IT technologies, the entry of new non-financial institutions into the financial sector as well as the creation of new

products at the intersection of finance and IT. As argued above, a clear and encompassing definition of money, reflecting these developments, is necessary for regulatory purposes both at the national and international level.

Typically, money is defined through its functions, such as measure of value, means of circulation, means of payment and savings. For example, the Large Economic Dictionary suggests that "Money is the universal equivalent, a special product, used to form expressions of the value of all other goods. Money functions as a medium of exchange and of payments, as a measurement of value, wealth accumulation and world money" (Borisov, 2003). As can be seen, one of the most important characteristics of money is its universality. Money can be exchanged against different goods and services almost without any limitations. At the same time, Tarasov mentioned that money is "legal payment funds, usually consisting of banknotes and coins that are constantly circulating as a medium of exchange in accordance with government rule" (Tarasov, 2012). There are other definitions of money, but they usually describe traditional money.

Along with traditional fiat money there are other payment methods and electronic money is the most common of them. According to the Belarusian legislation, electronic money is "units of value stored in electronic form, issued in exchange against cash and monetary funds and accepted as a means of payment [...]"

Electronic money cannot be described as traditional cash or money on bank accounts. It is not included in the money supply and can be issued only by commercial banks. At the same time, electronic money can perform the same



functions as traditional fiat money. Whether or not electronic money can be considered full-fledged money is essentially a legal issue.

Another very important question is dedicated to cryptocurrencies. Cryptocurrencies are usually issued based on blockchain technology (distributed ledger) and can be created (“mined”) by anybody. Hence, electronic money is the representative of traditional money, but cryptocurrencies are not.

Taking into account the penetration of information technologies into finance as well as the appearance of electronic money and cryptocurrencies, we can define money as the universal equivalent (measure) of value constituting a legal means of circulation, payment and savings on certain territories within a particular jurisdiction, with a legal status guaranteed by the government (Luzgina, 2018). In this definition, the emphasis is placed on the legitimacy of money because in some countries, operations with digital currencies can be legally interpreted as operations with securities, equity etc., rather than money in the legal sense.

Belarus was one of the first countries that legalized operations with crypto assets. But this does not mean that cryptocurrencies have become the equivalent of national or foreign currencies. According to the Belarusian legislation, people can mine cryptocurrencies, exchange them against Belarusian rubles, foreign currencies, buy, sell and exchange against other tokens (Decree #8, 2018). There is no official permission to use crypto money as measure of value, means of circulation or payment method. In other words, people cannot use bitcoins for purchasing goods and services. At

the same time, cryptocurrencies can be used as traditional financial assets.

It is necessary to emphasize here that the digitalization of the financial sector is an ongoing process. It is very hard to be the leader in the sphere. Despite Belarus being an early mover in the legalization of crypto assets and notwithstanding the existence of a strong IT sector and attractive crypto assets regulation, Belarus is only the 59th among 65 countries in the Fintech Index 2020. Based on the experience of other countries, sustained progress in this area, can be achieved by government support, the existence of well-developed ecosystem and access to financing (Global FinTech Index 2020).

Belarus is not the only country in the world that has limitations on cryptocurrencies’ circulation as fiat money; restrictions differ depending on the jurisdiction. Many central banks consider cryptocurrencies as disruptive technologies with high risks. Regulatory bodies usually cannot control operations with crypto money. That is why cryptocurrencies can be attractive for payments in the gray economy. Moreover, exchange rate fluctuations of cryptocurrencies are very unpredictable. Owners of cryptocurrencies can become very rich as well as very poor within a short period of time.

Central banks can implement limitations to avoid or decrease risks. For example, operations with cryptocurrencies are prohibited in Bangladesh and strongly restricted in India. There are central banks (including the central banks of Malaysia and Austria) that take a neutral position with regards to crypto operations but inform the society about possible risks, including risks of high fluctuations (Luzgina, 2018). At the same time, Japan permits



the circulation of cryptocurrencies as a means of payment within its current regulation. That is, the Japanese authorities legalized these digital assets and, supposedly, can keep risks under control.

It is important to understand that these, and other, differences in the approach to crypto assets regulation create barriers for international payments and investment transactions. At the same time, a unification of regulation would contribute to transparency and mitigate the risk of cybercrimes.

## Central Bank Digital Currencies: Main Aspects

There is an intense political and academic debate about the future of crypto markets. At the same time, more and more countries begin to think about the introduction of Central Bank Digital Currency (CBDC). Countries like Ukraine, China, Sweden, Canada, Thailand and some others have announced their plans of issuing CBDC. CBDC can be compared with digital cash; it can reduce operational costs and make all money transactions more transparent. But there are some uncertainties: The technology is new and may cause confusion and even disapproval among the population who prefers to use only cash.

One of the most interesting examples of the introduction of CBDC is the case of Uruguay. In 2017-2018, this country realized a pilot project of CBDC (the e-peso). A limited amount of digital currency was issued and only 10,000 citizens joined the project. There was a limited list of stores and businesses that were allowed to work with digital currency and all transactions on the base of mobile phones were done only between registered users. This project has demonstrated several advantages

of e-peso circulation. First, the system could work without Internet and provided anonymity but at the same time controllability of all operations. Second, security was a main concern: The person could get the access to his/her digital resources even if he/she forgot the password of the digital wallet or lost the mobile phone, but non-authorized access was effectively avoided. Finally, the last but not the least advantage of the system was the exclusion of double charge or falsification during payment transactions. The project lasted half a year and finished successfully. However, transition to the digital currency did not follow.

As of now, many countries only consider or are going to realize pilot studies in this area. The only country that is going to implement CBDC in the foreseeable future is China. The cautious position of many central banks is understandable because CBDC is an analogue of digital cash. The population distrusts such forms of money. Another challenge is that senior citizens often prefer cash for payments and other financial transactions.

## Tokens vs. Cryptocurrencies

Bitcoin and other cryptocurrencies present only one kind of digital tokens. According to the Belarussian legislation, a token is an entry in the register of transaction blocks (blockchain), or another distributed information system certified that the owner of a digital sign (token) has rights to civil law objects and (or) presents cryptocurrency. All cryptocurrencies are tokens but not all tokens can be defined as cryptocurrencies. Tokens are issued for multiple purposes. Governments in many countries try to identify all types of operations with tokens for the creation of clear regulation. For example, the Central Bank of



Lithuania highlights the differences between issuing tokens in the framework of ICO (Initial Coin Offering) and STO (Security Token Offering). According to the Lithuanian regulation, ICO usually provides for presenting discount programs or using tokens as payment instruments. At the same time, STO includes issuance of tokens that have features of bonds or other traditional financial instruments and is subject to regulation. In other countries, central banks do not highlight STO and operations regulation with tokens depends on the characteristics and specifics of each project.

Many countries have developed unique principals and rules of tokens regulation. But there are no unified approaches at the international level which

makes it difficult for conscientious market participants to work with financial crypto assets over different jurisdictions. Moreover, there are uncertainties and risks that have to be investigated more in detail. Authorities in many countries are afraid of cybercrimes and increasing money laundering operations.

At the same time, many advantages are apparent. For example, in Belarus, crypto platforms get more popular, because they offer attractive financial instruments for the population and companies. On such platforms, companies can attract necessary resources and citizens invest in financial tools with regulated risks.

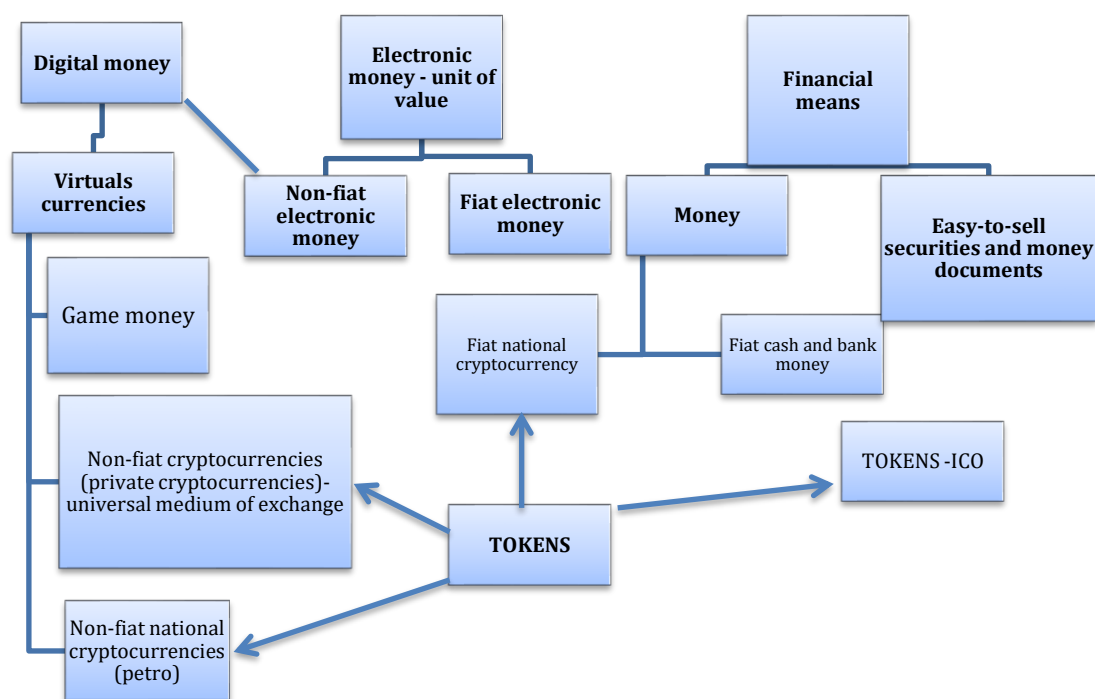


Figure 1 – Structure of digital, electronic money, tokens and financial means (Luzgina, 2018)

*Comment.* Fiat electronic money is an electronic analogue of fiat currency. In this case, if we put 100 euros in an electronic wallet, we should see 100 electronic euros after the transaction. At the same time, non-fiat electronic money differs from fiat currency. For example, we can exchange Belarusian ruble against electronic money – V-coin, that are issued by Belgazprombank in cooperation with the mobile operator – A1.



The above discussion results in a number of policy-relevant implications:

1. The legal definition of money, financial funds and electronic money should be updated taking into account innovative forms of financial instruments development and appearance of new financial market participants.
2. Old rules and regulatory approaches hinder market development and unregulated space can create additional risks and uncertainties.
3. Transition from cash to CBDC is possible but has limitations.
4. A unified regulation for the cryptocurrencies and other tokens should be developed at the international level for decreasing risks and further developing financial markets.

## Conclusion

Financial market transformation is happening very rapidly. The penetration of information technologies in the financial sector created a huge number of new innovative products and simplified financial operations. All these changes have affected the payment system. The creation of electronic and digital currencies makes it necessary to reconsider the future of the traditional monetary system. But even the current regulation has to become more flexible and take into account the rapid growth of new types of financial market participants and products. The development of financial technologies creates additional risks, such as money laundering, money theft or uncontrolled financial operations which go beyond the borders drawn by national jurisdictions very often. Many central banks treat payments with

cryptocurrencies and ICO with caution. At the same time, the process cannot be stopped because alternative methods of financial transactions are often more attractive compared with traditional financial services. But the low level financial and digital literacy among the population combined with outdated legislation can slow down innovative processes in the financial sphere and augment the risks.

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