

# LEGAL AND ACCOUNTING DIMENSIONS OF CRYPTOCURRENCY IN UKRAINE

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## ABSTRACT

*Cryptocurrencies are progressively developing and spreading in use in different countries and Ukraine in particular. An important and at the same time difficult issue is the process of regulating the cryptocurrencies functioning and their reflection in accounting.*

*The purpose of the article is to substantiate the accounting content of cryptocurrency in Ukraine based on the analysis of legislative regulation and international experience.*

*The methodological basis of the study is a dialectical method of cognition of socio-economic phenomena. General scientific methods of analysis, synthesis, induction and deduction, detailing and theoretical generalization are used for a comprehensive study of the cryptocurrencies functioning. Special methods of grouping and comparison were used in studying the practice of introducing cryptocurrencies into the financial sector.*

*Based on a systematic review of the literature, legislation, statistics, the level of cryptocurrency research was investigated, demonstrating its complexity and lack of consensus on a unified approach to legal regulation, definition of economic essence and accounting content of cryptocurrency in international practice and in Ukraine.*

**Keywords:** Cryptocurrency, Cryptocurrency Exchange, Cryptocurrencies Functioning, Legal Regulation, Accounting.

## JEL Classification

K39; M41; O17

## INTRODUCTION

Despite a number of risks in the XXI century, society is actively using cryptocurrency based on the progressive development of economic and technological spheres in many countries around the world. The creation of different types of cryptocurrencies is founded on the use of Blockchain technology. This technological development can be actively applied and implemented in business processes. It avoids the intervention of intermediaries, reduces the cost of contracts and eliminates the fact of fraud. In mid-October 2020 PwC presented a new analysis according to which by 2030 blockchain technology will ensure the growth of the global economy by \$ 1.7 trillion. There are certain areas where this technology can be applied such as: - cash flow tracking; - payments and financial services; - identification management; - contracts and settlement of disputes; - interaction with clients (Blockchain (world market), 2020).

The most popular cryptocurrency is Bitcoin that was launched in 2009 by an individual or a group known by the pseudonym “*Satoshi Nakamoto*” (Investopedia, 2020). Other types of cryptos have been developed based on Bitcoin (BTC) called “*altcoin*” (Softwarefindr, 2019). Cryptocurrencies known as “*altcoins*” include Ethereum, Litecoin, Peercoin, Cardano,

and EOS. “Altcoin” requires less effort for their extraction than Bitcoin and have a lower value on cryptocurrency exchanges.

According to the blockchain company The Chainalysis, Ukraine is a leader in the use of Bitcoin. The most popular types of cryptocurrency in Ukraine and worldwide are presented in Table 1 (Coinmarketcap, 2020), Farrington Robert, (2020).

World			Ukraine	
№	The name of the cryptocurrency	Market capitalization, USD	The name of the cryptocurrency	Market capitalization, USD
1	Bitcoin	355 861 165 294,00	Bitcoin	355 861 165 294,00
2	Ethereum	67 045 820 423,00	Ethereum	67 045 820 423,00
3	Litecoin	5 437 358 583,00	XRP	23 318 815 908,00
4	XRP	23 318 815 908,00	Tether	19 836 986 473,00
5	Zcash	719 230 625,00	Bitcoin Cash	5 148 453 886,00

Each country has a different perception of this innovation spread. Some countries are actively introducing cryptocurrency transactions at the legislative level while others on the contrary impose significant restrictions and prohibit its use. Based on this we can state that understanding and interpretation of the cryptocurrencies’ fundamentals are different. The relevance of this topic lies in the uncertainty of the legal status and the lack of a unified approach to the disclosure of the accounting content of cryptocurrency in most countries and Ukraine in particular.

## LITERATURE REVIEW

Foreign and domestic scientists studied the issues related to the prospects of introducing cryptocurrency into the financial sector, the legislative regulation of operation and determining the economic essence of cryptocurrency.

Fedorova Yu. (2018) explored the probability for the introduction of cryptocurrency in the modern global financial space and analyzed the basic historical patterns in terms of the money’s history. The scientist highlighted that ignoring cryptocurrency by state structures, as a way of mutual settlements between citizens and legal entities, is a loss of the key opportunities in the financial space.

Efremenko I., Panasenкова T., Artemenko D., Larionov V. (2018) study the rapid development of the economy through the influence of a new virtual asset. They determined the advantages of cryptocurrencies over modern fiat international currencies and the ability to successfully perform the function of measuring the value of goods. The legal regulation of operations with virtual currencies in different countries of the world is also reflected in their studies.

Nelson Rebecca M. (2019) explored the nature, benefits and risks of virtual currencies’ usage in various transactions as well as the analysis of its legal regulations. In their turn, Chudinovskikh M. and Sevryugin V. (2019) consider different approaches to regulation of the cryptocurrency market in the world. Based on researchers’ analysis, there are three approaches to the regulation of cryptocurrencies are identified: conservative, liberal and neutral. The experience of the BRICS and EAEU countries allowed the authors to conclude that these countries need to formulate similar requirements for the regulation of cryptocurrencies to avoid the migration of investment and capital to the ones with more liberal approach.

Chuen David Kuo, Guo Li and Wang Yu (2018) analyzed the prospect and effectiveness of investing in cryptocurrencies as an alternative asset class. They compared the characteristics of cryptocurrencies and traditional asset classes and investigated the static correlations between them as dynamic conditional correlations and the results of the study gave positive results. Cryptocurrencies and cryptocurrency exchanges are still in the experimental stage before they form the asset class of large enterprises and financial institutions.

Nabilou Hossein (2019) in his research aimed to classify the most effective and efficient strategies for the regulation of decentralized cryptocurrencies.

Considering the debates among scientists around the globe on the regulation of cryptocurrencies, this article identifies two comprehensive strategies for the regulation of decentralized cryptocurrencies: centralized direct regulation and decentralized indirect regulation. Therefore, at this stage of economic development most countries are trying to keep up with innovation and are intensively developing tools for the implementation and regulation of cryptocurrency transactions.

### Research aim, methodology and data

The purpose of the article is to substantiate the accounting content of cryptocurrency in Ukraine based on the analysis of legislative regulation and international experience.

The methodological basis of the study is a dialectical method of cognition of socio-economic phenomena. General scientific methods of analysis, synthesis, induction and deduction, system method, detailing and theoretical generalization are used for a comprehensive study of the cryptocurrencies functioning; historical method – in studying the preconditions for the development of cryptocurrencies; method of structural-logical analysis – in the construction of logic and structure of work. Special methods of grouping and comparison were used in studying the practice of introducing cryptocurrencies into the financial sector.

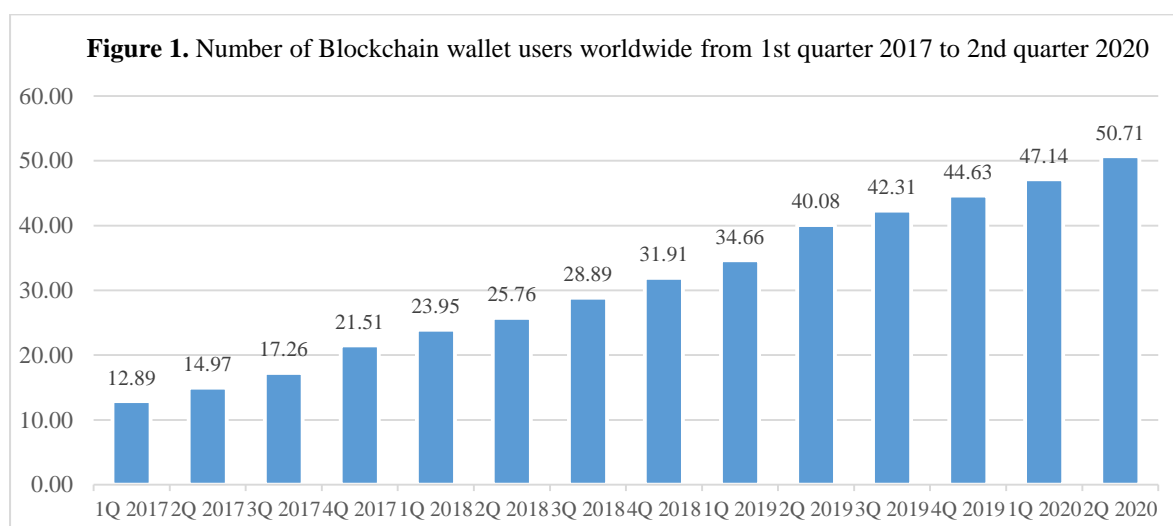
The cryptocurrency market is a unique platform for studying and researching approaches to the regulation of cryptocurrency transactions and the pricing process. Millions of active investors around the world trade Bitcoin and other cryptocurrencies on more than 100 exchanges. There are a number of cryptocurrency exchanges in Ukraine and the most popular are presented in Table 2 (Bitcoin, 2020), (Statista, 2020).

World			Ukraine	
№	Cryptocurrency exchange	Trading volume in 24 hours in billion U.S. dollars	Cryptocurrency exchange	Trading volume in 24 hours in billion U.S. dollars
1	Binance	\$ 12,13	Binance	\$12,13
2	ZG.com	\$ 5,12	Huobi	\$ 0,69
3	IDCM	\$ 4,37	Exmo	\$ 0,69
4	EtherFiyer	\$ 4,28	OKEEx	\$ 0,67
5	Binance.KR	\$ 3,87	Kucoin	\$0,11

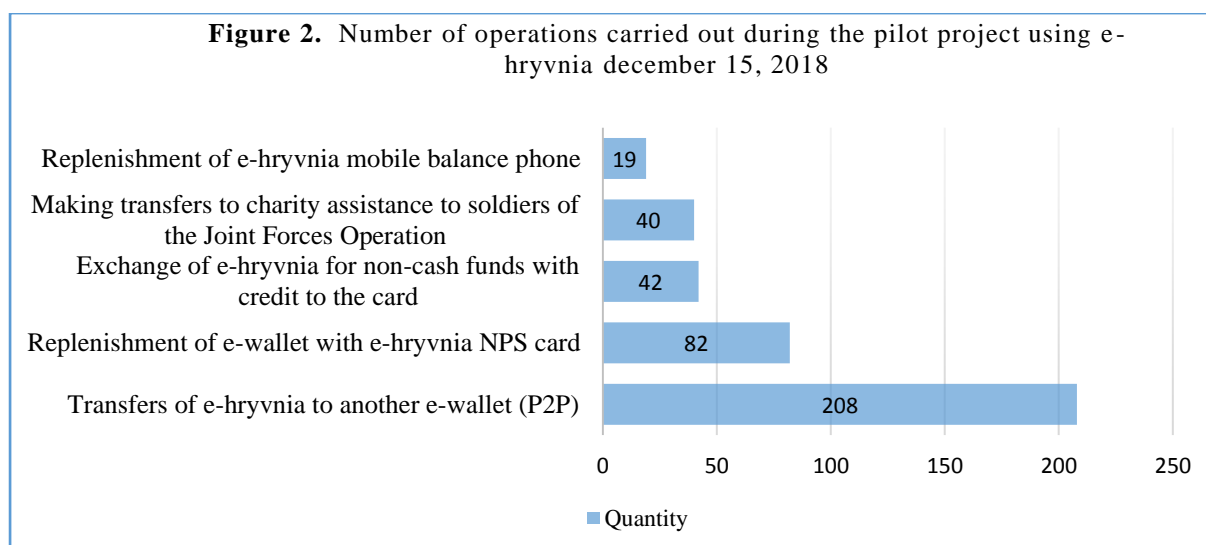
Statistics show that Ukraine is widely involved in the operation of cryptos. In terms of cryptocurrency trading in the world Ukraine entered the top 5 countries (September, 2020) and is recognized as country with a high level of digital education among the population (Cointelegraph, 2020).

From July 2019 to July 2020, Ukraine was recognized as the world leader in the global index of cryptocurrency acceptance. This figure includes the value of received, exchanged and deposited cryptocurrency, and is \$ 8.2 billion. USA (Morris David Z., 2020).

Cryptocurrencies are a universal way of exchange. They ensure the security of transactions which leads to a daily increase in the number of investors. Despite certain risks of using this asset, the number of e-wallet owners is constantly growing. Figure 1 shows that as of the end of 2Q 2020, the number of e-wallet users is 50.71 billion. (Statista, 2020). During the study period this figure increased 3.93 times.



Analysis of the cryptos' spread in the world shows that countries like Anguilla, Antigua and Barbuda, Venezuela, Saint Lucia are actively implementing the development of national or regional cryptocurrency. Ukraine is no exception. In 2018 the National Bank of Ukraine (NBU) in cooperation with technology companies launched a pilot project of its own cryptocurrency - E-hryvnia. During the trial period NBU issued a limited amount of E-hryvnia for transactions (Figure 2).



Now the project is in test mode and its implementation requires significant investment (Delo.ua, 2020).

## RESULTS AND DISCUSSION

The dynamic development of cryptos in the world and in Ukraine puts on the agenda the solution of such issues as legislative regulation of cryptocurrencies, payment of income tax for exchanges, determination of the state body regulating cryptocurrencies, definition of accounting content, control and accounting of cryptocurrencies.

Analysis of the legal regulation of cryptocurrencies at the international level showed the lack of a single legislative regulation of crypto activities in the world. Most of countries do not regulate any actions of cryptocurrency exchanges at all and as a result they are not able to prevent illegal transactions.

Thus, in the European Union (EU), crypto is not regulated either by the European Central Bank or by EU legislation (Ecb, 2020) and classified as a convertible decentralized virtual currency. In paragraph 18 of the Fifth EU Directive the concept of “virtual currency” is defined. There is also emphasized the extension of the scope of Directive (EU) 2015/849 that leads to including providers of exchange services between virtual currencies, fiat currencies and providers of virtual wallets (Directive (EU) 2018/843, 2018). In February 2018 the Member States of the EU represented by the European Securities and Banking Authorities, the Bank, Insurance and Pensions, jointly issued warnings to users of virtual currencies about the risks and unregulated cryptocurrency market (Eba, 2018). The Euro Banking Association (EBA) proposes a separate regulatory regime to reduce financial risks.

In the United States the attitude toward crypto is vary by state, ministry or government agency. At the federal level there is no single concept of cryptocurrency. Federal agencies interpret the definition of the term "cryptocurrency" differently (Fin-accounting, 2018). Depending on the state crypto is considered as money or their analogue: property or commodity.

Japan has passed the Currency Regulation Act (2017) which allows the use of digital currency as a method of payment and gives it legal status like any other currency. An asset-like crypto is a legal tender (JBA, 2017). Bitcoin is classified as a prepaid payment instrument.

In Australia cryptocurrency is defined as property, and things purchased for it are considered as barter. The government does not exclude the possibility of using Blockchain technology in many areas of public administration. In February 2017 the country's first Bitcoin bank opened and it was possible to exchange cryptocurrencies for dollars or euros (Globallegalinsights, 2019).

In accordance with the legislation, the Government of Mexico in March 2018 prescribed a section on transactions with “virtual assets” which are defined as value in electronic form (Diputados.gob.mx., 2018).

The Government of India has easily implemented the use of Blockchain technology. However, cryptocurrencies were not recognized as legal digital currency and were banned by the Reserve Bank of India which acted as the Central Bank. It prohibited local credit institutions from working with cryptocurrency companies and cryptos themselves were considered outside the legal field (Coinlife, 2020).

China is taking active action to ban the spread of the cryptocurrency market (Bitcoinmagazine, 2018).

Progressive development and spread of the use of cryptocurrencies in Ukraine requires their legislative regulation. For the last few years a number of bills have been submitted to the Verkhovna Rada: Bill 7183-1 “On Stimulating the Cryptocurrency Market and Their Derivatives in Ukraine” (2017); two bill drafts № 9083 and № 9083-1 “On Amendments to

the Tax Code of Ukraine Concerning the Taxation of Transactions with Virtual Currencies” (2018); bill draft № 3637 of 11.06.2020 “On virtual assets” (Draft Law on Virtual Assets, 2020). Unfortunately, none of them was adopted.

An important event in the recognition of cryptocurrency and transactions with it was the adoption of the Law of Ukraine "On Prevention and Counteraction to Legalization (Laundering) of Proceeds from Crime, Terrorist Financing and Financing the Proliferation of Weapons of Mass Destruction" (2020). The main goal of this law is to prevent money laundering and terrorist financing. The Law was the first to introduce the concept of "virtual asset" as a digital expression of value that can be traded in digital format or transferred and that can be used for payment or investment purposes; to set possible types of transactions with cryptocurrencies for identification of users in case of transactions for certain amounts; the to define the regulator of operations with virtual assets (the Ministry of Digital Transformation). The law legalized the cryptocurrency business and provided access to the banking system to representatives of the crypto industry (cryptocurrencies, exchangers and others). (Biz.ligazakon, 2020).

The lack of legal regulation of cryptocurrency circulation makes accounting of such objects difficult. Under such conditions, scientists have studied the accounting content and the order of reflection of cryptocurrency in accounting. Domestic scientists such as Jacik T (2017), Petruk, (2017), Novak, (2017), Bezverkhy (2018); Kuvshinova, (2018) have been working on defining the economic essence, accounting content and the order of reflection of operations with cryptos in the accounting. However, their approaches differ and are based on a vision: cryptocurrency is a special kind of electronic money or financial instruments.

Currently, the accounting content of the cryptocurrency has been determined by the Interpretations Committee’s Agenda Decision of June 2019 addressed the accounting for cryptocurrency holders. Interpretations Committee has clarified the accounting for such assets and recommends that they be accounted for as an intangible asset (Holdings of Cryptocurrencies, 2019) and to be recognized as inventories in case of their sale. However, there are still many controversial and unresolved issues regarding the reflection in the accounting of transactions with cryptos in terms of subset (cryptocurrency, asset-backed token, utility token, security token), initial and subsequent measurement of cryptocurrencies value and the accounting of cryptocurrencies in terms of transactions.

It should be noted that in Ukraine International Financial Reporting Standards (IFRS) are mandatory for companies of public interest and are allowed to be used by companies that independently determine the appropriateness of applying IFRS for financial reporting (Law of Ukraine #996-14, 1996).

## CONCLUSION

The study analyzes approaches to the regulation and disclosure of the accounting content of cryptocurrencies in different countries including Ukraine. It turned out that most of the countries are loyal to this innovation and are actively trying to introduce control over transactions with them through legal regulation.

Cryptocurrencies have become widespread in Ukraine. Cryptocurrency exchanges and own crypto E-hryvnia have been created and are functioning. There is no legal regulation of cryptocurrency circulation in Ukraine; although in recent years there have been attempts at the legislative level to adopt a number of laws. In order to strengthen control over the possibility of involving cryptocurrencies in the financing of terrorism and the proliferation of weapons of mass destruction in Ukraine a regulator on crypto transactions was appointed and a relevant law was adopted. The procedure for accounting cryptocurrencies is not regulated. Exceptions are public interest entities that are required to apply IFRS. The Interpretations

Committee of IFRS has issued recommendations on the accounting of dependent cryptocurrencies. They are accounted for as intangible assets. In the event of their resale they are recognized as inventories.

In the field of cryptos, the following problems remain for further solution: legal regulation of relations arising in the field of cryptocurrency circulation; mechanisms of taxation of income from operations with cryptos; regulation of the activities of professional participants in cryptocurrency markets; accounting content of crypto, the order of accounting for cryptocurrencies and operations with them.

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