



ACCOUNTING AND AUDITING

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PREREQUISITES FOR NON-FUNGIBLE TOKEN ACCOUNTING

***Abstract.** Today, in the world and in Ukraine, in particular, along with fiat money, there are cryptocurrencies in circulation. One type of cryptocurrency is non-fungible tokens (NFT). NFT is a type of digital asset created on the blockchain basis, which allows you to obtain ownership of a product that exists exclusively on the network (images, videos, animations). NFT opens up new opportunities for intellectual property objects. The purpose of the article is to research the theoretical foundations of cryptocurrency accounting, in particular one of its types, non-fungible token (NFT). NFT framework is the ERC-721 (Ethereum Request for Comments 721) standard for issuing and trading non-fungible assets. The creation of legislative norms to regulate relations related to cryptocurrencies has just begun in Ukraine. The Law "On Virtual Assets" was adopted in Ukraine, but it has not entered into force. Accounting issues remain unsettled due to the lack of a regulatory framework.*

***Keywords:** cryptocurrency, non-fungible tokens, accounting.*

Cryptocurrencies have gained a lot of popularity in the world over the last decade. Ukraine was not an exception. The war in Ukraine has shown great potential



for the use of cryptocurrency. At the outset of the conflict, Ukrainian officials posted addresses for two crypto wallets on their Twitter account, giving donors a direct and clear address to which to send contributions. The wallets attracted more than \$10.2m (9.2 million euros) just four days after the start of the russian invasion [1].

Currently, cryptocurrency go more and more notorious, even in the everyday life, and its' place in the funds and donations through the period of war in Ukraine cannot be underestimated. It is also is a great opportunity for countries with poor banking systems. More than 1.7 billion people have no access to banking services to assist them in a financial crisis [2]. These financially disadvantaged people typically resort to dubious and unsafe loan lending practices. These practices cause instability for the people who asked for the loan. It is where cryptocurrencies step in with high volatility and easy use.

Cryptocurrency is the way of dealing with financial issues not only for emergency but also for countries with well-developed economies. Cryptocurrency has provided a new technology-based way to go about business. As noted by Caleb D. (2021) “the market has brought about many new buyers and allowed for international trade to happen more smoothly. Even though the market has been on the rise, it has ways to go before it can take that next leap to be a more widely used form of currency “[3].

Despite the growing popularity of cryptocurrency, many issues regarding its regulation, recognition, valuation, taxation and accounting remain unresolved. This indicates the relevance of the researched problem.

The purpose of the article is to research the theoretical foundations of cryptocurrency accounting, in particular one of its types, non-fungible token (NFT).

Several periods can be distinguished in the evolution of cryptocurrencies. The first period dates back to the 1980s, when cryptocurrencies were called cybercurrencies. However, they did not become widespread, because the Internet and digital technologies were not developed and popular. The second period can be associated with 2008, the year of the global financial crisis, when Bitcoin appeared, created by a programmer or a group of programmers named Satoshi Nakamoto (the developers still remain anonymous). The next period can be associated with 2017,

which became the year of cryptocurrency, as the value of Bitcoin and other cryptocurrencies increased rapidly and remains quite high until now.

Different definitions of cryptocurrency are given in economic sources.

Milutinović Monia (2018) notes that “a cryptocurrency, crypto-currency, or crypto is a digital currency designed to work as a medium of exchange through a computer network that is not reliant on any central authority, such as a government or bank, to uphold or maintain it” [4].

Cierra Murry (2022) provides the following definition of cryptocurrency: “A cryptocurrency is a digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend” [5].

In the electronic publication "The Guardian" it is stated " cryptocurrency is a digital decentralized and not controlled by any government” [6].

Bogdan Cretu (2020) states that “a cryptocurrency is a digital currency. But unlike regular currencies such as the Euro, they’re created, secured, and verified via cryptography. Cryptocurrencies can never exist in a physical form because all their data is stored in distributed digital ledgers based on blockchain technology. Without these ledgers, the whole system would not be able to function [7].

Blockchain is a decentralized network that operates on the principle of a sequential chain of blocks that contain information about token transactions. Entries in the blockchain are immutable and public, so it avoids manipulation of data and ensures its security [8].

Cryptocurrencies have significant advantages over fiat money.

Benefits of the cryptocurrency:

- Decentralisation and internationality of currency
- Easy and fast transactions. Compare to world banking system as MasterCard, Visa or PayPal, crypto has more advantages in the sphere of transactions as fast and most of the cases free-commission ways.

- Accessibility, anyone can use cryptocurrency. All you need is a computer or smartphone and an internet connection. The process of setting up a wallet is extremely fast compared to opening an account at a traditional financial institution. There's no ID verification. There's no background or credit check [9].

– Privacy, since man don't have to register for an account at a financial institution to transact with cryptocurrency, it can maintain a level of privacy [9]. Transactions are pseudonymous, which means the only identifier on the blockchain is a wallet address but it doesn't include any specific information about person.

– Diversification, cryptocurrency can offer investors diversification from traditional financial assets such as stocks and bonds. While there's limited history on the price action of the crypto markets relative to stocks or bonds [10], so far, the prices appear uncorrelated with other markets.

However, transactions with cryptocurrencies are associated with certain risks.

Risks of cryptocurrency:

– A big reliance on the psychological factor of people. Most of the market collapses are caused by the statements of public people, as Elon Musk and etc.

– Big disruptor on the market that can cause a big crisis wave through the whole financial markets. Some argue that cryptocurrency will negatively impact the global economy, particularly the developing ones, as it removes the need for intermediaries like banks. They primarily refer to its newness and lack of trust among a large part of users. They also cite the extreme volatility crypto coins show regularly and the lack of regulating authority [11].

– Lack of authority or management regulation. The situation that market faced exactly now because of lack of regulation big players came to the market and we observe a huge decrease in the all platforms. The existence of «mining» - cryptocurrency mining is the process where specialized computers, also known as nodes or mining rigs, validate blockchain transactions for a specific cryptocurrency and, in turn, receive a mining reward for their computational effort [12].

Crypto is also diversified currency with different platforms and coins, so called tokens. A token is a unit of account in the blockchain network, which can be used to create digital values [8]. One of these tokens is non-fungible tokens (NFT) that are rapidly gaining popularity. NFT is a relatively new and little-studied phenomenon.

Non-fungible tokens or NFTs are a type of digital token where every token is different and hold unique characteristics. Due to the nature of the NFTs, many NFTs

have varying rarity and are considered valuable in the digital asset community. Anything from games to painting and even memes can be an NFT [12].

NFTs can help digital artists or any type of artist to fight plagiarism as they can tokenize their creations, which can't be copied. Luxury goods can be verified making them NFTs and giving ownership to the buyer only. Manufacturing companies can tokenize their products in order to offer provenance to their consumer base. Institutions can offer NFT based certifications and licenses, to authenticate a person's educational background. NFTs can stop counterfeiting tickets and merchandise issues within the sports industry. Games can tokenize in-game items for players and give them ownership over those items.

But there are disadvantages as well. First of all, it is necessary to understand that NFT remains outside of legal regulation, most platforms operate outside the legal field. This means that at any time with the adoption of such regulation in the future, there is a risk of closing platforms with all assets and services.

To date, the most common NFT framework remains the ERC-721 (Ethereum Request for Comments 721) standard for issuing and trading non-fungible assets. This means that the owner of the token does not have any rights over the issuer, the authority to make decisions on the issuer's project and the ability to find out the volume of the asset supply. NFT may qualify as a security token, and the platform that offered such functionality may fall under AML (Anti Money Laundering) - regulation aimed at combating money laundering, and the notorious KYC (Know Your Customer), without passing compliance with the verification policy your client.

The blockchain does not verify the authenticity of the works and does not verify the author at the entrance. In other words, any person can download other people's digital images, passing them off as their own. Nor does he necessarily commit offenses from a legal point of view. This possibility is especially obvious for digitized traditional art, the copyright for which has expired.

One of the important features of NFT is the so-called tokenized certificate, which binds an object of ownership to a subject at a certain point in time using a unique link. The certificate confirms that the digital asset represents something

unique and rare. Blockchain in this case will not protect against multiple uploads of the same art object to the same platform or to different ones, as well as from substitution of the original file using the same link. Most NFTs will not be able to prove their uniqueness without contacting an authorized expert center.

Finally, the latest NFT art sales cases demonstrate the lack of an intelligible pricing process. Hype sales inflate the value of a digital asset and can turn it into a soap bubble that has happened more than once with intangible assets.

At the moment the economic nature of the NFT contradicts its legal status, since from a legal point of view this object is informal. There is no concept of a non-fungible token in the legislation of Ukraine.

There is a lag in the creation of legal systems that regulate both global legal processes in cyberspace and local ones. Digital relationships are not regulated not only on a global scale, but at the level of specific countries. Along with the proliferation of activities that are not legally developed and not regulated, there is an increasing need to create the necessary regulatory framework. NFT just refers to such objects that are currently recognized by a large number of people in cyberspace, but are not formalized in the law. This imposes many restrictions on the NFT as an object of legal relations and an object of accounting.

Any individual or legal entity can take possession of the token, and the procedure for acquiring NFT is quite simple and fast. This is due to the fact that you can pay and receive a token without leaving your home. In turn, the sales procedure is always associated with verification, which usually can only be passed by citizens of EU member states or persons with citizenship of the United States of America [8]. This is due to the fact that these countries have some kind of legislative framework for regulating relations related to the circulation of NFTs.

The creation of legislative norms to regulate relations related to cryptocurrencies has just begun in Ukraine. The Law of Ukraine "On Virtual Assets" (the law has not entered into force) provides the development of amendments to the Tax Code of Ukraine, which may affect the procedure and features of taxation of income from NFT transactions. The law also provides for enhanced requirements for financial monitoring of transactions with virtual assets, including NFTs. Finally,

key changes relate to the organization of NFT marketplaces, which, ideally, should be licensed in accordance with the Law and by-laws that will be developed to implement it [13].

Draft Law № 2461 «On amendments to the Tax Code of Ukraine and other laws of Ukraine on taxation of cryptocurrency transactions» takes into account cases of withdrawal of assets to Fiat [14]. The authors of the draft law note that the Ukrainian market of virtual assets cannot develop normally due to the lack of certainty of the legal status of electronic virtual currencies and tokens. The document states that the profits from cryptocurrency transactions will be considered separately. Operating profit is defined as the positive difference between the proceeds from the sale and the cost of mining or purchasing assets. Cryptocurrency sales are not subject to VAT.

Ukraine is at the stage of searching for ways to effectively regulate the circulation of NFTs. Considering that now Ukraine is pursuing a targeted state policy in the field of digitalization, open data, national electronic information resources, can say that Ukraine can have an effective market system for the circulation of NFTs. However, at the present stage of development of digital technologies, humanity inevitably faces issues related to copyright and intellectual property. Of course, this is a topical and important issue, but its solution is not obvious now.

Therefore, the world is rapidly developing and transforming into digital technologies. Cryptocurrency seems to be a topic of much debate and controversy, but will definitely have a place in people's lives. But this requires a systematic approach to the identification of this asset, legal regulation, definition of recognition and evaluations criteria on this platform.

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