

КЛАСИФІКАЦІЯ ВІРТУАЛЬНИХ АКТИВІВ В УКРАЇНІ

Анотація. У статті проводиться дослідження, спрямоване на спробу формування загальної класифікації віртуальних активів у розумінні Закону України «Про віртуальні активи», на основі характерних рис, які притаманні продуктам новітньої фінансової цифрової технології розподіленого реєстру (блокчейн) та які мають поширене загальновідоме найменування, – криптовалюта. Поряд із цим досліджено порядок емісії віртуальних активів у контексті суб'єктного складу (резидент, не резидент). Формування принципово нового технологічного середовища на базі сучасних цифрових технологій впливає на різні сфери життя, а у більшій частині має широке впровадження у фінансових операціях і транскордонних платежах. І однією з таких прогресивних технологій вважається «blockchain», – це технологія розподіленого реєстру, паралельне рішення для транзакцій та управління даними, добре відоме тим, що є основою функціонування криптовалюти, зокрема найвідомішою, Bitcoin. Таким чином проникаючи в найрізноманітніші області людської діяльності сучасні цифрові технології створили основу для формування принципово нового середовища правового регулювання. Вплив сучасної «цифрової революції» поступово почав експансію й на формування відповідних норм національного права в Україні. Верховна Рада України прийняла 17.02.2022 Закон України «Про віртуальні активи» № 2074-IX, який був 15.03.2022 підписаний Президентом України. У результаті дослідження було сформовано класифікацію віртуальних активів та представлено результати у графічному вигляді (Рисунок 1). Проведено зіставлення, класифікованих автором віртуальних активів у розумінні Закону 2074, з загальновідомими термінами та визначеннями, що прийняті суспільством як цифрова фінансова категорія, – криптовалюта та інших елементів екосистеми їх цифрового існування. Також виявлено ряд недоліків, зокрема відсутня повнота поділу «забезпеченого віртуального активу» у статті 4 Закону 2074 поряд з «фінансовий віртуальний актив». Наявній правовій дефініції «фінансовий віртуальний актив» не надано визначення, зокрема й у статті 1 «Визначення термінів» розділу I «Загальні положення» Закону 2074. За результатами дослідження запропоновано власне бачення на формування, відсутнього у Законі 2074, визначення підвидів «забезпеченого віртуального активу», а саме правових дефініцій «фінансовий віртуальний актив» та «товарний віртуальний актив». Дослідженням встановлено, що Закон 2074 у підпункті 7 пункту 1 статті 1 розуміє серед усіх відносин з віртуальними активами і емісію, а вже у підпункті 8 пункту 1 статті 1 не зазначає під видом діяльності поставальників послуг, що регламентується – діяльність з емісії. Це можна назвати як дисонанс положень у Законі 2074, який потрібно привести у відповідність одна до одної.

Ключові слова: класифікація, криптовалюта, біткоїн, стейблкоїн, цифрова валюта, електронні гроші

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CLASSIFICATION OF VIRTUAL ASSETS IN UKRAINE

Abstract. *The article conducts research aimed at an attempt to form a general classification of virtual assets, in the understanding of the Law of Ukraine «On Virtual Assets», based on the characteristic features inherent in the products of the latest financial digital technology of distributed registry (blockchain), and having a common well-known name – cryptocurrency. At the same time, to study the procedure of virtual assets issue in the context of subject composition (resident, non-resident). The formation of a fundamentally new technological environment based on modern digital technologies affects various spheres of life, and for the most part, a wide implementation in financial transactions and cross-border payments. And one of these progressive technologies is considered «blockchain», is a distributed ledger technology, a parallel solution for transactions and data management, well known for being the basis for the functioning of cryptocurrency, including the most famous, Bitcoin. Thus, penetrating into a wide variety of human activities, modern digital technologies have created the basis for the formation of a fundamentally new environment of legal regulation. The influence of the modern «digital revolution» gradually began to expand on the formation of the relevant norms of national law in Ukraine. The Supreme Rada of Ukraine adopted on 17.02.2022 the Law of Ukraine «On Virtual Assets» № 2074-IX (hereinafter – the Law 2074), which was signed by the President of Ukraine on 15.03.2022. As a result of the study, a classification of virtual assets was formed, and the results are presented graphically (Figure 1). A comparison of our classified virtual assets, as understood by the Law 2074, with the commonly known terms and definitions accepted by society as a digital financial category – cryptocurrency and other elements of the ecosystem of their digital existence was carried out. A number of shortcomings are also identified. There is a lack of completeness in the section «secured virtual asset» in Article 4 of Law 2074, along with «financial virtual asset». The existing legal definition of «financial virtual asset» is not defined, including in Article 1 «Definition of Terms» of Section I «General Provisions» of the Law 2074. According to the results of the study, our own vision on the formation of the definition of «secured virtual asset» that is absent in the Law 2074, namely the legal definitions of «financial virtual asset» and «commodity virtual asset» is proposed. The study found that the Law 2074, in Article 1, paragraph 1, sub-paragraph 7 understands among all relationships with virtual assets the issuance, but already in Article 1, paragraph 1, sub-paragraph 8, does not mention under the service providers activity, which is regulated – the issuance activity. This can be called a dissonance of provisions in Law 2074, which should be brought in line with each other.*

Keywords: *classification, cryptocurrency, bitcoin, stablecoin, digital currency, electronic money.*

INTRODUCTION

The formation of a fundamentally new technological environment on the basis of modern digital technologies affects various spheres of life, and for the most part is widely implemented in financial transactions and transboundary payments [23]. And one of such progressive technologies is considered «blockchain» – the technology of a distributed registry, a parallel solution for transactions and data management, well known for being the basis for the functioning of cryptocurrencies, including the most famous one, Bitcoin [29]. The essence of this technology – blockchain is the creation of a decentralized environment without third-party control over transactions and data bases [31]. Of course, the world's view on the new innovative technology has turned to Bitcoin, but at this time there are many other areas where it is used or at least is in promising development. And these areas of use are no longer only the financial sector of the economy, they range from logistics and supply chain management [16; 24], to the development of highly effective decentralized solutions for economic, environmental, social and innovative problems of energy, health care [18; 25; 28; 30]. Gartner forecasts the value of blockchain technology as a value of innovation to be \$176 billion by 2025, and then it will exceed \$3.1 trillion by 2030 [9].

Thus, by penetrating into the most varied areas of human activity, modern digital technologies have created the basis for the formation of a fundamentally new environment of legal regulation. The influence of the current «digital revolution» on the formation of the corresponding norms of national law in Ukraine also began to expand.

As a rule, these digital technologies have a different nature of origin, which creates their heterogeneity and generates specificity of legal relations, in which they find coverage, through their features. That is why it is important and relevant to formulate the classification of existing new digital technologies of the financial environment, depending on the nature of their origin and their inherent characteristics, including those in current legal acts or draft laws or recommendations of central regulators and international organizations in the field.

Identification includes a description of something in sufficient detail so that it can be recognized in this context. Classification is a sequential approach that involves sorting objects or events into groups or categories. Classification and identification are important because they allow us to understand better the relations and connections between the words. They also help scientists to communicate clearly with one another. Classification and identification involves sorting objects or events into groups or categories. Clear systems (criteria) must be developed and used. Keys are often used as criteria for the classification process [19]. There are many advantages of classification, both in science and «behind it». Classification allows us to see the interrelationships between words, which may not be obvious when looking at them as a whole [21].

1. LITERATURE REVIEW AND INITIAL PRE-CONDITIONS

The Supreme Council of Ukraine adopted on 17.02.2022 the Law of Ukraine «On Virtual Assets» No. 2074-IX (hereinafter – the Law 2074) [10], which was signed

by the President of Ukraine on 15.03.2022. According to Clause 1, Section VI «Final and Transitional Provisions» of the Law 2074, the Law itself will enter into force: a) from the date of entry into force of the Law of Ukraine on Amendments to the Tax Code of Ukraine regarding peculiarities of taxation of operations with virtual assets; b) implementation of the State Register of Virtual Asset Circulation Service Providers, which is additionally mentioned in Clause 2, Section VI «Final and Transitional Provisions», as limitations to sanctions provided for by Article 23 of the Law 2074. In order to meet the requirements of Clause 1 of Section VI of the Law 2074 and for the purpose of its enactment, on March 13, 2022 the Parliament of Ukraine registered a Draft Law No. 7150 «On Amendments to the Tax Code of Ukraine regarding the taxation of transactions with virtual assets» (hereinafter – the Draft Law 7150) [13] [4].

It should be noted at once that the author could not find such studies with their full-fledged presentation in the information space. The reason may be that this phenomenon itself appeared in the legal field of Ukraine not so long ago, and the bulk of studies had a different research vector.

2. MATERIALS AND METHODS

This work sets the task of conducting research aimed at trying to form a general classification of virtual assets, in the understanding of the legislation of Ukraine, based on the characteristic features that are inherent in the products of the latest financial digital technology of the distributed ledger (blockchain), and which have a common well-known name, – cryptocurrency.

The research is based on the analysis of the Law of Ukraine «On Virtual Assets» dated 17.02.2022 No. 2074-IX and other international reports and reviews of international organizations, in particular the Group for the development of financial measures to combat money laundering (FATF).

The study is conditionally divided into two directions: 1) classification of virtual assets and their comparison with cryptocurrency; 2) the procedure for issuing virtual assets, in the context of the subject composition (resident, non-resident).

Object and subject of research 1. The object of research is virtual assets, within the meaning of law 2074 and cryptocurrency in the understanding of FATF. The subject of the study is social relations associated with the circulation of virtual assets (cryptocurrencies).

Object and subject of research 2. The object of research is the issuance of virtual assets, within the meaning of law 2074. The subject of the study are issuers, in terms of: resident and non-resident.

The existing type of virtual assets in the Law 2074, as well as the procedure for their emission in the context of subjects, require in-depth study, which is divided into a number of stages in order to form the necessary sequence of conclusions. The chosen research methodology corresponds to the tasks and contributes to the creation of the optimal structure of the conclusions obtained

During the study, a system of methods of scientific cognition was used: general scientific – deduction and induction, synthesis and analysis, scientific abstraction, analogy, analytical and dialectical, systematic approach; specifically – legal methods of cognition – formally legal; legal forecasting, retrospective and comparative legal method, comparison method, system-structural; methodological substantiation of the essence, nature and structure of terminology that is the object of research – virtual assets and their emission.

The general philosophical (universal) method of cognition was applied at all stages of the cognitive process. The Aristotle method was useful in analyzing the content of the current legislation of Ukraine regarding virtual assets and their emission (in the context of subjects), explaining the problems of its legislative equipment in the relevant regulations.

The dialectical method was used to analyze doctrinal approaches to the definition of the term: «financial virtual asset», «commodity virtual asset / non-financial virtual asset».

Using the analysis method, the study covered integral features and determined the individual characteristics of virtual assets and the order of their emission (in the context of subjects). The method of analysis also contributed to the identification of integral features of research objects.

The deduction method allowed, based on the opinions of researchers on the topic of cryptocurrency, to draw a general conclusion about the integral features of virtual assets and cryptocurrencies in their comparison, and the grounds for their classification.

The inductive method of cognition made it possible to obtain a general conclusion that in Law 2074 the dissonance of the provisions of its norms, in particular, sub-paragraph 7 of paragraph 1 of Article 1 understands among all relations with virtual assets and emission, and already in sub-paragraph 8 of paragraph 1 of Article 1 does not indicate under the type of activity of service providers regulated – emission activities.

Using the synthesis method, the author of the study came to the drafts of the formation of the concept of legal definitions in the Law 2074: «financial virtual asset» (based on the existing disparate definitions given in sub-paragraph 3 of paragraph 1 of Article 1, paragraph 3 of Article 4, paragraph 6 of Article 4 of the Law 2074) and «non-financial virtual asset (commodity virtual asset)» (on the basis of the existing disparate definitions given in sub-paragraph 3 of paragraph 1 of Article 1 and sub-paragraph 3, paragraph 5, paragraph 6 of Article 4 of the Law 2074).

The chosen methodology in the context of the issues submitted for consideration seems optimal for conducting research in the chosen direction.

The methodology is based on a combination of quantitative and qualitative approaches used: to classify virtual assets and compare them with cryptocurrencies as a generally accepted term; to the study of the issue of virtual assets in the context of entities (resident and non-resident). In the process of qualitative analysis of materials taken for research, in particular the Law 2074, the necessary structure of future

conclusions is prepared and the main, necessary elements on which these conclusions are subsequently based are determined – the classification of virtual currencies.

The comparative legal method contributed to comparative analysis and allowed, together with the general scientific method of comparison and analogy, to compare virtual assets with cryptocurrencies, taking into account the characteristics available to them.

Special legal methods are also applied, in particular, formal legal and system-structural methods used in the development and research of the terminology of this article.

The study of the materials underlying the study with the formation of final conclusions based on its results corresponds to the nature of the task and contributes to its qualitative and objective solution. An overview of available literary sources covering various aspects of cryptocurrencies and revealing the breadth of valuations and their diversity.

3. RESULTS AND DISCUSSION

Let us note from the outset that in determining the classification of the latest technologies in the financial sphere, it is necessary to take into account that they can be divided into groups and classes, each of which may already have its own classification for individual areas, and the author does not claim to a complete classification to a probably lower level .

1. Let's carry out research on the Law of Ukraine «On Virtual Assets», to form an idea of the proposed section of virtual assets, at the level of the main law of Ukraine in the field of the newest digital technologies, having a generalized and widely known notion – cryptocurrency, which mostly refer to the monetary sphere of public relations.

In the first paragraph of the first Article «Definitions of Terms», Section I «General Provisions» of the Law 2074, there is a concept of virtual asset, collateralized virtual asset and unsecured virtual asset. And already Article 4 «Legal Status of Virtual Assets» of Law 2074 directly proposes the division of virtual assets into a secured virtual asset and an unsecured virtual asset:

- virtual asset – an intangible asset that is subject to civil rights, has value and is expressed in a set of data in electronic form. The existence and turnover of a virtual asset is ensured by the system of ensuring the turnover of virtual assets. A virtual asset may certify property rights, in particular the right of claim on other objects of civil rights (Subparagraph 1 of Paragraph 1 of Article 1 of Law 2074);

Virtual assets are intangible assets, the peculiarities of which are determined by the Civil Code of Ukraine and this Law. Virtual assets can be unsecured or secured. (Paragraph 1 of Article 4 of Law 2074);

- secured virtual asset – a virtual asset that certifies property rights, in particular the right of claim on other objects of civil rights (sub-paragraph 3 of paragraph 1 of Article 1 of Law 2074); secured virtual assets certify property rights, in particular claims to other objects of civil rights (paragraph 3 of Article 4 of Law 2074);

- unsecured virtual asset – a virtual asset that does not certify any property or non-property rights (sub-paragraph 6 of paragraph 1 of Article 1 of Law 2074); unsecured virtual assets do not certify property rights. (Paragraph 2 of Article 4 of Law 2074).

The secured virtual asset, in turn, based on paragraph 6 of Article 4 of Law 2074, forms separate, two areas of its internal classification (distribution): financial virtual asset and others.

The financial virtual asset, in turn, forms two separate directions of its internal classification (distribution). Secured by currency values and secured by securities or derivative financial instrument (paragraph 6 of Article 4 of Law 2074):

- issued by a resident of Ukraine secured virtual asset secured by currency values (hereinafter – SVA(CV));
- a virtual asset issued by a resident of Ukraine is secured by a security or a derivative financial instrument (hereinafter – SVA(FI)).

Note that in the structure of Law 2074, paragraph 1 of Article 1 of Section I, as a place to define and group all available legal definitions of Law 2074 – and there, among others, there is no concept – a virtual financial asset.

We offer our own vision, which we mentioned as missing, but necessary to add, in order to eliminate the existing gap of the Law 2074, through changes, the legal definition of «financial virtual asset» in paragraph 1 of Article 1 «Definitions» of Section I «General Provisions «Law 2074. The formation of the definition was based on the existing disparate definitions given in sub-paragraph 3 of paragraph 1 of Article 1, paragraph 3 of Article 4, paragraph 6 of Article 4 of Law 2074, and in our opinion may be as follows: «Financial virtual asset is a secured virtual asset, which is divided into two types, depending on the type of collateral, secured by currency values and secured by securities or derivative financial instrument.»

Above, when forming the classification (distribution) of a secured virtual asset, we used the name «other», because in Law 2074 there is no clear reference, but based on the logical architecture of paragraph 6 of Article 4 of Law 2074, it should be. We believe that the legislator has made a gap in the legal indication and, accordingly, the provision of a definition of such an element. Based on the provisions of paragraph 5 of Article 4 of Law 2074, we can assume the name as appropriate, which harmoniously and logically corresponds to the general content of Law 2074, in contrast to the existing financial virtual asset – *not a virtual financial asset*; or characterized as provided with a commodity mass-*commodity virtual asset*.

We offer our own vision for the formation of the definition of the identified element of the classification – not a financial virtual asset (commodity virtual asset). Which, as well as the «financial virtual asset» is necessary to add, in order to eliminate the existing gap of Law 2074, by amending the list of legal definitions in paragraph 1 of Article 1 «Definitions» of Section I «General Provisions» of Law 2074.

The formation of the definition of «Non-financial virtual asset (*commodity virtual asset*)» was based on the existing disparate definitions given in sub-paragraph 3

of paragraph 1 of Article 1 and sub-paragraph 3, paragraph 5, paragraph 6 of Article 4 of Law 2074, and on our opinion may be as follows: «*A non-financial virtual asset (commodity virtual asset) is a secured virtual asset that has other collateral than a financial virtual asset.*»

2. In the future we will conduct a study of the legislative requirements of Law 2074, aimed at regulating the issue of: unsecured virtual assets (sub-paragraph 2 of paragraph 1 of Article 1 of Law 2074); non-financial virtual assets / commodity virtual assets (paragraph 5 of Article 4 of Law 2074); financial virtual assets (sub-paragraph 6 of Article 4 of Law 2074), in particular SVA (CV) and SVA (FI), in terms of their subject composition (residents, non-residents), as Law 2074 does not have a clear definition.

2.1. Issuance of financial virtual assets. Only a financial institution can be a provider of SVA (CV) turnover services (paragraph 7 of Article 9 of Law 2074).

Financial institution – a legal entity that provides one or more financial services in accordance with the law, as well as other services (operations) related to the provision of financial services, in cases directly specified by law, and entered in the register in the manner prescribed by law. Financial institutions include banks, credit unions, pawnshops, leasing companies, trust companies, insurance companies, funded pension institutions, investment funds and companies and other legal entities whose exclusive activity is the provision of financial services, and in cases expressly provided by law, – other services (operations) related to the provision of financial services. Independent financial intermediaries that provide financial guarantee services in the manner and under the conditions specified by the Customs Code of Ukraine (item 1 of item 1 of Article 1 of the Law of Ukraine «On Financial Services» are not financial institutions). and state regulation of financial services markets “) [12].

According to Art. 80 of the Civil Code of Ukraine, a legal entity is an organization created and registered and entered into the «Unified State Register of Legal Entities, Individual Entrepreneurs and Public Associations», which is endowed with civil capacity and can be a plaintiff and defendant in court [15] [11].

The provisions on SVA (CV) in Law 2074 set out everything clearly and logically, which cannot be said about the rationing of the treatment of SVA (FI).

Thus, with regard to SVA (CV), it is established that: a). and issue (paragraph 6 of Article 4 of Law 2074) – as a fact of «issued / issued»; b). and most importantly, turnover (paragraph 7 of Article 9 of the Law 2074) as a process of «issue / issue» – regulated by law and possible only by residents of Ukraine.

Regarding SVA (FI), in addition to the definition (paragraph 6 of Article 4 of Law 2074), it is only noted that its circulation is regulated by the National Commission on Securities and Stock Market (sub-paragraphs 18, 19, 20, paragraph 3 of Article 16 of the Law). 2074).

Based on the fact that the constitutional principle is the principle of the rule of law which is enshrined in Art. 8 of the Constitution of Ukraine, citizens exercise their rights on the principle of «everything is allowed that is not expressly prohibited by law», and

state bodies and their officials – on the principle of «allowed only what is expressly permitted by law.» It can be stated that before SVA (FI) there is no regulation on the prohibition of the possibility of their issuance, not by residents.

Substantiation of our position on the incomplete certainty in the regulation of the issuance procedure by subject composition, SVA (FI), we begin with the concept of «turnover of virtual assets» and «business entities» within the meaning of Law 2074:

- turnover of virtual assets – all legal relations relating to virtual assets that arise between participants in the market of virtual assets, as well as between them and the state (sub-paragraph 7 of paragraph 1 of Article 1 of Law 2074).
- providers of services related to the circulation of virtual assets – exclusively business entities – legal entities that carry out in the interests of third parties one or more of the following activities: storage or administration of virtual assets or keys of virtual assets; exchange of virtual assets; transfer of virtual assets; provision of intermediary services related to virtual assets; (sub-paragraph 8 of paragraph 1 of Article 1 of Law 2074).

Firstly. As we see, based on the meaning of the concept of «turnover», it includes «all legal relations», and issue (issue).

Second. Among the «activities», there is no definition of «issue / issue» related to service providers, which, in particular, have yet to obtain a permit for these «activities».

Thus, with regard to SVA (FI) there is no direct prohibition that «resident» or «non-resident» cannot conduct their issuance (issue), there are only reservations in paragraph 6 of Article 4 of Law 2074, which have already been issued (ie, stated fact in the past, regarding the issue) by residents of Ukraine – are called SVA (FI). That is, it can be assumed that virtual assets issued or still in the process of issuance by «non-residents» may have a different name of virtual assets and be secured by a security or derivative financial instrument – because Law 2074 does not prohibit.

We emphasize that it is not possible to state the same with regard to SVA (CV), which clearly states that «turnover» which includes the issue, can be carried out only by financial institutions (paragraph 7 of Article 9 of Law 2074).

An indirect confirmation of our study on the possibility of participating in the turnover of virtual assets (type SVA (FI)) in Ukraine and non-resident (legal entity) is the content of paragraph 6 of Article 9 of Law 2074: «Service provider may be a foreign legal entity virtual assets, under the law of a foreign state conducts activities as a service provider in the manner and under the conditions specified by the National Commission on Securities and Stock Market, taking into account the requirements and restrictions set forth in this Law “.

2.2. Regarding the regulation of the issue of «unsecured virtual assets» (sub-paragraph 1 of paragraph 1 of Article 1 of Law 2074) and «non-financial virtual assets» / «commodity virtual asset» (paragraph 5 of Article 4 of Law 2074), direct prohibition as well as permission to hold it in terms of the subject composition is missing. We can be guided by the previously considered regulations, where the constitutional principle

allows everything that is not prohibited (Article 8 of the Constitution) and the law states the possibility of being a service provider and a foreign legal entity (paragraph 6 of Article 9 of Law 2074).

However, it should be noted that in sub-paragraph 7 of paragraph 1 of Article 1 of Law 2074, the turnover of virtual assets means all legal relations relating to virtual assets that arise between participants in the market of virtual assets, as well as between them and the state. assume that «everyone» understands the issue. But in sub-paragraph 8 of paragraph 1 of Article 1 of Law 2074 it is determined that providers of services related to the turnover of virtual assets – only business entities – legal entities that conduct in the interests of third parties one or more of these types’ activities: storage or administration of virtual assets or keys of virtual assets; exchange of virtual assets; transfer of virtual assets; providing intermediary services related to virtual assets. That is, Law 2074 in sub-paragraph 7 of paragraph 1 of Article 1 understands among all the relationship and the issue, and in sub-paragraph 8 of paragraph 1 of Article 1 does not specify the type of activity of service providers – the activity of the issue.

3. Let’s compare our virtual assets, within the meaning of Law 2074, with well-known terms and definitions adopted by society as a digital financial category – cryptocurrency and other elements of the ecosystem of their digital existence.

In the direction of this study we will start from paragraph 7 of Article 4 «Legal status of virtual assets» of Chapter II «Legal regime of virtual assets»: virtual assets are not a means of payment in Ukraine and can not be exchanged for property (goods), works (services). That is, we reject their affiliation to the legal tender, in digital form, which has a common name in the literature, as the central currency of central banks (central bank digital currency – CBDC), given their concept in the literature.

The Central Bank’s digital currency (CBDC), or national digital currency, is simply a digital form of the country’s fiat currency. Instead of printing paper notes and minting coins, the central bank issues electronic tokens, the value of which is backed by full faith and government credit. However, deposits stored in commercial banks today are already digital and can be moved electronically using credit and debit cards and mobile payment applications. However, this form of digital money is the responsibility of private banks, which must maintain reserves and deposits. The CBDC is the responsibility of the government (as is cash today), which means that the central bank will have to support them [27].

3.1. Virtual assets, the definition of which in sub-paragraph 1 of paragraph 1 of Article 1 of Law 2074, contains a reference to the fact that they are intangible assets and expressed in a set of data in electronic form.

Let’s analyze the opinion of researchers who give various definitions of well-known terms that have taken a stable position in the latest financial technologies, and which in their characteristics may be close or even directly similar to the concept of virtual assets, which exists in Law 2074.

The Financial Anti-Money Laundering Unit (FATF) reports on the cryptocurrency: Cryptocurrencies use public and private keys to transfer currency from one (individual or legal entity) to another, and cryptocurrency signatures are always required to transfer cryptocurrencies. persons (in the case of Bitcoin called «miners») who protect the network in exchange for the possibility of receiving commissions that are freely distributed. (In the case of Bitcoin – a small number of newly created bitcoins, called «block reward»), and in some cases also com for transactions paid by users as a material incentive to «miners» to include their operations in the next block). Hundreds of variations of cryptocurrencies have been identified, most of which are related to Bitcoin, which uses the principle of «proof-of-work» – a system based on the fact that any transaction requires a certain number of calculations – approx. translation) to verify and confirm the correctness of operations and chain management. Although Bitcoin is the first working cryptocurrency cryptographic protocol, there is growing interest in developing alternative, more efficient methods of verifying and verifying transactions, such as proof-of-stake systems, a system in which new coins are not generated. due to the use of computing resources, and due to the duration of storage of older coins. [8]

The Internet portal Currency.com described the position of cryptocurrency – a type of virtual currency created using cryptographic methods and mathematical calculations, mainly based on blockchain. It is both a digital and a virtual currency – because it exists on the Internet and is created using cryptographic algorithms. [1]

Given the characteristics of the term cryptocurrency, they can be compared with the definition of virtual assets given in Law 2074, so it can include, in addition to cryptocurrency: Bitcoin (BTC), and its components, such as altcoin, stablecoin; tokens. [1; 2; 7; 9; 20]

3.2. Unsecured virtual assets (sub-paragraph 2 paragraph 1 of Article 1 of Law 2074). It should be noted that the lack of collateral causes strong volatility of the cryptocurrency rate, which is determined not by its purchasing power, but by supply and demand for it [3]. In this case, demand is mainly speculative [17]. For example, in the period from April 2021 to May 2021, the rate of one bitcoin coin ranged from 33 thousand to 63 thousand dollars. USA, which was generally determined by psychological attitudes under the influence of information noise. The value of this type of cryptocurrency is based on economic expectations, not on the availability of real assets, but there is no such institution that could alone affect their main characteristics: the rate of issue and exchange rate [5].

V. Usoskyi, it is believed that modern «cryptocurrencies are just digital goods that can not perform the functions of credit money, and unlike gold, they are low liquidity and highly volatile... Bitcoin has no business process, but there is a game bubble...» [14]. At this time, the process of creating a cryptocurrency is a game in which its units are obtained, and the cryptocurrency itself is a virtual «product» that a group of people collects and can then sell or exchange for another product or service, provided the party

agree to perform such an operation. The cryptocurrency market in the modern performance is a long Ponzi scheme [26].

Thus, unsecured virtual assets (sub-paragraph 2, paragraph 1, Article 1 of Law 2074) are a classic representation of a wide range of cryptocurrencies, including the most famous of all Bitcoins [29], which have no collateral, neither from the state (as example, fiat money), nor by private corporations (or even private individuals). [1; 2; 7; 9; 20]

3.3. A virtual asset is provided (sub-paragraph 3 paragraph 1 of Article 1 of Law 2074). Based on the compound name, stablecoin is a type of altcoin that is stable and has low volatility. But from a technical point of view, stablecoin is a type of token [2]. This is the difficulty of positioning stablecoin in the structure of cryptocurrencies.

Their value is tied to physical assets (such as gold, oil) or secured by foreign exchange reserves (such as the dollar). Stablecoins are needed in order not to withdraw fiat (traditional) money when trading on the stock exchange, as exchanges charge a commission and because of all this profit from trade can go to the exchange commission. The most popular of the USDT or Tether solutions. There is also a token from the Binance exchange called BUSD. [7]

According to E. Diudykova approach to collateral is implemented in stablecoin, which assumes that, unlike traditional money, the monetary value of which is established by law, the monetary value of stablecoin is represented by their collateral. The exchange of digital financial assets for legal money is the only condition for obtaining their monetary value outside the digital system. Prepaid nature automatically excludes stablecoin from the economic category of «money» and combines them into one group with tools used in non-cash payments: they are informative, providing information on the availability and transfer of rights to legal money, which serves as their security [6].

On the other hand, we can say that stablecoins are altcoins, the exchange rate of which is secured by something: either powerful fiat currencies (dollars, euros, etc.), or commodity values (such as gold), or other cryptocurrencies to dramatically reduce volatility prices. Tether, Dai, USD Coin and Paxos can be called the top stablecoins at the end of 2020. But sometimes stablecoins are not provided with anything – for example, the exchange rate of Carbon and Havven coins is regulated by additional issuance or burning of assets. [1]

Thus, a secured virtual asset (sub-paragraph 3, paragraph 1 of Article 1 of Law 2074), which according to its properties can be attributed (compared) to the category of stablecoin, This category also includes subspecies of secured virtual asset, according to our classification, namely: non-financial virtual asset (paragraph 5 of Article 4 of Law 2074) and financial virtual asset (paragraph 6 of Article 4 of Law 2074), and also together with its subspecies: ZVA (VC) and ZVA (FI).

The summary of our study on the classification of virtual assets and their issuance (by entities) is presented graphically in *Figure 1*.

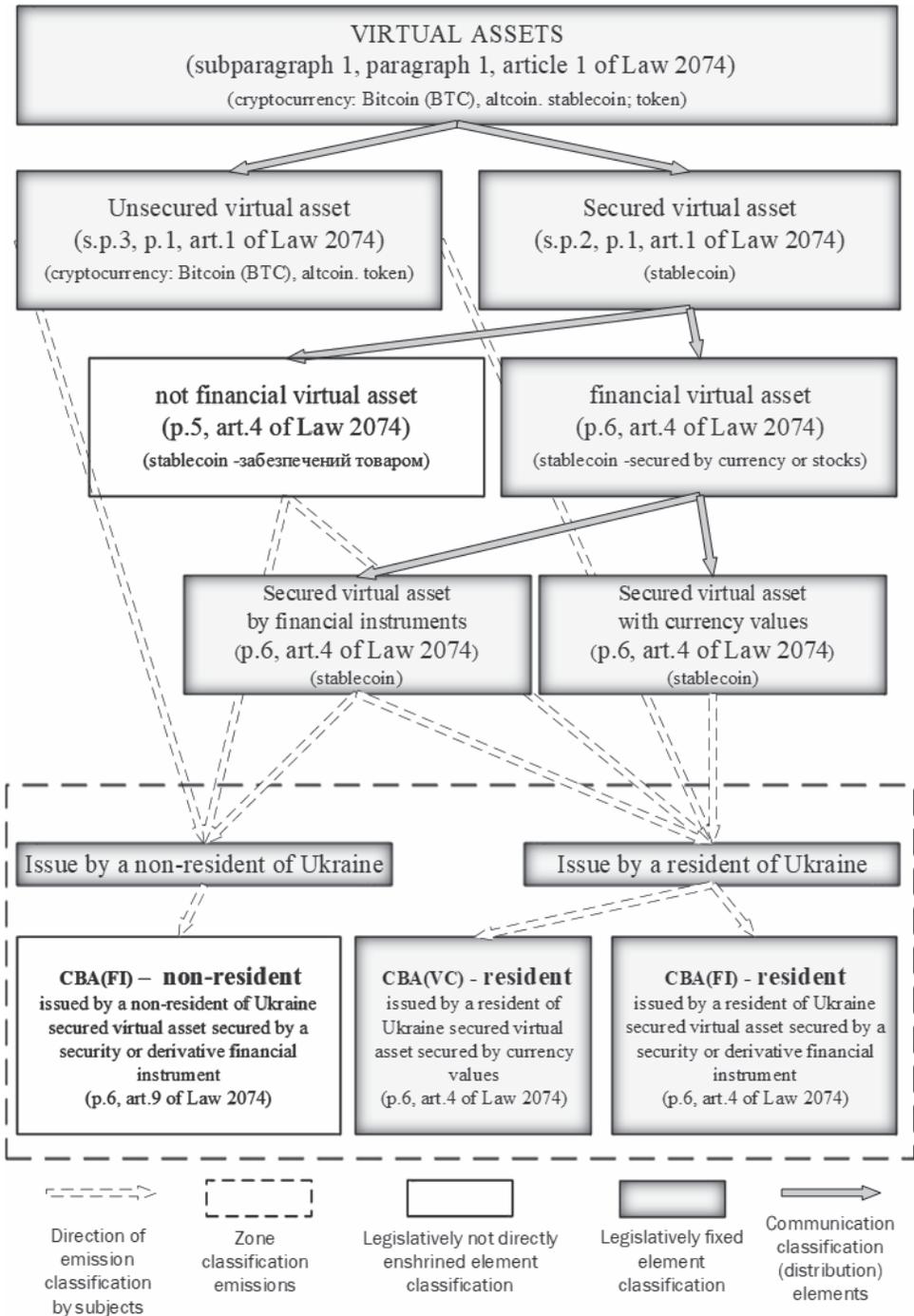


Figure 1. Classification of virtual assets and their issue (by entities) in Ukraine

CONCLUSIONS AND RECOMMENDATIONS

The study regarding the classification of virtual assets in the context of the Law of Ukraine «On Virtual Assets» as a result revealed existing shortcomings, both in coverage of completeness of such classification (illustrated in Figure 1), and in availability of proper legal definitions in relation to classification in paragraph 1 of Article 1 of the Law 2074.

1. Paragraph 6 of Art. 4 of Law 2074 contains a new definition of «financial virtual asset», which is not defined in Law 2074, and in particular in the first paragraph, the first article «Definition of Terms», Section I «General Provisions» of Law 2074 defines all legal definitions of Law 2074.

We would like to propose our own vision of the mentioned as missing, but necessary to summarize, in order to close the existing gap in Law 2074, by amending the legal definition of «financial virtual asset» in p.1 art.1 «Definitions of terms», Section I «General provisions» of Law 2074. Formation of the definition was based on the existing scattered definitions, given in sub – paragraph 3, p.1 of art. 1; p.3 of art. 4; p.6 of art. 4 of the Law 2074, and in our opinion, it could look as follows: «A financial virtual asset is a collateralized virtual asset, which has a division depending on the type of collateral into collateralized by currency values (hereinafter – CBA(VC)) and collateralized by securities or derivative financial instrument (hereinafter – CBA(FI)).

2. Article 4 of Law 2074, not interpretive, on the division of a collateralized virtual asset into «financial virtual asset» and «other-from-financial virtual asset.» Based on the logical-architecture of the statement of paragraph 6 of Article 4 of Law 2074, it should have.

We believe that the legislator allowed a gap in the legal indication and accordingly the definition of such an element. Proceeding from the prescriptions of paragraph 5 of Art.4 of the Law 2074, one may allow the name, as proper, which harmoniously and logically corresponds to the general content of the Law 2074, in contrast to the existing financial virtual asset – «*not financial virtual asset*»; or described as secured by the commodity mass – «*commodity virtual asset*»;

3. Let's offer our own vision on the formation of the definition with respect to the identified by us element of the classification – not financial virtual asset (commodity virtual asset). Which, as well as the «financial virtual asset» is necessary to add, in order to close the existing gap in Law 2074, by amending the list of legal definitions in paragraph 1 art. 1 «Definitions of terms» of Title I «General provisions» of Law 2074.

Formation of the definition of «*non-financial virtual asset (virtual commodity asset)*» was based on existing scattered definitions, given in sub-paragraph 3 of paragraph 1 of art. 1 and paragraph. 3, 5, 6 of art. 4 of the Law 2074, and in our opinion, it would look as follows «*A non-financial virtual asset (commodity virtual asset), is a collateralized virtual asset having a different collateral than the financial virtual asset.*»

4. Everything is clear and logical in the Law 2074 with the regulations on the issue of SVA(CV), which cannot be said about the regulation of the SVA(FI). So, regarding

SVA(CV) it is established that: a). and the emission (paragraph 6 of Article 4 of Law 2074) – as an accomplished «emitted/issued»; b). and what is the most important, the circulation (paragraph 7 of Article 9 of Law 2074) as the process «emission/issue» – is legally regulated and possible only for residents of Ukraine. As to issue/issue of SVA(FI) there is no direct prohibition on the fact that «resident» or «non-resident» cannot realize their issue/issue», there are only reservations in paragraph 6 of article 4 of Law 2074, which have already been emitted (i.e., the fact of issue is stated in the past) by the residents of Ukraine – they are called SVA(FI). That is, we can suppose that the issued virtual assets or those which are still in the process of issue by «non-residents» can exist and be secured by a security or derivative financial instrument, because Law 2074 does not prohibit this.

5. Regarding the regulation of the issue of «unsecured virtual assets» (sub-paragraph 1 of paragraph 1 of Article 1 of Law 2074) and «*non-financial virtual assets*» / «*commodity virtual asset*» (paragraph 5 of Article 4 of Law 2074), there is no direct prohibition in terms of its subject composition. We can be guided by the previously discussed regulations, where the constitutional principle of everything that is not prohibited, is allowed (Article 8 of the Constitution) and the law specifies the possibility to be a service provider and a foreign legal entity (paragraph 6 of Article 9 of Law 2074).

6. However, we emphasize that in sub-paragraph 7 of paragraph 1 Article 1 of the Law 2074, by circulation of virtual assets is meant all legal relations pertaining to virtual assets arising between participants of the virtual assets market, as well as between them and the state – we may assume that the word «all» means emission as well. But sub-paragraph 8 of paragraph 1 of Article 1 of the Law 2074 stipulates that provider of services related to circulation of virtual assets are exclusively business entities – legal entities, carrying out one or more of such activities for the benefit of third parties: holding or administration of virtual assets or keys of virtual assets; exchange of virtual assets; transfer of virtual assets; provision of intermediary services related to virtual assets. That is, the Law 2074, in sub-paragraph 7 of paragraph 1 of Article 1, understands among all relationships and emission, but already in sub-paragraph 8 of paragraph 1 of Article 1, does not mention under the type of activity of service providers – emission activity. This can be called a dissonance of the provisions in Law 2074, which should be brought in line with each other.

7. We have made a comparison of our classification of virtual assets, in the sense of Law 2074, with generalized terms and definitions accepted by the public as a digital financial category – cryptocurrency and other elements of their digital existence ecosystem.

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