

CHALLENGES OF FINANCIAL AND ACCOUNTING TREATMENT OF CRYPTO TOKENS

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ABSTRACT

Initial coin offering (ICO) is an entirely new method of raising funds based on blockchain technology. ICO implies the company's decision to issue cryptographic tokens in exchange for fiat currency (legal means of payment) or cryptocurrencies to a network of early adopters or development team members. The leading idea of this concept is to give ICO startups access to the financial resources necessary for funding their projects. What an initial public offering (IPO) is in traditional finance, ICO is in the decentralized finance world. Yet, unlike actions, issued tokens can have multiple uses and features and perform various functions. The situation is further complicated by the lack of a unique globally accepted classification of crypto tokens. However, in practice, they are most often classified according to their fundamental economic functions. According to this categorization, the following basic types of tokens are distinguished: utility, payment (or currency) and security (or asset) tokens. In addition to the three types listed, some tokens, known as hybrid ones, combine several functions of these three basic categories. It is essential for the company of the issuer of the crypto token to carefully compile the White Paper, synonymous with the prospectus for the initial public offering, and to precisely understand what it offers to investors. The financial and accounting treatment of crypto tokens also depends on the rights and obligations arising from the White Paper, i.e. the issued token type. There are certain conditions under which tokens issued by regulators could be deemed securities, with the necessary reminder that there is no single global view on this significant issue. The paper primarily aims to indicate when and under what conditions crypto tokens can be considered securities, i.e. what are the critical challenges of financial and accounting treatment of crypto tokens.

Keywords: *Initial coin offering, Initial public offering, Cryptographic asset, Blockchain, Accounting standard, decentralized finance*

JEL classification: *G32, G24, K22, M41*

1. INTRODUCTION

Via ICO, companies raise financial resources by selling crypto tokens to a large number of both individual and institutional investors around the world. Frequently this token is a cryptocurrency, a digital medium of value exchange based on distributed ledger technology (DLT). The number of ICOs, and therefore the financial resources thus collected, has been continuously increasing since 2017. Thus, there were 59 completed ICOs in 2016, with almost 257 million USD amassed funds. However, in 2017, the number of completed ICOs was tenfold compared to the previous year (the number of completed ICOs was 620), with over 6.5 billion USD collected (CoinSchedule, 2020). The situation climaxed in 2018 when

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1080 ICOs were initiated, and 991 were completed, amassing USD 21.6 billion in funds. It seems that the ICOs phenomenon, its way of use, possibilities and advantages, in general, is still insufficiently discussed and comprehended, especially in the financial and accounting domain of the treatment of crypto tokens despite the tremendous amounts of capital raised and the increasing interest of companies (not only from the crypto field), investors, regulators and policymakers (Golić, 2020).

The US Securities and Exchange Commission (SEC) has unquestioningly acknowledged the innovative potential of ICOs, simultaneously drawing the attention of investors to the high risks and openly addressing the problem of regulatory treatment of tokens (SEC 2017). Regarding the contemporaneity of the issue, this paper aims to point out the challenges in the financial accounting treatment of tokens without dealing with the risks for investors. The paper somewhat focuses on the token types because there is a regulatory difference between security, utility and payment tokens. Security and payment tokens fall under securities or property laws, while utility ones still operate in a legal grey zone. The central emphasis of the work is on providing recommendations and guidelines for the accounting treatment of tokens by their issuer.

The paper is organized as follows: various definitions and clarification of ICOs functioning through several essential phases are given in the following part. The types of tokens and their treatment are considered afterwards. That part of the paper aims to draw attention to the fact that only security tokens are considered securities and are subject to national regulations that apply to them. In the ensuing part of the paper, we carefully and gradually point out the problems in financial reporting on this type of asset, considering that crypto-assets (cryptocurrencies and crypto-tokens) represent a relatively new property type, complex in nature, even abstract to many market participants. It also has a bad reputation and prejudices among regulators, banks and users of financial reports. Finally, we conclude the paper with recommendations for the accounting treatment of crypto tokens by their issuer (the initiator of the ICO), which are offered instead of conclusion.

2. INITIAL COIN OFFERING (ICO) AS A FORM OF BUSINESS FINANCING

In many recent scientific works by Fisch (2019), Momtaz (2018), Fitzgerald and Arslanian (2017), etc., we encounter rather broad definitions of ICOs that focus on their role as a means of financing companies. Thus Fisch (2019, p. 6) defines an ICO as a mechanism that new ventures use to raise capital by selling tokens to a large number of investors. However, Momtaz (2018, p. 6) provides a slightly different definition according to which ICOs are smart contracts based on DLT or blockchains designed to provide external financing by issuing tokens. Fitzgerald and Arslanian (2017, p. 2) state that an ICO is a public, time-limited sale of a predefined number of crypto-tokens, usually in exchange for major cryptocurrencies (BTC, ETH) to raise capital.

Under ICOs, OECD and the European Securities and Markets Authority (ESMA) imply creating digital tokens by micro-small and medium-sized enterprises (MSMEs), i.e. start-ups, and their distribution to investors in exchange for fiat currency or, in most cases, the most famous cryptocurrencies Bitcoin (BTC) or Ether (ETH). It is made possible by the use of DLT, such as blockchain, which facilitates the exchange of value without the need for a trusted central authority or intermediary (e.g. bank, government) and enables increased efficiency due to disintermediation (OECD 2019, p. 9; ESMA 2019, p. 11).

The works of Blaseg (2018) and Adhami et al. (2018) offer more precise and complete definitions of ICOs. Thus Blaseg (2018, p. 5-6) defines ICO as a new fundraising mechanism in which projects appearing in the blockchain sell their basic protocols or application tokens

that can become a functional medium of exchange for potential trading on the secondary market and can provide a potential financial return or other forms of reward if the project is launched. We find a rather similar definition of ICO in the work of Adhami et al (2018, p. 65) who define ICO as open calls for funding promoted by businesses, entrepreneurs and organizations to raise money through cryptocurrencies, in exchange for a token that can be sold on the Internet or used in the future to obtain products or services and sometimes profits. As for the functioning of the ICO, unlike other forms of fundraising, the ICO procedure is not standardized but still follows an established pattern that can be presented in several steps/phases.

The procedure begins when the development team of the company, start-up, or still undeveloped project, announces to the public its intention to conduct an ICO, i.e. informs the public about the project and the terms of the offer through the publication of a non-standard document known as a white paper.

A white paper is usually between 10 and 30 pages long, similar to a business plan. It mainly includes information on the project, guidelines for the project development, a description of the team (education, references, etc.) that is to implement it, and specific details about the token offering. The white paper also presents the total amount to be raised, the currencies accepted for purchasing tokens (i.e. fiat, cryptocurrency), the token price, the percentage of the token that the founder keeps, the date of the campaign, the way the tokens will be produced and used, as well as necessary technical information (Cointelegraph, n.d.).

One of the probably most crucial steps in the ICO (Lipusch, 2018) follows the publication of the white paper, which is establishing a communication channel that the company, start-up, the project will use to communicate with potential investors. Therefore, it is essential that the company, start-up, or project that opts for an ICO design a professional website to inform potential investors about the goals of their projects, the problem they are endeavouring to solve, and the team behind these efforts, thus using them for building the confidence necessary to attract potential investors. However, they can also decide to use official communication channels (OECD, 2019, p. 7), i.e. the services of digital platforms that have specialized in ICOs promotion (ESMA, 2019).

After the white paper has been presented and communication has been established, the ICO begins. When the ICO starts, investors can send funds in the form of cryptocurrencies (usually BTC or ETH) or fiat money to designated addresses or money accounts to purchase tokens at a specific price (Blaseg, 2018). The ICO is considered successful if a pre-determined amount of funding is raised within the deadline. In this case, the company creates new tokens on the blockchain, which investors receive in exchange for the principal cryptocurrencies or, less often, for the fiat currencies they have invested. A part of the tokens is given to the team as an incentive. Depending on the utility of the tokens, investors can keep them or use them to partake in the project or trade them on a cryptocurrency exchange market. A way for a business to sell its token to a broader audience is to list it on a cryptocurrency exchange. Cryptocurrency exchanges allow token trading on the open market, which lets ICO investors flexibly enter and participate in existing projects by buying or selling tokens. Of course, this is possible if there is enough supply and demand for such a token, i.e. if there are interested parties who are willing to buy or sell the issued token (Lipusch, 2018).

Based on the above definitions and clarification of how ICOs work, it is evident that all ICOs are not equal, and therefore neither are the tokens they issue. Depending on the ICO, tokens can have several characteristics and a wide range of roles. Unfortunately, there is no single, globally accepted classification of tokens. However, in practice, there are two dimensions for token classification: the first, depending on the decentralized business model of the project (Warren, 2017) and the second, based on the fundamental economic functions of tokens

(FINMA, 2018; ESMA, 2018, 2019). Other classifications can be made according to the way tokens generate returns or the way they are allocated to investors (Benoliel, 2017; Fisch, 2019). In the continuation of the paper, we will consider the categorization of tokens based on the primary economic functions they perform for two simple reasons. The first reason is we hold this classification more suitable, considering this paper's research subject. The second reason is this categorization is used by the most important institutions and agencies of the European Union (EU) under whose jurisdiction this area falls.

3. WHEN ARE TOKENS TREATED AS SECURITIES?

The SEC's recent decision to fine actor Steven Seagal \$314,000 for unlawfully promoting an ICO held in 2018 has not only attracted the attention of all the world's leading media (Crane, 2020; Field, 2020; Gibson, 2020; Jacobs, 2020; Mangan, 2020; Manskar, 2020; McCoy, 2020; Merle, 2020), it has also proved that not all ICO tokens have the same legal treatment. Let us start from the beginning and consider what the actor Steven Seagal actually "did wrong"?

3.1. SEC vs. Steven Seagal

American actor and martial artist Steven Seagal recently settled with the SEC to pay \$314,000 concerning an ICO launched by Bitcoin2Gen (B2G) in 2018. According to the SEC, the actor's guilt is in the fact that he did not publicly disclose the fees received for the promotion of the token (Avan-Nomayo, 2020; Crane, 2020; Mangan, 2020; Manskar, 2020; Merle, 2020).

The fact is that there have been cases of crypto-trading platforms using celebrities to promote their ICO tokens to attract as many investors as possible (Crane, 2020; Field, 2020; Gibson, 2020). All this is done because the support (promotion) of celebrities gives certain "credibility" to tokens and thus attracts investors (Gibson, 2020; Jacobs, 2020; Mangan, 2020). However, these famous people sometimes promote fraudulent schemes that lead to the loss of client funds and subsequent lawsuits (Avan-Nomayo, 2020).

In a statement released on Thursday, February 27, 2020, the Commission (SEC) alleged that Seagal had acted contrary to the Federal securities law concerning anti-advertising (Avan-Nomayo, 2020). According to this law, any individual or celebrity who advertises crypto tokens that are categorized as security tokens (a type of token that is treated as securities - see more in the following subtitle of this paper) must disclose how they were compensated, i.e. paid for promotion (Bambrough, 2020).

Additionally, Seagal's illegal advertising occurred soon after the SEC released its 2017 SEC DAO Report, which warned that ICO tokens could be securities (Crane, 2020; Jacobs, 2020). In an effort to clarify the issue with Seagal, the head of one of the SEC's divisions responsible for these matters, Kristina Littman, explained the situation as follows: investors were entitled to know about payments Seagal received or was promised to endorse this investment so they could decide whether he may be biased (Bambrough, 2020). Besides, Littman stated that celebrities should not use their social media influence to advertise securities without proper disclosure of the compensation they have received or will receive (Avan-Nomayo, 2020; Bambrough, 2020).

According to the SEC's investigation, the virtual cryptocurrency trading platform, Bitcoin2Gen, agreed to pay the actor a total of \$1 million, including \$250,000 in cash and \$750,000 in Bitcoin2Gen tokens for referrals, i.e. promotion, which Seagal did not disclose. In addition, promotion included Seagal's social media posts inviting his numerous fans "not

to miss" this ICO (Avan-Nomayo, 2020). Also, the actor released a press release titled "Zen Master Steven Seagal Has Become the Brand Ambassador of Bitcoin2Gen" (Seagal, 2018), and in its press release, Bitcoin2Gen quoted Seagal as saying that he "wholeheartedly" supports the ICO.

Consequently, Seagal was fined \$314,000, an amount the actor agreed to pay without denying or admitting any wrongdoing. In addition to the fine, the actor consented to hold back from promoting any type of securities for three years (Avan-Nomayo, 2020; Crane, 2020; McCoy, 2020; Merle, 2020).

After carefully considering the case, we concluded how important it is to distinguish different types of tokens, i.e. when and under what conditions tokens are considered securities. In the remainder of this chapter we will pay attention to token types and apostrophize conditions a token should meet to be considered a security.

3.2. Token types and their treatment

The Swiss Financial Market Supervisory Authority (FINMA) categorizes tokens based on their basic economic functions (FINMA, 2018), and ESMA uses the same categorization in its reports (ESMA, 2018, 2019). According to this categorization, the following types of tokens are distinguished (FINMA, 2018):

Utility tokens are intended to provide access to specific applications (products) or services of enterprises through a blockchain infrastructure. They are a way to finance shared infrastructure projects that could not be financed before. In simpler terms, utility tokens are a means of payment used on certain applications. However, these tokens are not accepted as a means of payment for other applications, and the value of the product or service depends solely on the investor's perception. Utility tokens issued by a business to finance purchases by prospective customers are not treated as securities if their sole purpose is to grant digital access rights to a product or service and if they can be used in this way at the point of issue. In those cases, its primary function is to grant the right of access, i.e. to facilitate the purchase (Benoliel, 2017). There is no connection with the capital markets which is a typical characteristic of securities. Therefore, they are not treated as securities, nor are they subject to the regulations concerning securities.

Payment (or currency) tokens (synonymous with cryptocurrencies) are tokens that are to be used, now or in the future, as a means of payment for goods or services, as money or as a value transfer. These are, in fact, cryptocurrencies, with BTC undoubtedly being the most famous one. It is the first cryptocurrency, conceptually created in 2008 (Nakamoto, 2008) and first "mined" in January 2009 by Satoshi Nakamoto. Payment tokens are designed to function as a means of payment and are not analogous to traditional securities in their function. Therefore they are not even treated as securities, meaning that Seagal could promote them without dread of being fined.

Security (or Asset) tokens represent assets such as debt or equity securities, meaning they are basically investments. In terms of raising capital, security tokens can be issued in the context of an ICO that allows businesses to raise capital for their projects by issuing digital tokens in exchange for fiat money or other crypto assets, i.e. cryptocurrencies. These tokens work by sharing the project's profits in the form of interest and dividend payments to their owners. Profit sharing is usually done by issuing new additional tokens when the company makes a profit. It means that security tokens are analogous to shares, bonds or derivatives. In addition, security token owners take ownership of the company by purchasing it, and blockchain technology enables a voting system that provides investors with the opportunity to exercise their rights in the company's decision-making process. Therefore, security tokens are most similar to digital assets from which value is derived by trading in external funds. As a logical

consequence, this type of token is subject to the laws concerning securities. The ability of security tokens to effortlessly provide liquidity to their investors while subject to greater regulation makes them a preferred choice for institutional investors.

In addition to the three types of tokens listed, there are some other possibilities and variations as follows:

Tokens combining several functions of the above three basic token categories are called hybrid tokens. Essentially, this would mean those individual token classifications are not mutually exclusive, so utility and security tokens can also be classified as payment tokens, also hybrid ones. So in these cases, the claims are cumulative. In other words, these tokens are considered securities and means of payment.

Reward and reputation tokens are given as a token of reward or reputation, most often to members of the development team or famous people. Both types indicate on the blockchain that a user or wallet (E_Wallet) is someone special or has done something remarkable. They symbolise something like the Nobel or Oscars of the crypto world (Hill, 2017). According to Fisch (2019), these two subtypes of tokens belong to utility tokens, meaning they are treated as securities.

In some ICOs tokens are already released at the fundraising point on a pre-existing blockchain. However, in other types of ICOs, investors only have the opportunity to acquire tokens at some future point, and the tokens or the underlying blockchain have yet to be developed. This situation is called pre-financing. Another possible permutation is the token pre-sale when investors receive tokens that grant them the right to obtain some other tokens later. In cases of pre-financing and pre-sale that give the right to claims for acquiring tokens in the future, these claims are also treated as securities, i.e. in the same way as security tokens, if they are standardized and suitable for standardized mass trading.

Finally, a practice confirmed that due to the lack of a formal framework for token classification, many ICOs initiators tend to classify their tokens as utility ones to avoid meeting the financial requirements and obligations associated with the securities offering. On January 9, 2019, the European Banking Authority (EBA) and ESMA published two reports (EBA, 2019; ESMA, 2019), which provide advice on crypto-assets to the EC and ESMA to the EU Parliament and Council. They respond to the European Commission's (EC) FinTech Action Plan 2018 (EC, 2018) request for European Supervisory Authorities (ESAs) to assess the suitability of the current EU regulatory framework. The EBA and ESMA (EBA, 2019; ESMA, 2019) definition of crypto-assets encloses cryptocurrencies and tokens, which implies they regard them as crypto-assets. However, according to ESMA Reports (ESMA, 2018, 2019), not all crypto-assets are treated as financial instruments - securities. Where crypto-assets qualify as transferable securities, the legal framework for regulating and supervising financial instruments applies to crypto-assets. When certain crypto-assets do not qualify as securities, financial or supervisory regulations will not apply, leaving investors exposed to significant risks. However, according to ESMA (ESMA, 2018, 2019), all crypto-assets and related activities should be subject to Anti Money Laundering – AML (Smithers et al., 2019). But, according to the SEC, neither the definition of a token nor its regulatory treatment depends on its "labelling". They depend on a careful assessment of the economic realities on which the transaction is based (SEC, 2017).

Finally, we can conclude that the dividing line between different types of tokens is somewhat blurred despite everything. However, for a token to be treated as solely a utility token (intended to perform a function within the network and facilitate the use of the platform), it must have zero value outside the platform on which it is used (OECD, 2019). Nevertheless, this is currently not the case with most ICO-issued tokens, which tend to be offered on crypto exchanges after the initial offering and are freely traded on secondary markets with the profit

expectation. Even without its practical use on the platform, the token gains value through trading and is considered a security in such cases.

4. PROBLEMS IN FINANCIAL REPORTING ON CRYPTO ASSETS

Current international financial reporting standards do not include clear instructions and provisions on how crypto assets should be accounted for. An overview of the current financial reporting standards, which could conceivably be applied in the accounting treatment of specific categories of crypto assets of entities, as well as particular dilemmas and guidelines for their resolution, are listed below:

Cash and cash equivalents (according to IAS 7);

Financial assets (according to IAS 32);

Other investments and real estate investments (IAS 16 and IAS 40);

Intangible assets (according to IAS 38);

Inventories (IAS 2, IAS 2) i

Payments for future goods and/or services (prepayment).

According to IAS 7, money includes cash on hand and demand deposits. Cash equivalents are short-term, highly liquid investments that can be quickly converted into known amounts of capital and are not subject to a significant risk of value changes. The International Accounting Standards Board states that particular cryptocurrencies can indeed be used for the goods and services exchange or as a monetary unit in expressing the price of goods or services, which is not enough to measure and recognize all transactions in financial statements. When speaking of crypto tokens, they provide certain rights to goods or services, even though neither they nor cryptocurrencies are used as an official means of exchange. Therefore, the mentioned standard's provisions cannot be applied to them.

Based on the above, it can be concluded that crypto assets currently do not meet the IAS 7 prerequisites. They are not present significantly as a medium of exchange, are characterized by volatility, and even banks in many countries do not have a clear position on their use and are often associated with illegal activities (Božić et al., 2022).

According to IAS 32, a financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Cryptocurrencies do not meet the requirements for the recognition of financial assets because they do not lead to the creation of contractual rights or obligations for payments in money or other financial means. Also, crypto tokens do not meet the provisions of this standard unless they provide rights to capital or other financial assets. However, if the conditions defined by IAS 32 are met, the International Financial Reporting Standard 9 (IFRS 9) is used to classify and measure the value of crypto tokens. This standard specifies three valuation models, financial assets at fair value through profit or loss, financial assets at fair value through other comprehensive income and amortized cost. Fair value measurement is necessary for different situations (crypto assets are recognized as intangible assets, and a revaluation model is implemented, held in the name of a third party, etc.), and the provisions of IFRS 13 are applied. There are three levels of fair value measurement and the corresponding inputs for fair value determination techniques (first, second and third level inputs). Level 1 inputs are quoted prices from active markets for identical assets or liabilities that the reporting entity can access on the valuation date (Popović, 2018, p. 54). Level 2 inputs are all inputs, except quoted prices included in the first level of fair value measurement, available for a specific asset or liability directly or indirectly (Popović, 2018, p. 55). Level 3 inputs are inputs for specific asset positions not based on available market data, usually when there is decreased market activity on the valuation date or the market is inactive. In these circumstances, it is

crucial that inputs are developed based on the best information available in the conditions of illiquid markets, whereby business entities can also use their data (Popović, 2018, p. 55).

The International Accounting Standards Board defines real estate investment as an investment in the property to generate income through a change in its value or rental. This requirement is also met by crypto assets, as they are often held to make a profit by changing value. Nevertheless, it is not an asset with physical properties (tangible asset), so it cannot be classified as an investment property, according to IAS 40, and valued at fair value through profit/loss. Also, the intangible form of this asset does not meet the provisions of IAS 16, so following the above, it cannot be classified as an accounting position of real estate, plant and equipment.

There are some proposals to treat cryptographic assets as non-financial investments even though they do not meet the requirements defined by international accounting standards to be recognised as financial assets (Božić et al., 2022). Since the provisions of current international accounting standards do not specify their treatment, business entities are suggested to develop their accounting policy and apply two valuation models - the historical cost model and fair value through another comprehensive income model (Procházka, 2018).

According to IAS 38, intangible assets are defined as identifiable non-monetary assets without physical substance. It is clearly different from goodwill, and it can yield flows of future economic benefits. Assets meet the identification criteria in the definition of intangible assets when:

They are separate, i.e. they can be separated from the entity, sold, transferred, licensed, rented or exchanged separately or along with the associated contract, asset or obligation or

They arise from contractual or other legal rights, regardless of whether these rights can be transferred or separated from the subject or other rights and obligations.

Therefore, both crypto tokens and cryptocurrencies meet the requirements prescribed by IAS 38, so they should be treated according to it, i.e. valued according to acquisition costs or the revaluation model. According to the first model, crypto-assets are recognized in acquisition costs amount, and an impairment test is carried out according to the IAS 36 requirements. Crypto assets usually have a known value that can be cashed out on the reporting date, so the impairment test application is rather facilitated. The revaluation model implies that after the initial recognition of crypto-assets, it is measured at the revalued value (fair value on the day of the revaluation) reduced by accumulated depreciation (which does not exist with crypto-assets) and accumulated impairment losses. However, applying this model requires the existence of an active market, which is not always the case for all types of crypto assets.

IAS 2 defines inventories as assets intended for sale as part of ordinary operations or in the production process, sold as such or in the form of raw or auxiliary materials used in the production process or provision of services. Crypto tokens are predominantly held for further trading (to be sold later), which meets the requirements prescribed by IAS 2, so this form of property is measured according to the purchase cost or net realizable value (depending on which is lower). Therefore, business entities can own crypto assets intended for further sale (as part of a regular business). Assets are then treated as inventory according to the IAS 2 provisions. If business entities are in the role of intermediaries with crypto assets, the inventory is reported at fair value minus the cost of sales. If crypto tokens are held for investment purposes (for a more extended period), they do not meet the provisions of IAS 2 and cannot be recognized as inventories.

Crypto tokens can also provide rights to future goods or services and are then reported as prepayment, i.e. the definition and accounting treatment of intangible assets can be applied to them.

Hence, according to the provisions of the current accounting standards, the only solution at the moment is to record crypto-assets (crypto-currencies and crypto-tokens) as intangible

assets and inventories (IAS 38 and IAS 2). Regarding the two accounting standards' requirements, the classification and measurement of crypto assets could be done as shown in the following table:

Table 1: Classification and measurement of crypto assets

A standard applicable to a specific category of crypto assets	Initial measurement	Subsequent measurement	Movement in carrying amount
Inventories (IAS 2)	Cost	The lower value between the cost and the net realizable value is taken.	Movement above cost – not applicable (N/A) Movement below cost – Profit and loss
In the event that crypto assets are held for sale in the near future and profit from price fluctuations, the provisions of IAS 2 also apply – Commodity-broker – trader exception	Cost	Fair value less cost	Profit and loss
Intangible asset (IAS 38) The revaluation model that is chosen when there is an active market	Cost	Fair value less accumulated depreciation and impairment	Movement above cost – Other comprehensive income Movement below cost – Profit and loss
Intangible asset (IAS 38) Cost model	Cost	Cost less accumulated depreciation and impairment	Movement above cost – not applicable (N/A) Movement below cost – Profit and loss

Source: Adapted by PWC (2017)

Crypto assets represent a relatively new type of asset. It is complex and still abstract to many, accompanied by mistrust or prejudices of regulators, banks or financial statements users. Nonetheless, we witness numerous and often significant changes that transform the traditional way of doing business and financing companies, and thus also certain aspects of its accounting coverage. Consequently, there is a need for new solutions in the financial reporting domain, which would eliminate the detected problems accountants face in practice.

5. INSTEAD OF A CONCLUSION – RECOMMENDATIONS FOR THE ACCOUNTING TREATMENT OF CRYPTO TOKENS BY THE ICO INITIATORS (TOKEN ISSUERS)

When it comes to the accounting treatment of the ICO by the initiator - the token issuer (the demanding party in the accounting recording), it represents a significant challenge for these companies. It means that the issuer of ICO tokens should determine whether the tokens meet

the definition of financial obligations following IAS 32 because, according to the above standard, a financial obligation is any obligation that is:

- contractual right (to deliver cash or another financial asset to another entity or to exchange financial assets or financial obligations with another entity under conditions potentially unfavourable to the entity) or
- a contract that will be or can be settled with instruments of the entity's capital and which is non-derivative (for which the entity is or may be obliged to deliver a variable number of instruments of the entity's own capital) or derivative (which will be or can be settled otherwise than by exchanging a fixed amount of cash or another financial instrument for a set number of instruments of the entity's own capital).

According to IAS 32 (paragraph 11), an equity instrument is any contract that proves a residual interest in the asset of an entity in the entity's assets after deducting all its liabilities. Typically the ICOs do not provide those with whom they are located, the holders, with residual participation, such as participation in realized profits, dividends, etc. Therefore, it can be deduced that the ICO does not have all the characteristics of an equity instrument. It is essential to carefully assess whether the right to cash flows refers to individual cases (projects) or they essentially provide rights to residual cash flows of ICO entity.

If it is determined that the initial offer of tokens is a financial obligation, the provisions of IFRS 9 apply to it.

The issuer should determine whether the ICO meets the provisions of IFRS 15, i.e. the standard concerning revenue from contracts with customers. The stated standard of financial reporting will be applied: if the receiver of the ICO token is a customer, if there is a "contract" for accounting purposes and if the fulfilment of performance obligations associated with ICO tokens that are not within another standard.

IFRS 15 defines a customer as a party contracting with an entity to obtain goods or services that are the output of the entity's regular activities in exchange for consideration.

The entity should consider whether the Whitepaper, purchase agreement and/or other accompanying documents create "enforceable rights or obligations" to determine whether a contract with customer exists. The fulfilment of the conditions defined in paragraph 9 of IFRS 15 is assessed to determine whether a contract with customers truly exists.

If none of the aforementioned standards is relevant, IAS 8, which deals with accounting policies, should be considered to decide the appropriate accounting treatment in the given circumstances.

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