

Security Token Offering (STO) in Europe: A Legal Prospective

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Abstract

The 20th century was a landmark period in development of banking and financial system around the globe, most importantly the remarkable development in economics and finance is the emergence of derivative securities and stock exchange markets. The year 2019 would be historical in the banking system as it brought a revolutionary breakthrough in fundraising through the Security Token Offering (STO). In any deliberations on the emergence of STO, the Initial Public Offering and Initial Coin Offering is merely a predecessor of crowdfunding projects offering security tokens. In this research study, we are undertaking to answer the following research questions on the STO's legal and business activities. We start our study with the first question of "does the STO is a revolution or only a result of the evolutionary process of creation of tradeable and sophisticated financial assets based on blockchain technology?" This study is concluded with the question of "How much further development in FinTech and usage of tokens is required upon legislative progress or the businesses and start-ups can initiate projects based on crowdfunding without permission relevant financial authority? This research article sums up the overall discussion on the topic of the

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legality of STO in the EU and around the globe with examples and provides a significant research contribution in the literature of Law and Finance in the age of technology and artificial intelligence.

Key words: Security Token Offering, Initial Coin Offering, Crowdfunding, Securities and Tokens, Transferable Securities, European Union, MiFiD II

1. Introduction to DLT assets crowdfunding

Distributed ledgers technologies (DLTs) were first developed in the realm of virtual currencies, they have emerged since 2015 as an innovation that may change the current paradigm of financial markets. DLTs allow different users to share the management of data, possibly to process financial market transactions with keeping track of their holdings of securities and cash, and also facilitate integration in post-trading by providing an infrastructure ensuring that every user can transfer assets with a high degree of automation and without intermediaries (Lee 2018, Priem 2018).

Bitcoin was first proposed by an anonymous developer named Satoshi Nakamoto and revolutionizes the existing financial system and enables to make transactions through a decentralized system even among anonymous parties. Bitcoin's significance lies in the fact that it is a new currency system created by an anonymous developer in the private sector (Reyna, Martín et al. 2018). Inflated by the FinTech industry, and later considered as holy grail of modern payment handling, the Blockchain's technology is trying to move from FinTech to industrial applications. The weakness of Bitcoin Cryptocurrencies is their ability to be traded like a commodity (Gans and Catalini 2017). Commodities based markets show huge fluctuation in value from various events in the marketplace. This value fluctuation ultimately limits investor trust in the commodities. An unforeseen event could cause an investor to lose huge portions of money and frequent decrease of investor's trust (DeVries 2016).

ICO emerged in 2017 as it was used by the technology entrepreneurs, as an easy and quick fundraising tool that is somewhat like a crowdfunding campaign, but instead of being offered a product, it offers digital tokens. ICOs can be seen as a special form of crowdfunding, but have a very different characteristic, mainly

liquidity. ICOs were a chance for a new way for blockchain startups to finance project development. Through ICO, the startups issues coins or tokens in exchange for fiat money or Bitcoin or another cryptocurrency (Savelyev 2018). The buyers of tokens can use them to access future services or products that will be offered by the blockchain platform to be developed (Catalini and Gans 2018). Later on, the assets offered through ICO can be traded freely with online exchanges offering greater liquidity to investors than traditional equity investment. Not only problems concerning ICOs and lack of rules which would protect investors, resulted in high-profile scams, but also other factors triggered a process of drafting legislation for other form of fundraising allowing to use of blockchain in financial markets. New security tokens can be issued and sold to investors, similar to how new digital tokens are sold through a crowdfunding method known as an Initial Coin Offering (ICO) (Caselli and Negri 2018). The STO projects and its tokens has a potential to be exchangeable on a secondary market and startups wish that they become more than a simple platform of quasi currency exchanges. This is what is known as a Security Token Offering (STO). The difference with ICO is that STO provides assets called security tokens which are asset-backed and fall within regulatory parameters (however in practice and the new legislative approach in several jurisdictions proves something different). The STO finish the era of crowdfunding, where only utility/payment tokens or coins were issued and investors were not protected from scams, which usually consists 70% of all projects. With the birth of Ethereum and the recent crypto boom, newly issued tokens are evolving beyond simple coins to become more functional (Catalini and Gans 2018).

It is not the US, where the crypto industry progressing but the Europe. The crypto industry is global and so far, appropriately, without a real financial center (Hofmann, Strewe et al. 2017, Uzsoi 2019). The Belgian investment company NXMH has just bought the Bitstamp stock exchange - and paid cash for it. A several actions have been taken by the EU (European Union) in regard to financial assets based on the blockchain, mainly in the initiative called Capital Market Union (CMU).² A growing competition from other continents

² Commission Staff Working Document Impact Assessment Accompanying The Document Proposal For A Regulation of The European Parliament and of The Council

(China, USA) and implementation of technological advances made UE to make one step further and empower start-ups with other ways of fundraising. A 2019 has brought a lot of advancements to EU regulation towards providing regulation for STO.³

This article explains the technical and legal aspects of STO and also suggests some legal practical future changes which can make STO more reliable source of crowdfunding. This study is very important in the field of economics and law as the nature of business is changing, because of technological advancement and use of blockchain based applications. The next section will explain the overall mechanism of ICO and how can we understand the security tokens in crowdfunding projects and business. The second section will highlight the definition of STO, third section will elaborate the legal issues for exchange platforms for security tokens. The fourth and fifth section will explain the features of security tokens and the EU Law perspective on security tokens respectively. The second last section will put some light on the topic of General Classification on DLT Assets and we will conclude our article with future research directions and limitations of our study.

1.1 ICO Mechanism

A term Initial Coin Offering (ICO) is quite new in the business sphere and a reason behind this refers to recent occurrence of cryptocurrencies. There is no single definition of ICO however, a term refers to the problem with raising capital. A very useful and simple definition was provided by Joseph D. Moran in his paper *“An Initial Coin Offering (ICO) is a sale of digital assets to the public by an entity seeking to raise capital. The sale is administered and recorded via “distributed ledger technology” (Moran 2017) or in simple words it can be explained as “crowdfunding on the blockchain”.*⁴

ICO have become a popular form of financing for blockchain technology-based projects. Thus, in a process of ICO is similar to concept of Initial Public Offerings (IPO), but instead of shares, the investor in ICO is purchasing so-called "tokens" which have a

establishing the Programme for single market, competitiveness of enterprises, including small and medium-sized enterprises, and European statistics and repealing Regulations (EU) No 99/2013, (EU) No 1287/2013, (EU) No 254/2014, (EU) No 258/2014, (EU) No 652/2014 and (EU) No 2017/826 SWD/2018/320 final - 2018/0231 (COD)

³ <https://smartoptions.io/2019-the-year-of-the-sto/>

⁴ <https://medium.com/sesameseedorg/crowdfunding-on-the-blockchain-9301f970cd10>

different function and structure than conventional shares. The conceptual approximation by the term "ICO" can give the impression that ICOs are comparable to share issues, however this similarity does not have grounds neither from technical perspective nor legal (Hahn and Wons 2018).

Nowadays start-ups usually face difficulties and remain unfunded (Berger and Udell 1995). A traditional way of obtaining funding relies on bank loans or any other attempts to convince investors. A very high and rigid conditions to launch IPOs resulted in the alternative way of fundraising, particularly with the use of Internet (Shane and Cable 2002). A role of ICO has pure entrepreneurial purpose and commonly is used as a tool by newly established ventures to raise capital by selling tokens to a crowd of investors which constitutes a core difference between conventional crowdfunding and ICO. A crowdfunding with blockchain based assets such as tokens can be used as a means of exchange for the future use of a particular tangible or intangible products or services and can be easily compared with the reward-based crowdfunding offers non-pecuniary tangible (e.g., product) or intangible (e.g., reputation, identity) rewards in exchange for funding (Lambert and Schwienbacher 2010).

Not only a problem of increasing the investor's protection but also the investor's inner reasons pursue them to make investment in the crowdfunding based on the equity. On the other hand, the investors who want to obtain a utility or payment tokens might be interested in possibility to exchange their tokens for rewards on specific platform or become a part of community (whether they want to make a net of contacts or have other motives). Another similarity between the traditional crowdfunding and ICO is a will to complete the transaction with use of online payment systems and abstain from traditional banking system. The ICOs generates sufficiently high level of interest for companies by their digital assets offerings. In regard to blockchain assets such as coins, utility tokens, payment tokens, the ICOs initiated by start-ups showed that digital assets issued should not only successfully conduct a fund-raising but also the success of ICOs is depend on the project and products, services and business model presented in Whitepaper (Hahn and Wons 2018). The ICOs based on utility and payment tokens are dependable from interest of investors to trade tokens within the platform. Mostly these projects

are facing a decrease of value after fundraising. From this perspective, a first ICOs in 2016 and 2017 have lost in the eyes of investors and are not considered in the crypto-environment as an attractive source of investment.⁵ That is why, it is not an easy to attract investors for a purely token-based business model without operative added value. Since a token is stored from the time of issue under a massive speculative pressure can come, the underlying business model must be of real benefit in order to achieve appropriate sustainability to generate demand on the market.⁶

1.2 Understanding the Security Tokens in Crowdfunding Projects and Business

A most well-known System Ethereum is dedicated for digital assets such as cryptocurrency and tokens. A token is a digital representation of diverse range of digital assets on a distributed ledger or “a cryptographically—secured representation of a token-holder’s rights to receive a benefit or to perform specified functions.”⁷ With the tokenization, tokens can represent voting rights, ownership shares, bonds, vouchers and tangible objects.

A focus of token creation is not the introduction of an entirely new payment system. The great majority of the tokens are hosted by another platform. Accordingly, many protocol tokens such as Ether are coins, while application tokens are just tokens. The biggest protocol platform is Ethereum (Boreiko, Ferrarini et al. 2019). The most popular type of smart contract of tokens is ERC-20, it means that in practice tokens are a smart contract and they can be used in the blockchain of Ethereum. The ERC-20 standard token released through ICO must be compliant with the standard set of programming rules in order to release token on Ethereum system, the tokens have to follow programming rules. If the token has a different standard set of programming rules, then the Ethereum developers cannot predict what are the functionalities of different token, and what would be result of interacting with any ERC-20 token (Mazzei, Baldi et al. 2019). A Token is not necessarily related to a

⁵ <https://coindoo.com/reasons-why-icos-are-likely-to-disappear/>

⁶ <https://101blockchains.com/sto-vs-ico-the-difference/>

⁷ Monetary Authority of Singapore to regulate issue of digital tokens, Xinhua 2017-08-01

http://www.xinhuanet.com/english/2017-08/01/c_136491429.htm

Cryptocurrency like Bitcoin or Ether and can be considered as a sort of security document. Technically, a Token is implemented by an algorithm defined in a Smart Contract on a Blockchain and is the digital representation of an asset available on the Blockchain. For example, Ethereum is a platform that can be used to create any arbitrary smart contract, including those that represent digital assets called Ethereum tokens. Ethereum tokens can represent tangible items or sort of currency used to pay transaction fees. Tokens can be used for a variety of purposes such as paying to access a network or, like in our use- cases, tracking the status and modifying the value of goods and parcels.

The most attractive function of DLT assets refers to tokenization of rights or property. Tokenization refers to process when a token contains asset model that is populated with data by the algorithms implemented on the smart contract. The algorithm of the smart contract secures the data and prevents from making copies or any actions which would deprive token holder of his ownership (Reyna, Martín et al. 2018). A classification on what requirements certain token belongs to category of security tokens depends on the jurisdiction. According to US, a financial product is legally classified as a security if assets can be considered as investment. The EU does not implement “substance over form” or any test which would provide clear features of securities (Hughes and Wang 2019). The mainland Europe has civil law system, which is a principle-based approach to law. However, policy makers around the world agree that every DLT asset, including cryptocurrency can be considered as security if it falls into scope of security definition. From a general viewpoint a “financial security” includes any financial investment that derives its value from an underlying asset. It can be a tradable financial asset of any kind, broadly categorized into debt, equity and derivatives.⁸ Regulators from several countries have published reports and public positions arguing that the tokens which would be characterized as “securities” or “financial instruments” under their current rules would have to abide by the relevant local security laws. There is a growing consensus among regulators, market participants and law firms from

⁸ By Crypto Valley Association Edited by Florian Ducommun, Asset Tokenization Paper Under Swiss Law

OECD countries to assume that security tokens are equivalent to securities (Blémus and Guegan 2019).

2. Security Token Offering (STO)

A Security Token Offering is a compliant private offering made on the blockchain with offering of security tokens (a digitized financial security that can be backed by assets, profits or revenue of a company, and providing voting rights). STOs are an emerging alternative to private equity and VC financing as they allow for businesses to lock in funds without locking in investors. An STO may create an innovative way of financing a company's portfolio, allowing it to raise funds by tokenizing its cash-flows. The offerings of security tokens through their diversified projects and asset-backed tokens guarantee to better adjust investors expectations and improve offerings provided by ICOs (Leiberman and Miryneh 2019). STO's participants classify as investors with the respective rights derived from financial instrument, whereas ICO's participants may legally classify as donors with very limited rights (Ante and Fiedler 2019).

2.1 Security Tokens vs. Tokenized Security

There are two types of blockchain-based representations of securities: "security tokens", which are blockchain-native tokens are treated as securities but do not exist outside of the blockchain and on the other side "tokenized securities", which are blockchain-embedded representations of real-world securities. Both of these terms refer to two very different concepts.⁹ Security tokens and tokenized securities can confer benefits over traditional means of representing securities, such as on paper, or digitally in siloed databases. However, they are different from perspective of type of legal a framework and settlement finality issues.

2.2 Security Tokens

Security tokens refer to new technology representation and they share many traits similar with traditional securities. For instance, investor can make returns in dividends by purchasing a security token,

⁹ <https://www.securities.io/security-tokens-vs-tokenized-securities-thought-leaders/>

however such asset from legal perspective is equal with securities.¹⁰ Security tokens and their value is derived from tradeable asset. Security tokens can be divided into several subtypes, such as equity tokens, which imply ownership of some tangible or intangible assets or entitle to receive dividend like traditional stocks (Fisch 2019). Moreover, what is convenient from issuers perspective, security tokens do not change the fundamentals of a financial security. They just shift an ownership of assets on blockchain based platform. That process of digitizing an asset or so-called “tokenization” allows to represent value and allocation of shares in the form of a cryptographic asset. Therefore, security tokens are linked to investment contract similar to traditional financial instruments.

2.3 Tokenized Securities

Tokenized securities are shifting already existing security or different financial instrument into a digital asset which role is representation of that security on blockchain ecosystem. In addition, a tokenization process can be compared to creation of storage and management of an asset and represented by tokens or it is just a different solution for transfer of ownership of that asset via Internet.¹¹ In contrast with security tokens, it is not completely a new solution of ownership transfer (Melanie, Jason et al. 2019). Tokenized security can be represented as shares issued by company, immovable properties and their digital representation allows to track ownership digitally under the umbrella of security tokens.¹²

3. Legal Issues for Exchange Platforms for Security Tokens

The emergence of various crypto assets based on “permissionless” blockchain networks (Ethereum) allows for tokenization of assets with the goal of streamlining the process for exchanging the assets, including way how transactions are booked and accounted for (Smith, Vora et al. 2019). In regard to tokenized securities a problem of finality and settlement refers to a transaction and its consideration as ‘final’.

¹⁰ <https://tokenmarket.net/news/security-tokens/what-are-security-tokens/>

¹¹ <https://hackernoon.com/tokenized-assets-security-tokens-and-stos-ae72dc0e275e>

¹² <https://blockimpact.tech/2019/02/28/techfacts-1-security-token-vs-tokenized-security/>

It is crucial that any transfer of payment or transfer of ownership of an asset is final and is bind both parties. If the security tokens are going to be traded on the regulated platforms, then the sphere of the post-trade processing security tokens might trigger other issues, such as problem of investor's interest. A trading venue for security tokens should be in compliance with applicable securities laws. The ownership of such tokens would be revealed in the Ethereum blockchain and, the transaction with security token would be completed only once when the transaction which involving Ether was completed. A platform established in particular jurisdictions should have transparent regulation and encompass every aspect of transfer of tokenized securities in all relevant jurisdictions.

In respect to applicable law, the potential regulatory framework utilizing a permissionless blockchain network should create a mechanism by which a platform would adopt a choice of governing law by platform participants (Barsan 2017). The issue regarding how to govern interests in securities, evidence such rights, and make these rights enforceable on platform should be based on the similar regulation to dematerialized and immobilized securities. A problem of proprietary rights of tokenized securities or security tokens should be solved by imposing on issuers obligation to ensure that applicable law is compatible with the operation of the potential regulatory framework and that ownership transfers on the distributed ledger have legal effect in such jurisdiction.

On the other hand, to remove legal uncertainty from sphere of a trade with tokenized securities, a regulation of intermediated securities can be useful. Intermediated securities can be designed in a way that a synchronization between a tokenized security or security token is not necessary and such digital asset might take form of the intermediated security.¹³ Such structuring option would decrease legal risks. However, the requirements for the creation of regulation of intermediated securities are challenging and currently are not regulated by EU law.

¹³ <https://medium.com/altcoin-magazine/the-security-token-offerings-saga-part-2-market-perception-and-legal-meaning-45e35491b7db>

4. Decisive Features of Security Tokens

A classification of security token under EU law depends on the determination whether token can be considered as “transferable security”. The EU legislation refers to negotiability, transferability and standardization of securities, which have a strong links between each other. The imposition of limits on transferability of securities can be crucial to legal classification of tokens. A security is transferable when can be easily transferred. A transferability of securities is linked to feature of negotiability of assets on the capital market, which also implies that they are standardized instruments. Standardization means that securities are issued in classes. A definition of negotiability is not synonym to transferability; however, both refers to ease of exchange as a matter of fact.

4.1 Transferability of Tokens

Tokens should be considered as transferable when their ownership is easily transferred, regardless of transfer of relevant certificate or document which confirms the existence of units (Lausen 2019). A requirement of transferability is fulfilled when tokens have a potential to be sold or transferred on any capital market (Hacker and Thomale 2018). The actual listing on exchange (whether regulated or crypto-exchange) does not disable the transferability of such digital asset (Maume and Fromberger 2018). In the context of the Art. 2(1)(a) of the Prospectus Directive and Art. 2(a) of the Prospectus Regulation, the capital market is any place where transferable securities or financial instruments (in terms of MiFID II) are offered. The requirements referring to prospectus applies to transferable units.

In aspect of restrictions of transferability of tokens, there is a practice among issuers by equipping tokens with mechanism to prevent the transfer of tokens (so-called “lock-up”). However, transfers restrictions imposed by issuers which made impossible transfer of tokens in specific country or concluding a lock-up agreement between company and shareholders, in view of ESMA, such restrictions do not influence status of units and they remain transferable and fall into scope of the Prospectus Directive. In addition, from the moment when tokens are issued, they are keeping their transferable feature, regardless if transferability is made possible or a lockup is removed after the ICO (Maas 2019). However, the transfer of the token is not

legally effective when such activity requires to meet additional formal criteria i.e. notarial certification. A fact, that tokens are assets of non-tangible nature does not influence their transferability. The issuer can make an effective restriction on transferability of tokens in prospectus and thus Prospectus Directive provides that restrictions to free transferability of securities should be contained in summary of that prospectus.

The transfer of ownership is effective off-chain; however, documents of title are recognized only under law which applies to crypto-assets (Cutts 2019). Any rights to entitlements and other rights allowing to influence the ICOs projects might be considered in terms of securities regulation as a characteristic of share in company and together with transferability of such asset it might be subject to the MiFID II and the Prospectus Regulation. Contrary, when tokens give right to an entitlement in kind, without giving the holder decision power, but lacks transferability feature means that such digital assets might be considered as prepaid assets.¹⁴ In general, the transferability of tokens in terms of “transferable securities” in Article 4(18) MiFID refers also to negotiability of these assets on the capital markets.¹⁵

4.2 Negotiability

A token which fall under scope of “transferable securities” definition have to possess feature of negotiability. The equity securities and debt securities are both negotiable, what is more, the characteristics of negotiability is related to legal form of financial instrument. The negotiability should be contrasted with marketability of securities where there is demand on such assets. Even there is no available liquid market where securities can be sold, it is not indicative that they are not legally negotiable. A transfer of financial instruments’ ownership by means of delivery or endorsement means that such security is negotiable. A final destination of negotiable instruments is trade with them on organized exchange or “over the counter”¹⁶ The

¹⁴ Own Initiative Report on Initial Coin Offerings and Crypto-Assets, Date: 19 October 2018ESMA22-106-1338

¹⁵ Questions and Answers, Prospectuses, 30th updated version – April 2019, 8 April 2019 | ESMA31-62-

¹⁶ Handbook on Securities Statistics Part 3: Equity Securities November 2012, p. 9-10, accessed on 10th December

above-mentioned rules should be applied to security tokens which are listed on crypto exchange reflects their negotiable character. From the EU perspective, the classification of the assets, whether they can be considered as transferable or not depends on the substantive law on securities regulation.

The perspective of laws of Member State might be dependent on at least unilateral expression of will. Most Member States treat negotiability on equal foot with transferability or tradability, but simultaneously assets are not required to be effectively transferred. Member States are also in line with each other that crypto-assets as negotiable on the 'capital market', generally because they are capable of being traded on an exchange (Cutts 2019). The active trade with tokens on blockchain platforms indicates on their negotiability. However, there is still disagreement on further criteria except tradability to consider tokens as negotiable instruments. Some scholars are distinguishing negotiability from transferability, in this matter they emphasize that acquisition of securities based on good faith must be possible, or that equivalent security mechanisms need to be in place to protect investors *erga omnes*, and not only vis-à-vis their contractual party, from insecure links in the chain of ownership. A perspective taken by Member States is a result of lack of harmonization in securities EU law and implies that different jurisdictions would differently classified DLT assets. A survey of National Competent Authorities (NCAs) was taken in order to determine how Member State had transposed MiFID II into its national law and how they interpret ICO crypto-assets qualified as 'financial instruments' under their respective national laws. The ESMA survey provides important information how the negotiability is understood by Member States.¹⁷ Most of NCAs consider 'negotiability on the capital market' as one criterion, rather than assessing 'negotiability' and the 'capital market criterion' as two stand-alone criteria.¹⁸ Meanwhile, as mentioned before, most NCAs in practice equate transferability with negotiability. However, only three NCAs

2019, https://www.ecb.europa.eu/stats/pdf/money/securities/wgsd/sec_handbook_bis-ecb-imf_pt3.pdf?56ba1ac4ef45f79d210428406ee37504

¹⁷ ESMA: Initial Coin Offerings & Crypto-Assets <http://www.gibraltarlaw.com/initial-coin-offerings-crypto-assets/>

¹⁸ Annex 1: Legal qualification of crypto-assets, survey to NCAs January 2019 | ESMA50-157-1384: https://www.esma.europa.eu/sites/default/files/library/esma50-157-1384_annex.pdf

contested a notion negotiability to the civil law assignment of claims. Considering the cross-border nature of tokens issued through STOs, it should be noted that the legal status of tokens could differ from one Member State to another depending on specific national implementation of the EU law.¹⁹ As such, the criterion of negotiability on the capital market almost seems to be reduced to mere transferability in practice, with no requirement as to whether assets have effectively been transferred or traded.

4.3 Standardization

Standardization together with the ability to be transferred are the prerequisites for negotiability feature.²⁰ The indirect consequence of negotiability is standardization of units (according to capital market requirements, the units should be identifiable and enumerable). A legal ground for standardization of units is Art. 4(1)(44) MiFiD II. A transaction on capital markets should be feasible without additional negotiations between the markets participants. The standardization of securities in effective way to exclude customization of products for particular customers, which could disrupt capital market. In practice, all tokens issued in the particular ICO project should be clearly identifiable and therefore negotiable, even when there are different classes of tokens.

Standardization should not be confused with fungibility. Fungible tokens manifest similar functions and features with cryptocurrencies, and their function is to be used as fiat money. Fungible tokens are not supposed to be in any way unique or characterized by inherent value.²¹ Fungibility is linked to properties of currencies and their exchangeability, divisibility (into units) and possibility to have a role of storage of value. The Bitcoin, Ether and some ERC20- based tokens are fungible.²²

¹⁹ Board of the Bank of Lithuania of October 2019, Guidelines on Security Token Offering, accessed on: https://www.crowdfundinsider.com/wp-content/uploads/2019/10/Bank-of-Lithuania-GALUTINIS_Guidelines-on-Security-Token-Offering.pdf

²⁰ Handbook on Securities Statistics Part 3: Equity Securities November 2012, p. 9-10, accessed on 10th December 2019, https://www.ecb.europa.eu/stats/pdf/money/securities/wgsd/sec_handbook_bis-ecb-imf_pt3.pdf?56ba1ac4ef45f79d210428406ee37504

²¹ <https://www.lexology.com/library/detail.aspx?g=fd64fd27-522b-45f7-98ff-613a1abd1fa6>

²² <https://coindoo.com/fungible-vs-non-fungible-tokens-whats-the-difference/>

5. The EU Law Perspective on Security Tokens

According to EU law, the classification of tokens refers to ‘transferable securities’ under Art. 4(1)(44) of MiFiD II. A ‘transferable securities’ are ‘those classes of securities which are negotiable on the capital market, but strictly excludes instruments of payment, such as:

- a) *Shares in companies and their securities equivalent to shares in companies, partnerships or other entities, and depositary receipts in respect of shares;*
- b) *Bonds or other forms of securitized debt, including depositary receipts in respect of such securities;*
- c) *Any other securities are giving the right to acquire or sell any such transferable securities or giving rise a cash settlement determined by reference to transferable securities, currencies, interest rates or yields or other indices or measures.’*

It means that securities possess feature of negotiability if they are capable of trading on the capital markets. What is interesting, MiFiD II chooses to not provide a fixed definition but embrace prerequisites of the potential instrument (black-letter approach). The MiFiD II provides securities’ definition, which often refers to other capital market regulation in the Market Abuse Regulation, the Prospectus Regulation. Large differences exist in terms of the legal classification of tokens among Member States, which is a result of freedom provided to EU Member States in transposing the MiFiD II definition of transferable securities into national law. It is worth to mention that the EU Prospectus Regulation applies to offers of transferable securities to the public²³.

A regulation on financial instruments also influence classification of tokens. Financial instruments are defined in Article 4(1)(15) of MiFiD II and also in MiFiD II Annex I, Section C.²⁴ MiFiD II covers wide-ranging array of securities and financial instruments.²⁵ The inclusion of instrument in the list of financial instruments found in Annex 1 Section C does not automatically result in the issuer’s obligation to publish prospectus. The applicability of the Prospectus

²³ Art. 1(1) of Prospectus Regulation (EU) 2017/1129

²⁴ Annex 1 Legal qualification of crypto-assets – survey to NCAs, p. 4

²⁵ Markets in Financial Instruments Directive II Implementation – Policy Statement II, Policy Statement 2017, accessed on 11th of December 2019

Regulation depends on classification of tokens as transferable securities.

Currently, Member States focus on cases in which tokens would be considered to be transferable securities or any other financial instruments under transposition of MiFID II to their national law.

6. A General Classification on DLT Assets/ Basic Classification of Crypto Assets (Typology of Tokens)

Blockchain-based tokens are divided into three main categories (investment, payment and utility) by European Banking Authority in accordance by tokens economic function (Burirov 2019). Other regulators such as the Swiss Financial Market Supervisory Authority provided a similar legal classification on digital assets.²⁶ A typology of tokens can also be categorized by way how digital assets generate returns or method for allocation.²⁷ In other legal systems, like U.S. a classification of tokens is not based on arbitrary categorization but according to in-depth analysis whether token falls under scope of financial security definition. Contrary to common law systems, the EU legislation has employed a black-letter approach.

Tokens offered in ICO projects are labelled by issuers according to their business perception. From investor's viewpoint, the offering of tokens with more rights (especially dividend or other form of profit) are the most demanded and to attract investors the issuers are more prone to issue investment tokens. On the other hand, the issuers taking actions in order to avoid their tokens to be classified as securities (simultaneously offering profit distribution to investors), and thus mitigate costs connected to fulfillment of all requirements linked to traditional offering of securities in regulatory market.²⁸ Such self-classification of assets does not reflect a factual nature of their tokens. A specific right attached to tokens or their "utilities" granted to holders determine legal classification of digital assets. In this

²⁶ Switzerland: FINMA ICO Guidelines 23 February 2018

<https://www.cms-lawnow.com/regzone/articles/2018/february/switzerland-finma-ico-guidelines>, accessed on 22.10.2019

²⁷ <https://qoinbook.com/news/periodic-table-blockchain-classify-tokens/>

²⁸ OECD (2019), *Initial Coin Offerings (ICOs) for SME Financing*, www.oecd.org/finance/initial-coin-offerings-for-sme-financing.htm

aspect, the label or name given to token in the Whitepaper published by ICOs organizer is not decisive or does not legally binding.²⁹ There is difference in the legal classification on securities in common law and civil law, in particular when in civil law systems there is an excessive disparity among scholars and their opinions on classification of tokens, especially in regard to hybrid tokens.

In order to attract investors and foreign capital, countries like Malta, Switzerland, Lithuania, Gibraltar have provided clear and sound legislation, together with the guidelines on tokens classification, with emphasis on financial instruments. Token offerings which are classified as financial instruments should be in compliance with rules on anti-money laundering, market abuse and obligation to publish prospectus. In terms of financial legislation the implementation of new regulatory framework for DLTs assets in countries which show their interest in new technologies is a high challenge, due to lack of other legislation on financial digital assets and reliable data.

A classification of tokens should find grounds in EU legislation and not left to the discretion of Member States. A regulation of ICOs and STOs by every Member State would result in the high legislative fragmentation. A survey among NCAs showed a different perspective on classification of security tokens or hybrid tokens.³⁰ A relevant Member States authorities should improve legal certainty by frequently announcing important rules on classification of blockchain assets. In the EU, a similar step has been taken by Maltese by introducing Virtual Financial Asset Test.³¹

6.1 Utility Tokens

A functionality of utility token is determined by certain blockchain platform (for example, it can be an access to some services). A majority of ICOs issue utility tokens due to their flexibility and possibility to meet expectations of platform users. Generally, utility tokens are based on Ethereum (ERC-20 standard) and at the moment of issuance their functionalities are already determined. A purpose of

²⁹<https://www.lexology.com/library/detail.aspx?g=fd64fd27-522b-45f7-98ff-613a1abd1fa6>

³⁰ Annex 1: Legal qualification of crypto-assets, survey to NCAs January 2019 | ESMA50-157-1384:

https://www.esma.europa.eu/sites/default/files/library/esma50-157-1384_annex.pdf

³¹ Virtual Financial Assets Framework Frequently Asked Questions,

https://www.mfsa.mt/wp-content/uploads/2019/01/20190125_VFARFAQs_v1.01.pdf,

utility token depends upon concrete platform and smart contract should be adjusted to with tools, wallets and applications across the Ethereum.³² There are many types of token's utilities i.e. reputation or discount tokens.

A relation between the cryptocurrency and utility tokens can be also observed. A former refers to digital medium of value and is exchangeable. Many ICOs projects by issuance of tokens which serves as their own cryptocurrency (a tool for payment on specific platform). This kind of utility function brings utility tokens closer to cryptocurrency. It can be stated that in certain cases cryptocurrency could be considered as subcategory of utility tokens (Fisch 2019).

6.2 Payment Tokens

Payment tokens are alternative to legal tender. A functionality of these digital assets is only playing role of payment tool in exchange for goods or services. All transactions with payment tokens are external to the platform of that digital asset. For users in blockchain a payment tokens serves as a currency and "digital reflection of value", even though from legal standpoint they do not possess legal status of currency or legal tender. Payment tokens and cryptocurrency has similar usage.

Cryptocurrency such as Bitcoin is a form of currency and exists only digitally. Cryptocurrency is based on cryptography and its own blockchain. Their only purpose is digital store of value or digital representation of value that is not held by a central bank or public authority is created and has no connection with legal tender. Usually cryptocurrency is called as "coins" or "altcoins" in order to emphasize their role as an alternative for traditional legal tender. From above-mentioned purpose payment tokens are different. Their payment functionality is adjusted to particular ICOs purpose and they are not intend to exchange them globally. Payment tokens are issued as digital assets within the project and their role is limited to method of payment inside of platform or ensures easier participation in specific digital network and access to its services and goods.

³² <https://excudo.com/blog/blockchain/utility-tokens-vs-security-tokens/>

6.3 Investment Tokens

Investment Tokens (security, asset or equity tokens) from perspective of their economic function can be treated as equivalent to equities, bonds or derivatives, they are also a mere representation of assets such as a debt or equity claim on the issuer. Tokens are also just a title with the specific rights attached to them. A tokenized physical asset traded on blockchain and represented by tokens also belong to that category. Investment tokens can be also a unit of account which represent a specific amount of goods, services, tangible or intangible assets and at the same time fulfill the requirements of being exchangeable and tradable between those who wish to access such assets and those who own the assets. A significant functionality which distinguishing investment tokens from payment or utility tokens, is correlation between value of token with value of assets and its amount which is represented by that security token. In terms of civil law, a legal relation between token and asset is a reflection of title on the one side and right, on the other side.

6.4 Hybrid Tokens

Hybrid forms of above-mentioned tokens are also possible. A particular token can be a mixture of ‘investment-type’ and/or ‘utility-type’ and/or ‘payment-type’ tokens. Then, the investor who acquires such hybrid token, can according to functionality of token use it as a payment instrument and at the same time benefit from certain services on issuer platform.³³ For instance, Ether can be used in two ways. It can be exchanged for smart contracts execution in Ethereum public blockchain but also due to its high liquidity is also used as a payment token.

A hybrid token which has more than one functionality, and one of them is a right to receive a profit (revenue with voting rights), then such asset in terms of EU financial regulation should be qualified as transferable security. On the other hand, according to Lithuanian law on securities, a token will not be considered as transferable securities, when they can only be used on decentralized platform and exchanged for access to services such as unused

³³ https://www.crowdfundinsider.com/wp-content/uploads/2019/10/Bank-of-Lithuania-GALUTINIS_Guidelines-on-Security-Token-Offering.pdf

computer storage capacity, and later service providers may sell tokens for cryptocurrencies or fiat money.

7. Conclusion

There are more initiatives in Europe since 2019, for the improvement of securities tokens regulation and their offering. The policy makers give a priority to ensure that investors will be sufficiently protected even if it causes a stagnation in FinTech industry. The ICOs have been known as a typical attempt to make a scam on big scale in that way that business venture teams will disappeared after raising a funds. An action taken by policy makers to counteract such scams should focus on the enforcement of issuers to publish the indicators identified in this study that refer to higher venture quality (what technology is in the possession of new venture). Another problem of EU regulation on tokens refers to technical issue which is technology neutrality.³⁴ A same requirements and regulation should be applied to services based on FinTech regardless of what kind of advanced technology have been used. In refer to applicability of the technological neutrality rule, a proportionality should be taken account regarding business model, especially its size or cross-border activity and other factors being applied to respective service. A rule of technological neutrality should not cause uncertainty among market participants especially these from FinTech sector. Financial regulation on the DLTs assets should be focused on the capital market regulation, some tokens features may resemble and fall under definition of security.

Even if the ICO should be not considered on the equal foot with IPO, still some online token offerings are a main distribution channel and attract many investors. That way of targeting investors and creation of pre-contractual interaction between the issuer and investor implies that ICO should be regulated (at least in the aspect of STOs).

A clear distinction should be made between security tokens and other categories of tokens. Payment tokens and utility tokens

³⁴ The Commission to The European Parliament, The Council, The European Central Bank, The European Economic and Social Committee and The Committee of The Regions Fintech Action Plan: For A More Competitive and Innovative European Financial Sector, Com/2018/0109 Final

have a very close connotations and functionalities to cryptocurrency. Security tokens are superior due to their main function o which is making profit by increasing the price of an asset.

This article has some limitations, as the accessibility of data, reports, and regulations to analyze the legal aspect of STO. This limitation is also one of our future research directions in the field of DLT based technology adoption in crowdfunding projects. The investor behavior in STO is also very important, and still there is no research on this topic.

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