ICO is Knocking on EU Doors; What is the Most Appropriate Regulatory Response?

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We also had a good exchange of views on crypto-assets. We see that crypto-assets are here to stay. Despite the recent turbulence, this market continues to grow.

Valdis Dombrovskis, Vice president of the European Commission

Vienna, 7 September 2018[1]

[1] European Commission, Remarks by Vice-President Dombrovskis at the informal ECOFIN press conference in Vienna (September 7, 2018), http://europa.eu/rapid/press-release_SPEECH-18-5716_en.htm, last accessed on May 29, 2019

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1 INTRODUCTION

Whether you like it or not, we live in an era of not only great uncertainties but also great opportunities. Twenty years ago, it was unimaginable to think that one could raise millions or even billions via computer. Back then, that was something completely new. Today a computer, or more precisely, the Internet, is at the top of the list of things we can't live without. From today's perspective, it is clear that the Internet has been just the starting point for more advanced technologies and emerging markets. Ten years ago, a person or a group of people named Satoshi Nakamoto wrote an academic article that spoke of a revolutionary idea of peer-to-peer transactions without centralised trusted parties such as banks with digital money.[2] This digital money, called Bitcoin, hit its peak value of nearly $20,000 in December 2017.[3] The price has dropped dramatically since, and most of the opponents use that as proof that Bitcoin, and everything related to it, is yet another bubble, like many other financial bubbles throughout history. They might be right when they say it is another financial bubble, but besides the financial aspects, the underlying technology is also exciting because of its functionality and features. The underlying technology behind Bitcoin, a blockchain, might be the answer to many problems we are nowadays coping with. Blockchain technology can lower transaction costs, speed up processes and, most of all can be trusted. The possibilities for its application are countless, from the improvement of government services or fostering transparent relations with citizens, to application in healthcare or the music industry. This paper will focus on the financial aspects of blockchain application, particularly on Initial Coin Offerings (ICOs) and accompanying regulatory repercussions.

ICO is an alternative, together with crowdfunding, to traditional sources of financing - like venture capital equity, bank loans and IPOs. One may be tempted to conclude that ICO may be a subtype of crowdfunding. That conclusion would be inaccurate, albeit not completely wrong. Those two types of financing can provide external funds at a lower cost in a rapid manner when compared to traditional sources of funding. However, the main difference is that crowdfunding is usually conducted via internet platforms like Kickstarter, while in the case of ICOs, blockchain

[2] Nakamoto, Satoshi, Bitcoin: A peer-to-peer electronic cash system (January 3, 2009), available at http://bitcoin.org/bitcoin.pdf

[3] Higgins, Stan, From $900 to $20,000: Bitcoin's Historic 2017 Price Run Revisited (December 29, 2017), https://www.coindesk.com/900-20000-bitcoins-historic-2017-price-run-revisited, last accessed on March 4, 2019

technology is used.[4] Money collected during the crowdfunding campaign is exchanged for an equity stake in a project. Therefore, it can be considered either as a loan, a donation or as a product pre-order.[5] Similarly, tokens sold in ICOs entitle buyers to different rights depending on the type of the token. The cryptocurrencies have been aired as the main representative of everything regarding blockchain, but they are only one type of tokens. There are also utility, investment tokens and hybrids, which will be discussed in depth later.[6] Although crowdfunding and ICOs are means of financing based on distinct technologies, they also have a number of characteristics in common. Therefore, this paper aims to discover to what extent these two alternatives can be subsumed under the same regulatory framework.

The most accurate illustration of the significance of ICO is the amount of almost $29 billion raised in less than three years.[7] In 2018, EOS, the most flourishing case of fundraising in history, collected a little over $4 billion.[8] The numbers speak for themselves. ICOs are happening daily, which is why the legislators should think about how to adjust and regulate them. The adjustment is especially required if we consider statistics on scams, Ponzi schemes and failures of ICOs. The ICO "gold rush" might slow down a bit, but that is a normal process of maturing. First, come the huge interest and high expectations, then there are obstacles in the middle and consolidation in the end. Currently, ICO is halfway to its consolidation. The goal of this paper is to provide a solution for the process of consolidation with the most suitable regulatory measures.

ICO raises various questions, and a one-size-fits-all solution is not always applicable. Therefore, it is necessary to consider alternative solutions. The existing financial regulatory framework is often applicable, but, due to the lack of regulation, it doesn't fit perfectly. Distinct

[4] Dell'Erba, Marco, Initial Coin Offerings. A Primer. The First Response of Regulatory Authorities (July 7, 2017). NYU Journal of Law & Business, Vol. 14, p. 1109, 2018., p. 4, available at: https://ssrn.com/abstract=3063536

[5] Zetzsche, Dirk Andreas and Buckley, Ross P. and Arner, Douglas W. and Föhr, Linus, The ICO Gold Rush: It's a Scam, It's a Bubble, It's a Super Challenge for Regulators (July 24, 2018) Harvard International Law Journal, Vol. 63, No. 2, 2019., p. 9, available at: https://ssrn.com/abstract=3072298

[6] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 25, available at: https://ssrn.com/abstract=3075820

[7] Coin Schedule, Crypto Token Sales Market Statistics, https://www.coinschedule.com/stats, last accessed on March 10, 2019

[8] Lielacher, Alex, Top 10 Biggest ICOs (by Amount Raised) (August 1, 2018), https://www.bitcoinmarketjournal.com/biggest-icos/, last accessed on March 10, 2019

features of blockchain technology have made existing regulation too rigid in some respects. On the other hand, the flexibility that can be attributed to the lack of specific regulation often generates mistrust in all those that participate in ICOs. Furthermore, the lack of technical knowledge possessed by regulatory bodies contributes to the difficulty of monitoring ICO processes. The additional problem of regulators is the fact that financial regulation must be technology neutral.[9] Therefore, the central question is how to reconcile all the particularities of the new technology and still have technology neutral regulation.

The regulators all around the world are tackling difficulties in the process of regulating crypto – assets. In order to find out the most effective solution for the European Union, this paper compares different applications under current legislation by regulatory authorities and courts around the globe. It analyses distinct implications of every one of those jurisdictions. The great variety of legal solutions is not surprising but is extremely inefficient in combating legal uncertainty. The most important international organisations are too slow in following the foremost recent technology-driven products, so the joint regulatory regime and conventions are too far in the future at this point. Comparing the three biggest world's markets, Europe, Asia and the US, it becomes clear that the world is disunited regarding the standing of ICOs. Some countries like China and South Korea have banned all ICO activities within their territories, whereas others like France, Malta and Gibraltar developed wholly new regulatory regimes.[10] On the other side, the US, or more precisely, The Securities and Exchange Commission (SEC) released an investigative report in which it declared that token sales are within the full scope of the regulation of US securities law.[11] This report, together with a few recent enforcements, is proof that the US and its regime are unwelcome to all token sellers. Moreover, ICO participants have strong incentives to avoid US regulation and turn to some legislation that has taken into consideration new aspects of this financial technology. However, even in the US, some questions are still left unanswered

[9] Maume, Philipp and Fromberger, Mathias, Regulation of Initial Coin Offerings: Reconciling US and EU Securities Laws (June 15, 2018). Chicago Journal of International Law, Forthcoming., p. 5, available at: https://ssrn.com/abstract=3200037

[10] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 6, available at: https://ssrn.com/abstract=3075820

[11] Rohr, Jonathan and Wright, Aaron, Blockchain-Based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets (October 4, 2017). Cardozo Legal Studies Research Paper No. 527; University of Tennessee Legal Studies Research Paper No. 338., p. 5, available at: https://ssrn.com/abstract=3048104

because the legal recognition of some types of tokens under US securities law is debatable.

This paper aims to answer the question from the title; what should be the proper regulatory response on the EU level to the growing number of Initial Coin Offerings that due to their novella and hybrid nature do not properly fit in the current regulatory framework of securities, currencies and digital assets? To answer this question, one chapter of this paper will be dedicated to the analysis of *The European Securities and Markets Authority* (ESMA), t*he European Banking Authority* (EBA) the EU Commission and the EU Parliament stance on ICO. ESMA issued new advice in 2019 that reflects the feedback of the market participants to ESMA discussion paper.[12] In this report, ESMA detected the main legal issues and challenges connected with distributed ledger technology, but at the same time highlighted the edges of this technology. It is clear from the report that the current regulatory framework represents some serious limitations to the new mode of financing, but detection is the first and welcome step by ESMA and EBA. The other two EU regulatory bodies, Commission and Parliament, are balancing between two extreme views. The EU Commission left ICOs out of crowdfunding regulation, which is presently in the process of adoption.[13] Despite the differences that are mentioned, the crowdfunding regulatory framework appears to be a great chance for the implementation of an ICO policy. Therefore, the European Parliament's Committee on Economic and Monetary Affairs has recognised the possibility and proposed, in their draft report, regulation of token sales amid the crowdfunding framework.[14] This draft report is public, and its propositions will be mentioned and regarded as doable solutions if the regulatory action is inevitable.

In the chapter before the conclusion, three potential approaches of the EU addressing the ongoing need to deal with token sales will be elaborated. The first approach encompasses the existing securities and financial law framework of the EU. Therefore, existing regulations are analysed and conferred. The second approach is perhaps the most polemical and, at the same time,

[12] Ngo, Khanh Dang, The ESMA View on Blockchain (April 26, 2017)., p. 1, available at: https://ssrn.com/abstract=2959027

[13] Nikhilesh, De, EU Lawmaker Wants to Include ICOs in New Crowdfunding Rules (August 13, 2018), https://www.coindesk.com/european-parliament-proposes-ico-regulations-for-crowdfunding-efforts, last accessed on March 11, 2019

[14] Ibid.

the least probable.[15] Considering EU regulatory bodies current standpoints, the complete ban of ICOs appears hardly possible. However, it is necessary to investigate the potential benefits of Chinese and South Korean approach in the EU context. The second approach considers widening the scope of the EU financial law within the context of the new crowdfunding regulation, as suggested by the European Parliament's Committee on Economic and Monetary Affairs. However, propositions within the draft report will not be taken for granted but discussed in conjunction with detected common regulatory patterns worldwide. The final approach that will be considered entails alternative methods of regulating, such as regulatory sandboxes and self-regulation.

2 ICO IN A NUTSHELL

2.1. The Technology behind ICOs

Blockchain

The common characteristic between Bitcoin and ICOs is the technology behind them. Both have been made possible by the new distributed ledger technology (DLT), called blockchain. Information is stored in blocks and tied together, forming a blockchain. Every block has its hash[16] , and every following one contains the hashes of all the previous ones. Thereby, every change of data in one of the previous blocks leads to a change in all the others. The distinct feature of this technology is that it allows everyone to verify and monitor all the information without the central administration.[17] At the same time, it prevents hackers from changing the transaction data without being noticed due to dispersed control. The hackers would need to simultaneously attack the majority of servers to manipulate them into thinking that the changed data is authentic, which is nearly impossible. To sum up, blockchain is a distributed database which contains immutable information about past transactions linked with a cryptographic verification. This technology has

[15] Zetzsche, Dirk Andreas and Buckley, Ross P. and Arner, Douglas W. and Föhr, Linus, The ICO Gold Rush: It's a Scam, It's a Bubble, It's a Super Challenge for Regulators (July 24, 2018) Harvard International Law Journal, Vol. 63, No. 2, 2019., p. 32, available at: https://ssrn.com/abstract=3072298

[16] *Cryptographic hashes are the mathematical equivalent of fingerprints. Just as a fingerprint is a unique identifier of a person, a hash is a unique identifier of some data, such as a text document, image, or offer to buy a stock.*
Aune, Rune and O'Hara, Maureen and Slama, Ouziel, Footprints on the Blockchain: Information Leakage in Distributed Ledgers (January 10, 2017)., p.10, available at: https://ssrn.com/abstract=2896803

[17] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 8, available at: https://ssrn.com/abstract=3075820

already revolutionised the business world, and it is only a matter of time before the broader application of this technology is accepted worldwide.[18] One of the first applications of blockchain technology have been cryptocurrencies and Bitcoin as their main representative since these transactions were simple to store without a bank or any other authority.[19]

Smart Contracts

Smart contracts are another important technical element of every successful ICO. Even though it may sound like that at first, they are not any smarter than any ordinary contract. However, their distinguishing feature is the removal of a middleman entitled to enforce a contract. In the case of the dispute, this would be the court or, more precisely, the judge. A smart contract is a contract embedded in a code which can be automatically self-executed after certain agreed-upon conditions are fulfilled.[20] Humans are not able to execute smart contracts because they are dependent on the input from a trusted source which is predefined in the code. When specific information is received, this triggers an execution in the code. For example, transfer of money from one bank account to another on the specific date. For ICOs, smart contracts are essential because they allow the minting of tokens and their distribution but also at the same time they define responsibilities, obligations and resale rights.[21] Investors can rest assured that their money will not be stolen because every transaction is recorded on the blockchain and is therefore transparent.

DAO

Decentralised Autonomous Organization (DAO) is a combination of both ICOs and smart contracts.[22] Its name is very suggestive of why this technology is so important. DAO is an entirely autonomous investment vehicle governed by token holders who make decisions about investments

[18] Maume, Philipp, Initial Coin Offerings and EU Prospectus Disclosure (January 17, 2019). forthcoming in European Business Law Review, p. 9, available at: https://ssrn.com/abstract=3317497

[19] Ibid. p. 9

[20] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 9, available at: https://ssrn.com/abstract=3075820

[21] Falempin, Luc, A Closer Look at ICO Smart Contracts (June 27, 2018), https://medium.com/tokeny/a-closer-look-at-ico-smart-contracts-5812aecd782e, last accessed on April 5, 2019

[22] Stylianou, Theodoros, An Investigation into the Utility and Potential Regulation of Initial Coin Offerings and Smart Contracts in Selected Industries and Jurisdictions (November 1, 2018). King's College London Law School Research Paper No. 19-8., p. 11, available at: https://ssrn.com/abstract=3276822

and the distribution of the profit.[23] The backbone of DAO is a smart contract in which are defined and coded all rules for the governance of this organisation. The most prominent DAO representative has been the Dao. Slock.it launched the Dao four years ago.[24] Nonetheless, the Dao is one of the most famous ICOs. The masterminds behind the Dao started the whole project with coding, but after launching, the organisation is functioning like *Perpetuum mobile* based on token holders' decisions. In the future, platforms akin to the Dao will replace some intermediaries in the investment cycle like fund managers.[25] The main disadvantages of the Dao are that it is impossible to change the code after its deployment in blockchain and its vulnerability to bugs.[26] The Dao was under the attack in the past, but fortunately, Ethereum saved the day. Ethereum managed to undo all the transactions that had occurred after the attack and restored all the funds.[27] However, this attack provides clear evidence that there is an urge for the regulatory framework of smart contracts and DAO. It is evident that a simple human could cause catastrophic consequences and drain funds.[28]

2.2. What is ICO?

ICO and IPO (Initial Public Offering) resemble each other. The intention and the idea behind the naming are clear. However, despite this apparent similarity, these two tools for raising capital have many individually specific features. In IPO, investors buy shares in the company that went public, while in ICO, they purchase digital tokens with different categories of rights and participation. Therefore, ICO can be defined as a platform for raising capital by the emission of

[23] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 10, available at: https://ssrn.com/abstract=3075820

[24] Jentzsch,Christoph, The History of the DAO and Lessons Learned (August 21, 2016), https://blog.slock.it/the-history-of-the-dao-and-lessons-learned-d06740f8cfa5, last accessed on April 22, 2019

[25] Infinity Economics platform, What is a DAO? (August 22, 2018), https://medium.com/@IEP_Official/what-is-a-dao-cd7fdce9a19d, last accessed on April 7, 2019

[26] Universa, Decentralized autonomous organization—What is a DAO company? (November 28, 2017) https://medium.com/universablockchain/decentralized-autonomous-organization-what-is-a-dao-company-eb99e472f23e, last accessed on April 7, 2019

[27] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 10, available at: https://ssrn.com/abstract=3075820

[28] Stylianou, Theodoros, An Investigation into the Utility and Potential Regulation of Initial Coin Offerings and Smart Contracts in Selected Industries and Jurisdictions (November 1, 2018). King's College London Law School Research Paper No. 19-8., p. 36, available at: https://ssrn.com/abstract=3276822

digital tokens on blockchain in exchange for cryptocurrencies or fiat currencies (cash).[29] After the ICO, the investors are free to trade with their tokens on secondary markets for digital tokens exchange. A more specific definition is not possible because the term ICO encompasses various forms and subforms. The difference between them depends on types of tokens issued and will be further discussed in the subchapter on different types of tokens.

Token or Coin

Tokens or digital tokens are a broader term than cryptocurrencies. Cryptocurrencies are just one type of tokens used as a medium of exchange.[30] On the other hand, tokens have many alternative applications. They can be used as an entitlement for some rights or even to obtain ownership of assets. Therefore, tokenisation is a process of encrypting these rights on the blockchain. The creation of tokens doesn't require the formation of a new blockchain. Nowadays, some existing blockchains serve as templates to build their own modified version and create tokens. One of the most famous blockchains for building new structures is the aforementioned Ethereum. At the same time, Ethereum is one of the biggest ICOs in history. However, the distinction is made between tokens that are created on existing blockchains or the blockchain made from scratch. The former are called coins, while the latter are called tokens.[31] Nevertheless, in this paper, the term tokens will be for both since the technical difference doesn't influence securities or any other regulation.

Starting the ICO

After the creation of tokens, an issuer can begin to advertise an ICO and sell tokens through an internet platform by utilising smart contracts. Usually, the process of advertisement is comprised of two channels. One of them, social media, is heavily used for attracting investors because most of them are young tech geeks.[32] The structure of ICO investors is different than in

[29] Pilkington, Marc, The Emerging ICO Landscape - Some Financial and Regulatory Standpoints (February 8, 2018)., p.2, available at: https://ssrn.com/abstract=3120307

[30] Maume, Philipp, Initial Coin Offerings and EU Prospectus Disclosure (January 17, 2019). forthcoming in European Business Law Review, p. 5, available at: https://ssrn.com/abstract=3317497

[31] Ibid., p. 5

[32] Maume, Philipp and Fromberger, Mathias, Regulation of Initial Coin Offerings: Reconciling US and EU Securities Laws (June 15, 2018). Chicago Journal of International Law, Forthcoming., p. 12, available at: https://ssrn.com/abstract=3200037

traditional capital markets, which will undoubtedly change in upcoming years. Even though something can be exciting and attractive on social media at first glance, most of the investors want to read more about the project and the vision of issuers. To introduce the project in more detail, issuers publish White Papers. The White Papers are usually posted on the website of the issuer, and they can be compared to Prospectus required in securities regulation for IPOs. However, it is crucial to bear in mind that there is no official regulation requiring information to be included in the White Papers as opposed to Prospectus. So, the content of White Papers can vary from a poor description to a comprehensive booklet that can be easily applied to an IPO. Issuers can use an ICO to freely bypass cumbersome procedures under securities regulation and financial intermediaries like banks and underwriters.

The Contribution Process

The technology and the difficulties in applying the current regulation offer a broad spectrum of possibilities for fundraisers. ICOs can have limited duration and fundraiser can specify the minimum or maximum amount of the money raised.[33] Contribution period can vary in form, but the contribution rules should be announced prior to the first day of an ICO launch.[34] Some ICOs are exclusively offered to accredited investors, and the issuers are forced to examine the potential investors through the procedure known as Know Your Customer (KYC).[35] It is clear that this procedure represents a vast administrative task which can be burdensome and unnecessary. Therefore, the majority of them is open to the public without any limitation. Filecoin, the first investors-only ICO, was launched in 2017.[36] After the contribution period, the raised capital is transferred to fundraisers, usually from the ESCROW account via smart contract. The issuers can define a lock-in period, but this period should also be determined before the ICO launch so that the investors can assess the profitability of the potential investment in conjunction with information about the lock-in period. Lock-in rules may reduce the attractiveness of the ICO and consequently, the liquidity of the whole project. Therefore, issuers are careful with these kinds of

[33] Collomb, Alexis and De Filippi, Primavera and Sok, Klara, From IPOs to ICOs: The Impact of Blockchain Technology on Financial Regulation (May 26, 2018)., p.12, available at: https://ssrn.com/abstract=3185347
[34] Ibid. p. 11
[35] Ibid. p. 11
[36] Filecoin: A Decentralized Storage Network (July 19,2017), available at: https://filecoin.io/filecoin.pdf

limitations. However, a contribution cap or time limitation could be a sign of a well-prepared ICO, and the opposite may be seen as an indication of greedy issuers without a clear plan.[37] [38]

2.3. Categories of tokens

Although there is no precise classification of tokens, the academic community mainly agrees upon the existence of three main archetypes of the existing token. The most important classification of tokens is probably the one from the Swiss Financial Market Supervisory Authority (FINMA).[39] FINMA Guidelines divide tokens into Payment, Utility and Asset tokens, with the addition of hybrid models. The categories differ from each other depending on the right which is attached to them. Some principal rights attached to tokens are right of usage, right of participation, right to profit or rights of ownership.[40] Usually, tokens are not exclusively limited to one type of rights. Furthermore, the list of rights is not exhaustive, and issuers have numerous possibilities at disposal as long as they are technically possible.[41] The determination of the type of token is crucial for assessment under securities regulation because some tokens may be considered securities while others are not. The consequences of recognition under existing securities regulation are a cumbersome procedure and the same treatment as any other security. In the following paragraphs, FINMA's classification of tokens will be briefly discussed.

Payment or Currency Tokens

Known also as cryptocurrencies, payment or currency tokens are probably the simplest form of tokens. The primary role of payment tokens is the exchange of value, so they share this characteristic with fiat currencies as a medium of exchange. They are used for acquiring goods or

[37] Dell'Erba, Marco, Initial Coin Offerings. A Primer. The First Response of Regulatory Authorities (July 7, 2017). NYU Journal of Law & Business, Vol. 14, p. 1109, 2018., p. 9, available at: https://ssrn.com/abstract=3063536

[38] *The Ethereum is an example of ICO without pre-defined number of tokens for selling. Their ICO ran for 42 days, while some capped ICOs are sold in less than 1 minute. For instance, BAT sold $35 million tokens in 30 seconds.* V. Buterin, Analyzing Token Sale Models, Vitalik Buterin's Website (June 9, 2017), available at http://vitalik.ca/general/2017/06/09/sales.html

[39] FINMA, Guidelines for enquiries regarding the regulatory framework for initial coin offerings (ICOs) (February 16, 2018), available at: https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/

[40] Collomb, Alexis and De Filippi, Primavera and Sok, Klara, From IPOs to ICOs: The Impact of Blockchain Technology on Financial Regulation (May 26, 2018)., p. 8, available at: https://ssrn.com/abstract=3185347

[41] Rohr, Jonathan and Wright, Aaron, Blockchain-Based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets (October 4, 2017). Cardozo Legal Studies Research Paper No. 527; University of Tennessee Legal Studies Research Paper No. 338., p. 37, available at: https://ssrn.com/abstract=3048104

services. While some securities experts argue that every type of token is a security, it is a commonly held belief that securities regulation is not applicable to cryptocurrencies as a simple mean of payments. As a support to this statement, CJEU in Hedqvist[42] concluded in its judgement that Bitcoin is a "contractual means of payment". However, it should be noted that the decision was related to the VAT treatment of Bitcoin and securities regulation was not applicable in that case.[43] Although EU securities and tax regulation differ in their definition of securities, similar conclusion through analogy would be probably reached for securities regulation.

In addition, payment instruments are exempted under the EU *Markets in Financial Instruments Directive* (MiFID II).[44] In a recently published *SEC Framework for "Investment Contract"*[45], SEC defined the list of characteristics which can be used for assessment under the Howey Test[46]. Virtual currencies are listed under characteristics that, depending on the level of their presence, could lead to the conclusion that the Howey test is not met and consequently, this would mean that virtual currencies do not fall under US securities.[47] Main features of virtual currencies in this framework are the possibility of immediate use for payment, substitution for fiat currencies and a store of value that can be exchanged for goods or services. Thus, payment tokens lack financial risks which are specific for investments. However, just one look at the Bitcoin price in the last two years shows how extremely volatile they are considering the exchange rate between cryptocurrencies and fiat currencies.[48]

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[42] Case C-264/14, Skatteverket v. David Hedqvist, (2015) ECLI:EU:C:2015:718, available at: http://curia.europa.eu/juris/document/document.jsf;jsessionid=0911B20A999680D2C4BA3011EDCAD447?text=&docid=170305&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=6404252

[43] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 30, available at: https://ssrn.com/abstract=3075820

[44] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments (MiFID II), available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0065

[45] SEC Framework for "Investment Contract" Analysis of Digital Assets (April 19, 2019), available at: https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets

[46] *4. The test of whether there is an "investment contract" under the Securities Act is whether the scheme involves an investment of money in a common enterprise with profits to come solely from the efforts of others…*
SEC v. Howey Co., 328 U.S. 293 (1946), available at: https://supreme.justia.com/cases/federal/us/328/293/

[47] SEC Framework for "Investment Contract" Analysis of Digital Assets (April 19, 2019), p. 5, available at: https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets

[48] Aloosh, Arash, The Price of a Digital Currency (February 2, 2018)., p. 16, available at: https://ssrn.com/abstract=3047982

Utility Tokens

As noted by FINMA, if the main purpose of a utility token is access to some application or service, these tokens are not considered securities.[49] However, if tokens in addition to their real utility purpose have an investment as an objective, these tokens are treated as securities and their issuers are forced to apply strict securities regulation. Once again, as is the case with cryptocurrencies, pure utility tokens lack in the aspect of investment. For example, the aforementioned Filecoin[50] grants the right to use cloud space managed via blockchain to their token buyers. The purpose of these tokens is a fair use of storage space without any connection to investments.[51] The idea of paying for a project that you can share and enjoy in the future is similar to some crowdfunding projects. On the other hand, the idea is at first also similar to the notion of shares. If we put this analogy between shares and utility tokens in a real-life situation, it becomes clear that Apple shareholders cannot pick the newest model of MacBook for free although they are the owners of one part of the company. A Filecoin buyer can use storage space on the blockchain without restraints, but these investors are not owners of the company. That does not mean that it is impossible to make some money by investing in Filecoin.[52]

Utility tokens are also exchanged on the secondary token exchange market. The market model is the same if the number of tokens is limited and if the service they provide is very wanted. The price of the tokens will then clearly go up. The fact that some investors or even fundraisers have a big incentive to buy utility tokens to trade with them make them investments. The line between these two incentives is very thin and can be crucial in the final decision depending on whether some utility tokens are treated as securities or not. The examination of promises that were made in White Paper can elucidate the underlying intentions of issuers. The US Supreme Court had dealt with this distinction in the past and described it as consumptive or profit intent. For

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[49] FINMA, Guidelines for enquiries regarding the regulatory framework for initial coin offerings (ICOs) (February 16, 2018), p. 5, available at: https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/

[50] *Blockchain data storage network Filecoin has officially completed its initial coin offering (ICO), raising more than $257 million over a month of activity.*
Higgins, Stan, $257 Million: Filecoin Breaks All-Time Record for ICO Funding (September 7, 2017), https://www.coindesk.com/257-million-filecoin-breaks-time-record-ico-funding, last accessed on March 21, 2019

[51] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 28, available at: https://ssrn.com/abstract=3075820

[52] Ibid., p. 29

example, in the case of *Forman*[53], the judges decided that profit that residents of the housing cooperative were enjoying in the form of reduced fees was insufficient to trigger securities regulation.[54] The utility tokens are out of the scope of MiFID II due to its definition of securities, which is strictly limited to monetary claims.[55] Utility tokens have become extremely popular among issuers because they allow them to circumvent securities regulation. Therefore, it becomes necessary to examine the extrinsic and intrinsic factors of all participants in order to find out which ones have honest intentions.[56]

Investment Tokens

There is not much doubt in the case of asset or investment tokens. This archetype of tokens is the easiest one to assess due to its expected profit component. An example is the aforementioned DAO, an investment vehicle in which token holders share profit via smart contract. The underlying intention of investors is evident – the expectation of profit. In the US, this expectation of profit is a part of the Howey test. However, things can become tricky if we look at a requirement called "efforts of others", stated in the Howey test.[57] If a DAO doesn't have an owner, and an investment decision is based on token holders' input, a DAO token also doesn't meet the aforementioned requirement. Each investor participates and votes about every investment decision. The SEC thinks that this condition is fulfilled because the DAO is effectively controlled by a small group, so this group represents "efforts of others". [58] Under the EU law, the main ground for inclusion of investment tokens in securities regulation is MiFID Recital which, due to its broad wording, can

[53] United Housing Found., Inc. v. Forman, 421 U.S. 837 (1975) ("Forman"), available at: https://supreme.justia.com/cases/federal/us/421/837/

[54] Rohr, Jonathan and Wright, Aaron, Blockchain-Based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets (October 4, 2017). Cardozo Legal Studies Research Paper No. 527; University of Tennessee Legal Studies Research Paper No. 338., p. 52, available at: https://ssrn.com/abstract=3048104

[55] …*securities giving the right to acquire or sell any such transferable securities or giving rise to a cash settlement*… Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments (MiFID II), Article 4 Paragraph 1 Point 44(c), available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0065

[56] Rohr, Jonathan and Wright, Aaron, Blockchain-Based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets (October 4, 2017). Cardozo Legal Studies Research Paper No. 527; University of Tennessee Legal Studies Research Paper No. 338., p. 90, available at: https://ssrn.com/abstract=3048104

[57] Ibid. p. 67

[58] Ibid. p. 68

absorb investment tokens under its definition.[59] This is especially true when we know the intention of token holders and what Prospectus is supposed to offer them.

Hybrid Tokens

The majority of the issued tokens are hybrid tokens – not only because of their mix of attached rights but also because of the intentions of participants which were discussed earlier. However, in most cases, one can determine the dominant characteristic of a token. Various combinations of investment and currency tokens or utility and investment tokens or even a combination of all three archetypes lead to one straightforward question.[60] What is the main objective of tokens? If the answer is a share of the profit generated from the specific project, then this answer triggers the application of securities regulation.

2.4. ICO vs Crowdfunding

Crowdfunding is an alternative way of raising funds for different kind of projects that utilise online internet platforms, like the most famous one – Kickstarter.[61] Regarding the different type of projects, crowdfunding is very flexible and can be used to fund community projects, creative movements, environmental projects, charity projects or start-ups and *small and medium-sized enterprises* (SMEs).[62] It also includes donations and other forms of contribution that don't lead to a return of any financial gain but provide contributors with moral satisfaction. However, this paragraph will focus more on crowdfunding that has economic objectives. Rather, those that aim to have social impact. This kind of crowdfunding is consequently more akin to ICO funding. The financial gain of contributors is, however, not the only thing that can arise as a result of them contributing to a project. Quite the opposite, a great deal of crowdfunding projects implies non-

[59]… *comparable to traditional financial instruments*…
Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments (MiFID II), Recital 8, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0065

[60] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 47, available at: https://ssrn.com/abstract=3075820

[61] Cai, Wanxiang and Polzin, Friedemann and Stam, Erik, Crowdfunding and Social Capital: A Systematic Literature Review (March 28, 2019), p. 2, available at: https://ssrn.com/abstract=3361748

[62] European Commission, Unleashing the Potential of Crowdfunding in the European Union (March 27, 2014), p. 4, COM/2017/0250 final, available at: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52014DC0172

financial benefits. The so-called reward-based crowdfunding is focused on a symbolic return to the contributors. This can come in the form of an experience of a project or a newly launched product and can be called "crowd sponsoring". The motivation for this type of project is an intrinsic desire to support something that one believes in. On the other hand, "crowd investing" provides a financial gain in the form of equity or debt. The contributors expect a stake in future profit of a project they are funding. The last most common type of crowdfunding is "crowd lending" in which fundraisers are considered borrowers and they are obliged to pay back raised capital with or without interest after specific period depending on the terms of the deal.[63] These are only three models of crowdfunding, and the list is not exhaustive because flexibility creates numerous other options. Crowdfunding fosters economic activity and nurtures entrepreneurial spirit by offering a possibility of raising funds for a promising project in a more comfortable and faster manner.

It is evident that ICO and crowdfunding resemble each other. ICO is crowdfunding's brother who is younger but also taller and stronger. When we compare their respective figures, it becomes clear why ICO is taller and stronger. The aforementioned biggest crowdfunding platform Kickstarter can provide us with useful statistics. Almost 162 000 projects that appeared on Kickstarter were funded with approximately $4.25 billion,[64] while EOS as the most prominent ICO raised $2.5 billion on its own[65]. The numbers speak for themselves – there is a big difference in scalability between those two forms in financing. While ICO numbers even surpass IPO numbers, crowdfunding cannot keep up. Although the difference in size cannot be unnoticed, these alternatives share many common characteristics. For example, "crowd sponsoring" corresponds to utility tokens. The accent is on the experience or product usage but not on direct financial benefit. In the same way, "crowd investing" is akin to investment or security tokens. The distinction can be found in the availability of the secondary market. Furthermore, both ICO and crowdfunding use technology, internet platform and blockchain respectively, to raise capital and by that, all financial intermediaries are bypassed which makes the whole process cheaper and quicker. However, when it comes to legislation, crowdfunding is far more advanced. Many countries have specific

[63] Ibid. p. 3

[64] Kickstarter, Stats, https://www.kickstarter.com/help/stats, last accessed on April 18, 2019

[65] Galka, Max, The 10 largest ICO fund raises: successes, controversies and lessons learned (May 10, 2018), https://bravenewcoin.com/insights/the-10-largest-ico-fund-raises-successes-controversies-and-lessons-learned, last accessed on April 18, 2019

crowdfunding regulatory framework, while ICO is still struggling to find the place under the regulatory sky.[66] It is fair to ask why crowdfunding regulation is not applicable to ICOs. The main reason for that is that most of the legislators set the strict aggregate cap per issuer or contributor. The sums are fixed pretty low.[67] As a sign of the made progress is a brand-new Crowdfunding Regulation[68] by the European Commission. Currently, the regulation is under the procedure in the European Parliament and its bodies. The provisions in Crowdfunding Regulation and the Draft Report[69] made by the European Parliament's Committee on Economic and Monetary Affairs[70] will be discussed in detail in the third and fourth chapter of this paper. The provisions related to ICO are added in the Draft Report.

2.5. The Truth behind the ICO Figures

The history of ICO statistics is still very young and goes back to 2014. There are at least ten websites that provide ICO statistics, some more accurate than the others. The study conducted by a small team at Boston College in Massachusetts demonstrated that every site has its advantages and disadvantages. Therefore, the data displayed on those websites should always be taken critically. Collecting even basic data, such as total raised funds in 2018, can be a big challenge considering that commonly used ICO trackers disagree on the figures. Some trends will be highlighted based on statistics from the aforementioned research study, although the study was

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[66] Gutfleisch, Georg, Crowdfunding and Initial Coin Offerings under the EU legal framework (June 1, 2018). European Company Law Journal 15, No. 3 (2018): 73–82, p. 3, available at: https://ssrn.com/abstract=3337670

[67] *In Germany, for example, the aggregate cap lies at €2.5 million per issuer, and at €1000 per investor, or €10,000 for high net worth individuals.*

Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 39, available at: https://ssrn.com/abstract=3075820

[68] Proposal for a Regulation of The European Parliament And Of The Council on European Crowdfunding Service Providers (ECSP) for Business (March 8, 2018), COM/2018/0113 final - 2018/048 (COD), available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018PC0113

[69] Draft European Parliament Legislative Resolution on the proposal for a regulation of the European Parliament and of the Council on European Crowdfunding Service Providers (ECSP) for Business (August 10, 2018) (COM (2018)0113–C8-0103/2018–2018/0048(COD)), available at: http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2F%2FEP%2F%2FNONSGML%2BCOMPARL%2BPE-626.662%2B02%2BDOC%2BPDF%2BV0%2F%2FEN

[70] Nikhilesh, De, EU Lawmaker Wants to Include ICOs in New Crowdfunding Rules (August 13, 2018), https://www.coindesk.com/european-parliament-proposes-ico-regulations-for-crowdfunding-efforts, last accessed on April 22, 2019

published in May 2018 and is almost a year behind current data. However, the study is still considered to be one of the most comprehensive studies about ICO statistics ever made. It should also be mentioned that the study analysed only the period from January 2017 until April 2018. Even though the first ICO was launched in 2014, 2017 was the first year of a global ICO boom with close to $7 billion raised and 450 launched ICOs. [71] The following year, 2018, tripled that amount with well over $21 billion raised[72] . Some other sources say that the amount of money raised was doubled and not tripled, so the concrete numbers are uncertain. The conclusion of the trend in 2018 depends on this figure. Was the ICO mania balloon deflated in 2018 or is it stronger than ever?

According to the study, an average successful ICO raised $11.5 million. However, this number is inflated due to a small number of mega ICOs, so the median value raised is only $3.8 million.[73] 60% is the average percentage of tokens that are sold during the ICO and the average ICO lasts 37 days (median length is 31 days). In 2018, the average ICO length was raised to 41 days.[74] Approximately only 25% of all ICOs in 15 months (January 2017 – April 2018) listed their tokens. The rest of the tokens (75%) are illiquid and almost useless unless they can be exchanged for services.[75] The study suggests that the strongest return of the investment is in the first month after listing. Start-ups sell their tokens during ICO well under opening market price, so the average return for an ICO investor is 179% with an average holding period of 16 days.[76] What is worrisome is that still many ICOsare either dead or a scam. Some early metrics in 2019 show that ICO funding continuously goes down[77] , which is probably a sign of the market stabilisation after the boom in 2017, followed by the equally or triple successful 2018. To conclude, no matter which metrics or

[71] Coin Schedule, Crypto Token Sales Market Statistics, https://www.coinschedule.com/stats, last accessed on April 24, 2019

[72] Ibid.

[73] Benedetti, Hugo E and Kostovetsky, Leonard, Digital Tulips? Returns to Investors in Initial Coin Offerings (May 20, 2018), p. 16, available at: https://ssrn.com/abstract=3182169

[74] Ibid. p. 17

[75] Ibid p. 21

[76] Palmer, Daniel, More Than Half of ICOs Fail Within 4 Months, Study Suggests (July 10, 2018), https://www.coindesk.com/over-half-of-icos-fail-within-4-months-suggests-us-study, last accessed on April 24, 2019

[77] Shilov, Kirill, How do investors view the ICO/STO market in 2019? (February 7, 2019) https://hackernoon.com/how-do-investors-view-the-ico-sto-market-in-2019-b8c91bd2bb26, last accessed on April 23, 2019

websites one refers to, ICO parameters for statistics are still uneven as is the nature of some ICO projects. One thing is sure, 2017 and 2018 figures were unreal and will not return expeditiously.

3 REGULATORY TRENDS WORLDWIDE

The following chapter compares and presents different approaches that have been undertaken by the regulators in chosen jurisdictions in four geographic areas - Asia & Oceania, the Americas, Africa and the Middle East and Europe (including Russia). The selection of jurisdictions is based on an underlying goal to highlight some diverse and interesting approaches worldwide and conclude on some common patterns that can be noticed. The word regulators in this context will be used to describe and represent all three branches of government; the legislative, executive and judicial branch. The approach to ICOs or tokens varies from jurisdiction to jurisdiction. Some of the presented jurisdictions passed specific laws on crypto-assets, while others issued guidance, warnings, or provided a framework. Regulators use different terminologies to describe emerging technology. Terms like cryptocurrency, virtual currency and digital currency have often been used interchangeably. However, in the last two years, the regulators have started to make a distinction between cryptocurrencies and crypto-assets. Therefore, new notions such as virtual asset, digital asset, and crypto-asset appear more often in official documents which can be interpreted as a better awareness of the nuances of the various forms of tokens.[78] The analysis of definitions, made by Cambridge Centre for Alternative Finance in their study, detects that many definitions of cryptocurrency use similar terms like a store of value, means of payment, transferable and tradeable but they don't mention blockchain technology which supports the hypothesis about the need for technology-neutral regulation.[79] The majority of the jurisdiction made a clear distinction between types of tokens, similarly to our classification of payment, utility and investment tokens.[80]

[78] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Cryptoasset Regulatory Landscape Study (April 16, 2019), p. 35, available at: https://ssrn.com/abstract=3379219

[79] Ibid., p.36

[80] Ibid., p. 37

3.1. Asia & Oceania

China

China has vigorously advocated against ICOs and cryptocurrencies since 2017. In 2017, six institutions[81] led by *People's Bank of China* (PBOC) jointly issued *Public Notice on Preventing Risks of Fundraising through Coin Offering*[82]. This notice argued that tokens are not legally accepted as a currency and thus it is prohibited to trade with them or to use them for fundraising. The underlying objective of that outright ban, as stated in the notice, is the protection of investors and the education of the public about illegal tokens and risks related to them. Further consequences of the ban are shutting down of all online trading platforms, potential charges for financial crimes and revocation of business licenses for all parties involved in the trading of tokens or cryptocurrencies. [83] Moreover, in a more recent notice in 2018, PBOC repeated the 2017 conclusion. ICO is an illegal activity and a danger for the economy and financial climate in China.[84]

Additionally, China began a war against Bitcoin miners.[85] China was a popular destination for Bitcoin miners due to low taxes and prices of electricity and rent. However, in the following years, miners might start looking for other mining havens because of several measures that China has taken to drive them away from their territory. Although a ban can be seen as a drastic measure

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[81]Six institutions: The People's Bank of China (PBOC), the Cyberspace Administration of China (CAC), the Ministry of Industry and Information Technology (MIIT), the State Administration for Industry and Commerce (SAIC), the China Banking Regulatory Commission (CBRC), the China Securities Regulatory Commission (CSRC), and the China Insurance Regulatory Commission (CIRC).
Global Legal Research Directorate Staff, Regulation of Cryptocurrency in Selected Jurisdictions (June 2018), p. 30, available at: https://www.loc.gov/law/help/cryptocurrency/index.php

[82] The People's Bank of China, Public Notice of the PBC, CAC, MIIT, SAIC, CBRC, CSRC and CIRC on Preventing Risks of Fundraising through Coin Offering (September 8, 2017), http://www.pbc.gov.cn/en/3688110/3688181/3712144/index.html, last accessed on April 29, 2019

[83] *To keep financial activities in order, all kinds of self-regulatory financial organizations shall interpret policy properly, urge members to consciously resist illegal financial activities related to coin offering fundraising and trading or "virtual currencies", and to stay away from market irregularities and improve investor education.*
Ibid.

[84] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Cryptoasset Regulatory Landscape Study (April 16, 2019), p. 97, available at: https://ssrn.com/abstract=

[85] Raza, Ali, China to Move Against Crypto Again: Is Bitcoin Mining the Next to Go? (April 16, 2019), https://dapplife.com/china-to-move-against-crypto-again-is-bitcoin-mining-the-next-to-go/, last accessed on April 29, 2019

and a part of the strong anti-ICO movement, former PBOC governor Zhou Xiaochuan in 2018 interview[86] gave a glimpse of a possible great reversal. Namely, he said that a bigger picture is needed and because of that, they are still in the process of evaluation and testing. The final assessment will also be dependent on the maturity of the technology behind ICOs.[87]

South Korea

Three regulatory bodies are involved in crypto actions in South Korea. In the last two years, *Financial Services Commission* (FSC), *Financial Supervisory Service* (FSS) *and Financial Intelligence Unit* (FIU) have collaborated in numerous publications.[88] These publications, together with the *Financial Investment Services and Capital Markets Act* (FISCMA),[89] represent Korean crypto-assets regulatory framework. In 2017 the FSS and FCS introduced some measures regarding cryptocurrencies followed by the guideline in 2018. Emergency measures from 2017 encompass a ban on banks, foreigners and minors engaged in any cryptocurrency activities.[90] The FSC announced that token offerings are illegal in South Korea.[91] Various start-ups filed a constitutional complaint against the government due to the ICO ban. Furthermore, *Cryptocurrency-Related Anti-Money Laundering Guideline* from 2018 was intended to force banks and other financial institutions to apply a real name policy. Thereby, it is allowed to trade cryptocurrencies only under the real bank name account. The real name policy is the result of the FSS and FIU to fill all the loopholes in anti-money laundering policy in banks detected during

[86] The People's Bank of China, PBC Governor Zhou Xiaochuan and Two Deputy Governors Answered Press Questions on Financial Reform and Development (March 22, 2018), http://www.pbc.gov.cn/en/3688110/3688172/3711743/index.html, last accessed on April 29, 2019

[87] *Regulation in the future will, first of all, be highly dynamic, depending on both technical maturity and final results of testing and evaluation. Therefore, the situation remains to be observed and no concrete measure is immediately required.*
Ibid.

[88] Helms, Kevin, How 5 Asian Countries Regulate Cryptocurrency(April 8, 2019), https://news.bitcoin.com/how-asian-countries-regulate-cryptocurrency/, last accessed on April 29, 2019

[89] Financial Services Commission, Financial Investment Services and Capital Markets Act, available on: https://elaw.klri.re.kr/kor_service/lawView.do?lang=ENG&hseq=44449

[90] https://news.bitcoin.com/south-korea-emergency-cryptocurrency-regulation/, last accessed on April 29, 2019

[91] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Cryptoasset Regulatory Landscape Study (April 16, 2019), p. 103, available at: https://ssrn.com/abstract=3379219

their joint investigation.[92] Similarly to China, it is expected that South Korea will proceed with a temporary ban to prepare comprehensive laws on crypto-assets.

Japan

Japan is one of the few countries that have defined cryptocurrencies in its *Payment Services Act*.[93] The act passed in 2009, and it was amended with crypto novels in 2017. The amendment addressed issues related to the protection of cryptocurrency users that had been highlighted during the work of the *Financial Service Agency* (FSA) working group. Except for the definitions, the act introduced a registration system for businesses involved in virtual currency exchange including capital requirement (JPY 10 million), anti-money laundering (AML) and KYC measures for customer protection and strict FSA supervision mechanisms.[94] It should be noted that no matter how advanced this regulation is, it does not cover ICOs. However, the FSA published the *Report from Study Group on Virtual Currency Exchange* at the end of 2018 in which the main directions for new ICO regulation or amendments in existing regulation are determined. In that report the FSA stressed out practices of some countries like the ICO ban of their neighbours, the well-accepted distinction of different archetypes of tokens, warning about the possible application under the current regulatory framework; the PSA and the *Financial Instruments and Exchange Act*

[92] *The measures are aimed at minimizing the side effects such as money-laundering and tax evasion using cryptocurrencies. We would like to stress that these are not intended to formally institutionalize cryptocurrency exchanges or facilitate cryptocurrency trading through the exchanges.*
Financial Services Commission, *Financial Measures to Curb Speculation in Cryptocurrency Trading* (January 23, 2018), available at: https://www.fsc.go.kr/downManager?bbsid=BBS0048&no=123388

[93] *The term "Virtual Currency" as used in this Act means any of the following:*
(i) property value (limited to that which is recorded on an electronic device or any other object by electronic means, and excluding the Japanese currency, foreign currencies, and Currency-Denominated Assets; the same applies in the following item) which can be used in relation to unspecified persons for the purpose of paying consideration for the purchase or leasing of goods or the receipt of provision of services and can also be purchased from and sold to unspecified persons acting as counterparties, and which can be transferred by means of an electronic data processing system; and
(ii) property value which can be mutually exchanged with what is set forth in the preceding item with unspecified persons acting as counterparties, and which can be transferred by means of an electronic data processing system.
Payment Services Act, Act No. 59 of 2009 (2017), Article 2 Paragraph 5, available on: http://www.japaneselawtranslation.go.jp/law/detail/?id=3078&vm=04&re=01

[94] The Law Library of Congress, Global Legal Research Center, Regulation of Cryptocurrency in Selected Jurisdictions (June 2018), p. 94-96, available at: https://www.loc.gov/law/help/cryptocurrency/regulation-of-cryptocurrency.pdf

(FIEA).[95] They concluded that Japan has no intention of prohibiting ICO but addressed numerous issues in the new ICO framework. A new regulation regarding investment tokens will be developed under the FIEA, while the upgraded PSA will be applicable to payment tokens. The PSA refers to tokens as the *rights attached to token* or *RAT*s, without any bad connotation. In its existing form, the FIEA divides securities into two groups; a high-liquidity and low-liquidity type of securities. According to that differentiation, RATs are considered high-liquidity securities due to their easily transferable nature. According to the report, investment type RATs should be exposed to the same disclosure requirements as securities, more specific the offering disclosure and the continuous disclosure like the public offering of securities as opposed to the private placement.[96]

Furthermore, underwriters or other intermediary agents for the IPO are in charge of monitoring the whole project and the financial condition of the party. However, in ICOs, there is no one responsible for monitoring due to the "self-offering" nature of ICO. It means that in most cases, issuers launch and issue tokens by themselves. Therefore, the FSA argued that issuers should also be registered because of the investor's protection.[97] The unfair trading regulation should be applied similarly to securities trading with further development of insider trading regulation. The FSA will take into consideration the possibility of restricting solicitation.[98] In addition, the FSA accredited the *Japan Virtual Currency Exchange Association* (JVCEA) and gave them the mandate to make a self-regulatory framework regarding ICOs.[99] To conclude, one thing is sure, according to the report, Japan will treat investment tokens almost identically to securities. However, it will be interesting to see what will the JVCEA come up with in their long-expected self-regulation, and it stays unclear how Japan will treat other types of tokens.

[95] Financial Services Agency, Study Group on the Virtual Currency Exchange Services (December 21, 2018), p. 20, available at: https://www.fsa.go.jp/en/refer/councils/virtual-currency/20181228.html

[96] Ibid., p. 23

Ibid., p. 23

[98] Ibid., p. 26

[99] Raftery, Gavin, Oki, Kensuke, Binghamhttp, Ryan, Japanese Financial Services Agency accredits the Japan Virtual Currency Exchange Association as a Self-Regulatory Organization (November 13, 2018), http://blockchain.bakermckenzie.com/2018/11/13/japanese-financial-services-agency-accredits-the-japan-virtual-currency-exchange-association-as-a-self-regulatory-organization/, last accessed on May, 1 2019

Singapore

In Singapore, the new *Payment Services Act* (the Act) was passed on the 14 January 2019. The draft was read for the first time at the end of 2018. [100] The new act defines virtual currencies similarly to Japanese regulation, but in this act, the term digital payment token[101] is used as a broader term. Furthermore, the bill imposes AML requirements for mitigation of risks by entities involved in crypto-trading under the supervision of the *Monetary Authority of Singapore* (MAS). [102] MAS is the central bank of Singapore and the body which performs almost all regulatory actions related to crypto-activities in Singapore. *A Guide to Digital Token Offerings* (the Guide) was released in 2017 by the MAS. Recently, the Guide has been updated. The Guide primarily aims to solve the status of investment tokens under the existing *Securities and Futures Act* (SFA) and its "capital markets product"[103]. If the digital token can be subsumed under the definition of a capital markets product, SFA has to be applied identically to any other capital market product.[104] Therefore, the issuer should follow Prospectus requirements and register the Prospectus with MAS. However, a token offering can be exempted from Prospectus requirements if it satisfies certain conditions like the offering of maximum $5 million, private placement with

[100] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Crypto-asset Regulatory Landscape Study (April 16, 2019), p. 91, available at: https://ssrn.com/abstract=3379219

[101] *"Digital payment token" means any digital representation of value (other than an excluded digital representation of value) that —*

(a)is expressed as a unit;

(b)is not denominated in any currency, and is not pegged by its issuer to any currency;

(c)is, or is intended to be, a medium of exchange accepted by the public, or a section of the public, as payment for goods or services or for the discharge of a debt;

(d)can be transferred, stored or traded electronically; and

(e)satisfies such other characteristics as the Authority may prescribe

Payment Services Act (No. 2 of 2019), Article 2 Paragraph 1, available on: https://sso.agc.gov.sg/Acts-Supp/2-2019/Published/20190220?DocDate=20190220#pr17-

[102] Fintechnews Singapore, Singapore Financial Regulator Releases Updated Guide for ICOs (December 3, 2018), http://fintechnews.sg/26757/blockchain/singapore-guide-ico/, last accessed on May 2, 2019

[103] *"Capital markets products" means any securities, units in a collective investment scheme, derivatives contracts, spot foreign exchange contracts for the purposes of leveraged foreign exchange trading, and such other products as the Authority may prescribe as capital markets products;*

Securities and Futures Act (April, 1 2006), Article 2 Paragraph 1, available on: https://sso.agc.gov.sg/Act/SFA2001

[104] Monetary Authority of Singapore, A Guide to Digital Token Offerings (last update November 30, 2018), p. 2-3, available at: http://www.mas.gov.sg/~/media/MAS/News%20and%20Publications/Monographs%20and%20Information%20Papers/Guide%20to%20Digital%20Token%20Offerings%20last%20updated%20on%2030%20Nov.pdf

no more than 50 persons or offering aimed to institutional and accredited investors only.[105] It is clear that the majority of ICOs cannot fulfil any of these criteria due to their size and public character. This exemption is intended for crowdfunding projects.

In the same way, as the Japanese PSA explained in their study the need for licensing of ICO issuers, MAS in their guide also requires capital markets service license for facilitators of token offering that are considered a capital markets product under the SFA. In the end, the Guide illustrates the application of SFA on the case study examples. It is noted that the case study is not exhaustive and MSA decision depends on the specific case. Despite that, Case study 1 in the Guide is interesting because it describes utility tokens[106] and concludes that this token is neither a capital markets product under the SFA nor a digital payment token under the PSB. Therefore, at least pure utility tokens look like a tool for circumventing Singapore's regulation. Except for MAS discretion on a case-by-case basis, the Singapore regulatory framework is straightforward and provides some clarity to what is required for an ICO.

Hong Kong

Although China, for now firmly stands by its position towards ICO, Hong Kong as an autonomous region is not obliged to follow China's ICO ban. Therefore, Hong Kong has been developing its regulatory framework lately. The leader of that crypto regulatory movement in Hong Kong is *Securities and Futures Commissions* (SFC). Their fruitful work can be seen in four published documents related to crypto-assets in 2018. The SFC released *Statement on regulatory framework for virtual asset portfolios managers, fund distributors and trading platform operators* (the Statement), *Circular to intermediaries: Distribution of virtual asset funds* (the Circular), *Regulatory standards for licensed corporations managing virtual asset portfolios* (the Standards), *Conceptual framework for the potential regulation of virtual asset trading platform operators* (the Framework). Also, the *Hong Kong Monetary Authority* supports SFC attempts by advocating for addressing crypto regulatory issues before the supranational regulatory bodies.[107] All four

[105] Ibid., p. 5

[106] *Case study 1 …Token A will give token holders access rights to use Company A's platform…*
Ibid., p. 10-11

[107] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Crypto-asset Regulatory Landscape Study (April 16, 2019), p. 99, available at: https://ssrn.com/abstract=3379219

documents were issued on the same day, November 1st, 2018. The most general document is the Statement in which the SFC describes unique features of virtual assets but also informs about the risks related to them.[108] In the footnotes of the Circular, the SFC defines "virtual assets"[109]. Some of the included risks are fraud, money laundering, issuers' conflict of interest, market integrity and the volatility of the market.[110] Furthermore, they explained their stance regarding virtual portfolio managers and fund managers, especially the ones that solely invest in virtual assets that do not constitute securities under existing regulation. These firms are still obliged to obtain a license. In the Circular, the SFC expanded their position towards distributor of virtual asset funds. Even if they are not required to obtain a license under the *Securities and Futures Ordinance* (SFO), they are still forced to limit their target group only to professional investors and asses knowledge of their clients in the *due diligence* process. Nonetheless, intermediaries involved in the distribution of virtual funds should provide clients with specific warnings and information. [111]

In the Standards and the Framework, the SFC sets out obligations for licensed corporations managing virtual asset portfolios[112] and trading platforms or crypto-assets exchange, respectively. Licensing depends on the fact whether the virtual asset amounts to securities under SFO.[113] The SFC can put a trading platform in a sandbox environment before the final decision about licensing. The choice depends on their ability to show the commitment to high standards of investor

[108] Securities and Future Commission, Statement on regulatory framework for virtual asset portfolios managers, fund distributors and trading platform operators (November 1, 2018), available at: https://www.sfc.hk/web/EN/news-and-announcements/policy-statements-andannouncements/reg-framework-virtual-asset-portfolios-managers-fund distributors-trading-platform-operators.html

[109] *These include digital tokens (such as digital currencies, utility tokens or security or asset-backed tokens) and any other virtual commodities, crypto assets and other assets of essentially the same nature.*
Securities and Futures Commission, Circular to intermediaries: Distribution of virtual asset funds (November 1, 2018), available at: https://www.sfc.hk/edistributionWeb/gateway/EN/circular/doc?refNo=18EC77

[110] Securities and Future Commission, Statement on regulatory framework for virtual asset portfolios managers, fund distributors and trading platform operators, (November 1, 2018) Risks associated with investing in virtual assets, available at: https://www.sfc.hk/web/EN/news-and-announcements/policy-statements-andannouncements/ reg-framework-virtual-asset-portfolios-managers-fund-distributors-trading-platform-operators.html

[111] Securities and Futures Commission, Circular to intermediaries: Distribution of virtual asset funds, (November 1, 2018), available at: https://www.sfc.hk/edistributionWeb/gateway/EN/circular/doc?refNo=18EC77

[112] Securities and Futures Commission, Regulatory standards for licensed corporations managing virtual asset portfolios (November 1, 2018), Information for clients, available at: https://www.sfc.hk/web/EN/files/ER/PDF/App%201%20-%20Reg%20standards%20for%20VA%20portfolio%20mgrs_eng.pdf

[113] Securities and Futures Ordinance — Schedule 1 Interpretation and General Provisions (2018), available at: https://www.elegislation.gov.hk/hk/cap571

protection.[114] The interesting core principle for crypto-asset exchange, defined by the SFC in the Framework, is the moratorium on trading 12 months after completion of an ICO or after the project starts to generate profit. The underlying aim for this moratorium is to force the investors to make an informed investment decision and to entice them to invest only in viable projects.[115] The trading platforms should ensure sufficient AML monitoring, disclose certain information to investors and carefully consider which virtual assets should be approved for trading.[116] It is evident that Hong Kong is a genuinely innovative environment but as long as all the players on the market play according to the rules. Case-by-case analysis in a regulatory sandbox enables a balanced approach that takes into account investors' protection and also fosters innovation.

Australia

Specific for Australia is that its definition of digital currency[117] is a part of *Anti-Money Laundering and Counter-Terrorism Financing Amendment Act 2017* (the AML Act). The digital currency exchange register is also stipulated in the AML Act.[118] However, crypto-assets fall out of the ambit of the AML Act and the digital currency definition except for currency tokens. Therefore, the *Australian Securities and Investments Commission* (ASIC) issued in 2017 a short answer sheet that provides some clarity about the *Corporations Act (*Corporations Act*)* application during the ICO process. The ASIC information sheet was updated in 2018, and it provides

[114] Securities and Futures Commission, Conceptual framework for the potential regulation of virtual asset trading platform operators (November 1, 2018), p. 2., available at: https://www.sfc.hk/web/EN/files/ER/PDF/App%202_%20Conceptual%20framework%20for%20VA%20trading%20platform_eng.pdf

[115] Ibid., p.4

[116] Ibid., p. 6-8

[117] *Digital currency means:*
(a) a digital representation of value that:
(i) functions as a medium of exchange, a store of economic value, or a unit of account; and
(ii) is not issued by or under the authority of a government body; and
(iii) is interchangeable with money (including through the crediting of an account) and may be used as consideration for the supply of goods or services; and
(iv) is generally available to members of the public without any restriction on its use as consideration; or
(b) a means of exchange or digital process or crediting declared to be digital currency by the AML/CTF Rules;
but does not include any right or thing that*, under the AML/CTF Rules, is taken not to be digital currency for the purposes of this Act.*
Anti-Money Laundering and Counter-Terrorism Financing Amendment Act (2017), Section 5, available at: https://www.legislation.gov.au/Details/C2017A00130

[118] Ibid., Part 6A—The Digital Currency Exchange Register

information about the legal status of crypto-assets, cases when an ICO is considered as an offer of a financial product and cases when the platform for token trade becomes a financial market. According to the Corporations Act, a crypto-asset is deemed a financial product if it is a managed investment scheme (MIS)[119], an offer of shares, an offer of a derivative and a non-cash payment (NCP) facility[120]. If token falls under one of the definitions of the financial products, there is a whole range of requirements in Corporations Act such as disclosure, registration, licensing and Prospectus like in IPO.[121] ASIC requires issuers to carefully consider the real nature of an ICO in order to protect investors. Therefore, the mere fact that token is represented in public as a utility or currency token does not mean that it cannot be subsumed under the definition of a financial product and exposed to regulatory obligations according to the Corporations Act.[122] However, for non-financial products, ASIC still has the power to monitor misleading information under the Australian Consumer Law.[123] Crypto-asset trading platforms that offer ICO tokens, which are a financial product, should hold the Australian financial market license.[124] Australia resolved virtually all the ambiguities related to ICOs and crypto-assets by connecting existing regulation with a short information sheet. While the application for investment tokens or currency tokens is

[119] *Managed investment scheme means:*
(a) a scheme that has the following features:
(i) people contribute money or money's worth as consideration to acquire rights (interests) to benefits produced by the scheme (whether the rights are actual, prospective or contingent and whether they are enforceable or not);
(ii) any of the contributions are to be pooled, or used in a common enterprise, to produce financial benefits, or benefits consisting of rights or interests in property, for the people (the members) who hold interests in the scheme (whether as contributors to the scheme or as people who have acquired interests from holders);
(iii) the members do not have day-to-day control over the operation of the scheme (whether or not they have the right to be consulted or to give directions);
Corporations Act (2001), Division 1-General, available at: https://www.legislation.gov.au/Details/C2018C00424

[120] *A non-cash payment (NCP) facility is an arrangement through which a person makes payments, or causes payments to be made, other than by physical delivery of currency.*
Australian Securities and Investments Commission, Initial coin offering and crypto-currency (May 2018), Part B: When could an ICO be a financial product?, available at: https://asic.gov.au/regulatory-resources/digital-transformation/initial-coin-offerings-and-crypto-currency/

[121] Ibid., Part B: When could an ICO be a financial product?

[122] Ibid., Part A: What is the legal status of ICOs and crypto-assets?

[123] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Crypto-asset Regulatory Landscape Study (April 16, 2019), p. 76, available at: https://ssrn.com/abstract=3379219

[124] Australian Securities and Investments Commission, Initial coin offering and crypto-currency (May 2018), Part C: When could a crypto-asset trading platform become a financial market?, available at: https://asic.gov.au/regulatory-resources/digital-transformation/initial-coin-offerings-and-crypto-currency/

pretty straightforward, the situation is opposite for hybrid types that cannot be put in the same basket. For these types of tokens, future ASIC decisions will solve all uncertainties or show some flaws in the existing regulation.

Other countries

Other countries in this region that are worth mentioning regarding ICO regulation are Thailand, India, and New Zealand. *The Securities and Exchange Commission of Thailand* (SEC of Thailand) issued *Royal Decree on Digital Asset Business* (the Royal Decree) in 2018. In the Royal Decree, the definitions of cryptocurrency and a digital token[125] are given. Specific for Thailand is ICO Portal,[126] governed by the SEC of Thailand. Through this electronic system, the SEC of Thailand approves tokens, enables issuance of tokens and monitors AML and KYC policies. An issuer that wants to issue tokens should meet certain requirements such as a capital requirement or a proper IT system.[127] Furthermore, *Reserve Bank of India* (RBI) issued a statement called *Prohibition on dealing in Virtual Currencies* (the Prohibition)[128] , but the term virtual currency is not defined in Indian jurisdiction. The prohibition aims to protect users and the exchange of cryptocurrencies through bank channels. Although there is no specific ICO regulation or guide in India, three different existing laws can be applied to three different token archetypes.[129] *The Financial Markets Authority* (FMA) in New Zealand released commentary on initial coin offers (ICOs) and cryptocurrency services. The stance and even the terminology of FMA are

[125] *"Digital Token" means an electronic data unit built on an electronic system or network for the purpose of specifying the right of a person to participate in an investment in any project or business, or to acquire specific goods, services, or other rights under an agreement between the issuer and the holder.*
Summary of the Royal Decree on the Digital Asset Businesses B.E. 2561 (May 13, 2018), p.2, available at: https://www.sec.or.th/TH/Documents/DigitalAsset/enactment_digital_2561_summary_en.pdf

[126] *"ICO Portal" means an electronic system provider of the offering of newly issued digital tokens who shall screen the characteristics of digital tokens which will be offered, the qualification of issuers, the accuracy of registration statement and the draft prospectus, including any information disclosed through the ICO Portal.*
Ibid., p. 2

[127] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Crypto-asset Regulatory Landscape Study (April 16, 2019), p. 75, available at: https://ssrn.com/abstract=3379219

[128] Reserve Bank of India, Prohibition on dealing in Virtual Currencies (April 6, 2018), available at: https://www.rbi.org.in/scripts/FS_Notification.aspx?Id=11243&fn=2&Mode=0

[129] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Crypto-asset Regulatory Landscape Study (April 16, 2019), p. 101, available at: https://ssrn.com/abstract=3379219

almost identical to Australian ones. If tokens can be considered a financial product, the existing regulation is applicable.[130]

3.2. The Americas

The United States of America

The US regulatory competence is divided between federal and state authorities. State level crypto-assets framework can differ widely and therefore; this paragraph will be focused only on federal regulation. On the federal level, the authority that is responsible for the protection of investors is the *US Securities and Exchange Commission* (SEC). Their most recent document related to crypto-assets is *Framework for Investment Contract Analysis of Digital Assets* (the Framework) and was published in April of this year. The Framework came with disclaimer of SEC that this document can be only seen as additional guidance made by SEC FinHub and not a rule or regulation. In the footnotes of the Framework, the definition of the term digital asset[131] is given. The SEC reiterated the stance from the last guidance. Howey Test will be further applied as the only test that can determine whether the issued token is an investment contract or securities. If that is the case, the US federal securities laws apply. In the Framework, the SEC offers all the relevant factors that should be considered while applying the Howey test. A digital asset is an investment contract if the purchase of such digital asset represents *the investment of money in a common enterprise with a reasonable expectation of profits to be derived from the efforts of others*. The SEC explained in the Framework that first two elements of the test, the investment of money and common enterprise, are almost always easily satisfied.[132] When it comes to reliance on the efforts of others and the expectation of profit, things become a bit foggier. That is why the SEC provides components that should be taken into account. In the part where the SEC describes components of

[130] FMA commentary on ICOs and cryptocurrencies (October 25, 2017), available at: http://www.fma.govt.nz/news-and-resources/media-releases/fma-commentary-on-icos-and-cryptocurrencies/

[131] *The term "digital asset," as used in this framework, refers to an asset that is issued and transferred using distributed ledger or blockchain technology, including, but not limited to, so-called "virtual currencies," "coins," and "tokens."* Securities and Exchange Commission, Framework for "Investment Contract" Analysis of Digital Assets (April 3, 2019), footnote 2, available at: https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets#_edn1

[132] Ibid., II. Application of Howey to Digital Assets

the efforts of others, a new notion – Active Participant (AP)[133] has been introduced. However, the concept of AP is inclusive and therefore, vague because it is not clear whether it includes promoters that are not associated with the issuer.

Considering the complexity of the Howey test and its application, there is a high risk of case law incoherency. This incoherency especially strikes utility tokens and some other hybrid types of the token. Therefore, the issuer has two options, to apply all the current requirements for securities trading or to fall under existing securities exemptions. The securities exemptions impose a number of different limitations such as the allowed amount of funding, global nature of issuance, number of tokens and restrictions for active resale.[134] The majority of these limitations don't suit properly to the nature of digital assets, so the consideration of new exemptions for digital assets or a safe harbour would be more than welcome. To solve some of the addressed problems, CoinList and the SAFT wanted to streamline securities laws compliance and introduced *Simple Agreement for Future Tokens* (SAFT).[135] However, it should be noted that this contract is not approved by the US authorities so the companies that apply the SAFT can still be in a grey area. For providing more clarity, even more, important document than the Framework is the first *No-Action Letter* (the Letter) published by the SEC, also in April of this year. In the Letter, company TurnKey Jet, Inc got clearance from the SEC confirming that their tokens are not securities. In its conclusion, the SEC highlighted several terms from TurnKey's ICO and gave clear guidance on what is not to be considered securities. Some of the key terms in the TurnKey's are fully developed product before ICO, immediately usable after ICO; tokens function as a pre-paid coupon for TurnKey's air charter services and not for investment reasons.[136] Third important document issued by the SEC is *The DAO Report of Investigation* (The Report) in which the SEC applied Howey Test on the Dao

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[133] *When a promoter, sponsor, or other third party (or affiliated group of third parties) (each, an "Active Participant" or "AP") provides essential managerial efforts that affect the success of the enterprise, and investors reasonably expect to derive profit from those efforts, then this prong of the test is met.*
Ibid., II. Application of Howey to Digital Assets

[134] Rohr, Jonathan and Wright, Aaron, Blockchain-Based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets (October 4, 2017), p. 72-73, Cardozo Legal Studies Research Paper No. 527; University of Tennessee Legal Studies Research Paper No. 338., available at: https://ssrn.com/abstract=3048104

[135] Gobaud, David, ICOs and the SAFT—Why, What, and How (May 23, 2017), https://medium.com/cryptos-today/icos-and-the-saft-why-what-and-how-9dee58cc0059, last accessed om May 10, 2019

[136] Securities and Exchange Commission, Response of the Division of Corporation Finance - TurnKey Jet, Inc. (April 3, 2019), available at: https://www.sec.gov/divisions/corpfin/cf-noaction/2019/turnkey-jet-040219-2a1.htm

tokens and concluded that the tokens fall under investment contract definition.[137] As evidenced, the SEC will assess intentions of the issuers mainly visible in the wording of the White Paper while deciding about the nature of tokens. The SEC already has a long list of cyber enforcement actions against companies or persons who acted against federal securities laws.[138] However, the case law is often inconsistent with unequal treatment towards some market participants. Thus, these enforcements have not contributed to setting standards necessary in the development of legal certainty. The inconsistent practice of the SEC and harsh regulation contributes to the picture of the USA as an unwelcome environment for ICO issuers and investors.

Canada

In Canada, *Canadian Securities Administrators* (CSA) is the authority in charge of ICO regulatory matters. Therefore, CSA issued *Staff Notice 46-307 Cryptocurrency Offerings* in 2017, which was followed by *CSA Staff Notice 46-308 Securities Law Implications for Offerings of Tokens* last year (the Notice). The more recent notice mainly repeated conclusions from the previous one with the addition of examples that illustrate the application on different life situations. Both notices have introduced a test for assessing whether an investment contract exists or not. The test contains the same four elements from the US Howey Test; an investment of money in a joint enterprise with the expectation of profit to come significantly from the efforts of others.[139] If a particular token passes the test, Canadian securities laws and Prospectus requirements will be applied. The CSA emphasised the importance of case-by-case analysis even if the issuer decides to name the token as a utility token. Furthermore, if a token contains some utility characteristics alongside investment features, the token will be considered an investment contract.[140] The same principle will be applied if tokens are received at a future date after the contribution stage. Interestingly, CSA recommended the use of the SAFT for the issuers of future tokens as opposed

[137] Securities and Exchange Commission, Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO (July 25, 2017), available at: https://www.sec.gov/litigation/investreport/34-81207.pdf

[138] See more: SEC, Cyber Enforcement Actions, https://www.sec.gov/spotlight/cybersecurity-enforcement-actions, last accessed on May 10, 2019

[139] Canadian Securities Administrators, Staff Notice 46-308 Securities Law Implications for Offerings of Tokens (June 11, 2018), p. 2, available at: https://www.osc.gov.on.ca/documents/en/Securities-Category4/csa_20180611_46-308_implications-for-offerings-of-tokens.pdf

[140] Ibid., p. 2

to the US approach.[141] CSA offers the possibility for token issuers to apply and participate in CSA Regulatory Sandbox in order to be exempt from some securities law requirements. Canada follows the US approach with some innovations such as ICO examples explanation, CSA Regulatory Sandbox for token issuers and a recommendation of the SAFT. For example, company Impak Finance was accepted by Quebec's financial institution's regulator into the regulatory sandbox to issue their Impak Coins in ICO. The benefits that Impak has received from the sandbox environment are relief from Prospectus requirements and registration as securities dealer for two years, but the regulator will consider making it permanent.[142]

Bermuda

Bermuda is a British Overseas Territory that consists of small islands in the North Atlantic Ocean. Despite that fact, Bermuda has quite comprehensive ICO regulatory framework. The ICO regulatory framework encompasses *Digital Asset Business Act* (DABA) and *The Companies and Limited Liability Company (Initial Coin Offering) Amendment Act* (ICO Acts), both from 2018. *Bermuda Monetary Authority* (BMA) is DABA delegated authority and has a broad spectrum of powers to monitor digital assets activities. These activities include granting or revoking of the license to Bermuda established companies involved in the digital asset industry.[143] The DABA reiterated the digital asset definition from the ICO Acts. Therefore, DABA defines *digital asset*

[141] Ibid., p. 6

[142] Gilbert + Tobin, Regulator in Quebec accepts ICO into regulatory sandbox, https://www.lexology.com/library/detail.aspx?g=ee27af77-82b2-458d-aa60-d78250ac42d6, May 21, 2019

[143] The Government of Bermuda, Digital Asset Business Act (September 10, 2018), Part 2 Licensing, available at: http://www.bermudalaws.bm/laws/Annual%20Laws/2018/Acts/Digital%20Asset%20Business%20Act%202018.pdf

business[144] and *digital assets*[145]. The BMA can decide between two types of a license, a full permanent license (class F license) or a temporary license (class M license).[146] M license resembles Canadian ICO regulatory sandbox. According to the DABA, a company involved in digital asset business should have guidelines on risk management and cybersecurity, client disclosure rules but also indemnity insurance with a qualified custodian.[147]

One more distinct feature of Bermuda's ICO framework is the same treatment of investment and utility tokens under a unique ICO regime. The Bermuda company that plans to launch ICO should be registered with the Registrar of Companies and publish ICO offer document. The ICO Acts enumerates mandatory information that should be included in the ICO offer document. Among other things, the issuer should define the amount intended to be raised and limit

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[144] *"digital asset" means anything that exists in binary format and comes with the right to use it and includes a digital representation of value that*

a) is used as a medium of exchange, unit of account, or store of value and is not legal tender, whether or not denominated in legal tender;
b) is intended to represent assets such as debt or equity in the promoter;
c) is otherwise intended to represent any assets or rights associated with such assets; or
d) is intended to provide access to an application or service or product by means of blockchain;
but does not include
e) a transaction in which a person grants value as part of an affinity or rewards program, which value cannot be taken from or exchanged with the person for legal tender, bank credit or any digital asset; or
f) *a digital representation of value issued by or on behalf of the publisher and used within an online game, game platform, or family of games sold by the same publisher or offered on the same game platform.*

Ibid., Interpretation, Article 2 Paragraph 1

The Government of Bermuda, Companies And Limited Liability Company (Initial Coin Offering) Amendment Act (July 9, 2018), Interpretation of Part IIIA, Article 34A Paragraph 1, available at: http://www.bermudalaws.bm/laws/Annual%20Laws/2018/Acts/Companies%20and%20Limited%20Liability%20Company%20(Initial%20Coin%20Offering)%20Amendment%20Act%202018.pdf

[145] digital asset business" means the business of providing any or all of the following digital asset business activities to the general public

a) issuing, selling or redeeming virtual coins, tokens or any other form of digital asset;
b) operating as a payment service provider business utilizing digital assets which includes the provision of services for the transfer of funds;
c) operating as an electronic exchange;
d) providing custodial wallet services;
e) operating as a digital asset services vendor.

Ibid., Interpretation, Article 2 Paragraph 2

[146] Ibid., Digital asset business license, Article 12 Paragraph 3

[147] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Crypto-asset Regulatory Landscape Study (April 16, 2019), p. 60, available at: https://ssrn.com/abstract=3379219

the duration of an ICO.[148] Thereby, it is impossible to launch some types of ICOs without these restrictions. The whole procedure is monitored by FinTech Advisory Committee, specially appointed for that task. When ICO offer document contains misstatements, persons related to ICO such as issuer, promotor or officer of the company could be liable for damages.[149] Bermuda's approach is very innovation-oriented but without distinction between different archetypes of the token, which is necessary for applying proportionate security mechanism related to their specific characteristics and use.

Other countries

To get a comprehensive overview of regulatory approaches in this region, Venezuela and Mexico solutions will be discussed briefly. *Decree 3196* (Decree) passed by the government of Venezuela in 2017 introduced the possibility of creating the first official digital currency belonging to one country. The Petro became Venezuelan digital currency backed by Venezuelan barrels of oil. *Superintendency of Venezuelan Crypto-Assets and Related Activities* (the Superintendence) was established under the same decree.[150] The Petro contributes to the political risk in Venezuela due to a quarrel between government and the Venezuelan Congress that wants to declare Petro illegal. The Decree determined that ICO should be conducted through the Superintendence.[151] Mexico has the Fintech Law to regulate activities related to crypto-assets. According to the Fintech Law, only companies authorised by *The National Banking and Securities Commission* (CNBV) and *Mexico Central Bank* can trade crypto-assets. The same act imposes minimum capital requirements and accounting rules for these companies but also AML and KYC obligations.[152]

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[148] The Government of Bermuda, Companies And Limited Liability Company (Initial Coin Offering) Amendment Act (July 9, 2018), Contents of an ICO offer document, Article 34D Paragraph 1, Article 34A Paragraph 1, available at: http://www.bermudalaws.bm/laws/Annual%20Laws/2018/Acts/Companies%20and%20Limited%20Liability%20Company%20(Initial%20Coin%20Offering)%20Amendment%20Act%202018.pdf

[149] Ibid., Civil liability for mis-statements in ICO offer document, Article 34K Paragraph 1

[150] The Law Library of Congress, Regulation of Cryptocurrency Around the World, https://www.loc.gov/law/help/cryptocurrency/world-survey.php#venezuela, last accessed on: May 11, 2019

[151] Ibid. Venezuela

[152] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Crypto-asset Regulatory Landscape Study (April 16, 2019), p. 70-71, available at: https://ssrn.com/abstract=3379219

3.3. Africa and the Middle East

Israel

Israel's regulators have divided opinion on cryptocurrencies and crypto-assets. *The Bank of Israel* published in 2014 a warning about cryptocurrency trading risks and in 2018 a statement about its status. For the Bank of Israel, cryptocurrencies are not considered a currency but rather a financial asset. On the other hand, *the Israel Tax Authority* think that cryptocurrencies are a means of payment that should be included in their taxation system.[153] Furthermore, *Israel Securities Authority* (ISA) issued in March of 2018 comprehensive *Interim Report* (the Report) with several recommendations and proposals for future ICO regulatory framework. The report is a result of the ISA's Committee *to Examine the Regulation of the Issuance of Decentralized Cryptographic Currency to the Public* (the Committee) effort. The Committee defined cryptocurrency as a broader term which includes tokens.[154] The Committee also further developed differentiation between three token archetypes[155]. In the report are enumerated all the main opportunities, challenges and risks related to crypto-assets for all parties; entrepreneurs, investors and regulators. The Committee will examine tokens on a case-by-case basis with a clear distinction between tokens. Tokens which have embedded rights similar to traditional securities will be deemed securities. Currency and Utility tokens will not be deemed securities. However, for Utility tokens, the final test is the real objective of the purchase, whether its underlying objective is the use of a service or a pure secondary market trading.[156] The ISA concluded that recognition of a certain token as security would lead to the application of burdensome and costly procedures such as

[153] The Law Library of Congress, Global Legal Research Center, Regulation of Cryptocurrency in Selected Jurisdictions (June 2018), p. 49, available at: https://www.loc.gov/law/help/cryptocurrency/regulation-of-cryptocurrency.pdf

[154] Israel Security Authority, The Committee to Examine the Regulation of Decentralized Cryptographic Currency Issuance to the Public Interim Report (March 2018), p. 12 available at: http://www.isa.gov.il/sites/ISAEng/1489/1513/Documents/DOH17718.pdf

[155] *"Cryptocurrency" – A digital information file encrypted using DLT and transferrable between parties, Including:*
(1) A cryptocurrency used exclusively as a medium of exchange
(2) "Token" – A dedicated cryptocurrency conferring rights in a specific venture;
(a) "Security Token" or "Investment Token" – A token conferring ownership, participation or membership of a specific venture, or rights to future cash flows from such a venture;
(b) "Utility Token" – A token conferring use rights in a product and/or service proposed by a specific venture;
Ibid., p. 12

[156] Ibid., p. 14

Prospectus requirements. Therefore, the ISA urges to tailor bespoke Prospectus requirements for ICO because of a special characteristic of this kind of offering.[157] The members of Committee also considered to remove capital limitation in Israel's crowdfunding special regime but rather ended up posing limitations on recruiting investors in Israel alone. To make a well-informed decision about regulation, the ISA thinks that ICO issuers should be included in the regulatory sandbox. The recommendation includes a mechanism for relying on foreign law on ICOs. This seems necessary due to the global nature of crypto-assets. The report aims to foster public debate about the most appropriate regulatory solutions. Therefore, the new regulatory framework can be soon expected in Israel.[158]

United Arab Emirates – Abu Dhabi

The *United Arab Emirates* (UAE) is a federation of seven monarchies. In January 2018 the governor of the UAE Central Bank warmed public about risks associated with cryptocurrencies – especially about the risks related to money laundering and terrorism funding.[159] Despite that fact, Abu Dhabi wants to become one of the world's leading international financial centres through its international financial centre *Abu Dhabi Global Market* (ADGM) and because of that, they introduced a more advanced view on crypto-assets. ADGM consists of three independent authorities – the *Registration Authority*, *the Financial Services Regulatory Authority (FSRA)* and *ADGM Courts*.[160] Two different guidances published by FSRA in 2017 and 2018 are a part of Abu Dhabi's crypto-asset regulatory framework called the *Spot Crypto Asset Framework* (the Framework).[161] In the introduction of the more recent document called *Guidance – Regulation of Crypto Asset Activities in ADGM* it is stated that this document should be read in conjunction with earlier document - *Guidance – Regulation of Initial Coin/Token Offerings and Crypto Assets under the Financial Services and Markets Regulations* but also in conjunction with existing *the Financial Services and Markets Regulations* (FSMR). The Guidance is an indicative, non-binding document

[157] Ibid., p. 82-83

[158] Ibid., p. 84

[159] The Law Library of Congress, Regulation of Cryptocurrency Around the World, UAE, https://www.loc.gov/law/help/cryptocurrency/world-survey.php#uae, last accessed on May 8, 2019

[160] ADGM, About ADGM, https://www.adgm.com/about-adgm/overview, last accessed on May 8, 2019

[161] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Crypto-asset Regulatory Landscape Study (April 16, 2019), p. 58, available at: https://ssrn.com/abstract=3379219

and can be used as an annotation to the rules of FSMR. The Crypto Asset definition[162]was amended in FSMR in June 2018. At first, Crypto Asset seems a broad term, but from the definition and further explanation in the guidance, it is clear that this term is used as a synonym for currency tokens. The other two categories of tokens are security tokens and non-security token, which are utility tokens.[163] Although the terminology slightly differs, the Framework follows the widely accepted classification of three token archetypes. Therefore, if security tokens are deemed as tokens with the characteristics of securities, FSMR will be applied for all activities linked to that tokens offering and trading. Similarly to other jurisdictions, the final decision about the application will be made on a case-by-case basis by FSRA.[164] Crypto Assets or currency tokens and utility tokens are deemed commodities unless FSRA decides differently. The Framework introduced a novelty in the form of Crypto Assets activities called *Operating a Crypto Asset Business* (OCAB).[165] According to the Framework, companies involved in activities such as crypto-asset

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[162] *"Crypto Asset" means a digital representation of value that can be digitally traded and functions as*
(1) a medium of exchange; and/or
(2) a unit of account; and/or
(3) a store of value but does not have legal tender status in any jurisdiction. A Crypto Asset is -
(a) neither issued nor guaranteed by any jurisdiction, and fulfils the above functions only by agreement within the community of users of the Crypto Asset; and
(b) distinguished from Fiat Currency and E-money.
Financial Services And Markets Regulations (2015), Part 22, Definitions 258., available at: http://adgm.complinet.com/net_file_store/new_rulebooks/f/i/Financial_Services_and_Markets_Regulations_FSMR_2015_Consolidated_4_July_2018.pdf

[163] Financial Services Regulatory Authority, Guidance – Regulation of Crypto Asset Activities in ADGM (June 25, 2018), p. 5, available at: https://www.adgm.com/doing-business/adgm-legal-framework/guidance-and-policy-statements/adgm-wide-guidance/

[164] Financial Services Regulatory Authority, Guidance – Regulation of Initial Coin/Token Offerings and Crypto Assets under the Financial Services and Markets Regulations (2017), p. 5, available at: https://www.adgm.com/media/192772/guidance-icos-and-crypto-assets_20180625_v11.pdf

[165] *Crypto Asset activities include –*
(a) Buying, Selling or exercising any right in Accepted Crypto Assets (whether as principal or agent);
(b) managing Accepted Crypto Assets belonging to another person;
(c) making arrangements with a view to another person (whether as principal or agent) Buying, Selling or providing custody of Accepted Crypto Assets;
(d) marketing of Accepted Crypto Assets; (e) advising on the merits of Buying or Selling of Accepted Crypto Assets or any rights conferred by such Buying or Selling; and
(f) operating - (i) a Crypto Asset Exchange; or (ii) as a Crypto Asset Custodian.
Financial Services and Markets Regulations (2015), Schedule 1, 73B, available at: http://adgm.complinet.com/net_file_store/new_rulebooks/f/i/Financial_Services_and_Markets_Regulations_FSMR_2015_Consolidated_4_July_2018.pdf

exchanges or custodians should satisfy certain requirements and apply for licensing with the FSRA but also follow AML rules.[166] It is clear that Abu Dhabi developed a comprehensive framework to attract businesses, but FSRA also had the protection of investors and customers as one of the underlying objectives.

Other countries

Several countries in the Middle East and North Africa prohibited cryptocurrencies. Some of the examples are Algeria, Iran, Iraq and Egypt. *Dar al-Ifta*, Egypt's primary Islamic legislator, released a religious decree in which it is stated that the trading of cryptocurrencies is *haram* or prohibited under Islamic law.[167] The *Mauritius Financial Services Commission* (FSC) issued two guidance notes. The first one, from 2018, warned retail investors about risks regarding the investments in digital assets and cryptocurrencies because they are not protected by any regulation. The FSC in the same note defined digital assets as an asset class for investment by sophisticated and expert investors.[168] The second note concerning security token offering (STO) regulation was published this year in April and stated that security or investment tokens are considered securities according to their *Securities Act* of 2005.[169]

3.4. Europe

Malta

With a number of new technology-oriented laws, Malta has earned the reputation of *Blockchain Island*. Maltese government and other institutions follow all the emerging technology trends and respond in a rapid manner with specific laws. Therefore, Malta's comprehensive crypto-asssets regulatory framework is comprised of three laws; *Virtual Financial Assets Act* (VFAA), *Malta Digital Innovation Authority* (MDIA), and *Innovative Technology Arrangement and*

[166] Abu Dhabi Global Market, Guidance – Regulation of Crypto Asset Activities in ADGM (June 25, 2018), p. 12, available at: https://www.adgm.com/doing-business/adgm-legal-framework/guidance-and-policy statements/adgm-wide-guidance/

[167] The Law Library of Congress, Regulation of Cryptocurrency Around the World, Egypt, https://www.loc.gov/law/help/cryptocurrency/world-survey.php#egypt, last accessed on May 8, 2019

[168] The Mauritius Financial Services Commission, Guidance Note - Recognition of Digital Assets as an asset-class for investment by Sophisticated and Expert Investors (September 2018), available at: https://www.fscmauritius.org/media/55003/guidance-note-on-the-recognition-of-digital-assets.pdf

[169] The Mauritius Financial Services Commission Guidance Note 2 - Securities Token Offerings (STOs) (April 8, 2019), available at: https://www.fscmauritius.org/media/70864/guidance-note-on-securities-tokens.pdf

Services (ITAS). The main purpose of the MDIA has been the formation of the new authority - *Malta Digital Innovation Authority* (the Digital Authority).[170] Thus, the MDIA defines guiding principles, functions and competence of the Digital Authority. The Digital Authority has two roles at the same time, it is a regulatory and supervisory body. It regulates, monitors and supervises *Technology Service Providers* (TSP). As a part of its regulatory function, the Digital Authority is in charge of certification and registration of TSP, but the Digital Authority also has the power to revoke, suspend or cancel given authorization. Except that, the Digital Authority plays a watchdog role while monitoring TSP through its delegated inspectors. If it finds it necessary, it may request any relevant document and impose fines in a case of a breach of any relevant regulation.[171] One more distinct feature of Malta's crypto-assets regulation is the definition of *Distributed Ledger Technology* (DLT) [172]in all three aforementioned laws. Thereby, Malta has not followed the idea of technology-neutral regulation, which can be deemed as another example of the wish to please and attract potential users of Malta's regulation. The ITAS is the newest in the series of technology-related laws from 2018. It further develops and defines requirements for *Innovative Technology Arrangements And Services* providers and their certification before the Digital Authority. TSP should appoint an administrator who is responsible for proving at any time that the services listed on the certificate are satisfied.[173] For ICOs or *Initial Virtual Financial Asset Offering* (IVFAO), the most significant is the VFAA. Under the VFAA *DLT asset* is defined as a collective term for *a virtual token*, *a virtual financial asset*, *electronic money* or *a financial*

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[170] Government of Malta, Malta Digital Innovation Authority ACT (July 15, 2018), Part III Establishment, Functions and Conduct of Affairs of the Authority, available at: http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12873&l=1

[171] Ibid., Article 6 Paragraph 3

[172] *Software and architectures which are used in designing and delivering DLT which ordinarily, but not necessarily:*
(a) uses a distributed, decentralized, shared and, or replicated ledger;
(b) may be public or private or hybrids thereof;
(c) is permissioned or permissionless or hybrids thereof;
(d) is secure to a high level against retrospective tampering, such that the history of transactions cannot be replaced;
(e) is protected with cryptography; and
(f) is auditable;
Government of Malta, Innovative Technology Arrangements And Services Act (November 1, 2018), First Schedule Article 2, available at: http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12874&l=1

[173] Ibid., Article 8 Paragraph 4

instrument. However, of all of these four terms, only *Virtual Financial Asset* (VFA)[174] is regulated under the VFAA and the whole act is called after this term.

Given the importance of VFA and its differentiation from three other terms, *Maltese Financial Services Authority* (MFSA) has presented the *Financial Instrument Test* (the Test) and *Guidance Note* for the Test. The fact that the Test is in the form of excel sheet is a clear sign that in Malta everything is subordinated to practicality and innovation over formality. To determine the type of a DLT asset, the Test uses an elimination process. It eliminates qualification of an asset as a virtual token, e-money and financial instrument and when all of them are eliminated, an asset can be qualified as VFA and VFFA.[175] It is interesting to note that Malta has not accepted commonly used terminology of tokens but has developed its own. Therefore, it can be confusing to place one of Malta's terms under existing archetypes. For example, a virtual token resembles a utility token, but the definition of the virtual token is narrower, and these two terms can't be used interchangeably. A virtual token is a token whose utility or value is employed solely to purchase goods or services and can't be exchanged outside the issuer's platform.[176] However, it remains unclear how the authorities think to limit and monitor trading outside of a particular platform while the tokens are known as easily transferable. Considering that, the only possibility to do that is to limit trading technically but the details about their solution are not provided. Tokens that fall under the definition of the virtual token are out of the ambit of Malta's regulation and are therefore exempt. Financial instruments such as transferable security, a financial derivative or e-money fall under respective applicable EU and Malta's regulation. In other words, some investment or securities tokens can be scrutinised under EU MiFID II and Prospectus Directive and Malta's

[174] *"Virtual financial asset" or "VFA" means any form of digital medium recordation that is used as a digital medium of exchange, unit of account, or store of value and that is not*
(a) electronic money;
(b) a financial instrument; or
(c) a virtual token;
"virtual token" means a form of digital medium recordation that has no utility, value or application outside of the DLT platform on which it was issued and may only be redeemed for funds on such platform directly by the issuer of such DLT asset.
Government of Malta, Virtual Financial Assets Act (November 1, 2018), Article 2 Paragraph 2, available at: http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=29079&l=1

[175] See more: MFSA, Financial Instrument Test, https://www.mfsa.com.mt/fintech/virtual-financial-assets/guidance/financial-instrument-test/, last accessed on: May 13, 2019

[176] Malta Financial Services Authority, Guidance Note to the Financial Instrument Test (July 24, 2018), p. 9, available at: https://www.mfsa.com.mt/wp-content/uploads/2019/04/20190405_GuidanceFITest.pdf

securities laws.[177] Only tokens that pass the Test and that are qualified as VFA can further proceed with its IVFAO and procedures under the VFAA.

The essential procedure is the issuance and registration of white paper before the MFSA at least ten days before its circulation. The White Paper should contain a statement by the board of administration confirming that it complies with the VFAA and includes all the required information,[178] including the full contact information of the issuer. Furthermore, the VFAA regulates advertising of IVFO and determines where the White Paper should officially be published.[179] The issuer should appoint a VFA Agent who needs to be an independent expert and registered with the MFSA. The VFA Agent plays an important role because he checks VFA qualification under the Test and licensing, leads the process of IVFO as an intermediary between the MSA and the issuer and monitors if all the requirements stated by VFAA are met.[180] This could be problematic because VFA agents monitor the same issuers who pay them money, which results in the conflict of interests. The VFAA also regulates VFA exchange, and the VFA Agent is in charge of the application of the tokens to trade on an exchange.[181] Malta's regulation also has several KYC and AML laws that protect investors as well as possible sanctions and civil liability of responsible persons. It is clear that Malta's regulation provides the clarity needed by the issuers around the world. Its specific regime differentiates the virtual token, e-money, financial instruments and VFA and their respective applicable laws. Malta's regulatory framework is also protective for customers due to the increasing number of frauds. However, it should be noted that security or investment tokens can fall out of a scope of a specific regime and be treated under requirements from MiFID II and consequently, Malta's securities laws.

Gibraltar

Gibraltar is a British overseas territory in complicated relations with Spain. Albeit the status of Gibraltar is not clear; they continuously work on introducing new technology-oriented

[177] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Crypto-asset Regulatory Landscape Study (April 16, 2019), p. 68, available at: https://ssrn.com/abstract=3379219

[178] Government of Malta, Virtual Financial Assets Act (November 1, 2018), Article 4 Paragraph 1, available at: http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=29079&l=1

[179] Ibid., Article 6 Paragraph 1

[180] Ibid., Article 7

[181] Ibid., Article 8

laws. All credit for such an innovative approach goes to *The Gibraltar Financial Services Commission* (GFSC). The first noticeable effort that has been made is *The Financial Services (Distributed Ledger Technology Providers) Regulations* (DLT Regulation) under the *Financial Services (Investment and Fiduciary Services) Act*. The DLT Regulation was introduced in 2017 by the government of Gibraltar. This is the first attempt made by one country to regulate distributed ledger technology or blockchain later followed by Malta. The DLT regulation stipulates the licensing of *DLT Providers*[182]. The licence for DLT Providers is similar to Maltese TSP licence or French DASP licence. The providers of DLT services that want to apply for a licence have to pay the non-refundable initial application fee of £2000 to GFSC, a full application that depends on the complexity of applied DLT services and annual fees for which complexity is also taken into account. The GFSC is in charge of assessing the complexity of an applied service on a case-by-case basis.[183] Except for the aforementioned fees, DLT Providers should comply with the nine regulatory principles from the DLT Regulation. The regulatory principles encompass the conduct of business with honesty and integrity, open communication with clients, the maintenance of financial resources, due diligence, mechanisms for the protection of customers' money, effective corporate governance, AML and KYC systems and others. After obtaining the licence, DLT Providers are under constant GFSC monitoring. There is no possibility to be a DLT Provider without a licence. Furthermore, Gibraltar is about to introduce new ICO regulation and their government publicly shared document named *Proposals for the regulation of token sales, secondary token market platforms, and investment services relating to tokens* (Token Proposal) in 2018.

The focal point of the future regulation is an *Authorised Sponsor* (Sponsor), the role similar to the one of the VFA Agent in Malta. Only people who have adequate knowledge and experience in the digital assets industry will be appointed as a Sponsor. Sponsors will act as gatekeepers and

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[182] *Providing distributed ledger technology services.*
Carrying on by way of business, in or from Gibraltar, the use of distributed ledger technology for storing or transmitting value belonging to others.
Gibraltar Financial Services Commission, Financial Services (Distributed Ledger Technology Providers) Regulation (October 12, 2017), Schedule 1 Article 10, available at: http://www.gfsc.gi/uploads/DLT%20regulations%20121017%20(2).pdf

[183] Ibid. Schedule 3 Article Paragraph 3 and 4 and http://gibraltarfinance.gi/20180309-token-regulation---policy-document-v2.1-final.pdf, last accessed on May 18, 2019

at the same time, bridge the gap between the GFSC and the issuers.[184] The new token regulation will define necessary information that should be disclosed to potential investors before the launching of an ICO. Moreover, the new ICO regulatory framework will be mainly focused on utility and hybrid types of a token because the issuance of investment tokens falls under current Gibraltar's securities laws. The currency tokens will also be excluded from future regulation if they don't have any characteristic of other types of tokens and can't be perceived as a hybrid type. Every Sponsor will have a code of best practices and the GFSC will be maintaining a special register of Sponsors and codes. Additionally, the new ICO regulation will organise activities of the secondary market and investment services relating to tokens. Albeit the Token Proposal looks promising, there are still many open questions which are waiting to be answered by the government of Gibraltar and the GSFC. [185]

France

The PACTE Bill (the PACTE Act) was adopted by the French National Assembly or Parliament in April 2019. The newest regulatory invention came from France in the form of the optional visa regime for ICOs. Digital assets qualified as financial instruments fall outside the new regime. Therefore, for this investment or securities tokens, MiFID II and other relevant French securities laws are applicable, respectively. [186] The PACTE Act also defines tokens [187] and requirements for the ICO visa applicants before the *French Financial Markets Authority* (AMF). The requirements are the incorporation or registration of legal entity in France, the utilisation of white paper or prospectus with certain information that should be included, the monitoring of the

[184] HM Government of Gibraltar, Token Regulation - Proposals for the regulation of token sales, secondary token market platforms, and investment services relating to tokens (February 2018), p. 5, available at: http://gibraltarfinance.gi/20180309-token-regulation---policy-document-v2.1-final.pdf

[185] Ibid. p. 6-7

[186] Davis Polk, France Adopts an Innovative Optional Legal Framework for Digital Assets – Client Memorandum (April 23, 2019), p. 1, available at: https://www.davispolk.com/files/2019-04-23_france_adopts_an_innovative_optional_legal_framework_for_digital_assets.pdf

[187] *The PACTE Act includes the following definition of tokens: any intangible asset representing, in digital form, one or more rights that may be issued, registered, retained or transferred through a distributed ledger technology that makes it possible to identify, directly or indirectly, the owner of such asset.*
Ibid., p. 2

offering and KYC and AML compliance.[188] However, this visa regime is optional for the issuers of tokens, which are not subject to any specific regulation. The issuers without visa can still launch ICO but without general solicitation. It is clear that the AMF list of the approved ICOs is a great incentive which can attract investors and gain their trust. The AMF constantly monitors the fulfilment of all the obligations under the PACTE Act and can revoke an obtained visa and put the issuer on the "blacklist''.

The second novelty in French regulatory framework is a licence for *Digital Assets Services Providers* (DASP)[189] , which is also voluntary except for two services. A DASP that offers the custody of digital assets for third parties or the trade of digital assets with fiat currencies is under the mandatory licensing regime. The AMF will assess every applicant and decide about licensing. After being approved, DASPs are under specific obligations depending on which services they provide.[190] The AMF also has a list of approved DASPs. Additionally, France allows professional specialised investment funds and professional private equity funds to invest in digital assets. Professional private equity funds should limit their investments in digital assets to 20% of their total assets. [191] The French government is trying to persuade its EU partners to adopt a similar ICO visa regime.[192]

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[188] AMF, Towards a new regime for crypto-assets in France (April 15, 2019), https://www.amf-france.org/en_US/Reglementation/Dossiers-thematiques/Fintech/Vers-un-nouveau-regime-pour-les-crypto-actifs-en-France, last accessed on: May 17, 2019

[189] *Digital asset services comprise the following:*
1. custody of private cryptographic keys for third parties;
2. trade of digital assets with fiat currencies;
3. trade of digital assets with other digital assets;
4. operation of a digital assets trading platform; and
5. (i) receipt and transmission of orders on behalf of third parties, (ii) portfolio management on behalf of third parties, (iii) investment advice to digital assets purchasers, (iv) underwriting of digital assets and (v) making guaranteed and non-guaranteed investments in digital assets.
Davis Polk, France Adopts an Innovative Optional Legal Framework for Digital Assets – Client Memorandum (April 23, 2019), p. 2-3, available at: https://www.davispolk.com/files/2019-04-23_france_adopts_an_innovative_optional_legal_framework_for_digital_assets.pdf

[190] Ibid. p.3

[191] AMF, Towards a new regime for crypto-assets in France (April 15, 2019), https://www.amf-france.org/en_US/Reglementation/Dossiers-thematiques/Fintech/Vers-un-nouveau-regime-pour-les-crypto-actifs-en-France, last accessed on: May 17, 2019

[192] Reuters, France to ask EU partners to adopt its cryptocurrency regulation (April 15, 2019), https://www.reuters.com/article/us-france-cryptocurrencies-idUSKCN1RR1Y0, last accessed on May 17, 2019

Lichtenstein

Lichtenstein and Switzerland are not members of the EU, but unlike Switzerland, Lichtenstein is a member of the *European Economic Area* (EEA). Lichtenstein just recently adopted new *Token and Trustworthy Technology Service Providers Act* (TVTG) on the 7th of May, 2019, colloquially referred to as the Blockchain Act. In 2018, before the adoption of the new Act, a consultation report on the new Act written in English was available to the public, unofficially translated by *Ministry for General Government Affairs and Finance*, and *Fact Sheet on Initial Coin Offerings* by *Financial Market Authority Lichtenstein* (FMA)[193]. The Blockchain Act defines a number of technical terms like *Token*[194], *Public* and *Private Key*, *Token Issuance*, *TT Service Provider*, *Token Issuer* and many more. In its holistic approach, Lichtenstein uses term Token for broader application than just for ICOs. In their opinion, this act is just a starting point for the definition of Tokens in other specific laws because every possible asset can be digitalised or tokenised. The token is a representation of a right on DLT and any possible right can be represented. Therefore, Lichtenstein even defined disposal over tokens and the consequences of the transaction.[195] The Government of Lichtenstein refused to classify tokens following three archetypes because, in their words, this *would result in improper simplification*.[196] Thus one should check the applicability of other *lex specialis* depending on the token form. Token Issuers are a subtype of TT Service Providers and the new Act stipulates general requirements like legal capacity and minimum capital for all TT Service Providers and then for every subtype specific

[193] FMA, Fact Sheet on Initial Coin Offerings (October 1, 2018), available at: https://www.fma-li.li/files/fma/fma-factsheet-ico.pdf

[194] *Information on a TT System that can embody fungible claims or membership rights to an individual, goods, and/or other absolute or relative rights and ensuring the allocation to one or more Public Keys.*
Ministry for General Government Affairs and Finance, Government Consultation Report on The Creation of a Law on Transaction Systems Based on Trustworthy Technologies (Tt) (Blockchain Law; Tt-Act; Vtg) And The Amendment Of Other Laws, Law on Transaction Systems Based on Trustworthy Technologies (Blockchain Act; TT-Act; VTG) (November 16, 2018), Article 5 Paragraph 1, available at: https://www.naegele.law/downloads/2018-10-05-Unofficial-Translation-of-the-Draft-Blockchain-Act.pdf

[195] Ibid., Law on Transaction Systems Based on Trustworthy Technologies (Blockchain Act; TT-Act; VTG), Part II Disposal over Tokens., Articles 6-12

[196] Ibid., Government Consultation Report on The Creation of a Law on Transaction Systems Based on Trustworthy Technologies (Tt) (Blockchain Law; Tt-Act; Vtg) And The Amendment Of Other Laws, p. 82

requirement.[197]

Furthermore, the Blockchain Act enumerates information that *Basic Information* or the White Paper should contain.[198] There are also offered exemptions for the obligation of publishing the White Paper. The exemption applies, for example, if the offering is limited to 150 investors or if the value of total issuance is below million Swiss francs.[199] The Blockchain Act lays down possible liability for incorrect or misleading information in the White Paper.[200] TT Service Providers have to register before the FMA if they provide one of the subtypes of enumerated services like token issuance. The FMA is also a regulatory body that monitors and implements the Blockchain Act in practice and imposes fines.[201] As a part of regulatory reform related to new technologies, Lichtenstein has widened the scope of some of the existing laws such *as Due Diligence Act* for AML, *Financial Market Supervision Act*, *Persons and Companies Act* and *Business Act*.

Luxembourg

Luxembourg joined the club of a few European countries that regulate new technologies in February of this year with the approval of *Bill of Law 7363* (the Bill). More precisely, the inserted article[202] of the Bill aims to regulate *Security Token Offering* (STO). Unlike tokens offered during the ICOs, security tokens offered during STOs have dematerialised securities backed by some tangible assets like dividends, revenue or assets of the issuers.[203] Security or investment tokens as archetype are considered a broader term than security tokens involved in STO. The Bill evens legal

[197] Ibid., Law on Transaction Systems Based on Trustworthy Technologies (Blockchain Act; TT-Act; VTG), Part III Requirements for TT Service Providers A. General Requirements Article 13 and B. Special Requirements for Individual TT Service Providers Article 14

[198] Ibid., Articles 28-30

[199] Ibid., Article 31

[200] Ibid., Article 32

[201] Ibid., Article 46

[202] *The account keeper may hold securities accounts and register securities in securities accounts within or through secure electronic registration devices, including distributed electronic registers or databases. Successive transfers registered in such a secure electronic registration device are considered transfers between securities accounts.* Elvinger Hoss, Bill Of Law 7363 Was Approved On 14 February 2019 – Luxembourg's Confirmation That Securities Can Be Held Through Dlt-Like Technologies, Including Blockchains! (February 19, 2019), https://www.legitech.lu/newsroom/articles/bill-of-law-7363-was-approved-on-14-february-2019-luxembourgs confirmation-that-securities-can-be-held-through-dlt-like-technologies-including-blockchains/, Article 18bis Paragraph 1, last accessed on May 17, 2019

[203] Zaki, Iliya, Security Token Offerings (STOs)—What You Need To Know, https://hackernoon.com/security-token-offerings-stos-what-you-need-to-know-8628574d11e2, last accessed on May 17, 2019

treatment of securities and dematerialised securities distributed via *distributing electronic registers* or blockchain. Therefore, investors know what to expect when issuing security tokens and they are protected. Although Luxembourg has not introduced a specific regulatory regime for tokens, the novelty will have far-reaching consequences because it provides legal certainty and makes it possible to raise funds with lower transaction costs. Under Malta's solution, the fate of utility, currency and hybrid type of tokens stays unclear or, in other words, unregulated. Malta with the new Bill opened the doors for raising funds via STO as a more secure subform of ICOs applying regular securities laws which are still burdensome and unadjusted to new technologies.

Switzerland

After Ethereum chose Switzerland as the most suitable jurisdiction for launching its ICO, Switzerland became a well-known European ICO hub. Ethereum's ICO has been the most famous ICO ever, so there must be something in Swiss regulation that attracted Ethereum and others that followed.[204] The fact that Switzerland is not in the EU and under obligation to implement MiFID II positively contributes to that perception. The aforementioned FINMA and its Guidelines from February of 2018 made widely-accepted classification of three token archetypes; investment, utility and payment tokens. In addition to that valuable FINMA's Guidelines, at the end of 2018, *the Federal Council* further explained its position in a comprehensive report named *Legal framework for distributed ledger technology and blockchain in Switzerland* (the Report). The Report is a result of the work of *Blockchain/ICO working group* that was established at the beginning of 2018 by *The State Secretariat for International Financial Matters* (SIF)[205] that worked closely on the Report with the FINMA. The value of the Report is in the analysis of the legal basis of tokens under civil, banking AML, securities and financial market laws. The Report reiterated the position of FINMA relating differentiation between three main types of the token. When it comes to AML provisions, the Report concluded that they do not apply to utility tokens if the purpose of a utility token is to provide access rights to some non-financial services or applications. On the other hand, asset tokens deemed securities and payment tokens, as well as

[204] Maas, Thijs, Want to do an ICO in Switzerland? Read this first! (February 20, 2018), https://hackernoon.com/ico-switzerland-regulation-56c2ae1e3e33, last accessed on May 21, 2019

[205] The Federal Council, Blockchain/ICO working group established (January 18, 2018), https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-69539.html, last accessed on May 21, 2019

utility tokens as means of payment, are subject to the AML regulation. [206]

The FINMA treats tokens (asset and some hybrid tokens) as securities on a case-by-case basis if they fall under the definition of securities according to *the Financial Market Infrastructure Act* (FMIA).[207] Speaking of the FMIA's definition of securities, tokens are mostly considered uncertified securities due to the absence of a physical deed.[208] ICO issuers should bear in mind that their consideration of tokens as one type rather than others can be completely wrong. The line is often blurred and only FINMA has the answer about the right qualification of the specific token. For example, the aforementioned Ethereum was treated as a payment token and that is mainly true because it is used as a mean of payment for miners, but FINMA could have concluded differently. Ethereum also resembles a utility token or it might be considered a hybrid type. Tokens are typically not considered as a deposit under banking regulations since repayment is not required. However, if this is the case and tokens can be treated as a deposit, there are licensing requirements according to *the Banking Act*.[209] Currently, FINMA and other Swiss financial authorities together with the Federal Council are preparing amendments to exist civil, insolvency, banking and AML laws to further foster the innovation in their confederation.

Other countries

The UK, Estonia, Croatia and Russia are also taken into brief consideration. Russia is therefore regarded as an additional member of the Continent even though some of its parts belong to Asia. In 2017, *the Financial Conduct Authority* (FCA) of the UK warned the customers about

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[206] The Federal Council, Federal Council Report on Legal framework for distributed ledger technology and blockchain in Switzerland (December 14, 2018), p. 83-84, available at: https://www.newsd.admin.ch/newsd/message/attachments/55153.pdf

[207] *Securities in the sense of the Financial Market Infrastructure Act (FMIA) are standardized certificated or uncertificated securities, derivatives and intermediated securities (Art. 2 let. B FMIA), which are suitable for mass standardized trading, i.e. they are publicly offered for sale in the same structure and denomination or are placed with more than 20 clients, insofar as they have not been created especially for individual counterparties (Art. 2 para. 1 FMIA).*

FINMA, Guidelines for enquiries regarding the regulatory framework for initial coin offerings (ICOs) (February 16, 2018), p. 4, available at: https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/

[208] Blandin, Apolline and Cloots, Ann Sofie and Hussain, Hatim and Rauchs, Michel and Saleuddin, Rasheed and Allen, Jason G and Cloud, Katherine and Zhang, Bryan Zheng, Global Crypto-asset Regulatory Landscape Study (April 16, 2019), p. 106, available at: https://ssrn.com/abstract=3379219

[209] FINMA, Guidelines for enquiries regarding the regulatory framework for initial coin offerings (ICOs) (February 16, 2018), p. 6, available at: https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/

risks related to ICOs.[210] The FCA extended its views in *Guidance on Crypto-assets* (the Guidance) from January of this year. In the Guidance, the FCA follows the well-established taxonomy of tokens on investment, payment or exchange in the case of the FCA and utility tokens supported by real-life examples to clarify the distinction. If the token is considered securities, the issuer should apply all relevant securities laws of the UK, including Prospectus and licensing requirements.[211] Estonian *Financial Supervisory Authority* (FSA) issued *Information for entities engaging with virtual currencies and ICOs* (the Information) in September 2018 where it explains when tokens are considered securities and which regulations apply to the offering of these tokens. *Croatian National Bank* (CNB) and *Croatian Financial Services Supervisory Agency* (HANFA) notified the public about potential risks while investing in tokens, referring to the warnings and guidelines of some European institutions and countries.[212][213] In 2018, the Russian government unveiled a new ICO regulation that can be expected to pass soon. The regulation is heavily criticised by the industry participants because of some provisions that will hardly attract the issuers to launch ICO in Russia. Some of them are a capital requirement of $1.7 million, accreditation for five years, Russian bank account for funds raised from an ICO and transactions made only in Russian national currency - rubbles.[214]

3.5. Common Regulatory Patterns

The extensive analysis of twenty-seven jurisdictions has shown that approaches taken by the regulators diverge significantly in their form and terminology. However, the same cannot be said for their substance. Taking substance into account, the regulatory responses can be divided into three big groups with some intriguing distinctions within each of the group that will be emphasised. The first group of countries have decided to ban all ICO activities or even cryptocurrencies. The justification for the ban is, in essence, a proverb; prevention is better than

[210] FCA, Initial Coin Offerings (February 27, 2019), https://www.fca.org.uk/news/statements/initial-coin-offerings, last accessed on May 20, 2019

[211] Financial Conduct Authority, Guidance on Crypto-asset (January 2019), p.23-28, available at: https://www.fca.org.uk/publication/consultation/cp19-03.pdf

[212] HNB, Mogući rizici povezani s ulaganjima u virtualne valute (September 22, 2017), https://www.hnb.hr/-/moguci-rizici-povezani-s-ulaganjima-u-virtualne-valute, last accessed on May 21, 2019, available in Croatian only

[213] HANFA, Informacija o rizicima ulaganja u kriptovalute i ICO (December 28, 2017), https://www.hanfa.hr/vijesti/informacija-o-rizicima-ulaganja-u-kriptovalute-i-ico/, last accessed on May 21, 2019, available in Croatian only

[214] Scott, Allen, Regulations, Underpinned By The Ruble (April 2, 2018), https://bitcoinist.com/russia-unveils-ico-regulations-ruble/, last accessed on 20 May, 2019

cure. The approach taken by the majority sought to create legal certainty explaining how to apply existing regulation and warn about potential risks associated with crypto-assets. The third group of countries chose to answer the challenges of emerging technologies with brand new regulatory solutions and nomenclature. In the next three paragraphs, all three approaches will be discussed in more detail. A certain level of terminology reconciliation should be, however, achieved on an international level. The great diversity of terms does not help in providing legal certainty and can be confusing for all market participants. Consistent implementation of crypto standards and terminology is *conditio sine qua non* for successful dealing with regulatory inconsistency and facilitation of cross-border trading.

Complete Ban

If we exclude countries in North Africa and the Middle East that adopt ban due to religious reasons, the main representatives of this group are two Asian countries – China and South Korea. The public in China and South Korea were notified that the regulators undertook such an extreme measure in order to protect customers and educate them about dangers specific for crypto-assets. The protection of retail investors should be the principle followed by every regulator. However, the question is if China and South Korea could have enforced less strict and more proportionate measure to protect its customers. There are some rumours about the ban being only temporary while the countries prepare for new, specific regulation.[215] The consequences can be even worse in the case of a temporary ban because it is harder to build a new market when you already drove away all the industry makers from it. Catharsis is present in psychology, but the market doesn't work on this principle and cannot be switched off and then turned on rapidly. Therefore, Chinese and Korean action could be seen as rigid. When a regulator shuts down innovation in *statu nascendi*, this sends a wrong message about the environment being discouraging to creation. Albeit, the former PBOC governor Zhou Xiaochuan may be right saying that technology has not yet reached the level of maturity needed for the immediate measure[216], the ban is already an immediate

[215] Williams, Christoper, East Asia is cryptocurrency frontline as regulation develops in China, Japan, Korea and Taiwan (April 2, 2019), https://dapplife.com/asia-is-cryptocurrency-frontline-as-regulation-develops-in-china-japan-korea-taiwan/, last accessed on May 29, 2019

[216] The People's Bank of China, PBC Governor Zhou Xiaochuan and Two Deputy Governors Answered Press Questions on Financial Reform and Development (March 22, 2018), http://www.pbc.gov.cn/en/3688110/3688172/3711743/index.html, last accessed on May 29, 2019

measure that is undertaken. Current regulation can be applied to every new phenomenon and thus, it protects customers. It depends only on the regulator which laws they decide to apply on cryptocurrencies by interpretation of existing regulation. One thing is certain – an outright ban provides legal certainty at the lowest possible cost.[217]

Application of Existing Legal Framework & Self-regulation

This approach may be seen as the balance between two aforementioned extremes – the ban or a new regulation. They sought to find a fine line between customers' protection and fostering innovation. Because of that, the issuing of guidelines or warnings is the most popular move of the regulators. In this manner, securities tokens are treated as securities under the completely same regulatory regime. Some of the countries that have an almost identical regime for securities tokens and securities are Japan, Australia, Singapore, Hong Kong, Israel, USA, Canada, Switzerland, and Luxembourg and so on. The majority of them also require licensing of the issuer. In some cases, the same regime is applied to utility tokens and the decision is mainly determined by a competent financial authority on a case-by-case basis. While the quality case-by-case analysis can be an excellent strategy to determine the nature of a token in a particular situation, it is also the truth that this is very costly and often inconsistent, which can increase legal uncertainty. The best example of this incoherency is the American SEC, which is very selective in the laws it enforces and the Howey Test, which is often open to interpretation and very vague.[218] Existing regulation is also problematic because it is ill-suited for new technologies. One cannot just squeeze innovations into the current framework because it was not intended for that purpose and they cannot fit neatly without some modifications. The legal system is a living organism that evolves and develops during the time.

Some countries added interesting alternatives to soft law documents. For instance, the Japanese regulatory body gave a mandate to the *Japan Virtual Currency Exchange Association*

[217] Zetzsche, Dirk Andreas and Buckley, Ross P. and Arner, Douglas W. and Föhr, Linus, The ICO Gold Rush: It's a Scam, It's a Bubble, It's a Super Challenge for Regulators (July 24, 2018) Harvard International Law Journal, Vol. 63, No. 2, 2019., p. 31, available at: https://ssrn.com/abstract=3072298

[218] Rohr, Jonathan and Wright, Aaron, Blockchain-Based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets (October 4, 2017). Cardozo Legal Studies Research Paper No. 527; University of Tennessee Legal Studies Research Paper No. 338., p. 91, available at: https://ssrn.com/abstract=3048104

(JVCEA) to make a self-regulatory framework regarding ICOs.[219] While some argue that the future of regulating new technologies is self-regulation, that approach can be detrimental if it is not controlled by the authorities. Namely, when market participants get a mandate to regulate activities between themselves, the protection of consumers is at a high risk to be forgotten and ignored. A Counterforce for the balance is desired because self-regulation can also undermine competition on the market. Japanese solution may be seen as a positive example because the Association for self-regulation collaborates with the government that acts as a gatekeeper and can always pull the competence of the Association to make the self-regulatory framework. Hong Kong[220] found the desired balance and the issuers can launch ICOs without a licence, but the offering should be limited only to professional investors. Thereby, the regulator assumes that a potential professional investor can bear the consequences of a bad investment decision better than retail investors. Furthermore, Hong Kong[221], together with Canada[222], use, uses regulatory sandboxes to exempt chosen token issuers from certain requirements and by that closely monitors the whole process. In addition to soft law for investment and utility tokens, Japan[223] and Singapore[224] introduced specific regulation for payment tokens or cryptocurrencies, so this parallel regime is applied to them.

New Regulation

It is hard not to notice that it was mostly the small jurisdictions related to offshore activities that implemented completely new regulation regarding ICO. However, that does not mean that

[219] Raftery, Gavin, Oki, Kensuke, Binghamhttp, Ryan, Japanese Financial Services Agency accredits the Japan Virtual Currency Exchange Association as a Self-Regulatory Organization (November 13, 2018), http://blockchain.bakermckenzie.com/2018/11/13/japanese-financial-services-agency-accredits-the-japan-virtual-currency-exchange-association-as-a-self-regulatory-organization/, last accessed on May, 29 2019

[220] Securities and Futures Commission, Regulatory standards for licensed corporations managing virtual asset portfolios (November 1, 2018), p. 3, Information for clients, available at: https://www.sfc.hk/web/EN/files/ER/PDF/App%201%20-%20Reg%20standards%20for%20VA%20portfolio%20mgrs_eng.pdf

[221] Ibid., p. 2

[222] Canadian Securities Administrators, Staff Notice 46-308 Securities Law Implications for Offerings of Tokens (June 11, 2018), p. 8, available at: https://www.osc.gov.on.ca/documents/en/Securities-Category4/csa_20180611_46-308_implications-for-offerings-of-tokens.pdf

[223] Payment Services Act, Act No. 59 of 2009 (2017), Article 2 Paragraph 5, available on: http://www.japaneselawtranslation.go.jp/law/detail/?id=3078&vm=04&re=01

[224] Payment Services Act (No. 2 of 2019), Article 2 Paragraph 1, available on: https://sso.agc.gov.sg/Acts-Supp/2-2019/Published/20190220?DocDate=20190220#pr17-

these regulatory efforts are immediately flawed or defective. This is only a sign that these tax havens like Bermuda, Gibraltar, Lichtenstein or Malta once again recognised the opportunity in new technologies to attract foreign capital. Although, at the same time, this is detrimental for ICO marketing purposes. The fact is that smaller jurisdictions can answer to new technology trends faster and with more ease, especially if they have a forward-looking government. Nevertheless, they can change the regulation if the experiment failed even faster and with fewer consequences. In theory, a bespoke tailored regime is the best option for every emerging technology because then one can build regulatory requirements that are perfectly fitted and that simultaneously foster innovation almost from scratch. The pitfalls of that approach are possible negative effects in practice that cannot be predicted in advance. Additionally, in the case of investment tokens, it does not make sense to apply different requirements to the traditional securities and tokens. The essence of traditional securities and investment tokens is the same, unlike the form, but the legal obligations should be technology neutral and unbiased. The frequent change of laws has an adverse effect on the perception of legal certainty and it is very costly for the government but also for the undertakers. In this context, phenomena of regulatory competition and race-to-bottom may be seen in actions of regulators. Regulatory competition is phenomenon in law and politics that refers to the competition between lawmakers to offer regulation that will attract as many businesses as possible and, consequently, foreign capital.[225] Regulatory competition can have a positive connotation, but when it means race-to-bottom, it can be detrimental for protection of consumers. Race-to-bottom is often a negative aspect of regulatory competition because it entails competition in regulators' offering of more lenient requirements or relaxed laws that do not provide the investors with a necessary protection but are rather made to be beneficial and attractive just to businesses.

Malta has effectively outsourced the monitoring, investigation and approval of ICOs to third parties – VFA Agents. However, the outsourcing is also one of the greatest risks in Malta that could consequently lead to the conflict of interest of VFA Agents. They are undoubtedly experts in DLT technology, but they also act in more roles that are mutually incompatible. VFA Agents are appointed and paid by token issuers and concurrently monitor the fulfilment of regulatory requirements along with the process for the regulators that are not directly involved in the transaction. On the other hand, Malta is an example of a country that provides a clear test for

[225] Wikipedia, Regulatory Competition, https://en.wikipedia.org/wiki/Regulatory_competition, last accessed on May 29, 2019

determining the nature of tokens in the form of an excel sheet, which is an example of substance triumphing over form. That absolutely contributes to legal certainty and market participants can set their expectations according to that. Malta invented new terminology and the notion of a *virtual financial asset* (VFA) that doesn't recognize all differences between three types of the token. Bermuda also treats utility and investment tokens equally despite the obvious distinct features. Both Gibraltar and Malta define DLT technology, which is not recommended due to its complex nature and the absence of a generally accepted definition, even between technical experts and coders.[226] In that respect, France did a decent job with its visa regime and its development has a big impact on the EU because France is one of the strongest members, especially considering ongoing Brexit. A visa regime gives great incentive to the issuers to comply with all the regulatory obligations and to be on the list for approved companies as opposed to the blacklist. Lichtenstein has faced digital assets with comprehensive Blockchain Act that has far-reaching consequences for the whole legal system in Lichtenstein. They decided to go with a broad conception of token that also includes token issuers and ICO and should be applied with other *lex specialis*. It remains to be seen what the implications in practice are. New regulation or widening the scope of existing regulation can, if prepared carefully, be beneficial for all three sides – the regulator, issuers and investors.

4 STANCE OF EU INSTITUTIONS

The published documents on cryptocurrencies and crypto-assets of almost all EU institutions are a strong indication of how important it is for these bodies to familiarise potential investors with applicable regulation and warn them about potential risks. *The European Securities and Markets Authority* (ESMA), *the European Banking Authority* (EBA) and the *European Insurance and Occupational Pensions Authority* (EIOPA) (together referred to as *European Supervisory Authorities* - ESAs) in their warning are focused mostly on risks related to cryptocurrencies, such as extreme volatility, a lack of protection, the transparency of price and

[226] Finck Michèle, Blockchain Regulation and Governance in Europe (December 2018), Cambridge University Press, p. 171-173

misleading information.[227] In January of this year, the EBA published its separate report on crypto-assets.[228] The ESMA issued several documents regarding crypto-assets and cryptocurrencies and the newest one is the *Advice - Initial Coin Offerings and Crypto-Assets* (the Advice) also from January of this year.[229] Except for the activities of supervisory authorities of EU, the EU Commission and Parliament are involved in a pretty lively debate about DLT regulation in general and about including ICO into crowdfunding regulation in specific. For nineteen EU Members in the Eurozone that adopted Euro as an official currency, the *European Central Bank* (ECB) is the central bank that ensures financial stability in the Eurozone. The ECB established *ECB Crypto-Assets Task Force* to tackle the challenges related to crypto-assets and they issued in May a document named *Crypto-Assets: Implications for financial stability, monetary policy, and payments and market infrastructures* (the Paper).[230] Except these formal responses and actions undertook by EU institutions, there are also public-industry initiatives that go toward regulatory cooperation. One of them is *European Blockchain Partnership* (EBP). Twenty-eight countries, including Norway and Lichtenstein, which are not EU members, created the EBP to cooperate in the establishment of a *European Blockchain Services Infrastructure* (EBSI) by signing a declaration. Furthermore, the EU Commission launched *EU Blockchain Observatory and Forum* to monitor blockchain developments and prepare reports and conduct studies about it.[231] There are also numerous international organisations and self-governing initiatives involved in research, debating and making proposals about new technologies. One of these initiatives is *icocharter.eu* that displays self-regulation rules for the ICO ecosystem on their website signed by various lawyers and entrepreneurs across the European Union.[232] To evaluate current status and

[227] The European Supervisory Authorities, ESA Warning On Virtual Currencies (February 12, 2018), available at: https://www.esma.europa.eu/sites/default/files/library/esma50-164
1284_joint_esas_warning_on_virtual_currenciesl.pdf

[228] European Banking Authority, Report with advice for the European Commission on cryptoassets (January 9, 2019), available at: https://eba.europa.eu/documents/10180/2545547/EBA+Report+on+crypto+assets.pdf

[229] European Securities and Markets Authority, Advice - Initial Coin Offerings and Crypto-Assets (January 9, 2019), available at https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf

[230] European Central Bank, ECB Crypto-Assets Task Force, Crypto-Assets: Implications for financial stability, monetary policy, and payments and market infrastructures (May 2019), available at: https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op223~3ce14e986c.en.pdf?f2e9a2596a8f9c38c95f4735c05a0d47

[231] European Commission, EU Blockchain Observatory and Forum, https://ec.europa.eu/digital-single-market/en/eu-blockchain-observatory-and-forum, last accessed on May 24, 2019

[232] Icocharter.eu, Proposition for Self-Regulation rules for the ICO ecosystem, http://www.icocharter.eu/, last accessed on May 24, 2019

application of the existing regulation, the official documents, regulations and stance of some of the aforementioned bodies or organisations will be discussed.

4.1. European Securities and Markets Authority (ESMA)

As the supervisory authority of all competent national financial market authorities in the EU, the ESMA assesses financial risk on the European market, protects investors, issues relevant interpretation documents of EU financial and securities law and monitors national authorities to foster convergence.[233] In its Advice, the ESMA expressed concern about individual regulatory efforts of some Member States and their bespoke regime for ICOs because that can be detrimental for level playing field at the territory of the EU – especially considering the cross-border nature of tokens.[234] On the other hand, these countries are probably disappointed with the inertia of EU regulators. The ESMA describes the whole background and technology requirements for issuing tokens, specifically by providing definitions for some technological terms such as digital wallet, blockchain and crypto-assets[235] but also digital token and its subtypes[236]. Crypto-asset is for the ESMA umbrella term that includes virtual currencies or payment tokens and digital tokens. Digital tokens are further divided into utility and investment tokens, so the ESMA followed tacitly-accepted qualification of three archetypes. Except for the omnipresent risks, the ESMA emphasised the benefits of ICOs and crypto-assets and referred to them as a useful alternative funding source that can enhance liquidity.[237] Moreover, the ESMA recognised the long-term potential of tokenisation of assets in the most general terms, which is similar to the approach of Lichtenstein. Current EU regulatory framework does not contain the definition of crypto-assets. Thus, legal qualification of crypto-assets under current regulation is only possible under MiFID II

[233] ESMA, Who We Are, https://www.esma.europa.eu/about-esma/who-we-are, last accessed on May 29, 2019

[234] European Securities and Markets Authority, Advice - Initial Coin Offerings and Crypto-Assets (January 9, 2019), p. 5, available at https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf

[235] *Crypto-asset: a type of private asset that depends primarily on cryptography and Distributed Ledger Technology (DLT) or similar technology as part of their perceived or inherent value. Unless otherwise stated, ESMA uses the term to refer to both so-called 'virtual currencies' and 'digital tokens'. Crypto-asset additionally means an asset that is not issued by a central bank.*
Ibid., p. 42

[236] *Digital token: any digital representation of an interest, which may be of value, a right to receive a benefit or perform specified functions or may not have a specified purpose or use.*
Ibid., p. 42

[237] Ibid., 17-18

framework and its definition of financial instruments. Although MiFID II can also have a meaning of framework that consists of directive and regulation, the abbreviation MiFID II will be used only as a reference for directive while the use of the regulation from the same package will be indicated as MiFIR.

Among others, financial instruments in MiFID include *transferable securities*, *money market instruments*, *units in collective investment undertakings* and *various derivative instruments*.[238] MiFID II defines *transferable securities* like shares in companies and any other equivalent to them, bonds and any other form of securitised debt and *any other securities giving the right to acquire or sell any such transferable securities or giving rise to a cash settlement determined by reference to transferable securities*, with the exception of instruments of payment.[239] This definition should be read in conjunction with the Prospectus Directive that applies only to units that are transferable.[240] Furthermore, under MiFID, securities need to be *negotiable on a capital market*[241] and they need, as a class share, common characteristics in order to be deemed securities. Therefore, three requirements for tokens can be detected in the EU regulatory framework for them to be considered securities.[242] The requirements should be satisfied cumulatively. The first requirement is transferability and can be easily fulfilled considering the tradable nature of tokens utilizing DLT technology. However, if tokens are technically limited for trading, they are likely not securities. The second requirement is negotiability. The Commission explained this requirement as an ability *of being traded on a regulated market*.[243] The fact that tokens can be easily traded on crypto-assets platforms is a clear evidence of negotiability on capital markets. However, scholars are still debating about relevant factors to determine negotiability.

[238] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments (MiFID II), Annex I Section C, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0065

[239] Ibid., Article 4 Paragraph 1 Point 44

[240] Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading (Prospectus Directive), Article 2 Paragraph 2a, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32003L0071

[241] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments (MiFID II), Article 4 Paragraph 1 Point 18, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0065

[242] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 20-23, available at: https://ssrn.com/abstract=3075820

[243] Ibid., p. 21

Finally, the third requirement is standardization of classes of securities with certain qualities.[244] A similar definition of transferable securities from MiFID contains *Directive on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities* (UCITS) with the addition of *any other negotiable securities which carry the right to acquire any such transferable securities by subscription or exchange*.[245] It is clear that investment tokens can be simply caught under these inclusive definitions and even broader interpretation.[246] To confirm that, the ESMA surveyed the legal qualification of crypto-assets. As noted, only competent authorities of Member States are responsible for a real case-by-case analysis. Majority of these authorities perceive investment tokens as transferable securities, even though these tokens do not have attached governance or ownership rights. [247] The mere existence of profit rights is enough to consider them transferable securities. Therefore, ESMA and competent national authorities have recognised different types of tokens and the absence of the regulatory framework for utility tokens that remain unregulated.[248] The additional problem is the vague nature of utility tokens and factors that should determine their nature.[249]

Another question can arise regarding the suitability of the existing EU regulatory framework to the unique characteristic of investment tokens and ICO as a process. Under existing regulation, qualification of crypto-assets as transferable securities requires application of several different EU regulatory instruments such as the *Prospectus Directive* (Prospectus Directive)[250], the *Transparency Directive* (TD) [251] , the *Alternative Investment Fund Managers Directive*

[244] Ibid., p. 22-23

[245] Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS), Article 2 Paragraph 1 Point (n), available at: https://eur-lex.europa.eu/eli/dir/2009/65/2014-09-17

[246] European Securities and Markets Authority, Advice - Initial Coin Offerings and Crypto-Assets (January 9, 2019), p. 20, available at https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf

[247] Ibid., p. 19-20

[248] Ibid., P. 20

[249] Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017). European Company and Financial Law Review Forthcoming., p. 28-29, available at: https://ssrn.com/abstract=3075820

[250] Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading (Prospectus Directive), available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32003L0071

[251] Directive 2013/50/EU of the European Parliament and of the Council of 22 October 2013 amending Directive 2004/109/EC of the European Parliament and of the Council on the harmonisation of transparency requirements in

(AIFMD)[252], the fifth *Directive on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing* (AMLD)[253] and others. The implementation of these directives and the interpretation depend on the Member States and their competent authorities. The Prospectus Directive enumerates information that should be included in the Prospectus or White Paper before launching an ICO if the definition of transferable securities from MiFID II includes offered tokens.[254] The offering can be exempted of Prospectus obligations if it is below million euros or eight million euros if the Member States decide so.[255] Furthermore, reasons for exemption are a limitation of the offering only to the qualified investors, less than 150 natural or legal persons within one Member State and others. Meanwhile, the Prospectus Directive became Prospectus Regulation in 2017, but the reasons for the exemption are identical.[256] [257] MiFID II set the standards for investment firms, or in the case of token as platform for token trading. These platforms should comply with capital, organisational, transparency and investor protection requirements.[258] *The Market Abuse Regulation* (MAR) regulates and prohibits market manipulations and insider trading and is applicable if the token is qualified as transferable

relation to information about issuers whose securities are admitted to trading on a regulated market (Transparency Directive), available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013L0050&from=EN

[252] Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32011L0061

[253] Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing (the fifth AMLD), available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L0843&from=EN

[254] Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading (Prospectus Directive), Article 7, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32003L0071

[255] Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC (Prospectus Regulation), Article 3 Paragraph 2, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1129&from=EN

[256] Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading (Prospectus Directive), Article 4 available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32003L0071

[257] Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market (Prospectus Regulation), Recital 13 and Article 1 Paragraph 4, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1129&from=EN

[258] European Securities and Markets Authority, Advice - Initial Coin Offerings and Crypto-Assets (January 9, 2019), p. 25-27, available at https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf

security.[259] The ESMA detected possible incoherency in the application across the European Union as a major defect of the existing system. Even the definition of transposition of financial instruments can differ in every Member State. Additionally, some MiFIR provisions apply to equity instruments and some to non-equity instruments.[260] Lack of a unified definition of crypto-assets makes it almost impossible to put them in either basket and it is therefore complicated to apply relevant rules. There is a need for regulation of utility tokens because in the current constellation they pass under the radar. The current regulatory framework of the EU for securities and their trading is unfitting for a specific characteristic of investment tokens and simultaneously insufficient for utility tokens. Despite all these deficiencies, the ESMA has elucidated EU views with its Advice on crypto-assets and emphasised the need for further progress on the level of EU.

4.2. European Banking Authority (EBA)

As an independent EU authority, The EBA protects stability in the banking sector and supervises banking authorities in the Member States.[261] In its Report[262], the EBA reiterated well-known taxonomy of crypto-assets from the ESMA Advice on payment, investment and utility tokens. However, unlike the ESMA, the EBA's understanding of investment tokens is narrower. For the EBA investments, tokens usually include rights such as ownership or entitlements, while the ESMA highlighted that the absence of attached rights makes no difference. Noteworthy, the EBA perceives Ether as a token with utility and payment characteristics and therefore as a hybrid type of token. The EBA shares the ESMA's view on crypto-assets, with the addition that they *can be used as a means of exchange and/or for investment purposes and/or to access a good or service* and by that the EBA confirmed aforementioned taxonomy.[263]

Complementarily to the ESMA assessment of crypto-assets under MiFID II, the EBA considered a possible application under the *Payment Services Directive* (PSD2) and the *E-money Directive* (EMD2). Although the EBA illustrated by the example that, depending on the

[259] Ibid., p. 29
[260] Ibid., p. 28
[261] European Banking Authority, About us, https://eba.europa.eu/about-us;jsessionid=743B82BE1AD33ACE555DBC8ACAFFC77E, last accessed on May 27, 2019
[262] European Banking Authority, Report with advice for the European Commission on cryptoassets (January 9, 2019), p. 10-11 available at: https://eba.europa.eu/documents/10180/2545547/EBA+Report+on+crypto+assets.pdf
[263] Ibid., p. 10-11

characteristics of tokens, it is possible in some cases to qualify them as e-money, it concluded honestly that it is almost impossible or hardly possible to apply EU financial service law in most cases. However, it emphasised that implementation and application in the Member States may differ slightly. Therefore, the EBA has identified divergent approaches across the EU and non-applicability of EU financial services law as major problems. It recommends a coordinated international response and holistic approach in coping with the current conditions.[264] Some of the previous recommendations were accepted. For example, the EBA recommended amendment of exchange services between virtual currencies and fiat currencies that are together with the definitions of *virtual currencies* and *custodian wallet provider* included in the fifth version of the AML Directive.[265] In that regard, the next logical step is the inclusion of crypto-to-crypto exchange services and ICO providers in the AML Directive, according to the *Financial Action Task Force* (FATF) recommendations. The EBA supports these FATF's efforts and has proposed the same to the EU Commission. For now, only payment tokens are covered by the fifth AML Directive. EU institutions should speed up the process of amending directives and regulations to catch all new technology possibilities.

4.3. European Commission and Parliament

In March of 2018, the European Commission presented a completely new *Proposal for a Regulation on European Crowdfunding Service Providers* (the Crowdfunding Regulation)[266] which is a part of its FinTech action plan[267] and efforts to build a Capital Market Union. The proposal was forwarded to the European Parliament in a regular legislative process. The parliamentary committees, depending on what is the matter in the case, draw up a report on a

[264] Ibid., p. 18

[265] Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU (the fifth AML Directive), Article 1 Paragraph 1 Points g and h, Paragraph 18, available at: https://eur-lex.europa.eu/legal content/EN/TXT/PDF/?uri=CELEX:32018L0843&from=EN

[266] European Commission, Proposal for a Regulation Of The European Parliament And Of The Council on European Crowdfunding Service Providers (ECSP) for Business (March 8, 2018), COM (2018) 113 final, available at: https://eur-lex.europa.eu/resource.html?uri=cellar:0ea638be-22cb-11e8-ac73-01aa75ed71a1.0003.02/DOC_1&format=PDF

[267] European Commission, FinTech Action plan: For a more competitive and innovative European financial sector (March 8, 2018), COM (2018) 109/2, p. 5-7, available at: https://ec.europa.eu/info/sites/info/files/180308-action-plan-fintech_en.pdf

proposal before the European Parliament adopts its final decision in plenary. *The European Parliament's Committee on Economic and Monetary Affairs* (the Committee) led by rapporteur Ashely Fox made *Draft Report* (the Draft Report) on the proposal for Crowdfunding Regulation of the European Parliament and the Council in August 2018.[268] The members of the Committee noted that this Crowdfunding Regulation is a great opportunity to add ICOs that are not regulated under MiFID II, make them a part of the same framework and regulate them.[269] However, the new Crowdfunding Regulation would capture only ICOs or crowdfunding campaigns that meet the threshold of eight million euros, which is the same amount for which the Member States can opt while regulating Prospectus threshold. The initial Commission's threshold was one million euros, which was also the first threshold in Prospectus Regulation.[270] The Committee defined ICO[271] in the Draft Report. One more noteworthy amendment made by the Committee is the replacement of the ESMA with the *National Competent Authority* (NCA) as a body responsible for the authorisation and supervising of crowdfunding platforms or service providers.[272] Crowdfunding service providers that want to offer ICO with value lower than eight million euros through their platform should follow all the obligations from the Crowdfunding Regulation.

Despite the first attempts made by the Committee, the Committee in the Report from November of 2018[273] changed its stance on including ICO in the Crowdfunding Regulation. The European Parliament confirmed that position by not including ICO amendments in *Legislative*

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[268] European Parliament Committees, Draft Reports, http://www.europarl.europa.eu/committees/en/econ/draft-reports.html?ufolderComCode=ECON&ufolderLegId=8&ufolderId=12487&source=&linkedDocument=true&urefProcYear=&urefProcNum=&urefProcCode=, last accessed on May 29, 2019
Nikhilesh, De, EU Lawmaker Wants to Include ICOs in New Crowdfunding Rules (August 13, 2018), https://www.coindesk.com/european-parliament-proposes-ico-regulations-for-crowdfunding-efforts, last accessed on May 25, 2019

[270] Committee on Economic and Monetary Affairs of European Parliament, Draft Report on the proposal for a regulation of the European Parliament and of the Council on European Crowdfunding Service Providers (ECSP) for Business (August 10, 2018), Recital 15 a (new), available at: http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2F%2FEP%2F%2FNONSGML%2BCOMPARL%2BPE-626.662%2B02%2BDOC%2BPDF%2BV0%2F%2FEN

[271] *'Initial Coin Offering or ICO' means raising funds from the public in a dematerialized way using coins or tokens that are put for sale for a limited time by a business or an individual in exchange for fiat or virtual currencies.*
Ibid., Amendment Article 3 – paragraph 1 – point l b (new*)*

[272] Ibid., Amendment Recital 26

[273] Committee on Economic and Monetary Affairs of European Parliament, Report on the proposal for a regulation of the European Parliament and of the Council on European Crowdfunding Service Providers (ECSP) for Business (November 9, 2018), available at: http://www.europarl.europa.eu/doceo/document/A-8-2018-0364_EN.pdf

Resolution on the proposal for a regulation of the European Parliament and the Council on European Crowdfunding Service Providers (the Legislative Resolution).[274] The conclusions of the European Parliament are reasonable and expected. The European Parliament emphasised wide disparities between ICO process and crowdfunding process regulated in the proposed Crowdfunding Regulation, especially emphasizing the fact that majority of the ICOs raise funds over the initial threshold of one million euros and that they also conduct crowdfunding campaigns through licensed and registered crowdfunding platforms.[275] Moreover, the European Parliament criticised the attempts of the Committee to increase the threshold to eight million euros because the threshold should be set according to the practices on the national level with limitation of eight million euros. Nonetheless, the European Parliament opined in the Legislative Resolution that the European Commission should evaluate separately the need for ICO regulatory framework.[276] The EU legislators with this Crowdfunding Regulation have made a long-awaited environment for raising funds through crowdfunding campaigns on the European single market. However, it is also the truth that it does not make sense to regulatory tackle just a few ICOs with a threshold of eight million euros with the same regulation, which is what has been proposed by the Committee. The majority of the ICOs would fall out of the scope of such regulation. Therefore, the European Commission should also consider the preparations for comprehensive and specific ICO regulatory framework to level the playing field across the European Union due to the cross-border nature of tokens.

5 ANALYSIS OF POSSIBLE EU RESPONSES TO ICO

In the preceding paragraphs, the analysis of various regulatory approaches and the stance of EU regulators have shown why regulatory response on ICO and DLT technology cannot be reached simply. Even on the EU level, authorities cannot unanimously agree on the token taxonomy, while terminology in the Member States differs widely. On a worldwide basis, situation fluctuates from the outright ban to advanced and specific ICO regulation. Despite that, in the following paragraphs, three different approaches that can be undertaken by the EU will be analysed

[274] European Parliament, Legislative resolution of 27 March 2019 on the proposal for a regulation of the European Parliament and of the Council on European Crowdfunding Service Providers (ECSP) for Business, available at: http://www.europarl.europa.eu/doceo/document/TA-8-2019-0301_EN.pdf
[275] Ibid., Recital 11a
[276] Ibid., Recital 15a

and at the end, an opinion about the most appropriate response will be given. The first approach is the preservation of the *status quo*, which is also the most straightforward approach that does not require any regulatory action. However, this approach entails ascertaining whether the existing soft law/guiding documents at EU level adequately fulfil their role and provide clarity to investors. Revising of the existing regulation will be evaluated as the second possible technique used in the response. This method requires comprehensive reconsideration of several existing directives and regulations but also adding new regulation aimed to govern utility tokens that are currently unregulated. This approach would also require clear and unanimous stance on the requirements of token categorization. Thirdly, some alternative ways of regulating new technologies will be presented and commented. Alternative ways of regulation include regulatory sandboxes and self-regulation. Given the distinct features of new technologies, a complete paradigm of traditional regulation should also be reconsidered and called into question. The common regulatory patterns have offered three possible approaches, two of which will be reanalysed in EU context – soft law or *status quo* and new regulation or widening the scope of the existing regulation. The third common regulatory pattern, whose main ambassadors are China and South Korea, will not be even considered as a possible solution in the EU. Complete ban of ICOs and virtual currencies would be a step back for the EU when we know that some Member States enacted new regimes for tokens and some of them are preparing the most suitable response. Investor's protection can be achieved, adopting less restrictive measures with no significantly higher costs. The fact that prohibition in China and South Korea is just temporary while preparing new regulation speaks for itself. The outright ban can only be taken into account as an urgent measure and not as long-lasting solution which the EU needs.

5.1. Status Quo – Wait and See Approach

The EU has followed the approach undertaken by the vast majority of the countries worldwide. The idiosyncrasy of the EU answer is in the volume and type of the published documents by the different institutions. Almost every relevant institution felt compelled to issue warning or guidelines. Although all these documents are aligned and complementary in major parts, the consequences of unsynchronised actions may be seen in the token categorisation. The ESMA, EBA, ECB have followed structure consisting of three archetypes with the difference in

defining investment tokens. [277] The broad definition made by the ESMA or narrow by the EBA. Given the importance of characterising investment tokens due to the application of EU securities regulation, this can be seen as a negative effect of something very banal – a lack of proper communication within EU ecosystem. The problem is probably deeper and goes to the very end of the debate whether the EU for effective functioning needs cumbersome and bulky administration, but this is a topic for another paper. Generally, this interpretation provides some clarity and safeguards to token investors and the issuers. Significantly, both the US and the EU regulators have decided that this should be their response. The effects are also pretty much the same, except for the fact that US did enforce regulation in some cases while the EU did not. The majority of investment tokens are characterised as securities (investment contracts according to the Howey test) in the US or transferable securities in the EU. The consequence is the application of relevant securities laws without exemptions or safe harbours except for available exemptions in the current system. They have rejected to participate in the race to the bottom that can be seen in some smaller jurisdictions. This can be perceived as a normal course of action. The distinction between countries like Malta, Luxembourg, Gibraltar and federation or union is evident. Aforementioned size, flexibility and governments that want to attract foreign capital are important prerequisites for the rapid implementation of specific regulatory framework. Therefore, the EU approach cannot be seen as anything else than the most appropriate at the given time.

The EU already has comprehensive financial law that functions relatively well in terms of investors'protection. However, the regulatory framework consists mainly of directives and transposition is left to the Member States. In other words, the Member States have the right to choose how they want to implement objectives set in directives. This manifests in twenty-eight slightly different understandings of concepts like transferable securities from MiFID II. Considering the cross-border nature of tokens, this can be problematic for the issuers who cannot be confident whether they are caught by the definition of transferable securities in the single market of the EU. Another deficiency of the existing approach is a vague position for utility tokens. Currently, the issuers who are issuing utility tokens can bypass the whole EU regulatory framework. This is dangerous knowing that a purchase of these tokens can be incentivised by the motives that are not pure use of services or goods. Additionally, utility tokens can be easily traded

[277] European Banking Authority, Report with advice for the European Commission on crypto-assets (January 9, 2019), p. 7, available at: https://eba.europa.eu/documents/10180/2545547/EBA+Report+on+crypto+assets.pdf

at the same place as investment tokens. Regardless of how good the current securities framework in the protection of investors is, it is also maladjusted for specific features of ICO. The same result can be achieved with less intrusive solutions. The excellent starting point is the Crowdfunding Regulation that is still waiting to see the light of the day. The EU institutions have elucidated some uncertainties to the market participants, but they expect further explanations and unanimous position of the EU institutions about distinctions between token archetypes. However, the feeling of unfinished work remains because the published documents provide limited guidance on how to apply existing regulation. The EU institutions that have published documents recognised the importance of token distinction. To clarify distinctions between tokens, the institutions should identify relevant factors and apply them coherently. The practice of the *Court of Justice of the European Union* (CJEU) in this area is still non-existent so the pattern cannot be detected. CJEU decisions in the future will certainly provide needed clarity in the determination of the real nature of certain tokens. For now, the issuers and customers of utility tokens in the EU are forced to calculate the additional cost due to the inherent degree of uncertainty. On the other hand, these regulatory loopholes and a vague legal framework give room to customers and investors to treat the utility tokens as an opportunity for speculative profit and market manipulations.

5.2. Redesign of the Current Regulatory Framework

The redesign is based on three distinct types of tokens and should be conducted on more fronts for the best effect. As for investment tokens, e.g. the tokens that arguably fulfil all the requirements to fall into category of securities, the situation is straightforward. In the vast majority of the analysed jurisdictions, they are treated as securities, so the regulatory framework is well-known for all market participants and can be applied immediately. EU legislation, such as MiFID II, MiFIR, UCITs, AIFMD and Prospectus Directive could provide a regulatory framework for investment tokens irrespective of the underlying technology.[278] The same treatment is expected due to their shared substance with traditional securities. However, their form is slightly different compared to traditional financial assets. Investment tokens utilise DLT technology and thus tailor-made disclosure rules and other provisions might be needed. For example, the explanation of how the codebase is governed, who can modify it and what are the protection mechanisms for the buyers.

[278] European Parliament, Committee on Economic and Monetary Affairs, Report on virtual currencies (May 3, 2016), Paragraph 18, available at: http://www.europarl.europa.eu/doceo/document/A-8-2016-0168_EN.pdf

Furthermore, the explanation of cybersecurity measures that are taken and will be taken during the offering but also how secure storage of private is keys managed.[279] The examples are not exhaustive and EU regulators should consider additional disclosure requirements for the investment tokens. Some provisions in the current securities regulatory framework may be seen obsolete and investment tokens can be exempted from them. The AML Directive framework should be further expanded to crypto-to-crypto exchange platforms to deal with the hidden identities related to them.

The fifth AML Directive has introduced grounds for application of regulative to payment tokens, so the first step is taken. Unfortunately, the PSD2 and EMD2 have not done the same, so they are mainly inapplicable to all tokens. Therefore, the EU regulators should revise these two directives and make them suitable for virtual currencies.[280] Unlike investment and payment tokens that have some regulatory base that can be revised and expanded, the regulatory status of utility tokens in the EU is unidentified. Some regulators, like Gibraltar, are preparing special regulation just for the utility tokens. The Crowdfunding Regulation can be used as a starting point, especially the concept of a European passport. This concept can be developed and is inspired by the French ICO visa regime and licence for DASP.[281] This model would certainly have a strong partner and supporter in the French government, which is not insignificant, considering the status that France has in the EU. The other solution for utility tokens can be found in an existing regulatory framework applicable to investment tokens, specifically to ICOs that are worth more than eight million euros. For the rest of them, the Crowdfunding Regulation in the pipeline and proposal made by rapporteur Ashely Fox seem like a perfect fit. That way, investors would be protected while the issuers would need to carefully evaluate the scope of the whole project before launching an ICO, while balancing between stricter regulation and desire to collects funds from an ICO. However, whatever EU regulators choose, it is clear that current status without regulation is not a long-term solution and can very quickly become a suboptimal approach. Speaking of utility tokens,

[279] Smith+Crown, A Framework for ICO/Token Sale Self-Governance (November 13, 2017), p. 8-9, available at: https://www.smithandcrown.com/wp-content/uploads/2017/12/A-Framework-for-ICOToken-Sale-Self-Governance.pdf

[280] European Parliament, Committee on Economic and Monetary Affairs, Report on virtual currencies (May 3, 2016), Paragraph 19, available at: http://www.europarl.europa.eu/doceo/document/A-8-2016-0168_EN.pdf

[281] AMF, Towards a new regime for crypto-assets in France (April 15, 2019), https://www.amf-france.org/en_US/Reglementation/Dossiers-thematiques/Fintech/Vers-un-nouveau-regime-pour-les-crypto-actifs-en-France, last accessed on May 28, 2019

they should be probably technically restricted to trading. There are many standards that can be adopted. For example, the day before a purchaser needs to use his or her utility token for accession on the platform and limitation of trading on certain platforms like in Malta. In the debate, the coders should be included to determine which regulatory solution are technically viable and can be executed. In the US and Switzerland, the question of immediate use of utility tokens has appeared. If a utility token enables immediate use of the service or product, then it has the pure characteristics of the utility token. However, if the purchaser of the utility token can expect to use it at a certain point of time in the future, according to the US and Howey Test, this utility token is considered security. The rationale behind this comprehension is straightforward. If the utility token is not usable at the moment of issuance, it is more probable that it was purchased with an expectation of profit. The effort of others is one of the conditions in the Howey Test. The Swiss FINMA concluded the same in its guidelines, albeit Switzerland does not have the Howey Test. The same question arose in the Interim Report of the *Israel Securities Authority.*[282] Some countries examine the need for the launching of digital asset exchange. Interestingly, Gibraltar set up *Gibraltar Digital Asset Exchange* (GBX) as a part of *Gibraltar Stock Exchange Group* and next to the regular stock exchange. GBX is recognised by the ESMA and the EU regulated market.[283] The development of GBX enables controlled implementation of AML and KYC requirements, a higher degree of transparency and investors' confidence in trading. The EU already has a well-developed financial regulatory framework, so the building of a parallel system for digital assets does not make any sense. The core stays and should be developed in accordance with technology trends. The Crowdfunding Regulation is the most recent proof.

5.3. Alternative Approaches

The speed of the emergence of new and disruptive technologies has increased rapidly in recent years. Therefore, the regulators have been confronted with the choice between enacting an often-premature new regulation or applying existing regulatory framework on the new concepts. Irrespective of how a new technology is disruptive and untried, every jurisdiction has basic principles, at least in the Constitution, that can be applied. Thus, non-existing regulation often

[282] Israel Security Authority, The Committee to Examine the Regulation of Decentralized Cryptographic Currency Issuance to the Public Interim Report (March 2018), p. 30, available at: http://www.isa.gov.il/sites/ISAEng/1489/1513/Documents/DOH17718.pdf

[283] Gibraltar Blockchain Exchange, https://gbx.gi/, last accessed on May 28, 2019

means discussion on what laws can be applied to the new phenomena or on whether there is any need for bespoke regime strictly related to new technology. The answer is not straightforward. Namely, existing regulation can be inadequate, while a fast-new regulation can show unpredictable flaws in implementation. Parliamentary procedure is often slow and complicated, so there is no room for frequent changes. Therefore, the regulators have come up with new regulatory techniques that allow them to experiment without consequences or delegate the regulatory function to the organisations of the market participants. The first technique is the regulatory sandbox. Some of the analysed countries such as Canada, Hong Kong, Switzerland and the UK facilitate the use of the regulatory sandboxes for launching ICOs. The regulatory sandbox can be described as a safe environment in which innovators can try their products or services on the real market while being exempted from certain mandatory requirements.[284] The regulator decides about eligible projects that can enter regulatory sandbox and monitor them along the process. The start-ups are allowed to spend usually between 6 and 12 months[285][286] in the sandbox depending on the permission they obtain from the regulator. The process in the regulatory sandbox is designated to allow the regulators to learn from the experience while observing the effects on the market. On the other hand, it allows innovators to launch their product in a more lenient but still regulated environment. European Commission in its FinTech Plan supports regulatory sandboxes in the Member States, but there is no publicly know any plan about adopting similar structure on European level. The benefit for the regulators from such regulatory technique is that they receive information about whether there is a need for enacting new specific regulatory requirements for particular technology innovations. The innovators can benefit if they, for example, get out of the sandbox with a full licence for their service. However, no matter how ideal the whole idea behind the regulatory sandboxes might sound, there is a lack of empirical proof that the system works. The aforementioned example from Canada, Impak company, is a rare bright example of concerned public receiving the appropriate feedback. Impak was exempted from some Prospectus

[284] Zetzsche, Dirk Andreas and Buckley, Ross P. and Arner, Douglas W. and Barberis, Janos Nathan, Regulating a Revolution: From Regulatory Sandboxes to Smart Regulation (August 14, 2017), 23 Fordham Journal of Corporate and Financial Law 31-103 (2017), p.13, available at: https://ssrn.com/abstract=3018534

[285] CSA, CSA Regulatory Sandbox, https://www.securities-administrators.ca/industry_resources.aspx?id=1626, last accessed on May 28, 2019

[286] FINMA, FinTech Sandbox, https://www.finma.ch/en/news/2019/03/20190315-mm-fintech/, last accessed on May 28, 2019

requirements while launching the ICO and a Canadian regulator considers making it permanent. The admission criteria for sandboxes are often too vague and the admission is based on the regulator's assessment who often does not have required expertise to decide about projects that should be accepted. The bottleneck of the current system of sandboxes is their limitation to only one country. Cross-border services or products are unable to benefit from them.[287] Therefore, EU sandbox initiative might be a solution that can further enhance the perspective of a single market.

As a part of the better regulation process and *Digital Single Market*, the European Commission has promoted self-and co-regulation and made *Principles for better self- and co-regulation* (the Principles) in May of 2015.[288] The underlying rationale is the inclusion of the different market participants that have unique contributing competencies and the principle of learning by doing. The Commission emphasised the importance of defining clear targets and indicators in the process but also of pre-defined regulatory baseline.[289] The market participants include economic operators, the social partners and non-governmental organisations that adopt among themselves codes of best practices, sectoral regulation or guidelines.[290] The European Commission is promoting this process in relation to the Digital Single Market. The advantages of this regulatory technique, especially regarding DLT technology, are defining technological standards that are acceptable to all market participants. Unlike the EU Commission, these market participants possess the necessary knowledge and experience to set standards accordingly to the market and industry needs. The process implies constant monitoring of the European Commission and developing standards and self-regulatory rules according to the existing regulatory principles and mandatory rules. The examples of first self-regulatory movements regarding ICOs and virtual currencies may be seen in the US and Japan[291] The self-regulation inherently means regulation in decentralised manner which is close to the idea behind DLT technology. However, there are also

[287] Finck Michèle, Blockchain Regulation and Governance in Europe (December 2018), Cambridge University Press, p. 173 - 175

[288] European Commission, The Principles for better self- and co-regulation (November 28, 2018), p. 1., available at: https://ec.europa.eu/digital-single-market/sites/digital agenda/files/CoP%20-%20Principles%20for%20better%20self-%20and%20co-regulation.pdf

[289] Ibid., p. 2

[290] Finck Michèle, Blockchain Regulation and Governance in Europe (December 2018), Cambridge University Press, p. 177

[291] Suberg, William, Japan Finally Gets Self-Regulatory Body for Cryptocurrency Exchanges (April 24, 2018) https://cointelegraph.com/news/japan-finally-gets-self-regulatory-body-for-cryptocurrency-exchanges, last accessed on May 27, 2019

numerous pitfalls related to self-regulation that should be addressed before the discussion of adopting that regulatory technique. The vacuum in which market participants sometimes dwell is dangerous for the protection of customers and public interest. The regulators have a comprehensive overview of the market and can render improved decisions in public interest. Therefore, self-regulation lacks counterbalance needed to correct failures of blindfolded market participants. Furthermore, legal certainty can be dangerously undermined with different sets of applicable rules and standards. This diversity calls for case-by-case analysis where the role of the courts is not only to render decisions but also to create case law. There is also apprehension that stronger market participants would use the possibility to strengthen further and abuse market dominance, which is contrary to EU competition law. The new regulatory techniques have great potential when applied in controlled conditions and with clear targets, but they also need proper feedback.

6 CONCLUSION

Despite the ongoing tempestuous period, ICOs, or at least some of their types, are here to stay. The paper started with the quote from Vice president Dombrovskis who made an almost identical statement. The underlying rationale for such an optimistic view is the endless potential of blockchain technology. It offers liquidity to businesses that otherwise do not have that possibility. It offers transparency and openness to anyone. However, current status of development and loopholes in the regulation expose the system to people with not so good intentions. In upcoming years, we will see further improvements and evolution of the system. Tokenization a much more comprehensive phenomenon that will expand as a next evolutionary step. In the future, every imaginable traditional asset will be tokenized on blockchain and more easily transferable. Lichtenstein has already prepared its jurisdiction for that trend and is one step ahead. The analysis of the other selected jurisdictions has also showed that regulatory bodies are not immune to ICO mania and that they have responded to it. They have responded in three distinct ways, but the common element is that they did not ignore the issue at hand. The EU has also answered with several reports, studies and warnings but the question from the title remains; is this the most appropriate response that the EU could give? Published documents by the EU institutions perhaps were the best initial course of action, but is that the final response with which the EU should stick?

The scrutiny of the possible EU responses in this paper includes three potential paths that are not necessary mutually exclusive. Keeping the *Status Quo* or popularly called wait-and-see

approach, widening the scope of the existing regulation or redesign and alternative approaches for regulating new technologies. The analysis has shown that the current EU approach offers clarity with exception of utility tokens. That approach is also the best initial response that any regulator can provide. Therefore, the EU has reacted properly and delivered various explanatory papers that aim to help with application of the actual regulation on ICOs throughout the EU. Regardless of the encouraging influence that the reaction of the EU has, now is an opportune moment for supplementary measures. Regulatory sandbox as an alternative measure can be only temporary solution because it is used for gathering data and for preparing experience-based response. Co-regulation and self-regulation are exciting new methods of regulating but it is premature to rely on them. As a long-term solution for the EU, everything leads to redesigning of the current comprehensive regulatory framework.

The EU already has well-established financial market regulation, but certain loopholes need to be closed. The starting point of the redesign should be a more precise definition of securities. The three main elements, transferability, negotiability and standardization of the current concept of securities, can be interpreted very differently and broadly. Furthermore, all EU institutions that had published papers, have reiterated the distinctions between three token archetypes and so it seems that the EU has opted for token classification. To put the right token in the right basket, additional clarification is needed because EU institutions do not have the same perception about discrepancies between tokens. There are three clearly distinct frameworks for each archetype. Currently, the most comprehensive framework in the EU is aimed at investment tokens that are already caught under broad definition of the transferable securities from MiFID II and Prospectus Directive. Except for more an explicit definition, the EU should consider specific disclosure provisions or requirements for tokens as a new form of traditional securities. To include crypto-to-crypto exchange platforms the fifth AMLD requires amendment, although the fifth AMLD has brought some long-awaited novelties such as application to wallet providers and virtual currencies or payment tokens platforms. The AMLD is cornerstone of the regulatory framework for payment tokens in which revised PSD2 and EMD2 should be included. The definition of e-money in these two directives is insufficient to include payment tokens. The regulatory framework of utility tokens can go in two ways. The first option is an entirely new regulation based on the new Crowdfunding Regulation. The new regulation should be limited to trading of utility tokens with technically viable resources. The second alternative is the inclusion of utility tokens with

value lower than eight million euros to the Crowdfunding Regulation as proposed by the European Parliament's Committee on Economic and Monetary Affairs in the Draft Report. When discussing ICOs of utility tokens with value higher than eight million euros, the regulatory framework for investment tokens could be applied. With the redesign and improvements of the current regulatory framework it is possible to find a fine balance between investors' protection and a sufficient level of attractiveness. Thereby, information asymmetry can be reduced, and it is possible for issuers to know what to except and which laws are apply. This system would provide clear expectations across the EU which is much craved considering the cross-border nature of tokens. It is in alignment with the Commission's plans for digital single market and it will make the EU desirable destination for the issuers. On the other hand, the regulators can build new regulatory framework through evolution and not revolution. The existing EU regulations and directives can be revised gradually. It is of the utmost importance for the EU to be forward-looking yet still careful. As for ICOs, they are here, and they will stay.

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