



# SAGGI

## Aspettando l'Unione Europea ... Il paradosso delle ICOs: una regolazione nazionale per un fenomeno globale

### *Waiting for the EU ... The paradoxical effect of ICOs': a national regulation for a global phenomenon*

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#### ABSTRACT

Nel nuovo ambito delle c.d. cripto-attività – che possono essere descritte come ‘assets digitali che utilizzano la crittografia e poggiano su un registro distribuito’ – le offerte iniziali di gettoni digitali (Initial Coin Offerings o ICOs) hanno attirato l'attenzione delle autorità di vigilanza e dei regolatori di tutto il mondo. Durante gli ultimi due anni, molti Paesi dell'Unione Europea hanno iniziato a regolare il fenomeno, spingendo ora anche la Commissione Europea a intervenire. Tale decisione poggia sulla convinzione che le ICOs possano avere incisive peculiarità e potenzialità come modalità di finanziamento, soprattutto per le piccole e medie imprese.

In proposito, questo lavoro propone un approccio regolatorio innovativo e *ad hoc* per tutte le categorie di ICOs, ivi incluse le offerte di gettoni che possono essere assimilati a strumenti finanziari. Questa ricerca, infatti, poggia sull'idea che la tradizionale regolazione finanziaria non sia idonea a fronteggiare le peculiarità e i rischi connessi a questa tipologia di strumenti, né ai fini della protezione dei consumatori, né di quella degli operatori. In proposito, si pensi ad esempio alle problematiche poste dalla fase di custodia, dal ruolo del c.d. miners, dalla validazione dei nodi, etc.

**Parole Chiave:** Critto-attività – Offerta iniziale di gettoni digitali – Gettoni digitali – Regolazione

*Within the new domain of the crypto-asset – which can be described as a ‘digital asset that may depend on cryptography and exists on distributed ledger’ – initial coin offerings (ICOs) have attracted the attention of financial authorities and regulators worldwide. Over the last two years, legislative initiatives regarding this phenomenon have proliferated within the European Union member states and are now driving the European Commission to act. This action is based on the common opinion that ICOs should present remarkable peculiarities and potentialities among the alternative forms of financing for small and medium enterprises.*

*In this regard, this paper proposes a innovative and ad hoc regulatory approach for all ICO categories, including ones that issue tokens considered to be securities. This research is based upon the recognition that the traditional legal framework was not designed to face the specific needs and risks posed by these instruments, neither from the perspective of consumer protection nor from the view that serious operators need rules regarding, for example, the custody phase, the role of miners, validating nodes, and so on.*

**Key Words:** Crypto-assets – Initial coin offerings – Tokens – Regulation

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**SUMMARY:** 1. Some introductory remarks. – 2. The economic perspective: a summary. – 3. The structure of ICOs. – 4. The regulatory global “atmosphere”: the DAO approach. – 4.1. The consequence of the DAO approach: the “token focus”. – 5. Italy and the Consob initiative on ICOs. – 6. The need for a new regulatory approach to ICOs. – 6.1. The ineffectiveness of the token differentiation approach to ICO regulation. – 6.2. The inefficacy of a traditional financial framework for ICOs. – 7. The European Commission’s regulation proposals on crypto-assets: some brief notes. – 8. The Liechtenstein Tokens law: a good solution? – 9. Waiting for the EU... The paradoxical effect of ICOs’: a national regulation for a global phenomenon.

## 1. Some introductory remarks

Within the new domain of the crypto-asset – which can be described as a ‘digital asset that may depend on cryptography and exists on distributed ledger’<sup>1</sup> – initial coin offerings (ICOs) have attracted the attention of financial authorities and regulators worldwide. Over the last two years, legislative initiatives regarding this phenomenon have proliferated within the European Union member states and are now driving the European Commission to act.<sup>2</sup> This action is based on the common opinion that ICOs should present remarkable peculiarities and potentialities<sup>3</sup> among the alternative forms of financing for small and medium enterprises.<sup>4</sup> The ICO can be seen as a novel hybrid fundraising model, like crowdfunding and venture capital,<sup>5</sup> which allows a public

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<sup>1</sup> EUROPEAN COMMISSION, *Consultation Document: On an EU Framework for Markets in Crypto-assets*, available at [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/2019-crypto-assets-consultation-document\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/2019-crypto-assets-consultation-document_en.pdf). In October 2020, while this paper was being published, the European Commission have been enacted two regulation proposals: the first one “on Markets in Crypto-assets, and amending Directive (EU) 2019/1937” (MiCa); the second on a “pilot regime for market infrastructures based on distributed ledger technology”. For a first comment, see D.A. ZETSCHE, F. ANNUNZIATA, D.W. ARNER, R.P. BUCKLEY, *The Markets in Crypto-Assets Regulation (MICA) and the EU Digital Finance Strategy*, Law Working Paper Series, Paper number 2020-018, in [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3725395](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3725395).

<sup>2</sup> EUROPEAN COMMISSION, *Consultation Document: On an EU Framework for Markets in Crypto-assets*, cit.

<sup>3</sup> C. CATALINI-J.S. GANS, *Initial Coin Offerings and the Value of Crypto Tokens*, 5 March 2019, MIT Sloan Research Paper No. 5347-18.

<sup>4</sup> For ESMA, see *Advice on Initial Coin Offerings and Crypto-assets* (January 2019), available at [https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391\\_crypto\\_advice.pdf](https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf), and for EBA, see *Report with Advice for the European Commission on Crypto-assets* (January 2019), available at <https://eba.europa.eu/sites/default/documents/files/documents/10180/2545547/67493daa-85a8-4429-aa91-e9a5ed880684/EBA%20Report%20on%20crypto%20assets.pdf?retry=1>. “An ICO is an innovative way of raising money from the public, using so-called coins or tokens and can also be called an initial coin offering or token sale. In an ICO, a business or individual issue coins or tokens and puts them for sale in exchange for fiat currencies, such as Euro, or more often virtual currencies, e.g. Bitcoin or Ether”.

<sup>5</sup> L. FERRAIS, *Le Initial Coin Offerings: fattispecie in cerca d’autore*, in M.T. PARACAMPO, *FinTech. Introduzione ai profili giuridici a un mercato unico tecnologico dei servizi finanziari*, Torino, 2019, p. 272.

token offering based on blockchain technology<sup>6</sup> even if, in reality, it can assume very different forms without any exhaustive definition.<sup>7</sup>

Before analysing such recent regulatory interventions, it is important to underline that this public “hype” on ICOs raises many concerns, especially among some members of the crypto-community who have often considered these initiatives fraudulent.<sup>8</sup> From their perspective, the authorities are now trying to regulate a phenomenon that has already been going on for a while but that has been dropped by crypto-markets in favour of new and more serious investment opportunities. This position is evidenced by a decrease in ICO investment volume in 2019 and the emergence of new forms of token fundraising (e.g. security token offering: STO,<sup>9</sup> initial convertible coin offering: ICCO,<sup>10</sup> simple agreement for future tokens: SAFT,<sup>11</sup> etc.)<sup>12</sup> From a broader perspective, this should be able to demonstrate how the fintech phenomenon and crypto-assets world are evolving rapidly, as is the complexity of their regulation.<sup>13</sup>

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<sup>6</sup> With regard to this kind of technology, see M. PILKINGTON, *Blockchain Technology: Principles and Applications*, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2662660](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2662660).

<sup>7</sup> For an exhaustive analysis, see D.A. ZETSCHE ET AL., *The ICO Gold Rush: It's a Scam, It's a Bubble, It's a Super Challenge for Regulators*, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=30722](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=30722), pp. 6-7, which underlines that “The tokens, often called ‘coins’, that are offered typically exhibit the characteristics of a digital voucher and grant the participants a right of some kind. The particular right represented by the token varies”; for more about this issue, see also P.P. PIRANI, *Gli strumenti della finanza intermediata: Initial Coin Offering e blockchain*, in *Analisi giuridica dell'economia*, 1 June 2019.

<sup>8</sup> In this sense, see DIGITAL GOLD INSTITUTE, *Report Trimestrale 2019 Q4*, p. 22, which has defined the 2019 legislative attention as a “death kiss”.

<sup>9</sup> The STO is a new form of public offering where investors receive a security represented by a token. Unlike ICO, the STO is not a new concept or process because in these cases, tokens correspond to shares, debts, derivatives, or, in any case, rights to participate in profits. In other words, it is a complete title digitization. In this regard, in Germany, BaFin has recently authorized the Neufund platform (which offers digitized stocks) and Bitbond, a P2P lending platform in cryptocurrencies dedicated to the financing of small and medium enterprises. Additionally, Coinbase has announced its plans to support securities token trading, and the Swiss SIX Stock Exchange is building a fully regulated digital asset trading platform, see F. ALLEGRENI, *Securities Tokens Offering (STO) ovvero il futuro dei mercati finanziari*, 2019, available at <http://www.crowdfundingbuzz.it/security-token-offering-sto-ovvero-il-futuro-dei-mercati-finanziari/>.

<sup>10</sup> Unlike ICOs, with an ICCO, investors can convert tokens into company shares. The issue of the first tokenized convertible warrant – regulated by a prospectus approved by the Malta Financial Services Authority (MFSA) and subject to strict EU regulations – will give investors the right to convert the tokens into Palladium shares three years after the emission; for this institute, see <http://www.crowdfundingbuzz.it/al-via-la-prima-ico-che-offrira-token-convertibili-in-azioni-dopo-tre-anni-icco/>.

<sup>11</sup> In the SAFT, the developers create an addressed contract (SAFT) with their investors who now financially support the project and receive tokens later. See <https://medium.com/the-capital/simple-agreement-for-future-tokens-saft-explained-a72d23cddf77>.

<sup>12</sup> For this list, see BORSA ITALIANA, *Risposta alla consultazione in tema di offerte iniziali e scambi di crypto-attività in connessione con la recente diffusione di operazioni di Initial Coin Offerings (ICOs) aventi ad oggetto crypto-assets nelle quali investono i risparmiatori retail*, available on the Consob website.

<sup>13</sup> In this regard, see also the new phenomenon of the so-called Decentralized Finance (DeFi), which is still not considered by the EC regulation proposals already cited. The “Decentralized finance ... is an experimental form of finance that does not rely on central financial intermediaries such as brokerages, exchanges, or banks, and instead utilizes smart contracts on blockchains, the most common being Ethereum. DeFi platforms allow people to lend or borrow funds from others, speculate on price movements on a range of assets using derivatives, trade cryptocurrencies, insure against risks, and earn interest in a savings-like account”, in this way [https://en.wikipedia.org/wiki/Decentralized\\_finance](https://en.wikipedia.org/wiki/Decentralized_finance).

Nevertheless, while the debate rages concerning the soundness of this opinion, jurists must face this new regulatory ICOs “ferment”. In this regard, the paper proposes an innovative and ad hoc regulatory approach for all ICO categories, including ones that issue tokens considered to be securities.<sup>14</sup> This view, that a special framework is needed, is based on an important premise, which is that this issue requires new rules that can appropriately face this phenomenon. As will be underlined in what follows, this research is based upon the recognition that the traditional legal framework was not designed to face the specific needs and risks posed by these instruments, neither from the perspective of consumer protection nor from the view that serious operators need rules regarding, for example, the custody phase, the role of miners, validating nodes, and so on. Moreover, investors must understand the difference between a token offering (issued by a blockchain technology) and other more traditional fundraising mechanisms; in this case, neither bonds nor shares are involved, and the adoption of the same regulations applied to such mechanisms could be misleading.

As things currently stand, in the absence of any dedicated regulations, the securities law application – such as the prospectus regime – might represent the only way to protect investors from fraudulent or negligent activity. But in the long run, it is not an appropriate solution for transforming or using the issuance of tokens as an alternative means of fundraising. Consequently, the idea of situating tokens within the scope of financial instruments, no matter how evocative and widespread it could be,<sup>15</sup> would in fact not only make the same regulatory intervention useless by pushing the ICOs (even the potentially serious ones) and their funds to other markets, but it also would not guarantee consumer protection.

Conversely, at this stage, a public intervention should be oriented towards the identification of a set of minimum, essential, and specific rules that cannot be the same as those for securities. Furthermore, according to this interpretation, as it will be argued in this essay, also the new EU regulation proposals seem to agree with this paper’s approach.

In order to justify the significant (and recent) public attention this issue has attracted, it would be useful to offer some brief notes regarding the economic evolution of ICOs over the past few years.

## 2. The economic perspective: a summary

This phenomenon was almost absent prior to 2016. At that time, there were just a few operations launched in 2017, there were about 550 operations and more than 1100 in 2018, showing a remarkable increase. The volumes in dollars are also significant, amounting to approximately \$7 and \$20 billion collected in 2017 and 2018.<sup>16</sup> To understand the reasons for such improvement

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<sup>14</sup> D.J. CUMMING-S. JORDAN-A. PANT, *Regulation of the Crypto-Economy: Managing Risks, Challenges, and Regulatory Uncertainty*, in *Journal of Risk and Financial Management*, 2019, Vol. 12, p. 126; R. CLEMENTS, *Crypto-Assets: Current Research and Public Policy Issues*, 2019, University of Calgary School of Public Policy Working Paper.

<sup>15</sup> F. ANNUNZIATA, *Speak, If You Can: What Are You? An Alternative Approach to the Qualification of Tokens and Initial Coin Offerings*, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=333248](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=333248), p. 22.

<sup>16</sup> “The five largest successful ICOs (Filecoin; Tezos; EOS Stage 1; Paragon; and Bancor)

and success, it is necessary to underline two important and general features of ICO: the cryptocurrency as a means of payment and a structurally simple process that is streamlined and lacks any public control mechanisms.

The former is an ICO feature and cannot be ignored.

Worldwide, the cryptocurrency phenomenon has been developing since 2009, with a capitalization that – despite its extreme price volatility<sup>17</sup> – had slowed to over \$270 billion in June 2019 after reaching a peak of \$850 billion at the beginning of 2018.<sup>18</sup> The number of cryptocurrencies has grown enormously. Today, there are several thousands of them. In this context, it is evident that a significant amount of liquidity has been accumulated by crypto-investors who are now looking for new opportunities in alternative investments forms such as ICOs, especially after the general decline in the value of cryptocurrencies in 2018.<sup>19</sup>

From a technical point of view, ICOs have been developing in an international environment without control schemes and borders, thanks to the Ethereum protocols (i.e. the eRC20 standard and its iterations eRC223, eRC777, etc., and eRC721 for non-fungible tokens) that have permitted the creation of tokens that are widely and simply used without any entry barrier.<sup>20</sup> Even in terms of tokenization schemes and legal forms, these activities have been developing without rules, implying there is no emission cost and a large degree of disintermediation.<sup>21</sup> Based on blockchain protocols, tokenization is diffused, available at a low cost, and capable of attracting investment capital – what has been lacking is a transparent connection between tokens and the profitability of the underlying ICO projects to improve investors' assessment capacity. Such a scheme could bring ICOs closer to the venture capital investment risk profile, with increases in the cost of transparency, liquidity, and connection with new investors' baselines. However, it seems this would allow ICOs to be classified as an alternative fundraising model based on a new investor–consumer relationship.

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have each raised the equivalent of more than \$150 million, with Filecoin even surpassing \$250 million”, see P. HACKER-C. THOMALE, *Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law*, available at [https://www.researchgate.net/publication/329472011\\_Crypto-Securities\\_Regulation\\_ICOs\\_Token\\_Sales\\_and\\_Cryptocurrencies\\_under\\_EU\\_Financial\\_Law](https://www.researchgate.net/publication/329472011_Crypto-Securities_Regulation_ICOs_Token_Sales_and_Cryptocurrencies_under_EU_Financial_Law), p. 5; S. ADHAMI-G. GIUDICI-S. MARTINAZZI, *Why Do Business Go Crypto? An Empirical Analysis of Initial Coin Offerings*, 2018, available at <https://poseidon01.ssrn.com/delivery.php?ID=182125067086113008117>.

<sup>17</sup> F. AMETRANO, *Hayek Money: The Cryptocurrency Price Stability Solution*, Bicocca University, Department of Statistics and Quantitative Methods, Milan, 2016.

<sup>18</sup> For an in-depth analysis of the different ICO phases, see D. BOREIKO-N. SAHDEV, *To ICO or Not to ICO. Empirical Analysis of Initial Coin Offerings and Token Sales*, 2018, available at <http://ssrn.com/abstract=3209180>.

<sup>19</sup> For an update regarding the value of crypto-assets, see DIGITAL GOLD INSTITUTE, *Report Trimestrale 2019 Q4*, cit., p. 14.

<sup>20</sup> For a technical analysis, see OSSERVATORIO BLOCKCHAIN & DISTRIBUTED LEDGER TECHNOLOGY, *L'Universo dell'Internet of value, tra le galassie della Blockchain*, March 2019, Politecnico di Milano, available at <https://www.som.polimi.it/event/osservatorio-blockchain-distributed-ledger-010319/>.

<sup>21</sup> For an analysis of French ICOs, see AMF, *French ICO: A New Method of Financing*, available at [https://www.amf-france.org/en\\_US/Publications/Lettres-et-cah](https://www.amf-france.org/en_US/Publications/Lettres-et-cah).

### 3. The structure of ICOs

From a structural point of view, the ICO is usually preceded by an online publication of a white paper,<sup>22</sup> which is a voluntary and non-standardized document that contains descriptions of the project, the ICO team, the offering conditions, and so on. In this regard, in the absence of regulation, the publication of a white paper has spread in practice but there remain no compulsory elements. Often, there is a pre-token issue phase with attractive conditions that is reserved for particular and expert investor categories (the so-called early adopters) that could cover the initial operational costs. Subsequently, the public offer begins through the publication of the digital purchase address.

This operation may last from a few minutes to up to several weeks.<sup>23</sup> With regard to this point, it is remarkable that usually the most successful ICOs are also those that sell out in a moment, revealing the sector speed. After that, according to the type, the tokens can be exchanged in secondary markets managed by online platforms.

In this case, blockchain technology – especially those that are permissionless, such as the eRC20 already mentioned – allows the transactions to take place without any form of intermediation and control. The Ethereum open-source platform<sup>24</sup> allows to manage and develop “smart contracts”, that is, computer programs based on distributed ledger technologies, the execution of which automatically constrains two or more parties on the basis of predefined effects. In accordance with these observations, it is evident that the two ICO features cited above – the use of cryptocurrency as a means of payment and the absence of controls and constraints – also represent the causes of many bad investment opportunities, bankruptcies, and, in some cases, even fraud.<sup>25</sup>

For this reason, public authorities are now trying to find a good, balanced regulatory approach. But it is not easy to do. A regulatory hypothesis should try to maintain the strengths of this new financing channel for start-ups (or for projects connected with existing enterprises), grading only the dysfunctional elements recorded in recent experience. In this context, national regulators are trying to lay down rules for ICOs in order to provide legal guarantees for purchasers and enable ICOs to be transformed into safer investment initiatives in which the evaluation and the goodness of the underlying business project are more important than the pure upside gamble on a token's value.<sup>26</sup>

From this perspective, the United Kingdom's Crypto-Assets Task Force<sup>27</sup> has listed a series of advantages that could make ICOs a new capital-raising system to: 1) support innovation and competition with traditional funding channels; 2) in-

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<sup>22</sup> D. FLORYSIAK-A. SCHANDBAUER, *The Information Content of ICO White Paper*, in [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3265007](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3265007).

<sup>23</sup> C. FISCH, *Initial Coin Offerings (ICOs) to Finance New Ventures*, in *Journal of Business Venturing*, January 2019, Vol. 34, Iss. 1, pp. 1-22.

<sup>24</sup> V. BUTERIN, *Ethereum White Paper, A Next Generation Smart Contract & Decentralized Application Platform*, available at [https://cryptorating.eu/whitepapers/Ethereum/Ethereum\\_white\\_paper.pdf](https://cryptorating.eu/whitepapers/Ethereum/Ethereum_white_paper.pdf), P.P. PIRANI, *Gli strumenti finanziari*, cit.

<sup>25</sup> For more details, see the *Wall Street Journal* article, *Buyer Beware: Hundreds of Bitcoin Wannabes Show Hallmarks of Fraud*, available at <https://www.wsj.com/articles/buyer-beware-hundreds-of-bitcoin-wannabes-show-hallmarks-of-fraud-1526573115>.

<sup>26</sup> In this regard, see the following footnote n. 30.

<sup>27</sup> UK CRYPTOASSETS TASK FORCE, *Final Report*, October 2018, available at <https://assets.publishing.service.gov.uk/government/uplo>.

crease efficiency, enabling direct linkages between proposers and investors, especially for Small and Medium Enterprises (SME); 3) be able to find funding even for very risky business projects in the early stages of operation; and 4) be able to gain access to a new investor audience. Therefore, before examining this paper's thesis, it is necessary to analyse the current global regulatory atmosphere.

#### 4. The regulatory global “atmosphere”: the DAO approach

At the global level, despite the phenomenon's complexity and novelty, some general regulatory orientations can be identified. With the exception of a few countries that have decided to ban ICOs (China)<sup>28</sup> and some that have already introduced specific regulations (Switzerland, Malta,<sup>29</sup> and France<sup>30</sup>), the majority of countries are still studying a regulatory solution. But this situation should not be misunderstood. Even in the absence of a dedicated law, ICOs are not completely free from regulation because they are actually under the control of many market regulatory authorities (i.e. the Security and Exchange Commission (SEC) in the United States and Commissione Nazionale per le Società e la Borsa, Consob,<sup>31</sup> in Italy) that are creating practices that follow a common paradigm.

In the United States, for example, since 2017, the Securities and Exchange Commission has been investigating whether “the DAO”<sup>32</sup> (an unincorporated

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<sup>28</sup> G. PILAROWSKI-Y. LU, *China Bans Initial Coin Offerings and Cryptocurrency Trading Platforms*, *China Regulation Watch*, 21 September 2017, available at: <http://www.pillarlegalpc.com/en/news/wp-content/uploads/2017/09/PL-China-Regulation-Watch-Cryptocurrency-2017-09-22.pdf>; N. ACHESON, *China's ICO Ban: Understandable, Reasonable and (Probably) Temporary*, 13 September 2017, available at <https://www.coindesk.com/chinas-ico-ban-understandable-reasonable-probably-temporary>.

<sup>29</sup> In 2018, Malta enacted three laws concerning blockchain, cryptocurrencies, and DLTs: Chapter 590 the Virtual Financial Assets Act, the Virtual Financial Assets Regulations (enacted by the Minister for Financial Services Regulation), and the Virtual Financial Assets Rulebook. For a comment, see F. CALLEGARO, *Virtual Financial Assets: un primo complesso approccio legislativo. Analisi della Regolamentazione Maltese*, October 2019, available at [www.diritto bancario.it](http://www.diritto bancario.it).

<sup>30</sup> On 23 May 2019, the Government of France enacted a law on business growth and transformation (the so-called “PACTE Law”) under n°2019-486, which has introduced an optional regime for tokens (*jetons*) that, in accordance with Art. L. 54-10-1, are mentioned in “l'article L. 552-2, à l'exclusion de ceux remplissant les caractéristiques des instruments financiers mentionnés à l'article L. 211-1 et des bons de caisse mentionnés à l'article L. 223-1”. In accordance with art. 26, the law establishes a new system of optional approval for offers of tokens “as long as they do not fall within the scope of existing regulation such as that applicable to transferable securities, and the issuer is constituted as a legal entity established or registered in France”, see AMF, *French ICOs. A New Method of Financing*, p. 22. On 17 December 2019, the French financial regulatory authority, the Autorité des Marchés Financiers (AMF), authorized the country's first ICO application. The proposal came from French-ICO, a company that has developed a platform for financing projects through cryptocurrencies. The company was the first to be included in the white list introduced by the legislator. For more details, see R. WOLFSON, *Francia: arriva la prima ICO approvata dal regolatore finanziario del Paese*, available at <https://it.cointelegraph.com/news/frances-financial-regulator-grants-countrys-first-approval-for-an-initial-coin-offering>.

<sup>31</sup> On the position of the Italian financial authority, see the following.

<sup>32</sup> SEC, Securities Exchange Act of 1934, Release No. 81207/July 25, 2017, Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO, available at <https://www.sec.gov/litigation/investreport/34-81207.pdf>.

organization created by Slock.it UG, a German corporation) violated federal securities laws. The DAO was designed with the aim of creating and holding assets through the sale of tokens to investors. These assets would be spent in order to fund selected projects. During just one month, from April 30, 2016 through to May 28, 2016, the DAO sold almost 1.15 billion tokens in exchange for 12 million Ether. As a consequence, the token holders not only received the expected earnings as a return on their investments but could also monetize their assets by re-selling the tokens on web-based platforms for secondary trading.

In this case, the SEC realized that the DAO tokens were “securities” according to Section 2(a)(1) of the Securities Act and Section 3(a)(10) of the Exchange Act; in other words, these tokens entailed “investment contracts” (as an investment of money in a common enterprise with a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others<sup>33</sup>), even if the DAO was a virtual organization making use of distributed ledger technology.<sup>34</sup> In particular, the SEC specified that: 1) the investment of “money” “need not take the form of cash” and, as a matter of fact, the virtual currency Ether could also create an “investment” contract; 2) DAO tokens investors were reasonably expected to earn profits through that enterprise; and 3) the investors’ returns were to stem from the managerial efforts of others. As a result, the authority ratified that federal securities laws, including the requirement to register with the SEC, applied “to those who offer and sell securities in the United States, regardless whether the issuing entity is a traditional company or a decentralized autonomous organization, regardless whether those securities are purchased using U.S. dollars or virtual currencies, and regardless whether they are distributed in certificated form or through distributed ledger technology.”<sup>35</sup> Moreover, any exchanger that puts together multiple buyers’ and sellers’ orders “for securities using established non-discretionary methods under which such orders interact with each other and buyers and sellers entering such orders agree upon the terms of the trade, must register as a national securities exchange or operate pursuant to an exemption from such registration”.<sup>36</sup> This approach has been followed by the SEC until now<sup>37</sup> and has deeply influenced the conduct of a lot of other countries.

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In this regard, see for a comment R. DAMBRE, *Initial Coin Offerings and U.S. Securities Regulation: Challenges and Perspective*, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=318735](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=318735).

<sup>33</sup> 15 U.S.C. §§ 77b-77c.

<sup>34</sup> See *SEC v. Edwards*, 540 U.S. 389, 393 (2004); *SEC v. W.J. Howey Co.*, 328 U.S. 293, 301 (1946).

<sup>35</sup> SEC, Release No. 81207/July 25, 2017, cit., p. 18.

<sup>36</sup> SEC, Release No. 81207/July 25, 2017, cit., p. 18.

<sup>37</sup> During these last years, the SEC has adopted several statements against ICOs: Actor Steven Seagal Charged with Unlawfully Touting Digital Asset Offering, Feb. 27, 2020; ICO Issuer Settles SEC Registration Charges, Agrees to Return Funds and Register Tokens As Securities, Feb. 19, 2020; SEC Charges Founder, Digital-Asset Issuer with Fraudulent ICO, Dec. 11, 2019; SEC Charges International Dealer that Sold Security-Based Swaps to U.S. Investors, Oct. 31, 2019; SEC Orders Blockchain Company to Pay \$24 Million Penalty for Unregistered ICO, Sept. 30, 2019; Press Release: SEC Halts Alleged Initial Coin Offering Scam, Jan. 30, 2018; Statement by SEC Chairman Jay Clayton and CFTC Chairman J. Christopher Giancarlo: Regulators Are Looking at Cryptocurrency, Jan. 25, 2018; Joint Statement by SEC and CFTC Enforcement Directors Regarding Virtual Currency Enforcement Actions, Jan. 19, 2018; Statement of Chairman Jay Clayton and Commissioners Kara M. Stein and Michael S. Piwowar on “NASAA Reminds Investors to Approach Cryptocurrencies, Initial Coin Offerings and Other Cryptocurrency-Related Investment Products with Caution” by NASAA, Jan. 4, 2018; Statement on Cryptocurrencies and Initial Coin Offerings, Dec. 11, 2017; Press Release: Company Halts ICO after SEC Raises Registration Con-



#### 4.1. The consequence of the DAO approach: the “token focus”

The aforementioned DAO approach is based on the idea that the regulation of ICOs must be linked to the nature of tokens. In other words, the ICO is not considered because of its structural features (blockchain technology, Bitcoin or Ether involvement, and so on), but only for its products: the tokens. The ongoing debate over the nature of digital tokens is of great topical importance. In particular, tokens can be grouped into four main archetypes: 1) currency/payment tokens;<sup>38</sup> 2) investment/securities/financial tokens; 3) utility tokens;<sup>39</sup> and 4) hybrid tokens.<sup>40</sup> This “token focus” and categorization<sup>41</sup> lead to an important regulatory consequence: the appeal of tokens (and their ICOs) under the laws in force, particularly for financial instruments (as in the DAO case), in accordance with the neutrality principle.

However, taking into account only the ICOs’ products, the tokens, without any considerations of their structural features would create a series of regulatory distortive solutions. First of all, this approach raises the question as to what extent securities regulation (in the EU, United States, or elsewhere) is applicable to ICOs and whether issuers have to publish and register a pro-

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cerns, Dec. 11, 2017; Statement on Potentially Unlawful Promotion of Initial Coin Offerings and Other Investments by Celebrities and Others, Nov. 1, 2017; all available at <https://www.sec.gov/news/public-statement/statement-potentially-unlawful-promotion-icos>.

<sup>38</sup> The case of ICOs that issue “payment” tokens is sensitive. Generally, the tokens, used to finance projects, are securities (see N. AGRAWAL, *SEC Chairman Clayton: Bitcoin Is Not a Security*, 2018, available at <https://coincenter.org/link/sec-chairman-clayton-bitcoin-is-not-a-security>) or, at most, hybrid tokens, while Bitcoin and other cryptocurrencies, as pure media of exchange, are something different (N. DAMODARAN APPUKUTTAN, *The Bitcoin Innovation, Crypto Currencies and the Leviathan*, in *Innovation and Development*, 2018, <https://doi.org/10.1080/2157930X.2018.1502249>). Also, for EBA, in its Crypto-Assets Report of 2019 “virtual currencies should not be confused with ‘electronic money’ within the scope of EMD2 or ‘funds’ within the scope of PSD2”, p. 5.

It is not a coincidence that little attention has been paid to tokens considered (mere) instruments of payment, focusing instead on their exclusion for MiFID purposes (F. ANNUNZIATA, p. 40). In accordance with this reading, the recent European Commission report has recognized only a few typologies of tokens that could be defined as “e-money” under the Electronic Money Directive (2009/110/EC or EMD2) (always at the European level). For example, only in one of its decisions did the European Court of Justice qualify Bitcoin as a “contractual means of payment” (CJEU, judgment in Hedqvist, C-264/14, EU:C:2015:718, para. 55; see also P. HACKER, C. THOMALE, *Crypto-Securities Regulation*, cit., p. 30).

As EBA declared in its Report: “Crypto-assets are not recognized in any of the Member States or by the European Central Bank as fiat money (i.e. value designated as legal tender, typically in the form of notes or coins), ‘deposits’ or as ‘other repayable funds’, as referred to in point (1) of Article 4(1) of the CRR” (EBA, Report, cit., p. 12). However, over and above the possibility of identifying a payment token’s ICO, it is evident that this approach demands a case-by-case analysis that can place substance over form; see A. BURNIE ET AL., *Developing a Cryptocurrency Assessment Framework: Function over Form*, in *Ledger Journal*, 2018, Vol. 3. In regard of the MICA proposal’s two new sub-categories of stablecoin, see par. 7.

<sup>39</sup> An example is Filecoin; in this regard, see F. ANNUNZIATA, p. 22.

<sup>40</sup> Cfr. FINMA, *Practical Guide for the Treatment of Requests Concerning Subjection with Reference to Initial Coin Offering*, 16 February 2018, available at <https://www.finma.ch/it/news/2018/02/20180216-mm-ico-wegleitung>. In the UK, its Crypto-Assets Task Force recognized only the first three categories. See CRYPTOASSETS TASK FORCE, *Final Report*, October 2018, available at [http://cryptoassets\\_taskforce\\_final\\_report\\_web.pdf](http://cryptoassets_taskforce_final_report_web.pdf).

<sup>41</sup> For a different classification, see A. BURNIE, J. BURNIE, A. HENDERSON, *Developing a Cryptocurrency Assessment Framework: Function over Form*, 2018, in ISSN 2379-5980 (online) DOI 10.5915/LEDGER.2018.121; the authors propose crypto-transaction tokens (which act as a cash substitute); crypto-fuel tokens (which underpin generic blockchain applications); and crypto-voucher tokens (which can be exchanged for a predefined asset).

spectus in order to avoid criminal and civil prospectus liability. This depends on whether tokens are considered “securities” under the EU Prospectus Regulation regime<sup>42</sup> (focusing on the European context), because if the token could be defined as a security, the ICO falls under the financial law.<sup>43</sup> Moreover, a European survey conducted by ESMA has highlighted that the majority of national authorities (i.e. Malta, France, Italy, etc.) are following this example, qualifying some crypto-assets (e.g. those with profit rights attached) as transferable securities or other types of MIFID<sup>44</sup> financial instruments.<sup>45</sup>

It is evident that this kind of token classification entails a lot of other important and legal impacts on the regulation of ICOs, including the trading phase.<sup>46</sup> But not only this. Such method should solve the regulatory problems concerning ICOs that issue securities and (eventually) e-money tokens,<sup>47</sup> but instead it leaves out utility and hybrid ones. Utility tokens grant access or rights to the company’s goods, services, or ecosystem, and they are not very interesting for the market.<sup>48</sup> For this reason, they frequently fall outside the scope of national financial regulatory authorities (which are the subjects more involved in this issue). As a consequence, the new (and few) national laws regarding ICOs consider – more or less – the utility and hybrid token categories (which share different components of securities/payment/utility tokens to different degrees). This approach is followed by Malta<sup>49</sup> and France,<sup>50</sup> for example, which have already introduced an ad hoc regulation only for ICO utility tokens, while the securities ones are filed under the financial law.<sup>51</sup> Switzerland,

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<sup>42</sup> P. HACKER, C. THOMALE, *Crypto-Securities Regulation*, cit.

<sup>43</sup> F. ANNUNZIATA, *Speak, If You Can*, cit., p. 16. N. POPPER, *A Venture Fund with Plenty of Virtual Capital, but No Capitalist*, 2016, available at [https://www.nytimes.com/2016/05/22/business/dealbook/crypto-ether-bitcoin-currency.html?\\_r=1](https://www.nytimes.com/2016/05/22/business/dealbook/crypto-ether-bitcoin-currency.html?_r=1); B. DALE, *The DAO: How the Employeeless Company Has Already Made a Boatload of Money*, 2016, available at <http://observer.com/2016/05/dao-decentralized-autonomous-organizations/>. SEC and Commodity Futures Trading Commissions, Hearing in February 2018.

<sup>44</sup> Markets in Financial Instruments Directive n. 2004/39/EU.

<sup>45</sup> ESMA, *Advice on Initial Coin Offerings*, cit., p. 5. In this sense, see the amendment proposal of MIFID 2 regarding a new category of “financial tokens”, Proposal for a Directive of the European Parliament and of the Council amending Directives 2006/43/EC, 2009/65/EC, 2009/138/EU, 2011/61/EU, EU/2013/36, 2014/65/EU, (EU) 2015/2366 and EU/2016/2341 - COM(2020)596.

<sup>46</sup> For example, if such kinds of “securities” tokens are exchanged on trading platforms, the matter is to assess if the regulation of trading venues (i.e. Markets in Financial Instruments Directive n. 2014/65/EU, MiFID2) should also apply in these cases. As it is well known, securities must be traded within the three categories of regulated markets: a) regulated market (RM); b) multilateral trading facilities (MTF); and c) organizational trading facilities (OTF). With reference to the EU regulation proposal, concerning the pilot regime for security tokens, see par. 7.

<sup>47</sup> For this approach, see also ESMA, *Advice on Initial Coin Offerings*, cit. and EBA, *Report with Advice for the European Commission on Crypto-Assets*, cit.

<sup>48</sup> On the application of a prospectus regime to hybrid tokens, see P. HACKER-C. THOMALE, *Crypto-Securities Regulation*, cit., p. 29.

<sup>49</sup> The Virtual Financial Assets law, already cited, is based upon the definition of a “virtual financial asset” or “VFA”, which “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 whose utility, value or application is restricted solely to the acquisition of goods or services, either solely within the DLT platform on or in relation to which it was issued or within a limited network of DLT platforms” (first part). The notion of a VFA is strictly connected to distributed ledger technology, and the regulation introduces a new subject: the so-called “VFA agent”.

<sup>50</sup> See before footnote n. 30.

<sup>51</sup> P. HACKER-C. THOMALE, *Crypto-Securities Regulation*, cit., p. 34.

on the other hand, has decided to consider ICOs issuing asset tokens as securities that fall under financial market regulation.<sup>52</sup> The doctrine seems to agree with this theory,<sup>53</sup> and some even go further,<sup>54</sup> suggesting that all tokens must lead back to the traditional (MIFID2) legal categories. In this regard, it is necessary to recall the opinion that has suggested that utility tokens are securities (in particular derivatives) in the light of MIFID2.<sup>55</sup> According to this approach, there is no reason for new regulatory solutions. However, the aim of this paper is to counteract this opinion.

## 5. Italy and the Consob initiative on ICOs

In Italy, Consob follows the SEC's approach when considering the ICO and its tokens in order to identify features it shares in common with the initial public offering (IPO) in relation to financial investment. In particular, Consob considers the combination of three elements: 1) a capital outlay; 2) an expectation of financial return; and 3) a risk assumption directly connected with the capital outlay. In the case of a positive result, the activity is banned pursuant to art. 99 of Leg. Decree n. 58/1998, which imposes the prospectus requirement.<sup>56</sup> However, last year, Consob decided to take a step forward by launching a consultation document<sup>57</sup> in order to open a public debate for an ad hoc ICO regulation as it waits for a common European guideline.

While analysing the proposal in detail is beyond the scope of this paper,<sup>58</sup> some important elements relevant to this paper's perspective will be highlight-

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<sup>52</sup> FINMA, *Guidelines for Enquiries Regarding the Regulatory Framework for Initial Coin Offerings (ICOs)*, 16 February 2018, which complements its earlier guidance from April 2017.

<sup>53</sup> In Italy, in particular, the majority of the authors do not consider crypto-assets a new legal category; F. ANNUNZIATA, *Speak, If You Can*, cit. In this sense, with regard to crypto-currencies, see M. SEMERARO, *Moneta legale, moneta virtuale e rilevanza dei conflitti*, in *Rivista di diritto bancario*, maggio/giugno, 2019, p. 6 ss.; E. GIRINO, *Criptovalute: un problema di legalità funzionale*, 2018, id.; G.L. GRECO, *Valute virtuali e valute complementari, tra sviluppo tecnologico e incertezze regolamentari*, id. For an investigation of the monetary evolution, see V. LEMME-S. PELUSO, *Criptomoneta e distacco della moneta legale: il caso bitcoin*, 2016/2017, id.

<sup>54</sup> For this distinction, see P. HACKER-C. THOMALE, *Crypto-Securities Regulation*, cit., p. 37, "As a general guideline, we suggest that hybrid tokens should not be considered securities unless any of the following two conditions are fulfilled: 1) the issuers, through their promotion materials and communication with investors, raise significant expectations of profits; or 2) most investors buy the specific tokens to sell them for profit, and the issuer knows or should have known this".

<sup>55</sup> F. ANNUNZIATA, *Speak, If You Can*, cit.

<sup>56</sup> In this regard, see Consob Decisions, n. 21023 and n. 21024, 31 July 2019; n. 20845, 13 March 2019; n. 20786, 22 January 2019, available on the authority website.

<sup>57</sup> Available at [http://www.consob.it/documents/46180/46181/doc\\_disc\\_2](http://www.consob.it/documents/46180/46181/doc_disc_2). For comments, see A. GENOVESE, *Innovazione tecnologica e trasformazione del settore finanziario tra Initial Coin offerings (ICOS) e investment crowdfunding: quali sfide per l'autorità di controllo?* in G. FINOCCHIARO-V. FALCE, *Fintech: diritti, concorrenza e regole. Le operazioni di finanziamento tecnologico*, 2019, p. 17 ss.; CAL, *Risposta al documento per la discussione "Le offerte iniziali e gli scambi di cripto-attività"*, cit.; P. CARRIÈRE, *Possibili approcci regolatori al fenomeno dei crypto-asset; note a margine del documento di consultazione della Consob*, available at [www.diritto bancario.it](http://www.diritto bancario.it); A. SCIARRONE ALIBRANDI, *Offerte iniziali e scambi di cripto-attività: il nuovo approccio regolatorio della Consob*, April 2019, id.

<sup>58</sup> For an in-depth analysis, see CAL, *Risposta al documento per la discussione "Le offerte iniziali e gli scambi di cripto-attività"*, cit.

ed. First of all, it should be noted that the choice of not applying (in this case) the financial law regime to ICOs (the already mentioned discipline prospectus, MiFID2, distance placement, etc.) suggests the introduction of an ad hoc regulation framework.<sup>59</sup> This solution is appreciable because – in line with the approach suggested in this paper – the simple application of the traditional financial law would add significant complexity to the ICO system without providing consumers with adequate protection and a clear regulatory framework for businesses.

Nevertheless, in accordance with the SEC regulatory orientation, Consob focuses (solely) on the category of hybrid tokens, in which owning elements belonging to financial products (capital investment, risk assumption, and yield expectation) does not (apparently<sup>60</sup>) fall under securities law. The majority of the ICOs have proposed their tokens as utilities (in accordance with the trend of “tokenizing” real objects) in order to escape from the securities legal framework. At the same time, it is evident that this approach confirms the Consob issuance that the real securities tokens must fall under the securities and market regulatory framework (MiFID2, etc.).

Furthermore, Consob has been induced to propose a hybrid token regulation not just for theoretical reasons but also to answer a more sensitive question regarding its functional and operational competences, especially in relation to the Bank of Italy, which prevents the Consob from interfering in issues lacking financial aspects. For this reason, the government (the national government and eventually the EU) should submit a concrete proposal for the regulation of ICOs, disregarding the share of competences between financial authorities. Indeed, a more careful analysis reveals that the same problem also affects the EBA<sup>61</sup>'s and ESMA's approach to the crypto-assets phenomenon.<sup>62</sup>

Returning to the Consob proposal, another appreciable aspect concerns the opt-in regime that takes into account the risks connected to a strong regulatory approach, following the French example. As Consob has already clarified in its Final Report,<sup>63</sup> a good regulatory solution should imply a clear definition of a series of important elements (like the Liechtenstein law that will be analysed in the following), including: the subjects entitled to issue the ICO; the legal form that the issuer has to assume; the identification of primary and secondary markets; and the attention for the custody phase.

Shortly, the Consob proposal should be seen as the first attempt in the ICO regulatory field,<sup>64</sup> which will need further technical study, especially within the European context.

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<sup>59</sup> In particular, Consob proposes an opt-in regime concerning two distinct phases: 1) the primary issue phase, conducted by equity crowdfunding platforms; and 2) the secondary and exchange phase on trading platforms.

<sup>60</sup> With regard to the attempt to consider hybrid tokens as derivatives under MiFID2, see F. ANNUNZIATA, *Speak, If You Can*, cit.

<sup>61</sup> European Banking Authority.

<sup>62</sup> In this regard, see the ESMA and EBA reports concerning crypto-assets enacted in 2019, already cited.

<sup>63</sup> [http://www.consob.it/documents/46180/46181/ICOs\\_rapp\\_fin\\_20200102.pdf/70466207-edb2-4b0f-ac35-dd8449a4baf1](http://www.consob.it/documents/46180/46181/ICOs_rapp_fin_20200102.pdf/70466207-edb2-4b0f-ac35-dd8449a4baf1)

<sup>64</sup> For this reason, tokens must be strictly connected to the start-up activity; only this close link should transform ICOs into virtuous market instruments, apart from the speculative initiative.

## 6. The need for a new regulatory approach to ICOs

ICO is an unregulated fundraising model based on blockchain that was introduced to satisfy specific needs, but recent research has suggested that some blockchain operators (the serious ones) are looking for a good regulatory solution that might be able to balance freedom with guarantees – a regulatory solution that, for many the reasons that will be discussed in the next paragraphs, should not be the one adopted by the SEC.

In their first stage of development, ICOs have been improved without any regulation; however, some studies have recently underlined that a minimum regulatory set is necessary for the future survival of these instruments because “any uncertainty about the proposed project (lack of presence on social media, shorter white papers, issuer domiciled in a tax haven) is negatively correlated to the success of the project, whereas signals that convey the quality of the project (director has a strong professional network, size of the project team) are positively correlated”.<sup>65</sup>

### 6.1. The ineffectiveness of the token differentiation approach to ICO regulation

First of all, a regulatory approach based on the different nature of tokens presents a very serious and concrete problem: uncertainty. As is generally known, a common European understanding of financial (or payment) instruments simply does not exist. As a matter of fact, the classification of financial instruments is the responsibility of each individual national authority and in turn depends on the specific national implementation of EU law. In particular, in the course of transposing MiFID1 into their national laws, every member state has defined the term “financial instrument” differently. It is evident that this situation causes problems for both the regulation and the supervision of ICO tokens.<sup>66</sup> In Italy, for example, the TUF<sup>67</sup> makes a distinction between financial instruments and financial products. Moreover, also at the European level, there are several definitions of securities depending on the legislative framework: MIFID2, Prospectus Regulation,<sup>68</sup> Anti-Money Laundering Directive,<sup>69</sup> and so on. Consequently, it would be difficult (or quite impossible) to address the qualification of tokens following this path. Because of these doubts, a new alternative solution is needed. In particular, as we will suggest in the following, it is necessary to develop a new legal category for tokens<sup>70</sup> and an ad hoc regulation.

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<sup>65</sup> R. AMSDEN, D. SCHWEIZER, *Are Blockchain Crowdsales the New ‘Gold Rush’? Success Determinants of Initial Coin Offerings*, April 2018, available at <https://ssrn.com/abstract=3163849>.

<sup>66</sup> ESMA, *Advice on Initial Coin Offerings*, p. 6.

<sup>67</sup> Legislative Decree n. 58/1998.

<sup>68</sup> 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.

<sup>69</sup> 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.

<sup>70</sup> For this position, see the opinion of L. SORELANSKI, *Réflexions sur la nature juridique des*

## 6.2. The inefficacy of a traditional financial framework for ICOs

The SEC approach suffers from other shortcomings that go beyond the legal qualification of tokens. ICOs are the result of a transaction carried out by an issuer to raise capital, and this dynamic could make them similar to the IPOs of securities. But even if ICOs and IPOs could have the same aim, they present different structural and technological features that should not be addressed by a set of common rules.

ICOs request an ad hoc regulation that can balance the different interests and risks involved in order to guarantee investments and customer protections (and their fundraising capacity). In particular, MIFID2 and the Prospectus Regulation could not appropriately manage the issuance of tokens, even if they are classified as securities. As has been mentioned, “MIFID II is far from being exhaustive, also because – although effective from 3 January 2018 – it actually represents the state-of-the-art of markets, and technological evolution thereof, in the years 2011–2013, i.e. when groundwork for the MIFID II regulatory framework was carried out. In short, MIFID II represents a context quite different from the current one: crypto-assets, as we observe them today, did not exist at that time”.<sup>71</sup>

To give some examples, the blockchain (permission-less) technology used by ICOs makes it extremely difficult to identify the issuer; it is unclear whether the company or the group of core developers initiating the token sale should be considered the issuer, or if the issuer is the blockchain-based organization itself (such as the DAO). At the same time, ICOs are carried out by new and different actors (miners, wallet services providers, custody service providers, etc.) that, in the traditional public offering system, simply do not exist. For these reasons, the Prospectus Regulation cannot offer much insight.

White papers<sup>72</sup> usually contain “a description on how the token will be used, its benefit to holders, and how blockchain architecture will operate ... the track record of the funding team”.<sup>73</sup> In this case, investors need information on both organizational structures (the blockchain-based vehicle and the underlying company/group) to adequately assess the quality of the investments, which are not included in the traditional financial prospectus. Moreover, the Prospectus Regulation does not impose the disclosure of ICO and blockchain organization code.<sup>74</sup> With regard to this specific aspect, some studies have already observed that the success of an ICO is linked to the online availability of its source code.<sup>75</sup>

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*tokens*, in *Bulletin Joly Bourse*, May 2018, stating that, with regard to the tokens typology: “Il est difficile de présenter une typologie exhaustive des *tokens* tant leurs caractéristiques peuvent être différentes d'un projet à l'autre”.

<sup>71</sup> F. ANNUNZIATA, *Speak, If You Can*, cit., pp. 6–7.

<sup>72</sup> S. HOWELL, M. NIESSNER, D. YERMACK, *Initial Coin Offerings: Financing Growth with Cryptocurrency Token Sales*, 2018, European Corporate Governance Institute (ECGI) - Finance Working Paper No. 564/2018.

<sup>73</sup> F. ANNUNZIATA, *Speak, If You Can*, cit., p. 12.

<sup>74</sup> “While developers often disclose the code on a voluntary basis, not all of them publish the code in or early enough to enable thorough vetting by external experts”, P. HACKER, C. THOMALE, *Crypto-Securities Regulation*, cit., p. 40.

<sup>75</sup> S. ADHAMI, G. GIUDICI, S. MARTINAZZI, *Why Do Businesses Go Crypto? An Empirical Analysis of Initial Coin Offerings*, in *Journal of Economics and Business*, 2018, available at <https://re.public.polimi.it/retrieve/handle/11311/1056221/292387/JEP%20published%20ICOs.pdf>, the authors also consider the importance of a pre-sale phase.

To resolve such incoherence, the prospectus regime doctrine has already suggested the introduction of a sort of “safe harbour provision” that should be adopted for the sale of tokens<sup>76</sup> or a “registration exemption designed specifically for blockchain-based tokens so parties that sell tokenized securities with blockchain technology will have a method of compliance that does not require section 5 registration or compliance with exemption requirements inconsistent with blockchain technology”.<sup>77</sup>

Indeed, it is clear that these positions are based upon the idea that this kind of regulation is not well suited to digital tokens because it just ignores important features of ICOs. In the light of such considerations, to ensure greater clarity with regard to these peculiarities, this paper proposes a new and ad hoc tokens and ICO legislative framework. Consequently, the main issue lies in the identification of a suitable regulation.

## 7. The European Commission’s regulation proposals on crypto-assets: some brief notes

With the aforementioned Commission’s regulation proposals,<sup>78</sup> the European authority is trying to achieve some ambitious and agreeable purposes: 1. guaranteeing the legal certainty; 2. developing (within the EU) crypto-assets markets, supporting innovation; 3. instilling consumers and investors protection; 4. ensuring financial stability.

At the same time, as the first reliefs have already treated, the European intervention is driven by the urgency to face the risk of the new and global private coin, such as the famous Libra of Facebook.<sup>79</sup>

Therefore, it is impossible to cover all the complex issues involved, for this reason, it is surely useful to mention only a few points for strengthening this paper thesis.

In particular, MICA proposes a bespoke regime for utility tokens and the so-called stablecoins,<sup>80</sup> in other words, the typologies which fall outside the fi-

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<sup>76</sup> However, in this case, the number of ICO profiles that should need to be considered is so relevant that the result seems to be a new publication regulation altogether: 1) information about the blockchain code (at least one month before the sale); 2) information regarding the company and core development team that prepared and issued the tokens; 3) information about the mining timing and, in particular, if and how many tokens were mined before the ICO; 4) rights and obligations embodied by the tokens; and 5) the concrete purpose and development steps funded by the collected investments. See P. HACKER, C. THOMALE, *Crypto-Securities Regulation*, cit., pp. 41–42.

<sup>77</sup> J. ROHR, A. WRIGHT, *Blockchain-Based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets*, in *Hastings Law Journal*, 2019, Vol. 70, p. 468.

<sup>78</sup> See footnote n. 1.

<sup>79</sup> More in detail, see D.A. ZETSCHE, R.P. BUCKLEY, D.W. ARNER, *Regulating LIBRA: The Transformative Potential of Facebook’s Cryptocurrency and Possible Regulatory Responses* (July 11, 2019). European Banking Institute Working Paper Series 2019/44, University of New South Wales Law Research Series UNSWLRS 19-47, Available at SSRN: <https://ssrn.com/abstract=3414401>.

<sup>80</sup> The regulation proposal introduces two stablecoin sub-categories: 1. ‘asset-referenced token’, which “means a type of crypto-asset that purports to maintain a stable value by referring to the value of several fiat currencies that are legal tender one, or several commodities, or one or several crypto-assets, or a combination of such assets”; 2. ‘electronic money token’ or ‘e-money token’, that “means a type of crypto-asset the main purpose of which is to be used as a means

nancial and e-money regulatory frameworks. Instead, the pilot regime suggests some exceptions - to the traditional trading rules - for creating a suitable secondary market for the new security tokens category.

For example, in the case of a public utility tokens<sup>81</sup> offering, it introduces some minimal rules regarding the issuer legal nature,<sup>82</sup> “the obligation to draw up a *crypto-asset white paper* in accordance with Article 5 (with Annex I) and the notification of such a crypto-asset white paper to the competent authorities (Article 7) and its publication (Article 8)”.

The national authorities are not empowered to pre-approval the document, but they can suspend or prohibit the offering, whether the crypto-asset at stake constitutes a financial instrument under the MIFID2.

Instead, in regard to the two stablecoin sub-categories, it recommends stricter rules.<sup>83</sup> For instance, the issuer of asset referenced tokens has to be authorized by the national authority as well as its white paper; moreover, only credit institutions and electronic money institutions can offer to the public this kind of token.

With reference to the security tokens, the European authority proposes to “create a pilot regime to allow for experimentation with the application of DLT in financial services ... [that] should not be too restrictive, but at the same time cannot lead to market fragmentation or undermine important existing regulatory requirements”. In this regard, the proposal introduced the new notions of ‘DLT market infrastructure’, ‘DLT multilateral trading facility’ or ‘DLT MTF’, ‘DLT securities settlement system’ and ‘DLT transferable securities’.

Indeed, the Commission – despite the neutrality principle<sup>84</sup> reference – was already forced to admit that only a gradual regulatory approach “trying to provide first legal clarity to market participants should regard permissioned networks and centralized platforms before considering changes in the regulatory framework to accommodate permission-less networks and decentralized platforms” would be conceivable.<sup>85</sup> The European authority, in that case, took into account the different questions provoked by technology, such as ERC20 (which represents the most common system used by ICOs issuers), and should confirm the inefficacy of the traditional regulatory framework for these kinds of tokens.<sup>86</sup>

For these reasons, such regulation choices seem to match with this paper, related to the need for an ad hoc legal framework for ICOs (even if they issue security tokens).

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of exchange and that purports to maintain a stable value by referring to the value of a fiat currency that is legal tender” (art. 3, par. 1, (3) e (4).

<sup>81</sup> Art. 3, par. 1 (5) “utility token” means a type of crypto-asset which is intended to provide digital access to a good or service, available on DLT, and is only accepted by the issuer of that token”.

<sup>82</sup> Art. 4.

<sup>83</sup> More in detail, see D.A. Zetsche, F. Annunziata, D.W. Arner, R.P. Buckley, *The Markets in Crypto-Assets Regulation (MiCA)*, cit.

<sup>84</sup> With regard to the neutrality principle and its limits, see. F. Mattassoglio, *Algoritmi e regolazione. Circa i limiti del principio di neutralità tecnologica*, in this *Review*, n. 2/2018, p. 226.

<sup>85</sup> European COMMISSION, *Consultation Document*, cit., 30.

<sup>86</sup> As has been underlined, “we will need to acquire a greater understanding of the impact that *lex cryptographica* could have on society, observing and analysing the deployment of blockchain-based system and carefully evaluating how to regulate the technology.” See P. DE FILIPPI, A. WRIGHT, *Blockchain and the Law: The Rule of Code*, Harvard University Press, 2019, p. 208.



## 8. The Liechtenstein Tokens law: a good solution?

For the purposes of this article, a very important role should be played by the Law on Token and TT Service Providers (Tokens and Service Providers Act) recently enacted by Liechtenstein.<sup>87</sup> For the first time, this law aims to introduce a general regime for all categories of tokens, it defines as “piece[s] of information on a TT System which: can represent claims or rights of memberships against a person, rights to property, or other absolute or relative rights; and is assigned to one or more TT Identifiers”.<sup>88</sup> The law intends to become *the* framework for all token categories without any other distinction (securities, payment, utility, hybrid, and so on). As a consequence, this system would abandon the case-by-case analysis (as imposed by the SEC approach) and create greater legal certainty for issuers because the nature of the token would no longer be in dispute. Moreover, in order to guarantee its longevity (taking into account the speed at which innovation occurs in technology), the law does not mention the blockchain concept at all. Instead, it introduces the broader notion of trustworthy technology (TT).

According to the idea that these technologies change the market structure, the law identifies a series of new subjects directly involved in the ICO procedure. For example, there are entities that evoke the function of a TT identifier;<sup>89</sup> TT service provider;<sup>90</sup> token issuer;<sup>91</sup> token generator;<sup>92</sup> TT key depository;<sup>93</sup> TT token depository;<sup>94</sup> physical validator;<sup>95</sup> TT protector;<sup>96</sup> TT exchange service provider;<sup>97</sup> TT verifying authority;<sup>98</sup> TT price service provider;<sup>99</sup> and TT identity service provider.<sup>100</sup> For all of them, specific procedures and requirements have been introduced, such as minimum capital, special internal control mechanisms, a registration and reliability regime, etc.

On the other hand, the law regulates the “power of disposal” and the “right of disposal” over the token (arts 5–8); it provides a regulation for the hypothe-

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<sup>87</sup> Law of 3 October 2019 on Tokens and TT Service Providers (Token and TT Service Provider Act; TVTG), available at [https://www.regierung.li/media/medienarchiv/950\\_6\\_04\\_11\\_2019](https://www.regierung.li/media/medienarchiv/950_6_04_11_2019).

<sup>88</sup> Law of 3 October 2019, cit.

<sup>89</sup> Art. 2, an identifier that allows for the clear assignment of tokens.

<sup>90</sup> Art. 2, a person who exercises one or more functions under (l) to (u).

<sup>91</sup> Art. 2, a person who publicly offers tokens in their own name or in the name of a client.

<sup>92</sup> Art. 2, a person who generates one or more tokens.

<sup>93</sup> Art. 2, a person who safeguards TT keys for clients. With regard to the rules for dealers of crypto-assets, see D. CHU, *Broker-dealers for Virtual Currency: Regulating Cryptocurrency Wallets and Exchanges*, available at <https://columbialawreview.org/content/broker-dealers-fo>.

<sup>94</sup> Art. 2, a person who safeguards tokens in the name of and on account of others.

<sup>95</sup> Art. 2, a person who ensures the enforcement of rights in accordance with the agreement, in terms of property law, represented in tokens on TT systems.

<sup>96</sup> Art. 2, a person who holds tokens on TT systems in their own name on account for a third party.

<sup>97</sup> Art. 2, a person who exchanges legal tender for payment tokens (and vice versa) and payment tokens for payment tokens.

<sup>98</sup> Art. 2, a person who verifies the legal capacity and the requirements for the disposal of a token.

<sup>99</sup> Art. 2, a person who provides TT system users with aggregated price information on the basis of purchase and sale offers or completed transactions.

<sup>100</sup> Art. 2, a person who identifies the person in possession of the right of disposal related to a token and records it in a directory.

sis of acquisition in good faith (art. 9) and measures for the cancellation of tokens (art. 10). In particular, for ICOs, art. 30 introduces the concept of “basic information” that must be published before the token’s issuance and a series of exceptions (art. 31).

In accordance with art. 33, the basic information must “include the following: a) information about the Tokens to be issued and associated rights; b) the name of the TT system used; c) a description of the purpose and nature of the legal transaction underlying the Token Issuance; d) a description of the purchase and transfer conditions for the Tokens; e) information about the risks associated with purchasing the Tokens; f) for the issuance of Tokens which represent rights to property: 1. evidence of a registered Physical Validator regarding ownership of the property; and 2. a confirmation from a registered Physical Validator that the rights registered in the issued Tokens are also enforceable in line with the basic information”.

Although it is difficult to imagine what effect this law would have on the ICO ecosystem, Lichtenstein’s reputation cannot be ignored, even if it has recently been removed from the tax haven blacklist. However, its attempt to decrypt the tokens phenomenon without pushing it down within the perimeter of other legal frameworks is commendable.

## 9. Waiting for the EU ... The paradoxical effect of ICOs’: a national regulation for a global phenomenon

Thanks to the previous considerations, it is now possible to appreciate the reasons why the suggested approach is based upon an ad hoc regulation<sup>101</sup> and to understand why tokens and ICOs – or any other future form of crypto-funding – should not be approached using traditional regulatory categories. In other words, the neutrality principle should not be applied in these cases because they intrinsically involve new features and risks posed by the new crypto paradigm created by a decentralized network without a central (and liable) authority. The situation is certainly different for permissioned tokens, which should allow the application of a more traditional regulatory regime, but as has already been argued, the majority of ICO initiatives and their tokens are born in a “distributed” playing field. This reality cannot be ignored.<sup>102</sup>

Consequently, effective investor and consumer protection must be based on an understanding of these peculiarities; moreover, the use of traditional legal notions and frameworks could be confusing for the market.

At the same time, it must be acknowledged that ICOs and their tokens are a global phenomenon that should not be regulated at the national level; instead, International or at least European regulation is required.<sup>103</sup> For this rea-

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<sup>101</sup> F. ANNUNZIATA, *Speak, If You Can*, cit., p. 50.

<sup>102</sup> In this regard, see P. De Filippi, A. Wright, *Blockchain and the Law: The Rule of Code*, cit.

<sup>103</sup> D. Johnson, D. Post, *Law and Borders: The Rise of Law in Cyberspace*, in *Stanford Law Review*, 1996, Vol. 45, pp. 1367–1402; id., ‘Chaos Prevailing on Every Continent’: Towards a New Theory of Decentralized Decision-Making in Complex Systems, in *Chicago Law Review*, 1998, Vol. 73, No. 4, pp. 1055–1099. For a different approach, see J. Goldsmith, T. Wu, *Who Controls the Internet? Illusions of a Borderless World*, Oxford, 2006, 142 ss.; L. Lessing, *Code: And Others Laws of Cyberspace*, Basic Books, 1999.

son, it would be desirable an urgent European regulatory intervention.<sup>104</sup>

In this period of uncertainty – in a still open debate – crypto-operators<sup>105</sup> and crypto-investors are looking for any regulatory solution that could improve their businesses and gains. Taking the wrong decision now and introducing an inappropriate regulation could generate the risk of inducing ICO issuers (if any) to getaway. On the other hand, finding the right “receipt” could represent a great outcome in order to create a crypto-friendly field that is able to capture billions of crypto-assets.<sup>106</sup>

From this point of view – and as long as there is no common European legal framework –, this matter can be seen as producing a paradoxical effect of proposing a national regulation for a global phenomenon. The game is just beginning, but in our view, at this moment, there is only one certainty: there is a need for a “new” regulatory approach for tokens as autonomous legal category in order to ensure greater investment and consumer protection. Shortly, there should no longer be any securities or payment instruments, just tokens.

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<sup>104</sup> Hoping it won't be followed the same path of the crowdfunding regulation ((Regulation No. 1503/2020 - *European Crowdfunding Services Providers Regulation*), which has been enacted only recently; with regard to this issue see E. Macchiavello, 'What to Expect When You Are Expecting' a *European Crowdfunding Regulation: The Current 'Bermuda Triangle' and Future Scenarios for Marketplace Lending and Investing in Europe*, 2019, European Banking Institute Working Paper Series – No. 55, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3493688](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3493688).

<sup>105</sup> At least those who would prefer to operate in a “regulated” market.

<sup>106</sup> A fitting regulatory solution for ICOs – or any other kinds of offerings based on blockchain technology – should not only be advantageous for the country but also serve a purpose from the perspective of the money laundering issue. For these considerations, see M.B. Le Maire, J.P. Landau, *Digital Currencies. An Exploration into Technology and Money*, June 2019, available at [www.economie.gouv.fr/files/files/2019/ENG-synthese-ra-crypto-monnaies-180705.pdf](http://www.economie.gouv.fr/files/files/2019/ENG-synthese-ra-crypto-monnaies-180705.pdf). In this moment, without a regulatory framework, ICOs and, generally speaking, all the transactions in crypto-assets should make them preferred vehicles for illegal practices. As a matter of fact, the application of the preventative measures enacted at the European level by the 5th Anti-money Laundering Directive (Directive (EU) 2018/843), which already includes the trade in crypto-assets (platforms and custodian wallet providers of crypto-assets) as entities that are subject to requirements relating to money laundering, requires a regulated context.