

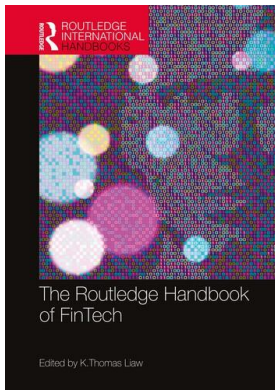
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## **The Routledge Handbook of FinTech**

K. Thomas

### **Initial coin offerings**

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# 8

## INITIAL COIN OFFERINGS

### A new trend in the market

*Ana García Rodríguez*

#### 1 Initial coin offering

##### 1.1 Definition

An initial coin offering or initial cryptocurrency offering (“**ICO**”) consists of a presentation to the market of an offer to sell a cryptocurrency or token. Despite the complicated terminology an ICO is no more than a method of raising funds based on the swap of a promise to the future acquisition of “digital currencies” or “tokens” to be created in exchange for existing and liquid digital currencies (i.e. Bitcoins or Ethers) or even legal currencies (i.e. dollars or Euros). These digital currencies have been defined as “digital coupons”. Tokens are issued by an untraceable distributed ledger technology or blockchain<sup>1</sup> and by definition can be understood to be subject to trade in a simple way, even though their disparity with shares is that they do not confer the rights a shareholder obtains<sup>2</sup> when purchasing a transferable security.

What should be understood by *token*, a term which is en vogue and yet whose meaning is difficult to capture? In the context of an ICO, the *token* represents the unit of value that is offered to the market receiving the “issuance” in exchange for the investment carried out so that the offering party can undertake an entrepreneurial project. The rights inherent to that unit of value can be of different natures and may vary from economic rights (expecting the future value of the investment will increase with time) to any kind of participation in the project (including receiving any product or service by it created), both as a way of raising funds.

A configuring element of this new kind of fund raising technique is the lack of any specific regulation, given the fact that it is neither subject to the regulations of either the issuing country nor the country whose investors the offer is aimed at. This is in part due to the fact that it is a new financing method and that the legislator had not taken into account the possibility of its existence when promulgating the Securities Market Regulation. Moreover, the outsourcing methods used and the difficulty of determining the geographical area involved and the nationality of the offerees being targeted, adds a layer of complication to being able to determine which should be the regulation governing the issuance and placing of these kind of offerings.

Due to their novelty on the market, ICOs have not been expressly regulated in any country of continental law,<sup>3</sup> however, there are signs that perhaps point to financial instruments being subject to specific regulation in the coming years.<sup>4</sup>

It is undeniable that ICOs share characteristics with crowdfunding and capital increase techniques, in regard to their purpose, given the fact that all of them fall under the category of methods of raising funds amongst the general public; in fact, these have been used by blockchain developers in order to finance their business plans. ICOs can also be used in the interest of science and society in general, for example to develop a new cryptocurrency, new distributed ledger technologies, services or platforms. A significant number, not to say the majority, of the business strategies looking for funding by means of an ICO are still in a preliminary phase, where the first steps to implement the business idea have not yet been taken.

The ICO issuance is generally carried out as a first way of raising funds for a project to be developed without a real need to justify whether the project will be viable or not. Doubt arises as to whether these funds will truly be used in the project they were raised for or if they will be used for other purposes or no purpose at all. The current lack of an *ad hoc* regulation is the key to the characterization of many ICOs as mere donations, given the fact that in the way they are configured, the counterparty risk is total for the fund provider, who can only expect the project to be successful, based on its potential. Without a legally binding arrangement to use the funds for the precise goal for which they were raised and without a legal framework sanctioning their uses in other ways, there is a significant space for fraud.

## *1.2 Why invest in an ICO?*

Once the business idea has been implemented and is functioning, those tokens or cryptocurrencies will grant access to the services provided by the issuing company, using the cryptocurrency as the payment method for the services. Should the business idea become profitable, investors will benefit from the company's value increase, hence, the issued cryptocurrency's value increase.

A key element in the definition of a cryptocurrency, as opposed to the definition of a share, is the lack of shareholder rights inherent to a right in cryptocurrency (i.e. political or economic rights). Participation in an ICO does not necessarily mean the acquisition of shares or any other similar instrument from the issuing entity, meaning the raising of capital is permitted without any dilution of it. This is a basic characteristic of an ICO and one that issuers have agreed to clarify to investors in their brochures or *white papers*. It is usual to make clear, when explaining the nature of the ICO, that it is understood that the purchase of a cryptocurrency or token does not imply the purchase of shares or any other equivalent instrument, present or future in any corporation or entity, listed or not that could be created in any jurisdiction.<sup>5</sup> The investment is referred to as a contribution to the development of the business plan presented with the "hope" of this being in fact developed so that the investor can benefit from the service created.

Even if it is true that some tokens invest their owners with the right to receive a sort of "dividends" or profits from the future enterprise, the majority of ICOs promise to provide services such as storage in a future cloud, services of prediction of the evolution of the markets or even the issuance of prepay cards that confer liquidity to the owner of the cryptocurrency as well as giving access to the Visa or Mastercard network.<sup>6</sup> However, it must be kept in mind that many tokens and cryptocurrencies on the market today have a primarily speculative goal. This means that a great number of the investors in this market have the idea of selling their tokens or cryptocurrencies at the highest possible price; regardless of the interest they may have on the failure or success of the underlying business idea.<sup>7</sup> The only relevant success in this respect will be an increase in the value of the token or cryptocurrency and this can be achieved by mere speculation on offer and demand.

Even though some investors do believe in the possibility of the creation of the promised services, the greatest attraction of ICOs and the one understood to generate the record number of fund raisings, – which are, in fact, weekly overtaken by investments in unknown entities until the ICO issuance or even until its earnings report –, is the exponential value increase of the new cryptocurrency or token received in exchange for the investment. Investors in ICOs seek fast and high profits, as does any other investor, but in exchange for a very high risk.<sup>8</sup> The granting of conventional credit is subject to the scrutiny of the business proposal by banks or venture capital entities, whereas the feasibility analysis in ICOs is either minimum or not carried out at all, due to three simple facts (i) developers do not share enough information in their brochures, (ii) information provided is not verifiable, (iii) even if information about the project is sufficient, its study is not appealing to the majority of investors participating in ICOs given its technical complexity (i.e. usage of coding or highly complex algorithmic formulas).

Value hikes taking place in the cryptocurrency market are not usually backed up by value creation in the entity presented in the ICO, but are mere speculation. Numbers in this sector seem to be rising very rapidly and show no sign of stopping any time soon, although they have experienced a slowdown; not even rumors of a bubble have discouraged investment.

A great deal of the attraction of ICOs is explained by the lack of tailored regulation, which leaves the issuer with a certain freedom regarding design and implementation. Resorting to an ICO as source of financing reduces transactional costs, as well as the time dedicated to presenting and defending the project to banking and venture capital entities or looking for sponsors and, even more importantly, it grants access to financing in the extremely early stages of the project when it is very difficult to obtain financing through other methods.

### 1.3 Stages of an ICO issuance

The most common way of carrying out an ICO is by means of the Ethereum or Bitcoin technology, this is, the new issuer uses the blockchain or public ledger that is intrinsic to Ethereum or Bitcoin and, by this means, issues a new cryptocurrency or token. These new cryptocurrencies or tokens are valued by their issuers in Ethers or Bitcoins, that is, a price is established for investors to purchase them. The investor receives a new currency while the issuer receives, most of the time, one of the most liquid and most valuable currencies in the market: Bitcoins or Ethers.

The issuance requires issuers to draft a smart contract, which is a coded extract that together with Ethereum or Bitcoin technology will automatically issue new tokens or cryptocurrencies when receiving in exchange, as a payment method, Ethers or Bitcoins.

Issuers gather together all the information regarding cryptocurrencies or tokens to be issued, as well as the characteristics of the business plan they wish to implement, in a brochure or *white paper*.<sup>9</sup> The content of this brochure is not predefined – although in the most sophisticated and rigorous ICOs mirrors IPOs prospectuses – and therefore, being of free choice, is not compulsory, even if it is common for issuers to present and justify the viability of their business plan as well as the need for the financing they are requesting. In addition, the white paper is targeted to any kind of investor through the most imaginative ways, social networks, massive email campaigns, website, or similar alternatives, without any oversight of these mass campaigns.

A deadline is set for interested parties to acquire said tokens or cryptocurrencies; usually it is set somewhere between two weeks and a month after the ICO. During this period, purchase is possible 24 hours a day. When the deadline arrives, the purchase of the token or

cryptocurrency is materialized by the receipt of a PDF document informing the investor that once the business plan implementation is completed, investors will have access to the offered services or receive the cryptocurrency for whose issuance the financing was requested.

In essence, the issuer receives a non-existing asset whose value is zero at the moment of its receipt. However, it is also true that the issuer has vowed and committed to implement his business plan in order to grant real value to the issued non-existing asset (cryptocurrency or token), backed by a tangible asset or service. However, chances are the cryptocurrency will continue as an illiquid asset, if it is backed by a future and indetermined investment rather than a real one. This will end up with its value subject to speculation, which could turn the cryptocurrency into an illiquid asset, hence, useless for the purpose it was issued for, and resulting in nobody wanting to purchase it.

#### *1.4 Lack of regulation*

Failure to implement the business plan referred to in the previous section is a consequence derived from the lack of specific regulation on the matter. Currently, ICOs are not subject to regulation in the majority of countries, be they European, Asian or American. However, regulators are becoming increasingly uncomfortable with this lack of control and are bringing up the possibility of submitting ICOs to the Securities Markets and Anti Money Laundering Regulation, or even directly prohibiting them until a specific regulation comes forward, as has been the case in certain radical economies, as we will detail later on.

Lack of regulatory control of the issuers, together with the fact that they expressly state in their brochures their lack of accountability for the non implementation of the business plan the ICO presents, raises concerns among regulators where this market is growing most, and many of them have already commented on it.

##### *(a) USA and Canada, case-by-case analysis*

ICOs became an increasingly popular means of raising capital in the USA in 2017 and 2018, with icodata.io showing over USD 7.8 billion raised from ICOs in 2018 alone. The ICO market, however, has cooled considerably in 2019, with icodata.io showing only 98 ICOs raising an aggregate of USD 0.36 billion as of the end of October 2019, and this decrease is likely a result of increased scrutiny from regulators.<sup>10</sup>

On 25 July 2017 a report was published by the Securities Exchange Commission (SEC) analyzing the possibility of the application of the American Securities Regulation<sup>11</sup> to the activities of offer and sale of cryptocurrencies or tokens.<sup>12</sup> It must be stated that each case is unique and, therefore, application of Securities Regulation should be analyzed on a case-by-case basis, taking into consideration the economic reality of the transaction, regardless of the corporate form or technology used to carry out the specific offer or sale.<sup>13</sup> Even when the sale of tokens is a clear investment, the SEC only has jurisdiction to regulate it if it is a security. Before the boom of ICOs, the definition of a security was periodically defined on a case-by-case basis in litigation involving investments backed by unusual assets. In these cases, courts typically ask whether an investment is a security under the Supreme Court's Howey test. If it is an investment contract under that doctrine, it is a security subject to SEC disclosure and anti-fraud requirements. If it is not, securities law does not provide the SEC with a basis for regulating the transaction.<sup>14</sup>

The application of the Howey test, which involves analysis of when the asset can be considered as a security in line with the legal definition passed by Congress, is not a simple thing

and can entail many reputational problems for the Government if, as a result of the test, the consequence is the blocking of activities that could inject liquidity into the entrepreneurial ecosystem.

This challenge of responding to ICOs illustrates the difficulties involved in regulating innovation. For the most part, the SEC has applied old legal standards to a new problem. Though it should be congratulated for its work, the SEC should not assume that its Regulation by Selective Enforcement program has completely resolved the legal issue of when a token is a security.

An alternative method used in recent times to avoid the need for a prospectus and all the accompanying regulatory proceedings required to launch an IPO is the Private Placement. This alternative placing method was created under Rule 504 of the Securities Market Law. Therefore, when an investor is willing to limit the ICO to Private Placement requirements, a safe harbor can be found.<sup>15</sup>

Following the same line, the Canadian Securities Administrators (CSA) have published a warning for entities carrying out cryptocurrency offerings, in relation to the possibility of application of the Canadian Securities Regulation, more precisely referring to the obligation of publishing a prospectus or registry obligations.<sup>16</sup> The CSA stresses that these cryptocurrencies or tokens are being advertised as if they were software products, which, *a priori* would mean that the Securities Regulation is not applicable. However, CSA adds that even if what is on offer are not shares, preferred shares or similar instruments, they could in fact fall under the category of securities. For this reason it encourages entities carrying out ICOs to analyze whether what is being issued is, or is likely to be considered as, a security, especially in those cases where the value of the cryptocurrency or token is linked to the future benefits or success of the business. In such cases, there is a chance that the Securities Regulation might be applied.

### *(b) Singapore, trend change*

The Monetary Authority of Singapore (MAS) and the Commercial Affairs Department (CAD) of Singapore have adopted a similar path after changing the position they had maintained since 2014.

Until mid-2017 Singapore was considered one of the most welcoming jurisdictions for ICOs, as cryptocurrency or token issuances were not *per se* considered to be securities or currency offerings and therefore were not subject to national Securities Markets Regulations. This position was nuanced in August 2017 when MAS clarified that if a digital token constitutes a product regulated under the securities laws administered by MAS, the offer or issue of digital tokens must comply with the applicable securities laws; therefore the Securities Regulation applied on the functions of the issued tokens as well as on the emission method used. This shift in position was due to the fact that tokens are no longer mere cryptocurrencies, but present new functionalities and, more precisely, deliver the possibility for the issued token to represent ownership or an interest in the assets or property of the issuer and, therefore, an ICO can also be considered a regulated securities offering<sup>17</sup> (i.e. there is an obligation to reveal certain information elaborated by professional advisors, such as lawyers or finance experts, or even an obligation to seek prior authorization if not falling under an exempted category). Special care should be given to intermediaries “dealing with or facilitating the trading of virtual currencies” or who carry out the activity of “marketing collective investment schemes” because even if token and cryptocurrency issuances are not at first glance a securities issuance, this does not mean they operate in a completely deregulated

market, and especially seeing as it is expected that the new regulatory framework could, according to local publications, extend its application to “intermediaries who buy, sell or ease the exchange of virtual currencies”.<sup>18</sup>

*(c) China and South Korea, temporary ban?*

The People’s Bank of China has gone further by banning ICOs on a national level by considering them illegal and fraudulent as well as generators of great financial risks.<sup>19</sup> However, according to statements by an employee of the Banking and Financial Institute of China, numerous publications<sup>20</sup> affirmed that this ban was temporary and would be lifted once a specific regulatory framework for ICOs and the projects behind them was established. Almost three years have elapsed since the ban was imposed, and it still remains in place. Moreover, the People’s Bank of China declared during the first quarter of 2020 that not only are ICOs and STOs considered fraudulent and, accordingly, illegal, but any fund-raising proceeding from an ICO completed in China during the last years must be returned to the investors.

Similarly, the Financial Services Commission of South Korea<sup>21</sup> banned any fund-raising activities for virtual currency, regardless of the designation they receive, given that their commercialization needs to be strictly controlled and monitored.<sup>22</sup>

*(d) Italy’s legislative response*

Italy was the first country to include digital currencies and providers of services related to them as activities and individuals subject to the Anti Money Laundering Regulations, as a result of a legislative modification introduced after the Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing.<sup>23</sup>

The concept of “virtual currency” is defined as any “digital representation of value, not issued by a Central Bank or Public Authority, not necessarily linked to a legal currency, used as a means of exchange for the purchase of goods and services and transferred, maintained and negotiated virtually”; “other non financial operators” providers of virtual currency services are understood as “natural or legal persons that provide third parties, in a professional way, with functional services to use, exchange, store virtual currencies, as well as to convert them into legal currencies”. These operators must comply with certain obligations under Anti Money Laundering legislation; virtual currency suppliers are to be registered in a special registry of the *Organismo degli Agenti e dei Mediatori Creditizi*, which is responsible for the administration of the registry of financial agents and brokers, in concordance with Italian regulation.<sup>24</sup> To date, there is no specific regulation of ICOs as a separate asset class and all the regulatory exercise must be focused, by implementing analysis by analogy, to the European Financial Instrument Legislation.

*(e) Switzerland, research process*

The Swiss Financial Market Supervisory Authority (FINMA) has not been so blunt; this could be due to the high number of ICO issuances in this jurisdiction and the wish to maintain those issuers inside the territory. It is estimated that between January and October 2017, Switzerland raised around USD 600 million in ICOs: four of the six largest ICOs that have taken place until now were issued from Switzerland (i.e. Tezos, Bancor, Status and The DAO).<sup>25</sup>

FINMA considers ICOs not to be subject to any specific regulation in Switzerland; however, it confirms it will carry out an investigation to determine whether any of the ICOs that have taken place under its jurisdiction would fall under the existing Securities regulatory framework.

On 29 September 2017 FINMA also published some guidelines on the regulatory treatment of ICOs “*FINMA Guidance 04/2017 Regulatory Treatment of Initial Coin Offerings*”<sup>26</sup> where, among other issues, the possibility is raised of applying Anti Money Laundering and Terrorist Financing Regulations on ICOs.

Finally, FINMA’s guidelines recommend securities issuers to become informed of obligations applicable to their business plan in the same way as stipulated in the Securities Regulation. In conclusion it might be said that FINMA considers it more than possible that ICOs figure as securities issuances subject to Swiss Securities Regulation.

#### (f) *Other responses*

Although not directly linked to the regulation of tokens, it is important to highlight the consolidation process in the cryptocurrency market, given that this will undoubtedly generate a reaction from the Central Banks of different countries regarding their monetary policies. These will maintain monopoly regarding currency issuance and price control of the different legal currencies. The actual cryptocurrency market is overpopulated, many of the existing cryptocurrencies risk losing all of their value because it makes little sense to have 1,101 cryptocurrencies<sup>27</sup> in circulation; however, claiming that the market will cease to exist seems like an extreme assumption.<sup>28</sup>

Although no cryptocurrency is likely to take the place of legal currencies either in the short or in the long term, and monopoly over them will still lie within the powers of the Central Banks, the passive position the banks have been maintaining in regard to them has disappeared. The economic crisis has brought together the collapse of the interest rates to negative figures and the accumulation of cash money. Search for investment opportunities divesting from the traditional banking system and the lack of trust that has grown around the system after the 2008 economic crisis have resulted in the appearance of ICOs and cryptocurrencies.

The CSA have expressly stressed the need to study these issuances with the goal of protecting the investor and the SEC states in an uncontestable way that, should these offers constitute a securities offering not falling under any exemptions, they should respect investors’ rights with special care towards their right to information.

The SEC makes reference to the irrelevance of the issuing entity being a traditional corporation or a decentralized autonomous organization, of the compensation for said securities being in USD or virtual currencies, and of said securities being distributed by certified documents or by means of distributed ledger technologies.

An offer of tokens or cryptocurrencies can constitute an offer of securities, which determines the need to provide investors with all procedural protection and information necessary in order for them to make an informed decision. Also, if the issuing entity cannot rely on any exemption contained in national law to avoid application of Securities Regulation it shall, probably, be subject to registration under competent national authorities and present a clearly regulated offering document. Some issuers are already aware that their issuances may be considered as a securities issuance, as has happened with Blockchain Capital’s ICO – for their part they expressly resorted to an SEC exemption to avoid ICO regulation.



*(g) Legal shape of ICOs under European Law*

The European Securities Markets Authority (ESMA)<sup>29</sup> has already advised of the risk of investing in cryptocurrencies, given the high volatility these can experience and the risk of ICO issuers not complying with relevant European legislation on the matter (i.e. Securities Markets Regulation applicable to securities issuance). In its statement ESMA also points to the fact that it is possible for ICOs not to be covered by EU regulation and, consequently, recognizes the lack of investor protection to this extent.

Let us define tokens: tokens are no more than “virtual” rights that only exist in the field of electronic transactions carried out in the website environment, which means we should rule out them being a “thing” as defined in Continental Civil Codes, because “things” are “objects with embodied existence verifiable by means of senses or instruments”, and should be treated as legal constructions derived from and articulated around the contractual conditions of the offer in which they are included.

Based on this premise (i.e. tokens as contractual elements), to determine how tokens should be treated, we should carry out an interpretation of the contracts (in this case Smart contracts) they derive from and, only then, categorize them, this is, to carry out “their inclusion in a determined type, findings about their nature and of the applicable law”. Nevertheless, given the inexistence of a standardized contract regulating the issuance of each token, and based on the premise that each issuance is one of a kind and its analysis should be conducted on a case-by-case basis, our duty should be limited to verifying, in an abstract way, whether tokens or the legal transactions they derive from could be included under any of the legal concepts contemplated by the European legislation for the financial regulation area.

In this sense, taking into consideration the aforementioned characteristics of the tokens, it is appropriate to verify whether they might be considered to constitute “transferable securities” in the sense of Article 4 of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments (“MiFID II”).

The main challenge we are faced with when assuming this duty is that “MiFID II does not want to be the go to text when trying to decide if something is or is not a transferable security”.<sup>30</sup> Aware of the complexity of trying to define such a concept, the legislator limited itself to “articulating” “some legal notes”, “without deliberately entering into detail”.<sup>31</sup> This has been enough for part of the doctrine to consider the will of the legislator to be left in the hands of the praxis and the continued use the ultimate determination of the figures and innovations that fulfilling the aforementioned “legal notes” should be incorporated to the “core of the figure we refer to as «transferable securities»<sup>32</sup>, based on a “factual analogy”<sup>33</sup> or “economic function equivalence” test.<sup>34</sup>

As a consequence, this legal analysis cannot cover in whole the legal characterization of tokens from the view of transferable securities, it being restricted to verifying if the “legal notes” proposed by legislation are fulfilled or not.

In this sense, what is “considered as transferable security [is] any entitlement right in assets, whatever its nomenclature or denomination, that, based on its unique legal configuration and transmission regime, is bound to be traded generally and in an arms-length way in a financial market”.<sup>35</sup>

From a general perspective, Sánchez Andrés considers that “for a legal position to be consolidated” as a transferable security “a series of characteristics must be met, among which is specially highlighted the possibility to rights in assets that permit their treatment as ‘things’ and which results, not only in free circulation on the market, but also purchasing and selling

massively on a public market according to impersonal factors regarding price and quantity” (i.e. negotiability).<sup>36</sup>

In connection with the first element (i.e. “rights in assets”), Díez-Picazo<sup>37</sup> defines them as “subjective rights whose aim is the attribution to the person of a [legal] power of economic content or dominion over assets of an economic nature” which, as indicated by Moreno Quesada<sup>38</sup> are “subject to pecuniary valuation”,<sup>39</sup> which can be:

- (a) “value in exchange”, understood as the “possibility of obtaining money or other rights by means of their disposal”<sup>40</sup>
- (b) “value in use”, this is, “personal use” the right or “the promise to someone else of the use of the right in exchange for a compensation”<sup>41</sup>

However, as brought up by Lacruz<sup>42</sup> in respect to the compensation<sup>43</sup> in the “modern economy: everything is useful” and, therefore, subject to economic valuation; in the case of tokens the right to assets seems, at first, clear (notwithstanding the possibility of, at the time of valuing certain ICOs, the right offered by tokens not being a right to assets per se).

The users who own the rights the tokens consist of, will have, on the one hand, a “value in use” for they are potential receivers of the benefits linked to objective parameters based on the professional performance of the business project funds have been raised for and, on the other hand, a “value in exchange” that can be materialized depending on the divestiture processes established in each particular ICO.

The “value in use” is, according to current approaches, fully determinable for it is based in objective predetermined factors. In a similar way, the “value in exchange” in a purchase or sale scenario will also be determinable, as it will depend on the purchase and sale prices published.

Notwithstanding the foregoing, the question arises of what exactly it is that users get when they receive profits, when they transfer a token or when they request its return, as it does not constitute a direct payment into their checking account, but a credit in favor of the user in their account (and it will all depend on how tokens are defined as to whether they qualify as securities). To this extent, it is sufficient to point out that even if cryptocurrency cannot be regarded as fiat money, it should be considered so; therefore, nothing should prevent the rights that form part of the token to be “susceptible to economic valuation”.

Once the asset-like nature of tokens has been confirmed, we will proceed to verify whether “given their unique legal configuration and transmission regime” they are “susceptible to general and arms-length exchange in a financial market”.

Starting from the general configuration of tokens, their representation will be tabular; that is, by means of a record (if wanted accounting and electronic). From the point of view of the “underwriter” of the token, once purchased, this will appear represented in a graphic form as owner of the rights granted by the token.

Based on this understanding, we find ourselves in the field of entries by means of “records” that, as pointed by the Doctrine, in our legal system can end up representing “various realities, starting with Government debt, following with shares and debentures issued by companies [...], and ending up with normalized options and futures that are negotiated in the official markets where said derivative products are purchased”.<sup>44</sup>

In this context, it is necessary to specify that while rights linked to shares or debentures “exist before the registry or representation” (regardless of how this is done), “in a way that, even when this kind of registry or representation does not exist, what will be missing is the physical or IT support able to verify the (transferable) ‘security’ but not the right that configures its content”. However, in the rest of the cases “even if the dissociation is conceptually

impossible[...], the normal case will be for the security and the right linked to it [...] to be born at the same time and continue the same path during their whole life”.<sup>45</sup> Which brings us to raise questions on the *nomen iuris* principle that states that “*things are what they are and not what the parties want them to be*”. Given this circumstance, we should take into consideration that, as much as we try to deny the transferable security feature of a determined registry or representation of an underlying right, this will not be enough if the transferable security nature exists after all.

Transferring this difference to the legal configuration of tokens we can appreciate that, in purity, each token is the tabular representation not so much of rights, but more of the legal position under a standardized smart contract in respect of which only the holder of the associated right will vary.

This implies that at first there might be points in favor of determining that tokens cannot be considered “securities” because they answer to a specific and individualized position, not susceptible per se to general commerce, which naturally excludes their categorization as “transferable securities”. However, we find it necessary to conclude this analysis by focusing on their “transmissory regime” and, particularly, if they are “subject to general and arms-length commerce in a financial market”.

This expression tries to simplify a much broader and complicated term, which is “negotiability”. This concept “makes reference to something much broader than mere transferability, that is inherent to practically all legal systems, and that should be defined in terms of a market that even if of reduced scale, is characterized by the predominance of the economic terms in which transmission of personal characteristics of the contracting parties is transferred”.

To predicate this “negotiability” in respect of a determined instrument, the doctrine represented by Sánchez Andrés bases said consideration on two basic pillars (i) “Capability to generate markets in public and permanent operation (marketability)”<sup>46</sup> and (ii) the “replaceable feature of the goods negotiated in it (fungibility)”.<sup>47</sup>

More difficulty arises in determining whether tokens possess said “marketability.” This happens because, due to their conception, they only exist in connection with the precise business trade they have funded; they are an aggregate of rights and liabilities inextricably linked to the terms and conditions of the issuance. This is why we cannot consider them as an integral part of ordinary legal commerce, belonging to a limited scope of action consisting of a virtual context controlled and operated by the issuer, which implies transferability is restricted *ab initio* to said virtual context, preventing them from being suitable for exchange in commerce and, much less, able to generate “markets of public and ongoing operation”.

In light of the foregoing, we might rule out tokens being a “negotiable” instrument, or “a security”, which has already been ruled out, or any other instrument for which “negotiability” is an essential element. However, this regard would change in each case, depending on the rights and attributes that are granted to each particular ICO (especially, if we take into consideration what are referred to as token-securities, the conclusion we have come to in this point would not be applicable).

After considering whether the specific ICO constitutes a securities issuance, next it should be analyzed whether this public offering to purchase or underwrite securities, understood as “any communication to people in any format or by any means that presents enough information about the terms of the offer and the securities offered,... that permits an investor to decide on the purchase or underwriting of said securities” and, that being so, the only step left to take would be to analyze if they are subject to any of the exemptions contained in national regulations in order to avoid application of Securities Regulation and, more precisely, the obligation to publish a prospectus.

From a European standpoint, ESMA published its advice on cryptocurrencies back in 2019 to guide the European Parliament and the European Commission in their legislative process. Although it gives certain guidelines in relation to the main risks involved in the virtual currencies' markets, it concludes that there is not a unique solution and that member states will need to adequate their position in accordance with their national regulations and analyse each ICO on a case-by-case basis. Should the European Commission or any other European institution release a statement regarding ICOs it would likely be a much more protective assessment than the one issued by the aforementioned authorities, given the fact that, contrary to the American or Canadian legislator, investor protection has traditionally been higher in the European continent, especially in matters related to retail investors.

### *1.5 Lack of transparency*

Despite the fact that Blockchain, the technology sustaining the functioning of a digital currency market, brags about its transparency, that the different blocks permitting the sale of digital currencies are in the public domain and all users can have access to them, the truth is that the identity of the people involved in the sale of these currencies is completely unknown. Users' personal information is not stored in the blockchain, there simply exists a public key that permits identification of each part of a transaction and a private key that permits each user access to the system.

The real identity of the people tokens and cryptocurrencies are sold to or bought from cannot be found out in a simple way, given that the only known information of the participants in a transaction of this kind is their e-mail address, formed by letters and numbers. This pseudoanonymity, as defined by the sector, generates opinions for and against it, given that there exists the possibility of hiding behind a group of characters for those who act in a legitimate way but also for those who act in order to sell smoke in the form of a cryptocurrency or buy goods not admitted to legal trade. This is exemplified by the constant rumours and numerous news items that can be found online regarding purchase and sale of narcotics, and other goods whose commercialization is illegal, by means of cryptocurrency.<sup>48</sup>

Given the lack of regulation of this market, issuers are not compelled to make public information that any corporation is obliged to disclose or submit for examination by third parties (i.e. annual statements of a corporation must be presented to the registry and have to undergo auditing in some cases), presentation of this information to the investor is neither agreed by issuer nor investor (contrary to when venture capital institutions are in charge of providing funding). This informational asymmetry only plays in favor of the issuer.

### *1.6 Investors' ignorance*

Currently, entities carrying out cryptocurrency or token issuances request from the investor only the minimum and essential information to carry out the investment (i.e. email and IP address); this should not be subject to sanctions given that there is no legal obligation to do more.

Neither are they, at the present moment, obliged to conduct Know Your Customer or similar procedures to determine whether the purchase of cryptocurrencies might be inadequate for the investor in terms of his investment objectives, his financial situation, or his risk tolerance.

Even if these issuances are normally directed at the general public, certain emissions are being directed only at qualified investors. On April 10th, 2017, Blockchain capital presented

an ICO directed exclusively at accredited investors,<sup>49</sup> that is, qualified investors, as defined in the American Securities Act. US investors had to prove ownership of Net assets above USD 1 million or revenues of at least USD 250.000. The establishment of this limitation is the result of applying the safe harbor of Rule 506 of Regulation D<sup>50</sup> of the Securities Act (mentioned on p. 112), that is, issuers have characterized their offer with the goal of eluding Securities Regulation by resorting to one of the exemptions contained in it, based on the characteristics of the target market. This is a perfectly legal practice, by directing the offer to investors with high resources, they are presumed to have some knowledge regarding the risk implied in carrying out investments, hence, the level of protection granted by the legislator is lower.

### *1.7 Risks*

#### (a) Risks linked to business phase

As previously mentioned, the vast majority of business plans seeking ICO funding are still in a preliminary phase. This means that, regardless of the applicability of the future idea subject to funding, difficulties linked to its implementation or other matters affecting its viability, this investment is inherently risky.

#### (b) Risks linked to lack of success or abandonment

An existing risk in alternative financing, the possibility of which increases in this kind of funding, is the lack of success or the abandonment of the project that justified the request for ICO funding. This is due to the fact that ICO issuers do not agree to any kind of obligation to drive the project until its end, much to the contrary, a disclaimer is added to the brochures according to which the investor accepts that s/he understands the development of the presented business plan could be abandoned due to a variety of reasons, including lack of interest from the industry or the market, lack of funds or lack of interest or commercial perspectives. Likewise, the investor usually accepts that even if the business plan does end up being put into operation, collection of revenues or utility is not guaranteed and the issuer will not be liable for the lack of materialization of those revenues.

Therefore, while in traditional funding the entrepreneur must, not only present financial statements and economic analyses that show the viability of his or her business idea, but also collateral and guarantees or even participation or equity in the business or in the future revenues to those who offer funding (i.e. venture capital funds), in ICO funding, no collateral is presented, no participation in the entity or corporation to be created is given, no participation in future revenues is agreed upon, and not even a best efforts commitment is agreed to put into practice the presented idea.

This risk gives the sense that only issuers truly committed to their business ideas will effectively end up putting them into practice. From the standpoint of consent, it seems pretty clear that the investor has accepted the issuer can limit itself only to receive the Bitcoins, Ethers or cryptocurrencies based on which the investment has been agreed to be carried out, because not even a means commitment and much less, a results commitment have been undertaken. This is captured in many ICO brochures where, by means of representations and warranties, the investor expressly accepts there is no assurance of any kind regarding the success of the proposed business plan, be this explicit or implicit, and it is expressly established that the cryptocurrency is issued at the sole risk of the investor.<sup>51</sup>

Even if the common practice is that just described, some maturity is starting to be observed or, at least consciousness of the need to provide a minimum assurance to the investor (i.e. maintenance of the funds raised by means of an ICO in an escrow account); however, this practice is by no means general and clearly rejected by issuers whose tokens or cryptocurrencies are destined only for speculation. Rejection to the constitution of warranties and collateral could end up becoming a simple method of valuing the implication of the issuers in the development of the business idea underlying the ICO after the obtention of funds.

(c) Risks linked to volatility

A risk of extreme relevance that, ironically, is also one of the biggest attractions of cryptocurrency is its high volatility. Even if the risk of a great collapse in the value of the cryptocurrency exists, there also exists the attraction of great appreciation. Closely linked to the volatility of these cryptocurrencies is the possibility that a few holders of large amounts of cryptocurrency might change their position towards the ICOs, substantially altering their value, which is not only possible but legitimate given that this market is not regulated. These quick and unexpected value fluctuations, linked to the inexistence of an underlying backing asset, determine the difficulty of carrying out a precise valuation of any cryptocurrency (Bitcoin included).

The sector is perfectly aware of this risk and, as a result, warranties offerings are being included in the brochures by means of which the investor expressly accepts his investment might experiment scenarios of extreme volatility and total depreciation.<sup>52</sup>

(d) Risks linked to lack of underlying asset

The value of cryptocurrencies is not backed by any underlying assets that grant intrinsic value (as happens with investments in gold) neither is it backed by a Central Bank (who would intervene in the case of sharp declines so as to protect the currency, as happens with all legal currencies) which means they are risky by nature.

(e) Bubble risk

Risks linked to the creation of bubbles cannot be forgotten in the field of purchase of cryptocurrencies, whose real value is not known in the majority of cases. Despite the constant noise in the cryptocurrency market it does not seem that its activity has been reduced, a fact backed by the latest ICOs (i.e. Status, Bancor or Tezos obtained USD 100, 153 and 206 million in Bitcoins respectively). However, the issuer is aware of the existence of this risk and that is why included in the brochure are representations and warranties confirming the investor understands that market liquidity is not guaranteed.

(f) Regulatory risk

Given the lack of a specific regulation applicable to Blockchain technology, as well as to the issuance of cryptocurrency, it is necessary to take into consideration the possible implementation of new regulations that will determine a substantial variation of the circumstances at the time of contracting.

This risk affects investors, but especially cryptocurrency issuers because a plausible regulatory change consists in a future express reference to cryptocurrency issuances being

equivalent to securities issuances<sup>53</sup> which, consequently would lead to ICOs being subject to Securities Regulation.

(g) Risks linked to illegal activities

As previously stated, the cryptocurrency market is based on the pseudoanonymity of the parties involved. This poses a clear risk that has already materialized in the past: use of cryptocurrency as payment currency for the black market. There are numerous publications that have shown the usage of Bitcoin as payment method for narcotics purchase and even different authorities have had a say on this issue (i.e. an officer of the American Immigration Agency affirmed in front of Congress that his department had observed a “substantial rise in the cases where private parties were acting as money services businesses to convert cryptocurrency into legal currencies with the purpose of enjoying the illegal benefits resulting from drug trafficking”).<sup>54</sup>

## 2 Investors

Given the boom taking place in this market and the coverage it is getting in the media, the investor’s profile is starting to diversify. The presence and interest in the ICO and cryptocurrency world from institutional investors, such as hedge funds and asset managers, is increasingly evident. However, the majority of investors are retail, which generates unease among regulators and is one of the reasons for the need to apply a protective regulation towards the investor, similar to that existing for Securities offerings.

This market is highly attractive to fraudulent issuers, given the quantitative volume of investments it attracts, which turns into massive amounts of money, minutes after the ICO issuance. This attracts two kinds of investors, (i) the one who is fully conscious of his/her investment and is aware of the risk of total loss of his/her investment, and (ii) the less qualified investor who invests in cryptocurrency given the repercussion it is having, not knowing, in the majority of cases, the possibility of losing all the investment or even not knowing that there exists no authority or regulation that will back and protect their rights.

## 3 What will the future hold?

Declarations by different authorities, be they European, American or Asian, lead to the same conclusion, the issuance and commercialization of tokens or cryptocurrencies will be specifically regulated directly or by extension of the securities, payment services, or, among others, anti-money laundering regimes. This will have implications for issuers as well as for investors. The former will have to comply with regulation applicable in the countries where they carry out their issuances and take into consideration the regulation of the countries whose investors they are targeting if offers are directed towards them (i.e. marketing activities especially directed towards a determined jurisdiction) and the latter will be able to invoke non-compliance with regulation with perspectives of bringing up civil law suits as well as criminal ones in cases of fraud. Activities are also expected to be expressly subjected to Anti Money Laundering Regulations, which means issuers will have to adopt the necessary procedures to assure the identity of the investor, the origin of the funds, real ownership of the funds, consistency between the investor’s financial situation and his investment activities, etc.

Regulation of this new market is extremely complicated, not only because of its technicalities but because of its fast and global functioning. Sale of cryptocurrencies is nowadays

carried out on a global scale, without borders and only requiring for its access a laptop with internet connection. Countless are the questions that arise and as different are the answers. We are faced with a market in its initial stages whose future we can only venture to predict. However, we can confirm that all these questions revolve around one that is of even wider reach, and at the center of any discussion relating to ICOs: are tokens digital currency, virtual currency, cryptocurrency or however securities are named in the future? If they are then compliance with Securities Regulation of the issuing country would be unquestionable, as well as the need to comply with investor information and protection, especially if talking about retail investors. Would application of the Securities Regulation mean the deterrence of issuers whose projects have no future? The answer is possibly yes, however we cannot be certain until the market matures and we are able to verify whether all business plans presented in current ICOs are being implemented and whether they are successful.

### Notes

- 1 Bitcoin is currently the cryptocurrency that represents the widest market share. For more information the following link can be consulted, where all cryptocurrencies in circulation are represented: <https://coinmarketcap.com/all/views/all/>
- 2 “The Market in Initial Coin Offerings Risks Becoming a Bubble”. *The Economist*, 27 April 2017. Available at: <https://www.economist.com/news/finance-and-economics/21721425-it-may-also-spawn-valuable-innovations-market-initial-coin-offerings> [Consulted 8 August 2017].
- 3 Cryptocurrency issuance is not regulated *per se*, however, Italy has subjected this practice to AML/TF (Anti Money Laundering/Terrorist Financing) Regulation, as will be discussed later in the chapter.
- 4 Numerous securities markets authorities from different countries have expressly pronounced the views on this sector and the common understanding is that cryptocurrency issuances can qualify as securities issuances, therefore, will be subject to the securities regulation of each country.
- 5 This can be found on: Tezos Contribution and XTZ Allocation Terms and Explanatory Notes, Sección 2.11. i. Available at: <https://www.tezos.ch/pages/static/Tezos%20Contribution%20Terms.pdf>.
- 6 An example of this is the ICO issued under: Monaco VISA®, the World’s Best Cryptocurrency Card, Comes out of Stealth Mode; ICO Launches May (<https://www.cryptocoinsnews.com/monaco-visa-ico-launch/>) 1, and that raised three million dollars in three days in spite of numerous doubts regarding VISA’s real involvement with investors.
- 7 Based on the article Global Cryptocurrency Benchmarking Study published by Cambridge University and VISA. Available at: [https://www.jbs.cam.ac.uk/fileadmin/user\\_upload/research/centres/alternative-finance/downloads/2017-global-cryptocurrency-benchmarking-study.pdf](https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2017-global-cryptocurrency-benchmarking-study.pdf)
- 8 This investment may even be riskier than one carried out by a seed capital entity, as it has no collateral in case of impracticality or failure of the business and has not been revised by external financial advisors, both of them processes carried out by venture capital entities prior to capital investment in projects.
- 9 Even though similar, this brochure should not be confused with an IPO prospectus. The brochure or prospectus is not regulated as to the information it should contain, which means it is the issuer who chooses what is included. Furthermore, its content is not presented to any authority or registry nor is it subject to a viability or similar analysis. The content of an IPO prospectus, however, is subject to the regulation of both the country where the securities will be issued and the country whose investors the IPO is targeting.
- 10 <https://www.sgrlaw.com/initial-coin-offerings-icos-sec-regulation-and-available-exemptions-from-registration/>
- 11 Basically the Securities Act of 1933 and the Securities Exchange Act of 1934.
- 12 Report available to the general public on the following link: <https://www.sec.gov/litigation/investreport/34-81207.pdf>
- 13 This report analyzes the situation of the Decentralized Autonomous Organization (DAO), an ICO that received USD 150 million. In this case the ICO was hacked due to a deficiency in its



- coding, which led to the theft of cryptocurrency to the value of USD 50 million, and leading to the SEC's first statement on the matter.
- 14 <https://corp.gov.law.harvard.edu/2019/11/21/regulation-by-selective-enforcement-the-sec-and-initial-coin-offerings/>
  - 15 Following the report issued by Smith, Gambrell and Russel, LLP,
  - 16 Statement available for the general public on the following link: [http://www.osc.gov.on.ca/documents/en/Securities-Category4/csa\\_20170824\\_cryptocurrency-offerings.pdf](http://www.osc.gov.on.ca/documents/en/Securities-Category4/csa_20170824_cryptocurrency-offerings.pdf)
  - 17 The regulation applicable to these issuances in Singapore is the Securities and Futures Act (Chap. 289). Available at: <http://www.mas.gov.sg/News-and-Publications/Media-Releases/2017/MAS-clarifies-regulatory-position-on-the-offer-of-digital-tokens-in-Singapore.aspx>
  - 18 ShookLin&BokLLP. Client Update. Financial Services Regulatory. August 2017. Available at: <http://www.shooklin.com/images/publications/2017/August/virtual-currencies-more-than-just-a-digital-token.pdf> [Consulted on 1 September 2017].
  - 19 The publication of the People's Bank of China can be accessed at: <http://www.circ.gov.cn/web/site0/tab6554/info4080736.htm> [Consulted on 1 September 2017, translated to English by *Google Translator*].
  - 20 Acheson, Noelle. "China's ICO Ban: Understandable, Reasonable and (Probably) Temporary". Coin Desk. Available at: <https://www.coindesk.com/chinas-ico-ban-understandable-reasonable-probably-temporary/> [Consulted on the 1 September 2017].  
Rapoza, Kenneth. "China's ICO Ban Doesn't Mean It's Giving Up On Crypto-Currencies". Forbes. Available at: <https://www.forbes.com/sites/kenrapoza/2017/09/06/chinas-ico-ban-doesnt-mean-its-giving-up-on-crypto-currencies/#33ead237aebf> [Consulted on the 21 October 2017].
  - 21 Youg, Joseph. "China Ban on ICO is Temporary, Licensing to be Introduced". The Coin Telegraph. Available at: <https://cointelegraph.com/news/china-ban-on-ico-is-temporary-licensing-to-be-introduced-official> [Consulted on the 21 October 2017].
  - 22 South Korea's Financial Services Commission publication can be accessed at: [http://www.fsc.go.kr/info/ntc\\_news\\_view.jsp?bbsid=BBS0030&page=1&sch1=&sword=&r\\_url=&menu=7210100&no=32085](http://www.fsc.go.kr/info/ntc_news_view.jsp?bbsid=BBS0030&page=1&sch1=&sword=&r_url=&menu=7210100&no=32085) [Consulted on the 21 October 2017, translated to English by *Google Translator*].
  - 22 Kim, Cynthia. "South Korea Bans Raising Money through Initial Coin Offerings". Reuters. Available at: <http://www.reuters.com/article/us-southkorea-bitcoin/south-korea-bans-raising-money-through-initial-coin-offerings-idUSKCN1C408N> [Consulted on the 21 October 2017].
  - 23 Decreto Legislativo 25 maggio 2017, n. 90. Attuazione della direttiva (UE) 2015/849 relativa alla prevenzione dell'uso del sistema finanziario a scopo di riciclaggio dei proventi di attività criminose e di finanziamento del terrorismo e recante modifica delle direttive 2005/60/CE e 2006/70/CE e attuazione del regolamento (UE) n. 2015/847 riguardante i dati informativi che accompagnano i trasferimenti di fondi e che abroga il regolamento (CE) n. 1781/2006. (17G00104).
  - 24 Article 128-undecies of the Consolidated Banking Act.
  - 25 Torpey, Kyle. "Regulators Are Investigating ICOs in Switzerland Where \$600 Million Has Already Been Raised". Forbes. 30 September 2017. Available at: <https://www.forbes.com/sites/ktorpey/2017/09/30/regulators-are-investigating-icos-in-switzerland-where-600-million-has-already-been-raised/#5eb502961800> [Consulted on 21 October 2017].
  - 26 This guide is available at <https://www.finma.ch/en/~media/finma/dokumente/dokumentencenter/myfinma/4dokumentation/finma-aufsichtsmittelungen/20170929-finma-aufsichtsmittelung-04-2017.pdf?la=en&hash=9DCC5C1FF8F61C9AA9412FAD2D7C70533F341EF2> [Consulted on 21 October 2017].
  - 27 According to the site <https://coinmarketcap.com/all/views/all/> there are 1,101 cryptocurrencies, of which complete data – regarding price, value in circulation, market ceiling, etc. – only exist for 850.
  - 28 Although Sumit Agarwal from Georgetown University and former Senior Financial Economist at the Federal Reserve Bank of Chicago regards this market as no more than a temporary trend that will not last in spite of its enhancements, because, in his view, it presents too many complications.
  - 29 ESMA statements can be accessed on the following URLs: <https://www.esma.europa.eu/file/23911/download?token=mvPl6EXo> and <https://www.esma.europa.eu/file/23910/download?token=PMCCNzcd> [Consulted on 12 December 2017].
  - 30 Aníbal Sánchez Andrés. "Estudios Jurídicos sobre el Mercado de Valores", Thomson Civitas (2008). p. 665.

- 31 Aníbal Sánchez Andrés. “*Estudios Jurídicos sobre el Mercado de Valores*”, Thomson Civitas (2008). p. 666.
- 32 Aníbal Sánchez Andrés. “*Estudios Jurídicos sobre el Mercado de Valores*”, Thomson Civitas (2008). p. 666.
- 33 Aníbal Sánchez Andrés. “*Estudios Jurídicos sobre el Mercado de Valores*”, Thomson Civitas (2008). p. 665.
- 34 Aníbal Sánchez Andrés. “*Estudios Jurídicos sobre el Mercado de Valores*”, Thomson Civitas (2008). p. 665.
- 35 Article 2.1 of the Royal Legislative –decree 4/2015, of 23rd of October, that passes the Consolidated text of the Securities Market Law
- 36 Aníbal Sánchez Andrés. “*Estudios Jurídicos sobre el Mercado de Valores*”, Thomson Civitas (2008). p.
- 37 Díez Picazo. Fundamentos del Derecho Civil Patrimonial. Editorial Tecnos (1972) p. 50
- 38 Díez Picazo. Fundamentos del Derecho Civil Patrimonial. Editorial Tecnos (1972) p. 50.
- 39 Díez Picazo. Fundamentos del Derecho Civil Patrimonial. Editorial Tecnos (1972) p. 51.
- 40 Díez Picazo. Fundamentos del Derecho Civil Patrimonial. Editorial Tecnos (1972) p. 51
- 41 Díez Picazo. Fundamentos del Derecho Civil Patrimonial. Editorial Tecnos (1972) p. 51
- 42 Jose Luis Lacruz Berdejo. Elementos de Derecho Civil II. Derecho de Obligaciones Vol.1. Dykinson (2003). pag 54.
- 43 To the extent that this compensation is considered part of the obligation, the right to claim compensation should also be “in use”, as it is what enables and legitimates its receipt.
- 44 Aníbal Sánchez Andrés. “*Estudios Jurídicos sobre el Mercado de Valores*” Thomson Civitas (2008). p. 725.
- 45 Aníbal Sánchez Andrés. “*Estudios Jurídicos sobre el Mercado de Valores*” Thomson Civitas (2008). p. 726.
- 46 Aníbal Sánchez Andrés. “*Estudios Jurídicos sobre el Mercado de Valores*” Thomson Civitas (2008). p.
- 47 Aníbal Sánchez Andrés. “*Estudios Jurídicos sobre el Mercado de Valores*” Thomson Civitas (2008). p.
- 48 Some examples are:
- Drugs, Code and ICOs: Monero’s Long Road to Blockchain Respect. Available at: <https://www.coindesk.com/drugs-code-icos-moneros-long-road-blockchain-mainstream/> [Consulted on the 10 October 2017].
- Founder Of Drug Site Silk Road Says Bitcoin Booms And Busts Won’t Kill His Black Market Available at: <https://www.forbes.com/sites/andygreenberg/2013/04/16/founder-of-drug-site-silk-road-says-bitcoin-booms-and-busts-wont-kill-his-black-market/#9585776c423c> [Consulted on the 10 October 2017].
- Monero, the Drug Dealer’s Cryptocurrency of Choice, is on Fire. Available at: <https://www.wired.com/2017/01/monero-drug-dealers-cryptocurrency-choice-fire/> [Consulted on the 10 October 2017].
- 49 The Offering Memorandum of Blockchain Capital can be accessed on the following link: <https://www.scribd.com/document/348748641/TOKENHUB-BCAP-Memorandum-Ocr> [Consulted on the 21 October 2017].
- 50 This regulation can be accessed on the following link: <https://www.ecfr.gov/cgi-bin/text-idx?SID=0a94ea1a8a9ecce212ec25025efed3af&node=17:3.0.1.12.0.46.181&rgn=div8> [Consulted on the 21 October 2017].
- 51 Tezos Contribution and XTZ Allocation Terms and Explanatory Notes, Sección 2.11. j Available at: <https://www.tezos.ch/pages/static/Tezos%20Contribution%20Terms.pdf> [Consulted on the 21 October 2017].
- 52 Tezos Contribution and XTZ Allocation Terms and Explanatory Notes, Section 2.11.1. Available at: <https://www.tezos.ch/pages/static/Tezos%20Contribution%20Terms.pdf> [Consulted on the 21 October 2017].
- 53 Tezos Contribution and XTZ Allocation Terms and Explanatory Notes, Section 2.11.1. Available at: <https://www.tezos.ch/pages/static/Tezos%20Contribution%20Terms.pdf> [Consulted on the 21 October 2017].
- 54 Comments made by Matthew Allen, assistant director to one of the US National Security Departments in front of the House of Representatives.

## Bibliography

### Digital press articles

- Acheson, Noelle. “China’s ICO Ban: Understandable, Reasonable and (Probably) Temporary”, Coin Desk. Available at: <https://www.coindesk.com/chinas-ico-ban-understandable-reasonable-probably-temporary/> [Consulted on 1 September of 2017]

- Adham, M. "Backing A New Digital Currency: Initial Coin Offerings", *Forbes*, 23 May 2017. Available at: <https://www.forbes.com/sites/forbesfinancecouncil/2017/05/23/backing-a-new-digital-currency-initial-coin-offerings/#63403db1d90d> [Consulted on 8 August 2017]
- Agrawal, A.J. "6 Lessons Marketers Can Learn From Cryptocurrency Initial Coin Offerings", *Forbes*, 3 July 2017. Available at: <https://www.forbes.com/sites/ajagrwal/2017/07/03/6-lessons-marketers-can-learn-from-cryptocurrency-initial-coin-offerings/#ab33acd3a972> [Consulted on 12 August 2017]
- Akhatar, T. "Forget IPOs: How do Companies Know if an ICO is Right for Them", *The Street*, 3 August 2017. Available at: <https://www.thestreet.com/story/14255268/1/forget-ipos-how-do-companies-know-if-an-ico-is-right-for-them.html> [Consulted on 8 August 2017]
- Arnold, M. "Big banks plan to coin new digital currency", *Financial Times*, 23 August 2017. Available at: <https://www.ft.com/content/1a962c16-6952-11e6-ae5b-a7cc5dd5a28c#axzz4IFxjuHiU> [Consulted on 1 September 2017]
- Barzilay, O. "Tezos' USD 232 Million ICO May Just Be the Beginning", *Forbes*, 15 July 2017. Available at: <https://www.forbes.com/sites/omribarzilay/2017/07/15/tezos-232-million-ico-may-just-be-the-beginning/#7d064b3b4c52> [Consulted on 29 August 2017]
- Chester, J. "A New Way To Raise Money: The Initial Copin Offering", *Forbes*, 6 December 2017. Available at: <https://www.forbes.com/sites/jonathanchester/2017/06/12/a-new-way-to-raise-money-the-initial-coin-offering/#430aa05c5fb5> [Consulted on 25 August 2017]
- Coraggio, J. "Virtual Currency Gets Regulated under Anti-Money Laundering Laws", DLA Piper website, 15 August 2017. Available at: [www.technologysleage.com/2017/08/virtual-currency-gets-regulated-under-anti-money-laundering-laws/](http://www.technologysleage.com/2017/08/virtual-currency-gets-regulated-under-anti-money-laundering-laws/) [Consulted on 30 August 2017]
- Kaminska, I. "A USD 4bn Bitcoin Laundering Operation Potentially Busted", *Financial Times*, 26 July 2017. Available at: <https://ftalphaville.ft.com/2017/07/26/2191910/a-4bn-bitcoin-laundering-operation-potentially-busted/> [Consulted on 31 August 2017]
- Kaminska, I. "Introducing Truly Outlandish ICO Claims, TokenCard edition", *Financial Times*, 8 May 2017. Available at: [https://ftalphaville.ft.com/2017/05/08/2188471/introducing-truly-outlandish-ico-claims-tokencard-edition/?ft\\_site=falcon&desktop=true](https://ftalphaville.ft.com/2017/05/08/2188471/introducing-truly-outlandish-ico-claims-tokencard-edition/?ft_site=falcon&desktop=true) [Consulted on 8 August 2017]
- Kaminska, I. "Initial Coin Offerings Risk Damaging your Financial Health", *Financial Times*, 25 May 2017. Available at: <https://www.ft.com/content/c82acb92-407b-11e7-9d56-25f963e998b2> [Consulted on 8 August 2017]
- Kaminska, I. "We Already Have a Utility Settlement Coin: It's Called the Euro", *Financial Times*, 24 August 2017. Available at: <https://www.ft.com/content/c82acb92-407b-11e7-9d56-25f963e998b2> [Consulted on 1 September 2017]
- Monier, S. "Bitcoin: ¿la nueva fiebre del oro?", *Funds Society*, 7 August 2017. Available at: <http://www.fundsociety.com/es/opinion/bitcoin-la-nueva-fiebre-del-oro> [Consulted on 8 August 2017]
- Nakamura, Y. "New Digital Currency Spikes as Drug Dealers Get More Secrecy", *Bloomberg*, 29 August of 2016. Available at: <http://www.bloomberg.com/news/articles/2016-08-29/new-digital-currency-spikes-giving-criminals-more-secrecy> [Consulted on 28 August 2017]
- Novikov, I. "What To Consider Before Investing in Initial Coin Offerings", *Forbes*, 24 August 2017. Available at: <https://www.forbes.com/sites/forbestechcouncil/2017/08/24/what-to-consider-before-investing-in-initial-coin-offerings/#49f1a7853604> [Consulted on 25 August 2017]
- Popper, N. "Easiest Path to Riches on the Web? An Initial Coin Offering", *New York Times*, 23 June 2017. Available at: <https://www.nytimes.com/2017/06/23/business/dealbook/coin-digital-currency.html?mcubz=1> [Consulted on 25 August 2017]
- Popper, N. "S.E.C. Issues Warning on Initial Coin Offerings", *New York Times*, 25 July 2017. Disponible en URL: <https://www.nytimes.com/2017/07/25/business/sec-issues-warning-on-initial-coin-offerings.html?mcubz=1> [Consulted on 25 August 2017]
- Rapoza, Kenneth. "China's ICO Ban Doesn't Mean it's Giving Up On Crypto-Currencies", *Forbes*. Available at: <https://www.forbes.com/sites/kenrapoza/2017/09/06/chinas-ico-ban-doesnt-mean-its-giving-up-on-crypto-currencies/#33ead237aebf> [Consulted on 21 October 2017]
- Russel, J. "Singapore, like US, Says it May Regulate some ICOs", *TechCrunch*, 31 July 2017. Available at: <https://techcrunch.com/2017/07/31/singapore-ico-regulation/> [Consulted on 8 August 2017]
- Sandoval, J. "Las ICO singular evento en el mundo de las criptomonedas", *The CoinTelegraph*, 7 October of 2016. Available at: <https://es.cointelegraph.com/news/ico-singular-evento-mundo-criptomonedas> [Consulted on 8 August 2017]

- Shin, L. “The Emperor’s New Coin: How Initial Coin Offerings Fueled a USD 100 Billion Crypto Bubble”, *Forbes*, 7 October of 2016. Available at: <https://www.forbes.com/sites/laurashin/2017/07/10/the-emperors-new-coins-how-initial-coin-offerings-fueled-a-100-billion-crypto-bubble/#715495b96ece> [Consulted on 25 August 2017]
- Shin, L. “ICOs: Why People Are Investing in this USD 380 Million Phenomenon”, *Forbes*, 16 May 2017. Available at: <https://www.forbes.com/sites/laurashin/2017/05/16/icos-why-people-are-investing-in-this-380-million-phenomenon/#13b73fba11a1> [Consulted on 8 August 2017]
- Torpey, Kyle. “Regulators Are Investigating ICOs in Switzerland where \$600 Million Has Already Been Raised”, *Forbes*. 30 September 2017. Available at: <https://www.forbes.com/sites/ktorpey/2017/09/30/regulators-are-investigating-icos-in-switzerland-where-600-million-has-already-been-raised/#5eb502961800> [Consulted on 21 October 2017]
- Walsh, P. “Blockchain’s Brave New World: Initial Coin Offerings”, *Forbes*, 21 June 2017. Available at: <https://www.forbes.com/sites/walshpadraig/2017/06/21/blockchains-brave-new-world-initial-coin-offerings/#29876c777897> [Consulted on 8 August 2017]
- Wilhelm, A. “WTF is an ICO?”, *TechCrunch*, 23 May 2017. Available at: <https://techcrunch.com/2017/05/23/wtf-is-an-ico/> [Consulted on 8 August 2017]
- Youg, Joseph. “China Ban on ICO is Temporary, Licensing to be Introduced: Official”, *The Coin Telegraph*. Available at: <https://cointelegraph.com/news/china-ban-on-ico-is-temporary-licensing-to-be-introduced-official> [Consulted on 21 October 2017]

### ICO issuance prospectuses

- Blockchain Capital, Offering Memorandum. Available at: <https://www.scribd.com/document/348748641/TOKENHUB-BCAP-Memorandum-Ocr> [Consulted on 21 October 2017]
- DDF Initial Coin, Offering Information Memorandum. Available at: <https://www.digitaldevelopersfund.com/wp-content/uploads/2017/07/Prospectus.pdf> [Consulted on 31 August 2017]
- SNT Creation and Status Project Creation Conditions: Explanatory Note & Governance Terms. Available at: <https://contribute.status.im/status-terms.pdf> [Consulted on 31 August 2017]
- Tezos Contribution and XTZ Allocation Terms and Explanatory Notes. Available at: <https://www.tezos.ch/pages/static/Tezos%20Contribution%20Terms.pdf> [Consulted on 31 August 2017]

### Publications of national authorities of Securities Markets

- Canadian Securities Administrators CSA Staff Notice 46–307. Cryptocurrency Offerings. Available at: [http://www.osc.gov.on.ca/documents/en/Securities-Category4/csa\\_20170824\\_cryptocurrency-offerings.pdf](http://www.osc.gov.on.ca/documents/en/Securities-Category4/csa_20170824_cryptocurrency-offerings.pdf) [Consulted on 30 August 2017]
- FINMA Guidance 04/2017 Regulatory treatment of initial coin offerings. Available at: <https://www.finma.ch/en/~media/finma/dokumente/dokumentcenter/myfinma/4dokumentation/finma-aufsichtsmittelungen/20170929-finma-aufsichtsmittelung-04-2017.pdf?la=en&hash=9DC-C5C1FF8F61C9AA9412FAD2D7C70533F341EF2> [Consulted on 21 October 2017]
- Securities Exchange Commission. Reselase 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> [Consulted on 30 August 2017]
- The People’s Bank of China Central Office of the Ministry of Industry and Information Technology Ministry of Industry and Commerce, Banking Regulatory Commission, China Insurance Regulatory Commission on the prevention of tokens issued financing risk notice. Available at: <http://www.circ.gov.cn/web/site0/tab6554/info4080736.htm> [Consulted on 21 October 2017, translated into English by *Google Translator*]
- Vice-chairman of the Financial Supervisory Service, will hold a “joint TF for virtual currency institutions. “Discuss countermeasures against recent domestic and foreign market regulation trends and check the current status of ‘virtual currency countermeasures’”: Available at: [http://www.fsc.go.kr/info/ntc\\_news\\_view.jsp?bbsid=BBS0030&page=1&sch1=&sword=&r\\_url=&menu=7210100&no=32085](http://www.fsc.go.kr/info/ntc_news_view.jsp?bbsid=BBS0030&page=1&sch1=&sword=&r_url=&menu=7210100&no=32085) [Consulted on 21 October 2017, translated into English by *Google Translator*]

**Others**

Global Cryptocurrency Benchmarking Study published by Cambridge University and VISA, it is estimated that the percentage of speculative investors in cryptocurrency is of around 75%. Available at: [https://www.jbs.cam.ac.uk/fileadmin/user\\_upload/research/centres/alternative-finance/downloads/2017-global-cryptocurrency-benchmarking-study.pdf](https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2017-global-cryptocurrency-benchmarking-study.pdf)

ShookLin & Bok LLP. Client Update. Financial Services Regulatory. August 2017. Available at: <http://www.shooklin.com/images/publications/2017/August/virtual-currencies-more-than-just-a-digital-token.pdf> [Consulted on 1 September 2017]