

white-paper











An introduction to the legal impacts of a groundbreaking technology

Enrico Roberto Luciana Simões Rebello Horta Luis Felipe Baptista Luz Renato Leite Monteiro

/ executive summary

In this paper, we offer an overview of the legal repercussions of conducting Initial Coin Offerings (ICOs) and trading cryptocurrencies in Brazil. The paper is divided in two main parts: first, we give a few details on the underlying technology of one of the most disruptive innovations in the last few years. We try to explain what a blockchain is and what kind of innovation it gives rise to, what a cryptocurrency is and what ICOs are, as well as compare ICOs to a concept that has notable similarities to them: IPOs. As we shall see, the decentralized, intermediary-free and safe nature of blockchain technology leads to unprecedented possibilities and challenges. On the second part, we will detail some of the most immediate legal impacts arising out of this technology. As we will see, considering tokens issued at an ICO as securities is a rising trend among regulators both in Brazil and abroad. There are some important exceptions, however, such as utility tokens and the possibility of applying, in Brazil, an equity crowdfunding procedure. How to tax ICOs and the trading of cryptocurrencies such as bitcoins is not a straightforward understanding either. Even though both the Brazilian Central Bank and the Brazilian Revenue Office have started asserting their opinions on this matter, stating, for example, that cryptocurrencies and their sale are to be normally declared for income tax purposes, many other situations remain unclear. In this second part, we also aim to clarify some of the possible discussions in this regard.







I. The Technology

/ the blockchain

A blockchain is a distributed and continuously expandable list of data sets, called "blocks", which are linked together through cryptographic entanglements. Each block contains a cryptographically secured hash of the preceding block, and this list of verifiable records, called the "ledger", can contain different kinds of data. Most importantly, blockchains are both cryptographically secured and decentralized.

Later iterations of the technology have added significant capabilities. One of the most relevant is the ability to write scripts attached to each block, which, if pre-written conditions are met, are automatically executed. Scripts attached to the ledger of a blockchain are normally called "smart contracts", even though they do not necessarily need to be not contracts in a legal sense. The most important, so far, and the first blockchain to allow the creation of smart contracts is Ethereum.

/ cryptocurrencies

Cryptocurrencies are finite digital resources which can be freely traded, peer-to-peer, by means of a blockchain network. Because cryptocurrencies are enabled by blockchain technology, transactions involving them have some key advantages: They can be carried out (i) **pseudoanonymously¹**, if the transacting parties' public address is not associated to their identity through information outside of the blockchain; (ii) **safely**, as transacting on a blockchain depends on cryptographic communication between the parties, as well as on public authentication systems; and, most importantly, (iii) without **any intermediaries or central authorities**. Also, such transactions are (iv) **irreversible**, since accepted blocks can no longer be modified and (v) **public²**, since anyone can read the ledger in its totality.

¹ They are considered pseudoanonymous because a unique identifier is attributed to the subject and to the transaction, his/her cryptographic digital signature, what allows for possible reidentification. Anonymity only occurs when it is not possible to reidentify the natural person behind the transaction.

²Not all transactions are public, however. A blockchain is a kind of technology whose varieties can be combined in many ways, which in practice allows for a diversified group of blockchains to exist. Due to this possibility, there can be both public and private blockchains. The former has a more centralized structure, more akin to a private network, which only authorized people can access through a cryptographic private key, and which normally can only be legitimately modified by whoever holds such private key. Public blockchains, on the other hand, are openly readable through a public key and can usually be modified by anyone (as long as the blockchain's rules are







/ bitcoin

The most well-known example of cryptocurrency is the bitcoin. The bitcoin was envisaged alongside the blockchain: aiming to create a decentralized digital paying system for exchanging value without the double-spending problem of other digital currencies³, a purpose that had been plaguing academics and activists for some time⁴, a person, or a group of persons under the pseudonym of Satoshi Nakamoto issued, in 2008, a white paper laying the groundwork of the first blockchain network. In the almost 10 years since, the technology has evolved and given rise to several other cryptocurrencies (such as Litecoin, Namecoin and thousands of others).

/ the potential

Blockchain is a disruptive technology. Because of its underlying features, it can provide a safe, almost impossible to fraud cryptographic system. Because of that, the blockchain is transforming markets and commercial relationships around the world. It is already being used for property registries and international financial transactions, as instead of relying on a central authority, a decentralized system can provide faster and more efficient capabilities.

followed). The practical relevance of this difference is that public blockchains are usually considered safer, exactly because the odds of faking or reversing transactions legitimized by decentralized proof-of-work systems, using the current state of technology, are very low. For more information: https://www.forbes.com/sites/bernardmarr/2017/09/21/14-things-everyone-should-

know-about-blockchains/#2e00b8e6252a; database-whats-the-difference-523e7d42edc.

https://medium.com/blockchain-review/private-blockchain-or-

³ Double-spending is a potential flaw which consists in the same item being spent more than once. This would be possible because a cryptocurrency consists of a digital file that can be duplicated or falsified. Blockchain technology, through its proof-of-work system, avoids the need for a trusted third party to validate transactions, thus making double-spending impossibly difficult, and increasingly more difficult as the size of the overall network grows. For more information: https://blogs.cornell.edu/info4220/2013/03/29/bitcoin-and-the-double-spending-bitcoins asp

⁴ Academics had been trying for a long time to ensure the safety of communication between two poles without the need of a trusted intermediary, which was long considered to be impossible, also known as "the byzantine general's problem". Solutions were tried by with B-Money in 1998, the BitGold proposal by Nick Szabo, also in 1998, among others. The bitcoin, however, was the first proposal to successfully solve the problem.







/ examples of new uses of blockchain

The Bank of England united with San Francisco-based company Ripple to create a blockchain-based technology to speed up cross-border payments.⁵

Air New Zealand united with Swiss travel start-up Winding Tree to explore new ways to improve the efficiency and security of its booking and baggage tracking services.⁶

Guardtime, a startup that uses blockchain technology to secure public and private data, united with the Estonian government to create a distributed database of medical records of over a million Estonian citizens.⁷

/ ICOs

Among the several potential applications for the blockchain, one of the most promising, and one which is increasingly being used, are **Initial Coin Offerings (ICOs)**. ICOs can be regarded as a new way to raise money to finance the development of projects. Up to now mostly used by small companies and startups, it is a means of creating and issuing a "token" through blockchain technology for an initial fundraising campaign. Sometimes, the new token is offered to the public in exchange for pre-existing cryptocurrencies (e.g. Ether), but this is not always the case. Tokens issued at ICOs may also offer rights over a company, such as voting rights and equity, or even access to different services, goods and applications. Such accesses can be enabled by smart contracts: as mentioned above, scripts embedded into the blocks of a ledger.

Through an ICO campaign, a percentage of the total amount of tokens created by the company will be sold to the first supporters of the project. Before the campaign begins, the company usually creates a plan in a white paper containing information about the project, such as achievements

⁵ Available at: https://www.ft.com/content/a8d997a0-6605-11e7-8526-7b38dcaef614

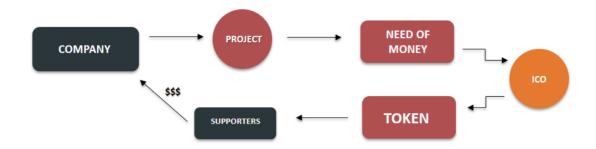
⁶ Available at: https://www.reuters.com/article/us-blockchain-travel-airnewzealand/air-new-zealand-swiss-travel-platform-winding-tree-in-blockchain-tie-up-idUSKBN1DM2KQ

⁷ Available at: http://uk.businessinsider.com/guardtime-estonian-health-records-industrial-blockchain-bitcoin-2016-3

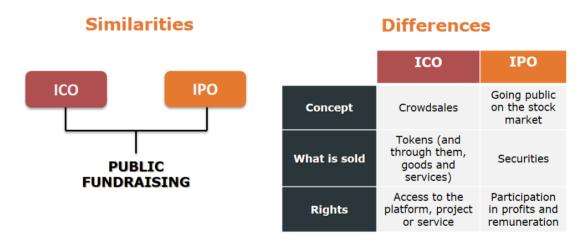




intended to accomplish, how much money is needed and duration of the campaign⁸.



In some ways, the idea of an ICO is similar to what underlies IPOs – Initial Public Offerings. However, some key differences should be noted.



Specifically for the purposes of this paper, the word "token" shall mean a blockchain-based resource issued through an ICO. Tokens, in the scope of this paper, usually grant their holders a right of any sort and are enabled by "smart contracts". In practice, this is normally carried out through the Ethereum network. In contrast to "tokens", we have used the word "cryptocurrency" as a synonym for any blockchain-based resources not issued through ICOs – such as bitcoins. Cryptocurrencies don't usually grant any rights other than the right of ownership over such cryptocurrency.

⁸ It should be noted that an ICO's white paper is not a technical paper like the prospect of an IPO. Typically, ICOs' white papers intend only to clarify the funding's purpose and the project to be funded, while an IPO's technical paper has the obligation to clarify risk factors and rentability perspectives.







/ examples of ICOs

Dragon Corp., a gaming company based in Macau, with the purpose of integrating blockchain technology into the largest gambling market of the world, is attempting to raise 500 million dollars through an ICO.⁹

Launched in 2017, Bancor Protocol, a platform designed for the creation of new tokens on their own blockchain, reached a new industry record with an ICO that raised about 153 million dollars.¹⁰

Filecoin's ICO, in 29 days, raised about 206 million dollars, a figure that adds to another 52 million dollars in funding obtained in its pre-ICO.¹¹

II. Legal Repercussions

/ world

In the whole world, cryptocurrencies and ICOs are growingly coming under the scrutiny of public bodies, and public agencies are starting to publish their understandings on the matter.



In the USA, bitcoin was defined in 2013 as a "decentralized and convertible" digital coin. In 2014, the IRS¹² considered bitcoins as property, and, regarding ICOs, the SEC¹³ stated that "in certain cases, the tokens or coins will be securities and may not be legally sold without registration before the SEC or pursuant to an exemption from registration"¹⁴.

⁹ Available at: https://www.cnbc.com/2017/09/24/macau-company-aims-to-raise-500-million-in-ico-despite-china-ban.html

¹⁰ Available at: https://medium.com/power-ledger/power-ledger-partners-with-bancor-to-maximize-liquidity-of-powr-tokens-as-token-sale-concludes-c6c8ed595fca

Available at https://www.forbes.com/sites/laurashin/2017/07/19/filecoin-ico-launching-next-week-aims-to-resolve-token-sale-

problems/&refURL=https://www.google.com.br/&referrer=https://www.google.com.br/

¹² The Internal Revenue Service, equivalent to Brazil's *Receita Federal*.

¹³ The Securities and Exchange Comission, equivalent to Brazil's Comissão de Valores Mobiliários (CVM)

¹⁴ Available at: https://www.sec.gov/litigation/investreport/34-81207.pdf









France concluded that crowdfunding regulation doesn't apply to ICOs and suggests three possible ways forward for regulation:

- promoting best practices without changing existing laws;
- extending the scope of existing legal texts to treat ICOs as public offerings of securities; or
- proposing ad hoc legislation adapted to ICOs.



The European Union has also taken a stand on the issue. In 2015, the European Court of Justice ruled that bitcoins were exempt from value added taxes¹⁵, and in 2016 there were proposals for a greater control of financial flows, including centralized bank accounts and tracking of terrorism money flowing through with virtual currencies and prepaid cards.

/ Brazil

In Brazil, regulators are also taking notice of what's happening. The Brazilian Securities and Exchange Commission - the *Comissão de Valores Mobiliários* (CVM) has given several indications, in both formal and informal situations, that it intends to do something about ICOs. Even though such indications are not conclusive, they do point towards a growing awareness by the CVM of this practice. The trend is followed by other regulators, such as the Brazilian Federal Revenue Office and the Central Bank, as both have issued notices regarding the legal nature of cryptocurrencies. The understandings of these regulators will be further detailed in the items below.

As for other uses of blockchain technology, such as, as illustrated above, using it for recording property or storing public records, Brazil is still in its very infancy. However, such implications are also in the public radar: in August 2017, the Brazilian Central Bank has issued a study¹⁶ to evaluate and analyze blockchain technology and better understand its applicability and shortcomings. Even though the study disclaims that its opinions are those of its authors, not of the Central Bank, the fact that it has been

¹⁵ In Brazil, the most important value added tax is the *Imposto sobre Circulação de Mercadorias e Prestação de Serviços* (ICMS)

¹⁶ Available at:

 $[\]frac{https://www.bcb.gov.br/htms/public/microcredito/Distributed_ledger_technical_research_in_Central_Bank_of_B}{razil.pdf}$





conducted within a governmental agency also points towards the growing awareness of the technology's potential.

/ conducting ICOs in Brazil

ICOs are not regulated in Brazil. As of the date of this paper, there are yet no specific laws or case law directly applicable to them. Therefore, conducting an ICO is a grey-zone activity of inherent legal uncertainty. For example, depending on the way it is conducted, it could lead regulators to applying classical capital markets concepts, e.g., by considering the ICO a securities issuance, just like the SEC has done in the US.

As ICOs can be conducted in several different ways, only specific case-bycase analyses should be able to safely assess the risks and legal implications of the practice. However, it is possible to offer an overview of how current regulation could theoretically affect the conduction of an ICO.

/ are tokens securities?

In Brazil, for a title or a contract to be considered a security, it must:

- be publicly offered;
- generate a right to participate, a partnership or a compensation right, including rights resulting from the provision of services; and
- the returns on such rights must be originated from the efforts of third parties or the issuing company.

In practice, securities represent investments offered to the general public. Because investors in this case do not have direct control over their investment and to assure to the public sufficient and isonomic information about the investment, it is considered an investment which risks require regulatory interference. Incontrovertibly, since the investment is made with the intent of profit, the type of contract that formalizes the investment, and even the existence of a title, just for itself, is irrelevant for the creation of an obligational relationship. Normally, securities grant to their holders the right to participate or receive dividends, the right to

¹⁷ CVM's position in the following lawsuits is interesting to be considered, as it has given its positions on the nature of what constitutes a security: CVM Procedure No. RJ 2003/0499 on CEPACs, decided on 08.28.2003; CVM Procedure No. RJ 2009/6346 on CCBs, judged on January 22.01.2008; and CVM Procedure No. RJ 2007/11593 on carbon credits, judged on 7.7.2009.







participate in profits, and remuneration. Therefore, as a rule, tokens could represent collective investment contracts and, therefore, securities. In fact, this understanding is in line with CVM's recent statements on the matter, which are further detailed in the item below.







/ utility tokens and securities

As a rule, for a company to issue securities, it must register itself (thus obtaining the so-called "Open Corporation Registry¹⁸") and the issuance transaction with the CVM. However, depending on the way the ICO is conducted, it could theoretically be possible to make the public offer of the investment without such registration. There seem to be two main situations under the current Brazilian regulatory framework which would exempt an ICO and its issuer from registering with the CVM. One of them, which we will explore in the following item, is if the ICO fits into the requirements of an investment-based crowdfunding. The other one is in the case of the so called **utility tokens**.

Formally, the CVM has issued two understandings on ICOs: one of them, issued on October 11th, 2017, stated that ICOs can be understood as "public fundraisings". ¹⁹ Even though the impacts of this statement are not completely clear, they have also stated that the virtual assets issued in ICOs, depending on the economic context of their issuance and the rights granted to investors, may represent securities. A few weeks later, on November 16th 2017, CVM issued an FAQ asserting its opinions on a wide range of topics related to ICOs. ²⁰ Among others, it importantly stated that "assets issued under ICOs can clearly be understood as some type of security, especially when they give the investor, for example, rights to participate in capital or in pre-fixed remuneration agreements on invested capital or in meetings that determine the direction of the issuer's business."

In this same FAQ, the CVM mentioned utility tokens. Generally, utility tokens, which may also be called app coins or app tokens, provide users with access to a product, service or the issuing platform itself. According to CVM's statement, such tokens only "give the investor access to a platform, project or service, in the form of a license to use or credits to consume a good or service", and, most importantly, were used as an example of how an ICO could not be considered an issuance of securities. Even though the legal repercussions of this statement are not completely clear, it does seem to indicate that issuing utility tokens would be exempt from registration with CVM.

¹⁸ Registro de Companhia Aberta

¹⁹ Our detailed analysis of this notice: http://baptistaluz.com.br/wp-content/uploads/2017/11/Informativo-EXTRA-CVM-ICO.pdf

²⁰ Available at: http://www.cvm.gov.br/noticias/arquivos/2017/20171116-1.html







/ tokens and equity crowdfunding

In Brazil, equity crowdfunding is a form of public fundraising that connects companies and investors through an online platform, offering equity participation rights in exchange for monetary value. In these cases, the CVM offers a special regime of automatic registration waiver, being both the public offer and the issuer exempt from previous analysis and approval of the respective registrations with the CVM. CVM's objective in these cases is to reduce the costs of public offerings, thus facilitating the access of new issuers to the capital market, such as start-ups.

Thus, equity crowdfunding platforms fall under a regulation exemption, provided that companies comply with the legal requirements for the configuration of such activity, provided for in CVM Instruction 588/2017²¹. Among several other requirements, regulation demands the company to be registered in Brazil and to have an annual gross revenue of up to 10 MM BRL²²; that the amount to be funded does not exceed 5 MM BRL; that the funding period does not exceed 180 days; that the investor be guaranteed a period of at least seven days for free withdrawal; that the total amount invested is limited to 10K BRL per investor per period; and that the electronic platform that mediates the investment obtains registration with the CVM.

If such requirements are not problematic for the company that wants to conduct the ICO, the registration exemption provided for in this case may prove to be a regulatory solution in Brazil of high practical value. It will be up to the ICO conductor to observe the applicable regulatory framework and evaluate the risks and limitations imposed by this modality. It should be noted, however, that an equity crowdfunding does not allow the realization of an organized secondary market: an organized and public resale of the securities obtained in this modality is not allowed by Instruction 588/2017. For the practical realization of an ICO, this can be problematic.

Another classic example of a registration exemption is provided by CVM Instruction No. 476/09²³, which regulates the offer of securities intended

²¹ Available at: http://www.cvm.gov.br/legislacao/instrucoes/inst588.html

²² Brazilian Reais

²³ Available at: http://www.cvm.gov.br/legislacao/instrucoes/inst476.html





for (i) a restricted (i.e., directed at up to 75 investors and acquired by a maximum of 50 thereof) and (ii) qualified public, i.e., having a sufficient degree of knowledge about the market, so that regulatory intervention is not necessary to guarantee a detailed informational degree by the investor. In these cases, the CVM determines that a qualified investor is one with financial investments in an amount greater than 1MM BRL.²⁴

The exemption provided by CVM Instruction No. 476/09 also authorizes the securities subject to these offers to be traded between qualified investors in the organized and non-organized over-the-counter markets, even if the issuing company is not registered with the CVM.²⁵

/ secondary market

Aiming to protect transparency and investors' access to information, Brazilian law determines that only securities traded by companies registered before CVM may be freely traded in the secondary market. Thus, if a company conducting an ICO proves to be exempt from registration before CVM – e.g. if it issues utility tokens, or if it fits into the requirements of an investment crowdfunding – it may also have problems allowing its issued tokens to be publicly sold after the initial campaign. Privately reselling those tokens, however, should not pose any legal difficulties.²⁶

In its FAQ²⁷, the CVM has also made important considerations regarding the selling of tokens on the secondary market, noting that companies intending to issue tokens should be aware of existing regulation on the matter.

Even though the impact of such statements is not directly clear, it does raise red flags to anyone wishing to conduct an ICO in Brazil. In any case, it is clear that token exchanges, and even equity crowdfunding platforms, while serving as intermediaries or gatekeepers for trading tokens, lack specific rules for securing secondary market trades.

²⁴ Available at: http://www.cvm.gov.br/legislacao/instrucoes/inst539.html

²⁵ Considering the restrictions provided by CVM in Instruction No. 476/09.

²⁶ In this regard, CVM has issued reports No. 32/2005 and 33/2005, both on their understanding regarding the sales of securities on the internet. On these reports, CVM states that for an offer on the internet not to be public, the website has to (i) take effective measures to avoid the public from accessing the website, (ii) not disclose the website through any means, such as e-mails, search engines, ads, etc., and (iii) indicate that the page is not intended for the general public. Available at http://www.cvm.gov.br/legislacao/pareceres-orientacao/pare032.html and http://www.cvm.gov.br/legislacao/pareceres-orientacao/pare033.html

²⁷ As mentioned before. Available at http://www.cvm.gov.br/noticias/arquivos/2017/20171116-1.html.





In this scenario, faced with the reality of virtual negotiations and the safety inherent to blockchain technology, one possible way forward would be to adopt this technology as a way of guaranteeing the transparency and mitigating the risks involved in negotiating tokens in the scope of the capital markets, both in initial campaigns and the secondary market.

/ trading and taxing cryptocurrencies

In Brazil, trading cryptocurrencies such as itcoins and Litecoins is also in a legal grey zone, and risks should be assessed on case-by-case basis. However, regulators have already started asserting opinions on this regard.

Brazilian Central Bank has issued two notices regarding the risks of trading cryptocurrencies: Notices No. 25.306 of February 19, 2014 and No. 31.379 of November 16, 2017. On both, the Central Bank alerts to inherent instability of such systems, and states that it does not consider cryptocurrencies as "electronic money" On Even though these understandings are not binding and do not seem to be final, they point towards the understanding that traders of cryptocurrencies, such as exchanges, may not be regulated under the rules applicable to financial institutions.

The Brazilian Revenue Office has also stated that gains obtained from trading cryptocurrencies are to be taxed under Brazilian law. Specifically regarding income taxes, it has issued its understanding on items 447 and 607 of its 2017 manual for the declaration of income taxes³⁰. There, it has stated that capital gains higher than 35,000 BRL per month obtained from

-

²⁸ Available at:

http://www.bcb.gov.br/pre/normativos/busca/normativo.asp?numero=31379&tipo=Comunicado&data=16/11/201

²⁹ According to Article 6, VI of Law No. 12,865, of October 9th, 2013 electronic money is defined as "resources stored in a device or an electronic system that allow the end user to perform payment transaction" exclusively in national currency (Brazilian Real). (...) E-money should not be confused with the so-called virtual currencies, which are denominated in a different unit of account from the currencies issued by sovereign governments." Available on Frequently Asked Questions Series – Brazilian Payment System: http://www.bcb.gov.br/conteudo/home-en/FAQs/FAQ%2007-Brazilian%20Payments%20System.pdf. Based on this concept, the Brazilian Central Bank has recognized that Bitcoin and other cryptocurrencies are not electronic money because they are not backed in other currencies and have decentralized and autonomous administration.

³⁰ Available at: http://idg.receita.fazenda.gov.br/interface/cidadao/irpf/2017/perguntao/pir-pf-2017-perguntas-e-respostas-versao-1-1-03032017.pdf





sales of cryptocurrencies are to be taxed at a 15% rate. It has also stated that cryptocurrencies are to be compared to financial assets for income tax purposes.

/ taxing ICOs

As seen in the items above, the legal impacts in Brazil of trading cryptocurrencies or conducting ICOs are not yet completely clear, and tax law is no exception. As mentioned before, tokens issued at an ICO may give rise to many different rights, and depending on the characteristics of their issuing, can end up constituting securities. If that is the case, the ICO could be equivalent to a classic IPO, and all its corresponding regulation - and tax law - would apply.

However, if the tokens are *not* considered securities – e.g. if they're utility tokens – taxing them becomes less straightforward. Even in the lack of specific regulation, it is already possible to foresee some of the problems that would arise in practice.

In the case of a utility token, i.e., a token that gives access to a good or service, the correct taxation could depend on the moment a capital gain by the company that issued the tokens is recognized. On one hand, one could argue that, because they represent a future service execution or a future delivery of goods, the selling of tokens should only be taxed at the time such obligations are effectively performed. In this case, the taxes that could usually apply to the transactions originated by the token should be applicable: e.g., Service Tax³¹ or Value Added Tax³². In fact, one could argue in this case that the gains obtained through the sale of such tokens are no revenue, given its linkage to the future realization of a compensation, guaranteed by the token.

On the other hand, it could be argued that the amounts received by the company that conducted the ICO should be treated, immediately upon receipt, as non-operating income, which in Brazil is taxed at a federal level and at rates much more aggressive than would be the case if the compensations mentioned above were taken in consideration. This understanding would seem to be applicable especially if the tokens are issued at a pre-selling level. However, such solution seems to completely

-

³¹ In Brazil, the *Imposto Sobre Serviços* (ISS) which is levied on a municipal level.

³² In Brazil, the *Imposto Sobre Circulação de Bens e Prestação de Serviços* (ICMS) which is levied on a state level.





ignore the subsequent delivery of the good or the provision of the corresponding service. In any case, given the legal uncertainty associated with this practice, knowing the exact rights conferred by such token on a case-by-case basis would be essential for properly applying tax law.

/ conclusion

As we have seen, blockchain technology gives rise to several potential innovations – and to unprecedented legal challenges, which regulators have only recently started getting aware of. Because blockchains allow for the existence of decentralized, intermediary-free and safe peer-to-peer transaction systems, they are natural candidates for the creation of innovative payment systems. The two most striking examples are cryptocurrencies and the use of blockchain for launching initial coin offerings.

In this article, we have shown that in many circumstances, the tokens issued at an ICO can be considered securities, especially if they grant their holders an equity right of any sort. However, ensuring that the tokens are utility tokens – i.e., only grant a right of access to a good or service –, or that the company conducting the ICO is compliant with the Brazilian rules on equity crowdfunding, may alleviate regulatory pressures on this practice.

It has also been shown that trading and taxing cryptocurrencies and ICOs is not a completely straightforward understanding. Even if regulators have been asserting that gains obtained from the sales of cryptocurrencies are to be declared for income tax purposes, many aspects remain unclear. From the perspective of a company conducting an ICO, the situation can be especially challenging. Depending on the way the tokens are issued, completely different tax regimes could apply. In case the ICO is not considered an issuance of securities, the main discussions would circle around the moment when the company is considered to have received income from said issuance.

That said, even though the blockchain technology is still in its infant stages and there remains much to be proved, its inherent characteristics have already shown of how much value it can be. For society to more efficiently and fairly use the blockchain, regulators should be aware of its potential and its pitfalls, providing rules able to both protect the public from risks







and to allow its free and open use – or even to integrate its possibilities into existing legal frameworks. Even for public agencies, making use or mandating the use of a blockchain's unmodifiable and open database can be of great social and financial value.