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THE DUTY TO COMMUNICATE AND THE IMPACTS OF THE LACK OF REGULATION OF CRYPTOCURRENCY EXCHANGES IN BRAZIL

Supervisor: Dr. Miguel de Azevedo Moura, Professor of the NOVA School of Law

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Dissertation to obtain a Master's Degree in Law, in the specialty of Law and Management.

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ANTI-PLAGIARISM STATEMENT

I hereby declare that the work I present is my own work and that all my citations are correctly acknowledged. I am aware that the use of unacknowledged extraneous materials and sources constitutes a serious ethical and disciplinary offence.

Milena Loyola Conci
13 of September of 2022

ACKNOWLEDGEMENTS

I would like to thank my family, who have always been there for me and helped me to achieve my goals. To my parents, thank you for encouraging me from an early age to seek more knowledge and overcome my challenges, whatever they may be.

I also thank my friends, for showing me different opinions and points of view, for the support and kindness. Thank you for being a second family in Lisbon for me.

Finally, I wish to show my gratitude to my supervisor, for having accepted since the first moment to guide me in this process. I thank you for all your availability, guidance and help.

I declare that this dissertation has a total of 138.450 characters, including spaces and footnotes.

LIST OF ABBREVIATIONS AND ACRONYMS

ABCripto	Brazilian Association of Cryptoeconomy
AIG	American International Group
AML/CFT	Anti-Money Laundering and Countering the Financing of Terrorism
BACEN	Brazilian Central Bank
CC	Brazilian Civil Code
CVM	Securities and Exchange Comission
CNPEP	National Registry of Politically Exposed Persons
COAF	Financial Activities Control Council
ESMA	European Securities and Market Authority
FATF	Financial Action Task Force on Money Laundering
ICO	Initial Coin Offering
IOSCO	International Organization of Securities Commissions
IRS	Internal Revenue Service
KYC	Know Your Customer
LSA	Corporations Act
MiCA	Market in Crypto-Assets
MiFID II	Markets in Financial Instruments Directive
PwC	Pricewaterhouse Coopers
P2P	Peer-to-peer
SISCOAF	Financial Activities Control System
STF	Superior Court of Justice
TFR	Transfer of Funds Regulation

ABSTRACT

The theme of this paper consists in characterizing the regulation of crypto-active products and the operation of exchanges in the Brazilian normative and economic scenario. To this end, it proposes to show the reader the distinctive characteristics that have enabled the vertiginous leverage in the use of crypto-active instruments over the last decade through the establishment of concepts that are relevant to the understanding of this market, as well as the speed of the degree of advancement in the accounting regulation of crypto-active instruments and the brokers that provide this type of service around the world. Taking into consideration the structural characteristic, the first section brings the contextualization of the functioning of crypto-active products and blockchain technology, whilst the second refers to the presentation of the provision for possible legal provision to which the functioning of crypto-active products shall be submitted. The third section, in turn, seeks to demonstrate the mode of operation of exchanges, as well as through which ways exchanges provide their services to their clients. In the fourth section, the possible regulatory paths for exchanges in Brazil are addressed taking as a basis what is being discussed in the Brazilian Parliament and what is the guiding parameter in the rest of the world. What we see is a regulatory grey area concerning exchanges: what information, how, and to whom it should be reported. In this sense, on one end there is total centralization by the State in the functioning of the crypto market. On the other hand, there is the absence of any form of regulation on crypto-activities and exchanges. It advocated the existence of guarantees provided to customers by exchanges, such as asset segregation, transparency in the provision of information, and contribution to the reporting of suspiciously illicit activities to the competent authorities.

Keywords: Crypto-currencies; Exchanges; Regulations.

SUMMARY

INTRODUCTION

Thanks to the constant technological advances that society has undergone in recent decades, the magnitude with which it have occurred has been so significant that different segments have undergone reasonable modifications in a relatively short space of time. In that sense, how money transactions are handled changed considerable during time in a way that making payments and financial transactions more conveniently and through digital means. And it is within this amount of changes that, especially since 2008, cryptocurrencies have received greater notoriety, assuming more and more global projection in daily life and by the increase in financial operations in which they are involved.

It can be considered a paradigm shift, especially in the international financial system, mainly due to its distinctive characteristics, such as decentralization, anonymity, and cryptography in transactions, as opposed to the need for a Central Bank and the implications of this in terms of taxation and related issues. As example, Bitcoin, the best-known cryptocurrency, exists only in an online environment and on a global scale. It is characterized by being a transnational, global, and integrated project. Issues of territoriality are irrelevant to the operation of the system and all those who adhere to it will be bound by the same rules of protocol, regardless of their location (varying the implication of this adherence with local legal rules).

The characteristics and advantages of cryptocurrencies have led them to be increasingly use for investment purposes, financial trading, and remuneration for national and international products and services, drawing attention, however, to the "difficulty" of tracking the origin and destination of the financial transactions carried out, since the blockchain does not store user´s personal data. And in virtue of the rapid evolution that this technology has presented since its origin, although not necessarily with the degree of monitoring of the understanding and of the corresponding legislative support, on the subject of cryptocurrencies reside some points that need to be resolved, being them related to security, reliability, the incidence of money laundering, financial pyramids, and fraud.

Furthermore, for being significantly disruptive compared to the current economic *modus operandi*, the increasing consolidation of cryptocurrencies in exchange relations faces issues related mainly to the need for regulation, the volatility of these cryptographic assets, and the general population's knowledge about them, also resting on a

paradigm of social acceptance. On the other hand, the financial system in vogue is structurally different depending on the country where the interested agents are, legal and technological aspects among others. The rules applicable to the state financial system are determined based on competence rules, which, in principle, are limited by geographical space, fiduciary currencies, the intermediation of Central Banks, and the figure of the State.

In the wake of the notoriety of cryptocurrencies, exchanges began not only to stand out, but also to contribute significantly to the adherence to cryptocurrency transactions, since they work similarly to brokers, intermediating the relationship between buyers and sellers of digital assets. In Brazil, the creation of exchanges began in 2011 with the foundation of the Mercado Bitcoin website. The possibility of investment and use as a payment instrument as an alternative to fiat and electronic currency has made crypto-active assets, specifically Bitcoin, a topic of interest for civil society and public authorities around the world.

However, specifically in the Brazilian context, both the formulation and the implementation of specific regulations for cryptocurrencies will need to happen to ensure the characteristics that make these crypto-active assets positively differentiated, in the sense of maintaining the absence of the need for an intermediary, the agility in conducting transactions. On the other hand, establishing legislation which main characteristic consists in providing a set of obstacles to the tool will consequently tend to hurt the flexibility and attractiveness that these crypto-activities have.

Given this situation, the structuring and approval of a true regulatory framework that can legally support and, consequently, regulate the use of both cryptocurrencies and exchanges will serve to outline the future of this segment in the world, on how comprehensive they will be in financial operations. Moreover, this development will occur in parallel to the evolution of cryptocurrencies, such as whether or not it fits into the concept of currency, fulfilling or not the three fundamental functions of a currency: store of value, unit of account and means of payment.

Taking into account the growth presented in just over a decade, mainly through the movement of exorbitant amounts in operations in the international financial system, as well as the influence on how society and financial institutions have dealt with the advent of a disruptive way of making payments, the realization of this dissertation is justified exactly by the possibility of offering greater understanding about cryptocurrencies and exchanges, the specificities they have, the functional aspects and the treatments

assigned to their regulations and accounting standardization in Brazil. Therefore, through this opportunity, it was outlined as an objective to characterize the regulatory framework of cryptocurrencies and exchanges in the Brazilian economic context.

The first section corresponds to the intent of contextualizing the details of cryptocurrencies and the registration protocol called blockchain, aiming to establish them conceptually and functionally and to clarify the nuances of the impacts they cause. In the second section, the legal provision on which both cryptocurrencies and exchanges reside or will reside in a possible regulatory legislation is presented. In regards the third section, the mode of operation of exchanges and the extent to which existing regulatory standards in other countries may or could affect the Brazilian context is explained. The fourth and last section, in turn, covers the central points of dialogue involving the operation of exchanges and the Brazilian regulatory framework.

1 CRYPTOCURRENCY AND BLOCKCHAIN

1.1 GENESIS AND NATURE OF CRYPTOCURRENCY

There is a tendency to confuse the terminology of cryptocurrency, electronic money, virtual currency and digital currency. People might use these terms interchangeably, define one term using the other one, or describe the correlation of terms improperly.

To understand what is cryptocurrencies, what is its legal nature and what are the transactions performed by exchanges, it is important to first identify and distinguish each concept.

1.1.1 E-money, virtual currency, digital currency and cryptocurrency

The European Central Bank defines e-money as an electronic store of monetary value on a technical device that may be widely used for making payments to entities other than the e-money issuer. The device acts as a prepaid bearer instrument which does not necessarily involve bank accounts in transactions. Also, e-money products can be hardware-based or software-based depending on the technology used to store the monetary value[1].

According to Directive 2009/110/EC, Article 2 (2), electronic money means electronically, including magnetically, stored monetary value as represented by a claim

[1] EUROPEAN CENTRAL BANK, 2021.

on the issuer which is issued on receipt of funds for the purpose of making payment transactions as defined in point 5 of Article 4 of Directive 2007/64/EC, and which is accepted by a natural or legal person other than the electronic money issuer[2].

On another hand, the Financial Action Task Force on Money Laundering (FATF), defines virtual currency as a digital representation of value that can be digitally traded and functions as (1) a medium of exchange; and/or (2) a unit of account; and/or (3) a store of value, but does not have legal tender status (i.e., when tendered to a creditor, is a valid and legal offer of payment) in any jurisdiction. It is neither issued nor guaranteed by any jurisdiction and fulfils the above functions only by agreement within the community of users of the virtual currency. Virtual currency is distinguished from fiat currency (a.k.a. "real currency," "real money," or "national currency"), which is the coin and paper money of a country that is designated as its legal tender; circulates; and is customarily used and accepted as a medium of exchange in the issuing country. It is distinct from e-money, which is a digital representation of fiat currency used to electronically transfer value denominated in fiat currency. E-money is a digital transfer mechanism for fiat currency—i.e., it electronically transfers value that has legal tender status[3].

Therefore, we can conclude that virtual currency have four main characteristics: (1) they do not have physical form per se; (2) they are only valid within the specified community; (3) they are unregulated, there is no centralized banking or state authority that regulates issuing or circulation of a currency; and (4) they work across national borders[4].

The FATF describes digital currency as a digital representation of either virtual currency (non-fiat) or e-money (fiat) and thus is often used interchangeably with the term "virtual currency[5]. In FinTech Revolution, Sofie Blakstad and Robert Allen explains that "cryptocurrency" refers to types of currency underpinned by crypto-technology (though not only distributed ledger technology), while "digital currency" is a superset of digital value which includes cryptocurrencies, but also other types of digital exchange of value based on other technologies[6].

[2] EUROPEAN UNION, 2009.
[3] FATF, 2014, p. 4.
[4] ARKHYPCHENKO, 2020, p. 11, 12.
[5] FATF, 2014, p. 4.
[6]BLAKSTAD, ALLEN 2018, p. 87.

In that sense, the World Bank published in 2018 the paper Cryptocurrencies and Blockchain, stating that the emergence of cryptocurrencies and blockchain technologies is part of a broader wave of technologies that facilitate peer-to-peer (P2P) commerce, individualization of products and flexibilization of production methods. Also, blockchain technologies organize P2P transactions and P2P information flows without companies that operate digital platforms. Cryptocurrencies are the first, and most developed application of blockchain technologies, since they create money without central banks and facilitate payments without financial institutions[7].

Thus, cryptocurrency is an electronic online payment system, which existence depends on public trust, will and agreement to accept virtual money as a mean of exchange (a social contract); it is backed up by cryptography and relies on blockchain technology, as well as the interaction between nodes that exist in the network[8].

The first cryptocurrency that came into being was Bitcoin. So it is only logical to start analyzing cryptocurrency features and requirements of its existence to answer the question of what cryptocurrency is.

1.2 CRYPTOCURRENCY, BLOCKCHAIN AND BITCOIN

The best way to understand cryptocurrencies and blockchain is with Bitcoin. Bitcoin was the first cryptoasset and today is the largest and the breakthrough that allowed Bitcoin to emerge underlie all other blockchain and crypto projects. As a result, understanding Bitcoin provides a firm foundation on which to consider the entire crypto and blockchain space.

First of all, it is important to understand the context of the emergence of Bitcoin. In 2008, the world was in the midst of the greatest financial crisis after the investment bank Lehman Brothers filed for bankruptcy and American International Group (AIG), the biggest insurer in America, had to be bailed out with a US$85 billion loan by the New York Federal Reserve Bank. With the financial crisis, a lot of people lost their jobs and their life's savings, triggering protests and a vilification of those working in the financial sector. A growing number of people began to wonder if the architecture of the financial system needed to be completely rethought.

After the bankruptcy of Lehman Brothers, Satoshi Nakamoto revealed a white paper to the world titled 'Bitcoin: A Peer-to-Peer Electronic Cash System, introducing a

[7] WORLD BANK, 2018, p. 21.
[8] ARKHYPCHENKO, 2020, p. 17.

system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. The white paper set out a vision of a purely peer-to-peer version of electronic cash that would allow online payments to be sent directly from one party to another without going through a financial institution. This is why Nakamoto's paper has become a sort of sacrosanct document in the crypto community[9].

The follow abstract of the white paper wrote by Satoshi Nakamoto explains what the Bitcoin is and how it operates:

> A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution. Digital signatures provide part of the solution, but the main benefits are lost if a trusted third party is still required to prevent double-spending. We propose a solution to the double-spending problem using a peer-to-peer network. The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. The longest chain not only serves as proof of the sequence of events witnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate the longest chain and outpace attackers. The network itself requires minimal structure. Messages are broadcast on a best effort basis, and nodes can leave and rejoin the network at will, accepting the longest proof-of-work chain as proof of what happened while they were gone[10] .

In that context, Bitcoin was trying to solve the problem with the reliance on financial institutions. In brief, Bitcoin is kept in cryptography, simultaneously on all computers in a network spread around the world. It cannot be erased, embezzled, canceled or held or frozen. Bitcoin issue and value are not controlled by anyone in particular and only its owner can authorize any operation on his money[11].

In that sense Arslanian and Fischer explains how the private and public key works:

> While your private key enables you to come up with your public key, it is impossible to use the public key to deduce the private key. […] When it comes to Bitcoin transactions, you are in practice using your private key to sign the hash of the transaction (not the transaction itself), which enables you to have a small signature even if the underlying data behind the hash is huge. This is what proves ownership to others in the network as they know that it is the person with the right private key that signed the transaction[12].

Furthermore, Antonio Vilaça Pacheco exemplifies those terms as it follows:

> The public key to your wallet is like an email address. It is used to send Bitcoins to your wallet. It is like the NIB or IBAN of your bank account. The

[9]ARSLANIAN, FISCHER, 2019, p. 96.
[10] NAKAMOTO, 2008.
[11] PACHECO, 2021, p. 45.
[12] ARSLANIAN, FISCHER, 2019, p. 100.

> private key is what allows you to spend your Bitcoins or send them to other wallets. It is like the secret access code to your bank account or the pin of your ATM[13].

By design, a Bitcoin wallet holder can send or receive some multiple/fraction of Bitcoin to another wallet holder just by knowing their wallet address (i.e. their public key)[14].A Bitcoin wallet is a software program. In other words, Bitcoin wallets are applications that allow you to store your Bitcoins. Most wallets also allow you to store more than one currency and to switch from one cryptocurrency to another using an internal exchange with which you have a protocol. The private key refers to your wallet of a cryptocurrency[15].

Before the analysis of the blockchain, it is important to understand the concept of a hash:

> A hash is an algorithm used in cryptography that takes an input of any size and returns a fixed-length sequence of numbers. This is important as regardless of the length or the size of the data, you will get a fixed size hash. A hash can be generated from any piece of data, but the data cannot be generated from the hash. Basically it only works one way and you cannot guess the input by looking at the hash. Also, even if a very minor change is made in the data, the hash will be different[16].

Bitcoin was the first cryptocurrency to create its blockchain. It has the largest blockchain managed on an open, global and transnational system used to make financial payments on a network in a secure protocol without requiring authorization from intermediaries.

Moreover, a blockchain is a chain of blocks. It was created originally in 1991 with the intention of having information organized in a sequential manner to prevent us from altering documents or events by assigning them an earlier date. In other words, blockchain is a security protocol, which aims to use decentralization as a security measure. Once a piece of information is questioned and registered in the blockchain, it becomes practically immutable[17].

Saying the same differently, in a conventional payment system such as a credit card, for example, Visa, MasterCard or even PayPal, there is a company in the middle, a for-profit company that centralizes payments, operates the network and makes sure it is secure and reliable. However, a blockchain operates differently, in a decentralized way:

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[13] PACHECO, 2021, p. 67.
[14]BLAKSTAD, ALLEN 2018, p. 76.
[15] PACHECO, 2021, p. 54.
[16]ARSLANIAN, FISCHER, 2019, p. 100.
[17] PACHECO, 2021, p. 71.

> Each block consists of the information it contains, the hash of that block and the hash of the previous block. The information it contains depends on the type of blockchain that is involved. In the case of Bitcoin, for example, the information contains the ID of the source wallet of the transfer, the value of the transfer, and the ID of the destination wallet of the transfer. A block also has its hash. Hash is like a fingerprint, through which you can identify yourself. It is unique to each block. When a block is created, it is assigned a code and that code is its Hash. This is critical to identify the block. If something changes in a block, its hash changes. And if the hash changes, it is no longer the same block. It becomes a new Block. A block also has the information of its previous block. This information is what allows the Blocks to be chained together, and this is what makes them so secure. Each block contains the information of who is the sender, recipient and the amount of the transaction. Each block also has its Hash[18].

Therefore, to validate that the hashes fit previous ones, you have the Proof of Work. Block security comes from the combination of hash identification and Proof of Work. In that sense, the Proof of Work is commonly called 'mining'. It involves four separate pieces of data: a hash of the transactions on that block, the hash of the previous block, the time and a number called the nonce. The nonce is a random number that is separate from the transactions that are set out on that block. So, a 'miner' will take these four variables and hope that the hash output will meet the necessary requirement of the number of starting zeros. That output is called the golden hash[19].

Also, the entire blockchain runs on a peer-to-peer system, without a central entity that processes, watches over or intervenes and where anyone can join the blockchain. Whoever joins the blockchain receives an entire copy of the entire transaction history of the network so far. When a new block is produced, it is distributed to the entire network. And each of them validates that the hash of the block has not been changed. If it hasn't and everything checks out, each node will add the new block to the blockchain[20].

Overall, the characteristics of the blockchain can be summarized as follows:

> • Decentralized and transparent: There is no central database or central authority and each participant maintains a copy of the ledger. Users are able to check on any transaction that has taken place at any time on the blockchain. The degree of decentralization varies from blockchain to blockchain.
> • Consensus-driven: All participants share and update the ledger after reaching a consensus and agreeing on the validity of transactions taking place. While true of most major blockchains, there are other various ways of reaching this consensus as we have seen previously.
> • Immutable: Once data is added to the blockchain, it cannot be altered. This is done via the use of particular cryptographic techniques[21].

[18] PACHECO, 2021, p. 71.
[19] ARSLANIAN, FISCHER, 201, p. 104.
[20] PACHECO, 2021, p. 73.
[21] ARSLANIAN, FISCHER, 2019, p. 115.

To summarize, blockchain is a database distributed and shared among thousands of computers, which is updated and recorded by several processing units at the same time, validating truths together in order to verify all the transactions that take place in a given market[22]. Nevertheless, there are a few issues regarding Bitcoin, for example, many businesses that initially took Bitcoin in payments have stopped doing so, because of its volatility. Bitcoin's blockchain has become a speculative instrument: digital gold, reserve currency for other cryptos—everything but a "peer-to-peer electronic cash system". A commonly quoted statistic is that Bitcoin processes approximately 7 transactions per second (the average is closer to 3.5), whereas Visa processes up to 20,000 transactions (average 7,000) per second. So, Bitcoin itself could never compete with the card networks even at today's levels of use[23]. Concerning the price volatility of Bitcoin, while volatility is great for speculators and traders, it is not good for an asset that can be used as a store of value.

Other issues are its legality, regulation and tax clarity. In that sense, it is difficult for an asset to gain mainstream acceptance if investors don't know what the tax impact will be for any gain or loss that they make. Also, people need to have certainty on the legal and regulatory framework in advance[24].

There is as well a technical challenge, for example, the scalability of Bitcoin. Currently, Bitcoin network can only process fewer than six or seven transactions per second. Just by way of comparison, Visa's network can process around 24,000 per second. Besides, Bitcoin faces serious ecological challenges as mining takes an incredible amount of energy. The electricity consumption required by the proof-of-work mechanism is clearly not scalable in a sustainable way. While many other cryptocurrencies use methods that are not as energy intense as proof-of-work (e.g. proof-of-stake), this is still a problem for Bitcoin today[25].

In brief, there are a few challenges that Bitcoin needs to overcome and it is in this context that new cryptocurrencies emerge. In the next topic, it will be presented the main cryptocurrencies existing today.

[22] PACHECO, 2021, p. 74.
[23]BLAKSTAD, ALLEN 2018, p. 78.
[24]ARSLANIAN, FISCHER, 2019, p. 109.
[25]ARSLANIAN, FISCHER, 2019, p. 109.

2 CURRENT OVERVIEW IN BRAZIL

2 .1 ECONOMIC, POLITICAL AND SOCIAL BACKGROUND

The National Monetary Council (*Conselho Monetário Nacional*), over the years, has accompanied the economic developments and sought to update the national payment system. Normative instructions and proposed laws will be addressed in the following sub-chapters. It has been noticed an increase in cases of financial pyramid involving cryptocurrencies in Brazil, which are reported by the Brazilian press. The cases originate from Federal Police operations, which investigate the illegal practice of financial pyramiding.

One of the most famous operations is Operation Kryptus, which investigates the illegal practice of financial pyramiding by a company located in Rio de Janeiro. According to the Federal Police, the company acted as if it were an investment fund, in which the investor acquires a certain amount of shares and receives fixed income. However, as in a volatile market such as cryptocurrencies, it is not sustainable to promote fixed profitability to investors, otherwise the company would resort to a financial pyramid[26].

A Ponzi Scheme, or Pyramid Scheme, consists in paying client's investments mostly from the investments of new clients. First, the savers instruct their money to the asset manager to earn profits. As long as the number of investors increases, the profit increases. Then the new investors pay the interest to the clients that are already saving. At the end, when the subscribers want to recover their capital, and the asset manager can´t find any new subscribers, the system collapses and money and the asset manager disappear.

In other words, financial pyramiding is an illegal scheme in which profit is generated by bringing in new customers and not by the profitable nature of the operation. To avoid the collapse of the system, it is necessary to keep expanding the network of customers. The scheme generates enrichment of the pyramid's mentors who do not declare their profits to the IRS[27].

According to the Federal Police, in the last six years, the financial movement of the companies involved in the frauds would have presented billionaire figures and 50% of this movement occurred in the last 12 months[28].

[26] AGÊNCIA BRASIL, 2021.
[27] AGÊNCIA BRASIL, 2021.
[28] SARAIVA, 2021.

2.2 LEGAL BACKGROUND

2.2.1 Legal nature of cryptocurrencies in Brazil

The importance of establishing the legal nature of cryptocurrencies consists in the fact that the legal treatment in the various branches of law changes depending on the nature of the object under study. Meaning that the attributions that the law determines are essential to establish the way in which certain institutes and assets are treated.

In this sense, the adequate legal treatment tends to create an environment of legal security favorable to the market's growth and integrity, as well as sustain constitutional and legal principles such as consumer protection, protection of popular savings and the fight against money laundering and terrorism financing[29].

The first possible classification for cryptocurrencies, especially considering the nomenclature used for their dissemination, is that they could have the legal nature of currencies. According to Werle, currencies have three main functions, namely, unit of account, medium of exchange and store of value. The first function of money is to serve as a means of exchange, which allows people who wish to exchange a certain good for another to do so without necessarily having to find someone with a coinciding interest in order for the exchange to take place. The second function, to serve as a unit of account, means that money allows the standardization of the values of assets and liabilities. Finally, the third function is the store of value, which is linked to the possibility of conserving value over time to be consumed later.

Therefore, for a currency to be considered as such, besides having the characteristics of being scarce, durable, divisible, easy to store and carry, it must also fulfill the functions of money.

After such considerations, it is necessary to analyze the possibility of framing cryptocurrency as a currency. First, regarding scarcity, considering that the number of Bitcoins, the main current cryptocurrency in place that may be issued through its system is known and determined, it is possible to state that it is endowed with the scarcity necessary for currency. In addition, cryptocurrencies are divisible and durable, and fulfill the function of being a means of payment[30].

The incompatibilities of the framework are due to the fact that cryptocurrency is not configured as a unit of account, because it has no ballast and its value depends on

[29]COSTA, PRADO, GRUPENMACHER, 2020, p. 82.
[30] WERLE, 2021, p. 352.

conversion into local currency, thus it would only serve as a unit of account after its conversion[31].

Furthermore, cryptocurrencies, despite being used as a form of investment and presenting a growth in value due to the speculation involved, have no guarantee of stability of value[32]. Thus, cryptocurrencies do not satisfactorily fulfill two of the functions that a currency should have. Even though cryptocurrencies may fulfill the function of intermediary means of exchange, they do not serve as a unit of account, because their supply is finite and predetermined, causing price volatility and because they also do not fulfill the function of store of value, since it is observed that they are not endowed with intrinsic value[33].

In addition, for a currency to be legally considered as such, it must also have "discharging power" and "legal tender," characteristics that Bitcoin does not have so far. Discharging power can be understood as the compulsory acceptance of the currency in a certain territory. Legal tender, on the other hand, would be the ballast based on the legislation of a given country, such as, in Brazil, the Real, which was established by Law 9.069/1995[34].

Therefore, cryptocurrencies are not exactly currencies, because they do not have the legal attribute of discharging power, i.e., their acceptance is not mandatory in order to release the debtor from a legal obligation. This is the case only of the national fiat currency, the *Real*, which is legal tender according to Brazilian law (Law No. 9.069/1995 and Decree Law No. 857/1969). Only a virtual currency, to be eventually issued in the future by the Brazilian Central Bank (*BACEN*), will be legal tender in the national territory[35]. Adding to that, cryptocurrencies are not considered electronic money under the terms of Law 12.865/2013. Electronic money is a digital representation of credit denominated in *Reais*, which is subject to regulation by *BACEN*[36].

However, creditors of a legal obligation may accept other goods (such as cryptocurrencies) as a form of payment in exchange of payment in cash. This is called payment in kind and is a form of debt extinction, which depends on the agreement of will between the parties and the object cannot be illegal according to the current legal system.

[31] WERLE, 2021, p. 353.
[32]WERLE, 2021, p. 354.
[33] WERLE, 2021, p. 354.
[34] WERLE, 2021, p. 555.
[35]COSTA, PRADO, GRUPENMACHER, 2020, p. 85.
[36]COSTA, PRADO, GRUPENMACHER, 2020, p. 85.

Finally, the Superior Court of Justice (*Superior Tribunal de* Justiça) (hereinafter STJ) also has the understanding that cryptocurrencies do not contain all the qualities inherent to their classification as currency under Brazilian law:

> NEGATIVE CONFLICT OF COMPETENCE. POLICE INVESTIGATION. STATE JUSTICE AND FEDERAL JUSTICE. INVESTIGATED WHO ACTED AS A CRYPTOCURRENCY TRADER (BITCOIN), OFFERING FIXED INCOME TO INVESTORS. INVESTIGATION INITIATED TO INVESTIGATE THE CRIMES TYPIFIED IN ARTS. 7, II, OF LAW N. 7.492/1986, 1 OF LAW N. 9.613/1998 AND 27-E OF LAW N. 6.385/1976. STATE PUBLIC MINISTRY THAT CONCLUDED BY THE EXISTENCE OF EVIDENCE OF OTHER FEDERAL CRIMES FEDERAL CRIMES (CURRENCY EVASION, TAX EVASION AND MOVEMENT OF RESOURCES OR VALUES PARALLEL TO THE ACCOUNTING REQUIRED BY LAW). INEXISTENCE. OPERATION THAT IS NOT REGULATED BY THE BY THE HOMELAND LEGAL SYSTEM. **BITCOIN DOES NOT HAVE CURRENCY NATURE NOR SECURITIES. INFORMATION FROM THE CENTRAL BANK OF BRAZIL BRAZIL (BCB) AND THE SECURITIES COMMISSION (CVM).** INVESTIGATION THAT MUST CONTINUE, FOR NOW, IN THE STATE COURT STATE COURT, TO INVESTIGATE OTHER CRIMES, INCLUDING STELION AND AGAINST THE POPULAR ECONOMY.
> 1. **The operation involving the purchase or sale of cryptocurrencies is not regulated in the Brazilian legal system, because virtual currencies are not considered as currency by the Central Bank Of Brazil, nor are considered as securities by the Securities and Exchange Commission (CVM),** not characterizing its negotiation, by itself, the crimes specified in arts. 7, II, and 11, both of Law n. 7.492/1986, nor even the crime foreseen in art. 27-E of Law n. 6.385/1976.
> […]
> 3. Regarding the crime of evasion, it is possible, in theory, that the trading of cryptocurrency is used as a means for the practice of this illicit act, provided that the agent acquires the virtual currency as a way to effect an exchange transaction (conversion of real into foreign currency), unauthorized, in order to promote the evasion of foreign currency from the country. In this case, the elements of the records, for now, do not indicate such a circumstance, being unfeasible to conclude the practice of this crime only based on an alleged inclusion of a foreign legal entity in the corporate structure of the investigated company[37].

In this sense, one classification that can be tied to cryptocurrencies is as intangible, movable goods that can serve as a way of exchange .In a broad or general sense, a good can be understood as anything that is useful to human beings, but in a strict and legal sense, a good is the utility, physical or immaterial, object of a legal relationship, whether personal or real. In this sense, everything that has a certain utility, is in some way scarce, can be valued monetarily and enables its appropriation, fits as such[38].

It should be emphasized again that cryptocurrencies are generally intended to carry out electronic transfers in a decentralized manner without submission to central bodies and intermediaries. Only because they fulfill this role of serving as a "means of

[37] BRAZIL, 2018.
[38] WERLE, 2021, p. 357.

exchange" it can be said that they are useful. However, "virtual currencies", in fact, serve people not only as a means of carrying out transactions online and without intermediaries, but are also being used as a form of investment - because of their volatility - and as a means of obtaining income[39].

Moreover, it can be said that access to cryptocurrencies is limited because they are scarce and it is this limitation that makes cryptocurrencies even more interesting in the eyes of those who acquire them for investment purposes, since it makes them economically valuable.

As for the need for economic valuation, it is observed that, currently, there is a pecuniary value attributed to cryptocurrencies, which is mainly due to the importance and usefulness that these virtual currencies have for their users. Besides that, cryptocurrencies are capable of appropriation, which is why they meet the requirements to be classified as property.

Finally, it is important to analyze the classification of cryptocurrencies as financial assets. In this sense, assets, broadly speaking, can be understood as the set of values, goods or even credits that someone owns, i.e., that are part of the ownership of the person, whether an individual or legal entity. Financial assets, in turn, are a more restricted type of assets, characterized by their intrinsic value, despite the fact that they do not need physical materiality. This concept includes stocks, for example, as well as bank deposits and bonds[40].

For accounting purposes, financial assets could be understood as cash and cash equivalents, financial instruments or securities representing an interest in another company, as well as rights arising from swap contracts or involving currency receivables. After a proper review of the list of assets that the Securities and Exchange Commission (*Comissão de Valores Mobiliários*) (hereinafter CVM) considers as financial assets in CVM Instruction No. 555/2014, and the concepts delimited therein, it is possible to ascertain that cryptocurrencies are not represented in the list disclosed by the autarchy, therefore, initially, we can state that, for CVM, cryptocurrencies do not fit into the concept of financial asset[41].

This understanding is in line with the one disclosed by the commission through Circular Letter 1/2018/CVM/SIN, according to which cryptocurrencies cannot be quali-

[39] WERLE, 2021, p. 357.
[40] WERLE, 2021, p. 360.
[41] WERLE, 2021, p. 361.

fied as financial assets for the purposes of article 2, V, of CVM Instruction 555/14, reason why their direct acquisition by investment funds regulated therein is not allowed[42].

Recently, there has been ongoing discussions on the Brazilian Congress to present legislative proposals regarding the legal nature of cryptocurrencies. Those proposals will be analyzed in sub-chapter 2.3.

2.2.2 Legal background of exchanges in Brazil

Currently, cryptocurrencies exchanges don't received proper oversight, since there is no state agency responsible for overseeing this type of practice making them operate normally without the interference of the State.

The CVM, through Circular Letter no. 11/2018/CVM/SIN11, understands the exchanges as a trading platform, through which it is also possible to make investments - and not only transactions in the strict sense, as it has been mostly discussed so far in this writing.

In March, 2020, the Superior Court of Justice decided that the existence of deposits made by a criminal organization in the accounts of a brokerage firm for trading in virtual currencies is not enough to characterize that it was used or consciously adhered to the commission of crimes.

> APPEAL IN WRIT OF MANDAMUS. OPERATION PHARAOH. CRIMES OF CRIMINAL ORGANIZATION, LAUNDERING AND SWINDLING. BLOCKING OF CURRENT ACCOUNTS. NECESSITY OF DEMONSTRATING VEHEMENT EVIDENCE OF PARTICIPATION IN THE OF PARTICIPATION IN THE CRIMES. NON-EXISTENCE. DURATION OF THE MEASURE. EXCESSIVE TIME. APPEAL IN SECURITY MANDATE PROVIDED.
> 1. The complexity of the case may justify the maintenance of property imposed on a given company for a reasonable period of time, provided there are reasonable period of time, provided there are strong indications of its participation in the participation in the practice of crimes. The imposition of precautionary measures, therefore is not consistent with the idea of mere possibility of participation in a crime, but requires the presence of concrete elements that can fill, at least in part, the gap that exists between total uncertainty and total uncertainty and absolute certainty of such participation.
> 2. In this case, the only aspect portrayed by the ordinary courts to justify the measure is the fact that the accused would have deposited part of the money obtained with the criminal scheme in current accounts of the insurgent. This, by itself, does not represent the existence of a causal link, since there is - at least so far nothing has been ascertained - no relation of the company or its partners with the partners with the criminal organization denounced. This finding, far from being a mere illusion, is extracted from the fact that there are not formalized accusation against the appellant and none of its partners, and partners and, also, because there is not even a police investigation to investigate any possible participation of the company in the scheme.

[42] BRAZIL, 2018.

> 3. The only concrete data that subsidized the blocking of the applicant's accounts is, exclusively, the existence of deposits made by the criminal organization, which used the service provided by the company for trading in virtual currencies. By accepting such a situation, if put in other terms, would imply the endorsement of the possibility of blocking the accounts of all companies that offer similar offering similar services (intermediation and agency of business in general, technical business in general, technical support, systems maintenance and consulting information technology consultancy), even when they completely unrelated to the commission of crimes by their clients.
> 4. Appeal granted to determine the immediate unblocking of the applicant's current accounts[43].

With this understanding, the 6th Chamber of the Superior Court of Justice upheld an appeal in a writ of mandamus to remove the judicial blockade of R$ 6.4 million against a Bitcoin brokerage company from Minas Gerais, which had already lasted three years. The blockade was granted in the context of investigations into the practice of financial pyramiding practiced by an investment club in sports trading operations. Part of the money raised was used in the company's platform for conversion into Bitcoin[44].

The blocking of the exchange's account was a result of Operation Pharaoh, which was conceived to investigate the commission of illicit acts involving investment operations commonly called "financial pyramid", let alone denounced in the records of the process initially registered under n. 132/2.17.0003345-5, today n. 001/2.19.0045453-8, as a possible author of crimes of swindling, against the popular economy, money laundering and criminal organization.

In August of 2021, the journal O Globo broadcasted the news that the Federal Police arrested in Rio de Janeiro the owner of GAS Consultoria Bitcoin, a company that promised to invest in bitcoins for suspected financial pyramid. In the arrestment, the police officers had seized R$15.3 million in cash in the house of the owner of GAS Consultoria Bitcoin, between real, dollar and euro notes, as well as gold bars. The company promised profits of 10% a month on investments in bitcoins, but the task force claims that GAS did not even reapply the cryptocurrency investments, doubly deceiving customers[45].

As of the role of the exchange in this financial pyramid, the Bitcoin brokerage platform was used by the criminal organization only for the acquisition of virtual currencies. This, in itself, does not represent the existence of a causal link, since there is - at least so far nothing has been ascertained - no relationship between the company or its partners and the reported criminal organization.

[43] BRAZIL, Superior Court of Justice, 2021.
[44] VITAL, 2020.
[45] FREIRE et all, 2021.

2.3 LEGISLATIVE BACKGROUND

It is important to notice that currently there are no legislative regulation regarding cryptoassets in Brazil. Any virtual assets that do not qualify as securities or electronic money, in the Brazilian legal system, are not regulated. Nevertheless, there are few legislative proposals and internal regulations from BACEN and Internal Revenue Service (hereinafter IRS) (*Receita Federal*). In this chapter it will be presented such proposals and internal regulations.

It is recommended that legislators and regulators adopt a functional approach to the legal treatment of virtual assets rather than proceeding to purely formal analyses based on their denomination. The functional approach has the advantage of allowing a legal treatment that overcomes two types of boundaries: the first, relating to the boundaries between regulated and non-regulated sectors, and, the second, relating to the boundaries of national jurisdictions. This approach allows for dialogue with other market regulators, even in different jurisdictions, notably for dealing with foreign exchange and international capital movement implications and anti-money laundering[46].

Recently, the Congress decided that the legislative proposals n. 2060/2019, n. 2234/2021 and n. 2140/2021, will be appended to the legislative proposal n. 2303/2015, since they are correlated subjects and will be voted together. For the same reason, the legislative proposals that are in the Senate (n. 4207/2020, n. 3949/2019 and n. 3825/2019) are appended and will be analyzed in the same topic.

2.3.1 Legislative Proposals No. 2303/2015, 2060/2019, 2140/2021 and 2234/2021

In July of 2015, the Congressman Aureo Ribeiro, from Solidariedade Party, presented the legislative proposal n. 2303/2015, which provides for the inclusion of virtual currencies and frequent flyer programs in the definition of "payment arrangements" under the supervision of the Central Bank.

The purpose of the proposed bill is related to three main issues on virtual currencies: prudential regulation by the Brazilian Central Bank; money laundering and other illegal activities and consumer protection. Each issue is addressed in different articles. Also, in the proposal justification, the congressman states that although there is still no

[46]COSTA, PRADO, GRUPENMACHER, 2020, p. 86, 87.

national regulation on the matter, there is a growing concern about the effects of the transactions carried out by means of these instruments[47].

In this regard, the proposed bill seeks to add to the competencies of the Central Bank the discipline that refers to cryptocurrencies, making a modification in payment arrangements. These arrangements can be conceptualized as ways of transferring and receiving capital in a different way than traditionally known ones.

As a result, if the bill is approved, there would be an inclusion of virtual currencies in the Brazilian legal system, especially in the scope of the regulatory agency - Central Bank - opening the possibility of its direct interference in how cryptocurrencies are operated, exercising oversight and, consequently, limiting them.

According to a report on the portal Jota[48], the regulatory framework intended by Bill 2303/2015 may facilitate direct investment in crypto-active in Brazil, reducing costs for investors. The regulation of cryptocurrencies, however, is controversial among specialists. For instance, Rodrigo Batista, former CEO of Bitcoin Market, heard by the report of Jota, is against the regulation, although he admits that the Bill would allow investment in Bitcoins in the national territory. To him, the State should invest in reducing bureaucracy and on the promotion of the sector, because, in his own words: "if the obligations for exchanges are greater than those outside, we will continue with what we have today: foreign exchanges having less regulatory requirements and having higher volumes than the local ones".

On the other hand, Bruno Ramos de Sousa, legal and compliance director of Hashdex, also heard by Jota, consider that the regulation of cryptocurrencies would add clarity and security to the crypto-active segment, which already presents a significant growth trend for the coming years.

From the initiative of the same congressman, Aureo Ribeiro, the legislative proposal n. 2060 of 2019 establish the legal regime of cryptoassets:

> **Art. 1** This law provides for Crypto-active Assets, which comprise assets used as a means of payment, store of value, utility and security securities, and on the increase of penalties for the crime of "financial pyramid as well as for crimes related to the fraudulent use of Crypto-active[49].

The proposed bill aim to establish legal parameters for the operation of the non-regulated virtual assets markets, in order to institute a legal regime of private law specific to these assets. Moreover, in article two it is defined cryptoassets as it follows:

[47] BRAZIL, 2015.
[48] JOTA, 2022.
[49] BRAZIL, 2019.

> **Art. 2** For the purposes of this law and those modified by it, crypto-active is understood as:
> **I** - Units of value encrypted through the combination of public and private keys public and private keys for digital signature, generated by a public or private and decentralized decentralized public or private system of registration, digitally transferable and transferable and that are not or do not represent legal tender in Brazil or in any other country or in any other country;
> **II** - Virtual units representing goods, services or rights, encrypted rights, encrypted through the combination of public and private keys for digital signature signature by digital means, registered in a public or private system and decentralized decentralized system of registration, digitally transferable, that is not or represent legal tender in Brazil or in any other country;
> **III** - Virtual Tokens that grant their holder access to the registration system that originated the respective utility token within the scope of a given platform a given platform, project or service for the creation of new registries in said system and that do not fit in the concept of security provided security provided in art. 2 of Law nº 6.385, of December 7, 1976;
> **Single Paragraph.** The following is considered to be Crypto-active Broker legal entity providing intermediation, trading, post-trading and custody services for Crypto-active Securities[50].

It is interesting in this proposal, the recognition of the emission and circulation of cryptoassets (Article 3). Also, in Article four, there is the possibility for legal entities in Brazil to issue cryptoassets if it is compatible with their activities:

> Art. 4 The issuance of Crypto-active, under the scope of this Law, may be be carried out by legal entities of public or private law, established in Brazil, provided that the purpose for which the issue of Crypto-active securities serves is compatible with their activities or with their markets of operation.
> § 1 Subject to the provisions of this article, the issuance of utility crypto-active assets, as well as other types of crypto-active assets that, due to their nature or the nature of the underlying goods, services and/or rights, are not subject to are not subject to specific regulation.
> § 2 The issuance of crypto-active assets which, due to their nature or the nature of the underlying goods, services, or rights, are subject to specific regulation must comply with it[51].

Furthermore, the text inserts in the Criminal Code (Decree-Law 2.848/40) a new type of crime of issuing bearer bonds without legal permission, intended to cover crypto-activities:

> **Article 6** Decree-Law nº 2.848, of December 7, 1940 (Penal Code), shall come into force with the addition of the following article 292-A:
> Art. 292-A. Organize, manage, offer portfolios, intermediate operations of purchase and sale of crypto-active assets with the objective of financial pyramid, currency evasion, tax evasion, fraudulent operations or practice of other crimes against the Financial against the Financial System, regardless of the obtainment of economic economic benefit:
> Penalty - detention, from one to six months, or a fine[52].

[50] BRAZIL, 2019.
[51] BRAZIL, 2019.
[52] BRAZIL, 2019.

In its justification, the legislative proposal defends the creation of a positive environment in which the elements of blockchain technology serve to the transparency of the National Financial System and at the same time to the needs of the economy and the desires of the population[53].

Nevertheless, the legislative proposal n. 2060/2019 was archived by the Chamber in December 08, 2021, because it was declared prejudiced due to the approval of the Global Substitutive Subamendment to bill n. 2303/2015.

Similarly, the legislative proposal n. 2234/2021 aimed to change the text of Law n. 9.613/1998, to increase the penalty for the crime of money laundering practiced through the use of cryptocurrencies or through a terrorist organization, among other provisions[54].

This project of law had 3 main aspects: 01) to oblige individuals and legal entities that have, permanently or occasionally, as their main or accessory activity, the purchase and sale of cryptocurrencies, to observe articles 10 and 11 of Law No. 9.613/1998 - Money Laundering Law; 02) increase the penalty for the crime of money laundering committed by using cryptocurrencies; and, 03) double the penalty for the crime of money laundering committed by a terrorist organization[55].

Nonetheless, the legislative proposal n. 2234/2021 was archived in December 08, 2021, also because it was declared prejudiced in view of the approval of the Global Substitutive Subamendment to bill n. 2303/2015.

In June of 2021, the legislative proposal n. 2140/2021 was presented to the Congress. The proposal aims to determine a deadline of 180 days for the Brazilian Central Bank and other financial control agencies to regulate transactions in virtual currencies and to make other provisions[56].

The main justification of this proposal was to avoid tax evasion, since the transactions involving virtual currencies are unregulated within the country[57].

2.3.2 Legislative Proposals No. 4207/2020, 3825/2019 and 3949/2019

The legislative proposal n. 4207/2020 was proposed in the Senate by Senator Soraya Thronicke and it establishes rules for the issuance of virtual currencies and other

[53] BRAZIL, 2019.
[54] BRAZIL, 2021.
[55] BRAZIL, 2021.
[56] BRAZIL, 2021.
[57] BRAZIL, 2021.

virtual assets, sets conditions and obligations for legal entities that carry out activities related to these assets, assigns supervisory and regulatory powers to the Federal Revenue Service, the Brazilian Central Bank, the Securities and Exchange Commission and the Financial Activities Control Council and also typifies conduct practiced with virtual assets in order to commit crimes against the Financial System, including financial pyramid crimes. It also creates the National Registry of Politically Exposed Persons (CNPEP), with the purpose of helping financial institutions to execute credit risk evaluation and money laundering prevention policies[58].

Moreover, the proposal defines virtual assets as it follows:

> Art. 2 For the purposes of the provisions of this law, virtual assets are considered to be
> I - any digital representation of a value, whether encrypted or not, that is not issued by a central bank or any public authority, in the country or abroad, or represents electronic currency of legal tender in Brazil or foreign currency, but that is accepted or
> transacted by individuals or legal entities as a means of exchange or payment, and of payment, and that may be stored, negotiated or transferred electronically.
> II - intangible virtual assets ("tokens") that represent, in digital format, goods services or one or more rights, that may be issued, registered, retained, transacted or transacted or transferred by means of a shared electronic device, which that makes it possible to identify, directly or indirectly, the holder of the virtual asset, and not fit into the concept of security provided in art. 2 of Law No. 6385 of December 7, 1976[59].

In the justification of the proposal, the Senator declares the need for some regulatory framework regarding cryptoassets, but not in excess. The main reasons to adopt legal and regulatory mechanisms is to combat money laundering, protect virtual wallets and the private property of consumers-investors and incorporate fiscal-tax rules in order to allow the tax collection from the capital gain resulting from commercial exchanges via crypto assets[60].

This proposal is appended to the legislative proposal n. 3949/2019 and n. 3825/2019, both from the Senate and with correlated subjects. In that sense, the legislative proposal n. 3825/2019 regulates services related to operations of crypto-active transactions on electronic trading platforms. According to the justification presented in the proposal, the main objective is to regulate the crypto-active market in order to provide it with greater security and protection for investors and the economic and financial order, especially in view of the risks and fears of using such virtual assets for harmful

[58] BRAZIL, 2020.
[59] BRAZIL, 2020.
[60] BRAZIL, 2020.

practices such as money laundering, currency evasion, financing of drug trafficking and terrorism, or even for obtaining illicit gains to the detriment of the community, such as the creation of financial pyramids and other fraudulent mechanisms.

In the proposal are defined some key concepts such as electronic platform, cryptoassets, and, exchange of cryptoassets. It is also established guidelines that should lead the cryptoassets market according to parameters determined by the Brazilian Central Bank. Moreover, it institutes a licensing system for crypto-active exchanges, upon prior authorization from the Central Bank, containing minimum requirements and obligations for companies to be authorized to regularly trade crypto-currencies in Brazil, providing security and credibility to the market and protecting investors and the economic and financial order of the country[61]. In other words, the proposed bill requires companies to adopt good governance and risk management practices and establish measures to prevent money laundering, so that the responsibility for controlling the trading of crypto-active assets should fall on digital platforms or exchanges. Such organizations must be based in Brazil and follow the regulations of CVM and the Central Bank in addition to being required to develop a compliance program that must adhere to local regulations.

In brief, it proposes a definition that crypto-active products, as a rule, are not subject to the supervision of CVM, except when they are characterized as securities through public offering to raise funds from the population, which usually occurs in Initial Coin Offering (ICO) practices[62].

One of the differences between this legislative proposal and the others is the application of the Consumer Defense Code to transactions involving crypto-active securities[63].In this sense, the exchange, as a service provider, would be subject to the rules provided by the Consumer Defense Code, and, therefore, the relationship between the consumer (client) and the exchange would have greater legal security.

Moreover, the proposal n. 3825/2019 determine that all service providers of virtual assets join the list of persons subject to the mechanism and control within the financial system. Unlike the original proposal of the House of Representatives that determines that money laundering crimes involving virtual assets would be equated to criminal organization and susceptible to aggravating penalties, the bill of origin of the Senate removes this, not because of impunity, but because it adopts a different philosophy.

[61] BRAZIL, 2019.
[62] BRAZIL, 2019.
[63] BRAZIL, 2019.

That is, the use of virtual assets should not be equated with criminal organization, since this would only intensify a shadow of illegality over the activities carried out with crypto-activities.

Nevertheless, the bill still leaves out an important aspect that should have been foreseen: the authority which should supervise the activity of crypto-active exchanges. Despite being silent and not pointing out which is the supervisory authority, the expectation is that in the future this function will be performed by the Central Bank given that securities, which is covered by CVM, have already been excluded.

Appended to those legislative proposals is the proposal n. 3949/2019, which includes provisions very similar to those contained in the proposal n. 3825/2019, and, for this reason, is being processed in the Senate altogether. The proposal regulates virtual currencies and the operation of intermediary companies of crypto-active transactions and providers of electronic trading platforms[64]. In short, the proposal intends to positively recognize the use of virtual currencies both as a means of transferring value and as a financial asset, traded only for capital gain purposes. It establishes minimum conditions for crypto-active operations, in a manner similar to the regulation of other third party funds intermediaries, including providing supervision of the sector by the public authorities[65]. The main innovation of this Bill is to extend to crypto-active sales transactions the rules for determining income tax based on capital gains, already provided for in art. 21 of Law 8.981/95.

Even if decentralisation is a characteristic trait of crypto-activities and the operations in which they are involved, to think that necessarily due to this factor no kind of regulation or accounting standards will serve to provide positive effects may be mistaken, given that the structuring of an adequate and efficient regulatory scope may contribute directly to the clarity, transparency and effectiveness in the monitoring process of illicit activities in order to curb them and provide security and growth for those who resort to this type of operation.

2.4 INTERNAL REVENUE SERVICE NORMATIVE INSTRUCTIONS

[64] BRAZIL, 2019.
[65] BRAZIL, 2019.

Even though there is not currently a legislation regarding cryptoassets, IRS published the Normative Instruction No. 1888 in 2019 regarding the obligation to declare operations with cryptoassets. This Normative Instruction establishes and regulates the obligation to provide information about operations carried out with crypto-active products to the IRS[66]. According to the Normative Instruction, individuals or legal entities, domiciled or resident in Brazil, are required to provide the information when the following conditions are met:

> Art. 6 The provision of information referred to in art. 1 is obligatory:
> I - the crypto-active exchange domiciled for tax purposes in Brazil;
> II - the individual or legal entity resident or domiciled in Brazil when
> (a) the transactions are carried out in an exchange domiciled abroad; or
> b) the transactions are not carried out in an exchange.
> § 1. In the case provided for in clause II of the head of this article, the information must be provided whenever the monthly value of the transactions, separately or jointly, exceeds R$ 30,000.00 (thirty thousand Reais).
> § The obligation to provide information applies to the individual or legal entity that carries out any of the crypto-active transactions listed below
> I - purchase and sale;
> II - barter
> III - donation;
> IV - transfer of crypto-active assets to the exchange
> V - crypto-active withdrawal from the exchange;
> VI - temporary assignment (rent)
> VII - payment in kind
> VIII - issuance; and
> IX - other operations that involve the transfer of crypto-assets[67].

In line with the Instruction, when the transactions involve exchanges between persons or legal entities domiciled in Brazil, the duty to declare this transaction to the IRS is the responsibility of the brokers, regardless of the value of the transaction. However, when the exchanges are located outside Brazil, or when the operation does not count on this type of agent as an intermediary, the declaration must be submitted by the individual or legal entity that carried it out whenever the transactions made in a month exceed, individually or jointly, the amount of R$ 30.000,00.

The entities that provide exchanges of cryptoassets are the main focus of this Instruction, but it also determines penalties (fines) if the individual or legal entity does not provide the information he/she is obliged to, or omits information or provides inaccurate, incomplete or incorrect information[68].

In July of 2019 the IRS published the Normative Instruction No. 1899, which modified a few articles of the previous provision. Among the main changes brought by

[66] BRAZIL, 2019.
[67] BRAZIL, 2019.
[68] BRAZIL, 2019.

this Normative Instruction is the provision that it will no longer be necessary to inform the number of the client's digital wallet. According to the instruction, the delivery of information relating to this content will be mandatory only in the event of receipt of a summon issued in the course of tax proceedings[69].

In brief, it is necessary to take into account that State regulation of cryptocurrencies must aim to protect users from illegalities, observing the fulfillment of the Federal Constitution and it is not reasonable for the State to restrict the use of this type of good given that it results in free initiative.

3 THE ROLE OF EXCHANGES IN BRAZIL

3.1 WHAT ARE THE EXCHANGES

Any asset class, including crypto-assets, needs a marketplace where they can be bought and sold. Equities are sold on stock exchanges like the New York Stock Exchange and the crypto-asset ecosystemhas its equivalent service providers, such as Coinbase or Binance. In this sense, an exchange is a virtual place where people can buy and sell at an agreed market price. The exchange creates a user-friendly and efficient environment to allow users to buy and sell Bitcoin. This is done by creating a user profile so that a individual may be able to make a purchase. The exchange is therefore a service provider and takes a percentage of the business[70].

These exchanges come in many shapes and sizes, but can be broadly separated into two categories: centralized exchanges and decentralized exchanges.According to Arslanian and Fischer, centralized exchanges operate in a way that is not dissimilar to the operations of an international stock exchange. They match buyers and sellers of cryptoassets, acting as the middleman for all trades without revealing the identity of the buyer or seller. There are two main types of centralized exchanges: fiat-to-crypto and crypto-to-crypto. A fiat-to-crypto exchange allows a user to deposit fiat funds in their account (e.g. USD, EUR, JPY) and convert that into the desired crypto-asset. By contrast, a crypto-to-crypto exchange does not touch fiat currencies and only facilitates the exchange of one crypto-asset for another. In order to use such a service, a user must send a crypto-asset to the exchange, typically Bitcoin or Ether (which she may have

[69] BRAZIL, 2019.
[70] PACHECO, 2021, p. 50.

gotten from a fiat-to-crypto exchange or potentially from mining), and use that crypto-asset to buy other crypto[71].

In brief, a centralized fiat-to-crypto exchange is a platform for converting between fiat and cryptocurrency. And as such, it needs to regulate itself by the rules imposed by banks and governments in order to work legally in its home country. Not all exchanges require the same information; however, Know Your Customer (KYC) and Anti Money Laundering and Countering the Financing of Terrorism (AML/CFT) protocols are probably enforced in most exchanges today.

On the other hand, decentralized crypto exchanges operate differently from their centralized counterparts. Instead of acting as a middleman, trading takes place directly between buyers and sellers. The decentralized exchange simply exists to facilitate the direct connection between the buyer and the seller. Such exchanges may provide advantages in terms of lower fees or facilitate a greater degree of anonymity; however, they may also suffer from lower levels of liquidity and may be more complex to use, particularly for the average retail investor[72]. In short, an exchange consist of legal entities whose brokerage and similar services are provided essentially through platforms on electronic sites, which promote the confluence between those who wish to trade (buy and/or sell) the crypto currency in question.

Still within the conceptual panorama, CVM, through Circular Letter no. 11/2018/CVM/SIN11, understands brokerage firms as trading platforms, through which it is also possible to make investments - and not only transactions in the strict sense, as we have been discussing in the majority of this article.[73]Furthermore, the legislative proposal n. 3949/2019, defines crypto-active exchange as the legal entity that offers crypto-active transactions in a virtual environment, including intermediation, trading or custody. Also, it clarifies that included in the concept of intermediation of transactions carried out with crypto-active securities is the provision of an environment for the execution of transactions for the purchase and sale of crypto-active securities among the users of its services[74].

Currently, specific regulations for crypto exchanges are limited, which may pose a number of risks for users. For instance, a report released by the General New York Attorney in September 2018 on crypto exchanges found that many crypto exchanges

[71] ARSLANIAN; FISCHER, 2019, p. 158.
[72] ARSLANIAN; FISCHER, 2019, p 160.
[73] BRAZIL, CVM, 2018.
[74] BRAZIL, 2019.

lacked sufficient internal controls with regard to conflicts of interest, market manipulation and protection of customer funds. In an attempt to address these issues, a number of industry-led initiatives are underway aimed at establishing best practices for crypto exchanges[75].

In Brazil, the Brazilian Association of Cryptoeconomy (*Associação Brasileira de Criptoeconomia*) (hereinafter ABCripto) published in 2020 a Manual of Best Practices on Prevention of Money Laundering and Financing of Terrorism for Brazilian Exchanges and a Self-Regulation Code applicable to all associated exchanges that will be analyzed in the following subchapter.

3.2 CURRENT REGULATION OF EXCHANGES IN BRAZIL

A majority of jurisdictions have not taken a neutral stance to crypto-assets and neither explicitly welcoming nor prohibiting dealing in these instruments. Instead, they tried to fit them into existing regulatory frameworks. In many cases, the focus of these jurisdictions has been on ensuring public protection while also adopting a wait-and-see stance as the crypto ecosystem and its technology evolves[76].

The vast majority of the Brazilian doctrine define the exchange as a virtual asset service provider. It is a legal entity that is not subject, in principle, to sectorial regulation, and that, as a business company, performs one or more of the following activities or operations for, or on behalf of, a natural or legal person: (1) the exchange between virtual assets and fiat currencies; (2) the exchange between one or more forms of virtual assets; (3) the transfer of virtual assets; (4) the safekeeping and/or administration of virtual assets or instruments, which allow control over virtual assets; and (5) the participation and provision of financial services related to the offering of an issuer and/or the sale of a virtual asset[77].

Thus, the exchange activity is different from the activities of banks and other financial institutions authorized to operate by the Brazilian Central Bank. The main difference concerns the fact that exchanges do not manage assets denominated in the national unit of account (the Real) in their own portfolio. They usually resort to commer-

[75] ARSLANIAN; FISCHER, 2019, p. 159.
[76] ARSLANIAN; FISCHER, 2019, p. 219.
[77] COSTA; PRADO; GRUPENMACHER, 2020, p. 88.

cial banks to manage their assets in Reais. Their technical expertise and economic activity are concentrated in the negotiation of virtual assets[78].

Therefore, it is understood that, as long as the activity of the exchanges does not reach a volume that poses a risk to financial stability, there would be no need to include the exchanges within the National Financial System and regulate them as if they were financial institutions. This does not mean, however, that (1) the activities developed should not be monitored by competent bodies; and (2) the companies in the industry should be exempt from any type of regulation by the law[79].

It is argued, in this regard, that a special legal regime should be created to monitor the development of these activities and regulate them over time. For instance, the companies in the sector should be able to organize themselves in the way that best suits their market strategies and business model. The recommendation is that exchanges be incorporated as legal entities, in the form of limited liability companies or corporations[80]. The Exchanges segment needs a self-regulation document in order to establish a security environment for civil society and public authorities regarding the commission of money laundering and terrorist financing conducts via the cryptoeconomy, so that this market may definitely consolidate itself in the Brazilian practice.

Finally, exchanges are subject to the regime of judicial or out-of-court reorganization or bankruptcy, in accordance with law 11.101/2005. In practice, this means that the insolvency of these companies will not be regulated or disciplined by BACEN or any other specialized autarchy, being, therefore, under the aegis of the general regime[81].

3.2.2 FATF Recommendation n. 15

Created in 1989, FATF is an intergovernmental organization that aims to develop and promote national and international policies to fight against money laundering and the financing of terrorism. To fulfill this objective, the FATF published in 1990 40 Recommendations, which work as a guide for countries to adopt standards and promote the effective implementation of legal, regulatory and operational measures to achieve the best practices in AML/CFT.

The Recommendation n. 15 concerns about new technologies, category in which cryptocurrencies are included. In this sense, it establishes a duty for countries and finan-

[78]COSTA; PRADO; GRUPENMACHER, 2020, p. 89.
[79]COSTA; PRADO; GRUPENMACHER, 2020, p. 89.
[80]COSTA; PRADO; GRUPENMACHER, 2020, p. 90.
[81]COSTA; PRADO; GRUPENMACHER, 2020, p. 92.

cial institutions to identify and assess the risks of money laundering and terrorism financing that may arise in connection with: (a) development of new products and business practices, including new delivery mechanisms, and (b) the use of new or developing technologies for new or existing products[82].

Between the years of 2013 and 2015, FATF released the first two Risk-Based Approach ("RBA") guides applicable to the cryptoeconomy: (i) "Guidance for a Risk-Based Approach - Prepaid Cards, Mobile Payments and Internet-Based Payment Services" and the "Guidance for a Risk-Based Approach - Virtual Currencies". The objective of FATF was to signalize to the globalized world the importance of paying attention to this new market segment, the crypto-economy and to the new windows of risk involving money laundering. The general principle of a RBA is that, where there are higher risks, countries should require financial institutions and DNFBPs to take enhanced measures to manage and mitigate those risks; and that, correspondingly, where the risks are lower, simplified measures may be permitted[83].

The importance of FATF Recommendation n. 15 is that it should serve as a parameter for the regulation of the activities performed by exchanges in relation to cryptocurrencies. Because they are a relatively new technology, and still poorly regulated in the Brazilian scenario, the Recommendation exposes the need for institutions, and here one can also include exchanges, to adopt appropriate measures to manage and mitigate money laundering and terrorism financing risks.

In the paper entitled "Regulation of virtual assets"[84], FATF sought to create a definition of virtual asset service provider - a category that encompasses Exchange activity - which includes a natural or legal person that conducts one or more business activities or transactions, for or on behalf of another natural or legal person, that involve: (i) exchange between crypto-actives and sovereign currencies; (ii) exchange between one or more forms of crypto-actives; (iii) transfer of crypto-actives; (iv) custody and/or administration of crypto-actives or instruments that enable control over crypto-actives; and (v) participation in providing financial services related to the offering of an issuer and/or the sale of a virtual asset.

Moreover, given the urgent need for an effective global risk-based response to the AML/CFT risks associated with virtual asset financial activities, the FATF has

[82] FATF, 2022.
[83] FATF, 2022.
[84] FATF, 2018.

adopted changes to the FATF Recommendations and Glossary that clarify how the Recommendations apply in the case of financial activities involving virtual assets. These changes add to the Glossary new definitions of "virtual assets" and "virtual asset service providers" – such as exchanges, certain types of wallet providers and providers of financial services for Initial Coin Offerings (ICOs). These changes make clear that jurisdictions should ensure that virtual asset service providers are subject to AML/CFT regulations, for example, conducting customer due diligence including ongoing monitoring, record-keeping and reporting of suspicious transactions[85].

3.3 HOW TO OPERATE AN EXCHANGE IN BRAZIL

BACEN normative n. 3.978/2020 provides policy, procedures and internal controls to be adopted by the institutions authorized to operate by the Brazilian Central Bank aiming at the prevention of the use of the financial system for the practice of the crimes of "laundering" or concealment of assets, rights and values, which deals with Law nº 9.613, of March 3, 1998, and financing of terrorism, foreseen in Law nº 13.260, of March 16, 2016[86].

Although the exchanges are understood as a virtual asset service provider, which is not subject, in principle, to sectorial regulation, BACEN Normative and the IRS Normative Instruction No. 1888/2019 can be used as a basis for applying best practices policies for exchanges. It is emphasized that the BACEN Normative is not applied to crypto exchanges, since it is only adopted by institutions authorized to operate by the Central Bank. In that sense, in the absence of a specific regulation for cryptocurrency exchanges in Brazil, it is appropriate to use both normative as a parameter for the exchanges activity.

Considering the lack of regulation in the sector, the ABCripto Association published in 2020 the Code of Conduct and Self-Regulation, which is a set of rules that help organize and standardize Conduct and Money Laundering Prevention practices among the companies in the market. The Code is applied to all member exchanges, notably Foxbit, Mercado Bitcoin, Alter, NovaDax, BitBlue.com, TravelexBank, EasyCrypto, UniEra, and One World Services Brasil. The purpose of the Self-Regulation Code is to establish principles, rules and procedures applicable to companies that operate with custody, intermediation and brokerage of crypto-assets and shall guide the practices and

[85] FATF, 2022.
[86] BACEN, 2020.

activities of Members[87]. Therefore, in order to analyze the following subchapters we will use theBacen Normative and the Code of Conduct and Self-Regulation as a parameter.

3.3.1 Minimum Capital

Considering that there is no specific regulation for cryptocurrency exchanges in Brazil, there is also no minimum capital to open an exchange. What occurs, however, is the existence of a corporate type that has a minimum capital. That is, the exchange chooses the corporate type that best fits its situation and then must respect the minimum capital stipulated in the Civil Code (in the case of limited companies) or by Law No. 6.404/1976, Corporations Act (*Lei das Sociedades Anônimas*) (hereinafter LSA).

Thus, for a better understanding of the current Brazilian scenario, the corporate types and respective share capital of the main cryptocurrency exchanges in Brazil will be analyzed. According to InfoMoney, the main brokers in Brazil are Binance, which since 2019 offers the largest cryptocurrency portfolio with no fixed headquarters; Mercado Bitcoin, founded in 2013 with headquarters in São Paulo and in 2021 became the first cryptocurrency unicorn in Brazil; Foxbit, founded in 2014 and that in addition to being a platform for trading cryptocurrencies, also offers services such as tokenization and payment solutions and bitcoin buying and selling for businesses; and BitcoinToYou, founded in 2010, which claims to be an international broker of Bitcoin and altcoins[88].

According to data from the IRS, Binance was officially registered in Brazil with CNPJ 37.512.394/0001-77 under the name B Fintech Serviços de Tecnologia LTDA. The corporate type adopted by the exchange is a limited liability company, with a capital of R$ 50,000.00 (fifty thousand reais). The exchange Mercado Bitcoin (Mercado Bitcoin ServiçosDigitais Ltda.) is registered under CNPJ 18.213.434.0001/35 as a limited liability company and has a capital stock of R$ 300,000.00 (three hundred thousand reais).[89]On the other hand, Foxbit (FoxbitServiçosDigitais S.A., CNPJ 21.246.584/0001-50) has adopted the closed corporation type, with a capital stock of R$ 421,050.00 (four hundred and twenty one thousand and fifty reais). Finally, the broker BitcoinToYou (business name VivarTecnologia da Informação Ltda. - CNPJ

[87] ABCripto, Code of Conduct and Self-Regulation, 2020.
[88] INFOMONEY, 2022.
[89] Receita Federal, Mercado Bitcoin, 2022.

12.454.181/0001-05), is a limited liability company with a capital stock of R$ 315,000.00 (three hundred and fifteen thousand reais)[90].

In light of the data made available by the Internal Revenue Service, one notices that most exchanges have adopted the limited liability company corporate type and only one as is closed corporation. The capital stock that differs most from the others is Binance, with only R$ 50,000.00 (fifty thousand reais). In this sense, the Brazilian Civil Code (CC) (Law no. 10,406/2002) deals with limited liability companies in its chapter IV. At a first sight, there is no article providing on the minimum value for the constitution of corporate capital. The law only mentions that the corporate capital must be expressed in currency and may comprise any type of assets susceptible to monetary evaluation. In principle, in the omissions of the Civil Code chapter referring to the limited liability companies, the rules of the simple companies, also provided in this same code, are applicable. The supplementary legal diploma for the limited liability company may be, however, the LSA, and it is necessary that the partners enter into an agreement on this matter.

In brief, as Fabio Ulhoa Coelho explains, if the limited liability company's articles of association do not provide for or define the rules of the simple companies as its legal regime of subsidiary application, then Articles 997 to 1038 of the Civil Code apply to the limited liability company whenever the matter is not regulated in Articles 1052 to 1087 of the CC. If, however, the partners expressly establish in the articles of association that the supplementary regime of the limited liability company will be that of the business corporations, in the matters not regulated by articles 1052 to 1087 of the CC, the rules of the LSA will apply. However, in the same way, the LSA does not stipulate a minimum amount of corporate capital, it only establishes that the company's bylaws shall establish the amount of corporate capital, expressed in national currency (article 5)[91].

Ricardo Negrão also explains that the corporate capital established in the articles of incorporation corresponds to the initial amount that the company will have at its disposal to achieve its corporate objectives. The Brazilian law did not establish a minimum mandatory capital, nor did it set a range of values for the obligation to adopt this or that corporate structure. Except in the case of companies that depend on authorization and of publicly-held companies, there is no interference from the Public Authorities or from

[90] Receita Federal, BitcoinToYou, 2022.
[91] BRASIL, Lei 6.404/76 (LSA).

the legislator in the consideration of the amount necessary for the viability of the undertaking to be developed by the companies in Brazilian territory[92].

In this manner, when the exchanges opt for the corporate form of a limited liability company or joint stock company, there would not be, in principle, a minimum capital to be adopted. The legal dispensation regarding the establishment of a minimum capital allows the creation of joint stock companies or limited liability companies for small or large enterprises. The exception is for the joint stock companies, in which the LSA, in the constitution of the corporate capital, requires the minimum payment, in cash, by way of down payment of 10% over the issue price of the subscribed shares deposited with *Banco do Brasil* or an authorized institution (article 80)[93].

The capital stock can be considered a guarantee that the company offers to the market and to its creditors that the business conducted by the company is backed by collateral. There is, therefore, a presumption that the company will fulfill its obligations, which generates an expectation of reliability that is fundamental for the start of activities and even to obtain credit, if necessary. Thus, the value of the capital stock must be adequate and compatible with the activities that will be developed by the exchange in order to confer greater credibility and reliability in its activities.

3.4 INVESTOR PROTECTION: SPECIFIC REQUIREMENTS FOR CLIENTS

3.4.1 Suitability and Appropriateness test

Further than the investing consumer, clear guidelines on how to specify suitability and appropriateness are important from a perspective of the investment advisers and asset managers involved in the provision of services to private individuals.

Regarding suitability tests, when providing investment advice and/or portfolio management, the information obtained from the client by investment firms must ensure that a suitable recommendation is made to the client. In that sense, according to Price waterhouse Coopers (hereinafter PwC), when assessing suitability the investment firm must obtain the necessary information regarding the knowledge and experience of the client (or of its representatives in the event of institution or company), the client's financial situation (or that of the institution or company) and the client's investment objectives (or that of the institution or company) to enable the firm to recommend suitable investment services and financial instruments to the client or potential client. In the

[92]NEGRÃO, 2021, p.162.
[93] Brasil, Lei 6.404/76 (LSA).

event that the investment firm does not receive sufficient information from the client to enable an assessment of the suitability, the investment firm will not be allowed to recommend investment services or financial instruments to the client[94].

Therefore, the suitability rule is essential to increase the information that can be obtained from customers, to outline the exact procedure to follow and to reinforce a form of substantive protection offer. The suitability rule (Art. 25, paragraph 2, MiFID II) applies to firms providing both investment advice to clients, whether independently or not, and to portfolio management activities on behalf of their clients. These corporations are responsible for carrying out assessment, for constantly informing clients clearly and simply about the reason for such evaluation, the consistency of information and, in the meantime, about policies and procedures[95].

As for appropriateness tests, when providing investment services without advice (meaning that the suitability requirements do not apply) such as only execution services, firms must assess whether the financial instrument or service is appropriate for the client. To this end, the investment firm must ask the non-professional clients for information on relevant knowledge and experience if the clients want to trade in regulated complex financial instruments[96]. It applies to companies receiving and transmitting orders, executing orders, dealing on own accounts and underwriting/placing financial instruments.

In the Brazilian context, the closest to monitoring the activities of exchanges is the Manual of Best Practices on the Prevention of Money Laundering and Terrorism Financing for Brazilian Exchanges and the Self-Regulation Code, both belonging to the ABCripto and the standards issued by *Conselho de Controle de Atividades Financeiras* (Financial Activities Control Council - hereinafter COAF).

There is room to discuss the scope of some norms around the world that may influence the development of a regulation in Brazil, such as the norm from the European Union, once a preliminary agreement was reached regarding the information that needs to accompany asset transfers so that, in this way, its traceability can be ensured. This step is impacting in the sense that it also covers crypto-active transfers also involving exchanges. It is emphasized that the approval of this preliminary agreement will be discussed in greater detail in chapter 4, through sub-topic 3.7.

[94]PwC, 2016.
[95] PASSADOR, 2016.
[96]PwC, 2016.

For instance, the application of the system of adequacy is essential for the performance of consulting services in the field of investment. In this sense, intermediaries should propose to customers and active participants a comparison between products and profiles of the investors, as well as an overview of the impact that this transaction might have within the entire economic plan. Therefore, intermediaries are charged with peculiar responsibilities in the distribution of illiquid financial products to retail customers. In brief, the operator shall provide to investors, in a concise and easily understandable way, even through the use of multimedia techniques, information related to the investment in financial instruments for innovative start-ups, at least, on the risk of illiquidity[97].

3.4.2 Anti-money laundering

Investments in crypto-active generate impacts for the obligations of prevention of money laundering and financing of terrorism. According to Circular Letter n. 5/2015/SIN/CVM, it is up to the administrators and managers to identify suspicious operations and report them to COAF. Similarly, BACEN Circular n. 3978/2020 determines that the financial institutions must implement monitoring and selection procedures that allow the identification of operations and situations that may indicate suspicions of money laundering and financing of terrorism. Besides, they must ensure that the systems used in the monitoring and selection of suspicious operations and situations contain detailed information of the operations performed and the situations occurred, including information about the identification and qualification of those involved. Finally, there is also the duty to communicate to COAF the operations or situations suspected of money laundering and financing of terrorism[98].

Although there is no financial or money laundering prevention regulation for exchanges, the aforementioned IRS Normative Instruction n. 1888 imposes a minimum standard for the collection of identification data, since it requires that exchanges communicate to the Federal Revenue the realization of transactions that exceed the monthly value of R$30.000,00 (thirty thousand) reais, in which case they must obtain the name of the individual or legal entity, its address, tax domicile, Registration of Natural Persons number, National Registry of Legal Entities number or Tax Identification Number

[97] PASSADOR, 2016.
[98] BACEN, 2020.

abroad, if any, in the case of individual persons or legal entities that are domiciled or that reside abroad, and other information set forth in art. 7 of this normative instruction.

The ABCripto Code of Conduct and Self-Regulation in its second article determines that the Exchanges must implement and maintain a policy based on principles and guidelines that seek to prevent its use for money laundering and terrorism financing practices. For such purpose, the policy must be compatible with the risk profiles of the clients, the institution, the operations, transactions, products and services, and the employees, partners and outsourced service providers. The anti-money laundering and terrorism financing policy must also foresee guidelines for the definition of roles and responsibilities for the fulfillment of the obligations established in the Code, the definition of procedures aimed at the assessment and previous analysis of new products and services, as well as the use of new technologies, the internal assessment of risk and the assessment of effectiveness, the verification of compliance with the policy, procedures and internal controls, as well as the identification and correction of the deficiencies verified[99].

The Code of Conduct and Self-Regulation establishes that exchanges must implement procedures for monitoring, selection and analysis of transactions and situations in order to identify and pay special attention to suspicions of money laundering and financing of terrorism. Such procedures must be compatible with the money laundering and terrorism financing prevention policy, be defined based on the internal risk assessment and consider the politically exposed person's condition, as well as the condition of the representative of the politically exposed person's, family member or close collaborator. Thus, the exchanges must implement analysis procedures of the transactions and situations selected by means of the monitoring and selection procedures with the purpose of characterizing them as suspicious of money laundering and financing of terrorism or not. It is also established the deadline of 45 days for the execution of the analysis procedures of the selected transactions and situations as of the date of the selection of the transaction or situation. The analysis must be formalized in a file regardless of the communication to the COAF (Financial Activities Control Council)[100].

In addition, the ABCripto Manual of Best Practices on Prevention of Money Laundering and Terrorism Financing for Brazilian Exchanges explains that although exchanges are not covered by the Money Laundering Law, it is understood that they

[99] ABCripto, Code of Conduct and Self-Regulation, 2020.
[100] ABCripto, Code of Conduct and Self-Regulation, 2020.

must comply with the legal provisions from the point of view of achieving a safe and reliable market. Thus, the exchanges must request to COAF to register with the Financial Activities Control System (SISCOAF) even if they do not figure as one of the obliged persons foreseen in article 9 of the Money Laundering Law. By registering, the exchange gains access to an exclusive relationship channel with COAF, which allows it to update its data, make communications, receive information, verify compliance with the pertinent rules, consult the list of politically exposed persons, among other functionalities[101].

Currently, some exchanges in Brazil present their own internal money laundering prevention policies, in which they explain that although there is no specific regulation for the exchanges, they adopt devices present in the financial market regulatory norms, among which it is worth mentioning the following: Law no 9613/98 - Provides on the crimes of "laundering" or concealment of assets, rights and values; the prevention of the use of the financial system for the respective illicit acts and creates the COAF - Council for the Control of Financial Activities; CVM Instruction n. 617/19 - Provides on the identification, registration, record, operations, communication, limits and administrative responsibility referring to the money laundering and terrorism financing crimes; BACEN Circular n. 3.978/20 - Provides on the procedures to be adopted in the prevention and fight against the activities related to the crimes foreseen in Law n. 9.613/98; and norms issued by COAF.

Thus, it can be seen that, although unaware of any regulatory apparatus, the platforms are already positioned in accordance with the normative requirements in order to implement identification and authentication mechanisms of the future client. However, this is an asynchronous scenario, in which there are those that provide simplified registration (although they the operations and the amounts transacted) and those that operate at the margin of the compliance programs, appearing as the preference of those interested in concealing their values.

3.4.3 Asset protection

The surveys conducted in Brazil on the activities of exchanges indicate significant numbers: until the month of May 2019, an amount of R$ 1.9 billion in bitcoins were traded through the exchanges, being R$ 760 million only in the month of May

[101] ABCripto, Manual of Best Practices on Prevention of Money Laundering and Terrorist Financing for Brazilian Exchanges, 2020.

itself. The transactions involved an average value of just over R$1,500, but in large numbers - 1.3 million trades in the first five months of 2019[102]. During 2020 alone, only in Brazilian exchanges, 351,204.65 bitcoins were traded, between January and December of the same year, which in the quotation of 31/12/2020, whose Bitcoin value consisted of R$ 151,903.59 was equivalent to R$ 53.349.247.159, 69[103]. Furthermore, because of what the Central Bank has ascertained, consolidated data points out that in December 2021, the crypto-active market moved approximately R$300.000.000,00(three hundred) billion reais in the Brazilian territory through centralized cryptocurrency exchanges[104].

Estimative point to the counting of about five thousand assets in the market, but which do not correspond to the precise amount of circulating virtual assets and CoinMarketCap, whose main function consists of tracking prices in the world of crypto-active assets, points to 8.240 virtual assets, with a market capitalization at a global level in the amount of R$ 4.98 trillion, on January 12, 2021[105]. However, Coinlore showed a different count from CoinMarketCap, listing a total of 5,385 crypto-active securities[106] When it comes to Brazil, Bitcoin is still preponderant, given that, in terms of market capitalization, it exceeded R$ 53 billion in 2020. The volume of operations is in line with data released by 36 Brazilian exchanges, which reported growth of 15% and 30% in new customer registrations compared to 2019, in the same period[107].

However, it is worth mentioning that there are relevant losses already verified that counted with failures in the safekeeping of digital assets worldwide so that global loss estimates vary, but there are mentions of damages of around US$ 1 billion in deviation of digital assets in 2018 and among the most recent cases Binance stands out, which, in turn, would have reported losses of 7,000 bitcoins in May 2019 and Coincheck with deviations of US$ 530 million in 2018[108]. Another example consists of the Italian exchange Altsbit, whose context of hacking took place a few months after its creation culminating in its shutdown due to lack of liquidity, whose main losses involved 6,929 Bitcoins out of 14,782[109]. The hacker attack that Altilly suffered on 23 December 2020 resided in the invasion of the server of the exchange in question

[102] BITVALOR, 2019.
[103] COINTRADERMONITOR, 2021.
[104] FOLHA, 2022.
[105] COINMARKETCAP, 2021.
[106] COINLORE, 2021.
[107] COINTRADERMONITOR, 2021.
[108] COSTA; PRADO, p. 410, 2021.
[109] ZDNET, 2020.

through the registration of emails that ended up enabling the theft of cryptocurrencies and wallets with the approximate lost amount of 30 bitcoins[110].

There are characteristics peculiar to digital assets, such as decentralization, anonymity and the innovative mechanism of an operation via blockchain, for example. However, a regulatory apparatus could confer some form of legal security and constant monitoring of illicit activities, since the lack of interest of some of the service providers themselves and the absence of a central body in the market operation of this technology, increase the risks that these assets might offer. Therefore, the high sums attributed to the counting of crypto-assets involved in operations with fiat currencies raise hopes as to what this will represent for a possible future and also reinforce the concern with security measures and the elaboration of normative measures aimed at preventing crimes and illicit activities.

3.5 BUSINESS MODEL OF EXCHANGES

The exchanges operate freely, but still without any specific regulation adapted to their characteristics and also the services provided differ substantially just like the contractual conditions to which their clients are subject. Regarding the models into which they are subdivided, they may be centralized or decentralized. Centralized exchanges are the best known and, in Brazil, account for the vast majority. They operate as true intermediary institutions, why is worth comparing what happens in the Stock Exchange to what is performed by the securities brokers. In addition, they are called "centralized" because all their essential or necessary activities for the performance of a certain transaction are concentrated in a single central agent, such as custody, the transfer of assets between users and the administration of the order book. Transactions can only be carried out on these platforms through user registration, which, in turn, depends on the subsequent approval of the exchanges[111].

The final transfer of title in the blockchain only happens when there is the withdrawal or deposit of assets, that is, when there is a representation of the entire transaction in a system outside the blockchain and there are one or more exchange wallets in which the assets are kept being part of the online storage. From the operation format, one can infer that these platforms are concerned with preventing the possibility of being used for illicit practices such as money laundering given that users will initially have to

[110] LIVECOINS, 2021.
[111] COSTA; PRADO, p. 411, 2021.

register and send their encrypted assets to the virtual wallet indicated by the exchange or national currency to the platform's current account, which is authorized to place orders in the order book if they have enough balance to cover the offer made[112].

But it is not only the positive aspect that characterize centralized exchanges and this is because they are susceptible to the risks of cyber-attacks. When using the services of a centralized exchange, customer's cryptocurrencies are operated by intermediaries who take responsibility for the custody, which does not necessarily mean that the account in question is immune to some kind of attack. In addition, another disadvantage involves taxation, especially if there are significant amounts of money, which are, therefore, susceptible to high transaction fees and are commonly high in centralized exchanges due to the service provided itself, as well as the convenience that these exchanges offer[113].

This pattern is opposed to a decentralized model, in which certain "essential" activities are performed directly by the investor without the need for intermediation, specifically, the delivery of assets or money, the provision or matching of purchase and sale offers, or asset exchanges. In Brazil, the alleged losses of exchanges are confused with fraud problems and in general with the construction of financial pyramid strategies that use digital assets as a factor to attract investors[114].

Establishing a comparison parameter, the decentralized exchanges are in an initial or embryonic "stage" when compared to the centralized ones and this is due to a great need for technological sophistication. In these exchanges, as stated above, not all activities are performed through the intermediation of an agent responsible for the centralization of services and activities, but this does not necessarily mean that all services will be performed in a decentralized manner[115].

The centralization of activities tends to clash with the central idea of blockchain, in which the disintermediation of transactions through the elimination of central authorities is a characteristic. Blockchain considerably reduces transaction time, but intermediation delays the process and increases the transactional cost and platforms of a centralized nature have other limitations, such as the possibility of theft of custody and susceptibility to cyber-attacks. Having said that, the central idea of decentralized platforms consists in allocating user´s trust in the blockchain and in the very code developed to

[112] MELLO et al., 2022.
[113] INVESTING, 2022.
[114] COSTA; PRADO; GRUPEMACHER, 2021.
[115] MELLO et al., 2022.

carry out transactions, largely disregarding the interposition of a third party. In addition to the elimination of third parties in the transaction to be made, decentralized exchanges carry with them the advantage of avoiding market manipulation to protect their users from false transactions[116].

To comply with this classification, decentralized exchanges need to fulfil at least one of the three essential functions and, of course, in a decentralized manner: make the order book available; hold the meeting of users; custody of assets. The software programmed in advance connects buyers to sellers based on the preferences executed and transactions in an automatic manner and this computational tool may be a smart contract or an atomic swap depending on whether the exchange covers crypto assets based on distinct blockchains or not. Moreover, the settlement of the transaction is conditioned to the verification of compliance with the conditions agreed between the users in question[117].

This is a software whose categorization consists of an address using the crypto-activities that will be stored until the established conditions are verified. When the transaction is consolidated or carried out, which happens without any human activity thanks to this procedure, since the transaction is all carried out via a software based on the network and not in specific countries[118].

On the other hand, in the analytical balance of "advantages and disadvantages", in the case of decentralized agencies, the lack of payments in fiat currencies and the complexity inherent to the *modus operandi* that characterizes them deserve to be highlighted. These crypto agencies do not allow the exchange of fiat currencies for digital currencies making it less convenient for those users who do not have cryptocurrencies. Moreover, to operate in this modality, a greater share of responsibility is required as a starting point given that the user will manage their accounts and assets, therefore, not being appropriate for beginners[119].

The provision of intermediation services through the exchange may or may not include the responsibility for the custody of client assets and it is worth mentioning that in the process of evolution of the capital market, this custody responsibility has received a specific regulatory classification. It is attributed to the market agent called custodian, who, thanks to that, depends on an authorization to offer its services on the market and,

[116] MELLO et al., 2022.
[117] MELLO et al., 2022.
[118] MELLO et al., 2022.
[119] INVESTING, 2022.

in many cases, accumulates the authorization to also provide intermediation services. Because there is a distinct regulatory classification for the two categories, in everyday language it is not uncommon that the allusion to intermediation in a broad sense corresponds to the operation that the same agent also custodies[120].

The practice of certain activities in the capital market consists of the submission of the service provider to a specific regulatory framework and the regulation of the intermediation activity in a broad sense and containing the custody of values to work with the necessity of a previous authorization for execution. This typically is a responsibility of a state regulatory agency, the discrimination of the activities that are forbidden and the minimum standards of internal governance, especially about the responsibility of administrators and the exercise of the compliance function. There is usually the requirement of a minimum capital, which is related to the size of the institution. Besides that, due to the market model adopted in Brazil, to exercise the custody activity of securities - especially those trading at the stock exchange - it is also required the link with a central depository, being that another market participant with performance regulated by the Securities and Exchange Commission[121].

3.6 EXCHANGE SUPERVISION

Given the lack of specific regulations with regard to the exchanges, the challenges of monitoring the operations of these institutions may precisely lie on the absence of a central body in charge of supervising and regulating it, as well as lack of definition over who has the power to act in those matters. On the one hand, it is known that operations and the registration of transactions with cryptocurrencies occur without previously established control of any monetary authority and the anonymity of the holders allow crypto-active assets to serve as tools for concealment of assets, fraud against creditors and the like. However, diversely, the process of popularization of exchanges due to the growing adherence to cryptocurrencies also represents a lawful way to make this market technology more efficient and, above all, safe (or even safer), a cause that also requires the implementation of a decent accounting standardization.

In Brazil, due to the lack of a specific regulation, there is a difficulty in understanding which body holds the power of supervision, so that distinguishing bodies such as the Internal Revenue Service, COAF, BACEN or CVM becomes necessary to under-

[120] COSTA; PRADO; GRUPENMACHER, 2021.
[121] COSTA; PRADO; GRUPENMACHER, 2021.

stand which one or which ones are the supervising agents of cryptocurrency exchanges. It is only available the conceptual framework of cryptocurrency exchanges regarding the definitions related to "what are exchanges", "how they operate", in addition to "what are companies and financial institutions". Through Communication n. 31.379/2017, the Brazilian Central Bank establishes that:

> Companies that trade or store so-called virtual currencies on behalf of users, whether natural or legal entities, are not regulated, authorised or supervised by the Central Bank of Brazil. There are no specific provisions on virtual currencies in the legal and regulatory framework related to the National Financial System. In particular, the Central Bank of Brazil does not regulate or supervise transactions with virtual currencies[122].

According to Law n. 4,595/1964, financial institutions are considered (art. 17) "public or private legal entities, which have as their main or ancillary activity the collection, intermediation or application of their own or third parties' financial resources, in national or foreign currency, and the custody of value owned by third parties. Constituting a kind of advance in the theme, the IRS, through art. 5, II of Normative Instruction n. 1.888/2019, highlights that the definition of a crypto-active exchange consists of a "legal entity, even if not financial, that offers services related to transactions carried out with crypto-active, including intermediation, trading or custody, and that may accept any means of payment, including other crypto-active"[123].

In 2014, in Brazil, BACEN issued a statement in which it sought to bring the concept of crypto-active products closer to that of virtual currencies, differentiating them from electronic currencies, which have their own regulation based on Law No. 12,865/2013. Pursuant to the definition set out in Communication 25306/2014, electronic money is classified as those resources in reais stored in an electronic device or system that enable the end user to make payment transactions. Thus, electronic currency is a way of expressing credits denominated in reais, while the so-called virtual currencies are not according to the same institution, referenced in reais or in other currencies established by sovereign governments[124]. But, even with a significant effort in the task of establishing a definition, crypto-assets are not synonymous with virtual currencies, strictly speaking, or digital currencies. At a first sight, one might not perceive a difference of qualitative nature that justifies a semantic distinction between the terms. According to the International Monetary Fund, the definition of virtual currency represents

[122] BRAZIL, 2017.
[123] BRAZIL, 1964.
[124] BRAZIL, 2013.

a broader category, so that virtual currencies can refer to electronic game currencies, loyalty programme points and other arrangements that contain electronic values and can even be used for a variety of functions[125].

It is also worth highlighting the validity of the self-regulation code structured by the ABCripto, whose self-regulation and conduct code determines that the exchanges must communicate to COAF the operations or suspicious situations of money laundering and activities associated to the financing of terrorism[126]. Furthermore, the procedures specified in Chapter VI indicate that one must:

> I - be compatible with the Exchange's policy for the prevention of money laundering and the financing of terrorism;
>
> II - be defined based on the internal risk assessment;
>
> III - consider the condition of politically exposed person, as well as the condition of representative, family member or close collaborator of the politically exposed person[127].

The general provision for the functioning of brokerage firms is set forth in the regulations attached to the National Monetary Council Resolution no. 1655 of October 26, 1989, in such a way that points such as the corporate purpose of this category of institution (art. 2), the need for prior authorization for functioning, incorporation and implementation of changes of a corporate nature (art. 3), the administration of the company (arts. 9 and 10) and its form of functioning (arts. 11 and following, covering issues such as liability for transactions carried out and certain prohibitions on financing clients) are dealt with. 3), the administration of the company (arts. 9 and 10) and its form of operation (arts. 11 and following, covering issues such as liability for transactions made and certain prohibitions on financing clients), observance of secrecy regarding operations and personal data of clients (art. 13), maintenance of current accounts (art. 14) and preparation of financial statements[128].

Considering these and other aspects, in a document made available for public consultation, the International Organization of Securities Commissions (IOSCO) presented a list of points of attention for national regulators about exchanges, namely:

> (i) the process of admission of new clients by the exchanges, including the need for fair and non-discriminatory procedures in the admission of new investors and in the offering of products and services, the application of know your client procedures and the availability of sufficient information for the investment decision-making process;
>
> (ii) the existence of an adequate treatment of conflicts of interests in the rendering of services, involving the exchange itself, its managers, the en-

[125] DONG et al., 2022.
[126] ABCripto, Code of Conduct and Self-Regulation, 2020.
[127] ABCripto, Code of Conduct and Self-Regulation, 2020.
[128] COSTA; PRADO; GRUPEMACHER, 2021.

> trepreneurs that may use the entity as a fund raising platform and the investors. Such potential conflicts tend to be aggravated in situations in which the exchange combines functions that, in the financial and capital markets, should be performed by distinct entities, as is the case of admission to trading, trading itself, clearing and settlement, custody, market making and counseling or recommendation of products and services;
>
> (iii) the existence of a detailed description, understandable by the average investor, of the way the exchange executes trades, including issues such as its influence in the price formation, interaction of buy and sell orders, the performance of the platform itself or of third parties as market maker and other issues related to the execution of trades on behalf of the clients
>
> (iv) the need for the existence of a regime that enables the prevention and the subsequent fight against practices that breach the integrity of the market, in particular frauds, price manipulation or other misconducts, including an assessment of the transparency of data on the trading of digital assets
>
> (v) the need for exchanges to have systems with characteristics of resilience, reliability and integrity, appropriate to the nature of the services provided, including with regard to protection against cyber attacks and with adequate security standards
>
> (vi) depending on the business model adopted by the exchange, the effectiveness of the clearing and settlement arrangements, focusing on the protection of the interests of the investors that use the platform to carry out their transactions, with an adequate treatment and clarity for the several responsibilities of the exchange itself, of contracted third parties and of the investor itself for the performance of these activities; and finally
>
> (vii) the safeguards in place for the protection of customer assets, including not only the funds delivered to the exchange to carry out the transactions, but also the product resulting from the execution of these businesses [129].

Given the absence of a more specific regulation involving crypto-activities and the financial operations through which they operate, the incipient nature of accounting standardization demonstrates a need for evolution, specifically concerning legal security and the monitoring of illicit activities. Furthermore, in the Brazilian context, this would imply a maturing of the characterization of crypto-assets, whether through the fiscal sphere, through the Federal Revenue Service, or the regulatory sphere, with the performance of the Securities and Exchange Commission and, perhaps in a slightly more distant future, with the labour side, given that it still lacks regulatory consolidation to be more present in this context in addition to the need to overcome the high volatility and the challenges that crypto-assets still need to overcome.

3.7 SANCTIONS FRAMEWORK

Just like what has been and what will be elucidated in this paper, the regulatory and sanctioning character involving exchanges, whether nationally or worldwide, is still very nebulous and in need of more objective criteria, so that proposals in the legislative

[129] IOSCO, 2019.

sphere will serve to outline what will be the most appropriate measures for the authorities to deal with this issue.

Regarding the sanctioning sphere discussed in the Brazilian parliament, Bills no. 3.825/2019 and no. 4.401/2021, correspond to the main legislative procedures regarding this issue. While the first disposes of the virtual assets service providers, to modify the Decree-Law n. 2.848, of December 7, 1940 (Criminal Code), the Law n. 7.492, of June 16, 1986, and the Law n. 9. 613, of March 3, 1998, to include the virtual assets service providers in the list of institutions subject to its provisions, the second proposes the regulation of the crypto-active market in the country, regarding the definition of concepts, guidelines, a licensing system of exchanges, supervision and inspection by the Central Bank and the Securities and Exchange Commission, as well as measures to combat money laundering and other illegal practices[130][131].

In terms of the regulatory scope for the operation of exchanges, The Brazilian Federal Revenue Service, through article 10, which also corresponds to Normative Instruction 1,888/2019, establishes that the provision of monthly information is mandatory for purchase and sale, donation, exchange, transfer, withdrawal and issue transactions, as well as other transactions involving the transfer of crypto-assets. In addition, non-compliance with this determination will result in the imposition of a fine under the terms of Article 10 of the aforementioned Normative Instruction, on its part, and also based on Article 16 of Law No. 9779/95[132].

Regarding COAF, the Brazilian administrative body, specifically August 30, 2022, it was known that this institution had granted a partial license for crypto-active brokerages to perform transaction reporting even in the face of the absence of a law requiring these service providers to do so, being mainly a follow-up request pulled by national exchanges, for example, Mercado Bitcoin and NovaDAX, by the self-regulation initiative. Qualifications before this new COAF understanding of law 9.613/98, whose provision involves money laundering crimes, will be revoked the week after August 31, 2022[133].

Internationally, among the benchmarks that can serve as a reference for Brazil, the Market in Crypto-Assets (MiCA) and the Transfer of Funds Regulation (TFR) are relevant given that they represent the latest advances in terms of regulation of the cryp-

[130] BRAZIL, 2019.
[131] BRAZIL, 2021.
[132] RECEITA FEDERAL, 2019.
[133] INFOMONEY, 2022.

to-active market in Europe. And specifically on June 29 and 30 of 2022, two interim agreements were approved by the European Parliament and the Council of the European Union, following the FATF's recommendation lines. In light of what has been approved, it should be noted that: the European Securities and Market Authority (ESMA), similar to the Brazilian CVM, as well as the European Bank Authority, will have intervention powers to restrict or prohibit the provision of services by crypto-active service providers in case of threat to investor protection, market integrity or financial stability; in addition, all these providers will have to collect information on the issuer and the beneficiary of the transfers they execute[134].

4 THE EXCHANGE DUTY TO COMMUNICATE IN THE BRAZILIAN LEGAL SYSTEM

In the Brazilian legal system, the main issues to be addressed in terms of operations with crypto-active assets and the operation of exchanges reside in the prevention of illicit activities, the structuring of a tax regime compatible with the distinctive characteristics of crypto-active assets and the legality of exchanges, together with the effectiveness of monitoring these activities, seeking to generate both the necessary security for this type of financial operation and the increase in the number of adepts.

As to the practice of illegal activities, specifically, money laundering and terrorism financing, parallel to the vertiginous growth of virtual assets in the last decades, the maturing of regulatory measures of preventive and coercive nature that, for example, are under the recommendations established by FATF may correspond to a set of mechanisms responsible for providing greater security to this market, especially when combined with the commitment of screening, verification and digital integration software[135].

Furthermore, if on one hand, it would provide a greater bureaucratization of the services of exchanges, on the other hand, a law whose premises involves establishing a charge on who are the most recent and the oldest registered could suppress the illicit gain with a criminal nature, so that public keys would be undeniably linked to individuals and legal entities, contributing to repress the entry of those interested in the black market of tax evasion, computer hijacking, drug trafficking, among others[136].

[134] CONJUR, 2022.
[135] REFINITIV, 2022.
[136] CASSI; SANT'ANNA, 2021.

Another argument would be that the establishing legislation could significantly favour the understanding of everyone about the theme and it could imply greater stability to the market exactly by clarifying concepts and operations. It is noteworthy that from the aspect of liquidity, if legislation were to be in force, it could attract new users, including those with a more conservative profile, resulting in increased supply and demand for new currencies and boosting this market[137].

However, the implementation of specific legislation could culminate in both the increase in the cost of operational relations and the destabilization of the market. The main justification is that could be a disincentive to innovation and stagnation in the functioning of cryptocurrencies and exchanges, as well as the degree of mismatch between the speed of changes that cryptocurrencies would go through and the possible obsolete nature of the prevailing legislation[138].

Another important piece of the puzzle to be solved concerns tax obligations, since what has been established may represent insecurity for involving only the normative signalling of the Brazilian IRS, through the Questions and Answers of the Individual Income Tax Return, equating the treatment of crypto-active assets to financial assets. As an aggravating factor, most of the countries in the world do not have a regulation through which one can be sure, besides which, depending on the country in which one resides and where the exchanges are registered there is the need to comply with additional obligations[139].

Although the starting point involving exchanges in Brazil is that the monthly provision of information is mandatory and extends to both individuals and legal entities in purchase and sale transactions, swaps, transfers or withdrawals, issuance, and others that culminated in the transfer of cryptocurrencies, the clarity on what exactly the requirements would be for exchanges to be licensed to operate in the country are not yet well established. Moreover, what can be conveyed as a route to be taken is still in progress.

4.1 REASON FOR THE DUTY TO COMMUNICATE

Recognizing the fact that, in the Brazilian scenario, exchanges are not under the Central Bank's framework under crypto-active securities, therefore, not being consid-

[137] CASSI; SANT'ANNA, 2021.
[138] CASSI; SANT'ANNA, 2021.
[139] FERREIRA, 2022.

ered as currencies and also that they are not subject to the supervision of the Securities and Exchange Commission because investments made in this type of operation are not understood as securities, it becomes important to compare this context with the one in which the financial system is regulated. In it, the Central Bank holds control over the operation of institutions, while CVM acts by regulating, supervising and controlling the securities market[140].

It is important to emphasize that for crypto-active products, the regulatory character would be more conceptual, establishing how and what the legal meaning of crypto-active products is and not necessarily covering their use. What would be in focus would consist precisely in the interest of regulating the exchanges activity as well as their performance in the market involving the monitoring of suspiciously illicit activities, among others[141].

Once this is established, the implementation of a specific legal regime for exchanges in Brazil becomes necessary, especially regarding the accreditation of these crypto-active brokerage houses in Brazil, specifically concerning the infra-legal regulation, consumer protection and transparency of transactions through them. Given the need to fill regulatory gaps, one that could also come to be solved would involve not necessarily what the regulator would be, but rather what would be objectively the limits through which the responsible autarchy or autarchies would operate[142].

Another point of emphasis should be directed to how the segregation of custody between client´s crypto-assets and the exchanges assets will or would be stipulated similarly to what happens with banks and investment brokers[143].

4.2 WHAT IS THE OBJECT OF THE DUTY TO COMMUNICATE

It is important to highlight that exchanges would need to comply with a duty to communicate regarding their operations in Brazil. The initial support for the structuring of this set of practices would be related to what Laws 7.492/86 and 9. 613/98, respectively, by the equating of virtual assets service providers to financial institutions and, therefore, by the inclusion in the list of financial institutions that are included in the typ-

[140] CAUSIN, 2021.
[141] CASSI; SANT'ANNA, 2021.
[142] HIGÍDIO, 2022.
[143] MOYA, 2022.

ification of crimes against the national financial system, in addition to the need to report to COAF on suspicious activities of money laundering[144][145].

Law no. 7492/86, specifically defines crimes against the national financial system and one of the attitudes typified as illicit is the printing, reproduction, or, in any way, the manufacturing, without the written authorization of the issuing entity, of a certificate, cautionary note or other document representing security[146]. Law no. 9.613/98, provides on the crimes of laundering or concealment of assets, rights and values, as well as on the prevention of the use of the financial system for the illicit acts outlined in this same Law. Besides, it is the Law responsible for creating COAF[147].

Based on the above, regarding not only the necessary elements but also the legal complements that must be subject to a duty of communication to the competent authority or authorities in the regulation of the exchanges, it is worth highlighting the specification of their accreditation in the Brazilian context. Since this is a technical analysis that will allow one to determine whether a crypto-active brokerage firm is suitable, the requirement of certificates, as well as the proof of market suitability may enable more effective supervision[148][149].

It is meaningful clarifying another aspect that concerns the need to expand the communication channels between exchanges and clients, such as making available a telephone number, email support, or instant chats, which, together, will enable and optimize the provision of more complete information about what is occurring, especially in any case of damage or even possible damage that may be generated for the client. And this is because of some need for action of the Brazilian justice tending to facilitate this procedure compared to the absence of headquarters in the country, being an exchange from overseas[150].

Another important characteristic could involve the need for a head office in Brazil. This regulatory measure would, firstly, positively complement the expansion of the communication channel mentioned in the previous paragraph and could also positively contribute to the exchanges that do not constitute a company in the country and that enter into partnerships with Brazilian companies. Through this artifice, it would be pos-

[144] BRAZIL, 1986.
[145] BRAZIL, 1998.
[146] BRAZIL, 1986.
[147] BRAZIL, 1998.
[148] LOPES, 2022.
[149] COSTA, 2022.
[150] HIGÍDIO, 2022.

sible to disguise the provision of their services, thus having the greatest possibility of failing to inform the authorities about the transactions they make[151][152].

4.3 POSSIBLE PENALTIES FOR NON-COMPLIANCE

Given what has already been outlined about the Normative Instruction of the IRS concerning the operation of exchanges, it is by establishing what is already in force that it becomes possible to elucidate normative scenarios involving the operation of exchanges in Brazil and their consequences in case of any noncompliance or legal omission. One of them is present in Bill no. 3,825/2019 and concerns the creation of the crime of fraud in the provision of virtual assets services, more specifically a form of swindling involving only crypto-active assets with a penalty of two to six years in prison plus fine[153].

It is also noteworthy that in the same Bill, there is an indication that exchanges may be held liable for financial crimes in the same way as banks and other institutions are, being also required to report suspected money laundering operations to COAF. Regarding its stage of proceedings, specifically on April 26, 2022, the Federal Senate voted and approved the Bill, which until the effectiveness of the presidential sanction, can be considered as being an important progress in the regulatory aspect since it would provide greater clarity on the conduct by the exchanges, as well as greater legal certainty to investors[154].

4.4 WHAT IS THE EFFECT OF THE DUTY TO COMMUNICATE

Based on what was discussed previously, the European Union recommendations of FATF, which combat money laundering and terrorism financing practices, updated its recommendations on crypto-activities in 2019. The centrality of these recommendations refers to the responsibility that exchanges would need to have for keeping information of originators and beneficiaries of transactions to eventually provide it to the authorities[155].

It is a clear demonstration of a resolute stance by the European Union in the sense of proposing to combat illicit activities through crypto-active, especially about

[151] COSTA, 2022.
[152] LOPES, 2022.
[153] HIGÍDIO, 2022.
[154] COSTA, 2022.
[155] PALHARES; ISZLAJI, 2022.

money laundering, despite potentially being the target of criticism for being a clash with the security of customer information and privacy, as well as a possible stifling and blocking of innovation. This regulatory application of the travel rule is related to the extensive package proposed by the European Commission for the regulation of MiCA, so that in it, exchanges will have to be regularised in the European Union with registration and supervision by the authorities regarding legal obligations, especially the prevention of money laundering[156].

In the new proposal, it is worth mentioning the focus on unhosted wallets, those crypto-active portfolios whose operations take place directly on the blockchain, with no intermediation by the exchanges, so that the only accessible information of those who own this type of wallet is its public key, a series of letters and numbers with no connection to the natural person. Given this scenario, to ensure that the travel rule also covers this type of operation, the then-approved preliminary agreement requires that before conducting transactions with unmediated crypto-active wallets, exchanges question their clients about the identity of the other side of the transaction.

According to the approval obtained, in any transaction that an exchange makes on behalf of its client, the following data must be kept: name, official document, address and public key of the originator; name and public key of the beneficiary. Moreover, the same provisions are valid in the opposite sense and the exchanges that do not comply with the stipulated regulation will be subject to administrative sanctions in each Member State of the European Union[157].

It should be noted that, legally going forward, the application of the new agreement would apply to any crypto-active transaction in which at least one exchange is involved. Therefore, not applying, to so-called peer-to-peer transactions, those directly carried out between two unhosted wallets under the main argument that it would be practically impossible for the authorities to supervise such compliance[159].

Regarding what was previously pointed out, the key points of the interim agreement establish that providers of crypto-active services whose parent company is located in countries on the European Union list of third countries are considered to be at high risk of illegal activities such as money laundering, as well as on the European Union list of non-cooperative jurisdictions for tax purposes. These will need to implement

[156] PALHARES; ISZLAJI, 2022.
[157] CRYPTOID, 2022.
[118] CRYPTOID, 2022.
[159] REVOREDO, 2022.

strengthened controls following the European Union framework in terms of combating money laundering[118].

Furthermore, according to the approved interim agreement, ESMA will play an important role in ensuring a consistent approach to monitoring the most important crypto-active service providers as it will be in charge of registering entities based in third countries and operating in the European Union without authorization, based on data requested by competent authorities, third country supervisors or identified by ESMA. In addition, the providers or exchanges themselves will be subject to robust anti-money laundering safeguards[160].

Other determinations contemplated in the agreement also deserve to be highlighted, such as, for instance, that exchanges will be liable for losses or damages caused to their clients as a result of operational failures or hacks that could be avoided. Besides that, as for cryptocurrencies, the exchange will be liable for any misleading information offered. Per what was suggested in the last paragraph of topic 4.1, exchanges will have to segregate client´s assets and isolate them and this is precisely for the purpose that client´s crypto-assets are not affected in case of bankruptcy of the broker. It will also be required that exchanges will need to clearly warn investors about the risk of volatility and losses, both partial and total, in addition to the necessary compliance with insider trading disclosure rules[161].

In light of the regulatory scope presented and approved concerning the MiCA, one may consider it an important reference for the Brazilian context, mainly due to the transparency it presents, as well as the possibility of representing a pre-filling of a regulatory gap in the country through which, for instance, the competitive distortion that companies without headquarters have in comparison with national ones. It is worth highlighting the importance of approving this agreement to boost the draft of the bills, specifically 3.825/2019 and 4.401/2021, aiming to bring greater legal certainty and transparency without necessarily discouraging the innovation that is characteristic of this market.

[160] REVOREDO, 2022.
[161] REVOREDO, 2022.

CONCLUSION

Understanding the advance of cryptocurrencies also implies understanding the significant degree of technological innovation that occurred in the last decade, as well as the reasons behind this growth, particularly due to the decentralization, efficiency, low transactional price and anonymity attributed to these assets. Both cryptocurrencies and blockchain, as well as exchanges, arise from the search for alternatives to the interference of central banks in issuing currencies and recording transactions. Nevertheless, cryptocurrencies represent an object of study whose effort to understand its applications is still very necessary.

The importance of implementing legal support is sustained as per the prevention of crimes and illicit acts related to cryptocurrencies and the operation of exchanges. Nevertheless, the taxation regime directed to this market, stipulating for these digital assets the development of norms and regulatory frameworks that cause some form of excessive restriction to these tools may have negatively interfere in the innovation capacity attributed to them. In that way, an excessive amount of regulations could limit the flexibility that they have and that made them growth over the last decade.

There are still certain uncertainties and doubts in the crypto scenario, due to the increasing consolidation of cryptocurrencies in the international financial system, i.e., as viable alternatives in making payments and financial transactions. If cryptocurrencies are also associated with the growing demand as an exchange value, they tend to provide an even greater advance in this issue and may become unified with the legal meaning of currency and with the attribution of reserve value and stability (something that still represents a great challenge for cryptocurrencies, given the volatility they present), greater liquidity, but with the condition of the accounting standardization on which it will be based.

As for the possibilities of operating regulations on exchanges in Brazil, through the development of this work, it was diagnosed that the main intricacies of this problem that require equation fall on three main aspects: the maintenance of asset segregation between virtual assets owned by the exchanges and those held by their investor clients; the determination of governance rules for exchanges; and, the modification of the Money Laundering Law to include exchanges as a sector required to report suspected money laundering activities to COAF. However, including, for example, the bills still pending in the Brazilian parliament about the regulation of exchanges, the crux of the matter is the same as for cryptocurrencies: the balance needed to not compromise the flexibility

of the operating technology and, at the same time, offer security in the prevention of crimes and illicit acts.

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