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Blockchain Development and Securities Regulation: the future of cryptocurrencies.

The SEC vs. Ripple case

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Abstract

SEC v. Ripple is a common case which is getting the attention of many. Between 2013 and 2020, Ripple Labs Inc. sold XRP tokens to raise capital worth USD 1.6 billion. However, Securities and Exchange Commission (SEC) filed a lawsuit against Ripple Labs declaring that the latter raised illegitimate means.

Ripple has been accused of having conducted an unregistered securities offering, and the SEC also complained that both CEOs and Accountants of the Ripple Labs gained profit by the process. This concern is considered as a violation of the Securities Exchange Act of 1933.

Moreover, this case sets up some important guidelines, such as the Howey Test, for both the registration and identification of securities: the SEC declared and recognized Bitcoin and Ethereum as non-security in the latest announcements. On the other hand, the same tolerance has not been granted to the XRP, since the SEC declared that the latter should be treated as a security. In response, Ripple claims that XRP is a medium of exchange that must register only with the Commodity Futures Trading Commission (CTFC), citing a 2015 settlement agreement between itself and the Treasury Department's Financial Crimes Enforcement Network (FinCEN).

Ripple Labs remained silenced to the accusations for almost two months, until Ripple's CEO stated that the SEC's charges do not refer solely to the Ripple Labs, but to the cryptocurrencies. In addition, Ripple Labs sustained that the company collaborated with the SEC during the transactions to avoid regulatory infringements. Garlinghouse, current Ripple CEO, defended the company affirming that the token holders did not get any profit since they were fully insulated from any entitlement to the company's profits. Moreover, the CEO confirmed that to become shareholders of the company, the token holders should purchase shares, not XRP tokens of the company. But the legal response that Ripple provided as a defence from SEC's accusations includes several counters that demonstrate the unfairness of the indictments.

However, the final verdict of the case has not yet been decided, since the case is still updating, and the final decision will establish how blockchain technology and innovation will have to be regulated in the US. If the SEC will end up being on the right side, the enthusiasm towards the crypto-systems and blockchain technology may decrease considerably. On the contrary, if the ruling will favour Ripple Labs, fewer regulations may be imposed. Furthermore, blockchain technology invention and

development would face fewer restrictions. It could also indicate that other countries are following suit and taking steps to advance the underlying technology. From Ripple's CEO standpoint is just absurd that the SEC, a US regulator, is in the business of determining winners and losers in any industry and penalizing corporations based in the United States.

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I. Introduction

This paper poses its focus on the ongoing litigation case SEC vs. Ripple, which concerns the use of the blockchain technology and whether its currencies should be classified as securities. However, this is a matter that can be solved thanks to the aid perceived by the Howey Test, a tool able to conclude if a currency falls into the definition of security and therefore subject to the regulations of disclosure imposed by the Securities and Exchange Commission. Thereafter, the final judgment will lead to massive changes in the blockchain system and may be definitive about the future of both Ripple and the American digital market.

In part II, I will illustrate the blockchain history, followed by an explanation of its functionality and its development through the years. Briefly, Blockchain is a technological ledger which stores data and in particular transactions, guaranteeing protection and safety from illegal modification. Thanks to a block of chains, from which the ledger takes its name, it is highly unlikely for hackers or any fraudulent act to modify the original document reporting the original information. Due to its incredible success in the digital market, many countries are now showing a deep interest in investing in this cutting-edge technology. In fact, crypto assets have already reached a value of 1.6 trillion. Therefore, many American federal regulatory bodies, such as Securities and Exchange Commission (SEC), are aiming to become an authority in managing the policy the crypto assets. Conversely, such an innovative product seems to be extremely difficult to be adapted to already existing authorities: the Howey Test, proposed by the SEC, is resulting a bit challenging since it requires the demonstration that initial coin offering (ICO) is equivalent to initial public offering (IPO).

In Part III, I will analyse various aspects of the legal case SEC v. Ripple Labs, Inc., a now leading case for cryptocurrencies and digital assets registration, in which the court's final decision may well decide the future of blockchain technology. On December 22nd, 2020, Securities and Exchange Commission accused Ripple Labs Inc. of having violated several essential rules while registering their company's securities. SEC's crucial concern refers to the fact that Ripple Labs, Inc., traded \$1.3 billion in their cryptocurrency XRP as a security without registering it with the Securities and Exchange Commission. In fact, the Securities and Exchange Commission asserted that XRP should be classified as a security considering that Ripple used it to finance its platform. Since SEC main aim is to prevent fraud or any illegal act while registering, the body regulator accused Ripple of having failed in registering this security with the commission as well as having lacked certain financial information that should have been publicly disclosed. Therefore, I will introduce the functionalities and responsibilities of the Securities and Exchange Commission (SEC) of the United States, such as an independent federal regulatory organization tasked with safeguarding investors and

ensuring the fair and orderly operation of the securities markets. The SEC also requires full public disclosure of each transaction movement and reputation of the company, to protect investors from fraudulent and manipulative practices that may happen in the market. However, the SEC required the utilization of the so called "Howey test", to determine whether a virtual currency (in our case XRP) is a security, classification based on the Supreme Court's 1946 decision in SEC v. W.J. Howey Co¹. The main concern related to this matter is the distinction between currency and security, in the sense that if an asset is sold with the hope of gaining financial profit from the effort of others, then it is considered a security. As a result, according to the SEC's allegation, the Howey test may also consider XRP as a security. Ripple's response is that SEC has been one-sided in the way virtual currencies should be defined as securities. Ripple finds quite suspicious the commission's attitude to Ethereum association, to which the commission gave a pass on securities regulation, whereas such thing was not done with XRP. This is true given that Ethereum's operations were initially funded through an initial coin offering (ICO), which is categorically regarded as security. The SEC claims that Ethereum is currently decentralized, disqualifying it from securities regulation. Yet, if this is the case, Ripple wonders why XRP is being targeted. Following the above-mentioned considerations, Ripple now claims that SEC is proving their decision not based on actual merit.

In the second section of Part III, I will discuss what consequences will come from the court's final verdict. On the one hand, if the SEC will turn out to be on the right side, the blockchain development may be limited. On the other hand, if the court will decide to favour Ripple, many restrictions may be reduced, guaranteeing free space to blockchain and digital assets to develop.

The litigation is currently in the discovery process, which means that both sides are gathering information to support their respective allegations.

¹ See "SEC v. W.J. Howey Co., 328 U.S. 293 (1946)." Justia Law. Accessed May 5, 2022. <https://supreme.justia.com/cases/federal/us/328/293/>.

II. The rise and development of the Blockchain technology

Blockchain was first introduced in 2008 as a distributed ledger for bitcoin transactions. Before the advent of blockchain, digital assets were at first conceptualized in 1983, but the non-developed technology at the time made creators doubtful about its potential functionality.

However, the first idea of blockchain came in 1991 by Stornetta and Haber², two scientists. Their first idea was the one-off creating a system under which digital document could not be altered by random individuals. To do so, they thought of a chain of blocks (from which blockchain gets its name years later), that would ensure the security of data. One year later this draft, the two scientists decided to incorporate into the system the so called “Merkle Trees”, such as the real characteristic of blockchain that makes sure that all documents are collected into a single “block”. Unfortunately, this idea did not develop over time and remained unused.

Later, blockchain as we know it today was introduced and improved by Satoshi Nakamoto in 2008, who introduced the concept of distributed blockchain. The reason why his idea of blockchain was considered, back then and even now, so innovative is because he conceptualized the elimination of the third-party authority. In other words, what he had done was to introduce a block of chain in which new blocks did not need the intervention of a third party to be approved. This approach may sound like the Merkle Tree approach, with the difference that Nakamoto utilizes a peer-to-peer network that will verify all steps of the process. This will be considered as a substitution of an external authority and will eliminate completely the need of the latter. This version of blockchain (the name was given by Nakamoto in 2016) widely spread because of its efficiency of use and it is what today is considered as the key for cryptocurrencies.

² Pilkington, Marc, Blockchain Technology: Principles and Applications (September 18, 2015). Research Handbook on Digital Transformations, edited by F. Xavier Olleros and Majlinda Zhegu. Edward Elgar, 2016. <https://ssrn.com/abstract=2662660>

Blockchain development led to many innovations such as Bitcoin, the first cryptocurrency developed on blockchain technology. In fact, thanks to the blockchain innovation, Bitcoin gained its reputation on the market. However, it would be proper to first understand how it was possible for blockchain to incorporate such a “service” into its use. In fact, blockchain is a public ledger for recording transactions that do not require the presence of a third authority to make each transaction valid, eliminating the double-spend issue as well. It is composed by blocks of data linked together by a chain of records, from which the name comes from. Blocks are time-proof and permanent. The process starts with an initial block that records the first transactions and all the following blocks are added to the chain and then linked together. Bitcoin is in fact an implementation, or the first of blockchain. The blockchain technology is based on three main characteristics which are its value, trust and the fact of being reliable.

The term “value” basically refers to the ability of blockchain to create digital assets that will provide value to its owners. Digital assets can be easily transmitted through the internet, which implies their value to increase thanks to the fact that Nakamoto’s version of blockchain eliminated the need of a third party that would allow such movement.

Furthermore, thanks to its ability to preserve the integrity of recorded data in one its block, blockchain permits its users to trust the process because every asset recorded into the system can be tracked and ownership is never lost. As above-mentioned, blockchain enables a process under which it is possible to never lose the original version of a document because it is possible to copy the original version which will never get lost over time. Blockchain is also reliable because, as explained above, distributes its work all over the system and thanks to its decentralized network, failure of a sector will not determine the failure of the entire system.

Blockchain innovation came from the fact that being a distributed ledger, it is possible to find many copies and therefore it removes the need of a third authority. The

original data/file is never lost because of the existence of infinite copies which makes it impossible for data to get lost. Moreover, Haber and Stornetta in 1980 questioned themselves on how it was possible to trust “computers” since there was no central authority providing security for our files. It was almost impossible for them to imagine a digital ledger without a controlling authority but the need of trust. The solution that they were able to come up to, was the introduction of the concept of a digital ledger in which there is a chain of blocks containing data which are all linked together by a central one in which are contained the original files/documents/data. From this idea, in 2008 the concept of blockchain and bitcoin was derived by a person, or a group of people, called Satoshi Nakamoto in 2008, who started the concept of payment online introduced in a paper called “a peer-to-peer electronic system”.

The blockchain development can be considered as an improvement from the version of Haber and Stornetta and the new one of Nakamoto, who introduced different features to the concept of blockchain. In order to maintain the connected copies of the ledger, Nakamoto presented the idea of winning coins in exchange of solving numerical puzzles that used to lead to the addition of new blocks to the chain. By doing so, Nakamoto has been able to test the idea of non-surveillance decentralized system and to prove that it was possible to trust the process. From these events, the bitcoin was introduced as the digital currency that people were allowed to win under the above-mentioned conditions. With the introduction of cryptocurrencies – bitcoin- it was now possible to verify blocks and to make sure that the defined order was maintained and not altered. Bitcoin was in fact the first decentralized public ledger that has all its success thanks to the blockchain.

Moreover, in the bitcoin system, there are intensive decentralized public ledgers that reflect how users are rewarded. The complexity of this derives from the fact that bitcoin is blockchain based and blockchain is internet based³. Consequently, since internet is infinitely spread, the decentralization can be a difficult concept to understand and to map out. Selecting the main characteristics of blockchain, immutability plays the main role. In fact, if all data are

³ Wright, Aaron and De Filippi, Primavera, “Decentralized Blockchain Technology and the Rise of Lex Cryptographia” March 10, 2015. <https://ssrn.com/abstract=2580664>

immutable⁴, blockchain can also afford itself to be centralized, because what makes cryptocurrencies worth trading is, in fact, immutability of data.

Although its efficiency, Blockchain presents many limits⁵. For instance, the lack of awareness lead to the misinterpretation of the real value of blockchain.

Secondly, the extreme immutability of blockchain represents a limit of its users because transactions cannot be modified and it's impossible to make any revision of the process. In other words, immutability is considered as an advantage of blockchain but also as a negative aspect of this technology.

Thirdly, the consensus mechanisms above mentioned, is a very slow process because it is needed to achieve common consensus every time a new block must be established. However, immutability does not always imply success for bitcoin's blockchain.

One of the main dysfunctionalities of blockchain was registered in 2010 because of a bug⁶ that hit the network, requiring Bitcoin software to be republished initiating a new blockchain⁷, which caused the old blockchain to be replaced with a new version of chain of blocks.

Nevertheless, by the end of 2011, bitcoin's value increased as much as to reach the same value of the US dollar. Later, on March 11th, 2013, another dysfunction occurred in the network, resulting in two separated blockchains. Luckily, this event did not lead to any severe consequence. Despite the above- mentioned risky aspects, by 2012, bitcoin and cryptocurrencies increased their popularity all over the world. For this reason, the Bitcoin Foundation was established and since then, Bitcoin's popularity has increased considerably.

Before introducing the entity of cryptocurrency, it would be necessary to explain more in detail what it is meant with the term "distributed ledger". As above-mentioned,

⁴ Id.

⁵ Chohan, Usman W., "A History of Bitcoin", February 5, 2022. <https://ssrn.com/abstract=3047875>

⁶ An integer overflow bug is generally caused by a computation operation that attempts to produce a numerical value which is too large to be represented within the available storehouse space.

⁷ Pilkington, Marc, Blockchain Technology: Principles and Applications, September 18, 2015, *supra note 2*.

blockchain can also be described as a distributed ledger that allows for digital transactions. A distributed ledger can be defined with the term of database which can be replicated and distributed between members of use.

As explained above, one main characteristic of blockchain distributed ledger is its security of maintaining the entity of its documents and recorded files.

Basically, distributed ledger has the same characteristics mentioned previously while describing blockchain technology and bitcoin cryptocurrency: there is no central authority that gives the consensus for a transaction to take place or to make sure that all is compliant with regulations. Due to the chain of blocks which duplicate infinitely recorded documents, immutability is given for true.

All these aspects, make distributed ledgers very difficult to sabotage because for a hacker to have success, he would need to attack all the blocks at the same time, which is considered a bit unrealistic. Now, to better understand the creation and development of Bitcoin, I will approach the term “cryptocurrency” in depth. With the term cryptocurrency we mean a type of digital asset which is used to exchange value between two or more individuals. This type of digital asset verifies the real entity of transactions and makes sure it is computed in complete secure terms. They work through a distributed ledger and one main example (the first) of cryptocurrency is Bitcoin.

Bitcoin was in fact the first cryptocurrency⁸ to be created thanks to the support of blockchain and its system of chain of blocks. Although bitcoin was created under the blockchain technology, its key concepts are slightly different from the latter. Bitcoins are in fact decentralized, distributed and trustless.

1. Bitcoins are decentralized because there is no controlling authority making sure that the “actions” of Bitcoin are compliant with the rules. In other words, there is no central control⁹.
2. By saying that Bitcoins are distributed, we assume the concept of sharing the work across different network. This is considered a positive aspect because

⁸ Chohan, Usman W., A History of Bitcoin (February 5, 2022)., *supra note 4*.

⁹“ Key Concepts of Bitcoin - Javatpoint.”, 2023. <https://www.javatpoint.com/key-concepts-of-bitcoin>

the risk of failure of the entire system is reduced to zero, since there is not a unique place of failure but several distributed ledgers across the system.

3. The concept of trustless comes from the elimination of the double spending problem. Assuming that there is no need for a third authority to allow the transaction, the trust of the process is given by the distributed trustless consensus in which both blockchain and bitcoin give consensus to transactions to take place.

Moreover, in the bitcoin system, there are intensive decentralized public ledgers that reflect how users are rewarded. The complexity of this derives from the fact that bitcoin is blockchain based and blockchain is internet based, as above-mentioned. In fact, the word "blockchain" means "concatenated blocks" and it is possible to imagine it as a chain of blocks made up of the set of verifiable transactions, able to connect different nodes, physically constituted by the servers of each participant in the network, which are used by the subjects to take part in the decision. In other words, one of the key features of the blockchain is that it is comparable to a ledger where every operation is recorded in the system and cannot be changed, modified or tampered with in any way¹⁰. In fact, to add a new block to the chain, there is a precise protocol of consent between these nodes. Once the consent is expressed by all servers, the new block is added, and each node will update its copy without any possibility of modification of data once validated and entered.

Each block contains the cryptographic code of the previous block, thus creating a concatenation between the previous and the following. In fact, blockchain, that is, a computer registers of transactions composed of a chain of blocks. It was possible to evolve into an asymmetric encryption method, through the insertion of two distinct keys: a public key to encrypt and a private key to decrypt.

The public key is known to anyone interested in transferring a communication, the private one is logically known only to the philanthropist who will use it to decipher the

¹⁰ "Law and Blockchain", by Stephen McKeon and Derek Edward Schloss, 2021.
https://econpapers.repec.org/bookchap/sprsprchp/978-3-030-65117-6_5f13.htm

communication transferred to him. Still, this system also shows a weakness. In fact, it could be that a third party can block a communication and be suitable to modify or tamper with it¹¹, using the public key of the philanthropist without him noticing.

To resolve this task, Blockchain uses double encryption along with a hash function. Another technology on which blockchain is grounded is the concurrence algorithm called Proof of Work. This, through the formerly described hash function, allows to apply security in the network. The possibility of manipulation of the information being transmitted is reduced. Once that the sale is approved, it isn't possible to change it because the hashes would not match presently. The result was to design the system so that it would give coin as decoration to the factors of the network that handed processing power, necessary to strengthen and structure the network itself, according to an arbitrary system reused in such a way as to bestow coin in proportion to the computing power handed.

This exertion is called mining¹².

The term indicates the process by which "miners" can confirm deals, validating new blocks to add to the chain and therefore adding the security of the system. In private blockchains mining is carried out by the authority that creates and governs the network. Two applicable functions certifying exchanges through evidence of work and introducing new coins¹³. In fact, blockchain can be either public and private, both with different features and different downsides.

The first and main public network is Bitcoin, in which there's no reality suitable to exercise control of deals, enjoin them, regulate them. Among the most important specialized aspects of public networks is the tone- regulated operation of security. Because the system is fully decentralized, everyone has a dupe of the database and, to produce each change, you must first go through a certain number of warrants, which makes it insolvable for a hacker to

¹¹ Ammous, Saifedean, Blockchain Technology: What is it Good for?, August 8, 2016
<http://dx.doi.org/10.2139/ssrn.2832751>

¹² Henderson, M. Todd, and Max Raskin. "A Regulatory classification of digital assets: Towards an operational howey test for cryptocurrencies, ICOs, and other digital assets". *Columbia Business Law Review*, 2018.

¹³ Simone Brina, "Blockchain e smart contract: definizioni, funzionamento, profili giuridici e applicativi". Roma: Luiss Guido Carli, 2021, 2022.

fake a sale, unless it comes into possession of a private key and therefore replaces the "due proprietor".

So, the conception of " permissionless" indicates a network that is public, open to all and decentralized. Such a model prevents any form of suppression, and no one can help a sale from being added to the registry after carrying concurrence from all bumps on the network. The permissionless networks can thus be used as a database for any type of document, especially for those that need to be inflexible over time. The classic examples of public networks are undoubtedly Bitcoin and Ethereum.

On the other hand, "permissioned networks" (private blockchains) are centralized and can be managed by one or more organizations and are based on a set of rules shared by all color that are part of the network and that are allowed to use it.

The main theme remains the centralization of control by a "third" body, which offers users the possibility to control who and how uses the network resources, putting in the hands of the managing body the management of access rules, the mechanism of consent. It is evident that the more business and trade-oriented the objectives of the networks are, the more decentralization is lacking, in favor of a high degree of "control".

Thus, for private network is defined that blockchain that "belongs" to an entity or organization. This organization can then choose an authority that guarantees and limits access by indicating who is allowed to use the network read and write, also establishing the management rules and taking care of governance.

Moreover, the model of public ledgers does include some downsides of its use¹⁴.

First, reversibility is a feature that lacks in the blockchain system, and this might create some difficulties in making government public register to be recognized in the digital ledger.

Second, the attacks from hackers are highly spread and the anonymity increases the risk of insolvency. Third, private transactions are less costly and faster.

¹⁴ Zetzsche, D.A., R.P. Buckley, and D.W. Arner. 2018. The distributed liability of distributed ledgers: Legal risks of blockchain. *University of Illinois Law Review*, 1361–1406.

Lastly, private ledgers are safer and include more severe permissions which increase safety.

Being of two different entities, public and private blockchains face different potential attacks. Much of the security of the system is guaranteed by encryption, which binds all the blocks together. Since the data is entered in the following blocks, the system is always able to compare the new block with the entire chain and then can notice any contradictions in order to recognize a hypothetical hacked block. There are, however, some types of attacks, albeit unlikely, that could take place.

The DDOS attack (Distributed Denial of Service) is, for example, an attempt to paralyze a network node, overloading it with high traffic volume. Multiple and varied small transactions, often invalid, are sent for the sole purpose of preventing the processing of real transactions. “Attack 51%” consists in trying to supplant the normal process of consensus of the protocol, trying to get control of 50% + 1 of the nodes of the network, to approve blocks created ad hoc to create, for example, a phenomenon of double expenditure¹⁵. In this case you would aim to make a transaction, and then delete it from the chain history in order to make new transactions with the same coins for a second time. To conclude, more centralized ones may present more risk of hacking, as a less decentralized blockchain is more vulnerable to attack.

Now that the functionality of blockchain should be clearer, let's analyze blockchain development through the years.

Blockchain gained the interest by many because it was seen as unknown and mysterious, to which it is related the cryptocurrency Bitcoin. Conversely, the real success came with the invention of Ethereum, which allowed people to discover transparent functionalities. In 2013, Ethereum was introduced as a decentralized ledger able to run smart contracts, without the intervention of a third authority. Ethereum could be also used by companies to build new software, a fact that allowed blockchain to develop from a simple currency to a multi-functional system. In terms of blockchain development, Ethereum has been the first big

¹⁵ Simone Brina, “Blockchain e smart contract: definizioni, funzionamento, profili giuridici e applicativi”, *supra note* 13.

extension of blockchain, which has been able in this way to evolve from the protocol imposed by bitcoin to a decentralized and more flexible system. In fact, the development of blockchain comes together with the introduction of Ethereum. Ethereum is an innovative blockchain that will drive blockchain to the introduction of digital contracts in real life, “establishing solid technological and legal basis”¹⁶. Ethereum can be defined as a program which can be run autonomously by every individual.

Vitalik Buterin, presented a white paper proposing a decentralized application ledger, that can be either public or private. In fact, the main difference between the two is that in between there is a partial decentralized blockchain, also called “consortium blockchain”. The consortium blockchain represents a mix between the private blockchain, such as a highly trusted entity model and the public blockchain, as to say the low trust.

The blockchain technology was first patented in 1998 in the USA, differing from its predecessors because of decentralization. In fact, Bitcoin’s blockchain is decentralized.

The Ethereum Foundation was established in 2014 as a result of this. Ethereum made it possible to use blockchain technology for applications other than cryptocurrency. It introduced smart contracts and consequently, financial institutions and other businesses began to understand and study blockchain's potential, shifting their focus away from digital money and toward the development of blockchain technologies. In 2015, the Ethereum Foundation provided creators the instruments to write smart contracts¹⁷, becoming one of the largest organizations of the blockchain technology.

Later that year, Buterin acknowledged some serious defects of the immutable public ledgers, such as the fact that non-controllable government registers faced the risk of not being recognized at all.

Secondly, the majority attacks in cryptocurrencies came from anonymous sources. Thirdly, public ledgers made transactions more expensive, while private blockchains faced minor costs.

¹⁶ Pilkington, Marc, Blockchain Technology: Principles and Applications September 18, 2015, *supra note 2*.

¹⁷ Smart contract is a tool information technology that governs in autonomy certain events that affect the relationship between two or more parties on the basis of instructions decided by them.

Finally, in public blockchains there was less connectivity between the nodes than in private blockchains. However, Buterin found an explanation and a solution to almost all these pitfalls.

As there are other types of blockchains that could be classified as “second generation blockchain”, different applications and methods can be used, such as Ethereum and Ripple. Not only is Ethereum one of the largest blockchain after Bitcoin but it is also considered to belong to the second-generation technology, because it reaches an extension of the crypto economy through the establishment of digital contracts.

Coming to our case of interest, Ripple Labs constructs thanks to the ripple technology, the possibility for cryptocurrencies to be able to transfer value around the globe. The strategy of Ripple is the one-off establishing a universal financial protocol, through which it will be possible to overcome boundaries of different currencies¹⁸. The coin in consideration is the XRP and allows companies to use an international set of rules instead of making its own, which will ease transactions. The ripple transaction protocol will allow fast currency exchange nearly to cost zero and a secure transfer of tokens¹⁹.

In fact, Ripple is the most advantageous blockchain for payments whose potential given by XRP eases the distribution of value among financial institutions. Ripple guarantees fast and secure distribution of tokens thanks to the installation of its protocol. Since 2020, blockchain has started to be considered as a strategic move for international firms as well. This economy trend represents a consequence of the increasing stability of both bitcoin's value and cryptocurrencies' value. Following this, the USA whose financial power is already well established has also become the most developed country in the cryptocurrencies market.

As a result, in 2022, the federal government has decided to invest in the blockchain market ten times more compared to the previous year. On the other hand, the European Union is still not making relevant progress, but it is also well-known that blockchain market is

¹⁸ Aranda, ByDaniel, By, Authors Daniel Aranda Ryan Zagone, Daniel Aranda, and Ryan Zagone. “The 'Ripple' Effect: Why an Open Payments Infrastructure Matters.” CGAP, 2023. <https://www.cgap.org/blog/ripple-effect-why-open-payments-infrastructure-matters>.

¹⁹ Cawrey, Daniel. “Ripple Labs' Grand Plan to Build a Global Payment Protocol.” CoinDesk Latest Headlines RSS. CoinDesk, February 21, 2023. <https://www.coindesk.com/markets/2014/04/11/ripple-labs-grand-plan-to-build-a-global-payment-protocol/>.

constantly evolving and the emerging nations are many and rapidly growing. Therefore, it is predicted that the development and the progress of the digital market will continue in the coming years.

To sum up, the application of blockchain will lead to a total innovation in the digital era, establishing a full reshape of banks and the possibility to meet the specific needs of individuals. Moreover, blockchain creates a ledger through which is possible to identify and track a specific good, guaranteeing the non-disclosure of personal data²⁰. Always referring to the concept of innovation and development, the inclusion of mobile service permits to include into the digital era also those individuals who are not in the possession of a computer or who lacks digital skills.

III. The Securities and Exchange Commission

A. The SEC v. Ripple Case

1. Introduction to the case

Nowadays, the so-called litigation case *Securities and Exchange Commission (SEC) v. Ripple* is a common case which is getting the attention of many.

Between 2013 and 2020, Ripple Labs Inc. (the blockchain developer of the XRP cryptocurrency) sold XRP tokens to raise capital worth USD 1.6 billion. However, Securities and Exchange Commission (SEC) filed a lawsuit against Ripple Labs declaring that the latter raised illegitimate means, since it failed in registering this security offering.

a. Ripple Labs

Ripple Labs was founded in 2004 in Vancouver, Canada by Ryan Fugger. However, in 2012 the company was sold, and it was renamed as “OpenCoin” by its new owners, McCaleb, Britto and Schwartz. In 2013, McCaleb left the company, which was in fact renamed in 2015 as Ripple. Ripple

²⁰ Id.

works thanks to its blockchain, XRPL²¹, that keeps track of the transactions' data of the company, made it possible due to the blockchain features analyzed in the previous chapter.

What is particular about Ripple, is that it does not use the classical consensus protocols, like the ones introduced in the first chapter, but it uses its own called Ripple Protocol Consensus Algorithm (RPCA) to approve for specific transactions. The process works through a Unique Node List (UNL) that chooses some validators among the ones proposed by Ripple, basing on specific characteristics of these validators, such as reliability²². The role of the validators in this case is the one-off suggesting eventual corrections for the process of the transactions. In order to approve the transaction, it is needed the consensus of 80% of approval and the blockchain, XRPL, can proceed with the creation of a new ledger. The same applies for the inverted situation, such as the case in which the transaction does not obtain the 80% of approval by the validators, which will imply its impediment.

However, even if this system is not 100% compliant with the classic model of cryptocurrencies, Ripple still fits the definition. It also presents several advantages such as the fact that Ripple does not pay when it must add new blocks to the blockchain and this works as an incentive to maintain the integrity and reliability of Ripple. Moreover, there is no mining involved and in fact the transaction cost of its currency, XRP, is very low, almost equal to the zero value. Ripple is also very fast in solving problems of its currency:

- Typically, a standard blockchain takes up to 10 minutes to resolve a problem in currencies such as Bitcoin.
- Ripple takes at maximum 6 seconds to allow the transaction and proceed with the payment.

Some controversies occurred in 2015 when Ripple was accused of violating the Bank Secrecy Act and failed in registering with their own Financial Crimes Enforcement Network. In addition, also the Securities and Exchange Commission accused Ripple of not having registered XRP while completing transactions or any other kind of operation.

b. The Securities and Exchange Commission

²¹ Robel Tsegu, Cryptocurrency and Security Issues: The Tide Awaiting Ripple's Decision, 25 SMU Sci. & TECH. L. REV. 95 (2022).

²² Id.

The Securities and Exchange Commission is a federal entity created during the Great Depression in the United States to ensure the fairness of securities transactions and to protect investors from vicissitudes of corporate life. Because of many corporate scandals in that period, SEC was originally created by the Securities Exchange Act to police securities transactions. It is prudent to briefly introduce the Securities Act 1933²³, such as a requirement for corporation to provide full disclosure to ensure that the transaction from the corporation to the investor is entirely fair. However, the Securities Act only takes place at the time of the transaction. Therefore, securities transactions and in particular securities frauds, are considered as a very delicate deal, reason for which the Securities Exchange Act 1933 was introduced as well, to trade corporate securities onto exchange and/or secondary markets²⁴. It was the Securities Exchange Act to create, in first person, the Securities and Exchange Commission. SEC was to first entity entitled to the policy of securities laws. As briefly mentioned above, the Securities and Exchange Commission's main aim is to enforce compliance with securities laws.

Moreover, SEC aims to protect investors and to guarantee the fairness of the market, also by facilitating the capital formation.

In fact, the first mission of Securities and Exchange Commission refers to the protection of investors in the American market, making sure that they are provided with the right information about their investments and the entity entitled to sell the latter. As a result, the SEC requires companies of different entities to regularly disclose information about financial movements, to allow investors to make the proper decisions about when or where to invest.

To do so, the SEC enforces several federal securities laws to detect misconduct and identify wrongdoers. When this is the case, the Securities and Exchange Commission allows returns to the harmed investors for the actions of the plaintiffs or wrongdoers of a given situation²⁵.

Since its efficiency is measured by the number of enforcements it can bring in action, the Securities and Exchange Commission not only punishes misbehaviors, but it also provides indemnification to investors in many ways. The most common type of refund the SEC is typical to

²³ GovInfo | U.S. Government Publishing Office, February 12, 2023. <https://www.govinfo.gov/content/pkg/COMPS-1885/pdf/COMPS-1885.pdf>

²⁴ Velikonja, Urska, Public Compensation for Private Harm: Evidence from the SEC's Fair Fund Distributions, 2015. Stanford Law Review, Vol 67, pp. 331-395 (2015). <https://ssrn.com/abstract=2400189>

use are the so-called “fair funds”²⁶, which are a sort of distribution of funds provided for investors victims of frauds.

The Securities and Exchange Commission distributes fair funds under the form of civil forfeit and disgorgements of illicit profits collected by the defendant, increasing the number of profits for the victim compensation. This process arises the attraction for investors since SEC provides the most extensive compensations for plaintiffs. On the other hand, many scholars have criticized the SEC distribution of fair funds declaring that this process lacks coherence, since it could result in a waste of resources.

The real issue is that most of times, Securities and Exchange Commission provides compensation to harmed investors even in cases in which the losses came from an impractical private lawsuit²⁷. Conversely to private securities litigation, most fair funds are provided to those investors’ victim of misconduct of financial intermediaries and for frauds committed by customers. Whenever the transactions are tainted by self-dealing, late trading, or manipulation of a third party, the illicit gains of the defendants will lead the harmed investor to receive a distribution of funds. Since in private litigation liability is rarely given to individuals, the SEC appears to be one of the very few solutions to provide compensation to damaged investors.

Moreover, the most frequent situations in which the Securities and Exchange Commission intervenes, are those cases in which the agent failed to monitor the conflict of interest between public agents and private victims, or those situations in which the public agent failed in providing full disclosure to the private victim before making an action of enforcement.

The Securities and Exchange Commission aims to prevent violations of securities laws, to prevent securities fraud, and imposes monetary liability otherwise. Other than imposing civil fines, the SEC is enabled to ask defendants to return any profit causally connected to illegal transactions, or any profit gained from dishonest procedures. Nevertheless, the SEC has no authority to request defendants to repay an ill-gotten gain. To expand the SEC’s power, the Congress enacted the Sarbanes Oxley Act²⁸, made to give the Securities and Exchange Commission the power to compensate

²⁶ Henderson, M. Todd, and Max Raskin. 2018. “A Regulatory classification of digital assets: Towards an operational howey test for cryptocurrencies, ICOs, and other digital assets”, *supra note 12*.

²⁷ *Id.*

²⁸ See <https://www.soxlaw.com>

investors victim of fraudulent actions. Section 308(a) of the Sarbanes Oxley Act authorizes the SEC to provide fair funds to be distributed to harmed victims²⁹.

Therefore, there are some limitations to restrict the SEC's authority, such as the fact that to impose disgorgement the SEC must prove that the defendant benefitted from the transaction occurred through securities violations. The most relevant securities violations that SEC is highly unlikely to tolerate, are the sales of unregistered securities, which can result in large monetary liability. In such cases, the SEC freezes the funds of the defendants, and it will nominate a collector. All the funds that are recovered are then collected by the receiver and are excluded from the fair funds. Moreover, in the latest years the blockchain technology played a fundamental role in the SEC administration of securities. Securities frauds are now considered more delicate than ever, considering that the success of cryptocurrencies has expanded to a wider range of interested investors.

As anticipated above, the Securities Act 1933 mainly focuses on the registration of securities, prohibition of securities fraud and requires investors to provide full disclosure. While acquiring securities of a company, it is fundamental that investors provide all the necessary information to make a fair and informed decision. However, if investors can demonstrate that they were lacking a relevant information at the time the transaction took place, they can be compensated of their losses. In general, the registration process is the main character of our discussion. The Securities Exchange Act empowers the Securities and Exchange Commission to both register and policy securities laws and requires that public corporations provide annual financial reports.

First, the Securities and Exchange Commission defines securities as a commonly traded financial instrument, such as a note, stock, or bond³⁰. This definition may result incomplete, since the definition of security expands to a wider range, including "investment contracts"³¹, a term that will be analyzed further in this discussion.

To better understand why SEC filed a lawsuit against Ripple, it is important to introduce how a company is required to register their securities.

²⁹ "Section 308 of the Sarbanes Oxley Act." GovInfo, 2023. <https://www.govinfo.gov/content/pkg/PLAW-107publ204/html/PLAW-107publ204.htm>.

³⁰ *SEC Framework for "Investment Contract", Analysis of Digital Assets*, 132, Harvard L.Rev., (2019) <https://harvardlawreview.org/2019/06/sec-framework-for-investment-contract-analysis-of-digital-assets-2019/>

³¹ *SEC Framework for "Investment Contract", Analysis of Digital Assets*, 132, *supra* note 10.

First, a company must file a statement of registration with the SEC. The registration statement must be divided into two parts:

1. The so-called “prospectus”, such as the purpose of the business operations of the issuer, the risk of the transaction and a financial statement³². SEC requires that the prospectus is sent to every individual who is interested in the purchase of a security.
2. The second part, instead, does not have to be sent to the buyer but must be filed within the SEC. The SEC staff functions are the ones of examining the compliance of the security with the disclosure requirements previously established. Both securities distributions and public offering must be registered under Section 5 of the Securities Exchange Act of 1933.

To sum up, the Securities and Exchange Commission has with three main mission values:

- (1) Protect Investors
- (2) Maintain the markets efficient and ensure their fairness
- (3) Facilitate and provide capital education

In fact, the SEC aims to protect the Main Street investors who are investing in the American markets, disclosing to them the proper financial features.

Maintaining the markets efficient and ensure the fairness of every financial movement is also one of the main interests of the SEC. In fact, the SEC capital markets are the ones with more liquidity in the world, which is why they became aware of the technological development that have penetrated the market in many ways. Therefore, the Securities and Exchange Commission aims to the ability of maintaining fair, orderly, and efficient markets, ensuring innovative responses and modernization of activities³³.

Finally, facilitating capital formation is what the Securities and Exchange Commission aims to provide to companies and investors. They propose a series of adequate resources to allow the

³² Dr. Philipp Hacker and Dr. Chris Thomale, “Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law”, SSRN L.J (2019) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3075820

³³ “What We Do.” SEC Emblem, February 19, 2020. <https://www.sec.gov/about/what-we-do>.

interested individuals and firms, to allow the access to the American capital markets, providing financial opportunities and the proper education to make it possible.

Since it was the Congress to create the SEC in 1929, the main purpose was related to several federal laws for users and participants in capital markets to be complaint with both companies offering securities for sale and with sellers of securities. More precisely, companies must register with the SEC all the proper information about what type of securities they are selling together with the disclosure of the risk of such securities for investors and provide a detailed report describing the business.

2. SEC's charges

In this litigation case the SEC is the charge and Ripple is the defense.

To briefly introduce the arguments, the SEC accuses Ripple of³⁴:

1. Never having filed a registration statement that could disclose to investors the right information before investing.
2. Having already received advice of registering XRP as an investment contract under the SEC but Larsen took the responsibility of not registering the currency.
3. Ripple used the money coming from the unregistered sales of XRP to provide maintenance to the secondary market of XRP and CEOs personally gained from such unregistered sales more than \$600 millions.
4. SEC accuses Larsen and Garlinghouse of having created this market exclusively for their personal gains.

All this together, brought Ripple to violate Sections 5(a) and 5(c) of the Securities Act of 1933³⁵. The SEC aims at making Defendants disgorge all the illicit gains coming from unregistered sales and repaying the interests. Moreover, SEC would request the exclusion of the Defendants from the participation of the business of digital asset, imposing civil penalties on the two CEOs.

³⁴ “Securities and Exchange Commission against Ripple Labs, Inc.”, United States District Court, Doc. 4, December 2020. <https://www.sec.gov/litigation/complaints/2020/comp-pr2020-338.pdf>

³⁵ See 15 U.S.C. section 77e(a) and 77e(c)

Thus, in December 2022, the SEC brought a lawsuit against Ripple, accusing the latter of having failed in registering XRP as a security. SEC accused Ripple of having sold more than 14.6 million units of XRP, that the SEC recognizes as security, in return for cash to enrich the Ripple's CEO, Garlinghouse. In fact, the main accuse is against Ripple's current CEO, Garlinghouse, and its former CEO, Larsen.

The SEC accuses them of having raised more than 1.3 billion of dollar through unregistered digital assets securities offering. According to the Securities and Exchange Commission, this raise has begun in 2013 with the sale of Ripple's currency, XRP, both in the US and internationally. Ripple was also accused of having distributed XRP in exchange for cash and other services, such as labor, and its CEOs of having personally gained from the non-registration of offers and sales of XRP.

In fact, the director of the SEC's Enforcement Division has recently declared that "issuers seeking the benefits of a public offering, including access to retail investors, broad distribution and a secondary trading market, must comply with the federal securities law that require registration of offerings unless an exemption from registration applies"³⁶. However, this was not the case of Ripple. In fact, the company was never exempted from registration but instead failed in be complaint with the law.

Not only is registration of securities imposed by the SEC, but it is also necessary to provide investors with the legitimate information when they invest.

Moreover, the SEC already advised Larsen of registering XRP as an investment contract, and to register this security under the SEC, but Ripple took the risk of initiating a large-scale distribution of XRP without registering under the SEC. This was financially beneficial for the company itself and for its CEOs, who gained from the unregistered transactions and movements of the currency. In fact, Ripple gained 1.38 billion from the unregistered sales of XRP and then used this money to finance operations such as the maintenance of the XRP secondary market³⁷.

Larsen and Garlinghouse gained \$600 million from these sales, but without disclosure, this creates a huge risk for investors³⁸.

After having been renamed as Ripple, the actions that the company could do with its currency XRP were limited, which is the reason that brought Ripple to creating a market in which they could sell XRP and profiting from the financial operations.

³⁶ S.D.N.Y.R. 1001-1, Doc. No 352 (2021)

³⁷ "Securities and Exchange Commission against Ripple Labs, Inc, *supra note* 14.

³⁸ *Id.*

Once the company started this process, Ripple's lawyers advised Larsen that XRP could start now to be considered and classified as security, and therefore, should be disclosed and registered under the SEC. Before deciding what to do, Larsen started two Legal Memos to understand what risks the company could face if it would have decided not to consider XRP as a security.

The results of the Legal Memos showed Ripple the limits that should be respected not to violate the federal law. First, there were possibilities that XRP could be considered as an investment contract if Ripple would promote XRP through increasing its price or if investors would buy XRP to engage investment trading. In such cases, the Legal Memos recognized that the XRP could be recognized as a security, and therefore should be complaint with the SEC federal laws.

As above-mentioned, XRP does not work as a classic currency, since is not a legal tender and is not supported by the government. This is the main reason for which the results of the Legal Memos revealed the high possibility that XRP would not be considered as a currency, but conversely, as a security.

In 2014, Larsen declared that no employee and no investor could receive any more XRP since the risk of its to be classified as a security, and he also affirmed of having received a compensation for the risk he personally assumed, such as being an issuer of securities. In fact, what the SEC complains is the Larsen's awareness of this concern and still ignored the warnings of the Legal Memos or asked the SEC for clarifications before holding large-scale distribution of XRP³⁹. The initial Ripple's Offering of XRP started to approve market sales (in the open market), institutional sales and other XRP distributions, such as the development of an XRP market.

When Garlinghouse joined the company in 2015, he assisted at the unregistered sales but since its role as CEO, he immediately assumed full responsibility of such actions. That is, both Larsen and Garlinghouse continued to sell XRP to the public markets. One of the main reasons was in fact that Ripple's main revenues came from the XRP operations⁴⁰.

In fact, the market price of XRP increased from \$0.002 in 2014 to \$3.84 in 2018⁴¹. To achieve this goal, Ripple continued the exchange of XRP for non-cash consideration and paid a third party to help to accomplish such goals and to develop the use of XRP.

³⁹ S.D.N.Y.R. 1001-1, *supra* note 16.

⁴⁰ *Id.*

⁴¹ *Id.*

Moreover, also Larsen and Garlinghouse sold their personal holdings of XRP to the public market. The problem in this operation occurred because the Defendants did not limit the actions of the people that were selling and re-selling the XRP to investors, despite the possession of use of the currency.

The profitability coming from such ill-gotten operation came from the achievement of as much widespread of XRP as possible, needed for promoting sell of XRP to investors.

However, all market sales operations were not registered under the SEC.

The institutional sales were made by Garlinghouse and Larsen to receive financing for the company's operations and, as above-mentioned, to create a specific trading market for XRP. This was a strategy that Ripple used to attract public investors towards XRP currency.

Moreover, Ripple sold XRP in exchange for investments, to create an XRP fund or to make investors include XRP in their funds. What the SEC accuses Ripple is again the non-registration of such market makers. In 2021, such actions amounted to twenty-six investors. And, again, Ripple did not provide any restriction towards buyers and sellers of XRP currencies, not even restricting buyer's possibilities of reselling XRP to which they possess no license of use.

The Securities and Exchange Commission provides in one of its reports, a crucial example to demonstrate the evidence of such accuses. In 2017, in fact, Ripple sold around 14.8 million XRP to Caium Investor, in exchange for \$2.1 million but Ripple did not restrict the ability of the investor to resell the currencies in the public markets at a price discounted by 30% respect to the market prices⁴².

The SEC also accused Ripple of distributing additional XRP on digital asset trading platforms. In fact, Ripple created a market for XRP on which the company could transfer the currency to third parties/intermediaries. The other distributions of XRP are divided in five types of distribution of XRP in exchange for cash⁴³.

1. "Executive Compensation Distribution"
2. "On-Demand Liquidity Distribution"
3. "Sales of XRP into the Market of Behalf of a Larsen-Established Entity and by Ripple-Funded Projects"
4. "The XRP Options"
5. "Payments to Digital Asset Trading Platforms to Support XRP's Trading Market"

⁴² "Securities and Exchange Commission against Ripple Labs, Inc.", *supra note* 14.

⁴³ *Id.*

Executive Compensation Distributions

At the end of 2016 and half of 2019, Ripple selected some executives to grant them a compensation of 900 million XRP for their effort and work as employees of Ripple.

During a separated meeting at the end of 2016, Ripple company decided to compensate Garlinghouse as well with 150 million and 500 million XRP. Subsequently, in 2019 Garlinghouse was provided with an additional 250 XRP.

On-Demand Liquidity Distributions

The On-Demand Liquidity Distributions occurred in the sense that in 2018, Ripple created a product “xRapid” to transmit money to buy XRP and further sell the currency for the local currency. Moreover, the SEC highlights the fact that Ripple paid XRP to market makers that have supported the ODL (On-Demand Liquidity). What the SEC considers to be wrong about this is that by providing direct compensation of XRP, Ripple knew that they were selling into the public market, and therefore should have had disclosed such transaction to the Securities and Exchange Commission.

More specifically, the entities that were provided with compensation of XRP resold the currency to investors in the public market and Ripple did not monitor such actions, not even to understand if these entities were about to sell the XRP in the public market.

Sales of XRP into the Market of Behalf of a Larsen-Established Entity and by Ripple-Funded Projects

“RippleWorks” is an entity created by Larsen to invest XRP in and achieve the Ripple’s goals, such as trading XRP in the market. In fact, Larsen donated 1 million of XRP to RippleWorks and the Board approved such donation because it believed that it would work as a promotion of Ripple. And again, RippleWorks used the donation XRP to sell in the public market.

Even in this case, the SEC accuses Ripple of not having ensured the intentions of such donation.

The XRP Options

Starting from 2018, Ripple offered the so called “Option Sales”, though which it offered investors to purchase XRP at the average market prices in exchange for a given contribution to the firm. Ripple decided to leave these options open until March 2022.

Payments to Digital Asset Trading Platforms to Support XRP’s Trading Market

The SEC became aware that Ripple in 2017-2018, made some agreements with several digital trading platforms, paying them mostly in XRP, to provide them incentives with respect to XRP. This

is illegitimate because none of these platforms were registered or disclosed to the Securities and Exchange Commission.

One of the main examples that the SEC is interested in pointing out while accusing Ripple of such action is the fact that in May 2017, Ripple gave to one of these digital trading platforms more than 17 million XRP, in exchange of making their websites available for the sell for XRP.

In addition, the SEC accused both Larsen and Garlinghouse for their XRP's sales⁴⁴.

In particular, Larsen was the main shareholder of Ripple, since he had up to 68% of equity holdings of the company. The SEC accuses Larsen of having sold XRP to worldwide customers and investors, without ensuring which individual really had the right to use the XRP and resell the currency in the public market. Moreover, considering the large amount of gain that both him and his wife gained from such sales (around \$450 million), Larsen's intentions are the ones of continuing with such unregistered sales, as mentioned in one of his tweets on Twitter social network.

On a similar page, Garlinghouse, CEO and COO of Ripple, decided to sell XRP to the public, starting from 2019⁴⁵. The problem with this comes with the fact that he failed in restricting offers or sales to those not in possess of a license to either use XRP and resell their currency to other investors on the market. However, Garlinghouse recently transferred additional XRP to some of their digital trading platforms, to demonstrate his intentions to continue with the unregistered sales of XRP.

Moreover, Larsen did not even limit the distribution of XRP to the registration requirements but went on with the large scale of distribution and assumed the entire risk of being against the federal law. In fact, in 2013 Ripple started to unregistering sell XRP in exchange for other digital assets. The SEC recognizes this concern as a violation of the Securities Act of 1933, which sustains that Ripple have conducted an unregistered securities offering. As required by the federal securities laws, Ripple should have filed the securities with the SEC and instead failed in registering the XRP as provided by the Act.

Therefore, the SEC accuses Ripple of not providing investors full disclosure and never had filed a registration statement. This is severe, because SEC's accusations refer to the fact that both the CEO and Ripple Accountants, made so to restrict specific information solely to themselves and selling XRP without providing full disclosure. In 2012, Ripple received some legal advice to consider XRP as an "investment contract" under some circumstances, which practically means a security.

⁴⁴ United States District Court Southern District of New York - ripple.com. Accessed May 11, 2023. https://ripple.com/static/53f754911c79f753e68728b7ce0aaa36/Ripple-Answer_Filed.pdf.

⁴⁵ Id.

The SEC recognizes that under a financial perspective the non-registration process worked, but Garlinghouse is accused of having personally profited from XRP sales without disclosing. Ripple is accused of having violated Section 5(a) and 5(c) of the Securities Act 1933. The SEC is aiming to moderate the Ripple to avoid continuous acts and business courses not in line with the SEC requirements.

The SEC requests the defendants to pay back their illicit gains and prohibits the defendants to ever participate in any other digital assets sale, imposing civil money penalty according to Section 20(d) of the Securities Act. Defendants have not been able to confirm with the SEC securities sales and offers registration requirements, violating the Securities Act, since Section 5 prohibits unregistered securities offering.

As mentioned above, Ripple was receiving warnings that XRP may result as an investment contract, such as a security. An investment contract is an instrument through which an investor invests money and is entitled of a return in profits, and the Congress ruled that the definition of a security is a “flexible rather than a static principle” and can be adapted to regulate those who “seek the use of the money of others on the promise of profit.”⁴⁶

XRP Ledger, aka Ripple Protocol, is a software protocol that records data internet to digital transactions. In 2012, during the completion of the XRP, it finally reached a fixed supply of 100 billion XRP. What the SEC finds extremely wrong, is also the fact that both Ripple Co-Founder and Agent 1, transferred 80 billion XRP to Ripple and then split the remaining 20 billion for themselves⁴⁷. By doing so, both the Ripple and both its agents gained full control of XRP. However, the SEC sustains that Ripple’s lawyers warned both the Co-founder and both the Ripple, that XRP could have been considered as a security.

In fact, there were some risks that XRP could be considered as an investment contract, such as a security, under the federal securities laws. Lawyers advised Ripple that if individuals would purchase XRP to make investments, XRP units would be considered as investment contracts.

⁴⁶ Wu, Skylar. “SEC v. Ripple: The Regulation of Cryptocurrencies as Securities.” Columbia Undergraduate Law Review, January 19, 2022. <https://www.culawreview.org/journal/sec-v-ripple-the-regulation-of-cryptocurrencies-as-securities>.

⁴⁷ United States District Court Southern District of New York - ripple.com., *supra* note 14.

Moreover, Ripple and Larsen avoided lawyers' warnings and they continued to offer and promote XRP as an investment, such as a security. Ripple and Larsen never filed a registration statement with the SEC, violating the Section 5 of Securities Act, not even limiting their distribution of XRP, however, taking the risk of violating the law.

In 2013, Ripple began to distribute XRP to establish a trading market for XRP. SEC's accusations also refer to the fact that in August 2013, Ripple started unregistered sales and offers of XRP in exchange for digital assets, such as Bitcoin.

In April 2015, Garlinghouse became the CEO of the Ripple Labs Inc., and by being aware of the unregistered sales of XRP he is considered liable as well. Even though the case is not yet concluded, the SEC orders the defendants to disgorge all the profit illegally obtained and to pay civil money liability as well.

The SEC accuses all the employees, respective agents and all individuals who participated, of violating Section 5(a) and Section 5(c) of the Securities Act⁴⁸, even for having delivered XRP to any individual and for having conducted unregistered sales of XRP.

To conclude, the SEC claims that Ripple and its CEOs, Larsen and Garlinghouse, sold XRP as an investment occasion to raise finances for the company, rather than as a mileage commemorative that could be used to buy goods and services within the Ripple network.

The SEC argues that XRP is a security, since is complaint with the definition provided by the Howey Test, and thus should have been registered with the Securities and Exchange Commission. The SEC also alleges that Ripple's director's tête-à-tête served from the trade of XRP and that they misled investors about the true nature of the cryptocurrency, such as a lack of disclosure about the company's business, required by the SEC as a protection for investors.

⁴⁸ 5(a): "Unless a registration statement is in effect as to a security, it shall be unlawful for any person, directly or indirectly, (1) to make use of any means or instruments of transportation or communication in interstate commerce or of the mails to sell such security through the use or medium of any prospectus or otherwise; or (2) to carry or cause to be carried through the mails or in interstate commerce, by any means or instruments of transportation, any such security for the purpose of sale or for delivery after sale."

5(c): "It shall be unlawful for any person, directly or indirectly, to make use of any means or instruments of transportation or communication in interstate commerce or of the mails to offer to sell or offer to buy through the use or medium of any prospectus or otherwise any security, unless a registration statement has been filed as to such security, or while the registration statement is the subject of a refusal order or stop order or (prior to the effective date of the registration statement) any public proceeding or examination under section 8."

https://www.law.cornell.edu/wex/securities_act_of_1933#:~:text=Under%20Section%205%20of%20the,who%20offer%20securities%20for%20sale.

However, on April 14, 2022, the SEC declared that it will not seek any further information, though suggesting that both parties need to agree what the accusers and the defendants are liable for, whether just some issuers or all. As a results, the settlement offers can start to be discussed.

Since the case is still ongoing, it is impossible by now to provide ending results. On 14th April 2023, the latest results achieved in the Supreme Court of United States, revealed that the SEC has lost five of its last six cases in the Supreme Court, since apparently no unlawful act has happened between those reported by the SEC to the Court⁴⁹.

3. Counterarguments by Ripple

The defendant Ripple Labs, Inc. responded to SEC's accusations.

As a first defense, Ripple decided to highlight the currency-security problem, such as one of the main reasons for which the company was accused by the SEC.

In fact, Ripple immediately states that XRP works as a medium of exchange, that does not have to register with the SEC but only with the Commodity Feature Trading Commission (CFTC)⁵⁰.

In particular, Ripple declares that the Securities and Exchange Commission's theory about XRP being an investment contract, and therefore eligible to register under the Section 5 of Securities Act, ignores the fact that the XRP functions are different from the functions of securities. To justify such statement, Ripple explains that when XRP functions as a medium of exchange, works in a way to facilitate transactions. Therefore, it is not a security, and it does not have to register under the SEC.

Moreover, Ripple explains that for XRP to be considered as a security, it should be responsible of complex transactions, such as market-makers or thousands of exchanges. Conversely, XRP currency's utility depends on low-cost transactions only.

Additionally, in 2015 and in 2020 as well, the Department of the Treasury's Financial Crimes Enforcement Network, FinCEN, affirmed more than once that XRP is a virtual currency, that functions to store value and as a medium of exchange⁵¹. Hence, Ripple states that XRP does not have to register under the SEC because it fails to fall into the security definition provided by the latter.

⁴⁹ S.D.N.Y.R. 1001-1, Doc. No 352 (2021), *supra note* 16.

⁵⁰ S.D.N.Y.R. 1001-1, Doc. No 4 (2020)

⁵¹ S.D.N.Y.R. 1001-1, Doc. No. 4 (2020), *supra note* 16.

First, Ripple declares that the functionality and the liquidity of XRP does not conform with the definition of securities and therefore, with the securities registration. In fact, Ripple affirms that XRP should not even be considered as an investment contract. Moreover, Ripple claims that the SEC is ignoring the fact that XRP is an open source, and the SEC never mentioned any previous regulator for cryptocurrencies such as XRP, thus XRP should not fulfill securities obligations. Also, the SEC does not recognize Bitcoin and Ethereum as securities, and Ripple believes that the same should apply for XRP, since its price is correlated with Bitcoin and Ethereum. Therefore, Ripple states that the SEC is providing an unfair opinion and that the SEC's allegations result to be false over time, as well. Finally, Ripple concludes declaring that in 2015, together with the United States Justice Department and the Financial Crimes Enforcement Network, XRP is recognized and registered as a crypto currency, not as a security⁵².

It is not possible for the SEC to deny such declarations, since Ripple affirms that the Securities and Exchange Commission previously allowed Ripple to continue with the distributions of XRP to the open market, exempting XRP from the regulations imposed by the Securities Act, as well as it did for Bitcoin and Ethereum.

Ripple, in fact, said that they never distributed XRP as investment contract, since Ripple never hold any initial coin offering and XRP's holders never has any ownership interest in Ripple and that Ripple does not have relationship with the XRP holders today as well as in the past. The Defendant affirms that they never offered XRP to investors to permit them to build an "ecosystem" or promised to XRP holders any profit in exchange. In fact, Ripple states, these activities were never investment contracts, but simple purchases and agreements on sale.

At the end, Ripple accuses the SEC of misinformation, in terms of not having deeply understood the main features of XRP.

Ripple explains that XRP is a decentralized open source, and it operates on a dimension too big to be controlled by Ripple itself. Moreover, XRP is a digital asset in terms of currency, therefore its price is not determined by Ripple but by the changes and fluctuations on the cryptocurrency market, as well as Bitcoin and Ethereum.

⁵² Park, James J. 2018. "When are tokens securities? Some questions from the perplexed." Reviwed by Lowell Milken Institute Policy Report in December 10; UCLA School of Law, Law-Econ Research Paper No. 18-13. <https://ssrn.com/abs tract=3298965>.

In addition, Ripple complains an unfair treatment by the SEC toward XRP, in the sense that it is not providing the same treatment as to Bitcoin and Ethereum, even though XRP falls in very similar features to the latter.

Ripple also cites the “Howey Test”⁵³, while proving that the XRP has different features from the ones that the Securities and Exchange Commission seeks to regulate in a security, in fact Ripple has never hold an ICO.

As a response to the accusations made by the SEC, regarding the fact that the Defendant offered tokens of XRP to raise money and profit personally to CEOs, Ripple demonstrates the inverse by declaring the above-explanation, compliant with the fact that it has no contracts with a majority of XRP.

Moreover, Ripple admits of having received in 2012 the warning that XRP could result as a security, but it also admits that attorneys would have concluded that XRP is a currency and not a security. Therefore, it denies the accusations made by the SEC, since it confirms that the Securities and Exchange Commission did not previously warn the company of such risk, but directly accused it to court.

Ripple does admit that both Garlinghouse and Larsen were CEOs and that they sold XRP in exchange for fiat and other currencies, but it also declares of lacking the appropriate information to either admit or deny the accusations of personal sales by both Larsen and Garlinghouse. Moreover, Ripple did not register these transactions under the SEC because no registration was required.

On the other hand, Ripple invites the Supreme Court to read the full document in which the information about the transfers of the 80 billion were correctly disclosed to the Board of Directors. Thereafter, the Board of Directors also approved the transaction and Ripple did not disclose such actions to the Securities and Exchange Commission because no registration under the SEC was required.

To conclude, Ripple declares that the SEC has distorted the facts.

⁵³ The Howey test is used to determine whether an investment contract exists. The name of this test goes back to the 1946 Supreme Court case SEC v. WJ Howey Company. The case involved Howie's sale of a citrus orchard to a Florida investor. The investor bought the orchard and immediately leased the land to Howie, who cultivated the land, sold the harvested citrus, and shared the profits with the investor. However, the Howey Company did not register the transaction as a security, leading to SEC intervention. According to the Howey test, an asset may be classified as a security if the money is invested in a public company with the expectation of profit from the efforts of others. Nowadays, this test is applied in the analysis of cryptocurrencies, including several cases such as Bitcoin's and XRP (Ripple).

In fact, Ripple states of having filed by the SEC is full of cherry-picked quotations taken out of environment and draws conclusions that are unsubstantiated by both the data and the law. Through our response we start to clarify the record.

While Ripple cannot get into all the specifics in this format (that will be as the case progresses), the firm denied numerous of the SEC's allegations. In fact, Ripple declared that:

“The SEC’s case is unprecedented and ill-conceived. The SEC has ignored XRP’s clear status as a virtual currency, contradicting not only the findings of other U.S. regulatory agencies, but also international regulatory regimes. Over the last eight years, the XRP market, independent of Ripple’s activities, had grown to a massive scale- trading on over 200 exchanges worldwide. The SEC is now stretching the concept of an “investment contract” beyond its breaking point. We look forward to presenting our case in Court.” - Andrew Ceresney, Debevoise & Plimpton⁵⁴.

The main Ripple’s goal is to exploit the power of blockchain technology to give the possibility to the firms to discover the incentives and the benefits that this innovation could bring to their business. Through the years, Ripple has become so successful that they also created the RippleNet, such as a financial committee that must ensure the fairness and the clarity of every transaction. Once the company assets have been defined, now further considerations will be made. RippleNet uses currency XRP as a liquidity on demand.

Moreover, Ripple recognizes a money transfer with the United States Financial Crimes Enforcement Network (FinCEN) and as a crypto currency with the New York State Department of Financial Services (NYDFS). Nevertheless, the SEC has accused Ripple of having committed unregistered securities, since the SEC recognizes XRP as a security that must be filed within the SEC.

Ripple Labs remained silenced to the accusations for almost two months, until Ripple’s CEO stated that the SEC’s charges do not refer solely to the Ripple Labs, but to the cryptocurrencies. In addition, Ripple Labs asserted that the company collaborated with the SEC during the transactions to avoid regulatory infringements. Garlinghouse, current Ripple CEO, defended the company affirming that the token holders did not get any profit since they were fully insulated from any entitlement to the company’s profits. Moreover, the CEO confirmed that to become shareholders of the company,

⁵⁴ United States District Court Southern District of New York - ripple.com. *supra note* 16.

the token holders should purchase shares, not XRP tokens of the company. But the legal response that Ripple provided as a defense from SEC's accusations includes several counters that demonstrate the unfairness of the indictments.

However, to the SEC's accusations that Ripple's CEO and Ripple were aware of the risks that XRP could result in security, both Garlinghouse and Larsen replied that the documents they had filled did not recognize its tokens as securities. Ripple's CEO declared that, after having analyzed the memos, any reasonable manager would have concluded that XRP were not securities. As a result, Ripple continued to affirm that the SEC provided unfair notice.

Moreover, Ripple also defended its position by adding that at the time the company started to issue the new digital tokens, the SEC did not provide clear guidance on how monitoring cryptocurrencies without violating securities law.

To conclude, Ripple affirms that the SEC fails to state a claim.

Moreover, it explains that XRP is not a security, and it proves such statement by declaring that there is no violation under the Section 5 of Securities Act, since together with the statement in the Howey Test, XRP does not fall the definition of security or investment contract.

XRP is exempted from securities registration, and it does not have to be regulated by the SEC, since as above-mentioned, it cannot be considered as neither a security nor investment contract.

The Securities and Exchange Commission has a lack of authority regarding all the transactions that occur outside the United States territory, therefore it does not have any authority or power to accuse Ripple of extraterritorial actions.

As a last defense, Ripple explains that the SEC has a lack of fair notice, since XRP was described also by FinCEN as a virtual currency and the SEC has never advised Ripple of the Plaintiff's perspective, denying Ripple the possibility to defend themselves within the appropriate time.

Ripple concludes asking for the reservation of its rights and compensation by the Securities and Exchange Commission for the illegitimate accusations and misinformation⁵⁵.

4. The Currency against Security problem

⁵⁵ United States District Court Southern District of New York - ripple.com, *supra note 16*.

As discussed in the previous sections, the central question in this case is whether to classify XRP as a security or as a currency.

The SEC maintains that XRP is a security like stocks and bonds and is therefore subject to securities laws and regulations.

Ripple, on the other hand, claims that XRP, like Bitcoin and Ethereum, is a currency and is therefore not subject to securities laws and regulations.

In the following section, I will analyze the “Howey Test”⁵⁶ such as the tool used in this legal case to determine whether XRP is a security or not.

In fact, the SEC stresses that XRP should be classified as a security since it meets all four of Howey test criteria⁵⁷.

On the other hand, Ripple claims that XRP is primarily used as a currency, not as an investment and not a security. Ripple does not control XRP and cannot be held responsible for its value or use. The SEC crackdown on Ripple has hit XRP holders and the wider cryptocurrency market.

Moreover, this lawsuit is still ongoing, and there have been several developments since the SEC filed the lawsuit. Ripple has filed multiple motions to dismiss the lawsuit, alleging that the SEC's allegations are baseless, and that the agency has exceeded its regulatory authority. In March 2021, Ripple was granted access to her SEC documents related to Bitcoin and Ethereum. With this, Ripple hopes to reinforce its claim that XRP is a currency and not a security. Overall, the SEC v. Ripple lawsuit is complex and highly controversial and has had a significant impact on the entire cryptocurrency industry.

To recall the concept of cryptocurrency, cryptocurrencies are digital assets recorded onto a decentralized public ledger called blockchain, as explained above, while internet currencies can be used for fast and reliable money transfers, without the intervention of a third party. Currencies can be used as a payment modality for products and services.

⁵⁶ Dr. Philipp Hacker and Dr. Chris Thomale, “Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law”, SSRN L.J., 2019. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3075820

⁵⁷ The Howey Test consist of four main elements: (1) Investments, (2) Joint Ventures, (3) Expectation of Benefits, (4) Profit that is derived from the effort of others.

However, the key difference is between utility component and currency component⁵⁸: the utility component is mainly used as a stream of payment directly provided by the token issuer; the currency component, instead, enables its holders to make payments external to the platform. An example could be the Ethereum token, that can work as an exchange with the Bitcoin. In fact, ether tokens can also be used to acquire access to the Ethereum platform⁵⁹.

Therefore, tokens can also be issued in an Initial Coin Offering (ICO), considered as a cash return to investors. Nonetheless, as mentioned in the previous chapter, tokens investments are classified as securities, and therefore subject to securities regulation. On the other hand, pure currency and utility tokens are exempted from securities regulation since they are not considered as securities by the SEC. But according to their definition, securities are described as investments while currencies as a method of payment.

Consequently, ICOs investment tokens must comply with the securities regulations imposed by the SEC⁶⁰. For instance, the SEC does not recognize Bitcoin and Ethereum as securities, but the same evaluation has not been granted to XRP, since the SEC strongly affirms that the latter should be treated as an investment token, and therefore as a security. However, the United State Supreme Court gives a better definition of investment token in the *Howey* case, in which the investment contract must fulfill some elements to be considered an investment contract. Only tokens with specific characteristics are recognized as securities, which basically means that the qualification of the token will depend on its characteristics. Issuers will then examine whether the token must be subject to securities regulation or not.

Related to this concern, another important aspect is standardization. Many experts do believe that if units and tokens are not perfectly standardized, then they cannot be classified as securities, because standardization is necessary to reduce search costs for investors⁶¹. However, tokens will never be

⁵⁸ McKeon, Stephen. 2018. "The security token Thesis". <https://medium.com/hackernoon/the-security-token-thesis-4c5904761063>.

⁵⁹ Robel Tsegu, "Cryptocurrency and Security Issues: The Tide Awaiting Ripple's Decision", 25 SMU Sci. & TECH. L. REV. 95 (2022).

⁶⁰ Goforth, Carol R. 2019. "Securities treatment of Tokenized offerings under U.S". *Law. Pepperdine Law Review* 45: 405–470.

⁶¹ Dr. Philipp Hacker and Dr. Chris Thomale, "Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law", *supra* note 32.

either bonds or shares, but if the features of their structure can be associated with either bonds or shares, tokens will be considered as securities.

On the contrary, currency tokens are going to be exempted from the consideration as securities if they perfectly meet the description of instruments of payment, which also includes cash payments. This also explains why bitcoins are not considered as securities, because bitcoins are primarily used for payment purposes. The real explanation for which instruments of payment are exempted from securities regulation is for their liquidity: they fall into the pure currency category and can be associated to pure utility tokens. In fact, currency tokens such as bitcoin are not regarded as securities.

Nevertheless, there is an exception in which utility tokens will be recognized as securities: if in the announced materials of the promoters, the opportunity of benefiting from the resale is highlighted and if tradability is made easier by the promoters. In such cases, the SEC requires securities regulation of utility tokens, but this rarely happens.

For such reasons, pure investment tokens are considered as securities, while on the other hand, pure currency and utility tokens are exempted from being recognized as securities.

In the SEC v. Ripple case, the “currency security issue”⁶² refers to whether XRP, the cryptocurrency used by Ripple for its payment network, qualifies as a security under U.S. securities law.

The SEC alleges that Ripple made an unregistered securities offering by selling his XRP to investors. Ripple claims that XRP is not a security, but rather a currency or digital asset used to facilitate payments over the network.

At the heart of the controversy is whether XRP meets the "Howey test" criteria, that are deeply discussed in the following section.

5. The Howey Test

The Howey test is a legal test used by the U.S. Securities and Exchange Commission (SEC) to determine whether a transaction contains an investment contract.

An investment contract is a type of security subject to SEC regulation. This test was introduced by the United States Supreme Court in SEC v. W.J. Howey Co. (1946). In this case, the court ruled

⁶² Robel Tsegu, “Cryptocurrency and Security Issues: The Tide Awaiting Ripple's Decision”, *supra* note 59.

that an investment treaty exists when funds are invested in a joint venture with the expectation of profiting solely from the efforts of others.

The Howey test consists of four main elements:

- (1) Investments
- (2) Joint Ventures
- (3) Expectation of Benefits
- (4) Profit that is derived from the effort of others.

More precisely⁶³:

Investing money is the first component of the Howey test, and investors must provide money, property, or assets to participate in the investment. This includes traditional forms of currency such as dollars and euros, or non-traditional forms such as cryptocurrencies such as Bitcoin and Ethereum.

The second component of the Howey test requires pooling investors' funds to form joint ventures. This means that investors should share financial interest in the outcome of their investments rather than simply owning separate investments that happen to belong to the same asset class. For example, when a group of investors pool their funds to fund the development of a new software product, it is considered a joint venture.

The profit expectation is the third component of the Howey test and requires investors to expect profits to be generated only by the efforts of others. This means that investors rely on someone, such as the issuer or the promoter of the investment, to generate a return on their investment. This element of the test is not met if the investor has control over the outcome of the investment. For example, if a group of investors form a partnership to buy and sell real estate, and they are all actively involved in the management and decision-making of the partnership, the expectation of profit may not arise solely from the efforts of others.

The fourth requirement refers to the fact that profits derive from the effort of others. The profit of cryptocurrency comes from the effort of the agents, but there can be different approaches of profit derivation that a cryptocurrency can imply. For instance, in autonomous trading both investors and

⁶³ Bradley D. Johnson, "Discretionary Commodity Accounts as Securities: An Application of the Howey Test", 53 *FORDHAM L. REV.* 639 (1984).

traders can establish the terms into an algorithm that will not require any manual interference to complete the transaction. In such cases, individual investor's profits come from the investor decisions rather than other's decisions.

If a trade meets all four of his elements of the Howey test, the trade is considered an investment contract and subject to SEC regulation.

This means that the investment issuer must register with her SEC and comply with various disclosure requirements.

It is important to note that just because a transaction meets all four elements of the Howey test and qualifies as an investment contract, it does not automatically mean that it is illegal or fraudulent. Rather, it simply means that the issuer of the investment must comply with specific regulations designed to protect investors.

As a result, the SEC vs Ripple legal case sets up some important guidelines, such as the Howey Test, for both the registration and identification of securities.

In fact, the SEC declared and recognized Bitcoin and Ethereum as non-security in the latest announcements. On the other hand, the same tolerance has not been granted to the XRP, since the SEC declared that the latter should be treated as a security. In response, as above-mentioned, Ripple claims that XRP is a medium of exchange that must register only with the Commodity Futures Trading Commission (CTFC), citing a 2015 settlement agreement between itself and the Treasury Department's Financial Crimes Enforcement Network (FinCEN)⁶⁴.

Whenever an investment is presented as a security, the court applies the Howey Test to verify if all four requirements to consider an investment as a security are matched.

However, if the purchasers were not aware of the effort made by a person or a group, then the digital assets will not be considered as investment contract, because sufficiently decentralized⁶⁵. Cryptocurrencies obviously match requirements 1) and 3), considering that almost all cryptocurrency holders have used money to issue their shares and they expect to earn profit.

⁶⁴ S.D.N.Y.R. 1001-1, Doc. No. 4, *supra note* 16.

⁶⁵ M. Todd Henderson and Max Raskin, "A Regulatory Classification of Digital Assets: Towards an Operational Howey Test for Cryptocurrencies, Icos, and Other Digital Assets," 2018. <https://doi.org/10.2139/ssrn.3265295>.

Therefore, if the investment is not made with the expectation to earn profit, then it is not a security. Consequently, bitcoin appears to be sufficiently decentralized and do not appear as a security under the Howey Test⁶⁶. Therefore, the case of Ethereum is a bit more challenging, since Ethereum is developed using Bitcoin. Furthermore, an asset once issued as a security can lose its security characteristics and consequently not being subject to securities regulation. This is the case of Ethereum⁶⁷.

This implies that using decentralized networks, the possibility for Digital assets to be categorized as invested contracts is reduced, and therefore it is highly unlikely to result as a security. This fact indicated that the SEC is supporting the decentralized ledger and is also trying to admit the occasion in which tokens do not label as securities⁶⁸.

To better understand requirement number 2) and 4), it is fundamental to understand what a common enterprise is.

First, an "investment contract" occurs whenever there is a money investment in a common enterprise with profit derivation from effort of others⁶⁹. A common enterprise can be outlined by either vertical or horizontal commonality⁷⁰. The former is defined by collective reliance of the circumstances between a protagonist and an investor, in which both parties should earn profit and in the meantime the investor is represented by the management of means from numerous investors where all of them split the gains and the pitfalls of the company. An illustration of the vertical commonality is the immovable property, such as the immovable property agent's earnings are not independent from the selling of a property in which the profits earned by the owner come from the agent's effort.

On the other hand, horizontally commonality is illustrated by the stock market, which includes the distribution of profit as dividends to a group of investors. Since cryptocurrencies are defined as

⁶⁶ Bradley D. Johnson, "Discretionary Commodity Accounts as Securities: An Application of the Howey Test.", *supra* note 39.

⁶⁷ M. Todd Henderson & Max Raskin, "A Regulatory Classification of Digital Assets: Toward an Operational Howey Test for Cryptocurrencies, ICOs, and Other Digital Assets", *COLUM. BUS. L. REV.* 443, 2019.

⁶⁸ *SEC Framework for "Investment Contract", Analysis of Digital Assets*, 132, *Harvard L.Rev.*, (2019)

⁶⁹ *SEC Framework for "Investment Contract", Analysis of Digital Assets*, *supra* note 10.

⁷⁰ Ryan Borneman, "Why the Common Enterprise Test Lacks a Common Definition- A look into the Supreme Court's decision of *SEC v. Edwards*", 16, *Business L.J.*, 2005.

mediums of exchange, there is no common dependence on the investor's earning and therefore they do not comply with the definition of vertical commonality.

Furthermore, when companies deal with cryptocurrencies, such as XRP, they work as a centralization platform. When a cryptocurrency presents horizontal commonality, it means that it is highly dependent on both profit derivation and the characteristics of the currency itself.

However, the Howey Test may result a bit challenging since it is not straightforward to determine if a cryptocurrency must be regulated as a security, according to the test. Moreover, XRP may satisfy the Howey Test requirements. Consequently, the examination of cryptocurrency under the Howey Test shows that a lot of clarification still needs to be made on whether a cryptocurrency can or not be classified as security.

Returning to the *SEC v. Ripple* case, the SEC claims that any distribution of XRP by defendants was a part of a single and unbroken "investment contract"⁷¹. Moreover, the SEC also argues that it will be able to demonstrate the commercial contracts by which the defendants sold XRP and additionally confirms that XRP meets all the criteria of the Howey test and should be therefore classified as a security⁷². Ripple disputes this characterization, arguing that XRP is a currency or digital asset that is not subject to securities regulation.

The SEC also confirms that it will not answer Interrogatory No. 2⁷³ because under the Howey Test, the fact that a transaction is an investment can be seen simply by the statements made in commerce and by the nature of the instruments. Such situation occurs as well, when talking about the identification of common enterprise, in which Ripple's efforts were needed to make profit and XRP buyers invested. This is crucial for Ripple's defense, but the SEC refused to provide supporting evidence, since it declares that these interrogatories are not useful under the interpretation of Howey. Nonetheless, the SEC cannot refuse to respond the interrogatories. However, the SEC affirms that there is no obligation to reply to interrogatories since the latter provide an incorrect reading of Howey.

⁷¹ See "SEC v. W.J. Howey Co., 328 U.S. 293 (1946)."

⁷² S.D.N.Y.R. 1001-1, *supra note* 16.

⁷³ Interrogatory No. 2 requires the SEC to clarify the terms of Defendant's contracts that the SEC recognizes as expectation of profits.

Conversely, the Judge disagrees with this statement, claiming that if readings of Howey are right or not, is a concern for the Judge to decide⁷⁴.

To conclude, the outcome of this lawsuit could have a significant impact on the cryptocurrency industry as it could set a precedent for cryptocurrency regulation in the United States.

B. Possible consequences stemming from the outcome of the case

1. Ruling in favour of the SEC

Now that all the arguments of the SEC v. Ripple Labs Inc. should be a bit clearer, it would be prudent to analyse the consequences that the court's final decisions will bring to the cryptocurrency dimension. Ripple has affirmed several times that the SEC's accusations do not refer solely to the single Ripple case, but to cryptocurrencies. However, the final verdict of the case has not yet been issued, since the case is still updating, and the final decision will establish how blockchain technology and innovation will have to be regulated in the US. Consequently, it is only possible to idealize the consequences of the court's final decision, as well as nothing has been dictated yet.

Therefore, if the SEC will end up being on the right side, the enthusiasm towards the crypto-systems and blockchain technology may decrease considerably. This is because many cryptocurrencies are now using the Commodity Future Trading Commission (CFTC) as regulation platform, which are a lot less heavy than the regulations than the ones implied by the SEC⁷⁵. On the other hand, the actions that the SEC, as well as other regulators, might take could affect the future of blockchain in more severe ways⁷⁶:

1. Greater regulatory clarity: If the SEC wins or makes significant progress in its regulatory efforts, the legal and regulatory landscape surrounding blockchain and cryptocurrencies could become clearer. This clarity could help drive mainstream adoption and encourage businesses to consider blockchain technology.

⁷⁴ S.D.N.Y.R. 1001-1, *supra* note 16.

⁷⁵ Paul de Havilland, "\$322 Million: How The SEC Should Settle With Ripple Labs Over XRP". <https://cryptobriefing.com/322-million-sec-ripple-labs-fine-xrp/methods-of-calculating-a-potential-penalty>.

⁷⁶ Robel Tsegu, "Cryptocurrency and Security Issues: The Tide Awaiting Ripple's Decision," *supra* note 59.

2. Enhanced investor protection: One of the primary objectives of regulators such as the SEC is to protect investors from fraudulent or deceptive activity. If the SEC can regulate blockchain-related projects more effectively, it could reduce the risk of fraud and fraudulent initial coin offerings (ICOs) and increase investor confidence in the blockchain ecosystem.

3. Compliance requirements: Increased involvement of the SEC could lead to increased compliance requirements for blockchain-based companies. This may include registration requirements, disclosure requirements, and compliance with certain policies. Enhanced compliance measures can increase organizational complexity and costs, but they also help build a more transparent and trustworthy ecosystem.

4. Market Stability and Maturity: Regulatory oversight can promote market stability by combating market manipulation, insider trading and other illegal activities. In addition, regulation may encourage institutional investors to jump into the blockchain space, increasing market liquidity, maturity and reducing volatility.

5. Innovation and Development Challenges: On the one hand, excessive or overly burdensome regulations can stifle innovation by imposing significant compliance requirements on blockchain start-ups and projects. Finding the right balance between regulatory oversight and fostering innovation is critical to ensuring that blockchain technology continues to evolve and contribute to diverse areas.

Moreover, if the court will favour SEC's position, there is a risk that the blockchain development will be suffocated in the United States, since the latter has always been a country that demonstrated dissent from heavy regulations. As final consequence, we can suppose that all the other countries will prefer to invest outside the US.

The owners of XRP would end up selling large amount of the currency due to these severe obligations and regulations that the SEC would impose, and this would also cause a drop in the price of XRP. There is no doubt that the utility of XRP would drastically disappear in terms of international payments due to the restrictions regarding regulations and due to the security classifications⁷⁷. For

⁷⁷ Anthony Balladon, "*Is Ripple's XRP Token a Security and What Happens if the SEC Regulates It as One?*", [https://medium.com/anthonyballadon/is-ripples-xrp-token-a-security-and- what-happens-if-the-sec-regulates-it-as-one-46370afed6f4](https://medium.com/anthonyballadon/is-ripples-xrp-token-a-security-and-what-happens-if-the-sec-regulates-it-as-one-46370afed6f4).

Ripple, not only is this a threat for the company reputation but for the future and the development of the company.

To conclude, it is important to note that the future of blockchain and its relationship with regulators such as the SEC will depend on many factors, including the regulatory approach chosen, technological advancements, and global regulatory trends. Moreover, the Securities and Exchange Commission recognizes the important impact that XRP has had on the international market and international payment methods. Therefore, the SEC should consider how its actions may influence the future of the American digital market as well as the wealth of its investors.

2. Ruling in favour of Ripple Labs

On the contrary, if the ruling will favour Ripple Labs, fewer regulations may be imposed. Furthermore, blockchain technology innovation and development would face fewer restrictions. It could also indicate that other countries are following suit and taking steps to advance the underlying technology. Moreover, the CFTC regulations will be able to apply, permitting the United States to avoid such heavy restrictions that the SEC will be highly likely to maintain if it wins the litigation case. Therefore, the blockchain development will have more space to occur. However, from Ripple's CEO standpoint is just absurd that the SEC, a US regulator, is in the business of determining winners and losers in any industry and penalizing corporations based in the United States⁷⁸.

Although, it is also important to reflect about possible drawbacks, such as the fact that if Ripple Labs Inc. will end up being on the right side, there will be fewer regulations able to detect and prevent fraudulent actions. Nonetheless, the capacity for prong to be hand-me-down in a cruelty, does not recital to rights honest use.

In addition, if Ripple were to prevail against the SEC, it could have multiple positive implications. A win in this case would likely lead to regulatory clarity for Ripple and the crypto industry at large. This could set a legal precedent for Ripple's XRP token to be classified as a security or digital asset, which could affect how other cryptocurrencies are treated by regulators. Furthermore, Ripple's victory could have a positive impact on its operations and market value. This could boost investor confidence and drive XRP prices higher. Additionally, it could pave the way for partnerships

⁷⁸ United States District Court Southern District of New York - ripple.com, *supra note* 16.

and cooperation with financial institutions that have been reluctant due to the legal uncertainty surrounding Ripple and XRP.

Regardless the impact of the company itself, if Ripple would end up being on the right side, this would represent the possibility for XRP to ease the terms of international transactions through the elimination of inefficiencies as well as excessive communication costs⁷⁹. As already mentioned in the previous section, this implies the creation of a security, XRP, that does not have to comply and file under the SEC as well as meeting the regulations of Securities Act. Moreover, XRP is already integrated in the cryptocurrencies system, and it would be very risky for the market to classify XRP as a security since the implications on the American market as well as the international market, may change the whole regulation system.

Overall, if the court will favour Ripple's position, blockchain development and innovation will be more likely to happen. Banks will become more efficient and faster regarding the digital payments since XRP created a bridge to transform digital assets into liquidity⁸⁰, eliminating the transaction costs that banks are forced to pay in standard cases.

IV. Conclusion

As above discussed, the blockchain technology has developed considerably in the last years and the expectations towards the improvements of this digital software are high. As a result of the creation of this Digital Ledger, cryptocurrencies and digital assets have gained success, leading to many currencies popularity such as Bitcoin or Ethereum. However, due to some notorious scandals in the sector, the Congress created the Securities and Exchange Commission to regulate the registration of securities to prevent fraudulent actions as well as protect the investors from vicissitudes of corporate life. However, there is a substantial difference between securities and currencies, which is basically the core of the ongoing litigation case, SEC v. Ripple Labs Inc.

The leading case analysed in the previous chapters is still an open case. In fact, the court has not yet expressed their final position. Nevertheless, both parties are still getting hard on each other in

⁷⁹Lindsay Martin, *Ripple Effects: "How in re Ripple Labs Inc. Litigation Could Signal the Beginning of the End of the Payment Platform"*, 19 DUKE L. & TECH. REV. 1, 2020-2021.

⁸⁰ Robel Tsegu, *Cryptocurrency and Security Issues: The Tide Awaiting Ripple's Decision*, *supra note 52*.

the lawsuit over the nature and the status of XRP. Whether the XRP is or is not a security, it is the Howey Test to determine.

The currency and security problem are the crucial point of the litigation case, in the sense that XRP has to be considered as a security to be complaint with the regulation constraints imposed by the Securities and Exchange Commission, but first the XRP has to turn out positive to the Howey Test four main criteria. However, the key concern lays in the difference between the utility and currency component, in the sense that the utility component provides a direct payment by the token provider while the currency component enables the token holders to use the latter as a method of payment external to the company.

Ripple affirms that XRP should be given the same treatment as well as Bitcoin and Ethereum, such as pure currencies exempted from securities regulation under the SEC. In fact, XRP is a method of payment and not an investment contract according to Ripple, and it is not issued in an Initial Coin Offering. Moreover, what is curious about XRP is that it does not meet the standard features of a security, which is why Ripple Labs requires its classification to fall under the term of currency. Not only pure currency and utility tokens are exempted from being recognized as securities, if they are not entirely or perfectly standardized, they cannot be classified as such. Therefore, if currency tokens are used as an instrument of payment, which also includes cash payments, they are to be exempted from the SEC regulations constraints, since they would meet the criteria of payment purpose. This is the case of Bitcoin, that Ripple requires to be the same for XRP, since the latter is a digital asset that eased the methods of payments across the network and offered facilities for banks to display liquidity.

Here comes the Howey Test, such as a legal test used to determine whether a transaction contains an investment contract or not. There are four main elements that help the process of security or currency determination: investments, joint ventures, expectation of benefits and whether profits are derived from the effort of others. In fact, if a transaction meets all these four requirements, then it must be subject to the SEC securities regulations. Thus, the issuer will be obliged to register the investment under the SEC, such as to meet the disclosure requirements. The crucial problem arises in terms of disagreements between the SEC and Ripple, considering that Ripple claims that XRP is a medium of exchange that must register under the CTFC and not under the SEC, given that it is not a security. On the other hand, the Securities and Exchange Commission declares and sustain that the treatment given to Bitcoin cannot be the same for XRP since the latter is a security and is an investment contract.

As a result, the ongoing litigation case concerns the accusations of the SEC to Ripple. The SEC concludes in fact its accusations declaring that Ripple and its CEOs Larsen and Garlinghouse did not sell XRP as an investment opportunity for the company's funding, but rather as a mileage souvenir that can be used to purchase goods and services within the Ripple network. It claimed that it was not sold as the SEC argues that XRP is a security because it did not meet the Howey test definition and therefore should have been registered with the Securities and Exchange Commission. The SEC also alleges that Ripple's director's verbal conduct is related to dealings with investors.

Conversely, Ripple reiterated that the SEC has no claims. It further explains that XRP is not a security, and substantiates this statement by stating that, together with the Howie test statement, XRP does not meet the definition of a security, there is no violation of Section 5 of the Securities Act. . investment contract. XRP is exempt from securities registration and, as noted above, is not considered a security or investment contract, and therefore does not need to be regulated by the SEC. Because the Securities and Exchange Commission does not have authority over all transactions that take place outside the territory of the United States, it does not have the power or authority to accuse Ripple of extraterritorial conduct. As a final defence, Ripple claims that XRP is also a cryptocurrency according to FinCEN, and that the SEC has never notified Ripple of the plaintiffs' views, resulting in the SEC's lack of proper notice. This has denied Ripple the opportunity to file a lawsuit within a reasonable period. Finally, Ripple assumes that the SEC has distorted the facts and asks for the preservation of its rights as well as a compensation for the false and unfounded allegations.

In view of an accurate examination, the Securities and Exchange Commission has several times required an extension of the deadline to complete its objections to the court and the court has consented this request most times. At this point, the final verdict will significantly impact the future of blockchain technology development.

On one hand, if the SEC turns out to be on the right side, this digital dimension will be restricted by strict and serious regulations. Thus, the enthusiasm towards the blockchain technology may decrease due to the strict regulations imposed by the SEC. These strict regulations will bring the system to have greater regulatory clarity, enhanced investors protection, compliance requirements, market stability and maturity and innovation and development challenges. The main risk occurs in the case that the owners of XRP would start to sell large amount of XRP therefore to the obligations and regulations that the SEC will be permitted to impose, a concern that will decrease drastically the price of XRP as well as incorporating the shape of a threat for both the company reputation and its future development or even existence.

On the other hand, if the ruling will be in Ripple's favour, the blockchain will continue to have great influence in the digital market. This will be made possible thanks to the CFTC regulations which will avoid heavy restrictions for currencies investors and holders. Consequently, the blockchain development will be more likely to occur since the investors' confidence would be boosted and the price of XRP would rise implying positive impact on Ripple. However, the main benefit from the eased regulations come in terms of international transactions, such as the elimination of inefficiencies and excessive communication costs that would occur if XRP should meet the regulations of Securities Act. Moreover, as above mentioned, this would represent a benefit for the banks around the globe as well, in the sense that it will be easier, faster, and cheaper for such entities to cash out liquidity from digital assets. XRP has in fact created a sort of transmission channel to transform digital currencies into instant liquidity, eliminating the excessive costs that would appear in more standard cases.

Considering this case being extremely controversial, it is believed that a settlement between the parties will soon take place. Therefore, by now the court seems to favour the Ripple assessments, but the outcome is still too hard to detect or even imagine.

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