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Regulating Cryptocurrencies: Towards a Digital Future

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To my family, for their support,

To Luiss, for giving me the opportunity to prove myself,

To Professor Pierluigi Matera, for its availability and for encouraging me to aim at the maximum of my potential,

And to those on whom I could always count on, who have been and will always be fundamental in my growth and life path.

ABSTRACT

This thesis represents a comprehensive exploration of the groundbreaking world of cryptocurrencies and blockchain technology. It starts with an introduction to these revolutionary technologies, providing a basic comprehension of their concepts, examining the economic impact of cryptocurrencies in the United States, including their involvement in investments, market growth, and general economic development, and enlightening the difficulties and risks involved with the digital revolution.

A substantial amount of the thesis focuses on cryptocurrency regulation, emphasizing the importance of clear norms and Wyoming's crypto-friendly attitude. It examines the role of government agencies such as the SEC, CFTC, and FinCEN, as well as their respective regulatory approaches.

Moreover, the study explores the potential risks associated with regulating digital currencies, putting in evidence both their benefits and drawbacks, with a look on possible future scenarios within the American legal landscape, focusing in particular on the "Howey test" and its application in legal cases such as SEC v Ripple. It finishes by commenting on cryptocurrencies' revolutionary potential and their role in crafting a digital future for finance and economics, while taking knowledge of regulatory complexity and the necessity for adaptive methods in this dynamic industry.

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I. INTRODUCTION

In an era defined by rapid and increasing technological advancements and digital transformations, cryptocurrencies and blockchain technology have emerged as dynamic forces changing the global financial landscape. These innovations, born out of a yearning for financial decentralization and independence, have caught the popular imagination, presenting a vision of a future where intermediaries in financial operations are reduced and confidence is algorithmically maintained.

As we make our way through this complex environment, we will examine the significant effects of these technologies on the American economy, analyze the current regulatory system overseen by various government agencies, and speculate on potential future scenarios that could influence the course of this digital revolution.

The first chapter goes deeply into the fundamental ideas underlying cryptocurrencies and blockchain technology, giving readers a thorough knowledge of their origin, purpose, and importance in modern society. We will pay close attention to their economic impact in the United States in particular, unraveling the numerous ways in which these inventions have altered financial markets, investment trends, and economic progress.

The second chapter focuses on the regulatory framework around cryptocurrencies, revealing the complex network of government agencies responsible with its monitoring and enforcement. From the Securities and Exchange Commission (SEC) to the Commodity Futures Trading Commission (CFTC) and the Financial Crimes Enforcement Network (FinCEN), we will explore their duties, actions, and the underlying issues they face in regulating this developing digital environment.

Finally, in Chapter 3, we will take a look into the future of cryptocurrencies and blockchain technology. We will participate in creative exploration, analyzing the effects

of the 1946 case Sec v Howey which gave birth to the “Howey test”, the first significant approach to regulate cryptocurrencies, digging into the more recent case of Sec v Ripple and imagining potential scenarios and developments that may occur in the next years hoping to decipher the next chapter of the enthralling saga of digital innovation.

Being aware of the complexities and ambiguities that define the cryptocurrency and blockchain ecosystem is crucial as we start out on this academic journey. These technologies have evolved from being only financial tools to being emblems of independence, democratization, and disruption. In the following chapters, we will take a deeper look into the complexities, difficulties, and opportunities of this digital revolution, all while keeping in mind the dynamic economic and regulatory environment of the United States.

II. CRYPTOCURRENCIES AND BLOCKCHAIN - THEMATIC OVERVIEW

A. *Introduction to cryptocurrencies and blockchain*

In recent years, cryptocurrencies and blockchain technology have revolutionized the financial landscape, offering new possibilities and challenges to traditional financial systems. Cryptocurrencies[1] are digital or virtual currencies that use cryptographic methods to safeguard transactions and regulate the generation of new units, operating on decentralized networks, independent from any central authority, and gaining popularity as alternative forms of currency. Blockchain[2], on the other hand, is the underlying technology that powers cryptocurrencies, which acts as a decentralized and transparent ledger where to record all transactions[3]. Together, they have upended conventional financial systems by transforming the way we perceive, transfer, and store value, shaping a new and promising era of digital finance.[4]

1. Origins of cryptos and the idea behind Bitcoin

Cryptocurrencies, starting with the emergence of Bitcoin in 2009, brought about a paradigm change in our conception of money. In contrast to traditional fiat currencies issued by governments, central banks and governed by a central authority, cryptocurrencies run on decentralized networks powered by the blockchain technology.[5] They are not controlled by any single authority but are maintained by a distributed

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[1] In 2012, the European Central Bank defined virtual currency as "a type of unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community." European Central Bank, *Virtual Currency Schemes*, (October 2012), https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf

[2] D. Vujičić D. Jagodić Siniša Ranđić, *Blockchain technology, bitcoin, and Ethereum: A brief overview*, 2018 17Th International Symposium Infoteh-Jahorina (Infoteh)2018

[3] Id.

[4] *The truth about blockchain*, Harvard Business Review, From the Magazine (January-February 2017) https://hbr.org/2017/01/the-truth-about-blockchain

[5] Id.

network of computers, called “nodes”, making them practically “immune” to government interference and manipulation.

The birth of cryptocurrencies may be traced back to a series of events that have shaped the international economic landscape. Following the global financial crisis in 2008, an individual or group of people known by the pseudonym “Satoshi Nakamoto” produced a whitepaper[6] titled "Bitcoin: A Peer-to-Peer Electronic Cash System”, introducing the concept of a decentralized digital money that would operate on a public ledger known as the blockchain. The digital currency known as Bitcoin was then launched in 2009, and by April 2021, there were over 18.8[7] million bitcoins in circulation with a total value of 915 billion dollars[8] in the market, demonstrating how rapidly the system increased[9] in popularity and in investments, principally thanks to the decentralized nature of its operating system. The launch of Bitcoin was not a coincidence. It was created in reaction to the existing financial system's shortcomings.[10] The crisis had reduced confidence in banks and centralized institutions, leading to a need for an alternative financial system that would do away with middlemen and offer greater security and transparency.[11] Cryptocurrencies addressed this fundamental issue successfully by introducing a revolutionary system in which cryptographic verification and

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[6] See Satoshi Nakamoto’s official whitepaper. *Bitcoin: A peer-to-peer electronic cash system*, 2008. https://bitcoin.org/bitcoin.pdf

[7] Source: blockchain.info, see *A short introduction to the world of cryptocurrencies* graphs at page 6, figure 5-6. https://files.stlouisfed.org/files/htdocs/publications/review/2018/01/10/a-short-introduction-to-the-world-of-cryptocurrencies.pdf

8 See also: John Taskinsoy, *Bitcoin Could Be the First Cryptocurrency to Reach a Market Capitalization of One Trillion Dollars*, University Malaysia Sarawak (UNIMAS) (Sep. 16, 2020) At the time of writing this thesis, the market cap of Bitcoin (BTC) is decreased at $515 Billion, representing a Bitcoin dominance of 47.26% over the global cryptocurrency market cap ($1.09 Trillion). See more at https://www.coingecko.com/en/global-charts#:~:

[9] How Many Cryptocurrencies Are There? CoinMarketCap reports that today there are approximately 22,932 cryptocurrencies, with a total market capitalization of $1.1 trillion. Forbes, https://www.forbes.com/advisor/investing/cryptocurrency/different-types-of-cryptocurrencies/

[10] Nicholas Weaver, *The Death of Cryptocurrency, The Case for Regulation,* Yale Law School (December 2022)

[11] Id.

decentralized consensus procedures effectively removed the requirement for traditional trust-based systems.[12]

2. Blockchain technology and the role of cryptography

At the heart of cryptocurrencies resides the concept of a public ledger where to record all financial transactions known as “blockchain". The deployment of blockchain technology, as defined in Nakamoto's whitepaper and later developed by the cryptocurrency community, became the impetus for a fundamental revolution in how we manage digital transactions, data, and trust.

As already mentioned, the blockchain is a decentralized and impenetrable digital ledger that keeps track of all transactions across a network of nodes.[13] In this system, each cryptocurrency transaction initiated by a user is added to a “block"[14], which is then linked to the previous block, creating a chain of blocks – hence the name “blockchain” – forming a chronological and unchangeable record. Then, using cryptography[15], this new block is broadcast to every participant in the network in an encrypted format, protecting the confidentiality of the transaction information.[16] The role of cryptography is pivotal in the arduous aim in ensuring the security of digital transactions, and to truly comprehend cryptocurrencies, we must first understand the crucial role that it plays. The foundation of these digital currencies is made up of cryptographic processes, which act as the fundamental element that underpins the decentralized financial system's guarantees of security, transparency, and trust. These processes are employed to guarantee and verify the authenticity of participants in cryptocurrencies’ transaction by introducing the use of digital signatures, public and private keys, and secure hash

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[12] Id.

[13] Adam Hayes, *Blockchain Facts: What Is It, How It Works, and How It Can Be Used*, Investopedia (Apr. 23, 2023), https://www.investopedia.com/terms/b/blockchain.asp/

[14] Id. A blockchain is a system for recording information. Each transaction is recorded as a “block” of data on the digital ledger, which is connected to the blocks before and after it. Sec. 56.1

[15] Paolo Tasca, *Digital Currencies: Principles, Trends, Opportunities, and Risks*, Deutsche Bundesbank and ECUREX Research (Oct. 2015). Available at: https://ssrn.com/abstract=2657598

[16] Id.

functions.[17] When initiating a transaction, a user employs its private key to generate a unique digital signature,[18] which is impossible to recreate since it is strictly related to the particular transaction data. As a result, it provides strong proof that the person initiating the transaction is the true owner of the corresponding private key, giving a basic proof and assurance of ownership and authorization. Users are also given two keys: a private key that must be kept secret and a public key that serves as their transaction address. While the private key is safely kept in the user's hands, the public key in essence is used to receive payments, ensuring the security, authenticity, and privacy of blockchain transactions.[19] To create the proper digital signature for transaction validation, the user must be the owner of the private key. This two-key approach provides an additional layer of protection by assuring that only the true owner can authorize transactions.[20] Before to be included in the blockchain a transaction must go through a hashing process, in which the transaction data is converted into a fixed-length string of characters known as a hash value using this cryptographic process.[21] What's relevant about this system is that even the minimum change in any possible data would result in an entirely different hash value,[22] so that users can personally verify on the public ledger that the transaction has not been altered by comparing the hash value of the transaction data to the one recorded in the blockchain, reducing significantly the risks of fraud and keeping the transaction history transparent and immutable.[23]

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[17] See also Dylan Yaga, Peter Mell, Nik Roby, Karen Scarfone, *Blockchain Technology Overview*, NISTIR 8202 (Oct. 2018) https://doi.org/10.6028/NIST.IR.8202

[18] Id.

[19] Orlee Berlove, *Public – private key pairs & how they work*, Preveil (January 12, 2021) https://www.preveil.com/blog/public-and-private-key/

[20] Id.

[21] *Cryptography, Hash Functions & Digital Signatures - Hash functions definition* inversegravity.net/2019/crypto-hash-digital-signature/

[22] Id.

[23] See more at crypto.com - *Symmetric and Asymmetric Encryption and Hash Functions* https://crypto.com/university/what-is-cryptography

The integrity and validity of the transactions are also verified via a pre-established algorithmic validation known as "mining" or "consensus mechanism"[24], which gives to a randomly selected group of network's participants (i.e., the other network nodes) the power to validate transactions, sign the block to confirm its authenticity, and add it to the digital ledger.[25] What matters in this structure is that once a block is added to the chain, it cannot be changed retrospectively, guaranteeing the immutability and security of the data[26] and ensuring that each document's certificate guarantees the accuracy of the contents of the one before it. In fact, you can use this justification in a recursive manner: each certificate fixes the history of all papers and certificates up to that moment.[27] The only way to change a certain data of a transaction in a block is to alter the entire ledger, which makes the transaction "immutable" and practically impossible, for users with malicious intents, to be manipulated, leading to a constant increasing trust in the financial system.[28]

3. Main benefits of cryptocurrency technology

Cryptocurrencies and blockchain technology are having an important function in the global economic landscape. We can treat several reasons why the system is gaining exponentially more and more popularity among people, users and investors, and it is believed it can become a cornerstone in the modern financial system. One of the main

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[24] A consensus mechanism is "a protocol that brings all nodes of a distributed blockchain network into agreement on a single data set. They act as the verification standards through which each blockchain transaction gets approved." See: Jake Frankenfield, *What is consensus mechanism in Blockchain and* Cryptocurrencies, INVESTOPEDIA, Updated February 17, 2023 https://www.investopedia.com/terms/c/consensus-mechanism-cryptocurrency.asp. See also: Brooke Becker, *What is a consensus mechanism*, Built In (Mar 23, 2023) https:// builtin.com/blockchain/consensus-mechanism

[25] Ryan Farell, *An analysis of the cryptocurrency industry*, University of Texas at Austin (May 1, 2015)

[26] Ghimire, S., & Selvaraj, H. *A survey on bitcoin cryptocurrency and its mining*. In 2018 26th International Conference on Systems Engineering; https://www.researchgate.net/publication/331040157_A_Survey_on_Bitcoin_Cryptocurrency_and_its_Mining

[27] Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller & Steven Goldfeder *Bitcoin and Cryptocurrency Technologies* (2016) https://pdfdirectory.com/pdf/0765-bitcoin-and-cryptocurrency-technologies.pdf

[28] Id. supra 13

benefits of this technology is that it makes it easier to carry out a variety of transactions that ordinarily need to be mediated by a third party (such as a central authority, bank, securities settlement system, broker-dealers, etc.). In practice, blockchain is all about enabling decentralized transaction authentication and decentralizing trust, simply enabling the "middleman" to be eliminated. This will probably result in efficiency advantages in many situations. It is crucial to stress that this could potentially expose parties that interact to dangers that were previously handled by these intermediaries.

It is already gaining popularity the foundation of complete decentralized and autonomous organizations (DAOs)[29], which are a type of organizations represented by rules encoded as a computer program that is transparent, controlled by organization members, and not influenced by a central government in the process of decision-making.[30] This disintermediation not only lowers costs but also boosts transaction speed and efficiency[31], especially in traditional cross-border payments, which are often slow and subject to intermediaries' delays, enabling near-instantaneous cross-border transactions with minimal fees and making it easier and more cost-effective for businesses and individuals to engage in global transactions.[32]

In addition to this, the technological nature of the system offers financial services to unbanked and underbanked people all around the world. With the use of cryptocurrencies, millions of people who do not have access to conventional financial systems can suddenly take part in the global economy, making financial inclusion[33]

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[29] Decentralized and autonomous organizations are a new kind of organizational structure, consisting in groups that form for a common purpose, like investing in start-ups, managing a stablecoin or buying a bunch of NFTs. See: Kevin Roose, *What are DAOs?*, NEW YORK TIMES https://www.nytimes.com/interactive/2022/03/18/technology/what-are-daos.html

[30] Alexandra Sims, *Blockchain and Decentralised Autonomous Organisations (DAOs): The Evolution of Companies?*, The University of Auckland Business School Research Paper (Nov. 1, 2019) Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3524674

[31] Id.

[32] Id.

[33] Edul Patel, *How can cryptocurrencies play a role in promoting financial inclusion?*, THE ECONOMIC TIMES, (May 13, 2023) https://economictimes.indiatimes.com/markets/cryptocurrency/how-can-cryptocurrencies-play-a-role-in-promoting-financial-inclusion/

more accessible and giving excluded populations more power with just a smartphone or internet-enabled device.

Cryptocurrencies and blockchain technology have become well-known and frequently discussed topics in recent years. It is important to differentiate between these two concepts even though they are commonly used interchangeably and are unquestionably connected. Blockchain is a particular kind of distributed ledger technology that is essential to the overall cryptocurrency business. Notably, it provides the foundational architecture for the enormous variety of cryptocurrencies that are currently in use. It is essential to distinguish the wide range of blockchain's applications from the particular context of cryptocurrencies and regulators must understand this distinction as they attempt to navigate the complicated world of digital assets.[34]

B. *Investments, market growth and economic impact in the United States*

The American cryptocurrency sector has undergone a spectacular journey characterized by investor interest, unheard-of market expansion, and significant economic effect. In order to chart the development of the cryptocurrency market and its long-term effects it is crucial to understand and explore these significant details. At the heart of the cryptocurrency market's ascent lies an undeniable rise in investor interest.[35] Bitcoin for example, often referred to as digital gold, was first thought to as an unproven digital currency with little practical use. But its distinctive qualities, such as decentralization, security, and scarcity, snared the attention of investors everywhere, and has been fundamental for the growth of general virtual currencies market and popularity.

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[34] At least a thousand blockchains of different types are currently in circulation. There are four types of blockchains: public, private, consortium, and hybrid. Each appeals to a different clientele, depending on their needs and requirements. See also: Mike Antolin, *What Are the Four Kinds of Blockchains?*, COINDESK (Updated May 11, 2023), https://www.coindesk.com/learn/what-are-the-four-kinds-of-blockchains/

[35] About 21 percent of American adults have owned cryptocurrency in 2022, according to NBC News. https://www.bankrate.com/investing/cryptocurrency-statistics/

The turning point occurred when the price of Bitcoin soared from practically nothing to an all-time high of around $65,000 in 2021.[36] The financial markets were stunned by this spectacular rise, which ignited a significant rise of investor interest. To gain exposure to this digital asset, institutional investors, hedge funds, and retail traders flooded to the market as the idea of using cryptocurrencies as a store of value and future inflation hedge was one of the main factors influencing this interest, leading many investors to see and consider cryptocurrencies as a digital heaven in an era characterized by monetary policies from central banks and economic insecurity, and as a method to protect and expand their capital apart from conventional financial systems. This rise in investor interest in the adoption of virtual currencies has been one of the driving forces behind its market growth. The exponential growth of Bitcoin, which is evidence of the disruptive potential of a more digital world, was just the beginning as it cleared the way for a large number of alternative cryptocurrencies, sometimes known as altcoins[37], each of which offered distinct features and use cases. The industry is now expanding primarily because of the development of distributed ledger technology and an increase in digital venture capital investments: digital currency is now being used by developing nations as a mean of financial transaction. Additionally, blockchain technology is frequently combined with digital currency to achieve decentralization and tightly regulated efficient transactions. Decentralized, quick, transparent, secure, and dependable transactions are provided by blockchain technology, and due to these benefits businesses are investing in cryptocurrencies and working together to provide customers with effective and high-quality services.[38]

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[36] Statista, Bitcoin (BTC) price per day from Apr 2013 - Sep 12, 2023 https://www.statista.com/statistics/326707/bitcoin-price-index/ See also: Bankrate, *Cryptocurrency statistics 2023: Investing in crypto*. In February 2011, Bitcoin's price passed the $1 threshold. Not quite 11 years later, Bitcoin hit an all-time high of $68,789 in November 2021. https://www.bankrate.com/investing/cryptocurrency-statistics/

[37] Alexey Mikhaylov, *Cryptocurrency Market Analysis from the Open Innovation Perspective*, Research Center of Monetary Relations, Financial University under the Government of the Russian Federation (Dec. 17, 2020)

[38] Fortune Business Insights, *Cryptocurrency Market Size, Share & Covid-19 Impact Analysis* (2020) https://www.fortunebusinessinsights.com/industry-reports/cryptocurrency-market-100149

Beyond the world of digital assets, the cryptocurrency market has a relevant economic influence. Established financial institutions entered the industry after realizing the potential of cryptocurrencies and blockchain technology, leading these organizations to start providing custody services, trading desks, and cryptocurrency-related investment products.

The emergence of blockchain-based decentralized finance (DeFi) protocols has also given the economic impact a new angle. Without the use of conventional intermediaries, DeFi platforms allowed anyone to access financial services like lending, borrowing, and trading, in some way democratizing the industry by opening doors for those who had been shut out of the conventional banking system.[39]

On the other side of the coin, its expansion has brought up significant issues regarding regulation, security, and the future of finance, which could result in a slowdown of cryptocurrencies' rapid ascent. As we've seen, the growth of the digital world has been propelled by investor interest and technological advancement, having a significant impact in the economic and financial landscape exerting a significant influence on various aspects of the global economy, including traditional banking, technology, and industries that were previously excluded from the conventional financial system. Stakeholders, including governmental organizations, financial institutions, and individual investors, will be crucial in determining the market's course as it continues to develop, and it is current topic that more and more governments, investment funds and corporates are formulating their crypto economy strategy and making investments to ensure they are well positioned for the future.[40]

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[39] See: Pierre Samaties, *The Rise of the Crypto Economy*, Roland Berger (Jan. 11 2022) https://www.rolandberger.com/en/Insights/Publications/The-rise-of-the-Crypto-Economy.html

[40] Id.

C. *Challenges and Threats*

Not only innovation and modernization, a part from gaining popularity and numerous consensus in the recent years the cryptocurrency's financial system has also raised various concerns in many jurisdictions in the areas concerning investor protection and market stability as a result of the volatility[41] of cryptocurrency prices and the lack of regulatory clarity. Even if usually – unlike traditional financial markets, where investors view volatility unfavorably – the crypto market's extreme volatility is interpreted by investors as a chance to make more money[42], the speculative nature of cryptocurrencies could on the other hand increase investments risks.[43] Cryptocurrency investors, in fact, frequently find themselves navigating a financial environment where significant gains might abruptly give way to large losses.[44] The prices of cryptocurrencies can be unusually sensitive to market emotion, news events, and speculative trading, in contrast to traditional assets like stocks and bonds, which are influenced by a variety of factors including corporate performance or macroeconomic trends.[45] As a result, both private and institutional investors need to exercise caution while understanding the speculative nature of cryptocurrencies, even if it is demonstrated that investors are usually motivated by a risk-seeking behavior and by focusing on short-term investments and trends.[46] In addition, the anonymity of cryptocurrency transactions, a defining feature of

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[41] Arash Aloosha & Samuel Ouzan, *The Psychology of Cryptocurrency Prices* (May 8, 2019) https://www.sciencedirect.com/science/article/pii/S1544612318309036 See also: Shaoxia Li, *A PESTLE Analysis of the Cryptocurrency Industry: An Investment Perspective*, SIAM UNIVERSITY (2018) Ch. 3: *Investment on Cryptocurrency* https://e-research.siam.edu/wp-content/uploads/2019/08/IMBA-2017-IS-A-PESTLE-Analysis-of-the-Cryptocurrency-Industry_compressed.pdf

[42] Claire Boyte-White, *Volatility From the Investor's Point of View*, Investopedia (Nov. 19, 2021), https://www.investopedia.com/ask/answers/010915/volatility-good-thing-or-bad-thing-investors-point-view-and-why.asp.

[43] Id.

[44] Id.

[45] Nadler, P., Guo, Y., *The fair value of a token: How do markets price cryptocurrencies?* (2020) Available at: http://dx.doi.org/10.1016/j.ribaf.2019.101108.

[46] Pelster, M., Breitmayer, B., Hasso, T., 2019. *Are cryptocurrency traders pioneers or just risk-seekers?* Available at: http://dx.doi.org/10.1016/j.econlet.2019.06.013.

digital assets, has been a double-edged sword,[47] drawing significant scrutiny from law enforcement organizations throughout the world.[48] This distinguishing feature of cryptocurrencies in fact is the substitution of cryptographic addresses for real-world identities such as names and addresses. Cryptographic addresses are, in synthesis, long sequences of alphanumeric letters that serve as digital IDs for transactions. While this design was meant to offer users with some financial privacy and security, it has resulted in a number of complex challenges and chances for abuse. First of all, because Bitcoin transactions are anonymous, they are becoming more and more linked to illegal activity and money laundering.[49] According to a 2019 report, there are over $76 billion in unlawful Bitcoin-related operations every year.[50] Due to a lack of regulation, criminals utilize cryptocurrencies for money laundering as well as ransom for kidnappings and to get around sanctions. Compared to other money laundering techniques, which can cost up to 50% of the earnings, this method has relatively moderate costs, about 15% of the proceeds.[51]

Another significant issue is the energy usage incurred by bitcoins. Cryptocurrency mining encompasses the intricate computational procedure of generating fresh digital money, where sophisticated computational algorithms are solved through the use of powerful computer systems, but it has been demonstrated that these procedures require a significant quantity of electrical energy.[52] The annual electricity use of Bitcoin mining in isolation amounts to an estimated 91 terawatt-hours, which corresponds to around 0.5

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[47] Anonymity and privacy in crypto - Key issues in anonymity and privacy (2023) https://blog.1inch.io/anonymity-and-privacy-in-crypto/

[48] IMF Staff Discussion Note, *Virtual Currencies and Beyond: Initial Considerations*, January 2016, https://www.imf.org/external/pubs/ft/sdn/2016/sdn1603.pdf, p. 27. Robby Houben & Alexander Snyers, *Cryptocurrencies and blockchain - Legal context and implications for financial crime, money laundering and tax evasion* (2020) Sec. 4.1.1

[49] Id.

[50] Jennifer J. Schulp, Jack Solowey, Nicholas Anthony, & Nicholas Thielman, *Overstating Crypto Crime Won't Lead to Sound Policy* (Jan. 27, 2023) See: *The Review of Financial Studies*, Volume 32, Issue 5, May 2019, Pages 1798–1853, https://doi.org/10.1093/rfs/hhz015

[51] Yunchen Huo, *The Effect of Government Policies on Cryptocurrency Market*, Atlantis Press (Apr. 22, 2022) https://www.atlantis-press.com/proceedings/icssed-22/125973983

[52] Id. see Section 3. *REASONS FOR LEGISLATION ON CRYPTOCURRENCY*

percent of the global electricity consumption. The magnitude of this level of consumption surpasses the annual electricity usage of entire nations such as Finland, which is inhabited by a population of over 5.5 million individuals.[53]

As already mentioned, the lack of clear and consistent regulations across different jurisdictions is probably one of the major challenges for the cryptocurrency system evolution.[54] This lack of specific and well-defined regulations for cryptocurrencies poses challenges for both institutional investors and businesses which may stay away from the market as a result of the uncertainty of cryptocurrencies in the legal landscape which could result in restrictions of capital inflow and could impede the sector's expansion. The main threat in seeking to regulate cryptocurrencies is given by the fact that the decentralized and borderless nature of cryptocurrencies makes it more than challenging for traditional regulatory frameworks to keep up with their rapid evolution. As a result, different nations have adopted different approaches for regulating cryptocurrencies, creating a disjointed and sometimes confused regulatory environment. On the one hand, passing laws to support high-tech financial infrastructure can increase economic competition. However, enabling the growth of digital currency might compromise the independence and reliability of the national currency.[55] In the US, its popular the thought that cryptos should be considered securities and for this they should be regulated as such, in contrast to the fact that cryptocurrencies are born with the same fundamental traits of fiat currencies and exist as a potential substitute for this last, so that securities laws shall not have any influence in regulating them.

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[53] Id.

[54] Id. supra 52

[55] Id. Sec 4. *THE IMPACT OF LEGISLATION ON CRYPTOCURRENCY*

III. REGULATIONS OF CRYPTOCURRENCIES IN THE UNITED STATES

A. *Need for regulations - Wyoming's crypto-friendly approach*

Blockchain technology is a game-changer with immense potential to reshape businesses and how they operate.[56] It offers certainty and eliminates the need for middlemen, making it a revolution in how companies are managed. Intriguingly, despite the immense potential it represents, neither the U.S. Congress nor any federal agency has yet introduced specific regulatory frameworks linked to blockchain technology and its associated digital assets. Theoretically, several federal regulatory agencies could assert jurisdiction over digital assets, with notable contenders like the Securities and Exchange Commission (SEC) and the Commodities Futures Trading Commission (CFTC). However, in practice, both of these agencies operate on a case-by-case basis, fighting with the challenges posed by this innovative technology. Notably, the SEC has opted for a regulation-by-enforcement[57] approach as it seeks to carve out a significant role in the oversight of crypto assets, but adapting pre-existing authorities to effectively regulate a new and, especially, dynamic product has proven to be an arduous task.[58] For instance, the SEC employs the well-established "Howey test"[59] in determining whether a transaction qualifies as an "investment contract"[60] for the purposes of federal securities laws. This test has been formulated in the landmark 1946 case SEC v. Howey, the first significant case representing a corner stone in regulating cryptocurrencies and mentioned in the recent case SEC v. Ripple in the 18th of July of the current year.

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[56] Sarah Jane Hugues & Stephen T. Middlebrook, *Regulating Cryptocurrencies in the United States: Current Issues and Future Directions*, William Mitchell Law Review, Vol. 40, Indiana Legal Studies Research Paper No. 282, II. A. p.816 (2014)

[57] Carol R. Goforth, *Regulation by Enforcement: Problems with the SEC's Approach to Cryptoasset Regulation*, University of Arkansas - School of Law (Apr. 14, 2022) Available at: https://deliverypdf.ssrn.com/delivery.php?

[58] See: *SEC Commissioner Dissents in Crypto Enforcement Action*, Fenwick (Sept. 20, 2020) https://www.fenwick.com/insights/publications/sec-commissioner-dissents-in-crypto-enforcement-action

[59] See Todd Phillips, *The SEC's Regulatory Role in the Digital Assets Markets,* (Oct. 4, 2021), https://www.americanprogress.org/article/secs-regulatory-role-digital-asset-markets/

[60] The broad US definition of a security includes investment contracts. SA1933 § 2(a)(1)

While federal regulatory responses to blockchain and digital assets remain a work in progress, state legislatures across the United States have displayed a diverse range of approaches and reactions. Notably, New York State has emerged as a focal point of regulation, where it introduced the controversial "BitLicense"[61] regulation in 2015. This regulatory framework mandates that companies who want to conduct operations with cryptocurrencies must obtain a specific license. Predictably, this stringent regulation resulted in an migration of blockchain and virtual currency businesses from New York, generating debates about the balance between regulatory oversight and fostering innovation within the blockchain industry and still giving thoughts about what would happen in the United States when – or whether if – an official set of rules regulating the blockchain technology will be drawn up.

Wyoming, among all U.S. states, has emerged as a trailblazer in promoting a blockchain-friendly environment, pushing boundaries and setting a precedent for the digital asset industry. In contrast to a more predominant focus on the potential of blockchain for corporate governance seen in other states, Wyoming has notably prioritized the business opportunities coming from digital assets.[62] To do so, Wyoming has gone through the issuing of 13 progressive bills[63] aimed at attracting blockchain, cryptocurrency, and token-based enterprises to its jurisdiction.[64]

The two main features of Wyoming's most recent blockchain laws are the recognition of direct property rights for individual owners of digital assets of all kinds (virtual currencies, digital securities, and utility tokens), as well as the application of the commercial law super-negotiability rules to virtual currencies, which promotes their

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[61] NYSDFS, 'BitLicense Regulatory Framework' (24 June, 2015)

[62] Pierluigi Matera, *Delaware's Dominance, Wyoming's Dare. New Challenge, Same Outcome?*, 27(1) Fordham Journal of Corporate & Financial Law 73 (2022)

[63] See more: Caitlin Long, *What Do Wyoming's 13 New Blockchain Laws Mean?*, FORBES (Mar. 4, 2019) https://www.forbes.com/sites/caitlinlong/2019/03/04/what-do-wyomings-new-blockchain-laws-mean/

[64] Gregory Barber, *The Newest Haven for Cryptocurrency Companies? Wyoming*, WIRED (June 13, 2019), https://www.wired.com/story/newest-haven-cryptocurrency-companies-wyoming/.

liquidity.[65] Wyoming's commercial law encourages other states to adopt its same legal safeguards because it accurately represents the underlying nature of digital assets (directly held, peer-to-peer assets). Wyoming's aim to establish itself as a blockchain-friendly state and a centre for blockchain technology innovation includes the passage of the Utility Token Bill[66], which was passed and signed into law in 2018. To begin, this bill provided an exemption for "utility tokens" from state securities rules, meaning that a developer or seller of an open blockchain token would not be treated as the issuer of a security. The bill specifies the requirements that a token must meet in order to be considered a utility token, or "open blockchain token," as the term is used in the legislation. In essence, the token cannot be advertised as an investment by its developers or issuers, it must be exchangeable for goods and services, presumably meaning that firms must have a working product or service at the time the tokens are issued, and it cannot be involved in a repurchase agreement for the token's creator, or developer, who is prohibited from creating a secondary market for the token by issuing a buy-back option or agreeing to locate buyers for the token.[67]

Wyoming's efforts to attract blockchain enterprises transcend mere securities law considerations; the state's approach to blockchain and securities laws stands as an intriguing aspect of its policy on blockchain-based businesses.[68] While federal regulations govern most aspects of securities, and the majority of its elements are considered as such, some other elements are subject to state laws, often referred to as

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[65] Id. supra 63

[66] Or "House Bill 70" (HB 70) *Open blockchain tokens-exemptions*. STATE OF WYOMING

[67] Josiah Wilmoth, *Wyoming House Unanimously Passes Bill Exempting Utility Tokens from Securities Laws*, CCN. https://www.ccn.com/wyoming-house-unanimously-passes-bill-exempting-utility-tokens-securities-laws/

[68] Id. supra 62

"Blue Sky Laws."[69] These state laws impose stringent disclosure and filing requirements to safeguard the public from fraudulent activities, and in Wyoming, several categories of securities are exempt from the regulations of these laws, including digital assets.

While providing exemptions for an entire industry might seemingly undermine the core purpose of such regulations, it also underscores Wyoming's unwavering commitment to position itself as the most attractive destination for blockchain enterprises, knowing what happened in the case of New York by adopting a not-friendly cryptocurrency environment. Its forward-thinking approach is confirmed with an Act (Act n.39)[70] in 2019 relating to property, classifying digital assets within existing law[71], and no longer categorizing utility tokens as securities, eliminating the need for securities exemptions entirely.[72] This progressive stance diverges from the Securities and Exchange Commission's (SEC) perspective, which tends to lean toward classifying tokens as securities in most instances. The SEC is actively advocating for federal legislation and is poised to establish its own regulatory framework if granted specific authority in this domain. In the event that Congress or the SEC takes decisive action, Wyoming's role as a sanctuary for "utility tokens" may no longer provide issuers with an absolute safe harbor. Furthermore, the enactment of federal regulations could restrict the extent to which state legislatures can differentiate their policies, potentially following Wyoming's strategy of attracting technology companies through favorable legislation.
Wyoming's legislative landscape, characterized by its friendly and permissive approach, positions itself uniquely in anticipation of a digital future where societies are likely to

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[69] Originally, they were intended to regulate the offering and sale of securities and protect the general public from fraud by imposing disclosure and filing requirements (the registration of stockbrokers, brokerage firms, and any offering of securities). According to common belief, Kansas was the first state to enact Blue Sky Laws in 1911. See: Troy Segal, *Blue Sky Laws: Definition, Purpose, How They're Regulated*, INVESTOPEDIA https://www.investopedia.com/terms/b/blueskylaws.asp See also:s Andrew Beattie, *The SEC: A Brief History of Regulation*, Investopedia (Feb. 3, 2022), https://www.investopedia.com/articles/07/secbeginning.asp.

[70] ENROLLED ACT NO. 39, SENATE, SIXTY-FIFTH LEGISLATURE OF THE STATE OF WYOMING, FILE NO. SF0125 https://www.wyoleg.gov/2019/Enroll/SF0125.pdf

[71] Id.

[72] Id.

become progressively more decentralized. As a matter of fact, Wyoming is often referred the "Delaware of digital asset law",[73] a reference to Delaware's lead in corporate law and as of today more than a dozen other US states and Congress are following Wyoming's lead by enacting their own specific bills in favor of the use of digital currencies. This approach aligns digital assets, which are directly owned and facilitate peer-to-peer transactions, with the broader framework of commercial law, and it is reasonable that in future other states will feel increasingly encouraged to adopt its same commercial law protections.

B. *Government agencies involved in regulating cryptos*

1. SEC's and CFTC's approaches

The advent of digital assets, particularly cryptocurrencies, has presented a unique challenge for regulatory agencies in the United States. Two of the main regulatory bodies responsible for overseeing financial markets are the Securities Exchange Commission (SEC) and the Commodities Futures Trading Commission (CFTC)[74], sharing also a sort of responsibility for regulating the sale[75] of digital assets and creating a well defined way to act for its numerous cases and operations, yet rising debates and criticism because of their differing approaches.[76]

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[73] Id. 63

[74] See also: John Joy, *The Race to Regulate Crypto: CFTC vs. SEC*, JURIST (Nov. 24, 2021) https://www.jurist.org/commentary/2021/11/john-joy-crypto-sec/

[75] See: Josias Dewey & Samir Patel, *Blockchain & Cryptocurrency Laws and Regulations 2023 | USA*, Global Legal Insights, Section 2: *Sales Regulation* https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/usa

[76] Stephen P. Piepgrass & Trey Smith, *Regulating Digital Assets: Will Congress Finally Enact a Comprehensive Regulatory Framework in 2023?*, Troutman Pepper (Feb. 8, 2023) https://www.regulatoryoversight.com/2023/02/regulating-digital-assets-will-congress-finally-enact-a-comprehensive-regulatory-framework-in-2023/

The SEC is traditionally responsible for regulating securities and maintaining market integrity, In August 2021, SEC Chairman Gary Gensler[77] emphasized the need for regulatory clarity, stating that Congress should provide the agency with more authority to better oversee cryptocurrency trading and operations. He described the crypto space as a "Wild West"[78] riddled with fraud and investor risks. For this reason the Commission is fighting with the challenge of fitting digital assets into its regulatory framework, but its approach is a bit confused: it depends on the specific cryptocurrency they're dealing with and whether a crypto is a form of investment of money.[79] For example, while Bitcoin, the pioneering cryptocurrency, is considered a commodity by the SEC[80], most other cryptocurrencies are viewed as securities.[81] This classification largely stems from the resemblance of many initial coin offerings (ICOs) and token sales to traditional securities offerings.[82] This lack of well-defined criteria has resulted in uncertainty

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[77] See U.S. Securities Exchange Commission, *Remarks Before the Aspen Security Forum*, Chair Gary Lesner Speech (Aug. 3, 2021, Washington D.C.) https://www.sec.gov/news/speech/gensler-aspen-security-forum-2021-08-03

[78] Casey Wagner, *Crypto Is the 'Wild West,' Gensler Tells US Army*, BLOCKWORKS (Jan. 11, 2023) https://blockworks.co/news/gensler-crypto-wild-west More at: Elizabeth Napolitano, *SEC Chair Gensler Cites 'Wild West' of Crypto in Case to Increase Agency's Budget*, COINDESK (Jul. 19, 2023) https://www.coindesk.com/policy/2023/07/19/sec-chair-gensler-cites-wild-west-of-crypto-in-case-to-increase-agencys-budget/

[79] Wayne Duggan, *How Does The SEC Regulate Crypto?*, FORBES ADVISOR (JUN. 30, 2023) https://www.forbes.com/advisor/investing/cryptocurrency/sec-crypto-regulation/ See also: Alfredo Dally, *A Call for Regulation: The SEC Should Oversee Crypto With its Ever-Growing Similarities in Risk and Opportunity to Securities*, University of Miami Law Review (2022), Sec. I. https://lawreview.law.miami.edu/

[80] Kevin Aguirre, *It's Official: Virtual Currencies (like Bitcoin) are a Commodity*, Fordham Journal of Corporate&Financial Law (Oct. 28, 2018) https://news.law.fordham.edu/jcfl/2018/10/28/its-official-virtual-currencies-like-bitcoin-are-a-commodity/

[81] Under U.S. law, a security includes "an investment contract," which has been defined by the U.S. Supreme Court as an investment of money in a common enterprise with a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others. SEC v. W.J. Howey Co., 328 U.S. 293, 301 (1946). See: Josias Dewey & Samir Patel, *Blockchain & Cryptocurrency Laws and Regulations 2023 | USA*, Global Legal Insights, Section 3: *Security Laws*. https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/usa

[82] Demelza Hays & Andrei Kirilenko, *Cryptocurrency regulation and enforcement in the US and Europe* (Chap.4), University of Liechtenstein; University of Cambridge, Section 4 UTILITY TOKENS, INITIAL COIN OFFERINGS AND SECURITY TOKENS. https://cepr.org/system/files/publication-files/101269-fostering_fintech_for_financial_transformation_the_case_of_south_korea.pdf#page=108

within the cryptocurrency market and the validity of SEC's "regulation-by-enforcement"[83] approach. Instead of proactively establishing comprehensive and well-defined rules and guidelines for digital assets, the SEC often deals with issues on a case-by-case basis through enforcement actions, especially with the case Sec v Howey, mentioned in the recent case of the Southern District Court of New York Sec v Ripple – which I'm going to threat in details in the next chapter.

Critics argue that this reactive strategy enlightens confusion and ambiguity within the industry, potentially obstructing innovation and compliance.[84] In contrast to the SEC's approach, the CFTC, also known as the Commodities Futures Trading Commission, made a significant decision. In 2015 it officially classified cryptocurrencies as commodities[85] putting this classification in act in the case CFTC v. McDonnell, a case in which the CFTC alleged that Coin Drop Markets (CDM) engaged in deceptive and fraudulent practices related to virtual currencies, with the aim of misappropriating funds from investors.[86] In synthesis, CDM promised to individuals who paid for membership in virtual currency trading groups through its websites, with a potential for profit of up to 300% per week, in order to ensure investments in the company. However, once they received membership payments and virtual currency investments, CDM suddenly deleted their social media accounts and websites, not only failing to deliver the promised returns but also providing minimal, if any, trading guidance. This classification allowed the CFTC to oversee and regulate cryptocurrency markets just like they do with what are defined "commodities" in the Commodity Exchange Act

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[83] Id. supra 57

[84] Michael Bacina, *'Regulation by enforcement' by US SEC meet with criticism from crypto industry and other regulators*, BITS OF BLOCK (Jul. 24, 2022) https://www.bitsofblocks.io/post/regulation-by-enforcement-by-us-sec-meet-with-criticism-from-crypto-industry-and-other-regulators

[85]David Lucking & Vinod Aravind, *Cryptocurrency as a Commodity: The CFTC's Regulatory Framework* (2019). See also: Jin Enyi & Ngoc Le, *The Legal Nature of Cryptocurrencies in the US and the Applicable Rules*, Queen Mary University of London (Posted: 1 Jul 2017, Last revised: 21 Nov 2019)

[86]Maria Nikolova, *CFTC Wins Landmark Case Against Cryptocurrency Fraudster*, FINANCE FEEDS (Aug. 24, 2018) https://financefeeds.com/cftc-wins-landmark-case-cryptocurrency-fraudster/

(CEA).[87] This definition of a "commodity"[88] extends beyond physical goods like wheat or cotton and encompasses "all services, rights, and interests". This recognition relies on the fact that virtual currencies can be traded in a market with consistent quality and value, so that we can consider the McDonnell case as a significant milestone into defining the CFTC's position and awareness[89] over the issue of regulating cryptocurrencies.

2. FinCEN's commitment

What's different with FinCEN, short for the Financial Crimes Enforcement Network, is its commitment into providing clarity, adapting to technological advancements, and preserving financial integrity.[90] Its first approach dates back to March 18, 2013, day in which FinCEN made a significant move with an official, public and written statement[91] that had a profound impact on how virtual currencies[92] were regulated in the United States, clarifying the roles and responsibilities of various entities within the

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[87] Id. supra 85, see also: CFTC Report: *The CFTC's Role in Monitoring Virtual Currencies*, generated in compliance with House Report 116-107, The Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Bill, 2020.

[88] A commodity, as defined in the Commodity Exchange Act, "includes the agricultural commodities enumerated in Section 1a(9) of the Commodity Exchange Act, 7 USC 1a(9), and all other goods and articles, except onions as provided in Public Law 85-839 (7 USC 13-1)" Commodities Future Trading Commission, https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/CFTCGlossary/index.htm#_commodity

[89] To CFTC, as stated officially, the crypto markets are "used to facilitate illicit financing of drugs, human trafficking, ransomware, terrorism, and malicious state sponsored activity posing national security risks". CFTC (Commodity Futures Trading Commission), *llicit Finance and Other Key Risks of Digital Assets: Keynote at City Week 2023* (Apr. 25, 2023) https://www.cftc.gov/PressRoom/SpeechesTestimony/oparomero8

[90] As its mission, FinCEN works to "safeguard the financial system from illicit use, combat money laundering and its related crimes including terrorism, and promote national security through the strategic use of financial authorities and the collection, analysis, and dissemination of financial intelligence". Mission, FIN. CRIMES ENF'T NETWORK, https://www.fincen.gov/about/mission.

[91] Department of the Treasury - Financial Crimes Enforcement Network, *Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies*, FIN-2013-G001 (Mar. 18, 2013) https://www.fincen.gov/sites/default/files/guidance/FIN-2013-G001.pdf

[92] Id. 90. FinCEN's guidance addresses "convertible" virtual currency. This type of virtual currency either has "an equivalent value in real currency, or acts as a substitute for real currency."

cryptocurrency space, such as virtual currency users[93], administrators and exchangers.[94] In contrast to real currency, defined as "the coin and paper money of the United States or of any other country […] customarily used and accepted as a medium of exchange in the country of issuance"[95], "virtual" currency is a medium of exchange that operates like a currency in some environments, but does not have all the attributes of real currency. In particular, virtual currency does not have legal tender status in any jurisdiction.[96]

In particular, FinCEN alleged that people and organizations involved in virtual currency transactions, including users, administrators, and exchangers, were subject to the Bank Secrecy Act (BSA). Its position was quite clear: just like traditional financial institutions, users, managers, and exchangers of virtual currencies were subject to BSA requirements. This represented an important turning point in the governance of cryptocurrencies by expanding regulatory control to the emerging sector. The designation of virtual currency exchangers and administrators as Money Services Businesses (MSBs)[97] was one of the main effects of FinCEN's 2013 guideline.[98] Anti-Money Laundering (AML) and Know Your Customer (KYC) obligations were included of this classification, and after this guideline exchanges of virtual currency were required to declare transactions worth more than $10,000, much like conventional

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[93] Id. supra 91. "A user who obtains convertible virtual currency and uses it to purchase real or virtual goods or services is not an MSB under FinCEN's regulations."

[94] Id. As stated in the page 3 of the guidance, "[a]n administrator or exchanger that accepts and transmits a convertible virtual currency or buys or sells convertible virtual currency for any reason is a money transmitter under FinCEN's regulations, unless a limitation to or exemption from the definition applies to the person." The term money transmitter is defined as "the acceptance of currency, funds, or other value that substitutes for currency from one person and the transmission of currency, funds, or other value that substitutes for currency to another location or person by any means."

[95] Id. See page 1: *Currency vs. Virtual Currency*

[96] Id.

[97] The BSA states that a Money Services Business (MSB) is a legal "person wherever located doing business, whether or not on a regular basis or as an organized or licensed business concern, wholly or in substantial part within the United States,". InnReg, 2022, https://www.innreg.com/blog/fincen-cryptocurrency-regulation-foundations-four-key-msb See also: Financial Crimes Enforcement Network, *Money Services Business Definition* https://www.fincen.gov/money-services-business-definition

[98] To determine a company to be an MSB and to operate in the U.S., it must be registered as such with FinCEN via FinCEN's BSA E-Filing System and FinCEN Form 107.5.

financial institutions. Additionally, FinCEN underlined the significance of submitting the Suspicious Activity Reports (SARs)[99] for suspected bitcoin transactions.[100]

The regulatory framework established by FinCEN's 2013 guidelines gave the bitcoin sector much-needed clarity and served as the cornerstone for compliance and it aimed to promote legitimate innovation while protecting the financial system from potential exploitation. But FinCEN's foray into the world of virtual currency has only begun, in fact in 2019, by publishing thorough guidance on convertible virtual currencies (CVCs), the agency took another crucial step. The new guideline, according to FinCEN, does not establish any new regulatory requirements but rather summarize prior administrative judgments and other guidance provided by FinCEN to clarify what is already required of businesses to comply with the regulations.[101] This guidance[102] underscores the fact that firms involved in the transmission of money through the use of cryptocurrencies are bound by the regulatory framework established by the FinCEN, so demanding for prerequisites for registration, maintenance of records, and adherence to anti-money laundering (AML) and know-your-customer (KYC) protocols. In essence, enterprises involved in the conversion of cryptocurrencies into conventional fiat currencies or engaging in peer-to-peer transactions are classified as money transmitters[103] and are obligated to comply with the corresponding regulatory frameworks.

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[99] p. 168, Michael G. Lindsay, *International Rise of Cryptocurrency: A Comparative Review of the United States, Mexico, Singapore, and Switzerland's Anti-Money Laundering (AML) Regulation*, South Carolina Journal of International Law and Business (2023): Vol. 19: Iss. 2, Article 8. Available at: https://scholarcommons.sc.edu/scjilb/vol19/iss2/8

[100] It is referred to transaction that involve, or aggregate, funds or assets worth $2000 or more. InnReg, *FinCen Cryptocurrency Regulation - Part 1: Foundations and Four Key MSB Considerations* (2022) https://www.innreg.com/blog/fincen-cryptocurrency-regulation-foundations-four-key-msb

[101] Mark W. Rasmussen, *Financial Crimes Enforcement Network Consolidates Guidance on Virtual Currencies*, Jones Day Publications (Jun. 2019) https://www.jonesday.com/en/insights/2019/06/fincen-consolidates-guidance

[102] In 2019, FinCEN issued CVC guidance, thus consolidating all of the associated administrative rulings and guidance for the 2011–2019 period. With this guidance, FinCEN provided its interpretation of the BSA juxtaposed against many activities involving CVCs. See: *Application of FinCEN's Regulations to Certain Business Models Involving Convertible Virtual Currencies* (May 19, 2019) FIN-2019-G001

[103] Christopher Conniff, Helen Gugel, and Ethan Thomas, Ropes & Gray LLP, *FinCEN Civil Enforcement and Virtual Currency*, BLOOMBERG LAW, (Feb. 2020) https://www.bloomberglaw.com/external/document/XAHVQ2US000000/banking-professional-perspective-fincen-civil-enforcement-and-vi

However, achieving the ideal balance between regulatory monitoring and technology advancement is a challenge for FinCEN as well as other regulatory agencies as seen with the SEC and the CFTC. Blockchain technology and virtual currencies have the potential to upend not only the financial sector but also a number of other sectors, including identity verification, healthcare, and supply chain management. Excessive regulation may impede these advances, slowing development and the economy's expansion. In order to preserve this delicate balance, FinCEN must remain flexible and engage in constant communication with industry stakeholders. The organization acknowledges that part of its job involves creating an atmosphere that allows for legitimate technical developments to flourish in addition to enforcing and regulating the law.

C. *Utah's Blockchain Legislation*

Not only Wyoming, in response to the increasing significance of cryptocurrencies and blockchain technologies in financial transactions, many states in the United States have made strides to include future technologies into their financial and legal systems. Amongst all, Utah is aiming to emerge as a prominent advocate of innovation putting its focus on blockchain and decentralized autonomous organizations (DAOs). We can date its first significant approach to 2019, year in which the state of Utah passed cryptocurrency-specific amendments to the state's Money Transmitter Act (MTA).[104] These amendments, introduced by Republican senator Daniel Hemmert in senate bill 213[105], specifically affirm that blockchain tokens do not fall under the category of money transmissions according to the laws of Utah.[106] Consequently, transactions

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[104] FREEMAN LAW, Utah Blockchain Legislation Status, https://freemanlaw.com/cryptocurrency/utah/

[105] SB0213, UTAH SENATE BILL 213, passed March 26, 2019. Available at https://legiscan.com/UT/text/SB0213/id/1968258/Utah-2019-SB0213-Enrolled.pdf

[106] Id. supra 104. See also: BUCKLEY, *Utah says blockchain tokens are not money transmissions* (Apr. 5, 2019) https://buckleyfirm.com/blog/2019-04-05/utah-says-blockchain-tokens-are-not-money-transmissions

involving cryptocurrencies are free from the licensing and operating obligations outlined in the MTA. The lack of licensing requirements for cryptocurrency enterprises operating in Utah under the MTA raises concerns regarding the fulfillment of the intended objectives of the regulatory framework, raising the risk to potentially undermine the safeguarding of financial consumers' interests inside the state.[107] Two years later, in 2021, the state legislature of Utah passed the Revised Uniform Unclaimed Property Act (RUUPA), which served as an amendment to the Uniform Unclaimed Property Act of 1983. According to the RUUPA, virtual currency, such as Bitcoin, is categorized as a digital representation of value that serves as a medium of exchange, unit of account, or store of value and a property under the jurisdiction of Utah state laws.[108]

Utah's welcoming approach to digital currencies has been confirmed by two House Bills which Senator Kirk Cullimore passed in 2022. The first, House Bill 456,[109] allows the state to begin to officially accept cryptocurrencies and ensures that any liability for that lies within the person who is paying, so that the state doesn't have any sort of risk in it. The second one instead, House Bill 335,[110] aims to put together a task force of government officials and tech industry professionals who can make policy recommendations.[111] What's been relevant in the current year is that Governor Spencer Cox recently signed two groundbreaking measures that underline Utah's commitment to developing a healthy blockchain environment. These rules not only lay the framework for on-chain credential verification, but they also provide DAOs with legal validity and

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[107] Id. See also: Yogita Khatri, *Utah Bill Would Exempt Blockchain Firms from Money Transmitter Act*, COINDESK (Mar. 19, 2019) https://www.coindesk.com/markets/2019/03/04/utah-bill-would-exempt-blockchain-firms-from-money-transmitter-act/

[108] Id. supra 104

[109] Utah State Legislature, H.B. 456 Digital User Asset Payment Amendments (2022), https://le.utah.gov/~2022/bills/static/HB0456.html

[110] Utah State Legislature, H.B. 335 Blockchain and Digital Innovation Task Force (2022), https://le.utah.gov/~2022/bills/static/HB0335.html

[111] MacKenzie Ryan & Chris Jones, *Is Utah poised to become the Wall Street of Crypto?*, 2KUTV (May 7, 2022) https://kutv.com/news/utahs-growing-pains/is-utah-poised-to-become-the-wall-street-of-crypto See also: Jacob Swanson, *People have mixed emotions about Utah's new crypto bills*, Utah Business (Jun. 23, 2023) https://www.utahbusiness.com/people-have-mixed-emotions-about-utahs-new-crypto-bills/

benefits comparable to those enjoyed by traditional limited liability companies (LLCs). The Utah DAO Act[112], approved officially on March 1, 2023, and inspired by the COALA DAO Model Law[113], published by the Coalition Of Automated Legal Applications, is the culmination of a multi-year effort of the state's Blockchain and Digital Innovation task group to build a "regulatory framework that supports the growth and development of DAOs in Utah". Utah puts its main focus on the security and integrity of electronic records, as demonstrated by the first of these measures, HB 470.[114] It requires the Division of Technology Services to launch a pilot program for on-chain credentials that can be verified digitally, preventing unauthorized changes to electronic records and making its digital records more reliable.[115] While the second bill, HB 357 covers the legal standing and privileges of DAOs that are not registered as for-profit or nonprofit organizations and offers a precise framework for DAO functioning by establishing the requirements for recognition, outlining the inherent rights of DAO members, formalizing membership standards, and establishing the purposes for which a DAO may be founded.[116] This new laws basically gives DAOs legal legitimacy and limited liability by classifying them as "Utah LLDs", (limited liability decentralized

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[112] Act HB 357, the Utah Decentralized Autonomous Organizations Act (Utah DAO Act). https://le.utah.gov/~2023/bills/static/HB0357.html. Utah Gov. Spencer Cox has also approved House Bill 470, which funds a pilot program focused on verified digital credentials. See https://le.utah.gov/~2023/bills/static/HB0470.html

[113] The COALA DAO Model Law cites in its Article 1 "Nature": "The DAO is a legal entity that can be used for commercial, mutualistic, social, environmental or political purposes, the nature of which will be specified in its By-Laws". See more at https://coala.global/wp-content/uploads/2022/03/DAO-Model-Law.pdf

[114] Sebastian Sinclair, *Utah Law Furthers Adoption of On-chain Credentials and DAOs*, BLOCKWORKS (April 13, 2023) https://blockworks.co/news/utah-law-on-chain-credentials-daos Utah State Legislature, H.B. 470 Government Digital Verifiable Record Amendments, (signed Mar. 14, 2023, became effective May 3, 2023) https://le.utah.gov/~2023/bills/static/HB0470.html

[115] Id.

[116] Id. See also: Utah State Legislature, H.B. 357 Decentralized Autonomous Organizations Amendments (13 Mar 2023, House/ to Governor, Effective Date: 1 Jan 2024) https://le.utah.gov/~2023/bills/static/HB0357.html

autonomous organizations),[117] defining the ownership of these organizations and protecting anonymity through act-compliant bylaws. As a result, they will not need to be encased in an existing company structure to take advantage of the benefits of legal personhood anymore.[118] With legal recognition, Decentralized Autonomous Organizations have the authority to enter into contracts, possess physical assets, and take part in legal actions as separate legal entities.[119] Additionally, the act's inclusion of limited liability measures serves to greatly reduce the risks and potential legal obligations connected to people and corporations participating in or doing business with DAOs.[120] By promoting this acts and granting protection and limited liabilities to DAOs Utah recognizes the significance of encouraging innovation in this field. It provides a clear message to entrepreneurs, developers, and investors that the state is willing to build a supportive regulatory framework for blockchain-based developments, seeking also to put itself into a dominant position considering a nation going increasingly towards a digital future.[121]

One of the immediate effects of this legislation is the possibility of an increase in DAO activity in Utah. Startups and blockchain projects may find the state to be an appealing location for forming decentralized organizations and Utah's Act's legal clarity and

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[117] Rather than being wrapped by an LLC. In short, a limited liability company is not a DAO, and a DAO is not a limited liability company. The Utah DAO Act grants the DAO a form of legal recognition that is unique to DAOs. Rob Lamb, *Utah Passes Innovative DAO Legislation*, JDSUPRA (Mar. 3, 2023) https://www.jdsupra.com/legalnews/utah-passes-innovative-dao-legislation-3845323/

[118] Fatemeh Fannizadeh, *Lawmakers In New Hampshire And Utah Recognize DAOs As Legal Persons*, FORBES (Mar. 7, 2023) https://www.forbes.com/sites/digital-assets/2023/03/07/-new-hampshire-utah-recognize-daos-as-legal-persons/

[119] Id. See also: Matthew Berlin, Gus N. Paras, William Schuman, Yusef Abutouk, *Utah "DAOs" and Don'ts: New Law Provides Limited Liability for Decentralized Organizations*, ArentFox Schiff (Mar. 31, 2023) https://www.afslaw.com/perspectives/alerts/utah-daos-and-donts-new-law-provides-limited-liability-decentralized

[120] Terrill Dicki, *Utah Passes Law Recognizing Decentralized Autonomous Organizations*, Blockchain.news (Mar. 8, 2023) https://blockchain.news/news/utah-passes-law-recognizing-decentralized-autonomous-organizations.

[121] Proskauer, *With New DAO Law on the Books, Utah Joins Race with Wyoming and Tennessee to Become U.S. "Crypto Capital"* (May 31, 2023) https://www.proskauer.com/blog/part-ii-with-new-dao-law-on-the-books-utah-joins-race-with-wyoming-and-tennessee-to-become-us-crypto-capital

protection can encourage the establishment of decentralized applications, financial platforms, and governance systems. This could result in more job possibilities, economic growth, and technological breakthroughs in the state. Overall, the Utah Decentralized Autonomous Organizations Act is a significant step forward in the legal recognition of DAOs.[122] With the passage of this new legislation, these new types of decentralized organizations in Utah will be able to function with more confidence and security, knowing that they are legally recognized and protected. In an era of continuing blockchain technology advances, more governments are likely to follow Utah's lead in recognizing the importance of DAOs in the digital economy.

D. *Potential threats in regulating digital currencies*

As already treated in this chapter, there are different beliefs about regulating currencies and what could happen in a future characterized by defined and specific laws regarding the digital world. If on one hand the last decades elicited a sort of need for urgent and ultimate regulations, it is strongly believed, taking the example of New York, that adopting a more restrictive and less crypto-friendly legislation would cause a consequent migration of corporations into less restrictive states, also out of the United States, and a resulting crash in economic resources and in the market growth of the digital currency system.

Leaving aside this aspect and considering a nation going increasingly towards this need for regulations, I would like to consider other possible challenges that are possibly slowing down the process of regulating cryptocurrencies.[123] First of all it is clear that

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[122] Anthony Clarke, *Utah DAO Act: How the law was made and what it means for decentralized business*, Bitcoin Insider (Apr. 27, 2023). David Lemke, chief financial officer at crypto wallet Giddy — and member of Utah's Blockchain and Digital Innovation Task Force — and Utah Representative Trevor Lee both authored the bill before it was presented to the Utah State Legislature. Lemke cites "Utah's DAO Act is a glimmer of hope going in the face of Federal anti-crypto sentiment that may begin to turn the tide." https://www.bitcoininsider.org/article/213333/utah-dao-act-how-law-was-made-and-what-it-means-decentralized-business

[123] See also: Nicolas Weaver, *The Death of Cryptocurrency*, X - Regulatory principles. Yale Law School

the lack of uniformity demonstrated in the different approaches of the government agencies involved highlights a general confusion of the central authorities and could complicate matters for businesses and users operating across borders, leading to legal ambiguity, potential conflicts between jurisdictions, and consequentially to regulation overlapping, gaps, or contradictions, which makes compliance for cryptocurrency firms extremely difficult.[124] Additionally, it could eventually cause regulatory arbitrage, potentially inducing businesses to move into regions with more benevolent legislation. This could obstruct economic development and employment creation in places that opt for stringent rules.[125] On the other hand of course, it might draw crypto-related enterprises to nations with lax legislation, giving those nations a competitive advantage, given by the fact that investor confidence may be impacted by this uncertainty and the resulting market instability and in the worst cases they could occur in situations in which they are not protected by the law being potentially subject of fraud and fraudulent schemes.[126]

Another prominent challenge in regulating cryptocurrencies is the so called “regulatory lag”.[127] This situation happens when the rate of technological advancement in the cryptocurrency industry exceeds the capacity of authorities to establish and uphold suitable laws and regulations. This problem is made more difficult by the decentralized and international character of cryptocurrencies, as existing regulatory frameworks struggle to keep up with this quickly changing environment. In particular, the primary cause of regulatory lag is the inherent complexity and novelty of cryptocurrencies and blockchain technology; the launch of Bitcoin in 2009 on one hand signaled the start of a new financial era, but it also left a gap in the regulatory system, and as a result, governments and regulatory organizations were largely unprepared for this emergent

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[124] Ruholamin Haqshanas, *Crypto Regulation Challenges: Balancing Innovation and Investor Protection*, Technopedia (July 6, 2023) https://www.techopedia.com/crypto-regulation-challenges

[125] Id.

[126] Jennifer Lorentz, *Crypto regulation should take risk-based approach*, OMFIF (Dec. 3, 2021) https://www.omfif.org/2021/12/crypto-regulation-should-take-risk-based-approach/

[127] Atlantic Council, “Three challenges in cryptocurrency regulation”, Greg Brownsten (June 7, 2023) https://www.atlanticcouncil.org/blogs/econographics/three-challenges-in-cryptocurrency-regulation/

asset class and lacked the knowledge to fully comprehend and regulate it. The result is that many countries have resorted to apply existing financial regulations to cryptocurrencies (the SEC by defining digital currencies as securities and legally considering them as such, the FinCEN instead using the CEA to give them the same legal traits of physical commodities), causing a significant market fragmentation and making the regulatory environment ambiguous, inconsistent, and in the majority of cases ineffective.[128]

On the other hand, considering the issue of the massive growth in legal cases in the United States in the recent years, another significant concern to the cryptocurrency market is overregulation.[129] Governments and regulators may use onerous, stifling restrictions in an effort to protect consumers and keep control of financial systems. Consumer safety is crucial, but excessive regulation can stifle the industry's expansion and drive innovation to offshore or uncontrolled regions.
Generally the suppression of innovation is one of the main issues associated with excessive regulation. Blockchain technology and cryptocurrencies have the potential to completely transform a large number of sectors and conventional financial institutions, and overly onerous regulations may discourage entrepreneurs and innovators from entering the market, denying society of potential advantages especially regarding the economic growth of the market. Moreover, governments are struggling to determine the best strategy since the regulatory environment for cryptocurrencies is still developing. To effectively address the challenges and dangers, regulators must collaborate, engage with industry stakeholders, and stay current on technical developments.

Cryptocurrencies have the enormous potential to revolutionize the American – and global– financial structure and give people more power, but doing so calls for a legal structure that is both intelligent and flexible. It is essential to create an environment that

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[128] See: William J. Luther, *Regulatory Ambiguity in the Market for Bitcoin,* Florida Atlantic University FL 33431 (Aug. 8, 2019)

[129] The Challenges of Regulating Crypto Assets - Overregulation. Sanction Scanner sanctionscanner.com/blog/the-challenges-of-regulating-crypto-assets-324

supports innovation while protecting the interests of all stakeholders as the crypto industry continues to develop. The future of cryptocurrencies and their incorporation into the larger financial ecosystem will depend on achieving this delicate balance, which will guarantee long-term market stability and investor safety in an increasingly digital environment.

IV. POSSIBLE FUTURE SCENARIOS FOR CRYPTOCURRENCIES IN THE AMERICAN LEGAL LANDSCAPE

This chapter explores the constantly changing interactions between cryptocurrencies and the regulatory landscape in the United States. We will explore the complex network of opportunities, difficulties, and potential trajectories that face cryptocurrencies inside the American legal system in this chapter. It is crucial to foresee how rules might adjust, develop, or hold firm in the face of technological innovation as this digital revolution continues to transform the financial sector, especially dealing with United States, which we know well being a regulation-by-litigation state. This chapter explores the effects of the leading SEC approach in regulating cryptocurrencies, the "Howey test"[130] instituted after the 1946 legal case of Sec v Howey, and provides insights into the possible directions that these digital assets may take in the future in the United States, analyzing the latest case held in the Southern District Court of New York the 18th July of 2023 of Sec v Ripple, a case which will probably be a milestone in the process of regulating cryptocurrencies but still rises concerns and confusion about the definition and legal implications of these lasts.[131]

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[130] Nathan Reiff, Howey Test Definition: What It Means and Implications for Cryptocurrency, INVESTOPEDIA (Jul. 31, 2023) https://www.investopedia.com/terms/h/howey-test.asp#citation-18 SEC v. W. J. Howey Co., 328 U.S. 293, 66 S. Ct. 1100, 90 L. Ed. 1244, 163 A.L.R. 1043 (U.S. May 27, 1946) https://www.casebriefs.com/blog/law/securities-regulation/securities-regulation-keyed-to-coffee/definitions-of-security-and-exempted-securities/securities-and-exchange-commission-v-w-j-howey-co

[131] Id.

A. *The Howey Test*

The historic Supreme Court case SEC v. W.J. Howey Co.[132] gave rise to the Howey Test, which has since been a cornerstone of the legal framework for evaluating what qualifies as a security under U.S. federal law. In this case Howey, owner of a corporation organized under the laws of the state of Florida, was offering investors a package that comprised land as well as the assurance that the orange groves[133] that grew there would be kept profitable.[134] Howey would require the investor to sign a land sale agreement for a small portion of the grove as well as a service agreement for the property's cultivation. Due to the investor's lack of involvement in any form of cultivation, the service contract gave Howey total custody. When the produce was harvested, the investor would receive a statement for what the strip they invested in had produced; as a result, Howey was the only one who could sell the fruit. When endorsing this agreement, Howey used a number of agencies of interstate commerce but neglected to register the contracts and securities with the SEC.[135] The fundamental and legal question that arouse from this case was whether or not these investment contracts qualified as "securities" under the Securities Act of 1933 and the Securities Exchange Act of 1934. In this case, the U.S. Supreme Court evidenced that "security" is any document that is traded for speculation or investment, has substance over form, and

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[132] Id. In SEC v. Howey Co. the US Supreme Court stated that: "The test of whether there is an "investment contract" under the Securities Act is whether the scheme involves an investment of money in a common enterprise with profits to come solely from the efforts of others; and, if that test be satisfied, it is immaterial whether the enterprise is speculative or nonspeculative, or whether there is a sale of property with or without intrinsic value."

[133] Upon the facts of this case, an offering of units of a citrus grove development, coupled with a contract for cultivating, marketing, and remitting the net proceeds to the investor, was an offering of an "investment contract" within the meaning of that term as used in the provision of § 2(1) of the Securities Act of 1933 defining "security" as including any "investment contract," and was therefore subject to the registration requirements of the Act. p. 328 U. S. 294-297, 328 U. S. 299. https://supreme.justia.com/cases/federal/us/328/293/

[134] Peter Van Valkenburgh, *Framework for Securities Regulation of Cryptocurrencies*, Coin Center Report (Aug. 2018). https://cnews24.ru/uploads/2a3/2a3f0ff0635225683a9966db8ed6d8bfc4a02412.pdf

[135] Securities and Exchange Commission v. W. J. Howey Co. Citation**.** SEC v. W. J. Howey Co., (U.S. May 27, 1946) https://www.casebriefs.com/blog/law/securities-regulation/securities-regulation-keyed-to-coffee/definitions-of-security-and-exempted-securities/securities-and-exchange-commission-v-w-j-howey-co/

controls the kind of a particular document or agreement, as defined by Section 2(a)(1)[136] of the Act. Howey is presenting a deal whereby investors can put money into a sizable citrus fruit plantation and receive a part of the earnings. For instance, the documents in this situation therefore serve as a proxy for the company's shares. The use of the sentence of SEC v Howey with conventional financial instruments has established precedences for many years. Nowadays, with the development of cryptocurrencies and blockchain technology, this test has become more and more important.

1.The four key requisites in defining a security

To truly understand its relevance, we'll look at the Howey Test's four key elements, and how they aid in recognizing securities in investment contracts. The Howey Test's initial prerequisite is financial investment. This implies that a monetary contribution[137] of some kind is necessary for a transaction to qualify as an investment contract. This investment may be made in numerous ways, including with money, real estate, or other valuable assets, and it basically involves giving money in exchange for the chance to take part in an enterprise.

The second requisite is the existence of a common enterprise.[138] A common business in this context describes a situation in which numerous investors pool their resources to support a single initiative. The success of the investment is frequently dependent on the combined efforts of various investors, highlighting the collaborative nature of the venture.

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[136] Id. supra 133

[137] As SEC explained in *The DAO Report*, "in determining whether an investment contract exists, the investment of 'money' need not take the form of cash" and "in spite of *Howey's* reference to an 'investment of money,' it is well established that cash is not the only form of contribution or investment that will create an investment contract." *SEC Issues Investigative Report Concluding DAO Tokens, a Digital Asset, Were Securities*, (Jul. 25, 2017) https://www.sec.gov/news/press-release/2017-131

[138] To fulfill the "common enterprise" component of the Howey test, federal courts require either "horizontal commonality" or "vertical commonality." On the other hand SEC specifies that it "does not require vertical or horizontal commonality *per se*, nor does it view a 'common enterprise' as a distinct element of the term 'investment contract.'" See: U.S. Securities Exchange Commission, *Framework for "Investment Contract" Analysis of Digital Assets*, (Modified: March 8, 2023), https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets

The third component of the test involves the expectation of profits, requiring that an investment contract must include the expectation that investors will get returns on their investment. This crucial profit expectation often indicates that investors are seeking to gain more from others' efforts than from their own direct involvement in the enterprise. Last but not least, the Howey Test's final criteria focuses on other people's efforts[139] as it states that in order for a transaction to qualify as an investment contract, the investment's performance and profitability must rely substantially on the efforts, knowledge, or managerial skills of a third person, sometimes known as a promoter or manager.[140] This component emphasizes the investors' roles in the investment contract as being passive.

In addition to this key requisites, it is crucial to state that the Howey test applies to any contract, scheme, or transaction, regardless of whether it possesses any of the characteristics of traditional securities.[141] The Howey analysis focuses not only on the instrument's form and terms, but also on the circumstances surrounding the digital asset and how it is offered, sold, or resold.[142] As a result, issuers and other individuals and businesses involved in the promotion, offer, sale, resale, or distribution of any digital asset must examine the relevant transactions to see whether federal securities laws apply.[143]

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[139] Id. supra 135

[140] Alisha Bains, *Howey Test, Explained*, CCN (Jul. 19, 2023) https://www.ccn.com/education/howey-test-definition/.

[141] Federal law, not state law, determines whether a contract, scheme, or transaction qualifies as an investment contract; this determination is independent of whether there is a formal contract between the parties. Instead under the *Howey* test, "form is disregarded for substance and the emphasis is on economic reality." *Howey*, U.S. The Supreme Court has also explained that the term security "embodies a flexible rather than a static principle" in order to meet the "variable schemes devised by those who seek the use of the money of others on the promise of profits."

[142] Id. Supra 137. See: *Framework for "Investment Contract" Analysis of Digital Assets*, Chap. I. INTRODUCTION (Modified: March 8, 2023), https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets

[143] Troy A. Paredes & Scott H. Kimped, *From Orange Groves to Cryptocurrency: How Will the SEC Apply Longstanding Tests to New Technologies?*, The Federalist Society Review (2019), I. Sec. 1. *The Investment Contract*

2. Application in the Cryptocurrency Landscape

Digital currencies are significantly challenging to classify. Due to their decentralized nature, they frequently avoid regulation.[144] The SEC has still expressed interest in digital assets and has worked to define when the sale of such assets constitutes an investment contract.[145] The SEC claims that the selling of digital assets easily satisfies the "investment of money" test since fiat money or other digital assets are being traded with the expectation of gains or profits. The "common enterprise" test can also be readily passed. The test has been employed by the commission on numerous occasions to bring legal action against cryptocurrency producers. The key challenge in examining a digital asset under the Howey test is whether the purchaser has a “reasonable expectation of profits”[146] (or other financial rewards) from the labor of others. A purchaser may anticipate a return through participating in distributions or by other means of enjoying asset appreciation, such as selling at a profit in a secondary market. This key feature of the test is met when a promoter, sponsor, other third party or any “Active Participant” (AP)[147] provides essential managerial efforts that affect the success of the enterprise, and investors reasonably expect to profit from those efforts. In order to evaluate whether this condition is met, the Test relies on several intricate factors. First of all, we must take into account the crucial question of whether these efforts carry significant management value for the project's success in order to fully evaluate this element. Whenever an AP takes the initiative to create a project or improve its functionality, investors may expect to make money from these initiatives. This component highlights how important the AP is to determine the project's course and,

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[144] Id. supra 130

[145] Fisher Hudson Brown Horton, *Decentralized Crytpocurrencies Typically fail the Howey Test*, https://fisherhudson.com/decentralized-cryptocurrencies-typically-fail-the-howey-test/

[146] Id. supra 135

[147] As stated, an Active Participant is “responsible for the development, improvement (or enhancement), operation, or promotion of the network” More on "Framework for 'Investment Contract' Analysis of Digital Assets." II. Application of Howey test to digital assets, subchapter C.“Reasonable Expectation of Profits Derived from Efforts of Others” U.S. Securities and Exchange Commission. https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets

consequently, the likelihood of investor success. The ownership or control of the related intellectual property rights to the digital asset is another factor that supports the "reasonable expectation of profits" requirement. When an AP controls the intellectual property that supports the asset, it may increase buyers' confidence that their investments will be profitable. The idea that ownership of these rights frequently translates into a larger degree of influence over the development of the asset and market performance is the basis for the relationship between intellectual property control and profit expectations. As a result, this aspect supports the claim that the AP's efforts are crucial in deciding the asset's profitability. Moreover, The Howey Test's "reasonable expectation of profits" requirement involves a complex analysis that takes into account a number of variables. In addition to the reliance on the efforts of others, ownership of intellectual property, it is relevant to consider also their control over the market, their managerial decision-making, and their ownership stakes. These elements highlight how difficult it is to evaluate digital assets in accordance with securities rules, demonstrating the dynamic nature of the bitcoin regulatory environment and the need for careful thought.

B. *Sec v Ripple - applying the Howey test*

In July 2023, the Southern District of New York court issued a summary judgment[148] in the matter of SEC v. Ripple, a blockchain developer that created the well-known cryptocurrency XRP.[149] In 2020, the SEC brought legal action against Ripple for making unauthorized offers and sales of stocks, which Ripple vigorously contested. Regarding sales to institutional and retail investors, both parties filed requests for summary judgment. Giving a brief background, early in 2012, Arthur Britto, Jed

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[148] UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK, Securities and Exchange Commission against Ripple Labs, https://www.nysd.uscourts.gov/sites/default/files/2023-07/SEC%20vs%20Ripple%207-13-23.pdf

[149] Binance, What is XRP Ledger? https://academy.binance.com/en/articles/what-is-xrp-ledger-xrpl

McCaleb, and David Schwartz worked together[150] to develop the core source code for a secure blockchain become known as the XRP Ledger.[151] Their main goal was to create a cryptographic ledger that could perform better than the original bitcoin network, which debuted in 2009, by providing faster processing, cheaper transactions, and more energy-efficient operations.[152] The source code of this ledger started producing a fixed quantity of 100 billion XRP tokens as soon as it was formally launched in 2012,[153] and in the same year, Arthur Britto, Jed McCaleb, and Defendant Larsen co-founded a company called Ripple.[154] In 2013, the company's founders raised money using XRP, resulting, in 2020, in a situation in which Ripple Labs and its current and former CEOs were sued by the United States Securities and Exchange Commission (SEC). The SEC's claimed that the company's leadership performed an initial public offering (IPO) of XRP, a cryptocurrency that was regarded as an unregistered securities during its capital-raising period. In this period of time, SEC complains that Ripple raised more than $1.3 billion[155] by selling its tokens to investors in the United States and around the world through unregistered security offerings, violating the registration restrictions stated in federal securities laws as they didn't meet the requirements for any exemptions from registration.[156] The Securities and Exchange Commission's action is focused on Section 5 of the Securities Act, which forbids the "offering or sale" of any "security" unless it is registered with the SEC or qualifies for an exemption. This framework divides securities offerings into three categories: registered, exempt, and illegal.

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[150] Id. supra 148. See I. Factual Background

[151] Id. supra 149

[152] Id.

[153] Id.

[154] Ripple was originally named NewCoin, Inc. and incorporated under California law. In 2013, the company was renamed Ripple Labs, Inc., and in 2014, it was incorporated under Delaware law.

[155] U.S. Securities and Exchange Commission. "SEC Charges Ripple and Two Executives with Conducting $1.3 Billion Unregistered Securities Offering." https://www.sec.gov/news/press-release/2020-338

[156] Coin Telegraph, *The SEC vs. Ripple lawsuit: Everything you need to know*, (2023) https://cointelegraph.com/learn/the-sec-vs-ripple-lawsuit-everything-you-need-to-know

Because neither side questioned the availability of an exemption in this case, the next question should have been whether these were illegal unregistered offerings.[157] The opinion reevaluated the original question based on the mode of sale rather than moving to the second phase of the analysis. This strategy not only departed from the framework of securities rules, but it also produced confusing results.[158] It's noteworthy that the court ruled that XRP could be considered an investment contract under certain conditions. It considered three different contexts: institutional sales, programmatic sales, and other distributions.[159] While institutional sales satisfied the Howey Test, as the court found that reasonable investors would have purchased XRP with the expectation that they would derive profits from Ripple's efforts,[160] programmatic sales and other distributions did not, as for Judge Torres XRP was sold on digital asset exchanges or through trading algorithms as blind bid/ask transactions and the recipients of other distributions did not pay any money or "some tangible and definable consideration" to Ripple.[161] Both parties have welcomed the judgment as a partial victory. The ruling is significant for cryptocurrency companies because it is the first time a US judge has ruled that a token issuer's sale of digital assets did not constitute a securities offering (at least in some instances). For the SEC, it supports the Commission's notion of Section 5 liability for the issuer of a token as a matter of law in certain types of sales, and confirms the staying power of the Howey test nearly eighty years later.[162]

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[157] Edwin Hu, *SEC v. Ripple: Everyone Loses*, The Columbia Law School Blue Sky Blog, (Jul. 18, 2023) https://clsbluesky.law.columbia.edu/2023/07/18/sec-v-ripple-everyone-loses/

[158] Id.

[159] See also: Sandali Handagama, *Ripple, Crypto Industry Score Partial Win in SEC Court Fight Over XRP*, COINDESK (Jul. 13, 2023) https://www.coindesk.com/policy/2023/07/13/sale-of-xrp-on-exchanges-not-investment-contracts-court-rules-in-sec-case-against-ripple/

[160] Stephen Aschettino, *US Federal Court issues mixed ruling in watershed SEC action on Ripple's XRP*, NORTON ROSE FULBRIGHT (Jul. 2023), https://www.nortonrosefulbright.com/en-us/knowledge/publications/74133d3b/us-federal-court-issues-mixed-ruling-in-watershed-sec-action-on-ripples-xrp

[161] Id. See also: Kevin George, *SEC v. Ripple - A court judgement decided that cryptocurrency is and isn't a security*, INVESTOPEDIA (Updated July 31, 2023) https://www.investopedia.com/sec-vs-ripple-6743752

[162] Id.

The fears after the Ripple's sentence are based on the assumption that a variety of transactions may be not considered as securities, which might undercut current securities legislation, and the feeling is that the regulatory supervision exercised by the SEC may be significantly impacted by this sentence.[163] Under this view, schemes meant to avoid initial coin offering scrutiny, such as Initial Decentralized Exchange offers, may argue that they do not constitute securities.[164] Nonetheless, this interpretation clearly contradicts existing securities rules, demanding a rapid investigation and potential reversal, and leaves open the question of whether secondary market sales of tokens constitute offers and sales of investment contracts, suggesting that the answer would depend on the totality of circumstances and the economic reality of the specific transaction.[165] Judge Torres has said that XRP sales fulfill the Howey test, which implies that unsatisfied institutional buyers may pursue remedies such as rescission, which may cost Ripple hundreds of millions of dollars.[166]

C. *Reflections - towards a digital future*

Several reflections about the court sentence in SEC v Ripple can be made. This latter emphasizes that the way in which a cryptocurrency is offered should not be used to establish whether it is classified as a security. This idea raises serious concerns regarding investor safety and the necessity for openness in digital currencies markets. The notion that institutional investors may not need the same amount of regulation protection as individual investors is intriguing, but it also raises worries about potential information gaps. The initial complaint in the case relies on the fact that a token has

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[163] See also Ruholamin Haqshanas, *What the Ripple (XRP) SEC Lawsuit Means For Crypto*, Technopedia (last updated 11 Sept. 2023) https://www.techopedia.com/what-the-ripple-xrp-sec-lawsuit-means-for-crypto

[164] Scott Mascianica & Jessica B. Magee, *SEC v. Ripple: When a Security Is Not a Security*, HOLLAND&KNIGHT, (Jul. 20, 2023) https://www.hklaw.com/en/insights/publications/2023/07/sec-v-ripple-when-a-security-is-not-a-security

[165] Id. supra 161

[166] Id. supra 157

been distributed, with respect to both professional investors or consumers investors, a direct negotiation of Ripple should implicate that the token should theoretically be considered a security, regulated and filed as such. Who was buying knew that he was investing in assets which depended exclusively on the outgoing of Ripple's company performances, it is logical to think that such investments should be regulated as investment contracts and the sentence in SEC v Ripple partially confirms this belief. The concerns raise in the moment in which it is made a distinction between professional investors, who have a direct negotiation with Ripple, and investors consumers, who rely on digital platform to purchase crypto-tokens, defining cryptocurrencies as securities in the first case and not in the latter one. Same tokens, same performances, same promised profit, different conclusion depending on the interlocutor. So are we sure that this court sentence, which should bring clarity to a blurred legal topic such as regulating digital currencies, is morally and legally correct and doesn't only arise more confusion among people, investors and companies? Shall United States legal authorities still rely on the Howey test as a milestone in processing and regulating virtual currencies or shall it be considered obsolete? For example future situations in which companies rely on digital middle platforms not dealing directly with another company in order to avoid regulations are not unrealistic or, even worse, companies could take advantage of the Southern District Court of New York sentence to justify their malicious acts or intentions and escape legal matters.

One thing is for sure, the lack of a unified legal framework in the long-term would result in the maintenance of the current patchwork of state laws, in which states that have enacted crypto-friendly policies, such as Wyoming, may continue to attract crypto enterprises, whilst others may impose harsher limits or bans. What will happen in the future is yet to be discovered and the absence of regulatory certainty around cryptocurrencies in the United States has left the industry in a sort of limbo, rising conflicting opinions and a feeling of ambiguity stemming from legal decisions such as SEC v Ripple. The actions of regulatory authorities, Congress, industry participants, and

the large crypto community in navigating this complicated and dynamic ecosystem will have a huge impact on future possibilities.

V. CONCLUSION

We've seen how rapidly the world of cryptocurrencies and blockchain technology is evolving, capturing the attention of investors, innovators and regulators. We've gone through a deep vision of the wide landscape of cryptocurrencies focusing on its key features and their regulatory environment in the United States. This study highlighted the opportunities of an unescapable and increasingly digital future, firstly treating the main characteristics of virtual currencies, dealing with its decentralized nature and emphasizing the key factors that will lead this modern financial system to become increasingly more popular, yet putting in evidence the need for clear, just and restrictive framework analyzing threats and challenges that could occur in the process of regulating cryptocurrencies.

The focus on Wyoming's crypto-friendly approach demonstrates the potential benefits of embracing this technology, nevertheless placing the focal point on the different approaches adopted by the various government agencies involved in regulating cryptocurrencies, passing through SEC's "Howey test" to determine whether a cryptocurrency met the requirements to be considered a security, CFTC official classification of digital assets as commodities, and FinCEN public statement clarifying and defining the roles and responsibilities of virtual currency users, administrators and exchangers, highlighting a certain confusion and lack of an unifying approach.
The sentence given in Sec v Ripple is arising several conflicting opinions, and it is likely that in the near future more legal cases will follow suit, leaving us space for imagination and questions over what awaits us next, yet serving as a warning that the

legal environment surrounding cryptocurrencies is still changing and that every decision could have an impact on how the sector develops in the future.

In conclusion, the cryptocurrency and blockchain ecosystem is an enthralling area characterized by rapid innovation and evolving regulations. In order to properly explore this uncharted area, it is essential to understand the possible benefits and risks of these technologies. Wyoming's progressive regulatory approach, the activities of government organizations such as the SEC, and the volatile legal landscape around cryptocurrencies all highlight the importance of continual debate and adaptation.

The "Howey test" and the SEC v. Ripple case point out the complexities of categorizing cryptocurrencies as securities, as well as the possible implications for the sector. The future prospects for cryptocurrencies in the American legal landscape are complex and uncertain, yet, they holding out an opportunity of further innovation, economic growth, and financial inclusion.

In this constantly evolving surroundings, regulators, industry participants, and stakeholders must work together to collaborate, adapt, and strike a delicate balance between regulation and innovation. The journey towards a digital future is filled with uncertainty, but it has the potential to reshape how we interact with money, technology, and the financial world. As we progress, we must approach this digital frontier with an open mind, a dedication to acquiring knowledge, and a commitment to develop a future that benefits us all.

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