



Emerging Regulatory Challenges on The Value and Future of Cryptocurrency Exchange Business

Collins Ngwakwe¹

Abstract: The objective of this paper is to appraise the regulatory challenge facing the cryptocurrency industry with attendant financial value implication following the current SEC's legal action and to provide an insight into the future of cryptocurrencies in the face of uncertain regulatory environment. The prior work inclination is on extant regulatory information, declarations, and commentaries on the cryptocurrency industry such as the SEC, the DOJ and financial publications. The approach combines a discursive analysis of documented commentaries and brief numerical share value analysis. Findings show, among others, that regulators around the world are still coming to terms with the uniqueness and intractable characteristic of cryptocurrency asset, hence current variegated regulations, and legal recognitions. Furthermore, findings show that the recent SEC's lawsuit against Binance and Coinbase had a significant impact on their share prices and additionally caused a negative ripple on the share price of some other cryptocurrencies. The findings have implications for cryptocurrency investors and operators for investment and strategic policy decisions in the face of uncertainty in cryptocurrency regulatory environment. It also provides a useful current case study for business schools and an agenda for further study with a larger pool of cryptocurrency companies facing regulatory threat. The paper contributes a novel weaving of financial ramifications of uncertain regulatory actions on cryptocurrency companies.

Keywords: Cryptocurrency regulation; cryptocurrency value; share Price; decentralized exchange; cryptocurrency exchange; regulatory authority

1. Introduction

Like other businesses, it is imperative for cryptocurrency investors and operators to engage in business environment analysis about the risks and opportunities implicit in uncertain regulatory and dynamic environment of cryptocurrency business operations and the future of crypto investments they may be considering (TechCrunch, 2023). The need for caution has become more apposite given the

¹ University of Limpopo, Address: Graduate School of Leadership, Edupark, Webster Street, Polokwane, 0727, South Africa, Corresponding author: collins.ngwakwe@ul.ac.za.

emerging regulatory actions which beclouds the operation of cryptocurrency companies and the apparently uncertain future thereof (MarketWatch, 2023; Wall Street Journal, 2023; CMBC, 2023). The uncertainty and seemingly attendant crypto investment jittery emerged recently as some crypto companies such as Binance and Coinbase came under the Securities and Exchange Commission (SEC) regulatory scrutiny (see: SEC, 2023a, for Binance charge & SEC, 2023b, for Coinbase charge). The SEC alleges some regulatory breach, which thus pose unprecedented financial risk to investors in cryptocurrencies.

Accordingly, the SEC's immediate release of June 5, 2023, pronouncement on Binance reads as follows:

“Washington D.C., June 5, 2023 — The Securities and Exchange Commission today charged Binance Holdings Ltd. (“Binance”), which operates the largest crypto asset trading platform in the world, Binance.com; U.S.-based affiliate, BAM Trading Services Inc. (“BAM Trading”), which, together with Binance, operates the crypto asset trading platform, Binance.US; and their founder, Changpeng Zhao, with a variety of securities law violations” (SEC, 2023a, p. 1).

Furthermore, the second SEC's immediate release of June 6, 2023, pronouncement on Coinbase reads as follows:

“Washington D.C., June 6, 2023 —The Securities and Exchange Commission today charged Coinbase, Inc. with operating its crypto asset trading platform as an unregistered national securities exchange, broker, and clearing agency. The SEC also charged Coinbase for failing to register the offer and sale of its crypto asset staking-as-a-service program” (SEC, 2023b, p. 1).

The SEC's recent regulatory announcement on Binance and Coinbase caused a temporary plummeting of the share price values of Binance and Coinbase (at least on the day of SEC's legal action announcement), which thus affected the investors (Investing, 2023; Forbes, 2023; Trading Economics, 2023). On the contrary, the trading volume of other top three decentralized exchanges (DEX) cryptocurrencies made an upward trading volume gain up to 444% soon after the SEC's pronouncement of legal actions against Binanace (CoinTelegraph, 2023a). The CoinTelegraph (2023a) captures the attendant abnormal trading volume increase in other top three decentralized exchanges as follows:

“... total daily trading volumes on Uniswap v3 (Ethereum), Uniswap v3 (Arbitrum) and PancakeSwap v3 (BSC) — which account for 53% of the total DEX trading volume in the last 24 hours — increased by more than \$792 million between June 5 and June 7” (CoinTelegraph, 2023a, p. 2).

According to the behavioural finance and the Efficient Market Hypothesis, both economic, social, environmental, and political news contributes to the factors that cause fluctuations in security market values (Kang, Lee & Park, 2022). Hence, it is not surprising that the news about the SEC’s legal action on Binance orchestrated market value ripples for Binance and other decentralized exchanges (DEX) (see example: CoinTelegraph, 2023a). This thus reminds investors about the somewhat obscured regulatory risks that crypto investors may face within the medium to long term until such a future time when the cryptocurrencies may have been accommodated under the control of global governments’ exchange regulations. However, it is also important for investors to understand that albeit the currently covert regulatory risk in crypto assets, there is also opportunities for investors to engage in cryptocurrency hedging with an opportunity to profit from a careful learning about when to buy short or buy long in cryptocurrency market by taking advantage of news that may trigger low and high sales and value fluctuations in different cryptocurrency markets.

2. Problem of the Paper

Regulatory challenges on crypto currencies appear to be increasing, with the instances recently emerging in the USA, such the recent SEC’s legal action against Binance and Coinbase. Investors have thus become jittery about the recent regulatory developments; therefore, both the investors and academics need a current insight into the latest developments about regulators’ actions that may impact the functioning of cryptocurrencies (in the medium and long term). Given therefore the current SEC’s legal action on Binance and Coinbase, there is currently a paucity of research reviews on the current regulatory challenges, the value and future of cryptocurrencies. This paper contributes to the literature on cryptocurrencies by providing an insight into the latest developments on the regulatory challenges that may also spiral into other cryptocurrencies both in the medium-term and in the future.

3. Objective of the Paper

The objective of this paper therefore is to provide an evaluation of current regulatory challenge facing the cryptocurrency particularly the Binance and Coinbase; to assess their values following the SEC's legal action and to provide a general overview of the future of cryptocurrencies in the face of current uncertainty in regulatory environment.

4. Method

The paper applies a mixed approach. Firstly, it provides a brief discursive review of latest issues on cryptocurrency lawsuit and/or enforcement. It then proceeds with a brief numerical evaluation of the financial value implications of cryptocurrency enforcement using the latest lawsuits on Binance and Coinbase on June 5 and June 6, 2023, with share price data from Investing (2023). The paper also provides a discursive insight into the future of cryptocurrencies for the benefit of investors and cryptocurrency business operators.

5. Emerging Regulatory Challenge on Cryptocurrency

The early days of the emergence of cryptocurrency attracted little or no attention from regulatory authorities around the world. In about ten years or so of cryptocurrency invention, events around its existence and operations seem to suggest it is still developing. This is because, as pointed out by cryptocurrency scholars, there is still insufficient ascribed definitions and taxonomies; furthermore, standards and regulations are apparently weak and/or incoherent (where available) (Morton, 2020). It does seem also that the complex characteristics of cryptocurrencies appear to overwhelm adequate grip of regulatory authorities. It requires a painstaking effort to explore and analyse the nitty-gritty of cryptocurrency risks and potentials that could strike a balance between a sustainable development of cryptocurrencies and prevention of any nefarious practices that may lay covert in the operations (Morton, 2020).

Perhaps, the recent wave of SEC's crypto action may have been orchestrated by events surrounding the collapse of crypto giant FTX by end of 2022. The name FTX– was used as the shorter name for a cryptocurrency exchange company whose full name was Futures Exchange. The FTX became one of the top cryptocurrency exchange companies that was popularised for specialising in purchasing and selling of cryptocurrencies and derivatives. Its outstanding performance saw the company's value reaching up to \$40 billion before uncertain business events

played havoc and diminished the celebrated prosperity (Forbes, 2023). According to Forbes, the FTX collapse was rooted in sudden liquidity crises, which emanated from amongst others the movement of FTX funds to another company and the selling of Binance FTT token with attendant rush in investors' jittery withdrawals (Forbes, 2023). The dismal failure of FTX attracted the attention of the United States Department of Justice (DOJ) who brought eight count charges on the former FTX CEO (US DOJ, 2022). The collapse of FTX brought about a closer attention of the Security and Exchange Commission (SEC) to the operations of cryptocurrency industries. It is estimated that within six months after the collapse of FTX, SEC's crypto actions has increased by around 183% Cointelegraph (2023b). Hence, there is apparent jittery that the growing SEC's regulatory attention on the crypto industry might portend an ominous signal regarding the future of cryptocurrency industry.

As an example of increasing SEC's action on cryptocurrency, Cointelegraph (2023b), provides a helpful chronology of SEC's cryptocurrency action since 2018. According to this chronology, the first six months and second six months of 2018 recorded two and three SEC's enforcement actions on cryptocurrencies respectively. For the year 2019, the first six months and second six months of 2019 recorded two and one SEC's enforcement actions on cryptocurrencies respectively. For the year 2020, the first six months and second six months of 2020 recorded three and three SEC's enforcement actions on cryptocurrencies respectively. For the year 2021, the first six months and second six months of 2021 recorded three and two SEC's enforcement actions on cryptocurrencies respectively. For the year 2022, the first six months and second six months of 2022 recorded six and twelve SEC's enforcement actions on cryptocurrencies respectively. Recently in the year 2023, the first six months of 2023 recorded 17 SEC's enforcement actions, excluding the latest lawsuits filed on June 5 2023 against Binance and on June 6 2023 against Coinbase (see: Cointelegraph, 2023b, p.2).

As a continuation of SEC's increasing watch on cryptocurrency exchange business, the beginning of June 2023 saw yet another episode of crack-down on cryptocurrency business by SEC. In the week of June 5 2023 the Securities and Exchange Commission initiated a legal action against two main cryptocurrency exchanges namely the Binance and the Coinbase. Albeit the legal action alleges different charges but apparent commonality in the two SEC's actions is the accusation that both operate unregistered security exchange systems; however, both companies denied the charges (MarketWatch, 2023; SEC, 2023a; SEC, 2023b).

This re-emergence of SEC's action has brought a somewhat air of uncertainty about the regulation of cryptocurrency exchanges and has affected the prices of cryptocurrencies; whether these actions may deter cryptocurrency investors is yet uncertain, but constitutes a concern for the industry and investors (MarketWatch, 2023).

On a global level, there remains apparent uncertainty about the real nature of cryptocurrency asset and, hence, how to formulated enabling regulations. Hence different countries have had mixed approach and varied legal recognition ranging from legally recognised, partially recognised to not recognised yet pending future clarities. Table 1 show a sample status of cryptocurrency in few select countries.

Table 1. Cryptocurrency Regulatory Status in Select Countries

| COUNTRY/REGION | CRYPTOCURRENCY & CRYPTOCURRENCY EXCHANGES LEGAL RECOGNITION |
|----------------|---|
| USA | Not a legal tender in the USA cryptocurrency exchanges have some form of legal status in the US, however, there are variations relative to each state of operation |
| UK | Not a legal tender in the UK cryptocurrency exchanges have some form of legal status in the UK; they undergo registration requirements with FCA Transaction gain and loss arising from cryptocurrencies are subjected to capital gains tax compliance and corporate tax |
| EU | There is a form of cryptocurrency Legality in the EU; although cryptocurrency exchanges are legal EU, there is regulation variation according to member states |
| Australia | Cryptocurrency is legal but regarded as property. The cryptocurrency exchanges are accorded legal status only after undergoing successful registration with AUSTRAC |
| China | Unlike other countries and/or regions with a form of legality on cryptocurrency, it is illegal in the Peoples Republic of China. |
| South Africa | Cryptocurrency has a legal recognition in South Africa; |
| India | There is a partial ban for cryptocurrency in India |

Source: Table by author with data from ComplyAdvantage (2023); Hicks (2023); Atlantic Council (2023); Thomson Reuters (2022)

Overall, the countries that have accorded a legal recognition to cryptocurrency have applied some stringent regulatory requirements meant to instil sanity and public protection. A summary of countries' regulatory activities on cryptocurrency by Atlantic Council (2023) reads as follows:

“Countries regulate actors in the crypto sector using tax policy, requirements to combat money laundering and terrorist financing, consumer protection rules, and licensing and disclosure obligations” Atlantic Council(2023, p.2).

6. Value Reaction Following Recent Sec’s Legal Action

A share price mean-differential probability analysis in Table 2 to Table 3 and in Figure 1 and Figure 2 show that the SEC lawsuit caused a significant negative effect on the share price of Binance and Coinbase as their share prices performed better during the seven days before the SEC’s lawsuit and with reduction in performance within the seven days following the SEC’s lawsuit. Binance 0.000075583 and 0.000151166 at two tail probability tests. Coinbase 0.000740757 and 0.001481514 at two tail probability tests.

Table 2. Difference in Binance Mean Share Price (a Week Before & During SEC Case)

| | <i>Binance Share Price BeforeSEC-Case</i> | <i>Binance Share Price DuringSEC-Case</i> |
|------------------------------|---|---|
| Mean | 307.6428571 | 259.1285714 |
| Variance | 7.736190476 | 299.2757143 |
| Observations | 7 days before SEC’s case | 7days during SEC’s case |
| Hypothesized Mean Difference | 0 | |
| df | 6 | |
| t-stat | 8.438289334 | |
| P(<=t) one-tail | 0.000075583 | |
| Critical one-tail | 1.943180281 | |
| P(<=t) two-tail | 0.000151166 | |
| Critical two-tail | 2.446911851 | |



Figure 1. Bar Graph: Binance Mean Share Price (A Week Before & During SEC Case)

Table 3. Difference in Coinbase Mean Share Price (a week before & during SEC’s Case)

| | <i>Coinbase Share Price Before SEC-Case</i> | <i>Coinbase Share Price during SEC-Case</i> |
|------------------------------|---|---|
| Mean | 60.57 | 52.8442857 |
| Variance | 9.721566667 | 2.10699523 |
| Observations | 7 | |
| Hypothesized Mean Difference | 0 | |
| df | 6 | |
| t Stat | 5.523920517 | |
| P(T<=t) one-tail | 0.000740757 | |
| t Critical one-tail | 1.943180281 | |
| P(T<=t) two-tail | 0.001481514 | |
| t Critical two-tail | 2.446911851 | |



Figure 2. Bar Graph: Coinbase Mean Share Price (a week before & during SEC’s Case)

6.1. Share Price Implosion of some Major Cryptocurrencies on 5 June 2023

As reflected in the extant Efficient Market Hypothesis literature, news affects stock performance (Kim & Willett, 2014). Similarly, the news of recent SEC’s regulation actions on Binance on the 5th of June 2023 caused some implosion (losses in the share of some Crypto currencies). Major share prices of cryptos came tumbling down as investors became jittery about the uncertainties of Binance SEC’s lawsuit Lange, Mccrank and Carew (2023). A somewhat involuntary reaction by risk-averse investors on negative commercial news often causes a concomitant negative effect on share prices of the company involved and may also ripple into other companies in the same industry (see example: Haslem, Hutton & Smith, 2017). A typical example of negative impact on share price can be seen in Table 4 following the announcement on June 5 2023 of SEC’s charge on Binance caused significant

drop on the share price of Binance to about -9.18%, on Coinbase, about -9.05%, on Bitcoin, a drop of about -5.07% and on other cryptocurrency companies.

Table 4. Share Price Implosion of some Major Cryptocurrencies on 5 June 2023

| Cryptocurrency | Share Price Implosion on 5 June 2023 |
|----------------|--------------------------------------|
| Binance | -9.18% |
| Coinbase | -9.05% |
| Bitcoin | -5.07% |
| | |

Source: author's table with data from Investing (2023).

7. The Uncertain Future of Cryptocurrency for Investors

Experts forecast two uncertainties regarding the future of cryptocurrency industry – a reduction in growth of cryptocurrency industry or a legally determined scope of SEC's control. Hence, in their analysis of current ongoing legal challenge brought by SEC AP News (2023) expatiates the likely future sentiment as follows:

“What results from the legal battle could greatly diminish the growth of the crypto industry or, alternatively, restrict the scope of the SEC's regulatory authority” (AP News, 2023, p. 2).

The above sentiment creates both an investment risk and opportunity for cryptocurrency investors and the industry at large. Should the scope of control by SEC be limited by law at the end of current legal challenges, it will mean that the cryptocurrency industries would have more flexibility to operate outside of the boundaries of the SEC, but if current legal challenges succeeds in bringing the cryptocurrency industry operations strictly under SEC's control, the industries' leeway will be bridled, and will have a somewhat effect on future boisterous growth. This uncertainty calls for caution on the part of cryptocurrency industry and investors (at least within the short to medium term). In the meantime, diversification (both in portfolio of offerings and locations) remain veritable opportunities that could obviate potential business failures such those seen in FTX (Cointelegraph, 2023b).

“The future of crypto-asset regulation in the U.S. is not fully predictable,” said Yuliya Guseva, a law professor at Rutgers University and head of the school's blockchain and fintech program” (quoted by: Keshner, 2023, p2).

But who really is the SEC going after – the users' money and assets or the business; analysts indicate that the SEC's lawyers appear to be pursuing 'disgorgement' – a legal remedy that seeks to recover profits made when not

complying with regulations (see example: Keshner, 2023, p2). In this case, the users or investors appear to be safe (at least in the interim), interim because, depending on the amount, the aftermath of a successful disgorgement itself might be devastating for the sustainable existence of a company (Keshner, 2023). Furthermore, the final court decisions on the ongoing SEC's cases about the regulatory compliance of cryptocurrency exchange operations will provide answers regarding "what and when digital assets are considered securities" (Keshner, 2023, p. 2). It is hoped that answers to this and other current uncertainties will be unravelled soon. Until such a time that current regulatory environment for the operating of cryptocurrency exchanges become clear, investors, users and the cryptocurrency businesses have to contend with the risks and opportunities that every business uncertainty offers. The short to medium term coping amidst uncertainties requires learning with available information, ability to sieve and ability to extrapolate. At the moment, investors are urged not to 'put all their eggs in one basket' – as the current uncertainties around cryptocurrency exchanges require astute investment portfolio diversification.

The future of cryptocurrency will seemingly be determined by the improved ability of regulators to craft an asset niche for cryptocurrency given that the current asset class of cryptocurrency fails to fit closely within any category of existing asset classes (Hicks, 2023). Yet the FTX collapse toward the end of 2022 has created more urgency for regulators to increase oversight and map out fitting regulations for cryptocurrency. Furthermore, experts advise that the operators and users of cryptocurrency industry may not be complacent in believing that crypto industry will escape tighter regulation in the future (Hughes & Middlebrook, 2014).

7.1. Implications

This paper provides current case discussion for business schools' corporate governance classes. It also provides an agenda for further research explorations on the financial implications of regulatory crack-down and regulatory uncertainty on cryptocurrency industry. In addition, the discussions and the results of the paper are useful for investors and managers of cryptocurrency companies for investment decisions and policy directions respectively.

7.2. Value (Contribution)

This paper contributes to the professional and academic discussions on cryptocurrency; specifically, the value of this paper draws from the novel joint weaving of regulatory and financial ramifications of current Security and Exchange Commission crack-down on some cryptocurrency companies. The paper thus demonstrates how regulation and financial performance are inextricably entwined.

8. Conclusion

This paper aimed to provide a brief assessment of ongoing SEC's regulatory compliance actions and the financial effect thereof on the cryptocurrency industry particularly through the lens of recent SEC's actions on Binance and Coinbase. The paper highlights the emergence of cryptocurrency regulation and provides a value impact assessment following the current SEC's legal action on Binance and Coinbase. Thereafter the paper provides a highlight on the future of cryptocurrencies in the face of current uncertainty in regulatory environment. A qualitative review indicates that SEC's current lawsuit against Binance and Coinbase might be signalling more regulatory uncertainties, which beclouds clarity about the future of cryptocurrency business. On the one hand, the success of current SEC's lawsuit might be a steppingstone towards determining the regulatory boundaries for Cryptocurrency industry. On the other hand, failure of the current lawsuit might lead to SEC's future alternatives on bringing the cryptocurrency within a comforting regulatory control for the benefit of investors and operators. Furthermore, as regards the value implication of recent SEC's lawsuit against Binance and Coinbase, a brief share price mean-differential probability analysis show that the SEC lawsuit caused a significant negative effect on the share price of Binance and Coinbase as their share prices performed better during the seven days before the SEC's lawsuit but with a reduction in performance within the seven days following the SEC's lawsuit. Accordingly, the share price implosion following SEC's legal action against the cryptocurrency industries provide vital information for investors, analysts, and crypto-industry operators for decision-making and strategic policy directions when SEC's action is anticipated or uncertain. This paper provides an opportunity for wider research that may consider the inclusion of more cryptocurrencies from many other countries in the analysis to provide wider insights into the phenomena of cryptocurrencies' regulatory environment and the implications, including financial value and uncertainties therefrom.

References

*** (2023). *Wall Street Journal*. SEC Says Binance Misused Customer Funds, Ran Illegal Crypto Exchange in U.S. <https://www.wsj.com/articles/sec-sues-crypto-exchange-binance-over-u-s-rule-violations-6918ed0f>.

Atlantic Council (2023). *Cryptocurrency regulation tracker*. <https://www.atlanticcouncil.org/programs/geoeconomics-center/cryptoregulationtracker/#:~:text=Amongst%20the%2045%20countries%20we,consideration%20in%20all%20G20%20countries>.

CMBC (2023). *SEC sues Binance and CEO Changpeng Zhao for U.S. securities violation*. <https://www.cnbc.com/2023/06/05/sec-sues-binance-and-ceo-changpeng-zhao-for-us-securities-violations.html>

Cointelegraph (2023a). *SEC crackdown on Binance and Coinbase surge DeFi trading volumes 444%*. <https://cointelegraph.com/news/sec-coinbase-binance-lawsuits-surge-defi-trading-volumes>

Cointelegraph (2023b). *SEC's crypto actions surged 183% in 6 months after FTX collapse*. <https://cointelegraph.com/news/sec-crypto-lawsuit-increased-six-months-following-ftx-binance-coinbase>.

ComplyAdvantage (2023). *Cryptocurrency Regulations Around The World*. available at: <https://complyadvantage.com/insights/cryptocurrency-regulations-around-world/>.

Forbes (2023). *Binance Will Stop Trading US Dollar Amid SEC Lawsuit*. <https://www.forbes.com/sites/katherinehamilton/2023/06/09/binance-will-stop-trading-us-dollar-amid-sec-lawsuit/?sh=7403b5793af5>.

Forbes (2023). *What Happened To FTX? The Crypto Exchange Fund's Collapse Explained*. <https://www.forbes.com/sites/darreonnadavis/2023/06/02/what-happened-to-ftx-the-crypto-exchange-funds-collapse-explained/?sh=5933f4373cb7>.

Haslem, B.; Hutton, I. & Smith, A. H. (2017). How much do corporate defendants really lose? A new verdict on the reputation loss induced by corporate litigation. *Financial Management*, 46(2), pp. 323–358.

Hicks, (2023). *Cryptocurrency Regulations Around The World*, *Forbes*. Available at: <https://www.forbes.com/advisor/investing/cryptocurrency/cryptocurrency-regulations-around-the-world/>.

Hughes, S. J. & Middlebrook, S. T. (2014). Regulating cryptocurrencies in the United States: Current issues and future directions. *William Mitchell Law Review*, 40(813). <https://ssrn.com/abstract=2410400>.

Investing (2023). *BNB/USD Binance Historical Data*. <https://za.investing.com/crypto/bnb/bnb-usd-historical-data> (also for Coinbase and Bitcoin historical data).

Kang, H. J.; Lee, S. G. & Park, S. Y. (2022). Information efficiency in the cryptocurrency market: The efficient-market hypothesis. *Journal of Computer Information Systems*, 62(3), pp. 622-631.

Karisma, K. (2022). Comparative Review of the Regulatory Framework of Cryptocurrency in Selected Jurisdictions. *Regulatory Aspects of Artificial Intelligence on Blockchain*, pp. 82-111.

Keshner, P. (2023). As SEC brings charges against Binance and Coinbase — watch out for three red flags before investing in crypto. MarketWatch. available at, https://www.marketwatch.com/story/as-sec-brings-charges-against-binance-and-coinbase-watch-out-for-three-red-flags-before-investing-in-crypto-1a63e554?cx_testId=3&cx_testVariant=cx_164&cx_artPos=6&mod=WTRN#cxrecs_s.

- Kim, Y. & Willett, T. D. (2014). News and the behavior of the Korean stock market during the global financial crisis. *Korea and the World Economy*, 15(3), pp. 395-419.
- Lange, H.; McCrack, J. & Carew, S (2023). *Crypto shares tumble as Binance SEC lawsuit ripples through industry*. Available at: Reuters. <https://www.reuters.com/markets/us/crypto-shares-tumble-after-us-sec-charges-binance-with-securities-law-violations-2023-06-05/>.
- MarketWatch (2023). As SEC brings charges against Binance and Coinbase — watch out for three red flags before investing in crypto, https://www.marketwatch.com/story/as-sec-brings-charges-against-binance-and-coinbase-watch-out-for-three-red-flags-before-investing-in-crypto-1a63e554?cx_testId=3&cx_testVariant=cx_164&cx_artPos=6&mod=WTRN#cxrecs_s
- Morton, D. T. (2020). The future of cryptocurrency: an unregulated instrument in an increasingly regulated global economy. *International Law Review: School of Law*, 16, p. 129.
- SEC (2023a). *SEC Files 13 Charges Against Binance Entities and Founder Changpeng Zhao*. <https://www.sec.gov/news/press-release/2023-101>
- SEC (2023b). *SEC Charges Coinbase for Operating as an Unregistered Securities Exchange, Broker, and Clearing Agency*. <https://www.sec.gov/news/press-release/2023-102#>.
- TechCrunch (2023). *The FTX implosion is an opportunity to learn*. <https://techcrunch.com/2022/11/17/the-ftx-implosion-is-an-opportunity-to-learn/>
- Thomson Reuters (2022). *Cryptocurrency regulations by country*. Available at: <https://www.thomsonreuters.com/en-us/posts/wp-content/uploads/sites/20/2022/04/Cryptos-Report-Compendium-2022.pdf>.
- Trading Economics (2023). *BNBUSD Binance / US Dollar*, <https://tradingeconomics.com/bnbUSD:cur>.
- US DOJ (2022). *United States Attorney Announces Charges Against FTX Founder Samuel Bankman-Fried*. <https://www.justice.gov/usao-sdny/pr/united-states-attorney-announces-charges-against-ftx-founder-samuel-bankman-fried>.