

Bitcoin: The nexus between regulation and recognition

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ABSTRACT

The article analyses the current issues contributing to the volatility of Bitcoin as the reliability of this new technology diminishes, leading to increased unpredictability of its value. Legal efforts and literature regarding Bitcoin have primarily focused on protecting society from the illegal use of this digital technology, with little emphasis on integrating it as an asset. However, this article proposes that countries adopt Bitcoin-related legislation, incorporating recognition and regulation clauses to transform Bitcoin into a stable, less volatile and functional digital asset. In the context of legal history, primary legal domains, such as contracts, family, trade and others, have been integrated through recognition and regulation processes. Therefore, we argue that adopting Bitcoin-specific legislation that recognizes this new technology while comprehensively regulating the associated risks would enhance the coin's stability and reduce volatility, ultimately increasing trust among digital investors and users.

KEYWORDS

Bitcoin, regulation, recognition, digital asset, cryptocurrency

JEL CLASSIFICATION INDICES

K10, K20, K24, 030

1. INTRODUCTION

Bitcoin, the primary cryptocurrency with the highest market capitalization among all digital currencies, has emerged as a ground-breaking innovation in the world of digital assets. Bitcoin is

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one of the greatest innovations of digital assets that brings diversity of property. The decentralized system introduced in 2009 has become a point of excitement and intellectual debate for different reasons. It brings an unconventional way of dealing with transactions with its small processing time, ease of making international transfers, and low or non-transaction fees without a central authority.

At the earliest stage of Bitcoin, it was introduced with no value. However, after 10 years, in 2010, it began to gain value in terms of U.S. dollars, and its nominal value significantly increased after 2011. Due to the global pandemic in 2019–2021, Bitcoin soared further in unprecedented amounts and reached an all-time high in November 2021 with a value of \$68,991 (Hong – Yoon 2022). In 2022, the number of Bitcoin wallet users surged to approximately 81 million, a significant increase from just 100,000 users in 2011. The overall population of cryptocurrency users experienced a remarkable 190% growth between 2018 and 2020. In terms of market capitalization, during its peak in October 2021, it had a total value of more than USD 1 trillion, even though it later slipped back in May 2022 (Özdemir 2022). Nonetheless, the market capitalization, the user base, and the influence of Bitcoin on the economic landscape are still anticipated to undergo substantial expansion in the foreseeable future.

Considering the progress made by Bitcoin thus far, concerns have arisen due to its inherent volatility in terms of value and the ongoing debate regarding its classification as a currency or a digital asset (these matters will be explored in detail later). One of the primary criticisms asserts that it lacks intrinsic value, contrasting it with the tangible assets like real estate or stocks, which represent ownership in operating businesses. Instead, Bitcoin's value relies on the consensus of its users. However, user consensus is not the sole determinant of Bitcoin's value. In practice, the system designed to bring stability to the cryptocurrency has proven to be volatile and susceptible to the intricacies of the real-world business environment. It experiences fluctuations during attempts at regulation and in response to political and financial instability. The contemporary trend surrounding Bitcoin centres less on its utility as a medium of exchange for transactions and more on pursuing profit by exploiting its price fluctuations for arbitrage. This study posits that volatility could be mitigated through an act of legal recognition, which would bring formality and legal legitimacy to cryptocurrencies.

Four key dilemmas are examined. The first Section is scrutinizing Bitcoin's volatility, encompassing considerations surrounding the collapse of cryptocurrency exchange platforms, notably the instances of Terra USD (UST)¹ and the recently failed FTX crypto exchange platform.² Within this context, it is contended that Bitcoin's resilience is underpinned by its extensive user base, robust public blockchain technology supported by numerous dedicated computer nodes, and its dominant market share. Nevertheless, the volatility in its value remains a persistent concern, underscoring the necessity of official recognition by governmental authorities to enhance user trust further. The second Section delves into the correlation between economic sanctions and the utilization of Bitcoin. Focusing on the specific case of sanctions imposed on Russia in response to its war against Ukraine, an analysis is conducted to evaluate Bitcoin's

¹TerraUSD (UST) is the decentralized and algorithmic stablecoin of the Terra blockchain. Its value is pegged 1:1 to the US dollar.

²FTX is now a bankrupt company that formerly operated a fraud-ridden cryptocurrency exchange and crypto hedge fund.



potential capability in enabling a sanctioned nation to evade the repercussions of such international restrictions. The argument posits that Bitcoin is less likely to facilitate a nation's evasion of international sanctions arising from the established international norms violations. Instead, the study asserts that Bitcoin's primary utility may lie in its capacity to aid nations in crisis by mobilizing funds from the international community and facilitating digital transactions in situations where access to traditional hard currency is restricted or minimal. The third Section focuses on a fundamental dilemma concerning the nature of Bitcoin, pondering whether it should be classified as a currency or a digital asset. In this context, the research contends that Bitcoin does not possess the essential attributes of a conventional currency, instead displaying distinct characteristics inherent to a digital asset. This distinction forms the foundation for a more nuanced understanding of Bitcoin's role and potential utility. Finally, we address the significance of legal recognition in fostering stability within the Bitcoin ecosystem, concluding that the formal recognition of Bitcoin holds the potential to yield superior outcomes in stabilizing the cryptocurrency, as opposed to an exclusive focus on the regulatory measures.

The overarching concern of Bitcoin's volatility is a prevailing issue, whenever its value exhibits large daily fluctuations, thereby undermining predictability. Considering this, the article maintains that formal acknowledgment of Bitcoin by regulatory bodies is necessary, aiming to introduce a semblance of stability and predictability that could contribute to the sustained prosperity of this digital asset, particularly for future generations.

2. THE ODDS IN BITCOIN: THE RISK OF LOSING IT ALL

Since its inception, Bitcoin has encountered a range of criticisms and undergone thorough scrutiny despite the initial enthusiasm surrounding this innovative technology. While it has garnered substantial acceptance and emerged as one of the most trustworthy digital currencies, it has also presented a complex array of unresolved issues, engendering a profound problem for both governmental authorities and users. These unsettled matters initially revolved around Bitcoin's categorization as a currency or a digital asset. It subsequently expanded to encompass further inquiries about its stability, potential involvement in illicit activities, and the absence of formal recognition (Shin – Rice 2022).

First, it's crucial to clarify the somewhat puzzling nature of Bitcoin. Despite being referred to as a digital currency, it lacks the formal recognition needed to carry this title, primarily because no major global economy has officially designated it as legal tender or imposed prohibitions on its use in transactions. While El Salvador and the Central African Republic have taken the unusual step of accepting Bitcoin as legal tender, the uncertainty surrounding this decision remains substantial, primarily due to the daily, sometimes even hourly, fluctuations in the global Bitcoin market. One of the most significant cryptocurrency-related concerns, especially Bitcoin, is its stability. Bitcoin's value is incredibly volatile, 18 times more unstable than the U.S. dollar and over 7 times more volatile than gold (Li et al. 2019). When Bitcoin was first introduced, it was seen as a stable and secure investment intended to provide an alternative form of financial security during uncertain times (Su et al. 2022). However, Bitcoin has proven to be quite the opposite, often showing much more significant fluctuations compared to traditional financial markets. Its value seems driven by unpredictable factors, making it resemble a speculative venture with uncertain outcomes (Jimoh – Benjamin 2020).



For example, Bitcoin's value experienced significant drops over the past year in response to various events. When the COVID-19 pandemic hit and the world went into lockdown in early 2020, Bitcoin lost over half of its value. However, it bounced back and reached an all-time high in May 2020. Towards the end of 2021, rumours of China potentially banning cryptocurrencies led to another significant drop, causing Bitcoin to lose more than 40% of its value to 35,000\$ from 68,000 against the dollar in November 2021 (Cheng – Yen 2020; Riley 2021). Even the sentiments expressed in tweets from influential individuals, including billionaires and government officials, have been found to impact Bitcoin's value (Huynh 2022). In its article, the Wall Street Journal mentioned that the financial and crypto markets are directly related.

“Cryptocurrencies have fallen in lockstep with the broader stock market... The trend for Bitcoin and other digital assets to fall alongside stocks is one that has become more pronounced in recent years....” (Wall Street Journal, WSJ 2022)

Cryptocurrency users are aware of the inherent volatility within the crypto market, where the extreme scenario of a complete collapse is not entirely implausible. In May 2022, a significant event unfolded when the Terra Blockchain experienced a failure, resulting in a near-zero valuation of the coins underpinned by this system (Hern 2022). Subsequently, in November 2022, which marked six months following the Terra Blockchain's downfall, another major player in the crypto sphere, FTX, also encountered a collapse.

The stablecoin UST and its counterpart, Luna, faced a substantial drop in value during the initial major cryptocurrency collapse, driven by extensive selling. This decline was primarily caused by the creator's efforts to maintain a fixed value of 1 USD for the UST coin (Jeger et al. 2020). The idea was to use UST to reduce the fluctuations in Luna's value. The system relies on digital code as opposed to physical assets or cash reserves, but as trust in UST waned, it triggered a massive sell-off of Luna, ultimately resulting in the cryptocurrency's complete collapse. The unexpected collapse of FTX, a prominent cryptocurrency exchange platform valued at approximately 32 billion dollars, occurred in November 2022 and indicates the prevailing volatility and irregularities within the cryptocurrency landscape. FTX filed for bankruptcy and halted asset withdrawals after the users withdrew six billion dollars within 72 h, leading to a widespread panic, intense selling, and a loss of user confidence. This collapse also had a ripple effect on another cryptocurrency, causing Bitcoin to plummet to a two-year low of \$15,725; however, it displayed signs of recovery in the subsequent days.

The inherent issue that caused the collapse of the FTX crypto exchange platform is that the founders attempted to use investors' funds inside the FTX platform for another company's benefit without giving notice to its customers. Users lost interest and felt betrayed when the event was first reported by CoinDesk (Allison 2022), leading to an intense asset-selling. The issue responsible for the failure of FTX was maladministration at the level, which amounted to fraud rather than system failure in the crypto ecosystem. The founder of FTX was convicted by a jury in seven criminal charges of fraud for undisclosed use of customers' funds (Neumeister 2023). The failure of the crypto exchange companies is affecting the reputation of other blockchain-based cryptocurrencies, including Bitcoin.

A notable advantage of Bitcoin is its provision of a cryptocurrency wallet, known as a Bitcoin wallet, which uniquely grants the users an exclusive access to their digital assets. Binance, the largest cryptocurrency exchange platform, not only permits but actively encourages its users to store their assets in a Bitcoin wallet or any wallet equipped with a private key for enhanced



security, highlighting the divergence in safety and risk factors between utilizing a Bitcoin wallet and a cryptocurrency exchange platform. Cryptocurrency exchange platforms pose multifaceted risks, including potential owner malpractice (as exemplified by FTX), inadequate security measures, a dearth of transparency, and the possibility of bankruptcy, given their reliance on centralized systems that grant the platform access to users' assets (Antolin 2023). In contrast, Bitcoin operates as a decentralized system, affording the users a complete control over their assets and eschewing third-party involvement in fund management. Assets are safeguarded by a unique private key for each user, and the proof-of-work protocol is upheld by the dedicated cryptocurrency miners, ensuring the overall system's security.

Does Bitcoin face the same fate as FTX and Terra Blockchain? Unlikely, but volatility will remain a significant challenge to Bitcoin. The Bitcoin environment differs, and total collapse is less likely despite the value instability issue. Bitcoin will not face complete failures like UST, or FTX because it has a better reputation as the first-ever crypto coin and has an independent decentralized system. The system it has built on can give the coin persistence and could be able to avoid total collapse (Evans 2014). With over 100,000 active nodes on the Bitcoin network spread around the globe, it would take a loss of faith or interest in these nodes for the blockchain to be destroyed, which is not easy (Güring – Grigg 2011). While the volatility issue remains problematic, Bitcoin has significant investors' trust for being the first known cryptocurrency.

Another related point is that significant business chains and bankers show interest in Bitcoin. Tesla has a considerable amount of Bitcoin reserve along with other meme coins³ and was accepting payment in Bitcoin for car sales for a brief time until eventually stopped it for environmental concerns (Hamid et al. 2021). Other businesses, including Overstock, PayPal, Microsoft, AT&T and Starbucks, assimilated Bitcoin into their systems (Lisa 2021). No other cryptocurrency has as much support as Bitcoin by actual businesses. The other reason is that it has a high market value. During its peak, the Bitcoin market cap exceeded one trillion U.S. dollars. Even during its dip, it was valued at multi-billion dollars. Despite its strong base compared with other cryptocurrencies, Bitcoin is still affected by volatility. Users might lose interest, including nodes if Bitcoin's value fluctuates daily following the changes in the real world or externalities (Bal 2015). Social media posts from billionaires, news of state crackdown on Bitcoin, and the changes in the stock market are the things Bitcoin directly reacted to recently (Shahzad et al. 2022). Hence, it is imperative for Bitcoin to establish itself as an autonomous digital asset within a legal framework to withstand external influences. The data reveals that in 2022, there were approximately half a billion Bitcoin users worldwide, actively contributing to the broader economy. Bitcoin is increasingly becoming a routine element of daily transactions for many individuals (Statista 2023a, 2023b). Failing to recognize Bitcoin as an autonomous digital asset would not serve the best interests of both users and the overall economy. Therefore, a well-considered acknowledgment of Bitcoin as a distinct digital asset is essential to ensure its resilience and ability to retain value, even amid external pressures, such as market events and the influence of tweets from influential individuals and political figures.

Another pivotal aspect of the Bitcoin discourse revolves around its potential involvement in illicit activities. This concern has extended to whether Bitcoin can aid a country in

³According to Wikipedia, meme coins are cryptocurrencies inspired by Internet memes, jokes, and satire. They have meme-inspired branding, logos, and names and are often not designed to have any specific use cases (*Editor's note*).



circumventing financial sanctions imposed due to alleged violations of the international norms. Instances of Bitcoin being used for illegal transactions and money laundering have been observed on multiple occasions (Clautice 2019). The use of Bitcoin as a tool for evading sanctions gained prominence during the Russia-Ukraine war, although the concept had been in circulation prior to this. The gravity of these allegations is significant, as it may prompt lawmakers to consider substantial regulation or even the possibility of an outright ban, although the latter is less likely. In light of these considerations, we aim to assess the factors supporting and contradicting the notion that Bitcoin can help a country evade international financial sanctions, explicitly focusing on the Russia-Ukraine war.

3. DOES BITCOIN HELP A COUNTRY TO SUBVERT FINANCIAL SANCTIONS FOR VIOLATIONS OF INTERNATIONAL NORMS?

The war in Ukraine gave rise to concerns that the sanctioned entities in Russia might exploit cryptocurrencies, including Bitcoin, to bypass sanctions and conceal their assets. Governments are keen to ensure that these sanctions are practical and not easy to circumvent. The underlying assumption is that cryptocurrencies facilitate covert transactions, making it challenging to trace the actors involved. This concern was addressed in a hearing held by the United States Senate in March 2022, focusing on the strategies to counter attempts by the sanctioned entities to transfer their assets into the realm of cryptocurrency (Lang 2022). The bill presented during the hearing sought to grant the relevant government authorities the power to sanction cryptocurrency platforms engaged with the sanctioned Russian entities.

The primary concern regarding Bitcoin is that the system is unsuitable for monitoring by the sanction-enforcing authorities. In the sphere of new technologies, blockchain has been viewed as an emergent worldwide phenomenon (Nan et al. 2022), but criticized for being anonymous. Bitcoin allows anonymous participation to transact without disclosing identity. This does not mean, however, that the illicit use of Bitcoin is untraceable (Li et al. 2019). The idea that the government cannot enforce sanctions or face extreme difficulty tracing illicit activities using Bitcoin is unfounded (LLP 2022).

Many Bitcoin transactions take place within cryptocurrency exchange platforms like Binance and Coinbase. These platforms utilize permission-based blockchains where the identities of participants can be readily verified. For instance, registration on the Binance platform necessitates the provision of a national I.D., driver's license or passport, and the system incorporates protocols for tracking and identifying transactions. Consequently, Bitcoin transactions on cryptocurrency exchange platforms can be easily monitored and enforced if parties attempt to evade sanctions.

In one landmark case by the United States District Court for the District of Columbia, judge Zia M. Faruqui ruled that the virtual currency is untraceable. He mentioned how multiple email accounts could be identified and that the reliable blockchain analysis software that traced the flow of stolen digital currency to the investigation's targets supported the probable cause for the search warrant (LLP 2022). The other important point in this ruling is that the compliance obligations apply equally to virtual and traditional fiat currency transactions. Governments, therefore, can track the suspect's account history to the crypto transactions and even use the IP address of the transactions and where it has been redirected and apply the same principle they would apply if the case were related to traditional fiat currency.



The other critical perspective about Bitcoin and sanctions is the total market capitalization of Bitcoin. Bitcoin is a decentralized system with nodes operating worldwide, and the value is distributed among users in different jurisdictions. As a result, the value of Bitcoin directly or indirectly related to a specific country is a fraction of that country's overall GDP. Entities of a single country cannot possess all the Bitcoin as the system is distributed in different jurisdictions. Experts also agree that the amount of cash needed for a large economy outnumbers the value of Bitcoin available. Bitcoin has a market cap of \$438 billion and a total market share of 42% of all cryptocurrencies (Singh 2023). Given its decentralized nature among users, single-country users only have a fraction of this amount. It is implausible that all the coins flow in one direction to users in a single country when they need more coins to evade sanctions imposed.

Nevertheless, the advantages offered by Bitcoin during a crisis far surpass the potential misuse of the technology to circumvent sanctions. During the war in Ukraine, people, while trying to escape to other countries, used Bitcoin to make transactions as getting hard currency was stalled (Polosukhin 2022). There are also attempts at fundraising using Bitcoin, mainly to help people affected by the war in Ukraine (Tidy 2022). Bitcoin allows people in crisis to make transactions by being an alternative to fiat currency where access to traditional money becomes limited in territory and acceptance. The international nature of Bitcoin allows users to make transactions beyond a particular jurisdiction (Chuen 2015).

4. RECOGNITION OVER-REGULATION: VOLATILITY OVER ILLICIT ACTIVITY

The issue is not be about regulating Bitcoin but in what context we regulate it. The interest lies in protecting investors *vis-à-vis* prioritizing eliminating illicit activities denominated in Bitcoin. In other words, the priority should be twofold: ensuring the protection of Bitcoin users and the technology itself while also shielding society from individuals who exploit Bitcoin for unlawful purposes. Or should it be both a priority to combine regulation with recognition? The current trend predominantly involves regulating alleged illegal activities linked to Bitcoin, with limited emphasis on officially recognizing this technology (Brito et al. 2014). The volatility and the recognition issues have not been addressed despite being, in our opinion, the primary problem. In any legal history, recognition is the first step for integrating new technology, and then the regulation of the illegal activity can be sorted out step by step.

Why should we recognize Bitcoin? Is it because it is a currency? Or is it an asset with a certain level of effort to obtain? Regarding the currency issue, Bitcoin does not qualify as a legal tender in the short- and medium-term. Even in the long-run, the possibility of Bitcoin becoming a legal tender is very low (Lloyd 2022). Some scholars contend that Bitcoin should be treated more as a currency than an asset, with the primary rationale centring around taxation considerations (Grinberg 2012). The main reason for that seems to be the issue of taxation, among other things. If Bitcoin were recognized as a currency, the proponent of recognizing Bitcoin as a currency maintained that it would be exempted from taxation (Chodorow 2016; Wiseman 2016). This group believes recognizing and treating Bitcoin as a property/digital asset could make it subject to a cumbersome tax that would diminish its features as an accessible medium for transactions (McLeod 2013). However, accepting and recognizing Bitcoin as a currency instead of a digital asset will make the adoption process longer and probably impossible (Yermack 2015). The country's currency determines monetary policy. It is perhaps the most heavily regulated legal domain.



Two main reasons hinder the smooth adoption of Bitcoin as a legal tender. First, governments have already started digitalizing fiat currency to provide an alternative to paper-based currency (Ahmar 2021). Instead of using Bitcoin or other privately developed cryptocurrencies as legal tender, states prefer to digitalize the actual currency or develop a sovereign digital currency to meet the digital alternative (Michaels – Vigna 2019). The technology's volatility is the second reason why Bitcoin cannot be an active legal tender. A legal tender or a currency of one country is supposed to be stable and predictable to sustain the public's trust. Adopting Bitcoin as a currency with unpredictable (and large!) ups and downs in value would scare investors both within a country and abroad. Thus, the idea of recognizing Bitcoin as a currency is, on the one hand, not feasible as governments would not recognize a privately developed and volatile decentralized system to be a currency. On the other hand, the bureaucracy of currency regulation would make Bitcoin lose its initial goal of facilitating transactions.

As it seems today, Bitcoin will remain a digital asset with certain peculiar features. There is a reasonable justification for recognizing Bitcoin as a digital or financial asset. The theory of property rights is somewhat vast and controversial. Locke (1690) recognized that mixing one's labour with the unowned thing in the world assures property right over that thing. The production of Bitcoin involves a lot of coding and mining that requires both mental and manual work and investment in assembling the necessary device to start the Bitcoin mining process. In this process, there is no doubt that a person uses his labour and money to exploit a technology that adds value to the society. Even if it does not have intrinsic value like the government's backing in the case of fiat currency or gold, the feature of Bitcoin as a simple transaction medium with many security protocols will make it as desirable as a fiat currency.

In his work titled "Toward a Theory of Property Rights" (1974), Harold Demsetz articulated that the emergence of new property rights takes place in response to the desires of the interacting persons for adjustment to new benefit-cost possibilities. He went on to say that property rights are created to internalize externalities when the benefits outweigh the costs of internalization. He also noted that technological change is one factor in starting new property rights. Bitcoin, thus, involves a new benefit-cost possibility aiming to explore the digital ecosystem to make digital assets financially feasible. Bitcoin has its bottlenecks, but on internalizing externality, the cost of recognition and integration of Bitcoin is less than the value a society could get from this technology. As seen in other legal domains, integrating recognition and insightful regulation must be the norm in addressing the issues concerning Bitcoin.

Private law has been protecting contracts, family, conventional property, and other civil rights for centuries. When we see the rules regulating these different domains of laws, we can see the combination of recognition and regulation. For instance, contract law recognizes a contract as a consensual agreement while simultaneously establishing rules governing the process and the consequences of breach in the event of non-compliance. Similarly, family law recognizes marriage but also delineates conditions under which it may be deemed invalid or illegal. Like any private law-related domain, Bitcoin can be recognized and regulated simultaneously. Solely focusing on regulating illicit activity makes Bitcoin more volatile and a headache to investors who have already spent a considerable amount of money.

Does combining recognition with regulation bring stability to Bitcoin? One of the misconceptions about regulation by Bitcoin users and governments is that it is only used to control its technology. However, regulation can involve a recognition that makes the Bitcoin ecosystem more user-friendly and legitimate. Many people hesitate to enter the Bitcoin world because they



think it is a shadow transaction without formal backing. If Bitcoin were reasonably regulated, it would increase the popularity of this technology. Reasonable regulation, in this context, pertains to recognizing Bitcoin as a digital asset by endowing individuals with property rights while simultaneously regulating the complexities and contingencies associated with the technology, akin to how private law domains operate. The value of Bitcoin depends on the trust of users and its popularity (Goczek – Skliarov 2019). The number of users measures trust in Bitcoin. The more users it gets, the more trustworthy it is, and its value increases proportionally.

In terms of stability, it is important to note that recognition may not bring the same level of stability as observed in the case of the US dollar or other fiat currencies. However, recognition can serve as a safeguard against severe downward volatility or the risk of total collapse, as seen in the case of the UST story. A recognized Bitcoin would present an alternative avenue for individuals to explore and engage with digital assets. It is worth emphasizing that this technology is still in its early stages, and experts anticipate that blockchain technology holds significant potential to revolutionize various aspects of digital transactions and business methods. In this evolving landscape, recognition of Bitcoin can play a crucial role in fostering its distribution and legitimacy.

5. CONCLUSION

To conclude and propose recognition as a legal solution to integrate Bitcoin as a working technology with low instability and illegal activity, we discussed the odds in Bitcoin. Regarding the anonymity of Bitcoin, it is possible to trace and identify digital wallet that has engaged in illicit activities. Additionally, most crypto exchange platforms, including the leading digital exchanges Binance and Coindesk, require users to provide basic identity information to make transactions. We also briefly discussed the correlation between international financial sanctions and Bitcoin and whether Bitcoin helps a nation avoid sanctions imposed for whatever reasons. For that, we briefly evaluated the issue of the war in Ukraine and the sanctions imposed on the Russian government and affiliated entities. We concluded that given the decentralized nature of Bitcoin on which assets are distributed across the world and the total market capitalization of the technology compared with big economies like Russia, Bitcoin is not enough to help a country circumvent a comprehensive sanction.

Despite the mixed reaction for and against Bitcoin, the technology develops daily. It is no doubt that it needs attention, and we cannot say that the attention given to Bitcoin is not enough. This is instead to highlight that the government's focus on Bitcoin tends to be predominantly oriented towards regulation, with relatively less emphasis on recognition. The current threat to Bitcoin and its users is the technology's volatility, which is easily affected by externalities. One of the main reasons for such instability is partly associated with a lack of formal recognition of Bitcoin as one form of a legal domain in civil law. We argued that regulation and recognition could facilitate the smooth integration of Bitcoin into the business world. Therefore, countries should recognize Bitcoin and its regulation, and both can be done simultaneously.

REFERENCES

- Ahmar, G. (2021): Digitizing The Dollar: Privacy Considerations and Policy Prescriptions for a US Central Bank Digital Currency. *Hastings Business Law Journal*, 18(1): 149–170.



- Allison, I. (2022): *Divisions in Sam Bankman-Fried's Crypto Empire Blur on His Trading Titan Alameda's Balance Sheet*. Coindesk. <https://www.Coindesk.Com/Business/2022/11/02/Divisions-In-Sam-Bankman-Frieds-Crypto-Empire-Blur-On-His-Trading-Titan-Alamedas-Balance-Sheet/>.
- Antolin, M. (2023): *Crypto Risk Management: How to Get Your Wealth off an Exchange*. CoinDesk. <https://www.Coindesk.Com/Learn/Crypto-Risk-Management-How-To-Get-Your-Wealth-Off-An-Exchange/>.
- Bal, A. (2015): How To Tax Bitcoin? In: Chuen, D. L. K. (eds): *Handbook of Digital Currency*. (2nd ed.) Amsterdam: Elsevier, pp. 267–282.
- Brito, J. – Shadab, H. – Castillo, A. (2014): Bitcoin Financial Regulation: Securities, Derivatives, Prediction Markets, and Gambling. *Columbia Science and Technology Law Review*, 16: 146–221.
- Cheng, H. P. – Yen, K. C. (2020): The Relationship Between the Economic Policy Uncertainty and the Cryptocurrency Market. *Finance Research Letters*, 35(4).
- Chodorow, A. (2016): Bitcoin and the Definition of Foreign Currency. *Florida Tax Review*, 19(6): 365–402.
- Chuen, D. L. K. (2015): *Handbook of Digital Currency: Bitcoin, Innovation, Financial Instruments, and Big Data*. Cambridge, MA: Academic Press.
- Clautice, T. (2019): *Nation State Involvement in Cryptocurrency and the Impact to Economic Sanctions*. La Salle University Digital Commons. https://Digitalcommons.Lasalle.Edu/Cgi/Viewcontent.Cgi?Article=1048&Context=Ecf_Capstones.
- Dechert, LLP (2022): “WRONG”: U.S. Court Affirms Sanctions Risks in Virtual Currency Transactions. <https://www.Jdsupra.Com/Legalnews/Wrong-U-S-Court-Affirms-Sanctions-Risks> 8402583/.
- Evans, D. S. (2014): *Economic Aspects of Bitcoin and Other Decentralized Public-Ledger Currency Platforms*. Coase-Sandor Working Paper Series in Law and Economics, No. 685, Chicago.
- Goczek, L. – Skliarov, I. (2019): What Drives the Bitcoin Price? A Factor Augmented Error Correction Mechanism Investigation. *Applied Economics*, 51(59): 6393–6410.
- Grinberg, R. (2012): Bitcoin: An Innovative Alternative Digital Currency. *Hastings Science & Technology Law Journal*, 4(3): 159–181.
- Güring, P. – Grigg, I. (2011): *Bitcoin & Gresham's Law – The Economic Inevitability of Collapse*. Financial Cryptography. <https://Financialcryptography.Com/Mt/Archives/001363.Html>.
- Hamid, A. – Fitritra, A. – Andriyani, S. (2021): Bitcoin as a Means of Transaction and Investment in the Perspective of Islam. *Jurnal Ekonomi Islam*, 10(2): 33–48.
- Hern, A. (2022): *Could Terra Fall Prove to Be Lehman Brothers Moment for Cryptocurrencies?* The Guardian. <https://www.Theguardian.Com/Technology/2022/May/11/Terra-Price-Cryptocurrency-Stablecoin>.
- Hong, M. Y. – Yoon, J. W. (2022): The Impact of COVID-19 on Cryptocurrency Markets: A Network Analysis Based on Mutual Information. *Plos One*, 17(2): 1–24.
- Huynh, T. L. D. (2022): When Elon Musk Changes his Tone, Does Bitcoin Adjust Its Tune? *Computational Economics*, 62: 639–661.
- Jeger, C. – Rodrigues, B. – Scheid, E. – Stiller, B. (2020): Analysis of Stablecoins During the Global Covid-19 Pandemic. *2020 Second International Conference on Blockchain Computing and Applications (BCCA)*. <https://Ieeexplore.Iee.Edu/Stamp/Stamp.Jsp?Tp=&Arnumber=9274450>.
- Jimoh, S. O. – Benjamin, O. O. (2020): The Effect of Cryptocurrency Returns Volatility on Stock Prices and Exchange Rate Returns Volatility in Nigeria. *Acta Universitatis Danubius*, 16(3): 200–213.
- Lang, H. (2022): *U.S. Democrats Introduce Bill to Curb Russian Crypto Use Amid Ukraine Crisis*. Reuters. <https://www.Reuters.Com/World/Us-Democrats-Introduce-Bill-Curb-Russian-Crypto-Use-Amid-Ukraine-Crisis-2022-03-17/>.
- Li, Y. – Susilo, G. Y. – Yu, Y. – Au, M. H. – Liu, D. (2019): Traceable Monero: Anonymous Cryptocurrency with Enhanced Accountability. *IEEE Transactions on Dependable and Secure Computing*, 18(2): 679–691.



- Li, Z. Z. – Tao, R. C. – Su, W. – Lobont, O. R. (2019): Does Bitcoin Bubble Burst? *Quality & Quantity*, 53(1): 91–105.
- Lisa, A. (2021): 15 Major Companies that Accept Bitcoin as Payment. Yahoo Finance. <https://Finance.Yahoo.Com/News/15-Major-Companies-Accept-Bitcoin-155558584.Html>.
- Lloyd, D. (2022): *Bitcoin: Property, Money, Currency or Legal Tender?* SSRN. <https://Papers.S>.
- Locke, J. (1690): *Second Treatise of Government*. Hackett Publishing Co., Inc., Indianapolis.
- Mcleod, P. (2013): Taxing and Regulating Bitcoin: The Government's Game of Catch Up. *CommLaw Conspectus*, 22: 379–406.
- Michaels, D. – Vigna, P. (2019): *The Coming Currency War: Digital Money vs the Dollar*. Wall Street Journal. <https://www.Wsj.Com/Articles/The-Coming-Currency-War-Digital-Money-Vs-The-Dollar-11569204540>.
- Nan, J. – Xing, L. – Ming, X. (2022): Measuring Technological Collaboration on Blockchain Based on Patents: A Social Network Analysis Approach. *Science, Technology and Society*, 27(1): 66–87.
- Neumeister, L. (2023): *FTX Founder Sam-Bankman-Fried Convicted of Defrauding Cryptocurrency Customers*. <https://Apnews.Com/Article/Sam-Bankman-Fried-Ftx-Crypto-Bitcoin-Baa4c94f2c4237c860475ff92e6bcf42>.
- Özdemir, O. (2022): Cue the Volatility Spillover in the Cryptocurrency Markets During the COVID-19 Pandemic: Evidence from DCC-GARCH and Wavelet Analysis. *Financial Innovation*, 8(1): 1–38.
- Polosukhin, I. (2022): *How Cryptocurrency Is Helping Ukraine*. WSJ. <https://www.Wsj.Com/Articles/How-Crypto-Is-Helping-Ukraine-Russia-Currency-Donations-Transfer-Infrastructure-11648065166>.
- Riley, J. (2021): The Current Status of Cryptocurrency Regulation in China and its Effect Around the World. *China and WTO Review*, 7(1): 135–152.
- Shahzad, S. J. H. – Anas, M. – Bouri, E. (2022): Price Explosiveness in Cryptocurrencies and Elon Musk's Tweets. *Finance Research Letters*, 47(PB).
- Shin, D. – Rice, J. (2022): Cryptocurrency: A Panacea for Economic Growth and Sustainability? A Critical Review of Crypto Innovation. *Telematics and Informatics*, 71(C).
- Singh, N. (2023): *Crypto Price Today: Bitcoin below \$22,800; Crypto Market Cap Crosses \$1 Trillion*. The Economic Times. <https://EconomicTimes.Indiatimes.Com/Markets/Cryptocurrency/Crypto-Prices-Today-Live-News-Bitcoin-Dogecoin-Ethereum-Shibha-Inu-Cryptocurrency-Latest-Updates-23-January-2023/Articleshow/97244031.Cms>.
- Statista (2023a): *Market Capitalization of Bitcoin (BTC) from April 2013 to August 8, 2022 (in Billion U.S. Dollars)*. <https://www.Statista.Com/Statistics/326707/Bitcoin-Price-Index/>.
- Statista (2023b): *Number of Identity-Verified Cryptoasset Users from 2016 to November 2022(in Millions)*. <https://www.Statista.Com/Statistics/1202503/Global-Cryptocurrency-User-Base/>.
- Su, C. W. – Xi, Y. – Tao, R. – Umar, M. (2022): Can Bitcoin be a Safe Haven in Fear Sentiment? *Technological and Economic Development of Economy*, 28(2): 268–289.
- Tidy, J. (2022): *Millions in Bitcoin Pouring into Ukraine from Donors*. BBC. <https://www.Bbc.Com/News/Technology-60541942>.
- Wiseman, S. A. (2016): Property or Currency: The Tax Dilemma behind Bitcoin. *Utah Law Review*, 2(5): 417–440.
- WSJ (2022): *Bitcoin, Other Cryptocurrencies Stabilize after Multiday Selloff*. <https://www.Wsj.Com/Articles/Bitcoin-Other-Cryptocurrencies-Stabilize-After-Multiday-Selloff-11652184528>.
- Yermack, D. (2015): Is Bitcoin a Real Currency? An Economic Appraisal. In: Chuen, D. L. K. (eds): *Handbook of Digital Currency*. Elsevier, pp. 31–43.

