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THE ECONOMIC IMPACT OF BITCOIN

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Abstract

Studies on Bitcoin, a leading cryptocurrency, examine various aspects of its traits, the advantages and disadvantages of its usage, along with its potential to sustain relevance over time and rival conventional currency. Drawing from these points, this article seeks to offer a summary of cryptocurrency by examining the economic effects of Bitcoin through a comprehensive literature review. Through the analysis of peer-reviewed articles in academic databases, we aimed to distill and critically assess the viewpoints in the literature about the doctrinal foundation of Bitcoin, its economic traits, and its effects on society and the economy. In addition, this research provides the chance to assess the degree of comprehension regarding Bitcoin mining's effects and then to explore the regulatory structures. The findings indicate that Bitcoin continues to be a favored asset in the economic landscape, despite its substantial energy consumption and adverse impact on the environment. Moreover, regulations in different nations indicate that Bitcoin is slowly achieving legitimacy, although it encounters some criticisms.

Keywords: Economy, Blockchain, Cryptocurrency, Bitcoin, Financial

1. Introduction

Over the past decade, the emergence and evolution of cryptocurrencies has had a profound impact on the global economy, attracting public attention due to their decentralized nature and the opportunities they offer. Among the most popular cryptocurrencies, Bitcoin holds a special place, having been introduced into circulation in early 2009 by an anonymous entity operating under the pseudonym Satoshi Nakamoto.

Originally conceived as a peer-to-peer electronic cash system (Nakamoto, 2008), Bitcoin has since evolved beyond its initial purpose, serving not only as a medium of exchange but also as an investment asset and a hedge against inflation. However, its economic implications remain a topic of intense debate, particularly regarding its impact on financial stability, its regulatory challenges, and its environmental footprint (Ammous, 2018).

The primary aim of this paper is to provide a comprehensive analysis of Bitcoin's economic impact, focusing on its influence on financial markets, its potential as an alternative currency, and the regulatory responses it has triggered globally. Despite Bitcoin’s increasing adoption by institutional investors and the integration of blockchain technology into various sectors, its role in the economy remains controversial due to high price volatility, the risk of illicit transactions, and significant energy consumption (Böhme *et al.* 2015). This study is motivated by

the growing need for a multidisciplinary perspective that examines Bitcoin not only from a technological standpoint but also from an economic and regulatory perspective. Understanding the potential and limitations of Bitcoin is essential in the context of emerging digital financial systems, including the development of central bank digital currencies (CBDCs) and the increasing digitization of financial transactions (Narayanan *et al.* 2016).

To achieve these objectives, this study employs a systematic literature review, analyzing peer-reviewed journal articles, book chapters, and policy reports from reputable sources. The research process involved two key stages: first, a keyword-based search was conducted to identify relevant academic publications related to Bitcoin's economic effects, legal status, and financial market interactions. In the second stage, the selected studies were critically evaluated to highlight key insights regarding Bitcoin's monetary characteristics, market behavior, and regulatory considerations. The focus was placed on English-language sources published from 2015 onward, ensuring an up-to-date analysis of Bitcoin's role in the contemporary economic landscape.

The structure of this paper is organized as follows: Section 2 elaborates on the research methodology, detailing the approach used for data collection and analysis. Section 3 presents the key findings, exploring Bitcoin's classification as a financial asset, its implications for financial stability, and the regulatory responses adopted by various countries. Section 4 provides the conclusion, summarizing the study's main insights and offering perspectives on Bitcoin's future considering regulatory developments and sustainability concerns. By addressing these aspects, this study contributes to the ongoing academic discourse on the legitimacy and economic relevance of cryptocurrencies.

2. Research methodology

To conduct a comprehensive analysis of Bitcoin's economic impact and legal regulation, this study employs a systematic review of academic literature, financial reports, and policy documents from relevant international organizations. The research is structured around the central question: What is the economic impact of Bitcoin? To answer this, we focused on two major research directions: the economic implications of Bitcoin as a financial asset and a medium of exchange, and the regulatory frameworks shaping its adoption and integration into global financial systems.

The data collection process began with a keyword-based search in leading academic databases, as well as policy reports from institutions like the International Monetary Fund (IMF), the European Central Bank (ECB), the World Economic Forum (WEF), and national financial regulators. The search terms were carefully selected to ensure relevance to the study's objectives, including "Bitcoin economic impact," "Bitcoin as private money," "Cryptocurrency regulation and financial stability," "Bitcoin volatility and investment risks," "Bitcoin mining environmental impact," and "Cryptocurrency adoption and legal challenges." These keywords helped identify literature discussing Bitcoin's role in financial markets, its speculative nature, price volatility, and the evolving global regulatory landscape.

Following the selection process, the gathered literature was analyzed and categorized into two key research areas: studies that examine Bitcoin's economic identity as a financial asset, and research discussing the legal frameworks, regulatory challenges, and policy responses in different jurisdictions. This classification enabled a structured review of Bitcoin's integration into global financial systems and its broader implications.

Applying this methodology to the reviewed literature revealed significant findings. Historical perspectives on private money (Rogojanu, 2014; von Hayek, 1990) provided a theoretical foundation for understanding Bitcoin's emergence as a decentralized financial instrument. Economic studies (Corbet *et al.* 2019; Dyhrberg, 2016) highlighted its hybrid nature, acting both as a commodity and an investment asset. Regulatory analyses (Lutz, 2020; IMF, 2024) demonstrated the increasing global efforts to regulate Bitcoin, including the European Union's Transfer of Funds Regulation (2024) and the Financial Action Task Force's Travel Rule for cryptocurrency transactions. Additionally, reports on Bitcoin's energy consumption (IMF, 2024) emphasized its significant environmental footprint, accounting for approximately 2% of global electricity usage and 1% of global carbon emissions, raising concerns about sustainability.

Despite the structured approach, certain limitations must be acknowledged. The exclusion of non-English sources may have overlooked specific regional perspectives on cryptocurrency regulation and adoption. Additionally, Bitcoin's rapidly evolving market conditions and regulatory landscape mean that findings from recent studies could change as new policies and financial trends emerge. Furthermore, the lack of a unified global regulatory framework makes it difficult to determine a consistent international approach to Bitcoin's legal and economic role.

Overall, this methodology ensures a rigorous and systematic analysis of Bitcoin's economic and regulatory implications, offering a well-supported foundation for further discussions on its role in global financial systems.

3. Results

Rogojanu (2014) suggests that since antiquity, philosophers such as Xenophon, Plato, and Aristotle have sought to identify the essential aspects of the value, form, and functions of money, as well as the way it circulates in the market. Economic studies have evolved over time, reflecting changes in nature and dimensions of economic exchange. The emergence and evolution of money highlight characteristics specific to different stages of human development.

The issue of private money has re-entered public debate. Certain schools of economic thought have addressed this topic, particularly since the second half of the 19th century, a period marked by controversies surrounding money and currency. These debates clearly reflect the need for, and the potential benefits of, monetary competition, which, from the perspective of entrepreneurs, would ensure the production of the most suitable currency based on the preferences of economic agents.

Throughout history, humans have demonstrated the ability to circumvent various prohibitions, including those related to currency. Notable examples include TEM, Sano, M-PESA, and QQ, which offer alternatives to official currency. Human ingenuity has been crucial in creating alternative solutions and fostering competition between official and private currencies, regardless of the education level of the individuals involved.

Rogojanu (2015) specifies that, at an academic level, the issue of using private money was first raised in the 19th century, when Carl Menger demonstrated that the origin of private money lies in the behavior of individuals guided by their economic interests. Menger argued that the state's monopoly over the management and issuance of currency was based not only on its presumed historical priority but also on legal and administrative confusions, which intertwined economic, psychological, and political interests.

Continuing the Austrian school of economic thought, (von Hayek, 1990), in his work "Denationalization of Money: The Argument Refined," proposed a controversial idea: that free competition among private currency producers is the best way to ensure a healthy currency. Hayek claimed that private currencies offer several advantages that have been overlooked. Among these advantages, he noted that a currency expected to maintain constant purchasing power would always be in demand and that in a private currency system, issuing institutions would be more motivated to maintain the value of the currency than a monopolist, as depreciation would directly affect the issuer's success.

Hayek's views have sparked, and continue to spark, significant criticism in academia. Over the past three centuries, three major perspectives on private money have emerged: the first sees its origin in self-interested individual behavior, as argued by Carl Menger, Friedrich August von Hayek, and the Austrian school of economic thought; the second associates private money with the expansion of individual freedom and initiatives; and the third, emphasized by (Selgin, 2020), considers private money a privilege of private banks.

The 20th century introduced a new element: cryptocurrency. Its status is still a subject of active debate in academic circles, with ongoing uncertainty regarding whether it qualifies as private money. (Fernandez-Villaverde, 2018) criticized Hayek's ideas, arguing that private monetary arrangements are not, except in special cases, socially optimal. He contends that the choice between private or public monetary systems is a choice between two relative evils: an inefficient market mechanism or an incompetent government. Similarly, (Rahman, 2018) argues

that a monetary system based solely on private digital currencies would not provide a socially efficient allocation.

Cryptocurrencies have generated extensive debate regarding their nature and functions. In the past, coins were made of precious metals, and their value derived from the material they were made of. Today, most countries use fiat money, backed by government guarantees. Cryptocurrencies, however, derive their value from algorithms and are verified through electronic data transfers. In a cryptocurrency system, all transactions are anonymous, and no central authority provides collateral.

Nevertheless, cryptocurrencies pose significant cybersecurity risks, and the cryptocurrency market is highly dynamic, influenced by various factors. In 2018, there were more than 1,800 types of cryptocurrencies in circulation, and by August 2020, this number had increased to 6,442. By 2024, the number of cryptocurrencies has exceeded 10,000, indicating continuous expansion but also a growing trend of failed projects and scams (CoinMarketCap, 2024). While some cryptocurrencies survive and consolidate their market position, many disappear shortly after their creation. The unique characteristics of each cryptocurrency influence their prices, stability, and relationships, while market uncertainties and investor expectations contribute to substantial price fluctuations.

From an economic point of view, there are several controversies regarding the functions that Bitcoin perform. While some authors consider it a medium of exchange, others view it as a speculative investment. (Corbet *et al.* 2019) identify cryptocurrencies as financial assets, whereas (Frisby, 2015) argues that Bitcoin possesses the fundamental characteristics of money, performing even better than traditional currency due to its durability, portability, and low transaction costs. (Dyhrberg, 2016) believes that Bitcoin can be seen as a hybrid between a currency and a commodity, similar to gold.

When analyzing Bitcoin as a currency, it is important to consider the generally accepted functions of money. In 1875, Jevons identified four fundamental functions of money: medium of exchange, common measure of value, standard of value, and store of value. Today, economic theories have evolved, adding new functions, such as the investment function and the information function. Based on these considerations, (Kubát, 2015) concludes that Bitcoin cannot be considered a true currency, although it can be used as a medium of exchange.

History shows that various objects and symbols have been used as money throughout time, even items with no intrinsic value. In Spain, between the 14th and 19th centuries, tokens circulated in some religious communities as a means of payment, and in the United Kingdom during the Great Depression, many communities created local currencies. Cryptocurrencies can similarly be seen as tokens with no intrinsic value, but which are accepted by social convention and used as a medium of exchange.

The European Central Bank defines Bitcoin as a digital representation of value, which is not issued by a central bank but can function as a substitute for cash, coins, sight deposits, and electronic money. Some authors even suggest that Bitcoin could become a universal currency. On the other hand, (Hong *et al.* 2018) explores the possibility of a dual currency system, allowing the coexistence of a digital currency with no intrinsic value alongside a government-issued fiat currency. Dual currency regimes are often found in emerging economies, where a foreign currency is officially used as a substitute for the domestic one, making it difficult to encourage market participants to retain the domestic currency.

Lutz (2020) analyzes the pressure exerted on central banks by the existence of cryptocurrencies, especially during periods of crisis in their image, suggesting that cryptocurrencies and fiat currencies will become inseparable. Seetharaman and his colleagues argue that while Bitcoin may have a positive influence on global currencies, it will not coexist in the long term due to regulatory challenges.

Van Alstyne (2020) argues that Bitcoin to have value, it must be backed by the government. Selgin proposes the idea of creating a digital currency using an algorithm that mimics the monetary rules described in economic literature. However, Ammous (2018) argues that a cryptocurrency cannot serve as conventional money due to the lack of a central authority, fluctuating demand, and inflexible supply, even though it can function effectively as a medium of exchange.

Yermack (2015) contends that Bitcoin is not a proper currency because cryptocurrencies lack intrinsic value. In contrast, (Woo *et al*. 2013) states that Bitcoin can be considered to have a value comparable to that of money due to its role as a medium of exchange and a store of value. (Ammous, 2018) emphasizes that a cryptocurrency can only gain credibility if users are assured that its supply will not increase suddenly, thereby avoiding devaluation.

To date, Bitcoin is the only cryptocurrency that has demonstrated the ability to control inflation through a moderate increase in supply. (Corbet *et al.* 2019) analyzed the relationship between three major cryptocurrencies Bitcoin, Ripple, and Litecoin and other traditional financial assets (gold, bonds, etc.), concluding that they are relatively isolated from the rest of the financial markets, which is why it can be used to diversify investors' risks. (Darlington, 2014) hypothesizes that Bitcoin can provide an advantage to those living in underdeveloped economies facing problems such as hyperinflation, currency exchange difficulties and currency counterfeiting.

Bitcoin ensures near-total anonymity in transactions, placing it at the center of concerns about its potential to facilitate illegal activities, such as drug trafficking and other criminal enterprises. This feature has fueled experts' fears that virtual currencies could become "criminal currencies," drawing attention to the need for strict regulation of cryptocurrencies. Regulatory measures are also necessary to prevent cyber-attacks on cryptocurrency networks.

Beyond the debate about the status of cryptocurrencies as private money, another major concern is their sustainability and the growing public interest in acquiring and using them. The legalization of Bitcoin has been, and continues to be, a challenge, but some states have recognized that Bitcoin's popularity could be a source of budget revenue through taxation of transactions. Germany, Brazil, Canada, and Bulgaria are just a few of the countries that have adopted such measures.

In the European Union, cryptocurrency regulation has not been approached in a unified manner, with each member state adopting its own solutions. For instance, Germany does not recognize Bitcoin as legal tender but classifies it as a "unit of account," imposing a 25% tax on capital gains from Bitcoin transactions, with certain exceptions. In Bulgaria, revenues from trading digital currencies are taxed at 10%, and the government has implemented strict rules regarding customer identification in cryptocurrency transactions. In Romania, Law no. 30/2019 mandates the taxation of gains from cryptocurrency transfers.

In the United States, Bitcoin is accepted as a payment method in many states, but regulations vary significantly from state to state. For example, New York introduced the requirement to obtain a "BitLicense" for companies wishing to operate with cryptocurrency services, while other states, such as Texas and Kansas, offer a more favorable regulatory framework for cryptocurrency use. Internationally, Japan legalized Bitcoin as a payment method in 2017, encouraging its widespread adoption. In contrast, countries like Russia, Vietnam, and Saudi Arabia have banned the use of cryptocurrencies altogether.

Another essential aspect of the Bitcoin debate is the issue of territoriality in international transactions, given that these are conducted in the virtual environment, complicating the application of legal norms. Additionally, the Bitcoin market tends to exhibit concentration, with a small number of mining "pools" controlling a significant portion of the computing power needed to validate transactions.

Bitcoin's role in financial markets has evolved significantly in recent years. In December 2024, Bitcoin surpassed the $100,000 mark for the first time, largely driven by institutional investments and regulatory developments favoring cryptocurrencies (Reuters, 2024). However, its price later dropped below this threshold in early 2025 due to new U.S. tariffs, which raised concerns over potential economic instability (Reuters, 2025).

Regulatory developments have also intensified. In 2024, the European Union introduced the Transfer of Funds Regulation, enforcing compliance with the Travel Rule for Crypto-Asset Service Providers (Elliptic, 2024). This aligns with a broader trend of increasing regulatory oversight, particularly in developed economies seeking to balance innovation with financial security.

Bitcoin’s environmental impact remains a major concern. A 2024 report by the International Monetary Fund (IMF) found that crypto mining and data centers now account for approximately 2% of global electricity consumption and nearly 1% of global emissions (IMF,

2024). This has renewed discussions about the sustainability of cryptocurrency mining and potential solutions such as carbon credit and green mining incentives.

4. Conclusion

The findings of this study highlight several key aspects regarding Bitcoin and other cryptocurrencies. Bitcoin is increasingly recognized as a distinct category of digital assets, functioning as a substitute for conventional money in certain contexts, despite not being officially considered legal tender in most jurisdictions. However, the debate over its legitimacy continues, particularly due to its lack of intrinsic value and the absence of backing from a central bank.

One of the most significant economic implications of Bitcoin is its role as a financial asset rather than a traditional currency. While some authors argue that Bitcoin meets the fundamental characteristics of money, its extreme price volatility undermines its effectiveness as a stable medium of exchange. Recent market developments, such as Bitcoin surpassing $100,000 in 2024 but falling below this threshold due to U.S. economic policies, reinforce the argument that Bitcoin behaves more like a speculative asset than a stable currency (Reuters, 2024; 2025). This raises concerns about its long-term sustainability as a widely used transactional currency.

Another critical aspect is the growing importance of cryptocurrency regulation. The European Union's introduction of the Transfer of Funds Regulation in 2024, which enforces compliance with stricter financial transparency measures, demonstrates a clear shift towards greater oversight and legitimacy of Bitcoin within regulated financial systems (Elliptic, 2024). In contrast, countries such as China and Saudi Arabia continue to enforce restrictive policies, preventing Bitcoin from becoming a universally accepted asset. The global regulatory landscape remains fragmented, and the lack of uniformity complicates the potential for a harmonized approach to Bitcoin's adoption. Future developments in regulatory policies will be crucial in determining Bitcoin's integration into the financial system or its relegation to a niche asset for speculative trading.

The environmental impact of Bitcoin mining remains another pressing concern. The International Monetary Fund's 2024 report indicated that Bitcoin and other cryptocurrencies now account for approximately 2% of global electricity consumption and nearly 1% of total carbon emissions, sparking renewed discussions on sustainability (IMF, 2024). As a result, solutions such as green mining initiatives, carbon credits, and energy-efficient consensus mechanisms like proof-of-stake are being explored as ways to mitigate Bitcoin's environmental footprint. The extent to which Bitcoin can transition towards sustainable energy sources will influence its future acceptance, especially among institutional investors and environmentally conscious economies.

Moreover, Bitcoin's role as a hedge against inflation and a tool for financial inclusion remains a point of debate. In economically unstable regions, Bitcoin has been used as an alternative to national currencies, particularly in cases of hyperinflation and restrictive capital controls. Countries such as El Salvador have even adopted Bitcoin as legal tender, though the long-term implications of this experiment remain uncertain. While some studies suggest that Bitcoin could provide financial inclusion for unbanked populations, its high transaction fees and volatility pose significant barriers to widespread adoption in daily economic activities.

Finally, the future of Bitcoin will depend on a combination of regulatory developments, technological advancements, and market stability. While Bitcoin has demonstrated resilience over the years, its ability to maintain relevance in an increasingly digital financial ecosystem will depend on whether it can adapt to regulatory requirements, address environmental concerns, and stabilize its market dynamics. Whether Bitcoin becomes a globally accepted digital asset or remains a speculative instrument will be determined by how these challenges are navigated in the coming years.

References

Ammous, S., 2018. Can cryptocurrencies fulfill the functions of money? *Quarterly Review of Economics and Finance*, 70, pp. 38-51. https://doi.org/10.1016/j.qref.2018.05.010

Böhme, R., Christin, N., Edelman, B. and Moore, T., 2015. Bitcoin: economics, technology, and governance. *Journal of Economic Perspectives*, 29(2), pp. 213-238. https://doi.org/10.1257/jep.29.2.213

CoinMarketCap, 2024. Number of cryptocurrencies worldwide. [online] Available at: <https://coinmarketcap.com> [Accessed on 10 April 2024].

Corbet, S., Lucey, B., Urquhart, A. and Yarovaya, L., 2019. Cryptocurrencies as a financial asset: a systematic analysis. *International Review of Financial Analysis*, 62(C), pp. 182-199. https://doi.org/10.1016/j.irfa.2018.09.003

Darlington, J. K., 2014. The future of bitcoin: mapping the global adoption of the world's largest cryptocurrency through benefit analysis. [online] Available at: <https://trace.tennessee.edu/utk_chanhonoproj/1770> [Accessed on 10 April 2024].

Dyhrberg, A. H., 2016. Bitcoin, gold and the dollar – a GARCH volatility analysis. *Finance Research Letters*, 16, pp. 85-92. https://doi.org/10.1016/j.frl.2015.10.008

Elliptic, 2024. Key insights from Elliptic's global crypto regulation landscape 2024 Review. [online] Available at: <https://www.elliptic.co/blog> [Accessed on 10 April 2024].

Fernández-Villaverde, J., 2018. Cryptocurrencies: a crash course in digital monetary economics. *Australian Economic Review*, 51(4), pp. 514-552. https://doi.org/10.1111/1467-8462.12306

Frisby, D., 2015. *Bitcoin: the future of money*. 1st ed. London: Unbound.

Hong, K., Park, K. and Yu, J., 2018. Crowding out in a dual currency regime? digital versus fiat currency. *Emerging Markets Finance and Trade*, 54(11), pp. 2495-2515. https://doi.org/10.1080/1540496X.2018.1452732

International Monetary Fund, 2024. Carbon emissions from AI and crypto are surging and tax policy can help. [online] Available at: <https://www.imf.org> [Accessed on 22 April 2024].

Kubát, M., 2015. Virtual currency Bitcoin in the scope of money definition and store of value. *Procedia Economics and Finance*, 30, pp. 409-416. https://doi.org/10.1016/S2212-5671(15)01308-8

Lutz, J.K.T., 2018. *Coexistence of cryptocurrencies and central bank issued fiat currencies—a systematic literature review.* Working Paper no.2. Düsseldorf: Heinrich-Heine-University [online] Available at: <https://ssrn.com/abstract=3303252> [Accessed on 10 April 2024].

Nakamoto, S., 2008. Bitcoin: A Peer-to-Peer Electronic Cash System. [online] Available at: < https://nakamotoinstitute.org/bitcoin/> [Accessed on 10 April 2024].

Narayanan, A., Bonneau, J., Felten, E., Miller, A. and Goldfeder, S., 2016. *Bitcoin and cryptocurrency technologies: a comprehensive ıntroduction*. Princeton: Princeton University Press.

Rahman, A. J., 2018. Deflationary policy under digital and fiat currency competition. *Research in Economics*, 72(2), pp. 171-180. https://doi.org/10.1016/j.rie.2018.04.004

Reuters, 2024. Bitcoin storms above $100,000 as Trump 2.0 fuels crypto euphoria. [online] Available at: <https://www.reuters.com> [Accessed on 15 March 2024].

Reuters, 2025. Bitcoin slides below $100,000 as Trump tariffs rattle markets. [online] Available at: <https://www.reuters.com> [Accessed on 20 December 2024].

Rogojanu, A. and Badea, L., 2014. The issue of competing currencies. case study—Bitcoin. *Theoretical and Applied Economics*, 21(1), pp. 103-114.

Rogojanu, A. and Badea, L., 2015. The issue of 'true' money in front of the Bitcoin's offensive. *Theoretical and Applied Economics*, 22(2), pp. 77-90.

Selgin, G., 2014. Bitcoin: Problems and prospects. [online] Available at: <https://www.hillsdale.edu/wpcontent/uploads/2016/02/FMF-2014-Bitcoin-Problems> [Accessed on 10 April 2024].

Van Alstyne, M., 2020. Why Bitcoin has value. [online] Available at: <https://cacm.acm.org/magazines/2014/5/174354-why-bitcoin-has-value/fulltext> [Accessed on 10 March 2024].

von Hayek, F. A., 1990. *Denationalization of money: the argument refined. an analysis of the theory and practice of concurrent currencies*. 3rd ed. London: The Institute of Economic Affairs.

Woo, D., Gordon, I. and Iaralov, V., 2013. *Bitcoin: a first assessment. FX and rates. cause and effect*. [online] Available at: <http://web.elastic.org/~fche/mirrors/www.cryptome.org/2013/12/boabitcoin.pdf> [Accessed on 10 April 2024].

Yermack, D., 2015. Is Bitcoin a real currency? an economic appraisal. In: D. L. K. Chuen, ed. *Handbook of Digital Currency*. San Diego: Academic Press, pp. 31-43. https://doi.org/10.1016/B978-0-12-802117-0.00002-3