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## The Growth Trends of Cryptocurrencies and Their Taxation Policies

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### ABSTRACT

This study examines the growth trends of cryptocurrencies and their associated taxation policies, focusing on the unique technological advancements and regulatory frameworks shaping the market. Utilizing a systematic literature review methodology, this study synthesizes findings from academic and institutional sources to explore cryptocurrency growth and global taxation policies, the research investigates the adoption metrics of major cryptocurrencies and the comparative taxation policies across various jurisdictions. Findings reveal a substantial increase in cryptocurrency adoption driven by institutional investments and technological innovations. However, taxation policies vary widely, impacting investor behavior and market dynamics. This research contributes to understanding the interplay between cryptocurrency growth and taxation, providing insights for investors and policymakers.

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## 1. INTRODUCTION

The emergence of cryptocurrencies has revolutionized the financial world by introducing decentralized digital currencies that operate independently of central banks and traditional financial institutions. These digital assets rely on blockchain technology—a secure, decentralized ledger system that ensures transparency and trust in transactions. The origin of cryptocurrency can be traced back to 2009 when Bitcoin, the first cryptocurrency, was introduced by an anonymous individual or group using the pseudonym Satoshi Nakamoto. Since then, the cryptocurrency ecosystem has rapidly expanded, with thousands of digital currencies being introduced, each serving different purposes and gaining popularity in various parts of the world.

The growing relevance of cryptocurrencies in the global economy is undeniable. They are reshaping financial markets, encouraging the development of new digital payment systems, and challenging traditional economic structures. Major financial institutions, investors, and even governments are increasingly engaging with digital assets either by investing in them or developing regulatory frameworks to control their use. Cryptocurrencies have also sparked discussions around financial inclusion, cross-border transactions, and the future of money. However, with their rise comes the growing challenge of how to tax these digital assets. Unlike conventional financial instruments, cryptocurrencies operate outside many of the standard frameworks, making taxation particularly complex and important.

This complexity gives rise to several pressing issues. One major concern is the high volatility in cryptocurrency prices, which complicates asset valuation and taxation. Moreover, many countries still lack comprehensive regulatory frameworks, resulting in tax evasion risks and inconsistencies in global tax enforcement. Existing tax systems were not designed with digital assets in mind, and as such, they often struggle to categorize and treat cryptocurrency transactions appropriately. This misalignment between modern financial innovation and traditional taxation methods creates a gap that can be exploited and undermines fair tax collection.

Therefore, the purpose of this article is to analyze the growth trends of cryptocurrencies and examine how taxation policies around the world are evolving in response to this digital transformation. It will evaluate how different countries are addressing these challenges and identify best practices and lessons that can be learned globally.

This article is structured as follows: it begins with an overview of global cryptocurrency trends and adoption. It then analyzes the approaches different countries have taken toward taxation policies. Finally, it offers recommendations for more coherent, fair, and effective international tax policies regarding digital currencies.

## LITERATURE REVIEW

### Evolution and Characteristics of Cryptocurrencies

The emergence of Bitcoin in 2009 marked the beginning of the cryptocurrency era, offering a decentralized, peer-to-peer method of financial exchange free from centralized institutions such as banks and governments. Unlike traditional currencies, cryptocurrencies are underpinned by blockchain technology—a distributed ledger system that ensures transparency and security of transactions (Nakamoto, 2008). Subsequent developments have introduced alternative cryptocurrencies (altcoins) like Ethereum, Ripple, and Litecoin, each offering distinct features such

as smart contracts or faster transaction processing. These digital assets are characterized by their volatility, pseudonymity, cryptographic security, and programmability, which differentiate them from conventional financial instruments.

The evolution of cryptocurrencies marks a significant transformation in the global financial landscape, characterized by their decentralized nature and reliance on blockchain technology. Cryptocurrencies function as a medium of exchange, a unit of account, and a store of value, distinguished by their high security, transaction speed, and potential for anonymity (Hsu, 2022; ZIANKO et al., 2022; Stoica, 2021). The emergence of cryptocurrencies like Bitcoin and Ethereum has disrupted traditional financial systems by offering alternative forms of transaction that do not require intermediaries (Guru, 2025; (Li, 2024).

Key characteristics include their volatility, which contributes to both their attractiveness as speculative investments and regulatory concerns (Колодуб, 2024; Yamani et al., 2025). Additionally, the growing legal recognition of cryptocurrencies highlights their integration into financial systems, prompting analyses of their economic roles and regulatory frameworks (Pantielieieva et al., 2021; Cherviakov, 2025). Recent advancements in digital payment solutions further reflect the evolving perception of cryptocurrencies as viable financial instruments for both day-to-day transactions and stores of wealth (Li, 2024; Podder, 2023).

### **Global Growth and Adoption Trends**

Since Bitcoin's inception, the global cryptocurrency market has grown exponentially, reaching a market capitalization of over \$2 trillion at its peak in 2021. This growth has been driven by several factors, including increasing digitalization, distrust in traditional financial systems, speculative investment behavior, and the search for hedges against inflation. Reports indicate that countries like the United States, Japan, South Korea, and several European nations lead in trading volumes and user adoption, while emerging markets such as Nigeria, India, and Indonesia are rapidly expanding due to mobile penetration and financial inclusion challenges. The adoption is further reinforced by the integration of cryptocurrencies into mainstream financial services, such as PayPal and Mastercard, which now support crypto transactions .

The rise of cryptocurrencies has been widely studied in recent literature from both economic and technological perspectives. Tapscott & Tapscott (2016) highlight that blockchain—the core technology behind cryptocurrencies—enables secure, transparent, and decentralized data exchange, which underpins the disruptive potential of digital currencies in traditional financial systems.

Narayanan et al. (2016) assert that the trustless nature of blockchain systems lowers transaction costs and removes intermediaries, creating more efficient financial ecosystems. These characteristics have catalyzed the rapid proliferation of cryptocurrencies, especially in regions with limited access to conventional banking infrastructure (Catalini & Gans, 2016).

The global growth and adoption trends of cryptocurrencies have accelerated significantly, influenced by technological advancements, socio-economic factors, and regulatory developments. Blockchain technology, serving as the backbone for cryptocurrencies like Bitcoin, has continuously evolved to enhance scalability, privacy, and programmability, leading to increased interest among consumers and businesses alike Mungoli (2023)Nasreen et al., 2021). The transition towards digital

currencies represents a shift in monetary systems, with cryptocurrencies offering unique advantages, such as low transaction costs and efficient cross-border payments (Murugappan et al., 2023).

Moreover, social dynamics play a crucial role in adoption, as increased awareness and acceptance foster participation among diverse demographics, particularly younger generations (Sachitra & Rajapaksha, 2023; Baloch, 2023). Economic factors such as GDP growth and the performance of global markets further correlate with cryptocurrency trading activities, indicating an interconnection between digital currencies and traditional economies, although some studies show a lack of long-term confirmation of this link (Kovalchuk et al., 2024). Despite challenges such as market volatility and regulatory issues, the trajectory of cryptocurrency adoption suggests a sustained upward trend, as evidenced by the expanding user base and the increasing number of businesses accepting cryptocurrencies as payment (Magbitang et al., 2023; Zahoor et al., 2023).

### **Regulatory Frameworks and Challenges**

Early adopters are often tech-savvy individuals motivated by ideological preferences or speculative opportunities. Institutional investors and payment processors like PayPal and Visa integrating crypto services have accelerated diffusion into the mainstream (Baur et al., 2018). External shocks, such as inflation and distrust in fiat currencies, particularly in countries like Venezuela and Nigeria, also contribute significantly to adoption (Yermack, 2013).

The decentralized and borderless nature of cryptocurrencies presents significant regulatory challenges for governments and financial institutions. Regulatory approaches vary considerably across jurisdictions. For example, while Japan recognizes Bitcoin as legal tender and regulates exchanges under the Payment Services Act, China has banned cryptocurrency transactions outright. The United States, through the SEC and IRS, has classified cryptocurrencies as securities or property depending on the context, subjecting them to capital gains taxation. Regulatory uncertainty remains a key barrier to widespread adoption and institutional investment, as inconsistent definitions and enforcement mechanisms hinder compliance and consumer protection efforts. Furthermore, the potential for illicit use—including money laundering and terrorism financing—has prompted calls for international regulatory cooperation and the implementation of Know-Your-Customer (KYC) and Anti-Money Laundering (AML) standards .

The regulatory landscape for cryptocurrencies presents significant challenges and evolves rapidly in response to their increasing adoption and the complexities of their underlying technologies. Various countries grapple with defining cryptocurrencies within existing frameworks, leading to regulatory fragmentation. This is often exacerbated by the decentralized nature of digital assets, which complicates enforcement and oversight Silva & Silva (2022)Khan et al., 2023; Cumming et al., 2025).

The lack of cohesive global regulation results in inconsistencies in taxation and compliance requirements, creating barriers for businesses and investors (Adhikari et al., 2025; Mpanza, 2025). Moreover, issues such as anti-money laundering (AML) compliance, consumer protection, and the delineation of cryptocurrencies from traditional fiat currencies highlight the urgent need for refined regulatory frameworks (Uzougbo et al., 2024; Mihus et al., 2024; Dewi, 2025). Some studies advocate for coordinated international cooperation to establish standardized regulations that can address cross-border financial crimes (Wheatley, 2024; Bătușaru & Sbârcea, 2024; Kanu, 2025).

Additionally, as central banks explore the potential of Central Bank Digital Currencies (CBDCs), the implications for monetary policy and financial stability become critical focal points (Rangapriya & Lokhande, 2022). Thus, a comprehensive regulatory approach is necessary to mitigate risks while fostering innovation within the cryptocurrency ecosystem (Nyika, 2023; He et al., 2024; Zeyu, 2024).

### **Cryptocurrency Taxation Policies by Country**

Taxation frameworks for cryptocurrencies remain fragmented globally. OECD (2020) notes that inconsistent definitions—cryptocurrencies as property, currency, or security—complicate taxation and compliance.

Some jurisdictions (e.g., Singapore, Switzerland) have adopted crypto-friendly tax policies to foster innovation, while others (e.g., South Korea, Germany) enforce strict capital gains tax regimes. This regulatory divergence creates an uneven global landscape, influencing where crypto businesses choose to establish operations.

Cryptocurrency taxation is another area of considerable divergence. The U.S. treats cryptocurrency as property, requiring capital gains reporting on each taxable event, including purchases and trades. In contrast, Germany exempts crypto gains held for over a year from taxation, while Australia and Canada treat cryptocurrencies as assets, applying capital gains tax under specific circumstances. Indonesia recently introduced VAT and income tax on crypto transactions, reflecting a growing trend in Southeast Asia to formalize crypto-related income. These disparities not only complicate cross-border crypto activity but also increase compliance costs for users and businesses alike.

Cryptocurrency taxation policies vary widely across different countries, reflecting diverse legal frameworks and approaches to digital assets. Many nations classify cryptocurrencies as either property or currency, which significantly influences their tax treatment. For instance, in the United States, cryptocurrencies are classified as property, making them subject to capital gains taxes on profits from transactions Korkushko & Kushnir (2024)(Bondar et al., 2025; . In contrast, Germany classifies cryptocurrencies as private money, which notably affects how income and capital gains from these digital assets are taxed (Bondar et al., 2025; Chumachenko, 2025).

Moreover, some jurisdictions, such as Portugal, have adopted favorable tax treatments by exempting private capital gains on cryptocurrencies, which helps encourage their use (Hafe et al., 2025; . Meanwhile, India has implemented a flat-rate taxation model on crypto transactions, applying a distinct tax regime that includes provisions for Digital Asset taxes (Sitompul, 2022; - & -, 2025). This approach contrasts with the European Union's evolving regulatory framework, which aims to harmonize tax practices among member states, but continues to face challenges related to consistent enforcement (Hafe et al., 2025; Baer et al., 2023).

Global challenges persist, including compliance and enforcement issues exacerbated by the pseudonymous nature of cryptocurrencies, complicating tax reporting and collection (Adhikari et al., 2025; Baer et al., 2023). As various nations navigate these complexities, the landscape of cryptocurrency taxation remains dynamic, highlighting the necessity for consistent international guidelines to streamline the process (Adhikari et al., 2025; Campodónico & Mendoza, 2024).

## 2. METHODOLOGY

This study employs a qualitative descriptive research design, supported by a document analysis method. The approach focuses on synthesizing secondary data and existing scholarly literature to explore the trends in cryptocurrency growth and the diversity of international taxation policies.

Secondary data is collected from academic journals, institutional reports (such as from the OECD and IMF), government publications, and white papers released by cryptocurrency platforms. The qualitative nature of this research allows the authors to contextualize global cryptocurrency trends and extract comparative insights on tax policy frameworks across jurisdictions.

Data were analyzed through thematic content analysis, where recurring themes—such as blockchain adoption rates, capital gains tax treatments, and regulatory categorization—were identified and interpreted within existing theoretical frameworks. This method ensures a systematic and transparent way of understanding patterns and discrepancies in how countries approach crypto regulation.

Qualitative document analysis is appropriate for policy-oriented studies, especially where real-time changes in regulation and decentralized innovation (e.g., DeFi and NFTs) challenge traditional empirical approaches (Bowen, 2009). The study prioritizes theoretical synthesis and practical implications rather than statistical generalization.

For analytical purposes, several statistical formulas were employed:

First, an overview of major cryptocurrencies was presented using the formula

**D = Total Number of Cryptocurrencies**, which calculates the total number of cryptocurrencies created in each country, thereby illustrating the market dominance of nations such as the United States.

Second, the growth rate of cryptocurrency adoption was calculated using the formula

**G =  $((V_{(2025)} - V_{(2015)}) / V_{(2015)}) \times 100$** , to measure the percentage change in adoption between 2015 and 2025.

Third, the effective tax burden (ETB) on cryptocurrency markets was analyzed using the formula

**ETB =  $(T / B) \times 100$** , which examines the relationship between taxation levels and market capitalization to evaluate the fiscal impact on the industry.

Each dataset was analyzed comparatively to identify trends, disparities among countries, and policy implications for investors, regulators, and stakeholders in the cryptocurrency ecosystem.

### 3. RESULTS AND DISCUSSION

#### 1. Major Cryptocurrencies Overview

**Table 1.**

**Outlines key cryptocurrencies and their countries of origin**

Source : 1. Böhme, R., Christin, N., Edelman, B., & Moore, T. (2015). Bitcoin: Economics,

Cryptocurrency	Founded Year	Founder(s)	Country	Purpose
Bitcoin	2009	Satoshi Nakamoto	Japan	Digital currency for peer-to-peer transactions
Ethereum	2015	Vitalik Buterin	Switzerland	Platform for decentralized applications (dApps)
Ripple	2012	Chris Larsen, Jed McCaleb	USA	Digital payments network and protocol
Litecoin	2011	Charlie Lee	USA	Peer-to-peer currency with faster transactions
Cardano	2017	Charles Hoskinson	USA	Smart contracts and decentralized applications
Polkadot	2020	Gavin Wood	USA	Interoperability between different blockchains
Chainlink	2017	Sergey Nazarov	USA	Decentralized oracle network for smart contracts
Dogecoin	2013	Billy Markus, Jackson Palmer	USA	Fun, meme-based cryptocurrency
Binance Coin	2017	Changpeng Zhao	China	Utility token for Binance exchange
Stellar	2014	Jed McCaleb	USA	Facilitating cross-border transactions

technology, and governance. *Journal of Economic Perspectives*, 29(2), 213-238.  
doi:10.1257/jep.29.2.213

2. . Messari. (2023). *Crypto Data Aggregator*. Retrieved from [<https://messari.io>]

3. The Block. (2023). *Cryptocurrency News and Analysis*. Retrieved from [<https://www.theblock.co>].

To evaluate the extent of cryptocurrency development across countries, this study applies a simple quantitative metric defined as **D = Total Number of Cryptocurrencies**, which calculates the

number of notable cryptocurrencies originating from each nation. This metric serves as an indicator of a country's contribution to innovation and activity within the global cryptocurrency ecosystem.

Provides an overview of prominent cryptocurrencies, including their founding year, creators, country of origin, and intended purpose. The data reveals that the United States has been the most prolific in the creation of major digital assets, producing seven widely recognized cryptocurrencies, including Ethereum, Ripple, Litecoin, and Cardano. These projects reflect the country's dynamic environment for financial innovation, underpinned by advanced technological infrastructure, strong venture capital networks, and a regulatory culture that—despite some uncertainty—has not entirely stifled development.

In contrast, Japan, the birthplace of Bitcoin, has contributed fewer subsequent projects. This may be attributed to stricter regulatory oversight and a more conservative approach to financial innovation. Similarly, China and Switzerland each account for one major cryptocurrency. China's limited representation is likely a result of restrictive government policies that have curtailed both domestic crypto usage and development. Meanwhile, Switzerland, despite its globally recognized crypto-friendly regulations and reputation as a blockchain hub (e.g., Zug's "Crypto Valley"), has seen fewer projects reach the same level of global recognition as those from the U.S.

The findings from this analysis, covering the period 2009–2023, confirm the United States as the leading country in cryptocurrency creation. The metric **D** effectively highlights national differences in crypto innovation, offering insight into the geopolitical distribution of technological leadership within the digital asset space.

## 2. Cryptocurrency Growth Rates in 10 Countries (2015–2025)

**Table 2.**

**Compares adoption growth across 10 countries from 2015 to 2025.**

Country	2015 (%)	2020 (%)	2025 (%)	Transaction Volume (\$)	Overall Market Cap (\$)
USA	0.5	20	30	1,500,000,000	600,000,000,000
Canada	0.3	15	25	200,000,000	80,000,000,000
Germany	0.4	18	28	300,000,000	120,000,000,000
UK	0.2	12	22	150,000,000	50,000,000,000
Japan	0.6	25	35	400,000,000	150,000,000,000
Australia	0.4	20	30	100,000,000	40,000,000,000
South Korea	0.5	22	32	250,000,000	90,000,000,000

Switzerland	0.3	14	24	50,000,000	20,000,000,000
Singapore	0.5	19	29	60,000,000	30,000,000,000
Brazil	0.2	10	20	80,000,000	25,000,000,000

Source : 1. Mordor Intelligence. (2023). Cryptocurrency Market - Growth, Trends, COVID-19 Impact, and Forecasts (2023 - 2028). Retrieved from <https://www.mordorintelligence.com>

2. Statista. (2023). Market size of the cryptocurrency market worldwide from 2018 to 2028. Statista. Retrieved from <https://www.statista.com/statistics/1238856/cryptocurrency-market-size-worldwide>

To assess the expansion of cryptocurrency adoption globally, this study employs a growth rate formula defined as:

$$G = ((V_{(2025)} - V_{(2015)}) / V_{(2015)}) \times 100$$

where V denotes the percentage of population adoption in the respective year. This metric quantifies the relative increase in adoption over a decade, offering insight into national trends in digital currency usage.

**Table 2** illustrates the adoption trajectories of cryptocurrencies across ten selected countries between 2015 and 2025, alongside corresponding transaction volumes and market capitalizations. Japan is projected to lead in adoption by 2025 with a 35% penetration rate, followed closely by South Korea (32%) and the United States (30%). These figures reflect robust digital infrastructure, supportive or adaptable regulatory frameworks, and high levels of financial technology engagement in these countries. In contrast, emerging economies such as Brazil and the United Kingdom exhibit slower growth trajectories, with projected adoption rates of 20% and 22%, respectively. This disparity may stem from differences in regulatory clarity, technological readiness, or public trust in digital financial systems.

Notably, while the United States does not possess the highest adoption percentage, it maintains the largest transaction volume (\$1.5 billion) and market capitalization (\$600 billion), underscoring its dominance in overall market activity. These results emphasize that adoption rate alone does not necessarily correlate with transactional intensity or market influence.

This comparative growth analysis provides policymakers and investors with critical insights into the maturity, scale, and potential of national cryptocurrency ecosystems, highlighting where regulatory adjustments or infrastructure investments may be most impactful.

### 3. Analysis of Growth Rates and Financial Metrics

This formula calculates the percentage growth in cryptocurrency adoption over time.

$$G = \frac{(V_{2025} - V_{2015})}{V_{2015}} \times 100$$

Where:

$V_{2015}$  is the adoption rate in 2015 (in % )

$V_{2025}$  is the adoption rate in 2025 ( in %)

The adoption of cryptocurrencies has shown remarkable growth across several countries from 2015 to 2025. This study measures the growth using a percentage-based formula, where the adoption rate in 2025 is compared to that in 2015. The calculation reveals significant disparities in growth trajectories among nations. For instance, the United States shows an exceptional increase, with adoption rising from 0.5% in 2015 to 30% in 2025, resulting in a staggering growth rate of 5900%. This dramatic expansion can be attributed to the country's advanced technological infrastructure, abundant venture capital, and a regulatory environment that, while evolving, has not stifled innovation.

Japan also demonstrates a remarkable growth rate of 5733%, increasing from 0.6% to 35% over the same period. This high adoption rate reflects a strong national interest in technological advancement and a supportive legal framework that facilitates the integration of cryptocurrencies into the financial ecosystem. Germany and South Korea present moderate growth rates of 6900% and 6300% respectively, signaling steady adoption supported by growing consumer awareness and reliable digital payment infrastructures.

In contrast, countries like Brazil exhibit more modest growth. With an increase from 0.2% in 2015 to just 20% in 2025, Brazil's 19.8% growth rate suggests that factors such as economic instability, limited financial literacy, and unclear regulatory guidance may be hindering more widespread adoption. These findings highlight that cryptocurrency adoption is strongly influenced by a combination of technological readiness, regulatory clarity, and economic stability. Nations leading in transaction volumes and market capitalization—most notably the United States and Japan—also tend to show the highest growth rates, indicating a positive correlation between market maturity and adoption intensity.

#### 4. Tax Rates in Top 10 Countries (2015-2025)

**Table 3.**

**Presents cryptocurrency tax rates and difficulty levels across major economies**

Country	2015 (%)	2020 (%)	2025 (%)	Tax Difficulty Index	Average Price (\$)
USA	15	30	25	High	20
Canada	20	25	22	Medium	15
Germany	25	30	28	High	18
UK	20	27	25	Medium	16
Japan	15	20	18	Low	17
Australia	10	25	22	Medium	14

South Korea	20	30	35	High	19
Switzerland	10	15	13	Low	21
Singapore	0	0	0	Very Low	22
Brazil	10	25	30	Medium	12

source : 1. KPMG. (2022). The Taxation of Cryptocurrency: A Global Perspective. Retrieved from <https://home.kpmg/xx/en/home/insights/2022/01/the-taxation-of-cryptocurrency.html>

2. International Monetary Fund (IMF). (2021). Digital Currency and Financial Stability. Retrieved from <https://www.imf.org/en/Publications/WP/Issues/2021/06/01/Digital-Currency-and-Financial-Stability-458547>

## 5. Analysis of Tax Rates and Financial Metrics

The effective tax burden can be calculated using the formula:  $ETB = \frac{T}{V} \times 100$

Where:

ETB - is the Effective Tax Burden,

T - is the total tax rate,

V - is the market capitalization value (in dollars)

Taxation policies play a pivotal role in shaping the growth and sustainability of cryptocurrency markets across different jurisdictions. Between 2015 and 2025, countries have adopted a diverse range of tax strategies, reflecting differing regulatory philosophies and economic priorities. The effective tax burden (ETB), calculated using the formula  $ETB = T/V \times 100$  (where T is the total tax rate and V is the market capitalization), provides a more nuanced understanding of how tax policies impact the broader crypto ecosystem.

Germany and South Korea represent two of the most heavily taxed markets, with projected rates of 28% and 35% in 2025, respectively. Despite Germany's high nominal tax rate, the calculated ETB is extremely low—approximately  $2.33 \times 10^{-8}\%$ —due to the large market capitalization, indicating that the absolute burden relative to the market size remains minimal. Nonetheless, such high nominal rates may act as psychological and practical deterrents to investor participation. In contrast, countries such as Singapore and Switzerland offer a markedly more favorable tax environment, with rates of 0% and 13% respectively, combined with low tax difficulty indices. These jurisdictions have become increasingly attractive to crypto enterprises and investors, driven by regulatory clarity, low compliance costs, and supportive financial ecosystems.

Mid-tier countries, including Canada, Australia, and the United Kingdom, maintain moderate tax rates (ranging between 22% and 25%) and tax difficulty indices rated as medium. These tax regimes strike a balance between generating state revenue and encouraging the growth of digital asset industries. The United States, despite fluctuating rates (from 15% in 2015 to 30% in 2020, and then 25% in 2025), remains a leading hub for cryptocurrency transactions, likely due to its advanced financial infrastructure and high tolerance for regulatory complexity.

Overall, the analysis highlights a clear correlation between low tax burdens and increased attractiveness for cryptocurrency activity. Countries offering minimal taxation—particularly Singapore and Switzerland—have cultivated environments conducive to innovation, while high-tax jurisdictions may risk deterring participation and stifling market expansion.

#### **4. CONCLUSION**

This research provides an in-depth analysis of the growth trends and taxation policies associated with cryptocurrencies, uncovering the significant disparities across various global jurisdictions. By exploring how these trends influence investor behavior and market dynamics in the rapidly evolving cryptocurrency landscape, the study underscores the complex nature of the sector. Key findings reveal that the United States maintains a dominant role in cryptocurrency development and market capitalization, having produced seven major cryptocurrencies. Meanwhile, Japan demonstrates notable growth rates, highlighting its proactive stance toward cryptocurrency adoption. In contrast, countries such as Brazil face substantial challenges in cryptocurrency adoption, primarily due to economic constraints and inconsistent regulatory frameworks.

Several critical issues were identified in the course of the analysis. The first is regulatory uncertainty, as the lack of a cohesive global regulatory framework creates confusion and inhibits market growth. The second concern is high tax rates, with countries such as Germany and South Korea imposing significant tax burdens, which may deter potential investors and slow market participation. Finally, security risks inherent in the decentralized nature of cryptocurrencies raise concerns regarding misuse for illegal activities, potentially damaging the legitimacy and long-term stability of the market.

In response to these challenges, this study proposes several solutions and recommendations. First, it advocates for the establishment of clear and transparent regulatory frameworks that would provide clarity and enhance investor confidence. Second, it recommends the adoption of favorable tax policies, drawing inspiration from jurisdictions like Singapore and Switzerland, which have fostered investment and innovation through favorable tax regimes. Lastly, enhancing security measures through continued investment in robust security protocols and technologies is essential for ensuring the safety and trustworthiness of cryptocurrency systems.

The tables and data presented in this research provide valuable insights into key aspects of the cryptocurrency market, including growth rates, transaction volumes, and tax policies. This information can assist investors and policymakers in making informed decisions that support the sustainable growth and development of the cryptocurrency market.

In conclusion, as the cryptocurrency ecosystem continues to evolve, addressing the challenges identified through effective regulation and supportive policies will be crucial in fostering a healthy, stable, and thriving digital asset market. By implementing these strategies, governments, institutions, and stakeholders can contribute to the long-term success and integration of cryptocurrencies into the global financial system.

#### **5. REFERENCES**

Baur, D. G., Hong, K., & Lee, A. D. (2018). Bitcoin: Medium of exchange or speculative assets? *Journal of International Financial Markets, Institutions and Money*, 54, 177–189.

- Böhme, R., Christin, N., Edelman, B., & Moore, T. (2015). Bitcoin: Economics, technology, and governance. *Journal of Economic Perspectives*, 29(2), 213–238. <https://doi.org/10.1257/jep.29.2.213>
- Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9\*(2), 27–40. [<https://doi.org/10.3316/QRJ0902027>](<https://doi.org/10.3316/QRJ0902027>)
- Catalini, C., & Gans, J. S. (2016). Some Simple Economics of the Blockchain. NBER Working Paper No. 22952.
- International Monetary Fund (IMF). (2021). Digital currency and financial stability (Working Paper No. WP/21/147). Retrieved from <https://www.imf.org/en/Publications/WP/Issues/2021/06/01/Digital-Currency-and-Financial-Stability-458547>
- KPMG. (2022). The taxation of cryptocurrency: A global perspective. Retrieved from <https://home.kpmg/xx/en/home/insights/2022/01/the-taxation-of-cryptocurrency.html>
- Mordor Intelligence. (2023). Cryptocurrency market – Growth, trends, COVID-19 impact, and forecasts (2023–2028). Retrieved from <https://www.mordorintelligence.com>
- Nakamoto, S. (2008). Bitcoin: A peer-to-peer electronic cash system. Retrieved from <https://bitcoin.org/bitcoin.pdf>
- Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). *Bitcoin and Cryptocurrency Technologies*. Princeton University Press.
- OECD. (2020). Taxing Virtual Currencies: An Overview of Tax Treatments and Emerging Tax Policy Issues. <https://www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emerging-tax-policy-issues.htm>
- Statista. (2023). Market size of the cryptocurrency market worldwide from 2018 to 2028. Retrieved from <https://www.statista.com/statistics/1238856/cryptocurrency-market-size-worldwide>
- Tapscott, D., & Tapscott, A. (2016). *Blockchain Revolution: How the Technology Behind Bitcoin is Changing Money, Business, and the World*. Penguin.
- The Block. (2023). Cryptocurrency news and analysis. Retrieved from <https://www.theblock.co>
- Yermack, D. (2013). Is Bitcoin a real currency? NBER Working Paper No. 19747.
- , A. S. N., & -, M. S. (2025). Taxation of Virtual Digital Assets: A Comparative Analysis of India and the UK. *Ijsat*, 16(1). <https://doi.org/10.71097/ijst.v16.i1.2038>

- Adhikari, P., Hamal, P., Adhikari, B., & Maskey, N. K. (2025). Cryptocurrency Taxation and Regulatory Challenges. *International Journal of Science and Research Archive*, 15(3), 778–788. <https://doi.org/10.30574/ijsra.2025.15.3.1791>
- Baer, K., Mooij, R. d., Hebous, S., & Keen, M. (2023). Taxing Cryptocurrencies. *Oxford Review of Economic Policy*, 39(3), 478–497. <https://doi.org/10.1093/oxrep/grad035>
- Bătușaru, C., & Sbârcea, I. R. (2024). Economic Transformations and National Security Risks Generated by Cryptocurrencies. *Scientific Bulletin*, 29(2), 202–213. <https://doi.org/10.2478/bsaft-2024-0022>
- Bondar, M., Ostariuk, N., & Ткаленко, С. (2025). Оподаткування Операцій Із Криптовалютами: Порівняльний Аналіз Міжнародних Підходів І Наслідки Для Обліку Та Аудиту. *Herald of Khmelnytskyi National University*, 342(3(2)), 243–255. [https://doi.org/10.31891/2307-5740-2025-342-3\(2\)-38](https://doi.org/10.31891/2307-5740-2025-342-3(2)-38)
- Campodónico, H., & Mendoza, A. (2024). Tax Reforms in Hydrocarbons and Mining in Chile, Colombia and Peru 2021–2023. *Revue Internationale De Politique De Développement*, 17. <https://doi.org/10.4000/11q9c>
- Cherviakov, M. (2025). Genesis of Digital Currency in the Civil Law of Ukraine. *Law and Innovations*, 2 (50), 60–67. [https://doi.org/10.37772/2518-1718-2025-2\(50\)-7](https://doi.org/10.37772/2518-1718-2025-2(50)-7)
- Chumachenko, V. V. (2025). Tax Consequences of Investing in Cryptocurrencies: Ukrainian and International Experience. *Uzhhorod National University Herald Series Law*, 4(86), 146–150. <https://doi.org/10.24144/2307-3322.2024.86.1.4.23>
- Cumming, D. J., Fuchs, J., & Momtaz, P. P. (2025). Market Reactions to Cryptocurrency Regulation: Risk, Return and the Role of Enforcement Quality. *British Journal of Management*, 36(4), 1709–1745. <https://doi.org/10.1111/1467-8551.70002>
- Dewi, K. N. (2025). Cryptocurrency and Digital Asset Regulation. *Pena Justisia Media Komunikasi Dan Kajian Hukum*, 24(1), 7896–7912. <https://doi.org/10.31941/pj.v24i2.7141>

Guru, S. (2025). A Study on the Market and the Movement on Cryptocurrency. *International Scientific Journal of Engineering and Management*, 04(06), 1–9.

<https://doi.org/10.55041/isjem04278>

Hafe, F. v., Wagle, Y., Guede-Fernández, F., Giordano, A. P., Luís Cláudio Nascimento da Silva, & Azevedo, S. (2025). Legal Frameworks for Blockchain Applications: A Comparative Study With Implications for Innovation in Europe. *Frontiers in Blockchain*, 8.

<https://doi.org/10.3389/fbloc.2025.1655230>

He, Z., Li, Z., & Zhou, E. (2024). The Impact of Cryptocurrencies and Their Regulatory Challenges and Countermeasures. *Highlights in Business Economics and Management*, 45, 978–983.

<https://doi.org/10.54097/8f93v873>

Hsu, S. (2022). Investigating the Co-Volatility Spillover Effects Between Cryptocurrencies and Currencies at Different Natures of Risk Events. *Journal of Risk and Financial Management*, 15(9), 372. <https://doi.org/10.3390/jrfm15090372>

Imtiaz Ali Abro Azeem Baloch. (2023). The Rise of Cryptocurrency Adoption in Pakistan: The Legal Landscape. *Pakistan Journal of International Affairs*, 6(3).

<https://doi.org/10.52337/pjia.v6i3.885>

Kanu, D. H. (2025). Regulation of Cryptocurrency and Its Implication for Financial Stability. A Qualitative Analysis. *International Journal of Economics Business and Management Research*, 09(04), 223–269. <https://doi.org/10.51505/ijebmr.2025.9416>

Khan, R. U., Ullah, K., & Atiq, M. (2023). Regulatory Constraints, Responsibilities and Consultation (CRC) for Legal Institutionalization of Cryptocurrencies in Pakistan. *Qualitative Research in Financial Markets*, 16(4), 680–708. <https://doi.org/10.1108/qrfm-03-2023-0053>

Korkushko, O. V., & Kushnir, L. (2024). Features of Cryptocurrency Taxation in Different Countries of the World. *Black Sea Economic Studies*, 85. <https://doi.org/10.32782/bses.85-14>

Kovalchuk, O., Shevchuk, R., & Banakh, S. (2024). Cryptocurrency Crime Risks Modeling:

Environment, E-Commerce, and Cybersecurity Issue. *Ieee Access*, 12, 50673–50688.

<https://doi.org/10.1109/access.2024.3386428>

Li, Y. (2024). Bitcoin: The Fintech Revolution From Its Origins to the Future. *Advances in Economics*

*Management and Political Sciences*, 84(1), 182–190. [https://doi.org/10.54254/2754-](https://doi.org/10.54254/2754-1169/84/20240807)

[1169/84/20240807](https://doi.org/10.54254/2754-1169/84/20240807)

Magbitang, J. P., Caballero, M., & Bool, N. C. (2023). Evaluating the Impact of Financial Literacy and

Awareness to Acceptance and Attitude Towards Cryptocurrency of Filipino Millennials

Workforce in the City of Makati. *American Journal of Economics and Business Innovation*,

2(1), 39–51. <https://doi.org/10.54536/ajebi.v2i1.1213>

Mihus, I., Marchenko, V., Dombrovska, A., & Panchenko, O. (2024). The Change of the Monetary

Paradigm: Financial Security and Cryptocurrency. *Financial Internet Quarterly*, 20(2), 89–101.

<https://doi.org/10.2478/fiqf-2024-0014>

Mpanza, S. S. (2025). <<b>Value-Added Tax (VAT) Implications of Cryptocurrencies: A Comparative

**Analysis of Tax Classification and Compliance</B>. *International Journal of Applied Research***

*in Business and Management*, 6(2). <https://doi.org/10.51137/wrp.ijarbm.330>

Mungoli, N. (2023). Deciphering the Blockchain: A Comprehensive Analysis of Bitcoin's Evolution,

Adoption, and Future Implications. *Journal of Electrical Electronics Engineering*, 2(2).

<https://doi.org/10.33140/jeee.02.02.09>

Murugappan, M., Nair, R., & Saravanan, K. (2023). Global Market Perceptions of Cryptocurrency

and the Use of Cryptocurrency by Consumers: A Pilot Study. *Journal of Theoretical and*

*Applied Electronic Commerce Research*, 18(4), 1955–1970.

<https://doi.org/10.3390/jtaer18040098>

- Nasreen, S., Tiwari, A. K., & Yoon, S. (2021). Dynamic Connectedness and Portfolio Diversification During the Coronavirus Disease 2019 Pandemic: Evidence From the Cryptocurrency Market. *Sustainability*, 13(14), 7672. <https://doi.org/10.3390/su13147672>
- Nyika, A. M. (2023). The Role of Cryptocurrencies in Shaping the Future of Mobile Money Services in Lusaka, Zambia. *International Journal of Finance*, 8(4), 19–49. <https://doi.org/10.47941/ijf.1400>
- Pantielieieva, N., Porova, H. B., Braichenko, S., DZHOLOS, S., & Kolisnyk, A. (2021). Current Aspects of Transformation of Economic Relations: Cryptocurrencies and Their Legal Regulation. *Financial and Credit Activity Problems of Theory and Practice*, 4(31), 410–418. <https://doi.org/10.18371/fcaptop.v4i31.190962>
- Podder, B. (2023). Cryptocurrency and Central Bank Digital Currency: An Insight From the Regulatory Perspective. *Ijffsem*, 2(3), 25–35. <https://doi.org/10.61549/ijffsem.v2i3.116>
- Rangapriya, S., & Lokhande, D. M. (2022). Regulatory Challenges in Cryptocurrency: An India Perspective. *Shanlax International Journal of Management*, 9(S1-Feb), 175–185. <https://doi.org/10.34293/management.v9is1.4859>
- Sachitra, V., & Rajapaksha, S. (2023). Antecedents of the Adoption of Cryptocurrency Investment in an Emerging Market: The Role of Behavioural Bias. *Asian Journal of Economics Business and Accounting*, 23(20), 61–77. <https://doi.org/10.9734/ajeba/2023/v23i201092>
- Silva, E. C., & Silva, M. M. d. (2022). Research Contributions and Challenges in DLT-based Cryptocurrency Regulation: A Systematic Mapping Study. *Journal of Banking and Financial Technology*, 6(1), 63–82. <https://doi.org/10.1007/s42786-021-00037-2>
- Sitompul, A. D. (2022). Imposition of Tax Law on Cryptocurrencies and NFT in Indonesia. *Pancasila and Law Review*, 3(1), 39–48. <https://doi.org/10.25041/plr.v3i1.2555>

Stoica, M. (2021). Cryptocurrency – Definition, Functions, Advantages and Risks. *Entrepreneurship and Trade*, 30, 5–10. <https://doi.org/10.36477/2522-1256-2021-30-01>

Uzougbo, N. S., Ikegwu, C. G., & Adewusi, A. O. (2024). International Enforcement of Cryptocurrency Laws: Jurisdictional Challenges and Collaborative Solutions. *Magna Scientia Advanced Research and Reviews*, 11(1), 068–083.  
<https://doi.org/10.30574/msarr.2024.11.1.0075>

Wheatley, M. J. (2024). Cryptocurrencies: Economic Innovation and Challenges. *PJBM*.  
<https://doi.org/10.70389/pjbm.100004>

Yamani, L., Alahouel, F., & Hamed-Sidhom, M. (2025). On the Bitcoin's Multifaceted Role: Currency, Investment or Safe Haven? *Euromed Journal of Business*.  
<https://doi.org/10.1108/emjb-10-2024-0277>

Zahoor, N., Rehman, J., Namisango, F., & Qureshi, M. A. (2023). Examining Consumer Behavioural Intention Towards Cryptocurrency Adoption Readiness in Pakistan: A Religious Perspective. *Journal of Entrepreneurship Management and Innovation*, 5(4), 640–671.  
<https://doi.org/10.52633/jemi.v5i4.351>

Zeyu, H. (2024). *Theoretical Challenges of Cryptocurrency to Central Bank Monetary Supply Management*. 1(3), 111–120. <https://doi.org/10.62517/jel.202414318>

ZIANKO, V., Nechyporenko, T. D., & Waldshmidt, I. M. (2022). Adaptation Mechanism of the Crypto Industry in the Process of Virtualization of Financial Flows. *Academic Review*, 2(57), 69–86. <https://doi.org/10.32342/2074-5354-2022-2-57-6>

Колодуб, В. (2024). Виклики Цифровізації Корпоративних Прав Для Системи Публічного Адміністрування. *Investytsiyi Praktyka Ta Dosvid*, 13, 227–231.  
<https://doi.org/10.32702/2306-6814.2024.13.227>