

BizFame 2024: 3rd International Conference on Business Finance Management & Economics
Suan Sunandha Rajabath University, Bangkok, Thailand, 24 & 25 October 2024

Organised by: Universiti Teknologi MARA, Kedah, Malaysia

Cryptocurrency in Malaysia: Navigating Islamic Legal Perspectives for Economic Innovation and Resilience

**Mohammad Hidir Baharudin^{1*}, Rahmawati Mohd Yusoff², Ros Hasri Ahmad³,
Muhamad Ismail Pahmi⁴, Siti Masnah Saringat⁵, Shafie Md Tarmudi³**

**Corresponding Author*

¹ Lecturer, Department of Syariah, Sultan Ibrahim Johor Islamic University College, 80350 Johor Bahru, Johor, Malaysia

² Senior Lecturer, Department of Law, Universiti Teknologi MARA, Cawangan Johor, Kampus Segamat, 85000 Segamat, Johor, Malaysia

³ Senior Lecturer, Faculty of Business and Management, Universiti Teknologi Mara (UiTM), Cawangan Johor, Kampus Segamat, 85000 Segamat, Johor, Malaysia

⁴ Senior Lecturer, Faculty of Computer and Mathematical Sciences, Universiti Teknologi Mara (UiTM), Cawangan Johor, Kampus Segamat, 85000 Segamat, Johor Malaysia

⁵ Senior Lecturer, Senior Lecturer, Faculty of Accountancy, Universiti Teknologi Mara (UiTM), Cawangan Johor, Kampus Segamat, 85000 Segamat, Malaysia

hidir@kuijsi.edu.my, rahmawati@uitm.edu.my, rosha446@iium.edu.my, muham184@uitm.edu.my, sitima067@uitm.edu.my, shafi128@uitm.edu.my
Tel: +60132223513

Abstract

Cryptocurrency has emerged as a revolutionary financial instrument, transforming the global economy with its decentralised and borderless nature. In Malaysia, cryptocurrency compatibility with Shariah principles is intensely debated. Through qualitative research methods, this paper explores the role of cryptocurrency within Malaysia's economic framework, its implications for financial resilience, and the potential for incorporating cryptocurrencies into Malaysia's Islamic finance sector. The findings suggest that cryptocurrency can boost economic innovation, lower transaction costs, and promote creativity. Malaysia might lead the global fintech sector by introducing bitcoin into Islamic financing, which could improve financial inclusion.

Keywords: Cryptocurrency; Islamic Perspective; Economic Sustainability.

eISSN: 2398-4287 © 2025. The Authors. Published for AMER by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers)
DOI: <https://doi.org/10.21834/e-bpj.v10iSI28.6952>

1.0 Introduction

The emergence of financial technology (FinTech) has radically transformed the financial services landscape, impacting both consumers and traditional institutions through various innovations such as mobile banking, peer-to-peer lending, blockchain, and artificial intelligence. These technologies improve efficiency, accessibility, and convenience, marking a significant shift in how financial services are delivered in response to the growing demand for speed and cost-effectiveness in a digital world (Mbate, 2023).

eISSN: 2398-4287 © 2025. The Authors. Published for AMER by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers)
DOI: <https://doi.org/10.21834/e-bpj.v10iSI28.6952>

Central to FinTech's innovations, blockchain technology underpins cryptocurrencies by providing a decentralised ledger that ensures transparency and security through cryptographic techniques (Katuk et al., 2023). The rise of cryptocurrencies, including Bitcoin and Ethereum, reflects a major financial trend driven by technological, economic, and social dynamics. These digital currencies have garnered significant attention from investors and researchers alike (Sapra & Shaikh, 2023). However, within Islamic finance, all financial transactions must adhere to Shariah principles, which prohibit usury (*riba*'), excessive uncertainty (*gharar*), and involvement in unlawful activities. Islamic finance maintains these ethical guidelines by promoting fairness, ethics, and social welfare (Kaya, 2023). The existing body of literature reveals a significant gap in research concerning the compatibility of cryptocurrency with Shariah principles, its influence on Malaysia's economy, its role in enhancing economic resilience, and its potential within Islamic finance. This study addresses these gaps and provides valuable insights into these areas. The study combines discussions of Islamic legal theory, economic growth and technology to explain how cryptocurrency fits into Malaysia's financial system, which has both conventional and Islamic parts. It answers the pressing demand for support as regulators, academics and market players handle Shariah-compliant digital assets.

1. The compatibility of cryptocurrency with Shariah principles in Malaysia.
2. The role of cryptocurrency in Malaysia's economy, its impact on economic resilience, and potential in Islamic finance.

This study examines whether cryptocurrency aligns with the principles of Shariah in Malaysia by reviewing scholars' opinions, fatwas, and regulations. The report also analyses how cryptocurrency can support Malaysia's economy during challenging times and how it may be relevant to Islamic finance. This current study contributes to the limited literature on Islamic legal perspectives regarding cryptocurrencies in Malaysia, which is focused on economic innovation and resilience. A thorough thematic analysis offers functional scholarly perspectives, particularly in the underexplored Malaysian context.

2.0 Literature Review

Cryptocurrency, a term that has gained significant traction since the introduction of Bitcoin in 2008 by the pseudonymous Satoshi Nakamoto, represents a transformative shift in the landscape of finance and technology. Bitcoin was initially proposed as a decentralised, peer-to-peer electronic cash system, eliminating the need for central authorities or trusted intermediaries in financial transactions (Yeong et al., 2019). This innovation has catalysed the emergence of over 2,000 alternative cryptocurrencies, each with unique features and applications, creating a diverse and rapidly evolving market (Yeong et al., 2019). This decentralised nature enhances security and introduces new privacy and regulatory compliance challenges. As cryptocurrencies gain acceptance beyond mere speculative investments, their application in various sectors, including e-commerce and tourism, is becoming increasingly relevant (Aiazbekov, 2023). Moreover, the borderless nature of cryptocurrencies allows for seamless cross-border transactions, which can be executed with minimal fees compared to traditional banking systems. This characteristic is particularly beneficial for individuals and businesses engaged in international trade, as it simplifies transferring funds across jurisdictions (Kim, 2023). Moreover, the perception of cryptocurrencies as a legitimate asset class has evolved in recent years. Initially viewed as a risky investment, cryptocurrencies are increasingly being integrated into institutional portfolios, reflecting a shift in investor sentiment (Bae & Kim, 2022). This transition is supported by empirical studies that assess the correlation between cryptocurrency returns and traditional asset classes, revealing a mild relationship that suggests cryptocurrencies may serve as a diversification tool (Sahoo & Sethi, 2022). The unique characteristics of cryptocurrencies, including their susceptibility to market manipulation and regulatory changes, necessitate a cautious investment approach (Gupta & Chaudhary, 2022). However, the disruptive potential of cryptocurrencies has attracted the attention of various stakeholders, including scholars, regulators, investors, and consumers, all keen to understand the implications of this new financial paradigm (Hassani et al., 2018).

Furthermore, the volatility associated with cryptocurrencies poses additional risks for investors and consumers alike. The cryptocurrency market is characterised by rapid price fluctuations, which can deter individuals from engaging in transactions or investments (Gupta & Chaudhary, 2022). This volatility is compounded by the speculative nature of many cryptocurrencies, leading to concerns about their long-term viability as a stable medium of exchange (Gronwald, 2021).

The integration of cryptocurrencies into mainstream financial systems also raises important regulatory questions. Governments and financial institutions are grappling with how to regulate this burgeoning market effectively while fostering innovation. The lack of a unified regulatory framework across jurisdictions complicates the landscape as different countries adopt varying approaches to cryptocurrency regulation (Sousa et al., 2022). This regulatory uncertainty can hinder the growth of the cryptocurrency market, as businesses and consumers may be reluctant to engage with a system that lacks clear legal guidelines. The decentralised nature of cryptocurrencies poses unique challenges for regulators, who must navigate the complexities of enforcing laws across borders while fostering innovation (Kim, 2023; Uzougbo, 2024). As highlighted, the current regulatory landscape often fails to adequately address the nuances of decentralised cryptocurrencies, leading to a patchwork of regulations that can hinder the sector's growth (Dhali, 2024). Collaborative international efforts may be necessary to establish a cohesive regulatory framework that balances innovation with consumer protection and financial stability. Several studies have examined cryptocurrency's technology, risks for investors and the rules that govern it.

Nevertheless, little research has been done about Islamic finance in Malaysia. Most of the literature either covers the topic in general or fails to offer a detailed analysis that suits the Malaysian system. For this reason, this study addresses those gaps by analyzing cryptocurrency from an Islamic legal standpoint and evaluating its economic impact on the national financial system.

From an Islamic standpoint, there are three distinct viewpoints on the legality of cryptocurrency: prohibited (*haram*), permissible (*mubah*), and not expressing an opinion (*tawaqquf*) on this matter. The first group is mainstream, which consists of the Shawqi Allam, Hamzah Adnan, Assim al-Hakim, Abd Allah al-Rakban, Abd Aziz al-Fawzan, Umar Abd al-Kafi, Ali al-Qarahdaghi, Abd al-Sattar Abu Qudadah, the General Authority of Islamic Affairs of the United Arab Emirates, the Indonesian Ulama Council, Haitam, the Turkish

Government, the Palestinian Fatwa Centre, and some other works of literature contend that cryptocurrency is prohibited by Islamic law. The second group has the opinion that it is permissible in Islamic law. They are the Fatwa Centre of the South African Islamic Institution, Darul Uloom Zakariyya, Abd Allah al-Salmi, Daud Bakar, Adnan al-Zahrani, the Council of Islamic Religion and Malay Custom State of Perlis in Malaysia, Zaharuddin Abd Rahman, Selcuk and Kaya, Monzer Kahf and some other works of literature. They argue that cryptocurrency is permissible by Islamic law. The third group, among others, is Saad al-Khathlan. He believes there is still a lack of clear information concerning cryptocurrency. As a result, prohibition or permissibility viewpoints are not relevant now. However, he maintains that people who transact in cryptocurrency and adhere to the advice of jurists who view it as permissible are free to continue their transactions (Baharudin, 2023).

In short, Islamic scholars in Malaysia have yet to reach a consensus on whether cryptocurrency aligns with Shariah principles. This situation underscores the necessity of examining how digital assets correspond with Islamic teachings in Malaysia's financial sector. Furthermore, there remains a lack of research concerning the potential benefits of cryptocurrency for Malaysia's economy and its application in Islamic finance, particularly in promoting financial inclusion and developing new Shariah-compliant methods.

3.0 Research Methodology

The study employed qualitative methods to analyse how cryptocurrency aligns with Shariah law in Malaysia. All data in this study are derived from secondary sources, including academic articles, Islamic law books, and fatwas. The themes were identified by analysing these sources to understand the rules for digital assets, what scholars say about them, and the rulings of Malaysia's Shariah Advisory Council. The study examined cryptocurrency's legal and religious aspects to illustrate how Islamic law responds to emerging financial technologies. It also explored how cryptocurrency could influence Malaysia's economy and contribute to the growth of Islamic finance. Economic resilience, regulatory support, and public perceptions of digital assets were investigated to determine how they could enhance financial inclusion and innovation. Although the study relied solely on secondary sources and did not involve fieldwork, it established a strong foundation for future empirical research. The research combined text analysis with contextual understanding, yielding clear insights into the relationship between Islamic law, financial regulation, and digital currency in Malaysia. Using thematic analysis, the study could group and organise the opinions and arguments found in various Islamic writings and institutions. The method was used to study how Shariah law is interpreted for digital currencies and how it relates to social and economic matters in Malaysia.

4.0 Findings and Discussion

4.1 Cryptocurrencies in Islamic Jurisprudence

Cryptocurrency, as al-Qarahdaghi suggests, may represent the currency of the future. Although it is banned in some countries, Abu Qudadah clarifies that it is not prohibited under Islamic jurisprudence (*fiqh*). However, Daud Bakar explains that the distinction between the legality of cryptocurrency in Islamic jurisprudence and the Shariah-oriented policy (*al-siyasah al-shariyyah*) is crucial. Many sources blur this line when discussing cryptocurrency's legality. The "holding price and value" concept traditionally associated with gold and silver can also apply to modern currencies, including cryptocurrency. Scholars such as Ibn Qayyim, Ibn Abidin, al-Ghazali, and others, including the International Islamic Fiqh Council, support this reasoning. This perspective dismisses claims that cryptocurrency is prohibited due to its lack of intrinsic value, noting that even currencies like paper money, which also lack inherent value, are accepted. Since the 1971 collapse of the Bretton Woods system, all national currencies have been pegged to the U.S. dollar rather than gold or silver. Thus, the argument that cryptocurrency should be rejected based on its intrinsic value is unfounded (Baharudin, 2023).

Furthermore, the Islamic currency must meet specific ethical criteria, including customary acceptability, state recognition, and value stability, as scholars such as Ibn Taymiyah, Ahmad bin Hanbal, and al-Nawawi argue. Cryptocurrency meets these requirements, especially in customary acceptability, with an increasing number of people using it globally. For example, as of June 2021, there were 221 million cryptocurrency users, and the adoption rate surged by 880% that year, with predictions that by December 2022, the number could reach 1 billion. This trend reflects how currencies like the dinar and dirham gained gradual acceptance in the Islamic world, highlighting the evolving acceptance of cryptocurrency. In addition, from a legal legitimacy standpoint, the government's recognition of cryptocurrency is not a requirement from an Islamic jurisprudence perspective. Historically, with Roman and Persian currencies in the Arabian Peninsula, the currency did not need official recognition to be valid in Islam. However, many developed countries, such as the United States, Canada, and the European Union, have legalised cryptocurrencies like Bitcoin. This demonstrates that state recognition pertains more to Shariah-oriented policy than Islamic jurisprudence.

Regarding value stability, the volatility of cryptocurrencies like Bitcoin is similar to fluctuations in gold, silver, and fiat currencies, which also experience inflation and rising prices. This stability issue is more a policy concern than a question of cryptocurrency's legality. The volatility of Bitcoin, for instance, is influenced by supply and demand, regulations, and market sentiment, but stability can improve with better policy measures (Baharudin, 2023). The use of cryptocurrency in Islamic law is influenced by its functions and the changing environment in which it is used. As more people adopt it, scholars must keep reviewing its applications and new technologies to give rulings that match Shariah and the market.

In conclusion, whether viewed as currency or an asset, cryptocurrency is permissible under Shariah law. Opposition to cryptocurrency largely stems from weak arguments rooted in policy concerns rather than Islamic jurisprudence. Thus, cryptocurrencies' legality aligns with Islamic principles, making them permissible without any compelling reason for prohibition. This basic knowledge about cryptocurrency and Islamic law helps to examine how these rules are implemented in Malaysia.

4.2 Shariah Compliance of Cryptocurrencies in Malaysia

In Malaysia, the Shariah Advisory Council (SAC) has given more detailed advice on cryptocurrencies, helping to turn general Islamic discussions into actual regulations. The Shariah Advisory Council (SAC) of the Securities Commission (SC) of Malaysia, a statutory body responsible for developing and regulating capital markets, has addressed the issue of trading digital assets, including cryptocurrencies, from an Islamic legal perspective. During its 233rd and 234th meetings, several key questions were discussed: whether digital assets can be recognised as assets (*mal*) under Shariah law, whether they qualify as currency or goods (*urud*), and how the Shariah status of a digital token is determined. From a Shariah perspective, the SAC ruled that digital currencies can be considered *mal* (assets). It distinguished between two types of digital currencies: those without any underlying asset and those backed by *ribawi* items (commodities subject to specific rules in Shariah, such as gold and silver).

1. Digital currencies based purely on technology without an underlying asset are categorised as *urud* (goods), not as currencies under Shariah law. Since they are not classified as *ribawi* items, their trade is not subject to the principles of *bay' al-sarf* (currency exchange).
2. The SAC made further distinctions for digital currencies backed by *ribawi* items. Digital currencies backed by gold, silver, or other currencies are considered as currencies according to Shariah law. Hence, their trade must adhere to the principles of *bay' al-sarf*. Digital currencies backed by other *ribawi* items besides gold, silver, or currencies are considered *ribawi* items themselves, and their trade must follow the specific Shariah rules governing *ribawi* items.

In addition, the SAC also provided guidelines on digital tokens, which are also recognised as *mal* under the category of *urud*. For a digital token to comply with Shariah law, the funds raised from its issuance must be used for Shariah-compliant purposes, and the rights and benefits attached to the token must also align with Shariah principles. In cases where the activities funded by the token are a mix of Shariah-compliant and non-compliant, the SAC's existing resolutions on *sukuk* and business activity benchmarks should apply. If *ribawi* items are backed by a digital token, their trade is subject to the same Shariah rules that apply to trading *ribawi* items. The SAC emphasised that these rulings only apply to digital assets under the jurisdiction of the SC, and digital assets traded on a registered Digital Asset Exchange (DAX) that meet these conditions are permissible for investment and trading under Shariah law (Securities Commission Malaysia, 2020). These rules clarify how digital assets can be handled in Malaysia's Islamic financial sector, preparing for their wider economic role. The explicit rules prove that Malaysia actively ensures financial innovation follows Shariah rules. It also guides people studying, regulating or developing fintech to assess how cryptocurrencies fit into Islamic finance, which supports the study's goal of studying their role in strengthening the economy.

4.3 Cryptocurrency In Malaysia's Economy For Economic Resilience And Potential In Islamic Finance

Apart from legal and religious factors, studying how cryptocurrency affects Malaysia's economy is essential, mainly regarding its resilience and connection to Islamic finance. Cryptocurrency has become a popular investment option in Malaysia, especially among the youth, who view it as a way to safeguard wealth and engage with the global economy amidst rising inflation (Yusof, 2023). This growing interest is supported by the presence of cryptocurrency exchanges and a regulatory framework that encourages secure trading, particularly through the efforts of the Securities Commission (SC) of Malaysia and Bank Negara Malaysia (BNM) (Huey, 2024). This regulatory structure is key to building investor confidence and promoting broader acceptance of cryptocurrency in the Malaysian market (Ji-Xi et al., 2021).

The global economic challenges, particularly due to the COVID-19 pandemic, have spurred the increased adoption of digital financial technologies, including cryptocurrencies. Countries like Tunisia have become prominent in cryptocurrency research, with innovative financial policies contributing to economic resilience during crises (Niftiyev, 2024). This global trend reflects the growing recognition of cryptocurrencies as tools for economic stability and growth. In Islamic finance, Central Bank Digital Currencies (CBDCs) are proposed as a solution to the issues posed by speculative cryptocurrencies. Backed by central banks, CBDCs offer more stability and could ensure compliance with Shariah principles, a concept aligned with the call for Islamic digital currencies that promote financial inclusivity (Glavina, 2024; Jihad, 2024).

Cryptocurrency has gained momentum in Malaysia, particularly among youth, due to inflationary concerns and regulatory support. Globally, the adoption of digital financial technologies is accelerating, with cryptocurrencies viewed as tools for economic stability. In Islamic finance, CBDCs offer a regulated alternative to speculative cryptocurrencies, aligning with Shariah principles and promoting financial inclusivity. Because of these changes, Malaysia's financial system, which includes both conventional and Islamic sectors, can use cryptocurrency to strengthen its financial stability. As the nation tries to innovate economically and follow Shariah rules, digital assets could be key in shaping new financial policies that benefit all.

5.0 Conclusion and Recommendation

In conclusion, cryptocurrency's permissibility under Shariah law is affirmed by Islamic scholars who argue that its status aligns with Islamic principles. Despite concerns about its intrinsic value and volatility, cryptocurrency meets the ethical and customary criteria for acceptance. In Malaysia, the Shariah Advisory Council has differentiated between types of digital currencies, with specific guidelines for those backed by *ribawi* items. The growing interest and regulatory framework in Malaysia underscore cryptocurrency's potential for economic resilience and its role in Islamic finance. While speculative cryptocurrencies pose risks, Central Bank Digital Currencies (CBDCs) offer a Shariah-compliant, stable alternative, promoting financial inclusivity and stability. Integrating cryptocurrency into Malaysia's Islamic financial system involves more than just technology; it presents a significant opportunity to enhance financial and economic stability for everyone, following Shariah principles. As digital assets transform the global economy, Malaysia is at the forefront,

merging modern technology with Islamic values, a model that other Muslim-majority countries may emulate. However, the study's results are limited because it relies on secondary sources and does not incorporate any fieldwork to understand practices and views in Malaysia. Moreover, further research is necessary to comprehend how Islamic financial institutions can utilise cryptocurrency by examining case studies or consulting Shariah scholars, regulators, and market participants.

Paper Contribution to Related Field of Study

This paper contributes to Islamic finance and FinTech by exploring the Shariah compliance and economic role of cryptocurrency in Malaysia. It bridges Islamic legal perspectives with digital innovation, highlighting cryptocurrency's potential for financial inclusion and economic resilience within a Shariah-compliant framework.

References

- Aiazbekov, A. (2023). Cryptocurrency as a method of payment in the tourism sector. *Financial Internet Quarterly*, 19(1), 57-65.
- Bae, G. and Kim, J. (2022). Observing cryptocurrencies through robust anomaly scores. *Entropy*, 24(11), 1643.
- Baharudin, M. H. (2023). *Exploring the Guidelines of Zakat On Cryptocurrency*. Thesis Master in Contemporary Islamic Studies. Universiti Teknologi Mara. Malaysia.
- Dhali, M., Hassan, S., & Zulhuda, S. (2024). The regulatory puzzle of decentralised cryptocurrencies: opportunities for innovation and hurdles to overcome. *Journal of Infrastructure, Policy and Development*, 8(6), 3377.
- Fang, F., Ventre, C., Basios, M., Kanthan, L., Martínez-Rego, D., Wu, F. & Li, L. (2022). Cryptocurrency trading: a comprehensive survey. *Financial Innovation*, 8(1).
- Farooq, M. O. (2022). *Islam compliance, beyond shari'ah compliance: toward a broader socio-economic transformation*. *Arab Law Quarterly*, 38(5), 503–545.
- Glavina, S. G. and Asmyatullin, R. R. (2024). The fourth industrial revolution in Islamic finance: the case of digital currencies of central banks. *International Trade and Trade Policy*, 9(4), 169-178.
- Gronwald, M. (2021). How explosive are cryptocurrency prices? *Finance Research Letters*, 38, 101603.
- Gupta, H. & Chaudhary, R. (2022). An empirical study of volatility in cryptocurrency market. *Journal of Risk and Financial Management*, 15(11), 513.
- Hassani, H., Huang, X., & Silva, E. (2018). Big-crypto: big data, blockchain and cryptocurrency. *Big Data and Cognitive Computing*, 2(4), 34.
- Huey, Y. C., Angeline, Y. K. H., Teng, Y. S., Melissa, T. T. T., Chin, W. S., & Saleh, Z. (2024). Text analytics on regulation of cryptocurrency. *KnE Social Sciences*. 718–742.
- Jihad, B., Lamrabet, H., & Oussama, B. (2024). *Islamic Digital Currencies as a Model*. *KUEY*. 30(5), 1810–1820.
- Ji-Xi, J. T., Salamzadeh, Y., & Teoh, A. P. (2021). Behavioral intention to use cryptocurrency in Malaysia: an empirical study. *The Bottom Line*, 34(2), 170-197.
- Katuk, N., Wahab, N., & Kamis, N. (2023). Cryptocurrency estate planning: the challenges, suggested solutions and Malaysia's future directions. *Digital Policy Regulation and Governance*, 25(4), 325-350.
- Kaya, İ. (2023). Islamic finance: fit for purpose or mere replication? *İslam Ekonomisi Dergisi*, 3(2), 1-18.
- Kim, G. and Ryou, J. (2023). Digital authentication system in avatar using did and sdt. *Mathematics*, 11(20), 4387.
- Mashatan, A., Sangari, M., & Dehghani, M. (2022). How perceptions of information privacy and security impact consumer trust in crypto-payment: an empirical study. *Access*, 10, 69441-69454.
- Mbate, C. (2023). Understanding the impacts of financial technology in the society 5.0 era. *Financial Jurnal Akuntansi*, 9(1), 97-111.
- Ngozi Samuel Uzougbo, Chinonso Gladys Ikegwu, & Adefolake Olachi Adewusi (2024). International enforcement of cryptocurrency laws: jurisdictional challenges and collaborative solutions. *Magna Scientia Advanced Research and Reviews*, 11(1), 068-083.
- Niftiyev, I. and Kheyirhabarli, M. (2024). The impact of covid-19 pandemic on cryptocurrency adoption in investments: a bibliometric study. *SocioEconomic Challenges*, 8(1), 154-169.
- Rahardja, U. (2023). Evaluating the mediating mechanism of perceived trust and risk toward cryptocurrency: an empirical research. *Sage Open*, 13(4).
- Sahoo, P. & Sethi, D. (2022). Market efficiency of the cryptocurrencies: some new evidence based on price–volume relationship. *International Journal of Finance & Economics*, 29(2), 1569-1580.
- Sapra, N. and Shaikh, I. (2023). Impact of bitcoin mining and crypto market determinants on bitcoin-based energy consumption. *Managerial Finance*, 49(11), 1828-1846.
- Securities Commission Malaysia. (2020). *Resolutions Of the Shariah Advisory Council of the SC (the 233rd and 234th SAC of SC Meetings – 29 June 2020 and 20 July 2020)*. Accessed from <https://www.sc.com.my/development/icm/shariah/resolutions-of-the-shariah-advisory-council-of-the-sc>

Sousa, A., Calçada, E., Rodrigues, P., & Borges, A. (2022). Cryptocurrency adoption: a systematic literature review and bibliometric analysis. *Euromed Journal of Business*, 17(3), 374-390.

Yeong, Y., Kalid, K., & Sugathan, S. (2019). Cryptocurrency adoption in malaysia: does age, income and education level matter? *International Journal of Innovative Technology and Exploring Engineering*, 8(11), 2179-2184.

Yusof, H., Zolkaply, Z., & Anuar, M. A. (2023). Are the young investors ready for cryptocurrency investments in Malaysia? *The Eurasia Proceedings of Science Technology Engineering and Mathematics*, 22, 377-388.