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REVIEW ARTICLE

Regulatory Framework for Cryptocurrency: A Comparative Analysis of Malaysia, Indonesia and Singapore

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ABSTRACT

The rapid evolution of cryptocurrency has prompted significant regulatory responses across the globe, particularly in Southeast Asia, where Malaysia, Indonesia, and Singapore are at the forefront of this transformation. This comparative analysis examines the regulatory frameworks governing cryptocurrency in these three nations, highlighting the unique approaches adopted by each country in response to the challenges and opportunities presented by digital currencies. Singapore is recognized for its progressive regulatory stance, which aims to foster innovation while ensuring consumer protection and financial stability. In contrast, Malaysia has implemented a more cautious approach, focusing on establishing a comprehensive legal framework that addresses the complexities of cryptocurrency transactions and their implications for the financial system. Meanwhile, Indonesia's regulatory landscape is characterized by a mix of enthusiasm for blockchain technology and concerns regarding potential risks, leading to a somewhat fragmented regulatory environment. This study employs a qualitative methodology, analysing primary and secondary data sources to assess the effectiveness of these regulatory frameworks in promoting cryptocurrency adoption while mitigating associated risks. The findings reveal that while Singapore's model may serve as a benchmark for regulatory best practices, Malaysia and Indonesia face distinct challenges that necessitate tailored regulatory solutions. Ultimately, this research contributes to the understanding how regulatory frameworks can shape cryptocurrency landscape in Southeast Asia, offering insights for policymakers and stakeholders navigating this dynamic market.

Contribution/Originality: This study analyses cryptocurrency regulations in Malaysia, Indonesia, and Singapore, recommending best practices to strengthen Malaysia's framework. It offers insights for policymakers, advocates ASEAN regulatory harmonization, and emphasizes the role of robust laws in fostering investor confidence, minimizing fraud, and supporting financial technology growth.

1. Introduction

The emergence of cryptocurrency has revolutionized the financial landscape globally, presenting both opportunities and challenges for economies, particularly in Southeast Asia. Cryptocurrency is regarded as a type of virtual or digital currency that is protected by cryptography, which is the process of encrypting information using codes, cyphers, or other encryption methods (Kunaifi et al., 2022). As digital currencies gain traction, the need for robust regulatory frameworks has become increasingly apparent. This study focuses on the comparative analysis of cryptocurrency regulations in Malaysia, Indonesia, and Singapore, three countries that have adopted distinct approaches to managing the complexities associated with digital currencies. The regulatory landscape in these nations reflects their economic priorities and their cultural and political contexts, which significantly influence how cryptocurrencies are perceived and utilized within their borders. Understanding these frameworks is essential for stakeholders, including investors, policymakers, and financial institutions, as they navigate the rapidly evolving cryptocurrency market.

In Malaysia, the regulatory framework for cryptocurrency is primarily governed by the Securities Commission Malaysia (SC), which has established guidelines to ensure investor protection and market integrity. The SC has classified cryptocurrencies as securities, thereby subjecting them to the same regulatory scrutiny as traditional financial instruments. This approach aims to foster a secure environment for cryptocurrency trading while promoting innovation within the fintech sector. The Malaysian government has also launched initiatives to educate the public about cryptocurrencies and their associated risks, reflecting a commitment to creating a well-informed investor base. However, challenges remain, particularly in addressing the regulatory gaps that may hinder the growth of the cryptocurrency market and the adoption of blockchain technology (Wardoyo & Hapsari, 2023).

Conversely, Indonesia's approach to cryptocurrency regulation is characterized by a blend of enthusiasm for digital innovation and caution regarding potential risks. The Indonesian government has recognized cryptocurrencies as commodities, allowing for their trading on futures exchanges. However, the regulatory framework remains fragmented, with various government agencies involved in oversight, leading to inconsistencies in enforcement and public understanding. Recent regulations, such as the Minister of Trade's policy on crypto asset futures trading, aim to provide clarity and guidance for market participants. Nonetheless, the lack of a centralized regulatory authority poses challenges for effective governance and investor protection, raising concerns about the potential for fraud and market manipulation (Hum, 2023; Putri, 2023).

Singapore stands out as a leader in cryptocurrency regulation, having developed a comprehensive legal framework that balances innovation with consumer protection. The Monetary Authority of Singapore (MAS) has implemented the Payment Services Act, which regulates cryptocurrency exchanges and service providers, ensuring compliance

with anti-money laundering (AML) and counter-terrorism financing (CTF) measures. This proactive regulatory environment has positioned Singapore as a hub for cryptocurrency and blockchain innovation, attracting numerous start-ups and investors. The MAS's approach emphasizes collaboration with industry stakeholders to create a conducive ecosystem for growth while safeguarding the interests of consumers and maintaining financial stability (Nguyen & Pham, 2011).

The comparative analysis of these three countries reveals significant differences in their regulatory approaches, influenced by their unique economic, cultural, and political contexts. While Singapore's model may serve as a benchmark for regulatory best practices, Malaysia and Indonesia face distinct challenges that necessitate tailored solutions. The effectiveness of these regulatory frameworks in promoting cryptocurrency adoption while mitigating associated risks will be crucial in shaping the future of the digital currency landscape in Southeast Asia. As the cryptocurrency market continues to evolve, ongoing research and dialogue among stakeholders will be essential to ensure that regulations remain relevant and effective in addressing emerging challenges (Gaol et al., 2020).

1.1. Research Objectives

This research aims to analyze the extent to which the cryptocurrencies has been regulated in Indonesia and Singapore and how Malaysia can learn from them in providing a comprehensive law govern on cryptocurrencies transaction in a competitive market.

2. Literature Review

The comparative study of the cryptocurrency legal framework among Malaysia, Indonesia, and Singapore reveals a complex landscape shaped by distinct regulatory approaches and cultural contexts. In Malaysia, the legal framework is primarily governed by the Securities Commission, which classifies cryptocurrencies as digital assets. This classification has led to a growing acceptance of cryptocurrencies among the populace, yet significant gaps remain in the legal clarity surrounding issues such as inheritance and estate planning for digital assets (Kamis & Wahab, 2022; Katuk et al., 2023). The existing literature highlights a "legal vacuum" in Malaysia, which poses risks for investors and users, as the lack of comprehensive regulations can lead to uncertainty and potential exploitation (Usman et al., 2022; Gillies et al., 2020). This duality of fostering innovation while ensuring consumer protection is echoed in the works of Mason et al. (2021) who emphasize the necessity for robust legal frameworks to mitigate risks associated with cryptocurrencies (Mason et al., 2021).

In contrast, Indonesia's approach to cryptocurrency regulation is characterized by a cautious stance, with the government recognizing cryptocurrencies as commodities but lacking a cohesive legal framework (Hum, 2023; Chang, 2019). The fragmented regulatory environment has resulted in significant uncertainty for investors, as various government agencies provide conflicting perspectives on the status of cryptocurrencies (Putri, 2023). The Indonesian government has made strides in drafting regulations, such as the Minister of Trade's policy on crypto asset futures trading, yet the lack of clarity continues to hinder the market's growth (Hum, 2023). This regulatory ambiguity aligns with Garg's findings on the challenges posed by regulatory uncertainty in the broader context of cryptocurrency mining and trading (Garg, 2022). The need for a comprehensive legal

framework in Indonesia is critical, as it would not only protect investors but also foster a conducive environment for innovation in the cryptocurrency space.

Singapore stands out as a leader in cryptocurrency regulation within the region, with the Monetary Authority of Singapore (MAS) implementing a proactive regulatory framework that encourages innovation while ensuring consumer protection (Karisma, 2022; Alekseenko & Belykh, 2020). The MAS has established licensing requirements for cryptocurrency exchanges and service providers, which has attracted numerous blockchain and cryptocurrency firms to the country (Alekseenko & Belykh, 2020). This regulatory clarity has positioned Singapore as a hub for digital finance in Asia, fostering a robust ecosystem for cryptocurrency innovation (Karisma, 2022). The successful regulatory model in Singapore serves as a potential blueprint for other Southeast Asian nations, including Malaysia and Indonesia, to consider in their efforts to create a balanced legal framework for cryptocurrencies.

Despite the differences in regulatory approaches, common themes emerge across the three countries. All three jurisdictions recognize the potential of cryptocurrencies to drive economic growth and innovation, yet they also share concerns regarding issues such as fraud, money laundering, and consumer protection (Paesano & Siron, 2022). The literature emphasizes the importance of a balanced regulatory approach that encourages innovation while safeguarding users, a sentiment echoed by Hsieh, who discusses the need for regional cooperation in investment rulemaking (Hsieh, 2023). Furthermore, the Islamic finance perspective plays a significant role in shaping the legal discourse around cryptocurrencies in Malaysia and Indonesia, where compliance with Sharia law is a critical consideration (Katterbauer et al., 2022; Abadi et al., 2023). This intersection of Islamic finance and cryptocurrency regulation highlights the unique challenges faced by these countries in developing a legal framework that accommodates both traditional financial principles and modern digital assets.

The role of international cooperation and harmonization of regulations is also crucial in addressing the challenges posed by the decentralized nature of cryptocurrencies. The literature suggests that a collaborative approach among Southeast Asian nations could enhance regulatory effectiveness and foster a more stable environment for cryptocurrency trading (Paesano & Siron, 2022). The establishment of regional frameworks, such as those promoted by ASEAN, could facilitate the sharing of best practices and regulatory experiences, ultimately leading to a more cohesive legal landscape for cryptocurrencies in the region (Haosheng & Canyu, 2022). The potential for cross-border collaboration is particularly relevant given the global nature of cryptocurrency markets, where regulatory discrepancies can create opportunities for regulatory arbitrage.

Moreover, the implications of cryptocurrency regulation extend beyond economic considerations, touching upon broader societal issues such as financial inclusion and access to digital finance. The literature indicates that well-structured regulatory frameworks can enhance public trust in cryptocurrencies, thereby promoting their adoption as legitimate financial instruments (Hairudin et al., 2020). This is particularly important in Malaysia and Indonesia, where a significant portion of the population remains unbanked or underbanked. By providing clear legal protections and fostering a secure environment for cryptocurrency transactions, regulators can empower individuals and small businesses to participate in the digital economy, ultimately contributing to economic growth and development (Susilo et al., 2020; Tauda et al., 2023).

The evolving landscape of cryptocurrency regulation in Southeast Asia also raises questions about the role of technology in shaping legal frameworks. The integration of blockchain technology into regulatory processes presents opportunities for enhancing transparency and accountability in cryptocurrency transactions. As highlighted by the literature, the adoption of innovative technologies can facilitate compliance with regulatory requirements, thereby reducing the risks associated with illicit activities such as money laundering and fraud (Mason et al., 2021). This technological dimension underscores the need for regulators to stay abreast of developments in the cryptocurrency space and adapt their frameworks accordingly to harness the benefits of digital innovation.

3. Research Methods

This study primarily employs qualitative legal research through a doctrinal analysis framework. Doctrinal analysis is a well-established method in legal research that encompasses two fundamental processes: the identification of relevant legal sources and the subsequent interpretation and analysis of these texts (Hutchinson & Duncan, 2012). This approach is particularly suited for examining the legal frameworks governing cryptocurrencies in Malaysia, Indonesia, and Singapore, as it allows for an in-depth exploration of statutory provisions, regulatory guidelines, and legal principles. Qualitative research, by its nature, does not involve statistical data analysis or numerical assessments. Instead, it focuses on understanding the nuances of legal texts and the implications of legal doctrines, making it an appropriate choice for this investigation. The absence of quantitative data underscores the study's emphasis on legal interpretation and contextual understanding rather than empirical measurement.

The research will utilize both primary and secondary sources to achieve its objectives. Primary sources include key legislative texts and regulatory frameworks that directly govern cryptocurrency activities in the selected jurisdictions. Specifically, this study will examine the following primary legal instruments: the Anti-Money Laundering Act, the Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001, the Capital Market and Services (Prescription of Security) & (Digital Currency and Digital Token) Order 2019, the Payment Services Act 2019, and the BAPPEBTI Regulation. These statutes provide the foundational legal context necessary for understanding the regulatory landscape of cryptocurrencies. In addition to primary sources, the research will incorporate secondary sources to enhance the analysis and support the arguments presented. Secondary sources will include scholarly articles, legal journals, governmental publications, and other credible resources that provide insights into the interpretation of the law and its application in practice. This comprehensive approach ensures that the study is well-rounded and grounded in both statutory provisions and scholarly discourse, allowing for a robust examination of the legal frameworks governing cryptocurrencies in the three jurisdictions.

By synthesizing insights from both primary and secondary sources, this research aims to contribute to the existing body of knowledge on cryptocurrency regulation, highlighting the similarities and differences in legal approaches among Malaysia, Indonesia, and Singapore. The findings will not only inform legal scholars and practitioners but also provide valuable guidance for policymakers seeking to navigate the complexities of cryptocurrency regulation in a rapidly evolving digital landscape.

4. Results

4.1. Nature of Cryptocurrency.

In the contemporary global financial landscape, cryptocurrencies have emerged as a transformative force, exerting significant influence on economies worldwide, including Malaysia. Defined as a novel form of digital currency that operates independently of traditional financial institutions, cryptocurrencies have garnered increasing attention due to their decentralized nature, which has fundamentally altered the mechanisms of financial transactions through the application of blockchain technology (Prayogo & Chornous, 2020). Blockchain serves as the foundational technology for cryptocurrencies, ensuring the integrity and security of transactions by maintaining a distributed ledger that records trading activities and the utilization of digital wallets (Mutiso & Maguru, 2020). The proliferation of cryptocurrencies has not only expanded public choices but has also facilitated the emergence of new economic paradigms. The inception of cryptocurrencies can be traced back to 2009, when an individual or group operating under the pseudonym Satoshi Nakamoto introduced Bitcoin, the first cryptocurrency (Saxena et al., 2021). Nakamoto's contributions to Bitcoin's development continued until December 2010. Since then, the cryptocurrency market has witnessed exponential growth, with over 10,000 distinct currencies available as of 2023, including notable examples such as Ethereum, Dogecoin, and Ripple. This proliferation underscores the global expansion and increasing acceptance of cryptocurrencies. Despite this growth, perceptions of cryptocurrencies within the financial sector vary significantly. The absence of a universally accepted definition contributes to this ambiguity. For instance, the European Central Bank categorizes cryptocurrencies as a subset of virtual currencies, which are defined as digital currencies that are unregulated and issued by developers, primarily utilized within specific virtual communities (European Central Bank, 2012). Similarly, the International Monetary Fund (IMF) classifies cryptocurrencies as a form of virtual currency, characterizing them as digital representations of value issued by private developers, distinct from fiat currencies (Haksar & Bouveret, 2018). The World Bank aligns with this interpretation, emphasizing that digital currencies are defined as representations of value denominated in unique units of account, differentiating them from e-money, which is pegged to fiat currencies.

4.2. Cryptocurrency in Malaysia and Its Legal Framework.

The rise of Bitcoin has catalyzed interest among financial technology stakeholders in Malaysia. However, the lack of comprehensive statistics and official records regarding cryptocurrency adoption and usage in the country has led to the assumption that Bitcoin trading commenced in Malaysia around 2012, as evidenced by postings on BitcoinMalaysia.com. By 2022, Malaysia ranked seventh in cryptocurrency ownership among 27 countries, with 63% of adults reportedly aware of cryptocurrencies (Wang & Crypto, 2021). Furthermore, as of February 2024, the Securities Commission Malaysia has recognized six Registered Recognised Market Operators for Digital Asset Exchanges, including HATA Digital Sdn Bhd, Luno Malaysia Sdn Bhd, MX Global Sdn Bhd, SINEGY DAX Sdn Bhd, Tokeniza Technology (M) Sdn Bhd, and Torum International Sdn Bhd. These operators comply with the guidelines established under the Capital Markets and Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019. Despite these developments, it is crucial to note that cryptocurrencies are not classified as legal tender in Malaysia, as Bank Negara Malaysia has not regulated Bitcoin's operations. This position was articulated in a statement released by the Central Bank in January 2014,

which clarified that while Bitcoin could be utilized, users must exercise caution regarding the associated risks.

The regulatory landscape for cryptocurrencies in Malaysia has evolved since 2014, when Bank Negara Malaysia issued a statement declaring that Bitcoin is not recognized as legal tender and falls outside its regulatory purview (Ida Madieha & Nazli Ismail, 2021). The absence of a definitive legal interpretation of cryptocurrencies suggests an ambiguous regulatory stance. Current legislation addressing cryptocurrency-related matters remains fragmented and lacks comprehensive coverage. Relevant statutes include the Central Bank of Malaysia Act 2009, the Financial Services Act 2013, the Anti-Money Laundering, Anti-Terrorism Financing & Unlawful Activities Act 2022, and the Capital Markets and Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019, each governing different aspects of financial regulation while touching upon cryptocurrency issues. The authority of Bank Negara Malaysia is enshrined in the Central Bank of Malaysia Act 2009, which establishes a governance framework promoting accountability and excellence. A critical issue remains whether cryptocurrencies can be classified as legal tender. Section 63 of the Act stipulates that legal tender consists solely of currency notes and tokens issued by Bank Negara Malaysia, reaffirming the bank's authority as articulated in its January 3, 2014, statement regarding Bitcoin. Consequently, cryptocurrencies do not qualify as legal tender.

The regulatory environment for cryptocurrencies in Malaysia has undergone significant changes, particularly with the issuance of the "Anti-Money Laundering and Counter Financing of Terrorism Policy for Digital Currencies (Sector 6)" in 2018, which marked a proactive approach to addressing the challenges and opportunities posed by cryptocurrencies. This policy aims to enhance transparency and combat illicit activities within the digital currency sector. The Capital Markets and Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019 represents a substantial regulatory advancement in Malaysia's cryptocurrency framework. Issued by Bank Negara Malaysia, this order facilitates transparency and establishes a regulatory framework for digital currencies. Regulation 3 classifies digital currencies and tokens as securities if they are routinely traded and anticipated to provide benefits such as trading, converting, or redeeming, provided they are not issued by a government body or central bank. Furthermore, they may also be classified as commodities. The case of Luno *Malaysia Pte Ltd v Robert Ong Thien Cheng* reinforced the necessity for real currency in cryptocurrency transactions, imposing requirements on operators to comply with regulatory standards. Regulation 4 mandates that operators obtain a Capital Markets Services License under Section 58 of the Capital Markets and Services Act 2007 (CMSA) to engage in regulated activities. While Malaysia possesses various legislative measures governing cryptocurrencies, a singular, comprehensive regulatory framework remains absent.

4.3. Cryptocurrency in Indonesia and Its Legal Framework

The regulation of cryptocurrency trading in Indonesia has evolved since 2019, with the Commodity Futures Trading Regulatory Agency (Bappebti) overseeing the sector. Bappebti, established in 2005, is tasked with regulating aspects of the financial services industry under the supervision of the Indonesian Ministry of Finance (Chang, 2019; Susilowardhani, Bidari, & Nurviana, 2022). Although there is no comprehensive regulation specifically addressing cryptocurrencies, several regulations govern the sector, including Bappebti Regulation Number 5 of 2019, which outlines technical

provisions for the physical crypto asset market, and Regulation Number 7 of 2020, which stipulates the list of tradable crypto assets. These regulations collectively refer to cryptocurrencies as "crypto assets," emphasizing their classification as commodities rather than legal tender.

The initial adoption of Bitcoin in Indonesia faced significant challenges (Dian Ekawati, 2024). The trading of Bitcoin and other crypto assets as commodities was only permitted in February 2019, while Bank Indonesia continues to prohibit the use of cryptocurrencies as a means of payment. Nonetheless, the prominence of cryptocurrencies has grown, particularly in 2020, as more individuals explore alternative investment opportunities (Lorenscia, 2021). As of November 2023, the total number of crypto investors in Indonesia reached 18.25 million, with an average monthly increase of 437,900 registered users. Java accounts for the highest concentration of crypto investors, comprising 63.6% of the total. Despite fluctuating market conditions, the total transaction value of crypto assets traded in Indonesia reached Rp122 trillion in November 2023, indicating significant growth potential for the country's open economy through the utilization of cryptocurrencies (Asosiasi Blockchain Indonesia, 2023).

Bank Indonesia (BI) issued Regulation No. 19/12/PBI/2017, which governs the operation of financial technology. While the use of blockchain systems is not prohibited, the regulation explicitly forbids the use of virtual currencies for payment, designating the Rupiah as the sole legal currency for transactions (Widjaja, 2019). Consequently, cryptocurrencies are not recognized as legal tender in Indonesia. Thus, Indonesia urgently needs comprehensive cryptocurrency regulations to protect consumers, prevent misuse, ensure tax compliance, and promote innovation and the development of the digital financial industry (Guntoro, & Listyowati Sumanto, 2024).

4.4. Cryptocurrency in Singapore and Its Legal Framework

Singapore's proactive approach to emerging technologies, including blockchain and cryptocurrencies, has positioned it as a pivotal hub in Asia. Notably, the introduction of Bitcoin did not mark the beginning of cryptocurrency engagement in Singapore; rather, the nation had already laid the groundwork for technological advancement through initiatives such as the IT2000 masterplan, aimed at creating a "smart island". The Monetary Authority of Singapore (MAS) has adopted a progressive stance towards cryptocurrencies, recognizing their potential while not designating them as legal tender. The implementation of the Payment Services Act in 2019 marked a significant regulatory milestone, making Singapore the second country to establish a regulatory framework for virtual currencies after the United States. A study by the Infocom Media Development Authority projects that Singapore's blockchain sector could grow to US\$272 million in 2022 and US\$2.6 billion by 2030, reflecting a compound annual growth rate of 32.5% (Lee et al., 2019).

Singapore's regulatory approach to cryptocurrencies is characterized by a balance of caution and proactivity. While cryptocurrencies are not recognized as legal tender, they are regulated under the auspices of the Monetary Authority of Singapore, which serves as both the central bank and integrated financial regulator. In 2017, MAS clarified that it would not supervise the issuance of cryptocurrencies unless they met the definition of securities. The Payment Services Act, enacted in 2019, expanded MAS's jurisdiction to encompass digital payment token services, thereby regulating cryptocurrency transactions. In May 2020, MAS published a Guide to Digital Token Offerings, indicating

that the Securities and Futures Act (SFA) applies to public offerings and issues of cryptocurrencies. Additionally, cryptocurrencies in Singapore are subject to anti-money laundering and counter-terrorism financing regulations, given their anonymous and borderless nature. Consequently, all providers of digital payment token transactions or exchange services must adhere to these AML/CFT regulations. The Financial Services and Markets Act further enhances the regulatory framework governing cryptocurrencies, granting MAS the authority to impose additional requirements on digital payment token service providers. This includes mandates for the segregation of customer assets and the establishment of deposit requirements to safeguard consumer interests in the event of provider negligence.

4.5. The Challenges in Malaysian Cryptocurrency and Recommendations.

The regulatory landscape for cryptocurrencies in Malaysia remains nascent, revealing numerous gaps and ambiguities that necessitate urgent attention. A significant shortcoming is the absence of concrete provisions aimed at consumer protection and awareness regarding cryptocurrencies. Currently, there is no specific statute that comprehensively governs cryptocurrency matters, leading to a regulatory environment where cryptocurrencies are neither explicitly prohibited nor fully endorsed. Consequently, individuals engaging with cryptocurrencies must assume the associated risks independently. To establish a robust regulatory framework for cryptocurrencies, it is imperative to adopt an innovative perspective that acknowledges their dual nature as both a medium of payment and an investment vehicle. Given the potential of cryptocurrencies to function as commodities, the development of a legislative framework is essential. Clear regulations and guidelines would not only facilitate the adoption of cryptocurrencies in Malaysia but also mitigate risks associated with illicit activities. To achieve this, it is crucial to examine best practices and legislative frameworks from leading blockchain countries, such as Indonesia and Singapore.

Indonesia presents a compelling case for regulatory comparison, having established a clear prohibition against the use of digital currencies as a medium of payment. However, the country has instituted a regulatory body, Bappebti, under the supervision of the Indonesian Ministry of Finance, tasked with overseeing certain aspects of the financial services industry (Chang, 2019). Furthermore, Indonesia has implemented concise regulations governing the use of cryptocurrencies as digital assets or commodities, exemplified by Regulation Number 5 of 2019, which outlines technical provisions for the physical crypto asset market, and Regulation Number 7 of 2020, which specifies the list of tradable crypto assets. These regulations provide clear guidelines that benefit Indonesian fintech players by enhancing their understanding of permissible trading activities. Conversely, Singapore has adopted a cautious yet proactive stance towards cryptocurrency regulation. The country is recognized as a leader in blockchain development, bolstered by initiatives such as the Payment Services Act 2019, which enhances consumer protection and delineates clear responsibilities for players in the financial technology sector. This regulatory framework has positioned Singapore as the second country to regulate virtual cryptocurrencies, following the United States.

Malaysia, Singapore and Indonesia are members of the ASEAN Community, which aims to achieve regulatory excellence through the ASEAN Master Plan Connectivity 2025. By adopting laws or policies from Indonesia and Singapore, Malaysia can work towards establishing a harmonized legal framework, thereby reducing the likelihood of misinterpretation of cryptocurrency regulations. Additionally, the shared Commonwealth

heritage between Malaysia and Singapore facilitates the potential for legislative harmonization, as evidenced by Section 3(1) of the Civil Law Act, which allows for the application of common law in the absence of local statutes, provided it aligns with local circumstances.

However, before enacting new legislation, a cost-benefit analysis should be conducted to assess the financial implications and anticipated advantages of regulatory changes. However, the evaluation of existing statutes, such as the Anti-Money Laundering, Anti-Terrorism Financing & Unlawful Activities Act 2001 and the Capital Markets and Services Act 2007, may prove time-consuming and costly, yielding limited benefits. Furthermore, the proposal to establish specific legislation regulating cryptocurrencies faces challenges. as Malaysia does not currently recognize them as valid currency. Deputy Finance Minister Shahar Abdullah has indicated that discussions regarding the legalization of cryptocurrencies have not yet occurred in Parliament. In light of these considerations, it is advisable for Malaysia to revise existing legislation governing cryptocurrencies by drawing on Indonesia's regulations on digital assets and Singapore's legislative best practices. Specifically, this paper recommends amending the Capital Markets and Services (Prescription of Securities) & (Digital Currency and Digital Token) Order 2019 to serve as the primary regulatory framework for cryptocurrencies in Malaysia. This order possesses the necessary attributes and authority to govern digital currencies and tokens, thereby establishing a solid foundation for cryptocurrency regulation. The proposed amendments should incorporate relevant provisions from the Anti-Money Laundering and Counter Financing of Terrorism Policy for Digital Currencies (Sector 6) into the newly revised Capital Markets and Services (Prescription of Securities) & (Digital Currency and Digital Token) Order 2019. While merging these regulations into a single framework is essential, it is crucial to ensure that consumer protection measures are adequately addressed. Therefore, the Singapore Guidelines on the Provision of Digital Payment Token Services should also be considered, as they outline responsibilities for digital token providers, including restrictions on advertisements that may mislead consumers regarding risks. Furthermore, Singapore's practices for safeguarding consumer assets, such as the segregation of personal and customer assets and the requirement for service providers to maintain a deposit with financial institutions, should be integrated into the proposed regulatory framework. This would enhance the responsibilities of reporting institutions and provide comprehensive governance for both service providers and consumers. In terms of utilizing cryptocurrencies as a mode of payment or investment, the proposed legislation would provide a solid foundation for regulation. However, it can be further strengthened by incorporating Regulation Number 5 of 2019 and Regulation Number 7 of 2020 into the Malaysian legal framework. These provisions would offer technical guidelines and establish a recognized list of digital assets eligible for trading in the physical market. The Malaysian government must identify and amend this list to align with local needs, thereby creating a cohesive legislative framework that governs cryptocurrencies and encompasses all stakeholders in the financial technology sector, whether they engage with cryptocurrencies as a mode of payment, investment, or commodities.

5. Conclusion

The comparative analysis of cryptocurrency regulations in Malaysia, Indonesia, and Singapore highlights the varied approaches these nations adopt to balance innovation and consumer protection. Singapore stands out with its robust regulatory framework under the Payment Services Act, which has positioned it as a regional hub for blockchain and

cryptocurrency innovation. Its proactive measures, including AML/CFT compliance and consumer asset safeguards, set a benchmark for regulatory excellence. Malaysia's regulatory environment, while evolving, remains fragmented. The country focuses on categorizing cryptocurrencies as securities, reflecting a cautious approach aimed at fostering fintech growth while addressing market risks. However, significant gaps in consumer protection and legal clarity hinder its progress. Malaysia could benefit from adopting elements of Singapore's comprehensive model, particularly regarding consumer safeguards and asset segregation practices. Indonesia's framework is characterized by regulatory ambiguity, with cryptocurrencies recognized as commodities but excluded as legal tender. The fragmented oversight, involving multiple regulatory bodies, poses challenges for governance and investor trust. Nevertheless, its regulatory steps, such as defining permissible crypto assets, offer lessons for Malaysia in creating technical guidelines for market activities. The study underscores the importance of a harmonized regulatory approach, particularly among ASEAN nations, to reduce legal ambiguities and foster cross-border collaboration. By integrating best practices from Singapore and addressing gaps observed in its own and Indonesia's frameworks, Malaysia can develop a comprehensive regulatory structure. This will ensure consumer protection, promote innovation, and position the nation competitively in the dynamic cryptocurrency market. The findings provide valuable insights for policymakers striving to navigate the complexities of digital currencies in Southeast Asia.

Ethics Approval and Consent to Participate

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Conflict of Interest

The authors reported no conflicts of interest for this work and declare that there is no potential conflict of interest with respect to the research, authorship, or publication of this article.

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