

Regulating Crypto Payments to Prevent Money Laundering in Indonesia: A Comparative Study

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ABSTRACT: The development of cryptocurrencies as part of digital financial innovation has created new challenges for anti-money laundering (AML) regulation and Digital Asset Supervision. In Indonesia, cryptocurrencies are legally recognised as digital financial assets under the supervision of the Financial Services Authority (OJK) after the 2025 digital financial assets regulatory reform. However, they are still prohibited from being used as a means of payment under Law Number 7 of 2011 on currencies. This dualism of regulation creates legal uncertainty and increases the risk of money laundering, as transactions can shift to less supervised channels, including peer-to-peer (P2P) transactions, decentralised finance (DeFi), and offshore platforms outside domestic supervision. This study aims to analyse cryptocurrency regulation in relation to money laundering in Indonesia and compare it with regulatory approaches in the United States and Singapore. This research uses a normative juridical method with legislative, comparative, and conceptual approaches. The United States and Singapore were chosen because they represent different but influential regulatory models. The United States implements a multi-regulatory, risk-based framework through FinCEN, the SEC, the CFTC, and OFAC. In contrast, Singapore implements a single, more integrated regulatory model through the Monetary Authority of Singapore (MAS) under the Payment Services Act (PSA). The results showed that Singapore's integrated model provided stronger regulatory coherence and supervisory efficiency, while the United States demonstrated higher adaptability to technological developments. Therefore, Indonesia needs to strengthen regulatory harmonisation, expand supervision of P2P and DeFi activities, implement domestic Travel rules, and improve coordination among OJK, Bank Indonesia, and PPATK to build a more integrated digital asset anti-money-laundering system.

KEYWORDS: Cryptocurrency; Money Laundering; Digital Assets; AML/CFT; Cryptocurrency Regulation.



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I. INTRODUCTION

The development of financial technology has driven the emergence of cryptocurrencies as a new form of digital asset that challenges conventional legal and financial systems.¹ In Indonesia, cryptocurrencies occupy a unique legal position.² On the one hand, its use as a means of payment is prohibited under Law No. 7 of 2011 on currency, as the Rupiah remains the only legal tender within Indonesian territory.³ On the other hand, cryptocurrencies are legally recognised as tradable digital financial assets.⁴ After the enactment of Law Number 4 of 2023 on the development and strengthening of the financial sector (P2SK law), supervision of digital financial assets, including cryptocurrencies, is gradually transferred from the Commodity Futures Trading Supervisory Agency (Bappebti) to the Financial Services Authority (OJK). This transition demonstrates Indonesia's efforts to build a more integrated digital financial supervision system.⁵

¹ Päivi Hutukka, “Fintech law in the European Union, the United States and China: Regulation of financial technology in comparative context” (2024) 31:5 Maastricht Journal of European and Comparative Law 559–594.

² Meiryani, “Exploration of potential money laundering crimes with virtual currency facilities in Indonesia” (2024) 27:6 Journal of Money Laundering Control 985–994.

³ Clara & Siti Nurbaiti, “Kedudukan Hukum Bitcoin Sebagai Mata Uang Virtual Di Indonesia Berdasarkan Undang-Undang Nomor 7 Tahun 2011 Tentang Mata Uang” (2018) 1:1 Adigama 1–26.

⁴ Afif Noor, Moh Arifin & Deni Parama Widia Astuti, “Crypto Assets and Regulation: Taxonomy and Framework Regulatory of Crypto Assets in Indonesia” (2023) 8:3 JED 303–315.

⁵ Jundri R Berutu, Yuhelson Yuhelson & Dedy Ardian Prasetyo, “Regulatory Shifts and Legal Certainty in Cryptocurrency Trading: Towards an Integrated Supervision Model in Indonesia” (2025) 3:9 ajosh 1687–1693, online: <<https://ajosh.org/index.php/jsh/article/view/578>>; Miftah Waratmaja & Maimunah Rusydah Istiqomah, “Peralihan Kewenangan Regulasi Aset Kripto Di Indonesia Dari Bappebti Kepada Otoritas Jasa Keuangan dan Bank Indonesia” (2026) 6:2 Jurnal 259–270.

Indonesia still faces inconsistencies in cryptocurrency legal arrangements, as the country simultaneously bans cryptocurrencies as a means of payment while allowing them to circulate as digital investment assets.⁶ This dualism creates uncertainty about the legal character of cryptocurrencies. It opens opportunities for regulatory arbitrage, especially in transactions conducted outside formally supervised systems, such as peer-to-peer (P2P) exchanges, decentralised finance (DeFi), and cross-border digital asset platforms.⁷ These conditions are becoming increasingly relevant in the context of money laundering because cryptocurrency transactions are pseudonymous, can be carried out across jurisdictions quickly, and rely on decentralised mechanisms that complicate tracking and monitoring the flow of funds.⁸ Several previous studies have addressed cryptocurrency regulation and its relation to money laundering risks.⁹

However, most studies still discuss the legality of cryptocurrencies and digital asset trading arrangements, as well as the technical risks of money laundering in blockchain-based transactions, separately.¹⁰ In addition, existing research generally reviews Indonesian regulation only in part and does not conduct a comprehensive comparison with countries that have more established cryptocurrency regulatory systems. Research on the relationship between the fragmentation of monetary regulation and digital

⁶ Krisna Bramantyo Aji et al, “Strengthening Indonesia’s Cryptocurrency Regulation to Combat Money Laundering: A Comparative Analysis of Canada and South Korea’s Approaches” (2025) 5:2 RH 427–436.

⁷ Asyam Shobir Muyassar, Arief Fitriyanto & Jessika Nurhidayah, “Platform-Embedded Enforcement In Cryptocurrency Regulation: Rethinking Taxation And Anti-Money Laundering In Indonesia’s Cross-Border Legal Context” (2025) 2:4 Multidisciplinary Indonesian Center Journal 4333–4341.

⁸ Meiryani, *supra* note 2; Christian Leuprecht, Caitlyn Jenkins & Rhianna Hamilton, “Virtual money laundering: policy implications of the proliferation in the illicit use of cryptocurrency” (2023) 30:4 JFC 1036–1054.

⁹ Febby Mutiara Nelson et al, “Cracking the Code: Investigating the Hunt for Crypto Assets in Money Laundering Cases in Indonesia” (2024) 9:1 Journal of Indonesian Legal Studies 89–130; Tiara Putri et al, “Inadequate Cryptocurrency and Money Laundering Regulations in Indonesia (Comparative Law of US and Germany)” (2023) 12:2 yst 129–152.

¹⁰ Shaikha Ali Al Naqbi, Haitham Nobanee & Nejla Ould Daoud Ellili, “Global trends and insights into cryptocurrency-related financial crime” (2025) 75 Research in International Business and Finance 102756; Nikos Passas, “Cryptocurrencies, Blockchain, and Financial Crimes” (2025) 14 International Journal of Criminology and Sociology 76–89.

asset regulation and the effectiveness of the anti-money laundering regime in Indonesia, especially after the transition of supervisory authority to OJK under the framework of the P2SK law, remains limited. Therefore, this study aims to fill that void by analysing cryptocurrencies not only as a matter of technology or investment but also as a matter of regulatory coherence within the framework of anti-money laundering laws.

The study compared Indonesia with the United States and Singapore, as the two countries represent different yet influential approaches to cryptocurrency regulation. The United States implements a multi-regulatory, risk-based model through institutions such as FinCEN, SEC, CFTC, and OFAC. In contrast, Singapore implements a single, more integrated regulatory model through the Monetary Authority of Singapore (MAS) under the Payment Services Act (PSA).¹¹ This comparison is important for assessing the extent to which differences in regulatory structures affect the effectiveness of anti-money-laundering supervision of cryptocurrency activities.¹²

Based on this background, this study aims to analyse cryptocurrency regulation in relation to money laundering in Indonesia and assess the extent to which Indonesia's regulatory framework remains fragmented despite regulatory reforms. This study also aims to compare Indonesia's regulatory approach with regulatory models in the United States and Singapore to identify a more coherent and integrated regulatory model. This study analyses cryptocurrency regulation in the Indonesian legal system in relation to efforts to prevent money laundering. It identifies problems arising from regulatory dualism between the monetary and digital asset regimes that could inhibit the effectiveness of supervision and law enforcement. Furthermore, this study conducted a comparative analysis of cryptocurrency regulation approaches in the United States and Singapore to evaluate the level of institutional and regulatory coherence in supporting

¹¹ Ali Muqadas Jaffri, "Regulating crypto assets in the United States: balancing regulatory effectiveness, investor protection, and cross-border challenges" (2026) 21:2 *Capital Markets Law Journal* 1–12; Jonathan W Lim, "A Facilitative Model for Cryptocurrency Regulation in Singapore" in *Handbook of Digital Currency* (Elsevier, 2024) 341.

¹² Hilmi Abdillah, "Hukum Cryptocurrency sebagai Mata Uang dan sebagai Komoditas (Analisis Fatwa MUI tentang Hukum Cryptocurrency)" (2023) 9:3 *Jurnal Ilmiah Ekonomi Islam* 4245–4255.

the anti-money laundering regime, and to formulate a more adaptive and integrated supervision model for Indonesia.

II. METHODS

This research is a normative legal study that analyses cryptocurrency regulation in relation to the Anti-Money Laundering (AML) regime. The study used a statutory approach (statute approach), a comparative legal approach (comparative approach), and a conceptual approach (conceptual approach).¹³ The approach to legislation is carried out by systematically reviewing various regulations relating to cryptocurrencies, digital financial assets, and the Prevention of money laundering in Indonesia such as Law Number 8 of 2010 on the Prevention and Eradication of Money Laundering, Law Number 7 of 2011 on Currency, Law Number 4 of 2023 on the development and strengthening of the financial sector (P2SK Law), Government Regulation Number 49 of 2024, as well as policies and technical regulations relating to the supervision of digital financial assets and the implementation of anti-money laundering principles by the Financial Services Authority and Bank Indonesia. This study also uses international legal instruments, especially the recommendations of the Financial Action Task Force (FATF), as a standard framework for assessing the suitability of national arrangements to the global AML regime.

The legal comparison approach is used to compare the construction of cryptocurrency regulation in Indonesia with that in the United States and Singapore. The selection of the two countries is based on differences in regulatory models applied. The United States employs a multi-regulatory, risk-based model through the involvement of institutions such as FinCEN, the SEC, the CFTC, and OFAC. In contrast, Singapore represents a single, more integrated regulatory model through the Monetary Authority of Singapore (MAS). The comparison was carried out using several indicators, namely the institutional structure of supervision, the mechanism for regulating digital assets, the application of AML/CFT principles,

¹³ Konrad Zweigert & Hein Kotz, *Introduction to comparative law* (New York: Oxford University Press, 1998); Terry Hutchinson & Nigel Duncan, "Defining and Describing What We Do: Doctrinal Legal Research" (2012) 17:1 Deakin Law Review 83–119.

supervision of peer-to-peer (P2P) and decentralised finance (DeFi) transactions, and the implementation of international standards such as the FATF Travel Rule. Using these indicators, this study seeks to assess the level of integration, coherence, and adaptability of each regulatory system in relation to the development of digital asset technology.

The legal materials used consist of primary legal materials and secondary legal materials. Primary legal materials include legislation, regulatory policies, and international instruments relating to cryptocurrencies and anti-money laundering regimes. Meanwhile, secondary legal materials include books, legal journals, scientific articles, and prior research findings relevant to the research topic. The entire legal material is qualitatively analysed using the method of systematic and comparative interpretation to identify interregulatory relations, identify normative inconsistencies, and evaluate the effectiveness of cryptocurrency regulation in preventing money laundering. This analytical approach is used so that the research is not only descriptive of regulatory developments but also capable of building critical arguments regarding the coherence of cryptocurrency regulation within the framework of anti-money laundering laws in Indonesia.

III. CRYPTOCURRENCY REGULATION AS A MONEY LAUNDERING PREVENTION INSTRUMENT IN INDONESIA, THE UNITED STATES, AND SINGAPORE

A. Indonesia

The journey of cryptocurrency regulation in Indonesia reflects a gradual, not always linear, process of adaptation. Cryptocurrency regulation in Indonesia exhibits characteristics of transitional and dualistic regulatory models.¹⁴ The state does not completely deny the existence of cryptocurrencies but also does not recognise them as legal monetary instruments. Under Law Number 7 of 2011 concerning Currency, the

¹⁴ Kadek Dyah Pramitha Widiyarni, Ida Ayu Putu Widiati & Ni Made Puspasutari Ujianti, “Kajian Yuridis Penggunaan Koin Kripto sebagai Alat Pembayaran di Indonesia” (2022) 3:2 Jurnal Preferensi Hukum 300–305.

Rupiah remains the only legal tender within Indonesian territory, while cryptocurrencies are permitted only as tradable assets.¹⁵

The ban on the use of cryptocurrencies as a means of payment can be understood as a preventive regulatory measure aimed at limiting the use of instruments characterised by high anonymity and volatility in everyday economic activity. By maintaining the Rupiah as the only legal tender, the state can still ensure that payment transactions occur within a system supervised by regulators and subject to financial transaction reporting mechanisms.¹⁶ In this context, the policy not only protects monetary sovereignty but also serves as an instrument for mitigating the risks of money laundering and illegal financing through payment systems.

This position is then strengthened through various policies that classify cryptocurrencies as digital assets, and after the enactment of Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector (P2SK), as part of digital financial assets under the supervision of the Financial Services Authority (OJK), which was previously under the supervision of the Community Futures Trading Regulatory Agency (Bappeti).¹⁷ The main problem in the regulatory model lies not so much in the Prohibition of the use of cryptocurrencies as a means of payment as in the fragmentation of the legal regime governing them. Cryptocurrencies are simultaneously in a tangent between a monetary regime, a digital asset trading regime, a financial services regime, and an anti-money laundering regime.¹⁸ This condition results in a supervisory structure spread across various institutions with different regulatory objectives.

The OJK oversees digital asset trading activities within the financial services sector, while the anti-money laundering regime operates through a financial transaction reporting and supervision mechanism. As a result, there is no single regulatory framework specifically designed to address the

¹⁵ Shabrina Puspasari, “Perlindungan Hukum bagi Investor pada Transaksi Aset Kripto dalam Bursa Berjangka Komoditi” (2020) 3:1 *Jurist-Diction* 303–330.

¹⁶ Go Lisanawati & Erly Aristo, “Urgensi Pengaturan Hukum Central Bank Digital Currency Dalam Dimensi Anti Pencucian Uang” (2022) 8:1 *Veritas et Justitia* 49–75.

¹⁷ Muhammad Al Ikhwan Bintarto, “Cryptocurrency as a Digital Property in Indonesian Law Perspective” (2022) 3:2 *Jurnal Penegakan Hukum dan Keadilan* 104–113.

¹⁸ Putri et al, *supra* note 9.

money-laundering risks arising from the unique characteristics of blockchain-based transactions. From an Anti-Money Laundering (AML) perspective, such fragmentation poses several normative vulnerabilities. On the supervisory aspect, AML and Know Your Customer (KYC) obligations applied to crypto asset providers are essentially only effective against entities operating within the ecosystem that are registered and supervised by national regulators. Meanwhile, transactions through foreign platforms, peer-to-peer (P2P) exchanges, decentralised finance (DeFi), and the use of privacy coins can occur outside the direct supervision of Indonesian authorities. This creates a regulatory gap that allows the movement of funds across jurisdictions without transparency comparable to that of conventional financial systems.¹⁹

In addition, Indonesia's AML regime is still built on the assumption that it will supervise traditional financial intermediaries. In contrast, blockchain transactions do not always involve intermediaries that can be burdened with reporting obligations.²⁰ Law No. 8 of 2010 on the Prevention and Eradication of money laundering has not explicitly accommodated the characteristics of blockchain transactions, which are pseudonymous, cross-border, and carried out through decentralised mechanisms. As a result, although blockchain theoretically provides a traceable record of transactions, the effectiveness of law enforcement remains dependent on regulators' ability to identify the relationship between digital wallet addresses and users' actual identities.²¹ From a cross-jurisdictional perspective, regulatory fragmentation also impacts cross-border monitoring capacity. The global nature of cryptocurrencies means the effectiveness of AML is determined not only by domestic regulation but also by authorities' ability to exchange information and coordinate with other jurisdictions.²² In conditions where most of Indonesia's crypto trading takes place on platforms not supervised by national regulators, the country's ability to freeze assets, track fund flows, and enforce the law becomes more limited.

¹⁹ Meiryani, *supra* note 2.

²⁰ Nelson et al, "Cracking the Code", *supra* note 9.

²¹ Vladlena Benson et al, "Harmonising cryptocurrency regulation in Europe: opportunities for preventing illicit transactions" (2024) 57:1 *European Journal of Law and Economics* 37–61.

²² Fred Steinmetz, Lennart Ante & Ingo Fiedler, *Blockchain and the Digital Economy: The Socio-Economic Impact of Blockchain Technology* (Agenda Publishing, 2020).

The fragmentation of regulation not only creates a surveillance gap but also undermines the effectiveness of implementing a risk-based approach, a key principle of the modern AML regime. In the conventional financial system, the identification of money laundering risks is carried out through the integrated supervision of financial institutions within a single regulatory framework. But in the context of cryptocurrencies, risk identification depends not only on the activities of registered business actors but also on regulators' ability to map the relationships among various actors operating in a global, decentralised blockchain ecosystem.²³ As oversight of digital assets remains fragmented across multiple legal regimes, the process of identifying, mitigating, and addressing money laundering risks has become less coordinated. The challenge is even more complex, given the characteristics of blockchain technology that are fundamentally different from those of traditional financial systems. In contrast to banking transactions, which make the customer's identity the primary focus of oversight, cryptocurrency transactions operate through digital wallet addresses that do not directly indicate the owner's identity.²⁴ This condition creates challenges in applying the principles of customer due diligence and identification of beneficial ownership. Therefore, the effectiveness of the AML regime against cryptocurrencies is determined not only by the existence of KYC obligations but also by the ability of states to develop supervisory mechanisms that link blockchain transactions to users' real identities.

On the other hand, the pseudonymous nature of cryptocurrency transactions poses a different challenge from conventional money-laundering patterns. In the traditional financial system, the layering process is generally carried out through a series of transactions involving various accounts and financial institutions. In contrast, in the cryptocurrency ecosystem, the process can be carried out through various mechanisms, including coin-mixing services, cross-chain bridges, decentralised exchanges, and other privacy technologies. Although all transactions on public blockchains are theoretically traceable, using such mechanisms

²³ I Nyoman Sucitrawan, M Arief Amrullah & Fanny Tanuwijaya Tanuwijaya, "Money Laundering Criminal Liability Through Crypto Asset Exchange in Indonesia" (2024) 1:3 International Journal of Law, Crime and Justice 314–321.

²⁴ Syahrul Sajidin, "Legalitas Penggunaan Cryptocurrency Sebagai Alat Pembayaran Di Indonesia" (2021) 14:2 AH 245–267.

increases the complexity of investigations and prolongs the process of identifying the origin of funds. Thus, blockchain transparency does not automatically result in supervisory effectiveness if it is not supported by adequate technological and regulatory capacity.²⁵ From an institutional perspective, the Indonesian regulatory model also shows a considerable dependence on the supervisory approach to registered entities (entity-based regulation). This approach is relatively effective when cryptocurrency activity is conducted through a licensed platform and is subject to reporting obligations. However, its effectiveness is limited when users switch to overseas platforms or use decentralised services that lack a legal entity or a clear operational location. In such situations, regulators face difficulties in implementing reporting obligations, conducting compliance checks, or imposing administrative sanctions on the perpetrators involved. The fragmentation of regulation has implications for the effectiveness of inter-authority coordination. Handling cryptocurrency-based money laundering requires rapid information exchange among financial sector regulators, monetary authorities, financial intelligence units, law enforcement officials, and international partners. If each institution operates under different regulatory frameworks and Policy Priorities, the process of asset tracking and proving crimes can be less than optimal. The issue becomes even more complex as the transactions under investigation involve different jurisdictions with varying levels of cryptocurrency regulation.

These characteristics indicate that Indonesia is currently in a transition phase towards a more integrated digital asset management model. The reform through the P2SK law suggests an attempt to place cryptocurrencies within the framework of more structured financial-sector supervision. However, these institutional changes have not fully addressed the fundamental issues of harmonisation between digital asset regulation, monetary policy, and anti-money laundering regimes. Therefore, from the perspective of Comparative Law, Indonesia can be classified as a jurisdiction with a transitional and fragmented regulatory model (transitional fragmented regulatory model) that is, a model that has recognised the existence of digital assets in the national financial system but has not fully integrated such arrangements with the needs of risk-based and

²⁵ Lavia Luky Carolina & Abdul Kholiq, “Legal Analysis of the Use of Decentralized Exchange (DEX) in Digital Money Laundering Schemes” (2025) 26:1 *Al-Risalah Jurnal Ilmu Syariah dan Hukum* 255–270.

cross-border oriented AML supervision. Based on the analysis, the main problem of cryptocurrency regulation in Indonesia is not just the difference in legal status between means of payment and investment assets.²⁶ The more fundamental problem lies in Indonesia's regulatory model, which remains in a transitional phase, characterised by dualism and fragmentation. Although reforms under the P2SK Act have strengthened the integration of cryptocurrencies into the National Financial Services System, the existing legal framework has yet to fully align the regulation of digital assets with the need for cross-border, decentralised, blockchain-based anti-money laundering supervision. This condition means Indonesia's AML regime remains significantly challenged in addressing cryptocurrency-based money-laundering risks.²⁷

B. United States

Money laundering using digital assets, such as cryptocurrency, involves laundering funds or cryptocurrency obtained as payment for illegal goods or for illicit purposes, so that the original criminal source cannot be traced. Criminals then attempt to convert the illicitly obtained cryptocurrency through various methods before cashing it out.²⁸

Recent regulatory issues highlight the importance of knowing the source of digital asset transactions to prevent money laundering. The United States does not recognize cryptocurrencies as legal tender because their regulation is based on a functional approach under the Bank Secrecy Act (BSA), which requires financial institutions—and, according to the FinCEN regulatory guidelines of 2013, entities that qualify as Money Services businesses (MSBS) in the cryptocurrency sector to identify and assess customer risk, implement Know Your Customer (KYC) procedures, and report all suspicious activities related to money laundering and other

²⁶ Kharisma Fatmalina Fajri & Dekar Urumsah, “Crypto laundering prevention in Indonesia: The role of regulatory technology and financial intelligence unit” (2024) 25:3 *Journal of Accounting and Investment* 1133–1155.

²⁷ Vladlena Benson, Umut Turksen & Bogdan Adamyk, “Dark side of decentralised finance: a call for enhanced AML regulation based on use cases of illicit activities” (2024) 32:1 *Journal of Financial Regulation and Compliance* 80–97.

²⁸ Rizaldy Anggriawan & Muh Endriyo Susila, “Cryptocurrency and its Nexus with Money Laundering and Terrorism Financing within the Framework of FATF Recommendations” (2024) 18:2 *Novum Jus* 249–277.

criminal activities.²⁹ Cryptocurrency companies are further expected to use public blockchain analytics to detect potential criminal patterns, involvement with known illegal virtual currencies, and other suspected irregularities.³⁰ This know-your-transaction approach extends traditional AML liabilities into the digital asset environment.

Since President Donald Trump's inauguration, U.S. policy toward digital assets has shifted toward a regulatory approach that supports innovation and legal certainty. Through an Executive Order on January 23, 2025, the government established policies to support the use of public blockchains, encourage the development of U.S. dollar-backed stablecoins, and develop digital asset regulations grounded in technology-neutral principles. Currently, the Presidential Working Group on Digital Asset Markets has been formed to draft a federal regulatory framework for the issuance and operation of digital assets, including market structure, consumer protection, and risk management. The most significant recent legislative development is the GENIUS Act, which was passed in July 2025. This Act specifically brings payment stablecoins under the scope of the BSA, to impose reserve mandates for high-quality assets, monthly reporting obligations, and AML/CFT compliance programs as defined jointly by FinCEN, OFAC, the Federal Reserve, and the Office of the Comptroller of the Currency (OCC). It is important to highlight, however, that the GENIUS Act, despite its important status, does not establish a single regulatory authority; instead, it will duplicate the multi-agency governance structure across other asset classes, in other words, maintaining is a hallmark of asset regulation in the United States rather than resolving fragmentation.

Furthermore, on April 8, 2026, FinCEN and OFAC jointly issued a Notice of Proposed Rulemaking (NPRM) to implement a GENIUS Act directive allowing payment stablecoin (PPSI) issuers to be treated as financial institutions under the BSA, requiring them to maintain a formal AML/CFT and sanctions compliance program marking the first time such sanctions compliance program has been mandated by law for digital asset

²⁹ Tareq Na'el Al-Tawil, "Anti-money laundering regulation of cryptocurrency: UAE and global approaches" (2023) 26:6 *Journal of Money Laundering Control* 1150–1164.

³⁰ Abdurrakhman Alhakim & Tantimin Tantimin, "The Legal Status of Cryptocurrency and Its Implications for Money Laundering in Indonesia" (2024) 11:2 *Padjadjaran Jurnal Ilmu Hukum* 231–253.

issuers. The NPRM, with the comment period closing on June 9, 2026, signifies that the implementation of regulations under the GENIUS Act will continue to evolve throughout 2026.

This policy shift was also marked by the repeal of regulations from the previous administration that were considered more restrictive toward digital asset innovation. Furthermore, the Securities and Exchange Commission (SEC) established a special task force to develop a more comprehensive regulatory framework for cryptocurrencies and provide legal certainty.³¹

The shift is significant from an AML governance perspective in that, under the Gensler-era SEC, the agency conducted 583 enforcement actions in fiscal year 2024 and secured a recovery of \$8.2 billion. Although proponents argue that this approach effectively prevents fraud, critics argue persuasively that enforcement without prospective rulemaking creates regulatory uncertainty that hampers legitimate compliance efforts, as companies cannot build compliance programs based on clear prior rules. The Trump administration's recalibration, while broadly easing enforcement pressure, still maintained AML-focused enforcement by the DOJ and FinCEN. By the end of 2025, the DOJ imposed a USD 500 million fine on OKX for AML failures. FinCen fined Paxful USD 3.5 million for intentional BSA violations, indicating that AML enforcement remained active even as securities-related enforcement was scaled back.

Developing comprehensive regulations for digital assets remains a challenge due to rapid technological advancements and the involvement of various government agencies with differing interests and regulatory approaches. In line with the U.S. Congress's efforts to update anti-money laundering regulations, including amendments to the Bank Secrecy Act (BSA) and the Anti-Money Laundering Act of 2020 (AMLA), the federal government continues to strengthen regulations on digital asset company compliance by implementing more comprehensive and effective policies.³²

Regulatory fragmentation as a structural vulnerability in the US AML framework for digital assets. As in Saggiu, Ante, and Kopiec's (2024) study, the cryptocurrency industry is grappling with an ambiguous regulatory

³¹ Akshay S. Ralhi, "Beyond Enforcement: The SEC's Shifting Playbook on Crypto Regulation", online: <<https://www.law.georgetown.edu/ctbl/blog/beyond-enforcement-the-secs-shifting-playbook-on-crypto-regulation/>>.

³² Anggriawan & Susila, *supra* note 28.

framework that hinders the establishment of a fair, orderly, and efficient market, while the absence of clear prospective guidelines aligns with patterns of regulatory behaviour. This may favour established financial institutions over emerging technologies.³³ This criticism is reinforced by empirical findings that the US. Enforcement actions, whether by the SEC, CFTC, or DOJ, result in negative market reactions globally, suggesting that the U.S. regulatory environment is exerting disproportionately severe effects on international digital asset markets.³⁴

The most distinctive structural feature of U.S. digital asset regulation is its multi-agency architecture, in which Regulatory Authority is distributed among federal and state entities in accordance with their respective functional mandates. At the federal level, the Financial Crimes Enforcement Network (FinCEN), which operates under the Treasury, exercises primary AML/CFT authority over MSBS, including cryptocurrency exchanges, and imposes registration, transaction monitoring, and SAR filing obligations. The Office of Foreign Assets Control (OFAC) has parallel authority to impose economic sanctions on digital asset activities, including the authority to designate entities and addresses on the Specially Designated Nationals (SDN) list. The Securities and Exchange Commission (SEC) asserts jurisdiction over digital assets that meet the Howey test criteria for investment contracts. At the same time, the Commodity Futures Trading Commission (CFTC) regulates digital assets classified as commodities, especially Bitcoin, and oversees derivatives markets on it. The Department of Justice (DOJ) exercises criminal enforcement authority, including through the National Cryptocurrency Enforcement Team (NCET), established in February 2022, which coordinates prosecutorial resources across the federal district for complex cryptocurrency-related criminal investigations. At the state level, jurisdictions such as New York have implemented licensing regimes through BitLicense, administered by the New York Department of

³³ Aman Saggi, Lennart Ante & Kaja Kopiec, “Uncertain Regulations, Definite Impacts: The Impact of the U.S. Securities and Exchange Commission’s Regulatory Interventions on Crypto Assets” (2025) 72 *Finance Research Letters* 106413.

³⁴ Yuliya Guseva & Irena Hutton, “Regulatory Fragmentation: Investor Reaction to SEC and CFTC Enforcement in Crypto Markets” (2023) 64:7 *Boston College Law Review* 1555–1613.

Financial Services (NYDFS), which mandate capital requirements, KYC standards, and continuous supervisory oversight.

These challenges are further compounded by the dual federal-state regulatory system, where cryptocurrency businesses must comply not only with federal anti-money laundering requirements but also with diverse state-level licensing regimes. As a result, the US. The framework illustrates the inherent tension between comprehensive regulatory oversight and the need for legal certainty, as fragmented oversight can strengthen regulatory coverage while increasing compliance costs and reducing predictability for cryptocurrency service providers.³⁵

The 2013 FinCEN regulatory guidelines, which classify virtual currency exchangers and administrators as MSBS subject to the BSA and Title III of the U.S. PATRIOT Act, establish a basic compliance framework for the cryptocurrency sector. These guidelines, which were later reinforced by an interpretive ruling, require cryptocurrency exchange service providers to maintain comprehensive AML programs, keep transaction records, and file SARS and Currency Transaction Reports (CTRs) with FinCEN.³⁶

Although the pseudonymous nature of blockchain transactions complicates law enforcement investigations, regulatory responses continue to evolve. In 2024, FinCEN is moving to strengthen travel rules by expanding its scope to explicitly cover high-risk transactions involving cryptocurrency blending services, directly targeting infrastructure mechanisms used to hide the origins of illegally acquired digital assets.³⁷

While these regulatory developments demonstrate the United States' commitment to strengthening anti-money laundering oversight in the cryptocurrency sector, the effectiveness of the travel rules remains limited by structural and implementation-related challenges. Travel rules primarily apply to transactions involving Virtual asset service providers (VASPs), leaving transactions conducted through self-hosted wallets and peer-to-peer networks outside the reach of direct regulation. In addition, its effectiveness relies heavily on cross-border regulatory harmonisation. Still, a 2024 FATF assessment found that around 75 per cent of jurisdictions remain only partially compliant or non-compliant with virtual asset

³⁵ Jaffri, "Regulating crypto assets in the United States", *supra* note 11.

³⁶ Alhakim & Tantimin, *supra* note 30.

³⁷ Al-Tawil, "Anti-money laundering regulation of cryptocurrency", *supra* note 29.

standards, thereby limiting the practical exchange of information between VASPs operating across jurisdictions. As a result, although FinCEN's efforts to expand reporting obligations for high-risk cryptocurrency transactions reflect a more proactive regulatory approach, the effectiveness of broader travel rules continues to depend on greater international coordination and on regulatory frameworks' ability to handle decentralised transaction environments that fall outside conventional intermediary-based oversight.

The stages of money laundering consist of placement, layering, and integration. During the placement phase, perpetrators place funds into unregulated instruments by purchasing cryptocurrency. Additionally, during the layering phase, perpetrators carry out a series of transactions to conceal the origin of the funds by transferring them to other cryptocurrency accounts. Finally, in the last phase, they integrate the funds, all of which have been concealed.³⁸ It is very difficult to track cryptocurrency during an investigation. In response to the global challenge of tracking money laundering through cryptocurrency, the United States, as a member of the Financial Action Task Force (FATF), uses a “Red Flags for Virtual Assets” report to detect suspicious virtual asset transactions.³⁹ Those indicators are:

1. Transactions involving various types of virtual assets, particularly private coins or DEXs, offer a safer alternative.
2. Operating virtual assets that originally ran on a transparent, public blockchain, such as Bitcoin, and then exchanging them for private coins;
3. Users access the Virtual Asset Service Provider (VASP) platform by registering their internet domain name through a proxy or DNS that can change the domain owner, among other methods.

These indicators can help detect the flow of funds from virtual assets used to facilitate money laundering. However, similar to Indonesia, which has struggled to track mixed cryptocurrency transactions and identify these transaction indicators.

³⁸ Anggriawan & Susila, *supra* note 28.

³⁹ Georgios Pavlidis, “International Regulation of Virtual Assets under FATF’s New Standards” (2020) 21:1 *Journal of Investment Compliance* 1–8.

The United States has implemented “Travel Rules” to address cryptocurrency-based money laundering. Guidelines regarding the “Travel Rule” are outlined in FATF Recommendation 16. Under the “Travel Rule” in the United States, Virtual Asset Service Providers (VASPs) must promptly obtain, retain, and transmit information regarding the sender and recipient of transactions exceeding \$3,000. Under the “Travel Rule,” Virtual Asset Service Providers (VASPs) and financial institutions involved in virtual asset (VA) transfers are required to collect and share the personal data of the sender and recipient of a transaction. The United States has taken this step to prevent the proliferation of cryptocurrency-based money laundering. These provisions will strictly monitor cryptocurrency owners.⁴⁰

In November 2021, cryptocurrency was mentioned in legislation for the first time. Provisions regarding cryptocurrency are included in the Infrastructure Investment and Jobs Act. These provisions refer to cryptocurrency as a digital asset. This is “any digital value recorded on a distributed ledger and secured by cryptography or similar technology as determined by the Secretary.” Any organisation or individual that “transfers digital assets on behalf of another person” will be considered an intermediary under the Infrastructure Investment and Jobs Act. For each violation, centralised cryptocurrency exchanges will issue Form 1099-B. This is bad news for those engaged in such criminal activities because the amount of assets and profits they hold will be known and will be immediately reported to the Internal Revenue Service. Of course, this means that the value of the cryptocurrency assets they hold cannot be hidden.⁴¹

From AML's view, the importance of the tax reporting requirement lies in its potential to create information asymmetries that are unfavourable to money launderers by requiring disclosure of the identity of asset holders and the value of their holdings to the IRS; the law reduces opacity. That makes cryptocurrency attractive as a medium for illicit transactions. However, scholars have noted that this regime applies primarily to centralised exchanges registered in the US and does not include DEXs, peer-to-peer trading platforms, or self-storage arrangements, precisely the

⁴⁰ Al-Tawil, “Anti-money laundering regulation of cryptocurrency”, *supra* note 29.

⁴¹ Putri et al, *supra* note 9.

categories of transactions that are most difficult to monitor and most often involved in complex money laundering schemes.⁴²

Overall, the U.S. anti-money laundering framework for digital assets demonstrates regulatory strength and institutional complexity. The involvement of multiple authorities, including FinCEN, SEC, CFTC, and state regulators, allows for broad oversight but also creates overlapping mandates and compliance challenges. Although the GENIUS Act of 2025 provides greater legal certainty for the regulation of stablecoins, jurisdictional ambiguities regarding other digital assets remain unresolved. As a result, the effectiveness of the US. The AML regime depends not only on substantive compliance requirements but also on improved coordination and regulatory clarity among relevant authorities.

C. Singapore

Singapore has long been known for its highly advanced, stable financial system and very strict regulations governing various financial activities, including cryptocurrency transactions, in the Asia-Pacific region.⁴³ Given the rapid development of financial technology and the growing use of cryptocurrency across various economic sectors, Singapore has taken proactive measures by implementing comprehensive legal regulations governing digital assets, including cryptocurrency, to provide legal certainty and minimise the potential for misuse in digital financial activities.⁴⁴ As part of these efforts, Singapore has established a robust legal framework through various regulations and laws that specifically govern the use of and transactions involving cryptocurrency.⁴⁵ The Monetary Authority of

⁴² Mollie Rouan, “Show Me the Money: Approaches to Anti-Money Laundering Compliance for Digital Assets” (2025) 19:2 Brooklyn Journal of Corporate, Financial & Commercial Law 485–508.

⁴³ Muhammad HafizuddinSufia Sufian, Nur Amisha Sutan Syahril & Norhasliza Ghapa, “Regulatory Framework for Cryptocurrency: A Comparative Analysis of Malaysia, Indonesia and Singapore” (2024) 9:11 MJSSH e003113, online: <<https://www.msocsciences.com/index.php/mjssh/article/view/3113>>; Iris H-Y Chiu, “The Disruptive Implications of Fintech-Policy Themes for Financial Regulators” (2017) 21:1 Journal of Technology Law & Policy 1.

⁴⁴ Rishik Elias Menon, “From crime prevention to norm compliance: anti-money laundering (AML) policy adoption in Singapore from 1989–2021” (2023) 26:1 Journal of Money Laundering Control 69–92.

⁴⁵ Leuprecht, Jenkins & Hamilton, “Virtual money laundering”, *supra* note 8.

Singapore (MAS) has implemented a structured approach to the regulation of virtual assets, positioning the country as a regional financial hub that seeks to integrate technological innovation with legal discipline.⁴⁶

The primary policy governing cryptocurrency activities in Singapore is the Payment Services Act (PSA), which came into effect in 2020 and was subsequently amended by the Payment Services (Amendment) Act 2021 to expand the scope of regulated activities and address identified gaps in the original framework. The PSA is a law that provides the legal framework for various types of payment services, including those involving cryptocurrencies and other digital assets. The PSA regulates various cryptocurrency-related activities, such as digital wallet service providers, digital asset exchanges (crypto exchanges), and blockchain-based transactions. One of the PSA's main focuses is strengthening Anti-Money Laundering (AML) and Know Your Customer (KYC) measures, which are two key principles in efforts to prevent money laundering.⁴⁷ In addition to the PSA, Singapore has also enacted the Financial Services and Markets Act 2022 (FSMA), which aims to address additional risks, including those related to retail investors and money laundering.⁴⁸

Aside from these legislative developments, the scope of the PSA regulation defines objectives for service providers that can be identified against entities that can be licensed, monitored, and sanctioned within the framework of MAS supervision. This creates fundamental limitations on activities conducted through non-identifiable or unregistered channels, including peer-to-peer transactions, non-hosted wallet transfers, and decentralised protocol interactions, which fall outside of PSA's compliance obligations.⁴⁹

Based on the relevant PSA and MAS notices, licensed DPT service providers are required to implement customer due diligence measures, conduct ongoing transaction monitoring, and submit suspicious transaction

⁴⁶ Dirk A Zetsche, Douglas W Arner & Ross P Buckley, "Decentralized Finance" (2020) 6:2 *Journal of Financial Regulation* 172–203.

⁴⁷ Lars Haffke, Mathias Fromberger & Patrick Zimmermann, "Cryptocurrencies and anti-money laundering: the shortcomings of the fifth AML Directive (EU) and how to address them" (2020) 21:2 *Journal of Banking Regulation* 125–138.

⁴⁸ Tju Liang Chua, "Strengthening AML/CFT controls of digital payment token service providers in Singapore" (2021) 22:4 *Journal of Investment Compliance* 370–376.

⁴⁹ Dirk A Zetsche et al, "The ICO Gold Rush: It's a Scam, It's a Bubble, It's a Super Challenge for Regulators" (2019) 60:2 *Harvard International Law Journal* 267–315.

reports (STR) to the Suspicious Transaction Reporting Office (STRO) in accordance with the Corruption, drug trafficking, and Other Serious Crimes (Forfeiture of Benefits) Act.⁵⁰ Singapore has also implemented the requirements of the FATF travel rules, requiring DPT service providers to submit originator and beneficiary information for virtual asset transfers above a defined threshold based on operationalised obligations through the MAS notification of changes to PSN02 of 2023.

However, the effectiveness of this obligation depends on speculation that all relevant cryptocurrency transactions pass through licensed service providers subject to MAS jurisdiction. However, most cryptocurrency transactions, including Bitcoin, are identified as illegal activities and routed through dedicated channels designed to circumvent compliance infrastructure.⁵¹ Peer-to-peer transactions conducted through non-custodial wallets, Cross-Chain Bridge protocols, and decentralised exchanges do not incur reporting obligations under the current PSA framework, as these activities do not involve regulated intermediaries.

Furthermore, the effectiveness of travel rules is limited by the uneven application of FATF standards across multiple deployments. If the counterparty operating at the microphone has not implemented an equivalent Travel Rule obligation or if the transaction is specifically structured to avoid triggering thresholds through transaction fragmentation (called "smurfing" in the context of digital assets), then the informational value of travel compliance rules will be substantially reduced.⁵² This cross-border money laundering scheme will exploit fraud arbitrage, which remains a persistent vulnerability even indoctrinated with sophisticated AML frameworks.⁵³

⁵⁰ Niels Vandezande, "Virtual currencies under EU anti-money laundering law" (2017) 33:3 *Computer Law & Security Review* 341–353.

⁵¹ Sean Foley, Jonathan R Karlsen & TTTlis J Putniii, "Sex, Drugs, and Bitcoin: How Much Illegal Activity Is Financed Through Cryptocurrencies?" (2018) 32:5 *The Review of Financial Studies*, Society for Financial Studies 1798–1853.

⁵² Christoph Wronka, "Money laundering through cryptocurrencies - analysis of the phenomenon and appropriate prevention measures" (2022) 25:1 *Journal of Money Laundering Control* 79–94.

⁵³ Fabian Maximilian Johannes Teichmann & Marie-Christin Falker, "Cryptocurrencies and financial crime: solutions from Liechtenstein" (2021) 24:4 *Journal of Money Laundering Control* 775–788.

Singapore's licensing framework for DPT service providers, administered by MAS, requires regulated entities to implement technology-based transaction monitoring systems, including the use of blockchain analytics tools as part of their AML/CFT compliance infrastructure. MAS has engaged with commercial blockchain analytics providers and incorporated transaction monitoring standards into its oversight expectations, reflecting the realisation that effective AML in the context of cryptocurrencies requires a technological upgrade of traditional compliance mechanisms.⁵⁴

One of the regulatory challenges related to Singapore's AML regime is the emergence of Decentralised Finance (DeFi), a blockchain-based financial system that operates through smart contracts without centralised intermediaries subject to licensing or compliance obligations. The PSA framework is essentially based on a supervisory model dependent on the existence of legal entities that can be identified and supervised; however, many DeFi protocols, such as decentralised exchanges (DEXs),⁵⁵ automated market makers (AMMs), and liquidity pools, operate without centralised operations, thus creating limitations on implementing AML/CFT obligations.⁵⁶

In addition, AML regulation in Singapore also faces jurisdictional challenges related to crypto asset transactions between countries. Although PSA and regulations from the MAS have regulated digital asset service providers who have legal relationships with Singapore, crypto transactions essentially take place on a global blockchain network involving multiple jurisdictions simultaneously.⁵⁷ This situation creates opportunities for regulatory arbitrage, which is the use of differences in regulation between

⁵⁴ Chiu, *supra* note 43.

⁵⁵ Ali Kırbaş & Ecnur Uğurlu-Yıldırım, "The Future of Decentralized Finance and Business" in Halis Kırıl & Gökhan Yılmaz, eds, *Futurisks: Risk Management in the Digital Age* Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application (Singapore: Springer Nature Singapore, 2025) 185.

⁵⁶ Emiliós Avgouleas, *Governance of Global Financial Markets: The Law, the Economics, the Politics* (Cambridge University Press, 2012).

⁵⁷ Douglas W Arner & János Barberis & Ross P Buckley, "FinTech, RegTech, and the Reconceptualization of Financial Regulation" (2017) 37:3 *Northwestern Journal of International Law & Business* 371–413.

countries to avoid AML/CFT liability.⁵⁸ As a result, the effectiveness of the regulatory framework in Singapore is determined not only by the quality of regulation within the country but also by the alignment of international standards and collaboration between jurisdictions in overseeing crypto activities.⁵⁹

One of Singapore's strengths is its ability to support technological innovation while maintaining the integrity of the financial system and preventing its misuse. Singapore has successfully struck a balance between facilitating the development of cryptocurrency and overseeing its use to prevent abuse. This demonstrates that transparent, structured policies that embrace technology can serve as a good model for other countries, including Indonesia, in developing their own policies regarding cryptocurrency-based money laundering. With its strict and well-structured legal framework, Singapore can serve as a model for other countries in developing regulations governing the use of cryptocurrency, particularly to minimise the potential misuse of digital assets in illegal activities. These regulations are reflected in the establishment of a licensing mechanism for digital asset service providers, requirements for implementing transaction compliance standards, and rules regarding transparency and reporting of digital financial activities.⁶⁰ Through this regulatory approach, Singapore seeks to strike a balance between fostering financial technology innovation and ensuring legal certainty regarding the use of cryptocurrency. In addition to protecting the financial system, adaptive regulation also serves as a key tool for maintaining the stability of the digital economy and boosting public and business confidence in the rapidly growing digital asset ecosystem.

IV. POTENTIAL FOR STRENGTHENING CRYPTOCURRENCY REGULATION IN PREVENTING

⁵⁸ Hossein Nabilou, "How to regulate bitcoin? Decentralized regulation for a decentralized cryptocurrency" (2019) 27:3 *International Journal of Law and Information Technology* 266–291.

⁵⁹ Ronald F Pol, "Anti-money laundering: The world's least effective policy experiment? Together, we can fix it" (2020) 3:1 *Policy Design and Practice* 73–94.

⁶⁰ Malcolm Campbell-Verduyn, "Bitcoin, Crypto-Coins, and Global Anti-Money Laundering Governance" (2018) 69:2 *Crime, Law and Social Change* 283–305.

MONEY LAUNDERING AND ADAPTATION INTO THE LEGAL SYSTEM IN INDONESIA

A comparison of cryptocurrency regulations in Indonesia with those in the United States and Singapore in the context of anti-money laundering reveals differences that are not merely technical or administrative in nature, but reflect fundamental conceptual choices regarding the relationship between monetary policy, digital asset governance, and the integrity of the financial system.⁶¹ These differences can be observed in three main dimensions, namely:

A. Comparative Analysis of Regulatory Frameworks

In comparing regulations on the use of cryptocurrencies as a medium for money laundering in Indonesia, America, and Singapore, a specific framework is needed, particularly regarding the technical aspects of the digital asset market and the broader structural determinants of regulatory design.

To interpret it in relation to the development of these regulations, it is necessary to rely on the first, namely, the regulatory governance needed to review the institutional architecture in which the supervisory authority is run. Second, the theory of legal certainty is used to assess the clarity and consistency of legal obligations imposed on regulated entities.⁶² The third is the risk-based financial supervision theory, which aims to calibrate the intensity of regulation based on the identified risk profile, and the monetary sovereignty theory, which provides the basis for banning cryptocurrencies as a means of payment in Indonesia under its regulations. On this basis, it can provide differences between jurisdictions related to digital assets.⁶³

The United States approach to cryptocurrency AML regulation is based on a model that establishes supervisory authorities based on the activities carried out. The designation of FinCEN or VASP as a Money Services

⁶¹ Alhakim & Tantimin, *supra* note 30.

⁶² Matteo Aquilina, Jon Frost & Andreas Schrimpf, “Decentralized Finance (DeFi): A Functional Approach” (2024) 10:1 *Journal of Financial Regulation* 1–27.

⁶³ Tina Van Der Linden & Tina Shirazi, “Markets in crypto-assets regulation: Does it provide legal certainty and increase adoption of crypto-assets?” (2023) 9:1 *Financ Innov* 22.

Business under the BSA presents questions of the SEC's jurisdiction over digital assets that are securities under the Howey test, the CFTC's authority over commodity derivatives, and OFAC's sanctions architecture, collectively forming a multi-dimensional regulatory network in which each agency addresses different risk vectors.⁶⁴

The advantage of this kind of functional model is that it can calibrate the applicable regulatory framework with its functional characteristics rather than its formal legal status, which avoids the rigidity of the definition that can make form-based frameworks become unusable as technology develops. The 2024 expansion of the Travel Rules to include CVC mixing services and the integration of the GENIUS Act 2025 payment stablecoin into the BSA framework exemplifies this adaptation dynamic.

However, the weakness of the functional model structure is the fragmentation of jurisdiction with the material consequences of AML. Where a single digital asset collectively exhibits the characteristics of payments, investments, and derivatives, as most cryptocurrencies do, many institutions complain of overlapping authorities resulting in disproportionate compliance uncertainties that burden smaller businesses and create a layer of regulation that can be exploited. The fragmentation of regulations will be administratively cumbersome and is a structural vulnerability of AML at the inter-agency layer.

Furthermore, Singapore takes a different approach through a permissive-but-regulated model formalised in the Payment Services Act (PSA) 2019. The PSA classifies cryptocurrency as a licensable payment service, with the Monetary Authority of Singapore (MAS) serving as the sole integrated regulator. The strength of this regulatory framework lies in its unified regulatory jurisdiction, meaning that all digital asset service providers, from crypto exchanges and digital wallet providers to blockchain-based transaction platforms, must comply with a single licensing regime and a single AML/CFT compliance framework. MAS requires licensed providers to implement Customer Due Diligence (CCD) standards, blockchain analytics-based transaction monitoring, and reporting of suspicious transactions to the authorities, as stipulated in MAS Notice PSN02. This

⁶⁴ Osman Sonmez, "Stablecoin AML Regulation: A Comparative Analysis of the EU MiCA Framework and U.S. Regulatory Approaches to Financial Crime Prevention" (2026), online: <<https://www.ssrn.com/abstract=6368040>>.

provides regulatory certainty to every entity in the digital asset ecosystem. Furthermore, regarding MAS's action against licensed DPT service providers in 2023, the overview indicates that licensing does not guarantee substantive compliance, suggesting that the gap between formal authorisation and effective supervision cannot be closed solely by institutional centralisation.⁶⁵

Indonesia, following the enactment of Law No. 4 of 2023 on Payment Systems and Electronic Money and OJK Regulation No. 27 of 2024, is undergoing a regulatory transition that is not yet complete. Indonesia faces an unresolved normative tension between the monetary regime, which prohibits the use of cryptocurrency as a means of payment under Law No. 7 of 2011, and the financial services regime, which recognises cryptocurrency as a tradable digital financial asset under OJK supervision. This regulatory tension directly affects the effectiveness of the AML regime, as uncertainty about a financial instrument's legal status can hinder the establishment of uniform compliance obligations for operators.⁶⁶ Nevertheless, POJK No. 27 of 2024 has established an initial framework regarding licensing mechanisms and the implementation of AML/CFT obligations for digital financial asset providers. However, the regulations still focus on centralised entities and do not yet accommodate peer-to-peer (P2P) transactions, decentralised finance (DeFi) platforms, or activities conducted through international platforms that are not registered in Indonesia.

B. Comparison of AML/CFT Compliance Mechanisms

The United States' approach to cryptocurrency AML regulation is based on the theory of functional regulation, which involves oversight determined by an asset's economic activities rather than its legal form. Under this model, FinCEN supervises VASPs as Money Services Businesses under the Bank Secrecy Act; the SEC regulates digital assets categorised as securities

⁶⁵ Bacelius Ruru et al, "The Impact of Crypto-Asset Utilization as Payment Instrument toward Rupiah as Legal Tender in Indonesia" (2021) 1:1 Journal of Central Banking Law and Institutions 141–180.

⁶⁶ Maria Arbina & M Ilham F Putuhena, "Tata Kelola Pembentukan Regulasi Terkait Perdagangan Mata Uang Kripto (Cryptocurrency) sebagai Aset Kripto (Crypto Asset)" (2022) 1:1 Mahadi: Indonesia Journal of Law 33–57.

through the Howey Test; the CFTC oversees assets classified as commodities and derivatives; and OFAC is responsible for compliance with economic sanctions. This division of authority creates a comprehensive and adaptive oversight system capable of responding to developments in financial technology. The primary strength of the U.S. regulatory model lies in its flexibility to align regulations with the economic functions of digital assets, enabling regulators to respond to innovation without requiring constant revisions to the legal definition of cryptocurrency. This is reflected in the expanded application of the Travel Rule to mixing services and the integration of payment stablecoins into the AML framework. However, the effectiveness of this model is undermined by fragmented authority among agencies, leading to legal uncertainty and jurisdictional overlap. The debate over Ethereum's legal status illustrates how such conditions could potentially create regulatory arbitrage and undermine the effectiveness of AML oversight by exploiting differences in compliance standards across agencies. The United States also utilises blockchain analytics to detect suspicious transactions by analysing transaction patterns on public blockchains. Although effective in tracing the flow of digital assets, this technology has limitations when dealing with mixers, privacy coins, cross-chain bridges, and DeFi protocols, which can reduce the ability to identify transaction actors. Additionally, the potential for false positives and user privacy concerns pose challenges to the implementation of blockchain-based oversight.

Unlike the United States, Singapore has implemented a centralised regulatory model through the Payment Services Act 2019, with the Monetary Authority of Singapore (MAS) serving as the sole regulator. All Digital Payment Token (DPT) service providers are required to obtain a license and comply with AML/CFT standards, thereby creating greater regulatory certainty. However, the effectiveness of this model is challenged by the development of DeFi, non-custodial wallets, and cross-chain transactions, which often lack a governing entity that can be licensed or held accountable. Furthermore, the use of blockchain analytics remains constrained by differences in data standards and interoperability across blockchain networks, meaning that the effectiveness of AML oversight depends not only on the quality of regulations but also on the technological capability to integrate information across blockchains and jurisdictions.

In the international context, the United States and Singapore have adopted FATF standards, specifically the Interpretative Note on Virtual Assets and Virtual Asset Service Providers. However, the effectiveness of the FATF framework is limited because it assumes that financial intermediaries can be identified and supervised. However, this assumption does not always align with the characteristics of DeFi, which operates in a decentralised manner and often lacks a clear operator. As a result, implementing the Travel Rule faces challenges in peer-to-peer transactions, self-hosted wallets, and DeFi activities. Furthermore, differences in the level of implementation of FATF recommendations across countries create regulatory gaps that could potentially be exploited for jurisdictional arbitrage. Therefore, formal compliance with FATF standards does not always reflect substantive effectiveness in preventing cryptocurrency-based money laundering.

Unlike in the United States and Singapore, cryptocurrency regulations in Indonesia are guided by the principle of monetary sovereignty, grounded in Articles 23B and 23D of the 1945 Constitution of the Republic of Indonesia and implemented through Law No. 7 of 2011 on Currency, which designates the Rupiah as the sole legal tender. Therefore, cryptocurrency is prohibited as a means of payment but remains recognised and traded as an investment asset within the cryptocurrency trading regime under the supervision of the Financial Services Authority. This situation creates a unique legal framework because cryptocurrency gains legitimacy as an investment instrument but is not recognised as a legal tender.

This complexity is also reflected in the effectiveness of Indonesia's anti-money laundering regime. In its 2023 Mutual Evaluation Report, the FATF assessed that Indonesia has a relatively comprehensive AML/CFT legal framework.⁶⁷ However, the FATF highlights the need to enhance the effectiveness of risk-based supervision, the implementation of preventive measures, and interagency coordination to address the evolving nature of technology-enabled financial crime. These findings indicate that the existence of adequate regulations does not necessarily guarantee the effectiveness of their implementation. This challenge is becoming increasingly relevant as the use of crypto assets in Indonesia rises, as

⁶⁷ M Ady Soehatman, Ani Purwati, & Yuherman, "FATF Recommendations dan Implementasi Nasional: Studi atas Efektivitas Harmonisasi Kebijakan Anti-Money Laundering" (2025) 2:8 Jurnal Riset Multidisiplin Edukasi 414-426.

reflected by the increase in the number of investors from 18.25 million in 2023 to approximately 21.3 million in 2024, as well as indications that crypto assets are being used to launder the proceeds of crime. The high rate of cryptocurrency adoption indicates that digital assets have become an integral part of the national financial system. However, the pseudonymous and cross-border nature of these transactions also increases the risk of misuse for money laundering, particularly during the layering and concealment stages. These risks are reflected in findings from the Financial Transaction Reports and Analysis Centre (PPATK), which uncovered alleged money-laundering crimes involving cryptocurrency worth Rp800 billion during the 2022–2024 period.⁶⁸ These findings indicate that cryptocurrencies have become part of money-laundering schemes and must be addressed through more effective oversight.

Although Indonesia already has a relatively adequate AML regulatory framework, the effectiveness of its supervision still faces various technical challenges. The use of blockchain analytics to detect suspicious transactions has limitations when dealing with mixers, privacy-enhancing technologies, cross-chain bridges, and DeFi protocols, and risks generating false positives due to the limitations of algorithmic analysis. Furthermore, differing data standards and low interoperability between blockchain networks hinder comprehensive oversight. Therefore, strengthening Indonesia's AML regime requires not only regulatory improvements but also enhanced technological capabilities, human resource quality, and interagency coordination. Compared to the United States and Singapore, Indonesia faces the additional challenge of balancing anti-money laundering efforts with its constitutional obligation to safeguard national monetary sovereignty. Consequently, the effectiveness of cryptocurrency oversight in Indonesia hinges heavily on the simultaneous integration of legal, institutional, and technological approaches.

C. The Potential for Adapting Regulations into the Indonesian Legal System

⁶⁸ Rosseno Aji Nugroho, "Diungkap PPATK, Begini Modus TPPU Lewat Kripto yang Disinggung Jokowi" (19 April 2024), online: <<https://www.cnbcindonesia.com/news/20240419143043-4-531712/diungkap-ppatk-begini-modus-tppu-lewat-kripto-yang-disinggung-jokowi>>.

Indonesia cannot fully adopt the regulations implemented in the United States or Singapore. The United States regulatory model is built on the division of authority among various institutions, based on the functions and characteristics of the supervised digital assets. Although this approach provides high regulatory flexibility and specialisation, its implementation in Indonesia has the potential to cause institutional fragmentation that is not in line with the post-enactment developments of the P2SK Law, which designates the OJK as the main authority for supervising the financial services sector.⁶⁹

On the other hand, the single-regulator model implemented by Singapore is closer to Indonesia's institutional structure because it places oversight with a single, integrated authority. The risk-based approach and tiered licensing system used by Singapore is also relatively aligned with the international AML/CFT standards adopted by Indonesia.⁷⁰ However, the model cannot be moved directly. Its effectiveness is supported by institutional capacity, supervisory resources, and industrial maturity levels that are different from Indonesia's conditions.⁷¹ In addition, the development of DeFi, *non-custodial wallets*, and cross-border transactions shows that even a single-regulator model still faces limitations in addressing the full spectrum of digital asset activities. Thus, a more realistic approach would be to combine the institutional coordination advantages of the Singapore model with the functional regulatory flexibility that is developing in the United States.⁷²

⁶⁹ Ayu Septyani Bellandina Sinlae, Aaa Ngurah Tini Rusmini Gorda & Kadek Januarsa Adi Sudharma, "Synchronization of Bitcoin Regulations in the Indonesian Legal System" (2026) 7:1 Jurnal Ilmiah Global Education 429–439.

⁷⁰ Esa Thanico Maulana, "Regulasi Travel Rule Terhadap Transaksi Aset Virtual Lintas Batas Dalam Konteks Decentralized Finance Di Indonesia: Studi Banding Terhadap Markets In Crypto-Assets (Mica) Di Uni Eropa" (2024) 6:3 Jurnal Rectum: Tinjauan Yuridis Penanganan Tindak Pidana 565–584.

⁷¹ Rachel Phang, "'Singapore's emerging regulatory approach to stablecoins" by Rachel PHANG" (2024) 40:1 Banking and Finance Law Review 67–104.

⁷² Huei-Wen Teng et al, "Digital assets: risks, regulations, mitigation" (2026) 12:1 Financial Innovation 65.

Table 1. Comparison of Regulations between Countries

Regulatory Aspect	Indonesia	United States	Singapore
Regulatory Approach	Exhibits normative dualism: digital assets are recognized as financial investment assets but are strictly prohibited for use as a medium of exchange.	A function-based multi-regulatory approach; digital assets are not prohibited but are not recognized as legal tender.	Formally recognized as licensable payment services under a specialized framework.
Primary Legal Instruments	Law No. 7/2011 (Currency), Law No. 4/2023 (P2SK), OJK Regulation (POJK) 27/2024, POJK 23/2025.	Bank Secrecy Act (BSA), Anti-Money Laundering Act 2020, GENIUS Act 2025, and the Executive Order of January 2025.	Payment Services Act 2019 (PSA), Financial Services and Markets Act 2022 (FSMA), and MAS Notice PSN02.
Status as Legal Tender	Prohibited; Law No. 7/2011 mandates the Rupiah as the sole legal tender for all domestic transactions.	Not recognized as legal tender, though private use in transactions is not categorically prohibited.	Classified and licensable as Digital Payment Tokens (DPT).
Supervisory Authorities	OJK (Digital Assets, post-Jan 2025), Indonesia (Payment	Multi-regulator model: FinCEN (MSB/AML), SEC (Securities), CFTC	Monetary Authority of Singapore (MAS) acts as the sole, integrated

Regulatory Aspect	Indonesia	United States	Singapore
	Systems), and PPATK (AML/CFT); currently fragmented with limited binding coordination.	(Commodity Derivatives), OFAC (Sanctions), and IRS (Taxation).	regulator for all digital financial services.
Supervisory Model	Lacks a mechanism for real-time exchange across inter-departmental authorities.	Each agency operates independently within its specific functional jurisdiction.	MAS serves as the single point of accountability, eliminating jurisdictional 'gray areas.'
Licensing Framework	Licensing for exchanges, clearing houses, custodians, and crypto-asset traders (per POJK 27/2024).	Mandatory registration as a Money Service Business (MSB) with FinCEN; certain states require additional licenses (e.g., NY BitLicense).	Tiered licensing: Standard Payment Institution vs. Major Payment Institution, based on transaction volume and risk profile.
AML/CFT Framework	Law No. 8/2010 (TPPU); POJK 27/2024 mandates internal AML systems for all service providers.	BSA and AMLA 2020; mandates SAR, CTR, and KYC programs; GENIUS Act 2025 integrates payment stablecoins into the BSA.	PSA and MAS Notice PSN02; mandates CDD and tech-based STR reporting, equivalent to traditional financial institution standards.

Regulatory Aspect	Indonesia	United States	Singapore
KYC/CDD Requirements	Mandatory for OJK-licensed providers, though uniform technical standards have yet to be established.	Customer Identification Program (CIP) is mandatory; the BSA sets rigorous identity verification standards.	Full Customer Due Diligence (CDD); MAS mandates verification procedures at parity with traditional banking sectors.
Travel Rule Compliance	Domestic Travel Rule regulations aligned with FATF Rec. 16 are currently unavailable.	Threshold set at \$3,000; 2024 updates include high-risk CVC mixing services.	Fully aligned with FATF Rec. 16; MAS defines specific data formats and interoperability requirements.
Risk-Based Approach (RBA)	Partially accommodated in POJK 27/2024 but not yet systematically integrated into the VASP supervisory framework.	Applied sectorally; FinCEN utilizes FATF red flag indicators for the detection of suspicious transactions.	Central to the PSA; compliance obligations are proportionally scaled based on the provider's risk profile.
DeFi and P2P Regulation	No explicit regulatory provisions currently exist.	DeFi entities performing intermediary functions are subject to BSA compliance.	MAS is actively developing a DeFi regulatory framework through ongoing public consultations.

Regulatory Aspect	Indonesia	United States	Singapore
FATF Alignment	The 2023 FATF Mutual Evaluation Report (MER) identified the AML assessment of virtual assets as a significant weakness.	Adopts FATF red flag indicators for the detection of virtual asset-related financial crimes.	The PSA and MAS PSN02 frameworks are fully compliant with FATF VASP standards.

The most urgent need is harmonisation between Law Number 7 of 2011, which prohibits the use of cryptocurrencies as a means of payment, and POJK Number 27 of 2024, which recognises crypto assets as digital financial assets.⁷³ Clarity on the boundaries between prohibited payment activities and permitted investment activities will strengthen legal certainty and support the more consistent implementation of AML/CFT obligations.⁷⁴

The regulatory framework also needs to be strengthened by *regulating Travel Rules* in line with FATF Recommendation 16. The absence of this mechanism remains a weakness in the supervision of virtual asset transactions, as it limits the identification of parties involved in cross-platform transactions. The FATF emphasised that implementing *the Travel Rule* is an important element in mitigating the risk of virtual asset money laundering.

In addition, a function-based approach needs to be applied so that AML/CFT obligations apply not only to licensed entities, but also to activities that substantially perform the equivalent function of a *Virtual Asset Service Provider* (VASP). This approach allows the OJK to maintain

⁷³ Dan Awrey & Pauline Pailler, ““An Ocean Apart: The Regulation of Financial Technology in the United S” by Dan Awrey and Pauline Pailler” (2026) 88:2 Law and Contemporary Problems 53–76.

⁷⁴ Ika Riswanti Putranti & Reni Windiani, “Regulating Beneficial Ownership: Unveiling Hidden Assets from Illicit Financial Flows via Cryptocurrency Exchanges in Indonesia” (2026) 45:1 Foro: Revista de Derecho 49–71.

centralised supervision while remaining responsive to technological developments and new business models.

Strengthening coordination among OJK, PPATK, and Bank Indonesia is also needed through a more integrated and binding data-exchange mechanism. This step is important for reducing the information gap and increasing the effectiveness of monitoring for money-laundering risks involving digital assets.

Ultimately, the effectiveness of cryptocurrency regulation is not determined by the number of rules it establishes, but by its ability to provide legal certainty, maintain monetary sovereignty, and adapt to technological developments. With regulatory harmonisation, a risk-based approach, and stronger institutional coordination, Indonesia has an adequate foundation to build an effective digital asset regulatory system that aligns with the principles of Rupiah sovereignty.

VI. CONCLUSION

Cryptocurrency regulations in Indonesia still exhibit regulatory dualism, as cryptocurrencies are recognised as tradable digital financial assets but prohibited from being used as a means of payment. This situation has prevented the integration of monetary, financial services, and AML frameworks, thereby creating regulatory gaps in the oversight of cryptocurrency transactions, particularly cross-border, P2P, and DeFi transactions. Although Indonesia has implemented AML and KYC obligations through OJK oversight, its regulations remain limited to centralised entities and have not yet fully addressed the decentralised and pseudonymous nature of blockchain transactions. A comparison with the United States and Singapore shows that both countries have more integrated AML regulatory systems. The United States uses a risk-based multi-regulator model, while Singapore employs a single regulator, the MAS, with a more structured and adaptive “permissive-but-regulated” approach. Compared to the U.S. model, Singapore’s approach is considered more relevant for adaptation in Indonesia as it aligns with the strengthening of OJK’s authority following the P2SK Law.

Thus, efforts to strengthen cryptocurrency regulations in Indonesia should focus on harmonising the monetary regime with digital assets,

implementing the Travel Rule in accordance with FATF standards, expanding oversight of P2P and DeFi transactions, and strengthening coordination among the OJK, Bank Indonesia, and the PPATK. However, the effectiveness of regulation depends not only on the establishment of legal norms but also on the capacity for technology-based oversight and adaptation to the ongoing transnational evolution of digital assets.

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