Law and Judicial Review

e-ISSN: 3108-9534

Vol 02 (1) 2026 p. 32-45

Corresponding author:
Merly Markhamatul Izzah
Email: merlymarkhamatul7@gmail.com

Received: 12 June 2026;
Accepted: 13 July 2026;
Published: 10 Agustus 2026.

Conflict of interest statement:
Author(s) reported no conflict of interest

DOI: http://doi.org/10.70764/gdpu-ljr.2026.2(1)-4

CRYPTOCURRENCY AND MONEY LAUNDERING IN INDONESIAN CRIMINAL LAW: A DOCTRINAL AND CASE-BASED ANALYSIS

Merly Markhamatul Izzah[1]

[1] *Universitas 17 Agustus 1945 Semarang, Indonesia*

ABSTRACT

Objective: This study aims to analyze the application of the elements of the crime of money laundering, the construction of the perpetrator's criminal liability, and to critically examine the judicial reasoning in District Court Decision No. 1240/Pid.Sus/PN.Tng involving the use of cryptocurrency.

Research Design & Methods: This study employs a normative legal methodology through a literature review using legislative, conceptual, and case-based approaches, and is analyzed using descriptive qualitative methods based on primary, secondary, and tertiary legal sources.

Findings: This study found that cryptocurrency has transformed money-laundering methods into more complex digital mechanisms, thereby complicating tracing and proof processes. Although there are no explicit regulations, the broad concept of "assets" in anti-money laundering law allows cryptocurrency to be treated as an asset for money laundering purposes. Courts have adopted an adaptive approach by interpreting crypto transactions as asset transfers and establishing criminal intent through circumstantial evidence, while maintaining the principles of actus reus and mens rea.

Contributions: This study contributes to the development of legal discourse on cryptocurrency regulation within the anti-money laundering regime, particularly by highlighting interpretive practices in judicial decisions and identifying regulatory gaps in Indonesian law.

Novelty: The novelty lies in integrating doctrinal legal analysis with a case-based examination of cryptocurrency-related money laundering, emphasizing judicial adaptation through functional equivalence and teleological interpretation within the existing legal framework.

Keywords: Cryptocurrency; Money Laundering; Criminal Liability

JEL codes: K14, K22, K42
Article type: review paper

INTRODUCTION

The development of digital technology in recent years has fundamentally transformed the global economic and financial systems, particularly through the emergence of financial technology innovations that enable transactions to be conducted without the involvement of conventional financial institutions. One of the most prominent innovations is cryptocurrency, a decentralized, blockchain-based digital asset which enables cross-border transactions to occur quickly, efficiently, and at relatively low cost. However, the key characteristics of cryptocurrency, such as pseudonymity, decentralization, and ease of global transfer, actually open new opportunities for misuse in financial criminal activities, including money laundering. Verma (2024) study indicates that these features make cryptocurrency an attractive tool for criminals to obscure the origins of illicit funds while simultaneously complicating tracking efforts by law enforcement agencies. Furthermore, this development poses serious challenges for national legal systems that are not yet fully equipped to accommodate digital assets within conventional legal frameworks, thereby creating a regulatory gap in the regulation of technology-based financial crimes (Iswandari et al., 2025).

The use of cryptocurrency is not only growing in the legitimate economic sphere but is also becoming increasingly widespread in financial crime. This phenomenon is reflected in criminal judicial practice in Indonesia, notably through Case No. 1240/Pid.Sus/PN.Tng, which demonstrates that the proceeds of criminal activity are no longer disguised through conventional financial instruments but are instead converted into digital assets to obscure their origin. This pattern marks a shift in the modus operandi of money laundering, which is becoming increasingly complex and sophisticated, in tandem with the use of digital technologies that enable anonymity, decentralization, and the rapid cross-jurisdictional movement of funds. These characteristics have been exploited by various criminal organizations to engage in money laundering, fraud, and the financing of other illegal activities, while also creating serious challenges for tracking and evidence-gathering (Arnone et al., 2025). Nevertheless, cryptocurrency-based money laundering still follows the classic stages of placement, layering, and integration. However, it is carried out through digital mechanisms that are far more complex and difficult to trace (Almeida et al., 2025). This situation indicates that conventional law enforcement approaches are no longer sufficient, necessitating a more adaptive, responsive criminal law approach to developments in digital financial technology.

Responding to the threat of financial crime, the government enacted Law No. 8 of 2010 on the Prevention and Eradication of Money Laundering, which serves as the legal basis for prosecuting perpetrators and confiscating the proceeds of crime. This regulation adopts the concept of "assets" in a broad sense, thereby allowing various forms of assets to be subject to money laundering, and granting law enforcement authorities the power to trace, freeze, and seize assets suspected of being derived from criminal activities. This policy aligns with international commitments to combating financial crime. However, the rapid development of digital technology has introduced new forms of wealth, such as cryptocurrencies, that are not explicitly regulated by these legal provisions. This situation creates a legal vacuum that could potentially lead to differing interpretations in law enforcement practice, thereby creating legal uncertainty.

The criminal justice system serves not only a punitive function in imposing sanctions but also a preventive role in protecting public interests and maintaining the stability of the economic system. The enforcement of criminal law aims to establish order and prevent the misuse of the financial system. However, the dynamic evolution of technology demands that criminal law remain adaptable without losing its normative legitimacy. This adaptation process must be carried out carefully to avoid disregarding fundamental principles such as justice and legal certainty (Tapscott & Tapscott, 2016). On the other hand, cryptocurrency-based money laundering crimes indicate that conventional evidentiary mechanisms are no longer sufficient. The complexity of digital transactions—which are cross-border, anonymous, and built on decentralized systems—demands a more comprehensive, technology-based approach to evidence.

The issue of criminal liability in cryptocurrency-based money laundering offenses has become increasingly critical in modern judicial practice. Case No. 1240/Pid.Sus/PN.TNG demonstrates that digital assets are used to conceal the proceeds of crime, thereby posing challenges in proving the connection between such assets and the underlying criminal offense. Nevertheless, criminal liability must still be directed at the perpetrator as the legal subject, while cryptocurrency is positioned as an instrument of the crime. The assessment of the element of fault, whether in the form of intent or negligence, is a highly decisive aspect in the evidentiary process. In this regard, judges are required to carefully assess whether the use of cryptocurrency was carried out with the intent to conceal the proceeds of crime, while adhering to the principle of "no punishment without guilt" as the basis for criminal liability (Ilyas, 2012).

To ensure a focused analysis, this study is limited to the examination of the Indonesian legal framework governing cryptocurrency-based money laundering and the judicial reasoning adopted in Decision No. 1240/Pid.Sus/PN.Tng. The scope of the research is confined to a doctrinal analysis of this single judicial decision within the Indonesian legal system. Accordingly, the discussion does not extend to comparative analyses of other jurisdictions or to broader regulatory developments beyond those directly relevant to the selected case. By establishing these boundaries, the study seeks to provide an in-depth understanding of how existing anti-money laundering legislation is interpreted and applied in addressing cryptocurrency-related financial crimes.

Based on this scope, the study aims to analyze the legal framework governing cryptocurrency-based money laundering under Indonesian criminal law and to examine the application of criminal liability in Decision No. 1240/Pid.Sus/PN.Tng, with particular emphasis on the judicial assessment of cryptocurrency as an instrument for concealing the proceeds of crime. Furthermore, this research seeks to evaluate how judicial reasoning adapts existing anti-money laundering provisions through functional equivalence and teleological interpretation to accommodate emerging digital financial technologies while maintaining the principles of legal certainty and criminal responsibility. The novelty of this research lies in integrating doctrinal legal analysis with a case-based examination of judicial reasoning, thereby bridging normative legal analysis and judicial practice to contribute to the development of criminal liability concepts and legal certainty in addressing cryptocurrency-based financial crimes in Indonesia.

LITERATURE REVIEW

Concepts and Legal Characteristics of Cryptocurrency

Cryptocurrency has emerged as one of the most significant innovations in the digital financial ecosystem, fundamentally transforming the way value is created, transferred, and stored. Contextually, cryptocurrency refers to digital or virtual assets that use cryptographic techniques to secure transactions and operate on decentralized blockchain networks (European Central Bank, 2019; Nakamoto, 2009). Unlike conventional currencies issued by central banks, cryptocurrencies are not controlled by any single authority, making them resistant to intervention. This decentralized nature, combined with features such as pseudonymity, transparency through distributed ledgers, and global accessibility, makes cryptocurrency both a disruptive financial innovation and a complex legal entity (Financial Action Task Force (FATF), 2021).

The legal classification of cryptocurrency remains a subject of debate. Some countries classify them as property or assets, while others treat them as commodities; in fact, quite a few have banned their use. In Indonesia, cryptocurrencies are not recognized as legal tender. Still, they are recognized as commodities that can be traded on futures markets under the supervision of the Commodity Futures Trading Regulatory Agency (BAPPEBTI). This approach is determined by the policy of the Kementerian Perdagangan Republik Indonesia (2018) as well as BAPPEBTI's implementing regulations governing the trading of crypto assets. Additionally, Bank Indonesia (2017) explicitly stated that cryptocurrency is not legal tender within Indonesia.

However, this classification raises several legal issues, particularly regarding ownership, the transfer of rights, and its treatment under criminal law, especially in cases of financial crimes such as money laundering. Experts argue that the legal ambiguity surrounding cryptocurrency stems from its hybrid nature, which combines the characteristics of currency, an asset, and technology (Zetzsche et al., 2020). This situation poses a challenge to legal systems that have traditionally relied on conventional and rigidly defined asset classifications.

Furthermore, the lack of an integrated global regulatory framework exacerbates inconsistencies in the treatment of cryptocurrencies across countries, thereby complicating law enforcement efforts in cross-border crime cases (International Monetary Fund, 2021). Therefore, in line with the rapid development of digital assets, the legal system must adopt a more adaptive, progressive, and technology-based approach to ensure legal certainty without hindering innovation in the digital finance sector.

Money Laundering in the Digital Finance Era

Money laundering is the process of disguising or concealing the origin of assets obtained through illegal activities, so they appear to come from legitimate sources. From a legal perspective, money laundering does not stand alone but is closely linked to predicate crimes such as corruption, drug trafficking, fraud, and cybercrime. Conceptually, money laundering is carried out through three main stages: placement (introducing funds into the financial system), layering (segregating or layering transactions to obscure the trail), and integration (reintroducing funds into the economic system as assets that appear legitimate) (Wicaksono & Sulistiyono, 2025). These three stages demonstrate that money laundering is an organized and systematic crime, as it involves various financial instruments and often crosses national jurisdictional boundaries.

As we enter the era of digital finance, technological advancements have fundamentally transformed the patterns and methods of money laundering. Innovations in the financial technology (fintech) sector, such as digital payment services, peer-to-peer lending, and electronic wallets (e-wallets), have created transaction systems that are faster, more efficient, and more accessible to the general public. However, these conveniences are also exploited by criminals to launder money through loopholes in digital systems. Transactions that can be conducted instantly and without face-to-face interaction (non-face-to-face) increase the risk of identity theft and complicate the user verification process (know your customer). Furthermore, financial digitization enables perpetrators to split large sums into small transactions (smurfing) that are difficult for conventional monitoring systems to detect. This situation demonstrates that digital transformation not only brings economic benefits but also increases the complexity of financial crime risks (Amrullah, 2025).

The most prominent instrument in the digital finance era is cryptocurrency, which offers a blockchain-based transaction system characterized by decentralization and pseudonymity. Unlike conventional financial systems, which are overseen by central authorities, cryptocurrency transactions do not rely on intermediaries, thereby providing users with a high degree of flexibility. In the context of money laundering, these characteristics are exploited by perpetrators to disguise the flow of funds through techniques such as mixing services, privacy coins, peer-to-peer transactions, and decentralized exchanges (DEX). Additionally, the use of anonymous digital wallets and the storage of assets in cold storage further complicates tracking efforts by law enforcement agencies. Research by Muslim (2025) indicates that, despite blockchain technology's systemic transparency, its complexity still poses challenges to identifying perpetrators due to limitations in user identity data.

The development of digital finance requires anti-money laundering regimes to adapt quickly and effectively. The main challenges lie in regulatory limitations that have not yet fully kept pace with technological advancements, as well as the lack of technical capacity among law enforcement agencies to address digital-based crimes. Furthermore, the cross-border nature of digital transactions necessitates strong international cooperation to ensure effective law enforcement. Therefore, there is a need to strengthen risk-based regulations, implement the "know your customer" (KYC) principle, and integrate technology into financial oversight systems. A study by Natsir et al., (2025) indicates that without policy updates and institutional capacity building, efforts to combat money laundering in the digital era will face significant obstacles.

The Theory of Legal Certainty and the Challenges of Crypto Regulation

The theory of legal certainty is one of the main pillars of legal philosophy, emphasizing that laws must be formulated clearly, unambiguously, and predictably to guide society. From a classical perspective, Gustav Radbruch identified legal certainty as one of the three fundamental values of law, alongside justice and utility (Julyano & Sulistyawan, 2019). Legal certainty requires written norms that are unambiguous, thereby ensuring consistent application of the law in practice.

Within the framework of legal positivism pioneered by Hans Kelsen, law is understood as a hierarchical and binding system of norms (Kelsen, 1966). These norms serve as guidelines for behavior and create social order (Prazak et al., 2020). Therefore, legal certainty is not only related to the existence of written rules but also to the consistency of enforcement and interpretation by law enforcement officials.

In the context of cryptocurrency regulation, the principle of legal certainty faces quite complex challenges. As a new phenomenon in the digital financial system, cryptocurrency does not yet have a fully comprehensive legal framework in many countries, including Indonesia. The ambiguity regarding the legal status of cryptocurrency—whether it is a means of payment, a commodity, or a digital asset—creates a gray area in regulation and law enforcement. This situation aligns with Jayus (2016) view that regulatory disharmony can hinder the establishment of legal certainty and optimal legal protection for the public.

This issue becomes increasingly significant when linked to the criminal offense of money laundering. Without clear legal norms regarding the status and characteristics of cryptocurrency as a legal object, law enforcement officials may face difficulties in classifying offenses and determining the appropriate legal basis. Consequently, inconsistencies in court rulings may arise, ultimately weakening law enforcement's effectiveness and eroding public trust in the judicial system.

Using the theory of legal certainty, this study aims to examine the extent to which court rulings, particularly in cryptocurrency cases, provide normative clarity on the legal status of cryptocurrency as a legal object. Furthermore, this analysis is also crucial for assessing whether judicial practices reflect legal consistency and predictability. Consequently, the study's findings are expected to contribute to the development of more comprehensive and adaptive regulations, thereby addressing legal challenges in the digital age and strengthening Indonesia's national legal system.

Research Gaps and Theoretical Contributions

Based on the evolving literature review, research on cryptocurrency and money laundering remains dominated by a normative-regulatory approach. Most studies focus on analyzing legal frameworks, anti-money laundering (AML) policies, and the characteristics of cryptocurrency as an instrument that can be misused. For example, Arnone (2026) research indicates that crypto-based money laundering practices operate within complex, cross-jurisdictional networks, while existing regulatory frameworks tend to be unable to address the entire criminal chain comprehensively. This underscores that the international literature primarily focuses on systemic and policy aspects rather than on concrete practices in court rulings.

Several studies have also highlighted characteristics of cryptocurrency—such as anonymity, decentralization, and the difficulty of tracking transactions—as key factors complicating law enforcement. A study by Almeida et al., (2023) explains that the pseudo-anonymous nature of cryptocurrency and the absence of a central authority make it highly susceptible to use in the money-laundering cycle, particularly during the layering and integration stages. In Indonesia itself, studies using a normative legal approach also indicate legal gaps, regulatory limitations, and technical obstacles to tracking and seizing criminal proceeds in the form of cryptocurrency (Habsari & Maharani, 2025).

However, there is a significant limitation in the existing literature, namely the scarcity of studies that specifically analyze court rulings as the primary research object. Most studies stop at the normative and conceptual level without exploring how these norms are interpreted and applied by judges in judicial practice. In fact, analysis of court decisions is crucial for assessing how the law operates in practice (law in action), including how judges classify cryptocurrency as a legal object in money laundering offenses and how the framework of criminal liability is constructed.

Although numerous studies have discussed cryptocurrency-related money laundering from regulatory and policy perspectives, very few studies have examined how Indonesian courts interpret cryptocurrency as an object of money laundering and construct criminal liability in concrete judicial decisions. This study addresses this gap by providing a doctrinal and case-based analysis of Decision No. 1240/Pid.Sus/PN.Tng.

This research gap is becoming increasingly relevant given the ever-growing global dynamics of crypto-based crime. A study by Wu et al., (2024) indicates that money laundering patterns within the Web3 ecosystem are becoming increasingly complex and constantly evolving, necessitating a more contextual and case-specific analytical approach. Without an examination of court rulings, it is difficult to assess whether the legal system can effectively adapt to these developments.

Therefore, this study aims to fill this gap by conducting an in-depth analysis of Judgment No. 1240/Pid.Sus/PN Tng. The research focuses not only on normative aspects but also on the legal interpretations judges employ, including those used to classify crypto assets as objects of criminal offenses and to determine the form of criminal liability. Thus, this study is expected to make a significant contribution to bridging the gap between normative law and judicial practice, while strengthening the understanding of legal certainty in the context of crypto-based crimes in Indonesia.

Research Proposition

Building upon the existing literature, this study advances the proposition that although Indonesia's anti-money laundering framework provides a general legal basis for addressing assets derived from criminal activities, its application to cryptocurrency remains largely dependent on judicial interpretation due to the absence of explicit statutory regulation concerning digital assets. Consequently, the effectiveness of criminal liability in cryptocurrency-based money laundering cases is determined not only by the adequacy of legislative provisions but also by the manner in which judges interpret cryptocurrency as a legal object and establish its connection with the predicate offense. This proposition guides the present analysis by examining whether Decision No. 1240/Pid.Sus/PN.Tng demonstrates a coherent application of legal certainty and criminal liability principles in adapting existing anti-money laundering law to emerging digital financial technologies.

METHODS

This study employs a normative legal research method to examine the legal framework governing cryptocurrency-based money laundering and its application in judicial practice. Normative legal research focuses on legal norms contained in legislation, legal doctrines, judicial decisions, and other authoritative legal materials to evaluate the consistency and interpretation of the law (Soekanto, 2001). This approach is appropriate because the research seeks to analyze legal certainty and criminal liability concerning cryptocurrency within the Indonesian anti-money laundering regime rather than to measure empirical legal behavior.

The research adopts three complementary approaches. First, the statutory approach is used to examine relevant legal provisions, particularly Law No. 8 of 2010 concerning the Prevention and Eradication of Money Laundering, Law No. 1 of 2023 concerning the Criminal Code, and other regulations governing crypto assets in Indonesia. Second, the conceptual approach is employed to analyze legal doctrines and scholarly opinions regarding cryptocurrency, money laundering, criminal liability, legal certainty, and judicial interpretation. Third, the case approach is applied through an in-depth examination of Decision No. 1240/Pid.Sus/PN.Tng to assess how statutory provisions are interpreted and implemented in judicial practice (Marzuki, 2005).

The selection of Decision No. 1240/Pid.Sus/PN.Tng as the object of analysis is based on purposive criteria. This decision represents one of the few Indonesian court judgments that explicitly addresses the use of cryptocurrency as an instrument for concealing the proceeds of crime within a money laundering prosecution. The case therefore provides an appropriate legal basis for examining how Indonesian courts interpret cryptocurrency as a legal object, construct criminal liability, and apply existing anti-money laundering legislation in the absence of specific statutory regulation concerning digital assets. Consequently, the judgment serves as a representative case for evaluating the adaptation of conventional criminal law principles to emerging financial technologies.

The legal materials consist of primary, secondary, and tertiary legal sources. Primary legal materials include legislation, official government regulations, and Decision No. 1240/Pid.Sus/PN.Tng. Secondary legal materials comprise legal textbooks, peer-reviewed journal articles, commentaries, and scholarly opinions concerning criminal law, financial technology, and anti-money laundering law. Tertiary legal materials include legal dictionaries, encyclopedias, and other reference works that support the interpretation of legal terminology (Ibrahim, 2013). These materials were collected through library research by reviewing statutory instruments, academic publications, official government documents, and judicial databases, including the Case Tracking Information System (SIPP) of the Tangerang District Court (Ali, 2009).

The analysis of the court decision was conducted using doctrinal legal analysis combined with qualitative legal reasoning. The judgment was examined systematically by identifying the ratio decidendi, namely the legal reasoning forming the basis of the court's decision, while distinguishing it from supporting judicial considerations that do not constitute the binding legal basis (obiter dicta). Particular attention was given to the judges' interpretation of statutory provisions, the legal qualification of cryptocurrency as an object of money laundering, the assessment of criminal liability, and the evidentiary considerations used to establish the relationship between cryptocurrency transactions and the predicate offense. These judicial findings were subsequently compared with relevant statutory provisions, legal doctrines, and the theory of legal certainty to evaluate the consistency and adequacy of existing legal norms.

The collected legal materials were analyzed using descriptive qualitative legal analysis. The analysis was conducted through several stages: identifying relevant legal norms, interpreting statutory provisions and judicial reasoning, comparing judicial findings with legal doctrines and existing regulations, and synthesizing the results to formulate conclusions regarding the adequacy of Indonesia's legal framework for addressing cryptocurrency-based money laundering. Through this analytical process, the study provides a systematic evaluation of how Indonesian criminal law has adapted to technological developments while maintaining the principles of legal certainty and criminal liability (Amiruddin & Asikin, 2020).

RESULT

Application of the Elements of the Crime of Money Laundering in Judgment No. 1240/Pid.Sus/PN.Tng

Based on a normative analysis of District Court Judgment No. 1240/Pid.Sus/PN.Tng, it can be identified that the panel of judges' legal reasoning is explicitly grounded in the normative framework established by Law No. 8 of 2010 on the Prevention and Eradication of Money Laundering. Within the framework of Indonesian positive law, this law functions not only as a repressive instrument but also as a preventive framework that emphasizes the importance of financial system integrity. Therefore, the application of legal norms in this decision reflects the judges' efforts to concretely operationalize the law's provisions in response to a new phenomenon: the use of cryptocurrency in money laundering. This approach simultaneously affirms that positive law extends beyond conventional forms of economic activity.

Dogmatically, the panel of judges outlined the elements of the money laundering offense by referring to the legal framework outlined in Articles 3, 4, and 5 of Law No. 8 of 2010, which inherently require a combination of the actus reus (the act itself) and the mens rea (the mental state). These elements include: (i) the act of placing, transferring, or diverting assets; (ii) the existence of assets derived from a predicate offense; and (iii) the intent to conceal or disguise the origin of such assets. From a criminal law perspective, these three elements are cumulative and must be proven legally and convincingly, in accordance with the principles of evidence in criminal procedure.

Regarding the act itself, the panel of judges held that cryptocurrency-based transactions, including the use of digital wallets and cross-platform exchanges, can be classified as a form of "transferring" or "conveying" assets. This interpretation reflects a functional equivalence approach, in which cryptocurrency is understood as a representation of economic value that can be electronically transferred. Thus, although it is not physically tangible and is not explicitly regulated by law, cryptocurrency remains within the scope of legal norms as an object possessing economic value. This aligns with developments in the literature stating that digital assets possess quasi-property characteristics that can be treated on par with conventional assets (Böhme et al., 2015).

Regarding the origin of the assets, the judge further emphasized that the existence of a predicate offense is a conditio sine qua non for proving money laundering. In this ruling, the panel of judges successfully linked cryptocurrency funds flows to a previously proven predicate offense. This reflects the application of the "follow the money" principle, which is also an international standard in anti-money laundering regimes as formulated by the Financial Action Task Force (FATF). The FATF emphasizes that changes in the form of assets, including conversion into digital currency, do not eliminate the illegal nature of the assets' origin (Financial Action Task Force, 2015). The judge thus correctly upheld the continuity of the assets' illegal nature despite their transformation in form.

The panel of judges used an inferential approach to establish the element of mens rea by assessing the defendant's behavioral patterns, including the complexity of the transactions, the use of anonymous identities, and the exploitation of blockchain's pseudonymous nature. In this context, the intent to conceal or disguise the origin of assets need not be proven explicitly but can be inferred from a series of actions indicating a specific design or scheme. This approach aligns with the doctrinal view that, in economic crimes, mens rea is often proved by circumstantial evidence (Levi & Reuter, 2006). Therefore, the use of technology that inherently provides anonymity can actually strengthen indications of criminal intent.

One of the most significant aspects of this ruling is the judge's assertion that cryptocurrency does not possess a legal status separate from the existing legal framework, but rather functions solely as an instrument or medium of transaction. Thus, the judge's approach is one of "substance over form," prioritizing the essence of legal acts over their technological form. This approach is crucial in the context of the highly dynamic development of financial technology, where the law must adapt without compromising its fundamental principles. In this case, the judge did not get bogged down in narrow formalism but prioritized the legal objective: preventing and combating money laundering.

Theoretically, this approach has a strong foundation in the legal positivism articulated by Hans Kelsen. In The Pure Theory of Law, Kelsen emphasizes that law is an autonomous system of norms that must be applied logically to relevant facts (Kelsen, 1966). This means that as long as an act meets the established normative elements, the law must be applied without regard to non-legal aspects, including the form of the technology used. Thus, the application of anti-money laundering regulations to cryptocurrency is a manifestation of consistent legal application within the framework of legal positivism.

Nevertheless, it cannot be ignored that this ruling reflects a tendency toward broad interpretation by the panel of judges, particularly in expanding the scope of the term "assets" to include digital assets. This interpretation can be categorized as teleological, oriented toward the law's purpose (ratio legis), namely, to prevent criminals from exploiting regulatory loopholes. While this approach provides flexibility, it also creates potential legal uncertainty if not accompanied by more explicit regulations. Therefore, harmonization between judicial practice and regulatory development is necessary to ensure both legal certainty and the effectiveness of law enforcement.

Overall, the results of this analysis indicate that the application of money laundering elements in Judgment No. 1240/Pid.Sus/PN.TNG reflects the adaptive nature of the Indonesian legal system in responding to developments in digital technology. However, this dynamic also indicates an urgent need to strengthen the regulatory framework governing digital assets so that it does not rely solely on judicial interpretation.

Table 1. Analysis of the Application of Money Laundering Elements in Judgment No. 1240/Pid.Sus/PN.Tng

Money Laundering Element	Legal Basis	Findings in the Judgment	Analysis
Act (depositing, transferring, disposing of)	Article 3 of Law No. 8 of 2010	Cryptocurrency transactions were used to transfer funds	Cryptocurrency is recognized as a means of value transfer
Origin of assets	Article 2 of Law No. 8 of 2010	Funds originated from a predicate offense	Illegal status remains attached even after conversion
Intent to conceal / disguise	Articles 3, 4, 5 of Law No. 8 of 2010	Use of anonymous accounts and layered transactions	Indicates the presence of mens rea (criminal intent)
Status of cryptocurrency	Judicial interpretation	Classified as property	Extensive interpretation of the concept of assets

Criminal Liability of Perpetrators of Cryptocurrency-Based Money Laundering

An analysis of District Court Decision No. 1240/Pid.Sus/PN.Tng reveals that the legal framework for the perpetrators' criminal liability rests on two fundamental elements of criminal law: actus reus (the act) and mens rea (the intent). The panel of judges not only identified the existence of objective acts—namely, the transfer, conversion, and concealment of proceeds of crime through cryptocurrency instruments—but also affirmed the existence of a subjective dimension involving the perpetrator's knowledge and intent. In this case, the perpetrator's actions reflect dolus directus, namely, direct intent to achieve a specific objective: disguising the origin of illegal funds. This approach aligns with developments in modern criminal law doctrine, which emphasizes that liability is determined not only by the existence of an act but also by the quality of the perpetrator's awareness of its legal consequences (Nelson et al., 2024).

Normatively, this approach is consistent with Indonesia's anti-money laundering legal framework, which adopts a more flexible standard of proof in establishing the element of culpability. In the context of money laundering offenses, the mens rea element need not be proven by explicit admission; it can be inferred from objective circumstances indicating that the perpetrator knew, or at least should have suspected, the illegal origin of the assets under their management. This reflects a shift toward a constructive approach to knowledge in economic criminal law. This phenomenon is further supported by the study by Wardani et al., (2022), which shows that the complexity of cryptocurrency transactions is often used to obscure the relationship between the perpetrator and the source of funds, so that proving guilt relies more heavily on logical inferences from transaction patterns.

The most significant aspect of this ruling is how the panel of judges addressed the evidentiary challenges arising from the characteristics of blockchain technology. As a distributed ledger, blockchain is transparent yet pseudonymous, meaning that participants' identities are not directly revealed in transactions. Nevertheless, this anonymity is relative and can be breached through digital forensic analysis. Research indicates that although cryptocurrency transactions are publicly recorded, identifying perpetrators remains possible by correlating blockchain data with external information, such as banking data, user identities, and transaction patterns (Koutsoupia, 2023). The panel of judges adopted a "multi-layered evidence" approach—combining digital evidence (transaction trails, wallet addresses) with conventional evidence (bank accounts, witness testimony)—reflecting the evolution of evidentiary law in addressing technology-enabled crimes.

The latest literature indicates that the technical characteristics of cryptocurrency—such as decentralization, irreversibility, and pseudonymity—actually make it an attractive tool for money launderers to layer funds and obscure transaction trails (Almeida et al., 2023). That said, research by Bellei et al., (2024) also confirms that the same technology can be leveraged by law enforcement to track criminal patterns through transaction network analysis based on graph analytics, thereby enhancing the effectiveness of detecting illegal activities. Thus, blockchain technology has an ambivalent nature: on one hand, it facilitates crime, but on the other, it also provides tools for law enforcement.

The actions of perpetrators can be understood, from the perspective of law and economics, as a manifestation of economic rationality in the context of crime. Within Richard Posner's framework, criminals act as rational actors who weigh the benefits they gain against the risks they incur. The use of cryptocurrency in money laundering reflects an effort to reduce the likelihood of detection by leveraging decentralized, cross-jurisdictional systems. However, empirical evidence indicates that this assumption is not entirely accurate, as law enforcement authorities can increasingly identify patterns of illegal transactions using advanced analytical technologies. In fact, recent reports indicate that while the volume of crypto-based money laundering is increasing globally, tracking capabilities have also improved significantly through digital forensic techniques (Howcroft, 2026).

The deterrence theory posits that imposing criminal sanctions on offenders increases the expected cost of crime, thereby reducing the incentive for others to commit similar crimes. The effectiveness of deterrence in this context depends not only on the severity of the sanctions but also on the certainty of punishment. A report from the Financial Action Task Force (FATF) confirms that the risk of money laundering through virtual assets remains high, but can be mitigated through improved regulatory compliance and cross-border law enforcement capacity (Financial Action Task Force, 2015). This demonstrates that the legal system possesses the adaptive capacity to respond to the dynamics of technology-based financial crime.

Table 2. Analytical Framework of Criminal Liability in Cryptocurrency-Based Money Laundering

Analytical Aspect	Judicial Findings	Legal Interpretation
Actus Reus	Transfer and conversion of criminal proceeds into cryptocurrency	Fulfils Article 3 of Law No. 8 of 2010
Mens Rea	Intention inferred from transaction patterns and anonymous wallets	Criminal intent established through circumstantial evidence
Evidence	Blockchain records, digital wallets, bank records, witness testimony	Multi-layered evidentiary approach
Legal Status of Cryptocurrency	Considered an asset/instrument of crime	Functional equivalence and teleological interpretation
Judicial Outcome	Defendant held criminally liable	Existing AML provisions remain applicable despite technological developments

Source: Developed by the author based on Decision No. 1240/Pid.Sus/PN.Tng.

The results of this analysis confirm that criminal liability in cryptocurrency-based money laundering cases has not undergone a fundamental paradigm shift, but rather a transformation in operational aspects, particularly regarding methods of proof. The fundamental principles of criminal law—actus reus and mens rea—remain the primary foundation, while technological advancements drive adaptations in investigative and evidentiary techniques. Thus, an integrative legal approach that balances normative consistency with technological innovation is crucial to ensuring the effectiveness of law enforcement against digital financial crimes in the contemporary era.

Judicial Reasoning in Adjudicating Cryptocurrency-Related Money Laundering Cases

The judge's reasoning in this case reflects a paradigm shift in judicial reasoning from a legal-formalistic approach toward a more contextual and adaptive approach to developments in digital technology. In addressing the phenomenon of cryptocurrency, the judge did not merely confine themselves to a grammatical interpretation of the provisions in the Anti-Money Laundering Act (AMLA), but also considered the socio-technological characteristics of cryptocurrency as a new financial instrument. Judges understands characteristics such as decentralization, pseudo-anonymity, and a borderless nature to increase the complexity of tracking illicit funds (Werbach, 2018; Zetzsche et al., 2020). Thus, the judges' reasoning demonstrates the use of systematic and teleological methods of interpretation, namely, interpreting legal norms based on the purpose of their enactment (ratio legis), which is to prevent and eradicate money laundering in its various forms, including technology-based forms.

The judge's legal reasoning demonstrates an integration of normative and pragmatic approaches. From a normative perspective, the judge explicitly refers to the elements of the offense under the Anti-Money Laundering Law, particularly regarding "assets" and "acts of concealing or disguising the origin of assets." However, from a pragmatic perspective, the judge adopts an expansive interpretation of "assets," including cryptocurrency as a legally protected subject matter. This approach aligns with the principle of "living law," which emphasizes that the law must be capable of evolving to keep pace with societal dynamics (Rahardjo, 2010). This judicial interpretation can be understood as a form of judicial innovation that remains within the bounds of legality, as it does not create new norms but rather expands the scope of existing norms to ensure their relevance in the digital age (Arner et al., 2015).

The judicial reasoning in this ruling also demonstrates a sufficient level of understanding of the technical aspects of blockchain technology. The judge not only recognized cryptocurrency as a digital asset but also understood how blockchain-based transaction mechanisms can be exploited in money-laundering schemes, particularly during the layering stage. The transparency of the public ledger inherent in blockchain does not automatically eliminate the potential for anonymity, as users' identities remain hidden behind cryptographic addresses. This condition creates an opportunity for perpetrators to disguise the origin of funds through a series of complex transactions. By incorporating these technical aspects into their legal reasoning, the judges demonstrate an evidentiary-based approach that integrates technical facts with legal construction, as recommended in modern financial law enforcement practice.

Based on the legal systems theory proposed by Gunther Teubner, these dynamics reflect the interaction between the legal and technological subsystems within a functionally differentiated society. Teubner views law as an autopoietic system capable of reproducing itself through internal operations, yet remains sensitive to "irritations" from the external environment, including technological innovations. In this context, the emergence of cryptocurrency can be understood as an external disturbance that compels the legal system to adjust by reinterpreting existing norms. This court ruling, therefore, can be understood as a concrete manifestation of the legal system's adaptive mechanism in response to the complexity of digital technology, in which the law does not lose its autonomy but rather expands its capacity to respond to new phenomena (Teubner, 2014).

Analyzed through a pragmatic approach in legal theory, the judge's reasoning also reflects a consequentialist orientation, as articulated by Posner (2003). The judge does not merely focus on the logical coherence of legal norms but also considers the practical implications of the ruling on the effectiveness of the anti-money laundering regime. By recognizing cryptocurrency as a potential vehicle for money laundering, judges strategically expand the scope of law enforcement and deter perpetrators of digital financial crimes. This approach demonstrates that adjudication functions not only as a dispute-resolution mechanism but also as a public policy tool for maintaining the integrity of the financial system.

The judicial reasoning in this decision demonstrates the law's adaptive, progressive, and responsive nature in response to technological advancements. The integration of interpretive approaches (textual, systematic, and teleological), a technical understanding of the case's subject matter, and a pragmatic orientation toward the decision's impact reflects the evolving role of judges in the digital age. Therefore, this ruling not only serves as a precedent in this specific case but also contributes to the development of a new legal doctrine that is more inclusive of financial technology phenomena. Thus, it can be concluded that the Indonesian judicial system is beginning to demonstrate the institutional capacity to address the challenges posed by technological disruption, particularly in the context of cryptocurrency-based financial crimes.

DISCUSSION

The Adequacy of Indonesia's Anti-Money Laundering Law in Addressing Cryptocurrency-Based Crimes

Normatively, Indonesia's anti-money laundering regime, as outlined in Law No. 8 of 2010 on the Prevention and Eradication of Money Laundering, has been designed with a broad-based and technology-neutral approach. This is reflected in the formulation of Article 1(1), which broadly defines "assets" to encompass all forms of assets, whether tangible or intangible, movable or immovable. With this normative construction, cryptocurrency can be doctrinally classified as part of the object of the crime of money laundering, even though at the time the law was enacted, the phenomenon of crypto assets had not yet developed significantly. This approach demonstrates legislative foresight that provides interpretive flexibility for law enforcement officials in responding to developments in digital financial technology.

The flexibility of the law, however, simultaneously raises issues regarding legal certainty. The absence of explicit regulations on cryptocurrency means that the legal status of digital assets is heavily dependent on the interpretations of law enforcement officials and judges. In judicial practice, this situation can lead to inconsistencies in the application of the law across cases. For example, in the Tangerang District Court Decision No. 1240/Pid.Sus/PN.Tng, the panel of judges used an extensive interpretive approach to recognize cryptocurrency as part of "assets" that can be the subject of money laundering. Although this approach is progressive, without an explicit normative foundation, there is a risk of disparity in future rulings.

Regulatory fragmentation is also evident in the dual regulatory framework for cryptocurrency in Indonesia. On one hand, from a criminal law perspective, cryptocurrency is not specifically regulated under the Anti-Money Laundering Law (AML Law). On the other hand, from an administrative perspective, crypto assets have been recognized and regulated as commodities within the futures trading regime through policies of the Commodity Futures Trading Supervisory Agency (Bappebti), particularly in Bappebti Regulation No. 5 of 2019 and its amendments. This situation reflects regulatory gaps and overlaps that could hinder the effectiveness of law enforcement due to a lack of integration.

Therefore, legislative reform is needed that is not merely piecemeal, but systemic and integrated. Legal updates can be achieved by revising the Anti-Money Laundering Law to include an explicit definition of digital assets, including cryptocurrency, or by enacting a specific law governing technology-based financial crimes. This step is crucial for strengthening legal certainty, enhancing the consistency of law enforcement, and providing a more robust normative foundation for law enforcement officials in handling cryptocurrency-based money laundering cases.

The Challenge of Proving Digital Financial Crimes in Criminal Proceedings

From the perspective of criminal procedure law, the burden of proof is a central factor in determining whether a person can be held criminally liable. In the context of cryptocurrency-based money-laundering crimes, proving guilt is far more complex than in conventional crimes. This is due to the characteristics of blockchain technology, which is decentralized, pseudonymous, and does not rely on a single authority (a trustless system). Although all transactions are transparently recorded in a distributed ledger, the identity of the perpetrator is not directly revealed, thus requiring further analysis to link a digital address (wallet address) to a specific legal entity.

Under Indonesian positive law, admissible evidence is regulated in Article 184(1) of the Criminal Procedure Code (KUHAP), which includes witness testimony, expert testimony, documents, physical evidence, and the defendant's statement. Technological developments subsequently led to an expansion of the definition of evidence through Law No. 11 of 2008 on Electronic Information and Transactions in conjunction with Law No. 19 of 2016, which recognizes electronic information and/or electronic documents as valid evidence. However, in practice, the validation and interpretation of blockchain-based evidence still require specialized expertise that is not yet widely possessed by law enforcement officials.

Limited technical capacity remains one of the primary obstacles to preventing digital financial crimes. Analyzing cryptocurrency transactions requires expertise in blockchain forensics, including transaction tracing techniques, cluster analysis, and identifying suspicious transaction patterns. Without adequate human resources and advanced technological tools, the evidentiary process becomes suboptimal and risks weakening the prosecution's position in court.

In addition, the cross-jurisdictional nature of cryptocurrency transactions poses its own set of challenges. Funds can move easily between countries in a short period, necessitating effective international cooperation mechanisms, such as mutual legal assistance (MLA) and the exchange of financial intelligence. In this context, the role of the Financial Transaction Reporting and Analysis Center (PPATK) is highly strategic in analyzing and tracking suspicious financial transactions. However, the PPATK's administrative and financial intelligence authorities need to be more effectively integrated into law enforcement processes. Thus, strengthening the evidentiary system for digital financial crimes requires a multidimensional approach that encompasses technical capacity building, the development of specialized evidentiary guidelines, and enhanced international cooperation. Without such efforts, the effectiveness of law enforcement against cryptocurrency-based money laundering offenses will continue to be significantly undermined by structural challenges.

Reconceptualizing Criminal Liability in the Digital Finance Era

The findings of Decision No. 1240/Pid.Sus/PN.Tng demonstrate that the Indonesian court did not abandon or fundamentally revise the classical doctrine of criminal liability when adjudicating cryptocurrency-related money laundering. Rather, the judgment confirms that the traditional elements of criminal responsibility—namely actus reus (the prohibited act) and mens rea (the guilty mind)—remain fully applicable despite the technological complexity introduced by blockchain-based financial transactions. The emergence of cryptocurrencies has therefore not altered the normative foundations of criminal liability under Indonesian law. Instead, it has transformed the evidentiary context in which these established legal principles must be applied. The decision illustrates that the core issue is no longer whether existing criminal law doctrines are relevant to digital financial crimes, but how these doctrines can be operationalized through evidentiary methods capable of capturing technologically sophisticated forms of criminal conduct.

A notable aspect of the judgment is the court's reliance on objective factual circumstances to infer the existence of criminal intent. Rather than depending solely upon direct confessions or explicit documentary evidence, the judges reconstructed the defendant's state of mind from a series of observable transactional patterns. These included the use of multiple cryptocurrency wallets, repeated transfers across numerous blockchain addresses, layered transactions intended to obscure the movement of assets, and mechanisms designed to preserve anonymity. Viewed collectively, these circumstances were considered sufficiently indicative of the defendant's knowledge that the assets originated from criminal activities and of his deliberate intention to conceal their illicit source. This approach reflects an important judicial recognition that in cryptocurrency-based financial crimes, intent frequently cannot be established through traditional forms of evidence because the decentralized and pseudonymous architecture of blockchain systems enables offenders to avoid direct evidentiary traces.

The court's reasoning is also consistent with contemporary developments in criminal law theory concerning the proof of culpability in economic, financial, and cybercrime. Modern criminal jurisprudence increasingly recognizes that subjective intent may legitimately be inferred from objective patterns of conduct where direct evidence is inherently difficult to obtain. Although the judgment does not explicitly invoke doctrines such as willful blindness, conscious avoidance, or dolus eventualis, its analytical framework closely resembles these concepts. The defendant's systematic use of sophisticated transaction structures designed to disguise ownership, fragment asset transfers, and reduce transaction traceability demonstrates a level of awareness incompatible with innocent or negligent conduct. Consequently, the court effectively treated the cumulative transactional behavior as circumstantial evidence establishing the existence of knowledge and intentional participation in the laundering process. This evidentiary approach reflects a broader trend in comparative criminal jurisprudence, where courts increasingly assess the entirety of transactional behavior rather than isolated acts when determining criminal intent in technologically mediated financial crimes.

From a broader theoretical perspective, the judgment illustrates the adaptability of classical criminal law doctrines in responding to technological innovation. The decision suggests that the evolution of digital finance does not necessarily require the creation of entirely new theories of criminal liability. Instead, legal development should focus on enhancing the mechanisms through which traditional elements of liability are proven in digital environments. In other words, technological innovation changes the evidentiary manifestations of criminal behavior rather than the substantive legal concepts of responsibility themselves. This distinction is particularly important because it preserves the principles of legality and legal certainty while simultaneously allowing criminal law to remain responsive to emerging forms of financial crime.

The findings further indicate that blockchain technology should not be viewed solely as an obstacle to criminal investigation. Although cryptocurrency transactions provide varying degrees of pseudonymity, blockchain records are inherently permanent, transparent, and capable of forensic reconstruction through specialized analytical techniques. Consequently, the challenge for law enforcement authorities lies less in identifying new legal standards than in developing sufficient institutional capacity to analyze digital transaction data, correlate blockchain evidence with conventional financial records, and demonstrate the defendant's knowledge through comprehensive evidentiary analysis. The increasing integration of blockchain forensic tools, digital asset tracing methodologies, and financial intelligence therefore becomes essential in ensuring that existing criminal liability doctrines remain effective in practice.

Accordingly, this study argues that the principal challenge in prosecuting cryptocurrency-based money laundering is not the inadequacy of Indonesia's criminal liability doctrine but the continuous adaptation of evidentiary methods capable of demonstrating knowledge, intent, and participation within decentralized financial ecosystems. Decision No. 1240/Pid.Sus/PN.Tng provides empirical support for the proposition that existing Indonesian criminal law possesses sufficient normative flexibility to address cryptocurrency-related money laundering through adaptive judicial interpretation without compromising fundamental principles of criminal responsibility. Nevertheless, the long-term effectiveness of this approach will depend upon strengthening digital forensic capabilities, improving judicial understanding of blockchain technology, and promoting closer cooperation between financial intelligence agencies, cryptocurrency service providers, and law enforcement institutions. Such institutional developments would enable traditional criminal law doctrines to remain both legally coherent and practically effective in addressing increasingly sophisticated forms of digital financial crime.

Implications for Legal Reform and Law Enforcement Practices

The findings of Decision No. 1240/Pid.Sus/PN.Tng generate significant implications for the future development of Indonesia's anti-money laundering regime, particularly in addressing crimes involving cryptocurrency and other emerging digital assets. Although the judgment confirms that the existing legal framework remains capable of accommodating cryptocurrency-based money laundering through judicial interpretation, it simultaneously exposes several structural challenges that require legislative and institutional attention. The decision therefore serves not only as an example of judicial adaptation to technological innovation but also as an important indicator of areas in which Indonesia's anti-money laundering framework should be strengthened to ensure greater legal certainty and more effective law enforcement.

First, the judgment demonstrates that the broad and technology-neutral formulation of Law No. 8 of 2010 enables courts to interpret cryptocurrency as an "asset" capable of becoming the object of money laundering without requiring immediate legislative amendment. Through purposive and systematic interpretation, the court successfully extended the application of existing statutory provisions to digital financial transactions while preserving the underlying objectives of anti-money laundering legislation. This approach reflects the flexibility of Indonesia's legal framework in responding to technological developments that were not explicitly contemplated when the statute was enacted. Nevertheless, the reliance on judicial interpretation also reveals an important normative limitation. Because the legislation does not expressly define cryptocurrency or other virtual assets within the anti-money laundering regime, future courts may adopt differing interpretative approaches depending upon the factual circumstances of each case. Such inconsistency has the potential to undermine legal certainty, generate divergent judicial precedents, and create uncertainty for investigators, prosecutors, digital asset service providers, and market participants. Consequently, legislative reform should provide explicit statutory recognition of cryptocurrencies and other digital assets as potential objects of money laundering while maintaining sufficient flexibility to accommodate future technological innovations.

Second, the decision highlights the evolving nature of evidentiary practices in cryptocurrency-related prosecutions. The court did not rely exclusively upon blockchain transaction data or digital forensic reports. Instead, criminal liability was established through the cumulative assessment of multiple categories of evidence, including blockchain transaction histories, banking records, witness testimony, financial intelligence reports, electronic communications, and other documentary evidence capable of demonstrating both the illicit origin of the assets and the defendant's knowledge of their criminal provenance. This integrated evidentiary approach recognizes that blockchain technology, while providing immutable transaction records, does not automatically reveal the legal identity or criminal intention of transaction participants. The evidentiary challenge therefore lies not merely in tracing digital assets across blockchain networks but in connecting those transactions with identifiable individuals and demonstrating the subjective elements of criminal responsibility required under Indonesian criminal law. Accordingly, future law enforcement practices should prioritize the integration of blockchain analytics with conventional investigative techniques rather than treating digital forensic evidence as a self-sufficient basis for criminal conviction.

Third, the judgment underscores the increasingly important role of judicial competence in applying existing legal principles to technologically complex financial crimes. Rather than introducing novel doctrines of criminal liability, the judges relied upon established methods of statutory interpretation to ensure that the objectives of anti-money laundering legislation remained effective despite changes in the technological environment. This demonstrates that judicial interpretation functions as a bridge between relatively stable legal norms and rapidly evolving financial technologies. However, the effectiveness of such interpretative approaches ultimately depends upon the judiciary's ability to understand blockchain technology, cryptocurrency ecosystems, digital asset transfers, and the operational characteristics of decentralized financial systems. Consequently, institutional capacity-building becomes as important as legislative reform. Continuous judicial education, specialized prosecutorial training, enhanced digital forensic expertise, and stronger cooperation between law enforcement agencies, financial intelligence units, blockchain analysts, and cryptocurrency service providers are essential to ensuring that courts can accurately evaluate increasingly sophisticated forms of digital financial evidence.

The decision also carries broader policy implications regarding regulatory governance in the digital finance sector. As cryptocurrency adoption continues to expand, anti-money laundering enforcement can no longer rely solely on reactive criminal prosecutions. Preventive regulatory mechanisms, including enhanced customer due diligence (CDD), Know Your Customer (KYC) obligations, transaction monitoring systems, suspicious transaction reporting, and effective supervision of virtual asset service providers, should be integrated more comprehensively into Indonesia's anti-money laundering strategy. Strengthening coordination among financial regulators, law enforcement authorities, and private-sector digital asset platforms would significantly improve the detection and prevention of illicit financial flows before criminal proceeds become increasingly difficult to trace through layered blockchain transactions.

Accordingly, the principal implication of this study is that Indonesia's anti-money laundering regime does not require a fundamental reconstruction of its substantive criminal liability framework to address cryptocurrency-related crimes. The existing legal principles remain sufficiently robust to accommodate technological developments through adaptive judicial interpretation. Nevertheless, the long-term effectiveness of this approach depends upon complementary reforms that reinforce legal certainty and institutional effectiveness. Such reforms should include explicit statutory recognition of digital assets within anti-money laundering legislation, the development of more comprehensive evidentiary guidelines for blockchain-based investigations, enhanced judicial and prosecutorial capacity in digital financial crime, and stronger inter-agency cooperation in digital asset supervision. By strengthening these institutional and regulatory dimensions, Indonesia can preserve the stability of its criminal law framework while ensuring that anti-money laundering enforcement remains responsive to the continuing evolution of digital finance.

CONCLUSION

This study demonstrates that although blockchain-based cryptocurrencies have increased the complexity of money laundering through anonymous and decentralized transaction mechanisms, Indonesia's anti-money laundering framework under Law No. 8 of 2010 remains sufficiently flexible to address such crimes through the broad interpretation of the concept of "assets," as reflected in Decision No. 1240/Pid.Sus/PN.Tng. The findings confirm that the court successfully applied the traditional principles of criminal liability, namely actus reus, mens rea, and the principle of geen straf zonder schuld, by adapting judicial interpretation and evidentiary methods to cryptocurrency transactions without departing from established criminal law doctrines. Theoretically, this study contributes to the understanding that existing criminal liability principles remain applicable to cryptocurrency-based money laundering through adaptive judicial interpretation rather than the creation of new legal doctrines. Practically, the findings indicate the need for more explicit statutory recognition of digital assets within Indonesia's anti-money laundering legislation, the development of judicial and prosecutorial guidelines for assessing blockchain-based evidence, the strengthening of blockchain forensic capabilities among law enforcement agencies, and closer institutional coordination between PPATK and criminal justice institutions. Nevertheless, this study is limited to a normative analysis of a single Indonesian court decision and therefore does not capture broader judicial practices or comparative legal developments. Future research should examine additional Indonesian court decisions, compare judicial approaches across ASEAN jurisdictions, and explore the legal implications of emerging digital financial technologies, including decentralized finance (DeFi) and other blockchain-based innovations, to further strengthen the legal framework for combating cryptocurrency-based money laundering.

REFERENCES

Ali, Z. (2009). *Metode Penelitian Hukum*. Sinar Grafika.

Almeida, H., Pinto, P., & Fernández Vilas, A. (2025). From Placement to Integration: A Parametric Study of Cryptocurrency-Based Money Laundering Techniques. *Risks*, *13*(12), 249. https://doi.org/10.3390/risks13120249

Almeida, H., Pinto, P., & Fernández Vilas, A. (2023). A Review of Cryptocurrency Transaction Methods for Money Laundering. *Proceedings of the 5th International Conference on Finance, Economics, Management and IT Business*, 114–121. https://doi.org/10.5220/0011993300003494

Amiruddin, & Asikin, Z. (2020). *Pengantar Metode Penelitian Hukum*. RajaGrafindo Persada.

Amrullah, M. A. (2025). Inovasi Digital dalam Bentuk Aset Kripto Sebagai Sarana untuk Melakukan Tindak Pidana Pencucian Uang. *MLJ Merdeka Law Journal*, *5*(2), 113–125. https://jurnal.unmer.ac.id/index.php/mlj/article/view/15202

Arner, D. W., Barberis, J. N., & Buckley, R. P. (2015). The Evolution of Fintech: A New Post-Crisis Paradigm? *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2676553

Arnone, G. (2026). Regulating the Crypto-Laundering Chain: A Comparative Study of Scam Compounds and Money Mule Mechanisms Within Criminal Networks. *Risks*, *14*(4), 96. https://doi.org/10.3390/risks14040096

Arnone, G., Scire', G., & Bivona, E. (2025). The (mis)use of Cryptocurrencies by Criminal Organizations: A Systematic Literature Review. *Digital Finance*, *7*(4), 815–851. https://doi.org/10.1007/s42521-025-00148-1

Bank Indonesia. (2017). *Peraturan Bank Indonesia No. 19/12/PBI/2017 tentang Penyelenggaraan Teknologi Finansial*. https://www.bi.go.id/id/publikasi/peraturan/Documents/PBI_191217.pdf

Bellei, C., Xu, M., Phillips, R., Robinson, T., Weber, M., Kaler, T., Leiserson, C. E., Arvind, & Chen, J. (2024). The Shape of Money Laundering: Subgraph Representation Learning on the Blockchain with the Elliptic2 Dataset. *ArXiv*. https://doi.org/https://doi.org/10.48550/arXiv.2404.19109

Böhme, R., Christin, N., Edelman, B., & Moore, T. (2015). Bitcoin: Economics, Technology, and Governance. *Journal of Economic Perspectives*, *29*(2), 213–238. https://doi.org/10.1257/jep.29.2.213

European Central Bank. (2019). Crypto-Assets: Implications for Financial Stability, Monetary Policy, and Payments and Market Infrastructures. *European Central Bank*. https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op223~3ce14e986c.en.pdf

Financial Action Task Force. (2015). *International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation*. https://www.fatf-gafi.org/content/dam/fatf-gafi/recommendations/FATF Recommendations 2012.pdf.coredownload.inline.pdf

Financial Action Task Force (FATF). (2021). *Updated Guidance for a Risk-Based Approach to Virtual Assets and Virtual Asset Service Providers*. FATF Recommendations. https://www.fatf-gafi.org/en/publications/Fatfrecommendations/Guidance-rba-virtual-assets-2021.html

Habsari, H. T., & Maharani, N. (2025). Kripto Dalam Pusaran Tindak Pidana Pencucian Uang dan Perampasan Aset di Indonesia. *Jurnal Fundamental Justice*, *6*(1), 51–68. https://journal.universitasbumigora.ac.id/index.php/fundamental/article/view/4882

Howcroft, E. (2026). *Crypto money-laundering hit $82 billion in 2025, researchers say*. Reuters. https://www.reuters.com/legal/government/crypto-money-laundering-hit-82-billion-2025-researchers-say-2026-01-27

Ibrahim, J. (2013). *Teori & Metodologi Penelitian Hukum Normatif*. Bayu Media.

Ilyas, A. (2012). *Asas-asas Hukum Pidana: Memahami Tindak Pidana dan Pertanggungjawaban Pidana sebagai Syarat Pemidanaan : Disertai Teori-teori Pengantar dan Beberapa Komentar*. Kerja sama Rangkang Education Yogyakarta & PuKAP-Indonesia.

International Monetary Fund. (2021). *Global Financial Stability Report*. https://www.imf.org/en/publications/gfsr

Iswandari, N. K. Z., Trisno, A. K., & Hadi, I. G. A. A. (2025). Cryptocurrency-Based Money Laundering: Legal Gaps and New Threats in the Digital Financial World. *SHS Web of Conferences*, *221*, 03008. https://doi.org/10.1051/shsconf/202522103008

Jayus, J. A. (2016). Konsep Sistem Hukum Investasi dalam Menjamin Adanya Kepastian Hukum. *LITIGASI*, *16*(2). https://doi.org/10.23969/litigasi.v16i2.38

Julyano, M., & Sulistyawan, A. Y. (2019). Pemahaman Terhadap Asas Kepastian Hukum Melalui Konstruksi Penalaran Positivisme Hukum. *CREPIDO*, *1*(1), 13–22. https://doi.org/10.14710/crepido.1.1.13-22

Kelsen, H. (1966). On The Pure Theory of Law. *Israel Law Review*, *1*(1), 1–7. https://doi.org/10.1017/S0021223700013595

Kementerian Perdagangan Republik Indonesia. (2018). *Peraturan Menteri Perdagangan No. 99 Tahun 2018 tentang Kebijakan Umum Penyelenggaraan Perdagangan Berjangka Aset Kripto*. https://jdih.kemendag.go.id/backendx/image/regulasi/27191241_PERMENDAG_NOMOR_99_TAHUN_2018.PDF

Koutsoupia, V. (2023). Challenges of the Use of Virtual Assets in Money Laundering. *Nordic Journal of European Law*, *6*(4), 53–78. https://doi.org/10.36969/njel.v6i4.25919

Levi, M., & Reuter, P. (2006). Money Laundering. *Crime and Justice*, *34*(1), 289–375. https://doi.org/10.1086/501508

Marzuki, M. (2005). *Penelitian Hukum: Edisi Revisi*. Kencana.

Muslim, E. A. (2025). Modus Baru Tindak Pidana Pencucian Uang Dengan Memanfaatkan Teknologi Blokchain Dan Mata Uang Crypto. *UIN Law Review: Jurnal Hukum Dan Hak Asasi Manusia*, *1*(2), 132–155. https://doi.org/10.15408/ulr.v4i2.50005

Nakamoto, S. (2009). *Bitcoin: A Peer-to-Peer Electronic Cash System*. https://bitcoin.org/bitcoin.pdf

Natsir, M., Suparji, S., & Machmud, A. (2025). Politik Hukum Pemberantasan Tindak Pidana Pencucian Uang di Indonesia: Analisis Efektivitas dan Rekomendasi Kebijakan. *Bappenas Working Papers*, *8*(2), 271–284. https://doi.org/10.47266/bwp.v8i2.394

Nelson, F. M., Prosperiani, M. D., Ramadhan, C. R., & Andini, P. P. (2024). Cracking the Code: Investigating the Hunt for Crypto Assets in Money Laundering Cases in Indonesia. *Journal of Indonesian Legal Studies*, *9*(1), 89–130. https://doi.org/10.15294/jils.vol9i1.4534

Posner, R. A. (2003). *Law, Pragmatism, and Democracy*. Harvard University Press.

Prazak, M. A., Soares, M. N., & Silva, U. da. (2020). O Positivismo Jurídico De Hans Kelsen. *Sapere Aude*, *11*(22), 521–535. https://doi.org/10.5752/P.2177-6342.2020v11n22p521-535

Rahardjo, S. (2010). *Penegakan Hukum Progresif*. PT Kompas Media Nusantara.

Soekanto, S. (2001). *Penelitian Hukum Normatif: Suatu Tinjauan Singkat*. RajaGrafindo Persada.

Tapscott, D., & Tapscott, A. (2016). *Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World*. Penguin.

Teubner, G. (2014). Law and Social Theory: Three Problems. *Asian Journal of Law and Society*, *1*(2), 235–254. https://doi.org/10.1017/als.2014.13

Verma, H. (2024). The Impact of Cryptocurrency on Money Laundering Practices. *African Journal of Commercial Studies*, *5*(2), 51–60. https://doi.org/10.59413/ajocs/v5.i.2.1

Wardani, A., Ali, M., & Barkhuizen, J. (2022). Money Laundering through Cryptocurrency and Its Arrangements in Money Laundering Act. *Lex Publica*, *9*(2), 49–66. https://doi.org/10.58829/lp.9.2.2022.49-66

Werbach, K. (2018). *The Blockchain and the New Architecture of Trust*. The MIT Press. https://doi.org/10.7551/mitpress/11449.001.0001

Wicaksono, B. W., & Sulistiyono, A. (2025). Analisis Terhadap Kasus Tindak Pidana Pencucian Uang Berbasis Digital. *RIGGS: Journal of Artificial Intelligence and Digital Business*, *4*(3), 159–168. https://doi.org/10.31004/riggs.v4i3.1992

Wu, J., Lin, D., Fu, Q., Yang, S., Chen, T., Zheng, Z., & Song, B. (2024). Toward Understanding Asset Flows in Crypto Money Laundering Through the Lenses of Ethereum Heists. *IEEE Transactions on Information Forensics and Security*, *19*, 1994–2009. https://doi.org/10.1109/TIFS.2023.3346276

Zetzsche, Dirk A, Arner, D. W., & Buckley, R. P. (2020). Decentralized Finance. *Journal of Financial Regulation*, *6*(2), 172–203. https://doi.org/10.1093/jfr/fjaa010

Zetzsche, Dirk Andreas, Arner, D. W., & Buckley, R. P. (2020). Decentralized Finance (DeFi). *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3539194