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Digital Governance for Confiscating Crypto-Assets to Settle Tax Liabilities in Indonesia

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ABSTRACT

The emergence of digital and virtual assets has created new challenges for tax authorities, as taxpayers now possess not only traditional but also digital assets that can be accessed globally through the internet. This unconventional form of asset ownership raises questions about how tax authorities can effectively confiscate and liquidate crypto-assets to resolve tax liabilities. The lack of these mechanisms complicates tax administration and criminal law enforcement in the digital era. **This study aims** to examine the possibility of confiscating digital and virtual assets for tax purposes within Indonesia's asset recovery framework. Using a **comparative law approach**, this article analyzes the potential use of crypto-asset confiscation for the settlement of tax arrears by referencing the latest European Union regulations on asset recovery and confiscation, particularly the Directive (EU) 2024/1260 of the European Parliament and Council on asset recovery and confiscation. **The analysis** shows that Indonesia currently lacks a system that enables the confiscation and recovery of digital assets for tax enforcement. Considering the shared civil law foundations and similar challenges faced by EU countries, the EU's model provides a relevant reference point. **Indonesia should consider** adopting the European Union's methodology for seizing and recovering digital assets to enhance its legal framework. Implementing the asset recovery and confiscation mechanisms established under Directive (EU) 2024/1260 could serve as a paradigm for Indonesia to efficiently confiscate taxpayers' assets and strengthen tax compliance in the digital economy.

1. INTRODUCTION

The growing ability of taxpayers to hold digital and virtual assets alongside conventional ones has reshaped Indonesia's legal and fiscal landscape. Cryptocurrency, or crypto-assets, has transformed investment behavior and taxation practices, prompting the Indonesian government to recognize crypto assets as tradable commodities [1]. This recognition aims to ensure legal certainty, simplify administration, and attract millennial investors to the domestic market. Between May 2023 and May 2024, the number of Indonesian crypto investors rose to 19.75 million, coinciding with Bitcoin's record surge to USD 94,000 in November 2024 an indication of the sector's rapid expansion.

However, the decentralized and borderless nature of crypto-assets creates significant challenges in tax collection and enforcement [2]. The Indonesian government, which has relied on taxation as the main source of national revenue since the 1986–1987 fiscal year accounting for more than 80% of total income introduced

Value Added Tax (VAT) and Income Tax on crypto transactions in 2022. Yet, the absence of a globally accepted definition of crypto-assets and limited international coordination hinder effective implementation. As decentralized digital property with minimal physical presence, cryptocurrencies are susceptible to theft and concealment, further complicating enforcement [3]. The FATF defines virtual assets as digital representations of value used in digital transactions, making them taxable, but research on their confiscation for tax purposes remains limited.

This study examines the readiness of Indonesia's legal framework to confiscate crypto-assets for settling tax arrears and supporting asset recovery. Using a comparative legal analysis of European Union regulations, particularly the EU's framework on asset recovery and confiscation, this research identifies key legal deficiencies and practical enforcement barriers [4]. Unlike previous studies that focus on taxation and investment perspectives or money-laundering contexts, this paper highlights both legal and technical challenges in implementing crypto-asset confiscation especially regarding detection, custodial cooperation, and the obstacles posed by self-custody and privacy-enhanced coins.

Table 1. Confiscating Crypto-Assets for Tax Purposes: Mechanisms, Challenges, and Examples

Mechanism / Step	**Legal Basis (Typical)**	**How It Works in Practice**	**Key Technical & Legal Challenges**	**Example Jurisdictions / Notes**
Detection & intelligence	Tax transparency laws; AML reporting; third-party reporting	Exchanges/OTPs report holdings or transactional data; blockchain analytics flag undeclared flows	Pseudonymity, cross-chain complexity, mixing/tumbling; limited reporting coverage	EU crypto-asset info exchange rules; Chainalysis tools widely used (Taxation and Customs Union)
Freezing (preliminary restraint)	Court orders; warrants; asset preservation rules	Courts/order to exchanges or custodians to freeze accounts; on-chain freezes via coordinated custodial cooperation	Self-custody (private keys) impossible to freeze; jurisdictional limits; custodian non-compliance	US/UK/France seizure orders used with exchanges (Skadden)
Seizure / Forfeiture	Criminal/civil forfeiture statutes; tax collection/enforcement laws	Asset transferred to state control after legal procedure (criminal conviction or civil forfeiture)	Proof of ownership/source, due process, valuation, chain of custody for private keys	Large DOJ/IRS seizures (e.g., Silk Road-related holdings) (Department of Justice)
Valuation	Administrative rules / court-appointed experts	Convert crypto to fiat at a legally defined rate/date or through auction results	Volatility, illiquid tokens, forks, tokens with restricted transferability	EU guidance on preserving asset value; courts may appoint experts (European Parliament)
Conversion / Realisation	Auction/sale rules; treasury management policy	Forfeited crypto sold on regulated exchanges or via private sale; proceeds go to treasury or victim compensation	Market impact, custody/security for large holdings, legal challenges to sale	US Treasury/DOJ have realised seized crypto in prior cases (Department of Justice)
Use for tax collection	Tax enforcement statutes; budget appropriation rules	Proceeds applied to outstanding tax liabilities or general revenue after legal clearances	Accounting and transparency; competing claims (victims vs. state); valuation disputes	Practices vary; some jurisdictions allocate proceeds to victims/agency budgets (Le Monde.fr)
Limitation: self-custody & privacy coins	N/A (technical)	If taxpayer controls private keys and refuses cooperation, seizure may be impossible	No lawful way to compel key disclosure in some countries; privacy coins hinder tracing	Enforcement relies on cooperation, civil orders, or indirect sanctions (Eutax)

The Table 1 shows the mechanisms, legal foundations, and practical challenges in confiscating crypto-assets for tax purposes. It highlights that detection and custodial cooperation are essential enablers in ensuring

effective enforcement, while self-custody and privacy-enhanced coins remain primary barriers. The table illustrates how various jurisdictions such as the EU, the United States, and France implement different procedural and technical approaches in tracing, freezing, seizing, and converting crypto-assets into state revenue. These mechanisms demonstrate that successful asset confiscation requires coordinated legal frameworks, technological capability, and interjurisdictional cooperation to overcome the anonymity and decentralization inherent in digital assets.

The main limitation of previous studies lies in their insufficient focus on the impact of crypto-assets on state tax collections through asset recovery. This study aims to demonstrate the potential benefits of utilizing crypto-assets as a government revenue source, preventing missed fiscal opportunities. Considering that confiscating crypto-assets for tax purposes is still a rarely explored topic, especially among crypto-friendly nations, this paper offers a novel contribution to legal scholarship [5]. While the discussion is largely theoretical, incorporating empirical data or case studies such as those from the United States, the Netherlands, or South Korea would enhance its credibility and practical relevance. Furthermore, expanding the comparative legal analysis beyond the EU to include crypto-forward jurisdictions like Singapore and El Salvador would provide valuable insights into asset tracing, seizure, and compliance mechanisms, offering regulatory models that could guide Indonesia's legal reform.

Figure 1. Sustainable Development Goals

Figure 1 illustrates how this study aligns with several United Nations Sustainable Development Goals (SDGs). It relates to SDGs 8 on [6] promoting sustainable economic growth through better fiscal governance, SDGs 9 on fostering innovation and technological progress in financial systems, SDGs 16 on [7] strengthening legal frameworks and institutional transparency, and SDGs 17 on enhancing international cooperation in digital governance. Together, these goals reflect the study's contribution to building an accountable, innovative, and sustainable economic environment.

2. RESEARCH METHOD

This study employs a comparative legal research methodology to systematically analyze the similarities, differences, and normative gaps between the European Union's Directive (EU) 2024/1260 and Indonesia's current legal framework governing asset recovery and tax enforcement. The comparative approach enables a detailed examination of how EU member states operationalize asset tracing, freezing, seizure, and confiscation particularly regarding crypto assets in both criminal and administrative contexts. By reviewing legislative provisions, institutional arrangements, and implementation practices across jurisdictions, this method helps uncover best practices, enforcement challenges, and institutional innovations that may serve as references for Indonesia. The analysis also emphasizes how shared civil law traditions between Indonesia and the EU provide a strong foundation for cross-jurisdictional comparison.

Furthermore, the comparative assessment supports the identification of specific legal, procedural, and technical elements that may require amendment within Indonesia's regulatory landscape to ensure a coherent and effective system for crypto-asset confiscation in tax-related cases. This includes evaluating the alignment of national laws with international standards, assessing institutional capacity, and examining the readiness of enforcement agencies to adopt practices such as blockchain forensics or NCBC. Based on these findings, the study formulates a proposal for strengthening Indonesia's legal framework, ensuring that any recommended reforms consider both the objectives of the EU directive and the practical realities of Indonesia's legal, administrative, and socio-economic environment [8].

3. RESULT AND DISCUSSION

3.1. Specific Definition of Crypto-Assets for Tax Purposes

Early internet advocates viewed digital innovation as a disruptive force with transformative potential for individuals, leading to the concept of "disruptive innovation". Blockchain-based cryptography has since become a foundation for many cryptocurrencies, representing a new form of disruption in financial and legal systems. However, there is still no universally accepted definition or classification of crypto-assets. The earliest reference comes from Satoshi Nakamoto's concept of Bitcoin as a decentralized electronic payment system allowing direct peer-to-peer transactions without intermediaries. Although the term "cryptocurrency" suggests its use as money, users often treat Bitcoin as an asset, affecting its exchange trading volume [9]. Lansky argued that if a government recognizes Bitcoin as legal tender, it must establish supporting infrastructure. While some studies consider crypto-assets intangible, applying the intrinsic value test indicates that Bitcoin may be viewed as tangible property subject to in rem or quasi in rem jurisdiction.

The evolution of this technology has reshaped government perspectives, legal frameworks, and regulatory variations across countries. Although crypto-assets do not inherently threaten financial stability, their treatment depends on national definitions. In the United States, for example, the Internal Revenue Service (IRS) classifies cryptocurrencies as taxable digital assets, the Securities and Exchange Commission (SEC) identifies certain tokens as securities 68 as of 2023 and the Commodity Futures Trading Commission (CFTC) categorizes them as commodities [10]. Globally, approaches differ: El Salvador adopted Bitcoin as legal tender in 2021, while the Central African Republic followed in 2022 but later suspended implementation. In contrast, Indonesia prohibits the use of crypto-assets as currency but allows them as tradable commodities through futures exchanges. This demonstrates Indonesia's cautious yet adaptive stance in integrating digital assets into a legally controlled and economically stable framework.

Similarly, the IMF expresses concern over the difficulty of precisely describing and legally categorizing crypto assets, presenting the following perspective:

- The assignment of crypto assets to a legal category is crucial in order to establish a clear understanding of their precise legal treatment. There exist three degrees of urgency:
  - The civil legal character of crypto assets is crucial for ensuring the predictability and enforceability of the rights and obligations of the parties involved. It is crucial for establishing market confidence and ensuring efficient risk management and supervision.
  - It is imperative to categorize crypto assets within the framework of financial legislation in order to effectively govern them using established or novel responsible and behavioural principles. More specifically, it is crucial to ascertain:
    - Prudential and resolution regimes, which involves competent agencies and criteria for accessing financial safety net components.
    - Market behaviour norms.
    - Enactment of the legislative framework that regulates the infrastructure of the financial market.
- A universally accepted legal definition of crypto assets does not exist. Notwithstanding the recently implemented legislation regulating certain elements of digital technology (lex cryptographia), the definitions of crypto assets differ and are influenced by the objectives of such legislation. An inherent difficulty in characterizing crypto assets lies in their wide range of intricate and/or innovative characteristics. In certain jurisdictions, like as Switzerland, the term "crypto-asset" has been adopted without a legal definition, but the European Union Cryptoasset Markets Regulation (MiCA) has provided a specific definition

for it [11]. Certain countries have opted to establish a more comprehensive classification of ”digital assets” utilized on Distributed Ledger Technology (DLT) or comparable technologies for general objectives (Liechtenstein and Ukraine) or for particular tax related objectives (India), while others have delineated specific categories of digital assets based on their economic purpose (such as Singapore), which has done so to supplement current payment regulations [12]. The European Union and Japan have divergent interpretations of crypto assets that have tangible implications. Although the EU MiCA definition encompasses stablecoins that are linked to fiat currencies, the Japanese framework seems to remove them from the classification of crypto assets, therefore permitting their issuance exclusively by banks and other specifically designated financial institutions. This makes sense given their relative stability, they have the potential for a wider adoption than traditional cryptocurrencies. They offer a bridge between the traditional financial markets and the emerging opportunities offered by crypto-assets technology [13]. They offer the opportunity of wider access to the benefits of digital currencies in general, for daily transactions and as a ‘digital form of cash’. This mitigates the previously identified issues regarding the propensity to promote crypto-assets as a speculative asset.

- The private law categorization of crypto-assets might exhibit significant variation. The classification of crypto-assets as property, personal claims, or sui generis assets is contingent upon their design characteristics and, in certain instances, contractual provisions. This classification applies even in the absence of any claim against the issuer of an unbacked crypto asset, such as Bitcoin. The fundamental inquiry is whether crypto-assets can meet the criteria of ”property” and so be afforded ownership rights [14]. Certain jurisdictions have included crypto assets into fundamental property law, whereas others, where the physical presence of an object remains crucial for determining its status as property, may encounter intricacies. Nevertheless, the application of conventional regulations to crypto assets, even if they belong to a specific category, might still be difficult because of their digital character and the use of DLT, especially in a cross-border setting. For instance, the presence of a DLT with nodes that span across borders poses challenges in determining the appropriate jurisdictional law that applies to transactions involving crypto-assets [15].

- Taxonomy of financial law is equally difficult. Typically, crypto assets can be classified under several established financial law categories, including deposits, electronic money, payment instruments, securities, other financial instruments, and commodities. Nevertheless, the outcome is contingent upon the specific asset, its private law character, design characteristics, intended purpose, and the prevailing financial law classifications [16]. Numerous regulatory bodies implement established legal classifications on an individual basis. A function-based taxonomy established by regulatory agencies aids in comprehending crypto assets, but it does not provide legal certainty on their categorization under financial law. Additionally, appraising the worth of cryptocurrencies lacking collateralization by tangible assets is difficult.

Due to the aforementioned reasons, many crypto-friendly nations now opt to classify it as an asset primarily for tax-related objectives. Meanwhile, the Indonesian government has implemented Income Tax and VAT levies specifically targeting value added tax and income tax on crypto asset trading transactions through the Ministry of Finance Regulation Number 68/PMK.03/2022 (“PMK 68/2022”), although one might say that the final rates set in this PMK 68/2022 do not fulfill the element of justice because tax collection is not based on the taxation of taxpayers and whereas tax collections on crypto-assets’ transactions carried out on centralized exchanges established outside Indonesia or on decentralized exchanges are still not regulated [17]. Hence, the inclusion of a crypto asset confiscation mechanism is essential to the overall objective of this legislation, which is to offer legal certainty, simplicity, and efficient administration for the collection, deposit, and reporting of taxes on crypto asset transactions.

3.2. The Influence of Crypto-Assets on Tax Enforcement

The coercive nature of taxation obligates the government to enforce tax collection, including the confiscation of assets when taxpayers fail to meet their obligations. With crypto-assets classified as property, they are subject to general property-based taxation principles and the concept of tax neutrality [18]. However, taxing virtual income presents valuation, liquidity, and compliance challenges because taxes must be paid in legal tender, while crypto holders may not always possess equivalent fiat funds. Additionally, the anonymity of digital transactions complicates voluntary compliance and increases enforcement difficulty, creating the risk that virtual income may remain untaxed without a clear legal and procedural mechanism.

Tax enforcement in Indonesia consists of both administrative and criminal components under the General Procedures of Taxation Law (UU KUP). Administrative enforcement aims to ensure taxpayer compliance through audits, assessment letters, and monetary penalties such as fines and interest [19]. Criminal enforcement is applied when intentional tax violations occur, allowing authorities to investigate and prosecute offenders. When tax debts remain unpaid, authorities may carry out asset seizures followed by state auctions to recover outstanding liabilities. Administrative confiscation can be performed without court approval under certain legal criteria, though some jurisdictions limit this authority or require judicial review to safeguard due process.

Criminal tax enforcement is closely linked to administrative measures when cases involve financial crime, enabling multi-layered sanctions for severe tax violations. Cooperation across multiple institutions the courts, police, the Attorney General's Office, KPK, and PPATK is often required to execute enforcement [20]. Under the revised Criminal Code (effective January 2026), failure to pay fines may lead to imprisonment or supervisory sanctions. However, such measures risk imposing additional burdens on the state if confiscation is ineffective in recovering losses. Therefore, developing a clear, effective mechanism to seize and manage crypto-assets for tax enforcement is essential to support revenue collection and prevent inefficiencies in the legal system [21].

3.3. Asset Recovery for Tax Purposes

Asset recovery is recognized as an effective tool in combating organized crime and corruption. However, the execution of asset recovery measures might be a formidable undertaking because to the evermore intricate technology progress and the impact of diverse organized criminal or multinational corruption patterns.

3.3.1. Shifting The Asset Recovery Center To Asset Recovery Agency

The establishment of the Asset Recovery Center (PPA) within the Attorney General's Office in 2014 marked the Indonesian government's deliberate focus on asset recovery. The PPA was established in response to the observation that Indonesian law enforcement has historically prioritized prosecution of criminal perpetrators over asset recovery [22]. In 2022, the PPA was renamed the Asset Recovery Agency (BPA) to bridge a vacuum in its authority to remove bureaucratic barriers and boost efficiency in terms of data and information sharing, as well as communication on a global scale.

Nevertheless, there is no specially established system for asset recovery for tax purposes in Indonesia. Tax confiscation in asset recovery serves a distinct objective compared to the execution of Criminal Code confiscation. The primary aim of confiscating tax objects in the form of crypto assets is to acquire liquid monies while minimizing the expenses associated with the confiscation process, similar to the economic theory of crime. Moreover, asset recovery must also consider an asset management strategy while handling retrieved assets [23].

Undertaking this task is crucial in order to address two prevalent challenges frequently encountered in the endeavor to reclaim illicit assets. Firstly, issues pertaining to the expenses associated with the upkeep, protection, and preservation of assets throughout the judicial proceedings. Secondly, the issue of asset valuation at the time of asset execution. The protracted duration required to get a final decision with enduring legal validity, which serves as the foundation for execution, gives rise to issues pertaining to expenses and asset value. The duration required to finalize a lawsuit consequently leads to a significant interval between the confiscation of assets [24].

Accordingly, there is a rise in the expenses that need to be paid for assets on one side and a decline in the economic worth of assets on the other. Both factors exhibit a negative correlation with the outcomes of asset recovery, thereby impeding their optimality. This factor is considered when applying the non-conviction based (NCB) mechanism in the process of confiscating assets. Nonetheless, the implementation of asset management principles is inevitable for both conviction-based and non-conviction-based processes to attain optimal outcomes. The NCB approach is currently inapplicable in the asset recovery process due to the absence of a corresponding legislation, such as the Asset Confiscation Law. Hence, asset confiscation proceeds via the conviction-based system as stipulated by the Code of Criminal Procedure 1981 (KUHAP) [25].

The use of the asset management concept in the administration of assets, indeed, arising from illegal activities is exclusively feasible for assets that have been officially seized. Assets that have been seized by a court ruling with enduring legal authority have satisfied the requirements to be classified as state property, thereby warranting adherence to the state property management system. Significantly, the Asset Recovery Agency has adopted traditional administrative security protocols and has formed a partnership with CoFTRA.

Nevertheless, the shift of oversight from the Ministry of Trade, which holds responsibility for CoFTRA, to the Financial Services Authority (OJK), has sparked apprehensions regarding the prospective collaboration agreements including crypto asset ownership.

3.4. Remification of Being Full Member of FATF

Indonesia's full membership in FATF in October 2023 requires the country to strengthen its asset recovery and anti-money-laundering framework, including regulations addressing crypto-assets. FATF standards mandate clear legal authority for investigating, freezing, seizing, and confiscating virtual assets, as well as regulating service providers and enforcing customer due-diligence, transaction monitoring, and suspicious-activity reporting [26]. Countries must ensure inter-agency coordination and international cooperation, as well as consider restrictions on fully anonymous digital assets. FATF also advises classifying virtual assets as property or similar legal categories to support confiscation, and recommends law-enforcement access to secure crypto-wallets and risk-mitigation mechanisms, such as insurance, to manage volatility and custodial risks. In cases where assets remain in a suspect's private wallet, cross-border cooperation and judicial assistance may be necessary to enforce asset-freezing or transfer orders [27].

Under Indonesian law, the concept of confiscation differs between criminal procedures and tax procedures. Criminal confiscation under the Criminal Procedure Code involves seizing tangible or intangible property as evidence in investigation and prosecution, while prosecutorial regulations broaden seizure authority to include asset recovery [28]. The Constitutional Court decision No. 21/PUU-XII/2014 expanded pre-trial oversight to include seizure actions, reinforcing legal protections in asset confiscation. In contrast, tax seizure is an administrative measure by a Tax Bailiff to secure taxpayer assets as collateral for unpaid tax liabilities and can occur before a criminal case is established. Tax confiscation may arise from tax collection warrants or tax-crime investigations, showing that while criminal confiscation focuses on evidence and crime proceeds, tax-based seizure aims to settle outstanding tax obligations and support state revenue.

3.5. Specialized Law Enforcement Expertise

In light of the aforementioned information, it is imperative for law enforcement personnel worldwide to possess the capability to identify criminal activities that employ bitcoin as a means of criminal activity, prior to ensuring the security of the crypto-assets. Therefore, law enforcement agents must possess specialized knowledge and awareness of the detection process and redirect their attention towards seizing control of crypto-assets. Accessing and managing crypto-assets necessitates knowledge of the relevant address, private key, and/or public key [29]. Upon acquiring these items, law enforcement officials are afforded the ability to seize control of the crypto-assets from the individual either suspected or accused. In cases of conventional money laundering, law enforcement frequently confiscates cash and other valuable assets that are discovered or linked to illicit financial operations. Nevertheless, the compatibility of this approach with crypto-assets is dubious, considering the inherent challenges in precisely designating an object as either property or money [30]. Although confiscation may still be conducted without a court-ordered application, the court has approved an additional application that permits the police to convert confiscated Bitcoin into fiat currency. Consequently, the concern arises on the potential for the confiscated Bitcoin to lose value as a result of its inherent volatility.

Although Bitcoin can be securely held in dedicated digital wallets on certain devices, the process of transferring Bitcoin between wallets sometimes necessitates the participation of third parties and middlemen [31, 32]. For instance, in the event that law enforcement were to endeavor to confiscate Bitcoin by transferring it from one private address to another, this would necessitate foreign servers to analyze data while verifying the transaction. These circumstances may give rise to territorial jurisdictional issues in cyberspace, therefore restricting the capacity of law enforcement to investigate and confiscate Bitcoin that is implicated in illegal operations.

To address these challenges, this paper expands on the role of blockchain forensics and transaction tracing technologies that enable authorities to identify, track, and freeze digital assets [33]. Blockchain forensics tools, such as Chainalysis or CipherTrace, employ heuristic clustering and transaction pattern analysis to trace the flow of funds across wallets and exchanges, thereby revealing ownership patterns and potential links to taxable assets. In Indonesia, collaboration between the Financial Transaction Reports and Analysis Center (PPATK) and the Asset Recovery Agency (BPA) has begun integrating these technologies into investigations of crypto-related tax evasion cases. Similar initiatives in the United States and the European Union demonstrate that blockchain-based tracing not only strengthens confiscation enforcement but also supports the verification

of lawful asset recovery. Including such technical mechanisms bridges the gap between theoretical legal analysis and practical implementation in crypto-asset confiscation

Drawing from the author's expertise as a tax auditor and in line with the content of the Asset Recovery Handbook, there are numerous key items that confiscating officers must seize to aid investigations in effective asset recovery:

- Financial records
  The paramount aspect is a comprehensive Balance Sheet and Financial Statements, encompassing tax reporting papers, corporate compliance, corroborating records, savings books, bank statements, and agreements pertaining to financial operations.

- Computing systems, electronic data storage devices, and various other electronic gadgets
  This category encompasses computers, tablet computers, cell phones, answering machines, CD-ROMs, external drives, fax machines (if still existing), and printers. Confiscations of computers or comparable electronic devices must pertain to the physical hardware, not replicas of the data stored on hard drives.

  Taking into consideration the recommendation to refrain from powering on an inactive device, and conversely powering off a functional device, is crucial, as both acts can initiate modifications and expose data to potential loss. An advisable approach is to include a computer forensics specialist into the team to mitigate such hazards. Whenever feasible, data that is kept in external "clouds" should be promptly retrieved from the specifically searched site.

- Indicators or other clues to determine the counterparty
  The things encompass photographs, films, address books, business cards, calendars, and even a dedicated garbage can for the workstation.

- Outcomes or tools of unlawful activities
  The aforementioned things encompass currency, precious metals, jewelry, financial instruments like stocks and bonds, as well as other values such as artwork and collector commodities. Based on the information provided in this article, it is necessary to download and transfer crypto assets into a "wallet" that can be securely and effectively managed by law enforcement personnel.

- Destroyed paperwork or printed materials
  Reconstruction of shredded records should be undertaken, if feasible.

The authors argue that given the current media developments, it is imperative for law enforcement to have the ability to use social media accounts as supplementary methods for acquiring crucial information. The paper would benefit from a more robust discussion of the broader economic and social consequences of implementing crypto-asset confiscation laws [34]. For instance, how might such policies influence Indonesia's reputation as a tech-forward nation, its ability to attract foreign investment, or its role in regional fintech development? Conversely, what are the risks of not implementing such reforms? Exploring these angles would provide a compelling argument for legal modernization and contribute to policy discourse.

The paper addresses a timely issue but could underscore its originality more clearly by explicitly identifying the legal voids within Indonesia's current regulatory environment. Exploring how Indonesian law treats (or fails to treat) digital assets compared to tangible ones would add value. Jurisdictional challenges, particularly in a decentralized digital economy, are critical in this regard and deserve focused attention to illustrate the urgent need for legislative reform [35]. The discussion on using crypto-asset confiscation for tax enforcement would benefit from expansion. For instance, how such measures might influence market perception, regulatory certainty, and investor confidence in Indonesia could be examined. Balancing tax enforcement with financial innovation is a nuanced issue that should be acknowledged to offer a more holistic view.

3.6. The EU Crypto Asset Recovery and Confiscation Mechanism as Law Reference

Indonesia currently lacks a comprehensive internet or digital legal framework capable of addressing legal issues in the online environment, making the European Union's legal developments highly relevant as a reference due to shared civil law foundations. On April 24, 2024, the European Union issued Directive (EU) 2024/1260, which strengthens mechanisms for tracing, freezing, seizing, and managing criminal assets, including crypto-assets [36]. The directive enhances the authority of Asset Recovery Offices (AROs), mandates

access to national databases, introduces Asset Management Offices (AMOs), and promotes the implementation of a national asset recovery strategy. It underscores the need for swift identification, immobilization, and confiscation of illicit assets to preserve value for the state or compensate victims, ensuring a coordinated and transparent asset recovery system [37].

The directive also expands minimum regulatory standards to cover all stages of asset recovery, building on the earlier Directive 2014/42/EU, which focused primarily on freezing and seizure. Although confiscating crypto-assets presents technical and procedural challenges, the transparency of blockchain technology creates significant opportunities for tracing and recovering illicit digital assets [38]. However, effective implementation requires specialized expertise, funding, appropriate regulation, and sustained political commitment. Thus, the principles set out in Directive (EU) 2024/1260 provide a valuable reference for Indonesia in developing its legal framework for crypto-asset confiscation in tax enforcement, addressing current regulatory gaps and strengthening asset recovery measures in the digital era [39].

Significant sections in Directive (EU) 2024/1260 that should be consulted in the Indonesian legislative framework regarding the confiscation of crypto-assets provisions for tax purposes, are:

3.6.1. Definition of property

- A comprehensive definition of property should encompass all types of property, including crypto assets.
- To efficiently confiscate property that can be altered and relocated to hide its source, and to promote consistency and precision in the definitions of property by Member States, it is necessary to provide a comprehensive definition of property that can be frozen and confiscated. This definition should encompass legal documents or instruments, including those in electronic or digital format, that provide evidence of ownership or interest in property that can be frozen and confiscated. This includes financial instruments, trusts, or documents that may lead to claims from creditors and are typically found in the possession of the individual affected by the confiscation process.
- The definition should encompass the income or other advantages obtained from the profits of criminal activities, or from the property into which or with which these profits have been converted, changed, or mixed. This comprehensive definition encompasses both the immediate gains from illegal activities and all indirect gains, which include the later reinvestment or conversion of the direct gains. Hence, the proceeds should encompass all assets, including those that have undergone transformation or conversion, either entirely or partially, into other assets, as well as assets that have been combined with property acquired from legal sources, subject to the estimated worth of the combined proceeds.
- The “affected person” means:
  - An individual or legal entity that is the subject of a freezing or confiscation order.
  - An individual or legal corporate body that possesses property subject to a freezing or confiscation order;
  - The third person whose rights to the property being frozen or confiscated are directly infringed upon by the legal order.
  - An human or legal corporate body whose property is being temporarily sold.

3.6.2. Asset Recovery Office (ARO)

Despite the existence of an asset recovery agency in Indonesia, the implementing and technical regulations have not yet been published. It is important to highlight that the agency has the power to:

- To obtain comprehensive access to personal and financial data, encompassing details on crypto asset accounts and transactions involving crypto assets.
- Propose the implementation of Non-Conviction-Based Confiscation (NCBC).

3.6.3. Freezing and Confiscating

- Freezing
  Immediate freezing of prohibited assets is necessary to prevent their loss. Furthermore, the ARO has the authority to implement immediate temporary freezing actions until a formal freezing order is granted. Should the frozen products not be confiscated, they must be promptly returned.
- Confiscating The recent developments include:

- Generalised confiscation, enabling the confiscation of all assets belonging to a prisoner if the court is persuaded that the assets were acquired through a criminal act, should be applicable to all types of crimes.
- In addition to the circumstances already addressed by Directive 2014/42/EU, the scope of the NCBC is expanded to encompass situations up to the death, immunity, amnesty, or expiration of the time limit set under national law for the offense, excluding illness or escape of the accused. The scope of the NCBC should be restricted to criminal offences that have the potential to produce significant economic gain, and only when the court is certain that all the features of the offence are present. NCBC is applicable to offences listed in Article 2 that carry a minimum penalty of four years of imprisonment.
- Implementing an alternative type of NCBC that is based on unaccounted wealth, in cases where confiscation cannot be authorized under other provisions of this Directive, and if specific criteria are satisfied, such as: the property has been immobilised; the offence has the potential to provide significant economic advantage; and a national court has determined that the immobilised property is a result of crimes committed within the context of a criminal organisation (Article 16). This is applicable to all crimes identified in Article 2 that are subject to a minimum jail sentence of four years.
- All kinds of NCBC must adhere to the principles of respecting the right to defense and the right of affected individuals to be heard in the presence of victims prior to the issuance of a sentence order. The Member States shall also facilitate the process of tracing and identifying assets subsequent to the receipt of a sentence or the completion of NCBC-related proceedings.

3.6.4. Utilization of confiscated property for social purposes and compensation for victims

Prior authorization from the government must be obtained for the use of seized property for public interest or social objectives. Furthermore, it is important to guarantee that the act of surrender, as instructed, does not prejudice the victim's entitlement to receive reparation [40].

3.6.5. Asset Management Office (AMO)

The government should guarantee efficient administration of assets that have been frozen or confiscated, which includes pre-confiscation planning or the disposal of temporarily frozen assets [22]. Prior to the transaction, it is necessary to notify the legal owner of the asset and provide them with a chance to express their views.

Administrating frozen property may incur expenses that are the responsibility of the beneficial owner [41]. Government must establish or designate at least one AMO that is responsible for: directly or indirectly administering frozen or seized property; providing pre-confiscation planning support to competent authorities in charge of managing frozen and seized property; and collaborating with national competent authorities and other jurisdiction if required.

3.6.6. Safeguarding of Impacted Parties

There is a government obligation to notify affected individuals of a freezing or confiscating order or temporary sale order, and to ensure their access to legal remedies, including the right to a defense, access to counsel, an effective legal remedy, and a fair trial [42]. A confiscation order may not be issued if the order is excessive in relation to the offense or charge, or if the order would impose undue hardship on the affected individual.

3.6.7. Strategic Approach and Collaboration

A national asset recovery strategy must be established and periodically revised every five years to ensure continued relevance, supported by adequate resources for Asset Recovery Organizations (AROs) and Asset Management Organizations (AMOs). This framework should include a centralized registry that records frozen, managed, and confiscated assets, enabling real-time access by authorized entities and ensuring transparency and accountability through regular reporting [43]. Although Indonesia established the Asset Recovery Agency (BPA) in 2024 to trace, seize, and return assets derived from criminal activity, its operational basis remains rooted in criminal procedural law. This creates inherent challenges in applying asset recovery mechanisms to administrative matters, particularly tax enforcement, where crypto-asset confiscation lacks a dedicated procedural basis [44].

The primary issue is the absence of a legal and procedural mechanism specifically designed for seizing digital assets in tax-related cases. The current regulatory framework excludes intangible assets from tax seizure procedures, resulting in legal uncertainty, procedural gaps, and potential enforcement failures [45]. Moreover, the objectives of criminal confiscation and tax-driven asset seizure differ significantly, further complicating enforcement efforts. Prompt identification, monitoring, and immobilization of illicit assets especially crypto-assets is essential to prevent loss and ensure successful recovery. As digital assets can easily be transferred across borders or concealed through decentralized technologies, traditional enforcement approaches are insufficient, requiring a shift in regulatory and operational perspectives.

Indonesia's membership in the Financial Action Task Force (FATF) obligates it to prioritize asset recovery, strengthen cross-border cooperation, and routinely assess the effectiveness of its confiscation system [46]. To address current gaps, the government must establish specific procedural rules governing the seizure, preservation, and management of digital assets for tax purposes, along with constructing institutional capacity to trace, value, and safeguard such assets. The European Union's Directive on asset recovery serves as a suitable benchmark, offering legal and procedural guidance applicable to emerging digital-asset challenges [47]. Adopting similar standards would enhance Indonesia's asset recovery regime, foster legal certainty, and strengthen tax compliance and financial integrity in the digital era.

4. MANAGERIAL IMPLICATIONS

The findings of this study highlight the urgent need for Indonesian tax authorities and policymakers to strengthen institutional capacity in managing crypto-assets within the national tax framework. The integration of asset recovery mechanisms into tax administration requires digital transformation, improved data analytics, and inter-agency cooperation to trace, freeze, and confiscate crypto-based assets effectively. Managers within regulatory bodies such as the Directorate General of Taxes (DGT), OJK, and Bappebti must adopt a risk-based monitoring system supported by blockchain intelligence tools and cross-border information exchange. This strategic adaptation ensures greater transparency, minimizes tax evasion, and aligns with Indonesia's goals of fiscal sustainability and digital economic growth.

Furthermore, managerial implications extend to the development of clear legal guidelines and operational procedures for confiscating and liquidating crypto-assets. Decision-makers should establish standardized valuation models, secure storage mechanisms, and auction systems to manage seized digital assets efficiently while maintaining public accountability. Collaboration with international agencies and adherence to global standards such as the EU Asset Recovery and Confiscation Directive can enhance enforcement effectiveness and build investor confidence. By implementing these measures, tax authorities can transform the challenges of crypto-asset regulation into opportunities for revenue optimization, institutional innovation, and long-term governance reform.

5. CONCLUSION

The lack of a clear mechanism for confiscating crypto assets owned by taxpayers with unpaid tax arrears has resulted in legal uncertainty within Indonesia's taxation and asset recovery systems. This study finds that developing an appropriate and enforceable confiscation framework is essential to ensure both criminal and tax objectives are achieved simultaneously. The analysis shows that while the success of asset confiscation does not automatically guarantee successful asset distribution, having a timely and structured system for confiscating crypto assets is vital for maintaining fiscal justice and strengthening legal enforcement.

The novelty of this research lies in its focus on the intersection of tax enforcement, asset recovery, and digital asset regulation. Unlike previous studies that primarily examined taxation or investment aspects of cryptocurrencies, this paper highlights the integration of crypto-asset confiscation within Indonesia's tax collection system by drawing lessons from the European Union's Directive (EU) 2024/1260. The study also proposes the establishment of an Asset Management Office (AMO) to manage confiscated digital assets, offering a new institutional model that bridges regulatory and operational gaps in digital fiscal governance.

Future research should expand this discussion through empirical and comparative analysis of crypto-asset confiscation practices in other jurisdictions such as Singapore, the Netherlands, and South Korea. Further investigation is also recommended to assess the technological, administrative, and legal readiness of Indonesia's institutions in implementing such frameworks. Integrating blockchain forensics, cross-border cooperation, and digital valuation mechanisms can further enhance transparency and effectiveness. Continued exploration in this

field will not only strengthen Indonesia's fiscal integrity but also contribute to the development of sustainable digital governance aligned with global standards.

6. DECLARATIONS

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6.2. Author Contributions

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6.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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6.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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