



The Urgency of Appropriate Legal Regulations on Financial and Tax Aspects in Cryptocurrency Transactions in Indonesia

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Abstract. The increasing popularity of cryptocurrencies has raised concerns regarding their financial and tax implications in Indonesia. This research aims to explore the urgency of implementing appropriate legal regulations to address the financial and tax aspects of cryptocurrency transactions in the country. By analyzing existing laws, regulations, and scholarly literature, this study aims to provide valuable insights into the current state of cryptocurrency transactions in Indonesia and the potential consequences of inadequate legal frameworks. The research begins by examining the financial aspect of cryptocurrency transactions, focusing on issues such as transaction security, investor protection, and financial stability. It investigates the potential risks associated with unregulated cryptocurrency transactions and the need for legal safeguards to mitigate these risks. Furthermore, the study delves into the tax aspect of cryptocurrency transactions, analyzing the challenges of taxing cryptocurrencies and the implications for government revenue. Through a comprehensive analysis of relevant laws and regulations, this research emphasizes the significance of establishing an appropriate legal framework for cryptocurrency transactions. The findings of this study contribute to the ongoing discussions on the regulation of cryptocurrencies in Indonesia and provide recommendations for policymakers, regulators, and stakeholders in formulating effective legal measures.

Keywords: Cryptocurrency; Financial Aspect; Legal Regulation; Tax Aspect.

1 Introduction

The rapid development in the cryptocurrency industry has led to significant popularity in Indonesia and worldwide. Cryptocurrencies such as Bitcoin and Ethereum offer advantages such as ease of use, transparency, and high investment potential. However, behind these benefits, there are significant potential risks associated with unregulated cryptocurrency transactions.

Cryptocurrencies are a form of digital assets that are not regulated by government authorities or traditional financial institutions. Due to their decentralized and anonymous nature, cryptocurrency transactions are vulnerable to various risks that can harm users and investors.

One of the major risks associated with unregulated cryptocurrency transactions is transaction security. The absence of adequate regulations makes the use of cryptocurrencies a target for hacking attacks and other criminal activities. This can result in significant financial losses for individuals and entities involved in cryptocurrency transactions.

Additionally, the lack of investor protection is a serious issue in unregulated cryptocurrency transactions. The absence of clear legal frameworks and effective oversight mechanisms can increase the risks of fraud, market manipulation, and other illegal activities. Investors may also face difficulties in obtaining compensation or recovering their funds in case of violations or failures in cryptocurrency transactions.

Furthermore, unregulated cryptocurrency transactions can have negative impacts on financial stability. High price volatility and widespread speculation can create market instability that can potentially harm the overall economy. Moreover, the lack of supervision and regulation can trigger price bubbles or sudden crashes, potentially harming market participants and the general public.

Considering these potential risks, the need for strong legal protection in cryptocurrency transactions becomes increasingly urgent. Clear and stringent regulations can make cryptocurrency users and investors feel more secure and protected. Appropriate legal protection can reduce the risks of fraud, enhance transaction security, and promote sustainable growth in the cryptocurrency ecosystem.

As a result, the goal of this study is to explore the potential risks connected to unregulated cryptocurrency transactions and evaluate the requirement for strong legal protection to reduce these risks. This study will examine current legal frameworks, academic literature, and best practices from other nations in order to offer policymakers, regulators, and stakeholders useful information and suggestions for creating an appropriate legal framework for cryptocurrency transactions in Indonesia.

2 Methode

This research utilizes the normative juridical research method, which is an approach used to analyze existing legal regulations, including laws, government regulations, court decisions, and other legal literature. This method aims to understand and interpret the content of legal norms and examine the consistency and suitability between the applicable legal norms and the issues under investigation. The normative juridical research method can assist in comprehending the existing legal framework, identifying weaknesses and deficiencies in the applicable norms, and providing recommendations for legal improvements or developments.

3 Discussion

3.1 Legal Protection for Cryptocurrency Investors in Indonesia

The development of technology and information plays a crucial role in the progress of a country as it impacts various aspects of human life. In the era of globalization,

supported by technological advancements, economic activities have also undergone significant development within society. (Sastrawidjaja, 2002) One technological advancement in the field of economics is the emergence of new methods in conducting business transactions. As we know, in conventional business transactions, the involved parties need to face each other directly to make payments and receive approvals using cash or bank transfers. However, with the development of technology, this process can now be done online through the internet. The advantages gained from conducting business transactions online are that buyers and sellers do not need to meet in person and can carry out transactions anytime and anywhere, solely using the internet. (Ilyasa, 2019)

Without the use of intermediaries, credit cards, or bank accounts, cryptocurrencies themselves provide a more streamlined transaction method. Cryptocurrencies like Bitcoin can be distributed directly between users without the need for a middleman, in contrast to digital currencies linked to banks and using payment systems like PayPal. The government has taken notice of cryptocurrencies as a digital good in Indonesia, especially in light of their expanding use there as an investment tool.

Cryptographic proof is a requirement for transaction confirmation in bitcoin, according to Jan Lansky. Limited anonymity, independence from centralized agencies, and protection against double spending are three distinctive characteristics that cryptocurrency combines. This combination of characteristics is unique to this currency group and excludes real fiat currencies. These three features were made available concurrently after a 25-year wait. Nakamoto created Bitcoin, the first cryptocurrency to appear on January 3, 2009, to combine these traits. (Lasky, 2018). The provision of limited anonymity makes it difficult to identify users who engage in cryptocurrency transactions. Cryptocurrency, however, assures that users' transactions are transparent since people can reveal their identities either knowingly or unconsciously, or external actors might do so by using external data to identify users.

Independence from central authorities means that cryptocurrencies are decentralized and free from the control of the central organizations that set the system's consensus rules. Only with a majority consensus (usually 75–95%) of bitcoin operators may the consensus rules be changed. However, these modifications are meant to make the coin rare in the hopes that this will raise its value. Changes come in two flavors: Hard Fork and Soft Fork. Consensus criteria are tightened by the addition of features in soft fork. The set of valid transactions is constrained by a soft fork, thus some transactions will be rejected under the new consensus rules while others will be accepted under the old rules. New features that were previously viewed as invalid are introduced by Hard Fork. This indicates that transactions that would have been rejected by the previous iteration of the consensus rules will be accepted by the new iteration. Since cryptocurrencies are decentralized, they cannot be banned or regulated through brute force; instead, they can only be destroyed when users lose faith in them (such as through hacking or cyberattacks). However, each cryptocurrency user can freely choose the type of transaction regulation they want to implement.

A cryptocurrency unit cannot be used to pay two separate receivers at the same time thanks to protection against double spending. Attempts to send a cryptocurrency unit to a different recipient are denied as unauthorized transactions once it has been

sent to one recipient. Because physical fiat money is only transferred to the first recipient, this problem does not apply to it. Due to the nature of assuring independence from central authority, the double spending problem for cryptocurrencies is challenging to overcome. A decentralized digital money is cryptocurrency. Peer-to-peer architecture allows for decentralization. For the decentralized confirmation of transactions, cryptography is used. When users of the blockchain system utilize their computing capacity to solve difficult mathematical puzzles to confirm transactions among themselves, this process is known as mining and results in the distribution of new units of bitcoin.

Legal protection encompasses the implications or outcomes within the legal framework that result from the establishment of a legal relationship between legal entities. The legal relationship, as described by Peter Mahmud Marzuki, primarily denotes the interaction between legal subjects, whether they are individuals or individuals with legal entities, and this interaction is governed by the state. (Marzuki, 2009) Legal protection, according to Muchsin, can be divided into two categories, namely: (Muchsin, 2003)

- 1) A step made to stop violations before they happen is called preventative legal protection. The public is given protection by the government to do this. This protection is governed by legal rules that forbid violations.
- 2) After a violation has occurred, repressive legal protection takes place, and penalties like fines or imprisonment may be applied as a kind of protection.

The objectives of legal protection are reflected in the legislation in Indonesia, which is created with the intention of providing benefits, certainty, and, most importantly, justice. Investors, as participants in investment activities, and consumers in commodity futures trading, also receive legal protection. Legal protection for consumers has similar objectives to the concept of legal protection as stipulated in **Article 3 of Law Number 8 of 1999 concerning Consumer Protection, including:**

- 1) Increasing consumer awareness, capacity, and self-reliance to protect themselves.
- 2) Upholding the dignity and reputation of consumers by preventing the negative use of goods and services.
- 3) Empowering consumers in choosing, determining, and asserting their rights.
- 4) Creating a consumer protection system that provides legal certainty, openness of information, and access to information.
- 5) Raising awareness among business operators about the importance of consumer protection, encouraging honest and responsible business practices.
- 6) Improving the quality of goods, services, health, comfort, safety, and consumer protection in order to ensure the sustainability of production activities.

In providing legal protection, it is necessary to have a form of legal protection in Indonesia, either through legislation or in other forms, concerning everything related to investments in digital cryptocurrency. This is intended to ensure the security of investors' assets and enable them to engage in cryptocurrency transactions comfortably and legally.

BAPPEBTI is a government institution under the auspices of the Ministry of Trade of the Republic of Indonesia. This institution was established based on Law No. 10 of

2011, which amends Law No. 32 of 1997 concerning Commodity Futures Trading. According to Article 1 paragraph (3) of the mentioned law, BAPPEBTI is responsible for the development, supervision, and regulation of futures trading. The purpose of establishing this institution, as stated in Article 5, is to create transparent, efficient, effective, and orderly futures trading to protect the interests of all parties involved.

In the context of Cryptocurrency in Indonesia, BAPPEBTI acts as a government body that oversees the trading of crypto assets by monitoring crypto asset trading companies operating in Indonesia. These companies are required to register with BAPPEBTI and meet certain requirements. These provisions are regulated in BAPPEBTI Regulation No. 5 of 2019 concerning Technical Provisions for the Implementation of Crypto Asset Physical Market on futures exchanges.

The requirements include the following:

- 1) Crypto asset trading companies must obtain permission from the Head of BAPPEBTI (Article 7 paragraph (2)).
- 2) In addition to the permission from the Head of BAPPEBTI, crypto asset companies must also meet other requirements, such as having a minimum paid-up capital of one trillion Indonesian Rupiah, having an organizational structure that includes divisions for information technology, audit, and customer complaint handling for crypto assets, and having Standard Operating Procedures (SOP) that govern the execution of trading transactions and the resolution of customer disputes regarding crypto assets (Article 8 paragraph (1)).

If these companies fail to meet the aforementioned requirements, their crypto asset operation permits can be revoked, and they will be considered illegal. The supervision conducted by the Satgas Waspada Investasi Satgas Waspada Investasi is a government entity responsible for overseeing the collection of public funds and investment management in Indonesia. Satgas Waspada Investasi was last established through Decision of the OJK Commissioner No. 01/KDK.01/2018 on January 1, 2018, regarding the Formation of the Task Force for Handling Alleged Unlawful Actions in the Field of Public Fund Collection and Investment Management. This organization consists of 12 (twelve) ministries or state agencies led by the Financial Services Authority (OJK). One example of supervision by Satgas Waspada Investasi Force regarding cryptocurrencies in Indonesia is by taking action against illegal crypto assets circulating in the country. According to CNBCIndonesia, Satgas Waspada Investasi has closed down nine illegal investments, one of which is the Vidy Coin and Vidyx crypto assets conducted by PT. Rechain Indonesia due to the lack of proper authorization to engage in crypto asset trading in Indonesia.

3.2 Legal Protection from Law Number 11 of 2008 on Electronic Information and Transactions

For activities in the area of electronic transactions (Cyber Space), Indonesia's Electronic Information and Transactions Law (UU ITE) is required. This is based on three primary factors: the requirement for legal certainty for those engaging in Cyber Space

activities, the attempt to foresee the effects of the use of Information Technology, and the existence of international factors like free trade and open markets.

The UU ITE consists of 13 chapters and 54 articles, regulating activities in the Indonesian Cyber Space. Budhijanto explains that several important aspects are covered by the UU ITE, including: (Budhijanto, 2016)

- 1) Jurisdictional Aspect: Electronic transactions possess cross-territorial characteristics that cannot be addressed using conventional legal approaches, thus requiring an expansion of jurisdictional principles (extraterritorial jurisdiction).
- 2) Electronic Evidence (e-evidence) Aspect: Electronic evidence is a form of evidence that holds legal validity in court.
- 3) Aspect of information and consumer protection: Business owners are required to give customers comprehensive and accurate information on the terms of contracts and the offered goods and services.
- 4) Management of Electronic Certificates, Information, and Electronic Transactions Aspect: The provider or operator of an electronic system is responsible for ensuring the reliable, secure, and proper operation of the electronic system.
- 5) Electronic Transaction Aspect: Electronic transactions are documented in electronic contracts to bind the parties involved, accompanied by the authority to choose the applicable law for the electronic transaction.
- 6) Privacy Protection Aspect: Unless otherwise stipulated by rules, any use of information via electronic media organized by electronic service providers pertaining to the personal data of electronic transaction customers must be done with their consent.

Regarding electronic evidence, it is necessary in the event of disputes between customers and electronic service providers. Based on Article 1 Number 4, Article 5 Paragraph (3), Article 6, and Article 7 of the ITE Law, in order for electronic evidence to have valid probative value, Budhijanto (2016) explained the following:

- 1) It takes the form of electronically generated or stored information that may be viewed, played back, or heard via a computer or other electronic device. This information may include pictures, sounds, or written words that can be comprehended by people who are able to do so.
- 2) It is deemed valid if it originates from/uses an electronic system regulated by the Law.
- 3) It is regarded as valid if it can be accounted for, accessible, shown, preserved intact, and used to explain a certain situation.

In the context of various types of cybercrimes, the Electronic Information and Transactions Law (UU ITE) imposes the following sanctions:

- 1) Hacking, as regulated in Article 30 jo. Article 46 of the UU ITE, refers to the intentional unlawful act of accessing another person's computer or electronic system by breaching, bypassing, or breaking the security system with the intention of obtaining electronic information or electronic documents. Perpetrators of this act can be punished with imprisonment for 6-8 years or fined between 600 million to 800 million Indonesian Rupiah.
- 2) Personal data dissemination, as stipulated in Article 32 jo. Article 48 of the UU ITE, pertains to the intentional or unlawful act of transferring or transmitting

electronic information and/or electronic documents of a confidential nature to another person's electronic system who is not authorized or accessible to the public. Perpetrators of this act can be sentenced to a maximum imprisonment period of 8 to 10 years and fined between 2 to 5 billion Indonesian Rupiah.

3.3 Taxation of Cryptocurrency Investors: Tax Law Concepts

As of the writing of this study, there are no specific regulations governing tax rates for cryptocurrency asset investors. Therefore, in taxation, if a particular income is not specifically regulated, general rules are applied to calculate the tax. This is done to address the legal gap that exists. According to Satory, the term "legal gap" can be understood in two ways. First, it refers to the inability to enforce a law due to a legal vacuum caused by the absence of regulations on a particular matter. Second, it pertains to abstract provisions of the law that need to be further elaborated through lower-level legislation that is more concrete, specific, and technical. (Agus Satory., 2020) Referring to Law Number 36 of 2008 on the Fourth Amendment to Law Number 7 of 1983 Concerning Income Tax (referred to as the Income Tax Law), the tax rate for individual taxpayers related to capital gains obtained is 5-30%. The tax rate depends on the amount of income from capital gains earned by investors in cryptocurrency trading in the physical market of crypto assets. This concept is known as progressive taxation, where the tax rate is based on the increase in the taxpayer's income.

According to Article 17 paragraph (1) of the Income Tax Law, the applicable tax rates for individual taxpayers are as follows: (1) A tax rate of 5% for taxable income up to 50 million; (2) A tax rate of 15% for taxable income above 50 million up to 250 million; (3) A tax rate of 25% for taxable income above 250 million up to 500 million; and (4) A tax rate of 30% for taxable income above 500 million.

In the Income Tax Law, Article 2 regulates the taxpayers, including corporations and individuals. Individuals refer to those who intend to stay in Indonesia for more than 183 days within a 12-month period (Article 2 paragraph (3)). Cryptocurrency is included in the income tax object. Article 4 of the Income Tax Law explains that the income tax object includes any additional economic capacity received from within or outside Indonesia that can be used to increase the taxpayer's wealth. Furthermore, the article states that income not yet subject to tax is also included in the tax object.

Cryptocurrency is subject to final income tax, similar to stocks, because crypto is classified as a commodity futures asset according to Regulation 5 of 2019 on Technical Provisions for the Operation of Physical Crypto Asset Markets (referred to as the Crypto Asset Market Regulation). According to Article 1 number (2) of the Crypto Asset Market Regulation, futures exchanges are entities that regulate commodity futures contracts or other derivative contracts. Futures contracts and derivative contracts are owned by crypto assets due to the existence of trading types in crypto, such as spot and futures, similar to stock trading on futures exchanges. Furthermore, Article 4 paragraph (2) letter c of the Income Tax Law states that taxable income is subject to final taxation.

Final Income Tax or PPh Final is a tax that is no longer included in the calculation of annual Income Tax (PPh) payable. This means that final income tax is not credited

in the PPh payable. Therefore, in PPh Final, the income tax will not be recalculated in the Annual Tax Return (SPT) with other non-final income to be subject to progressive rates as stipulated in Article 17 paragraph (1) of the Income Tax Law. As mentioned earlier, according to the Income Tax Law, cryptocurrency investors can be subject to progressive tax rates ranging from 5-30% depending on the income from capital gains obtained. Of course, these tax rates can be a burden for cryptocurrency investors and can potentially dampen the crypto asset business ecosystem. The tax rates should ideally be imposed as low as possible to avoid tax evasion due to excessively high taxes. According to Barry Bracewell and Milnes, if the tax burden is too heavy, taxpayers have a stronger motivation to avoid tax payments, even though they could pay at a lower tax rate. (Suandi, 2006) Therefore, if the government intends to regulate the determination of tax rates related to crypto assets, ideally such determination should aim to establish the lowest possible tax rates.

The planning of taxation treatment for crypto asset trading essentially shares the same objective, which is to increase the country's wealth while also considering how to reduce the tax burden on crypto asset investors. When determining the final income tax rate for crypto assets, it is necessary to compare it with stocks, as stocks are also considered as futures investment commodities. The final income tax on stock sales is levied at a rate of 0.1% of the gross transaction value, in accordance with the Minister of Finance Decree No. 282/KMK.04/1997 (KMK-282/1997) regarding the Implementation of Income Tax Collection on Income from Stock Sales in the Stock Exchange. Article 2 of KMK-282/1997 states that individuals or entities receiving income from stock sales in the stock exchange will be subject to Final Income Tax at a rate of 0.1% of the gross transaction value of stock sales. The tax collection is carried out by the stock exchange organizer through securities traders at the time of stock sales settlement. Therefore, crypto assets can also be subject to a tariff of 0.1% of the gross transaction value of crypto asset sales, with the collection conducted by the crypto asset exchange organizer through crypto asset traders at the time of crypto asset sales settlement.

3.4 The Urgency of Implementing Appropriate Legal Regulations on Financial and Tax Aspects in Crypto Currency Transactions in Indonesia.

Finding the right policy approach for crypto assets is not easy, given the rapid development of innovative blockchain technology. This raises questions about the implementation of regulatory frameworks on decentralized public blockchain networks, which may not yet be covered by current regulations or fall outside the scope of law enforcement. The challenges become even more complex as these applications also cross national borders and maintain anonymity. (OECD, 2022) Blockchain technology can, however, strengthen trust and governance through code and automation, increase transparency and accountability, and empower communities by eliminating intermediaries through decentralization and consensus based on distributed systems. These benefits can all be achieved if planned for and implemented with the right regulations.

Therefore, the proposed policy course should be designed to safeguard investors while reducing the possibility of regulatory arbitrage. However, these rules must also offer enough adaptability to take into account changing circumstances and potential hazards. The Government-Private Sector Collaboration Approach and the Restrictive Approach are the two current policy methods used by the Indonesian government. Through the Government-Private Sector Collaboration Approach, the trading of crypto assets has been legalized, and there are plans to establish the Indonesian Crypto Futures Exchange. The Restrictive Approach, meanwhile, forbids Indonesia from using cryptocurrency assets as a form of trade.

According to Minister of Trade Regulation No. 99/2018 on the General Policy of Crypto Asset Futures Trading, the Ministry of Trade of the Republic of Indonesia regulates cryptocurrencies as commodities that can be traded. The Commodity Futures Trading Regulatory Agency (Bappebti/CoFTRA) Regulation No. 5/2019 on the Technical Provisions for the Implementation of Physical Market of Crypto Assets on Futures Exchanges contains further regulations. Three revisions to this rule have been made, the most recent of which is Bappebti rule No. 3/2020. Additionally, Bappebti Regulation No. 8/2021 established the Guidelines for the Implementation of Trading of Physical Market of Crypto Assets in Futures Exchanges.

The recognition of cryptocurrencies as tradable commodities is based on their significant investment potential in the economic context. Prohibiting cryptocurrency trading has the potential to result in a capital outflow as consumers seek markets that allow legal crypto transactions. The speculative nature of cryptocurrencies makes them a widely sought-after investment choice that is rapidly growing in society. Additionally, cryptocurrencies possess several advantages, such as a value unaffected by government policies, reduced financial transaction costs through intermediary elimination, elimination of seizure risks by governments, and the absence of a specific bank requirement as the organizer or manager of cryptocurrency assets. (Setiawan, 2020) Therefore, legal certainty is needed to protect the public and business actors, as the legal protection for parties who suffer losses in cryptocurrency transactions is not specifically regulated in Indonesian legislation. (Krisnawangsa, 2021)

There are plans to create a Crypto Futures Exchange to make trading in crypto assets easier. The trading of cryptocurrencies will be carried out through a Crypto Asset Physical Market using electronic facilities owned by Crypto Physical Traders for buying or selling cryptocurrencies, under the supervision of the Futures Exchange, in accordance with Regulation Bappebti Number 8 of 2021 on Guidelines for the Operation of Crypto Asset Physical Market Trading in the Futures Exchange.

The Crypto Futures Exchange will serve as a collaborative ecosystem between the government and the private sector. Its objectives are to create legal certainty, protect crypto asset customers, and facilitate innovation, growth, and development of physical trading activities involving crypto assets.

However, there are several notes regarding the current regulations that have been implemented:

- 1) The current regulations restrict crypto assets to be treated only as investment and trading commodities, despite the fact that crypto assets have diverse functions.

- 2) Crypto Physical Traders have various roles and functions, including facilitating crypto asset exchanges, storage of crypto assets, and providing services resembling financial institutions. Relevant regulations need to be implemented for these functions.
- 3) The existing regulations only govern domestic crypto traders (exchanges) operating in Indonesia, while foreign crypto traders offering services in Indonesia are not yet regulated. Regulation in this regard is challenging due to the cross-border nature of crypto trading, which can easily be done through internet-connected devices. However, this legislation is required to safeguard consumers and level the playing field for cryptocurrency dealers.
- 4) Institutional investors are not covered by the present legislation, which exclusively govern the trading of crypto assets for retail/individual investors. The entry of large/institutional investors will increase the trading volume of crypto assets and foster motivation to create new crypto assets. This matter requires in-depth study.
- 5) There are 383 crypto assets permitted for trading in Indonesia according to Bappebti Regulation Number 11 of 2022 on the Determination of the List of Crypto Assets Traded in the Crypto Asset Physical Market.. However, further study is needed regarding the implementation, determination mechanism, and dissemination to the public, as the number of crypto assets is vast and their development is highly dynamic. The disclosure of the names of these crypto assets should be accompanied by symbols/abbreviations, links/website addresses or whitepapers, and displayed online/through a website for easy updating by Bappebti and accessibility by the public. In its implementation, Bappebti must closely monitor if any trader offers crypto assets not listed in the established list.

The current regulatory approach applied in Indonesia has not yielded the expected results, as it has led to regulatory arbitrage and failed to optimize the economic potential of crypto assets. Therefore, a more appropriate regulatory approach for crypto assets would be to adopt a comprehensive regulatory framework, as it provides investment and business certainty, fosters innovation, and prevents regulatory arbitrage.

To implement this approach, the following recommendations are proposed:

- 1) Based on the fundamental features of blockchain technology, the Ministry of Trade must, through the Trade Policy Agency, thoroughly assess the laws governing the trade of crypto assets. The steps listed below can be used to do this:
 - a) Collaborating with relevant agencies/stakeholders to generate a comprehensive assessment. Cross-institutional and cross-border studies will result in trading regulations and the utilization of crypto assets that support industry growth while maintaining financial stability. This will establish legal certainty, providing positive impacts such as security protection for investors and businesses, and generating tax revenue for the government.
 - b) Using the evaluation findings to create thorough regulations for crypto assets and taking them into account when creating a Crypto Futures Exchange or Digital Future Exchange (DFX), both of which are currently under construction. This will raise the standard of Indonesia's crypto asset trading and build a strong, creative, and fruitful crypto ecosystem.

- 2) To build a taxonomy for crypto assets, the Ministry of Trade should collaborate with Bank Indonesia (BI), the Financial Services Authority (OJK), and other pertinent agencies/stakeholders through the Commodity Futures Trading Regulatory Agency (Bappebti):
 - a) Continuously monitoring the development of blockchain technology and crypto assets to maintain an up-to-date crypto asset taxonomy.
 - b) Using the jointly agreed-upon crypto asset taxonomy as the basis for developing harmonized and integrated regulations.
 - c) Coordinating with international institutions and organizations to establish a globally agreed-upon crypto asset taxonomy.

4 Conclusion

- a. Investors in cryptocurrencies are given a variety of legal protections in Indonesia, including:
 - 1) Security of crypto assets provided by Crypto Asset Trading Companies, which includes personal data protection, investor account security, and dispute resolution through negotiation.
 - 2) Supervision conducted by BAPPEBTI as the futures commodity supervisory agency in Indonesia towards crypto asset market traders operating in Indonesia.
 - 3) Supervision of Indonesian assets.
- b. Legal certainty is crucial to protect the public and business actors involved in cryptocurrency transactions, as the existing Indonesian regulations do not specifically govern the legal protection for parties who suffer losses in such transactions.

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