

The Application of Cryptocurrency in The Islamic Banking and Finance in the Era of Digitalization

Abdullah Raden Aji Haqqi, S.H., M.H.

Doctoral Study, Universitas Islam As-Syafi'iyah, Indonesia radendul@gmail.com

Abstract

Cryptocurrency is a digital payment system that doesn't rely on banks to verify transactions. It's a peer-to-peer system that can enable anyone anywhere to send and receive payments. Instead of being physical money carried around and exchanged in the real world, cryptocurrency payments exist purely as digital entries to an online database describing specific transactions. When you transfer cryptocurrency funds, the transactions are recorded in a public ledger. Cryptocurrency is stored in digital wallets. Islamic banking, also referred to as Islamic finance or Shariah-compliant finance, refers to financial activities that adhere to Shariah (Islamic law). Two fundamental principles of Islamic banking are the sharing of profit and loss and the prohibition of the collection and payment of interest by lenders and investors. Meanwhile, in Islamic law, cryptocurrency is not issued by a legal/official financial authority, it has not been accepted by the wider community, if because it contains speculation, dharar, gambling, it is already in the abstract, only after that, because there is no physical form it is possible to have gharar and maysir elements. According to Islamic Law and the Indonesian Ulema Council opinion, both as a medium of exchange for payment and as an investment are both unlawful (haram). The Research will take the comparison between Islamic Law and Conventional Law and how to find proper law to combine between both laws in the daily implementation in the global society.

Keywords: Cryptocurrency, Comparison, Islamic, Society

I. INTRODUCTION

In this era, information technology is growing rapidly and increasingly sophisticated. That way, this is very helpful and makes it easier for the community, such as getting information, conducting electronic transactions, communicating remotely, buying goods or services, etc. Electronic commerce also usually uses digital money that is obtained through changing physical currency to digital. But now, technology experts have also created a Virtual Currency or cryptocurrency. The purpose of Virtual is that its use is done electronically or online. This virtual currency can be used as an



electronic transaction tool. In addition, the owners also use cryptocurrencies to invest and trade. This Virtual Currency is earned through purchases or mining. Cryptocurrency is generally used by the upper class who can afford it because the price of cryptocurrency is relatively high, up to tens of millions of Rupiah¹.

One of the most popular types of cryptocurrency is bitcoin. The value of Bitcoin is quite significant compared to other types of cryptocurrencies. The popularity of bitcoin is one of the pillars of the success of the existence of cryptocurrencies. In the international world, Bitcoin transactions are still debated. The presence of this currency is also opposed by several countries, such as the Central Bank in Iceland, which states that transactions using cryptocurrencies are illegal. The State Bank of Russia warned that transactions with bitcoin as a means of payment could potentially involve money laundering or financing of terrorism. In China, bitcoin circulates freely, but the Chinese government continues to warn companies about paying via Bitcoin².

In Indonesian law, bitcoin and other types of cryptocurrencies have not been regulated by law, giving rise to pros and cons. Bank Indonesia has not officially legalized the use and transactions with cryptocurrencies. Unlike other countries, bitcoin users in Indonesia continue to decline. Bank Indonesia's policy of not legalizing bitcoin is one of the factors in the decline in the number of bitcoin users. Although few and not yet legal, there are still bitcoin users in Indonesia. The development of information about Bitcoin in Indonesia is not difficult to find³.

In general, trading principles are like buying and selling gold or silver that happened during the Prophet's time be using Dinar and dirham as the means of payment. The buying and selling of gold and silver must be done in cash naqd, so that they can be free from usury transactions. In this case, it is a Riba Fadhl⁴. Then Transactions and Investments using cryptocurrency in its application based on Islamic law are still debated. A cryptocurrency is a transaction tool that can be used quickly and safely, but given that cryptocurrency can be gharar because it is uncertain or not physically known.

II. LITERATURE REVIEW

1. The Definition of The cryptocurrency

A cryptocurrency, crypto-currency, or crypto is a digital currency designed to work as a medium of exchange through a computer network that is not reliant on any central authority, such as a government or bank, to uphold or maintain it⁵.

A cryptocurrency is an encrypted data string that denotes a unit of currency. It is monitored and organized by a peer-to-peer network called a blockchain, which also



serves as a secure ledger of transactions, e.g., buying, selling, and transferring. Unlike physical money, cryptocurrencies are decentralized, which means they are not issued by governments or other financial institutions⁶.

Cryptocurrencies are created (and secured) through cryptographic algorithms that are maintained and confirmed in a process called mining, where a network of computers or specialized hardware such as application-specific integrated circuits (ASICs) process and validate the transactions. The process incentivizes the miners who run the network with the cryptocurrency⁷. Bitcoin, Ether, Litecoin, and Monero are popular cryptocurrencies.

Cryptocurrency received its name because it uses encryption to verify transactions. This means advanced coding is involved in storing and transmitting cryptocurrency data between wallets and to public ledgers. The aim of encryption is to provide security and safety.

The first cryptocurrency was Bitcoin, which was founded in 2009 and remains the best known today. Much of the interest in cryptocurrencies is to trade for profit, with speculators at times driving prices skyward.

2. Pros And Cons of Using Cryptocurrencies

The pros and cons of using Bitcoin as a means of payment occur in several countries. The states of Puerto Rico, California, and the United States have provided clear legal status and recognized Bitcoin as a virtual currency that can be used as a medium of exchange. Unlike Australia, Canada, and Singapore, where Bitcoin is not recognized as a legal tender, but still provides room for its development by collecting taxes. Meanwhile, Vietnam and China do not consider the currency a legal currency and even prohibit using Bitcoin as a trading transaction⁸. Through the Russian Federal Tax Agency, the Russian government officially legalized the use of Bitcoin and recognized it as one of the currencies circulating in the country as of November 2016. While the Japanese government, on April 1, 2017, recognized Bitcoin as a legal payment method. Even Fisco Ltd., a research and investment company from Japan, issued Bitcoin-based bonds. Furthermore, Bank Indonesia through the Governor of Bank Indonesia Perry Warjiyo prohibited financial institutions in Indonesia from using Crypto currency as a means of payment or as a means of providing financial services.

This regulation is contained in Bank Indonesia regulation nom16/8/PBI/2014 which expressly prohibits the use of bitcoin Concerning technology, it is undeniable that Indonesia facilitates all forms of utilization in the field of technology, as in Article 40 of Law Number 19 of 2016 concerning amendments to Law Number 11 of 2008 concerning Electronic Information and Transactions paragraph (1) stating "The



government facilitates the use of Information Technology and Electronic Transactions following the provisions of the legislation", and in paragraph (2) states "the government protects the public interest from all kinds of disturbances as a result of the misuse of Electronic Information and Electronic Transactions that disrupt public order, following the provisions of laws and regulations"⁹.

Bitcoin's popularity was then unavoidable. Therefore, experts, people in business, and people from all walks of life have begun to criticize the existence of Cryptocurrencies. Some agree with its existence, but not a few also disagree. The following is an explanation of the Pros and Cons of the existence of Cryptocurrencies: 1) Pro Party Peter Thiel, the co-founder of Paypal, said that Bitcoin investment could rival gold or precious metals, and Bitcoin has great potential to grow. At a conference, Thiel said nowadays, people tend to underestimate Bitcoin, but it is an investment choice. "Bitcoin is only for storing, so you don't need to use it as a means of payment". Cameron Winklevoss, an entrepreneur from the United States, said that if Bitcoin is a precious asset, he even became the first Bitcoin billionaire in 2017. "In the long term and a clear direction, Bitcoin can become a million dollar asset". Then Tim Draper, founder of Silicon Valley, said that Bitcoin is the most powerful technology in the internet era. According to him, Bitcoin is a transformation or a movement. Draper has been investing in Bitcoin since 2015. Various reasons expressed by the pros against Cryptocurrencies such as first, Bitcoin or other Cryptocurrencies are the currency of the future and today's investment that is very accessible; Second, Cryptocurrency security which can be said to be safe as in Bitcoin by using Blockchain technology where all transaction data is stored in the blockchain and the cryptocurrency value is encrypted and requires someone to have a private key and a public key; Third, the decentralized system allows anyone to own or print Bitcoin plus the highly volatile price allows massive profits when the Bitcoin price spikes; Fourth, some countries have started to regulate bitcoin as happened in Japan, thus making the price of Bitcoin even higher. 2) Counter Party In February 2014, the world Bitcoin community saw one of the exchange companies that serve the buying and selling of Bitcoin against fiat collapse and go bankrupt. And, as usual, the comments on the pros and cons have returned to the world of information 10 .

Those who are pro with Bitcoin think this is normal. Except for those who have Bitcoin deposits on MtGox. Those who are against Bitcoin insist that MtGox is the same as Bitcoin. If MtGox falls, Bitcoin will fall too. MtGox is a Bitcoin user, just like any other Bitcoin user. MtGox is a company that acts as an intermediary and serves the buying and selling of Bitcoin. When MtGox fell, there was a crisis of



trust, especially from those Bitcoin users who considered this encrypted currency an investment asset. The price of Bitcoin against Fiat suddenly fell, and many people flocked to sell their Bitcoins because they were worried that the news about MtGox would cause the price of Bitcoin to fall even further. Then the reasons used by counterparties against Virtual Currency include hacks that can be very detrimental to users. In some cases of Bitcoin security, hackers can hack encrypted currency. Second, because the price is very volatile, it can hurt Bitcoin sales when there is a massive price drop. Third, the lack of regulation in various countries against Bitcoin, such as the absence of clear legality, makes Cryptocurrencies vulnerable to fraud, and users and investors worry about the absence of guarantees when losses occur. Many Cryptocurrency users only use these cryptocurrencies for speculative activities and rarely to make payments from purchasing goods and services or daily financial transactions¹¹.

3. Cryptocurrency in the Perspective of Islamic Law

The recommended currencies in Islamic Economics are the dinar (Gold) and the Dirham (Silver). The gold dinar is a 22-carat (91.70%) gold coin weighing 4.25 grams. While the silver Dirham is a pure silver coin (99.95%) with a weight of 2,975 grams. This standard of Dinar and Dirham was set by the Prophet Muhammad in 1 Hijriyah and then upheld by Caliph Umar ibn Khattab in 18 Hijriyah. At that time, Caliph Umar ibn Khattab minted Dirham coins for the first time. At the same time, the person who first scored the Islamic gold dinar was Caliph Malik ibn Marwan in 70 Hijriah, while still referring to the provisions of the Prophet Muhammad and Umar ibn Khattab, namely in a weight ratio of 7/10 (7 Dinars versus 10 Dirhams)¹².

There are two opinions of Fuqaha regarding the nature of money with explanations. The first group argues that money is a form that was created only limited to dinars (gold) and dirhams (silver) to be printed as currency. Because according to them, God created gold and silver as currencies that were used as a bartering tool and a measure of value. In line with Al-Ghazali's opinion about gold and silver, among the blessings of Allah SWT is creation, there is a trade that is prepared for him. Then

The second group agreed with Umar bin Khattab's narration. According to them, money is a matter of terminology. So anything in human terms that can be accepted as a measure of value is called money. From the research results, a contemporary researcher said, "it is really strong to say that Umar bin Khattab was determined to make money from the skin because of the many dirham frauds. It's just that because he was worried about the extinction of the camel, he canceled the plan." It is also



not reported that someone supported Umar bin Khattab on the grounds of the value of silver when he wanted to make a dirham from camel skin. In this case, Muslim economists agree with the second group's opinion that money is a matter of terminology. And they argue that money means everything that circulates according to its use and becomes its receipt. Rawas Qal'aji, a contemporary Islamic economist said: in the view of Islamic law, Money is anything that is used as a price, means of payment, either made of paper, metal or other materials issued by the financial institution holding the authority" (Al-mu'amalah al-maliyah almu'ashirah fi dhau' al-fiqh wa al- syari'ah, 1999). According to Sulaiman al-Mani', a contemporary Muslim economist, money is anything that becomes a medium of exchange that is accepted by society in general.(Buhuts fi al-iqtishad al- Islami). Based on the quote above, it can be said that Bitcoin is not legal money, because it does not meet two criteria namely being widely accepted by the public and issued by a legitimate financial authority. Cryptocurrency purchases and sales can be made on Marketplaces such as the indodax.com website, one of the largest Cryptocurrency Marketplaces in Indonesia, or by buying directly from other Cryptocurrency users. Trading and the price of cryptocurrency are very volatile, and this invites the opinion of scholars. Cryptocurrency prices are very volatile, so it invites various opinions from scholars. In Islam, the category of property has at least four elements, including: a) Having a material substance that can be touched or touched. b) It can be stored for a long time and does not change. c) It has the principle of benefit and has no benefits. d) Some people view it as a treasure such as gold, silver, cars, stocks, etc. This category is not owned by Cryptocurrencies, even if the price is more than gold or silver. In addition, electronic money transactions must also avoid: a) Riba or additions given in exchange for usury goods (al-amwal al-ribawiyah) and additions given to the principal debt in exchange for total deferral of payment. b) Gharar or certainty in a contract regarding the quality or quantity of the object of the contract and its delivery. c) Maysir is a contract with unclear goals, inaccurate calculations, speculation, or luck. d) Tadlis is the act of hiding the defect of the contract object by the seller to trick the buyer as if the object of the contract is not defective. e) Risywah is a purchase that aims to take something that is not rightfully his, justify what is false, and make something that is false into something true. f) Israf is an excessive expenditure of wealth. MUI explains Bitcoin in eleven points, one of which says that Bitcoin in some countries is classified as a foreign currency. Generally, it is not recognized by authorities and regulators as the official currency and medium of exchange because it does not represent the value of assets. Bitcoin transactions are similar to Forex, so trading is highly speculative. Bitcoin as an



investment closer to Gharar (speculation to the detriment of others). Because there are no supporting assets, prices cannot be controlled, and there is no official guarantee of its existence, much speculation is likely haram. Bitcoin is legally permissible as a medium of exchange for those willing to use it and acknowledge it. However, Bitcoin as a legal investment is haram because it is only a tool for speculation, not for investment, only a profit and loss game tool, not a profitable business¹³.

Elements of Gharar in Cryptocurrency Concerning the use of Cryptocurrencies, users use Cryptocurrencies as a trading tool or intend to profit from currency exchange by speculation. Speculation activities are no different from risk-taking activities that business people or investors usually carry out. There is something that distinguishes speculators from business people (investors) from the degree of uncertainty they face. Speculators dare to face something with a high degree of uncertainty without calculation, while business people or investors always calculate risk with the return they receive. Speculators are a game of chance, while business is a game of skill. A person is considered speculative if he is suspected of having a motive to take advantage of this uncertainty for short-term gain. With these characteristics, investors who enter the primary market with the motivation to get capital gains solely when shares are released in the secondary market can enter the speculator class. Investors in the capital market are those who use the capital market as a means of investing in Tbk. companies that are believed to be good and profitable. They base their investment decisions on reliable information about the fundamental factors of the economy and the company itself through careful study. This type of investor activity is called rational speculation. These rational speculators encourage the creation of capital accumulation that drives the macroeconomy because everyone's investment is based on the achievement of company performance. Company Tbk. is required to be efficient, profitable, and prospective if you want to attract investors in the capital market. According to Figh experts, Gharar is a trait in Muamalah that causes some of its pillars to be uncertain (mastur alaqibah). Operationally, both parties in the transaction related to quality, quantity, price, and time of delivery of goods so that both parties are harmed. This gharar occurs when changing something sure to be uncertain. Gharar is legally prohibited in Islamic Shari'a. Therefore it is illegal to conduct transactions or provide conditions in a contract that contains elements of Gharar, as the Hadith of the Prophet Muhammad: "The Messenger of Allah forbade buying and selling that contains Gharar". Imam Nawawi explained that this hadith explains an essential principle in the Muamalah (business) chapter, which deals with unlimited matters.



According to him, among the examples of Gharar selling fruit. If the fruit is not ripe, it means Gharar because there is a possibility that it is ripe or not. Imam Nawawi concludes that among the forbidden business practices in fiqh muamalah, gharar and usury are business practices that have the most comprehensive scope. The sale and purchase of bonded goods were prohibited by Rasulullah SAW because the gharar was large. However, the seller and the buyer do it based on mutual pleasure. But the presence of pleasure is not enough. Because the problem is not in the existence of coercion against contract actors but in the object of the transaction, which is unclear. If the success of bonded transactions depends on fate at harvest, the success of Bitcoin investment depends on the fate of the prevailing trends in the community. As long as they still like it, the price of Bitcoin can still be maintained. When they get bored, it will disappear instantly.

Maysir Elements in Cryptocurrency Maysir etymologically means easy. Maysir is a form of an object defined as a place to facilitate something. It is said to make things easier because someone who should have taken the hard road but looks for shortcuts in the hope of achieving what he wants, even though the shortcut is contrary to the values and rules of sharia. Regarding gambling (Maysir), the ignorant Arabs habitually kept three arrows in the Kaaba wrapped in paper or cloth that read, don't do, and it was empty. Usually, before going on a long journey, they meet the judge of the key to the Kaaba and ask for one of the arrows. If an arrow is drawn that reads do, they will travel far and assume their journey will be safe. This is a game of change that is done effortlessly. Gambling is prohibited in Islam, and this is in QS. Al-Maidah verse 90 reads: "O you who have believed, indeed, intoxicants, gambling, [sacrificing on] stone alters [to other than Allah], and divining arrows are but defilement from the work of Satan, so avoid it that you may be successful". Imam Bukhari, when explaining the order of the prohibitions, stated that liquor is one of the ways to lose the most wealth, then the prohibition of drinking khamr with gambling was followed. And because gambling is one way to destroy wealth, the destruction of property is followed by a prohibition on glorifying idols, which is the destruction of religion. shirk (associating partners with Allah) if the idol is worshiped, and hidden shirk if it is slaughtered in its name on the condition that it is not worshiped, then the prohibition of exalting idols is made up by one of the hidden forms of shirk, namely drawing with arrows. And after all of that was stated, all of them were put together because they were rijs (heinous deeds). As in other verses, Allah SWT says that Maysir always goes hand in hand with Khamar. This shows that Maysir's legal status is the same as that of Khamar. Both are haram and must be avoided. Therefore, every game that makes one party gain



and the other party is defeated and gains a loss includes gambling which is forbidden. Like the lottery, a match for fate, or those with good intentions such as the lottery of hope, the Prized Social Fund Donation (SDSB). Especially those who are just looking for sheer profit. The existence of an intention to profit from speculation in the price of Bitcoin and other Cryptocurrencies, which is very volatile, and the gambling that is carried out makes cryptocurrency full of elements of Gharar and Maysir.¹⁴

4. Types of Money in Shariah

The Islamic jurists classify money into two types: 1) natural money (thaman haqiqi) and 2) customary money (thaman hukmi) (Hadid, 2021). Based on the opinion of scientists, gold and silver are categorized as Natural Money (Thaman Haqiqi), because this precious metal is a legal medium of exchange according to Islamic law. Al Ghazali argues that gold and silver are set by Allah SWT as a medium of exchange in the 5 Yunita: THE EVOLUTION OF MONEY TO CRYPTOCURRENCY Published by UI Scholars Hub, 2022 circulation of human trafficking. Gold and silver are precious metals and have the same intrinsic and face value. Customary money is money that is used as a medium of exchange because of the trust to function as money. Although, initially it was not intended as money, but because many people used it as a medium of exchange in trade transactions. Commodities other than gold and silver that are believed to be money are examples of customary forms of money¹⁵. Customary money does not have the same intrinsic value as its face value (Thamaniyyah). Customary money is divided into 2 types, namely 1) commodity money, 2) fiat money. Ibn Al Qayyim (1991) argues that the Dinar and Dirham are the value of the price of commodity goods. Price value is a known measure to measure assets, so it must be specific and accurate, not increasing and not decreasing. Because if the unit price value fluctuates like a commodity, then we do not have a unit of measure that can be confirmed as a measure of the value of the commodity, so all of them become commodity goods.

Digital Currencies Applied in Islamic Countries. Bitcoin is called Al-Umlah Arraqamiyah or An-Nuqud Al-iliktroni (electronic money) which is known as digital money and is used in transactions today. Blockchain technology as a platform that produces cryptocurrencies is allowed under Islamic law (Abubakar et al., 2019). In Middle Eastern countries, there are online investments that are backed up with gold, including: e-Dinar, an online system backed by gold managed by the Central Bank of the United Arab Emirates. E-Dinar currently operates on e-Dinar Wallet and blockchain technology. in addition there is GoldMoney operating in Jersey and Canada offering a gold paymeny network account that is 100% backed



up by gold combined with a mastercard, for payments you can use gold or paper currency. GoldMoney has received shariah compliance from Amanie Advisors in AAOIFI standards related to gold development with the World Gold Council. Classification of Money Natural Money (Thaman Haqiqi) Customary Money (Thaman Hukmi) Commodity Money Fiat Money 6 Jurnal Middle East and Islamic Studies, Vol. 9, No. 1 [2022], Art. 7 https://scholarhub.ui.ac.id/meis/vol9/iss1/7 DOI: 10.7454/meis.v9i1.147 In addition, there is a cryptocurrency operating since July 2017 in Dubai called OneGram. HelloGold, operating since 2015, is claimed to be the first gold-standardized digital currency that meets shariah compliance and operates on the Malaysian blockchain (Abdullah & Nor, 2018).¹⁶

III. METHODS

The type of research used in this research is Library Research. It is done by using works of literature and documents from previous research. Qualitative research is carried out according to the data type and its analysis, which emphasizes research and description in analyzing meaning. This research aims to gain an in-depth and broad understanding of the thing being studied. This study used several approaches, namely the normative juridical approach and the sharia normative approach. As for what is meant by the sharia Normative Approach, which is an approach and analysis carried out using Islamic Studies to know conclusions on the things studied based on Islamic Law.

IV. RESULT AND DISCUSSION

4.1. Crypto Currencies

Islamically, if a business does not have an element of appropriate loss probability within its assets is not strictly trading in a Sharia compliant manner. The Grand Mufti of Egypt, Shaykh Shawki Allam believes that cryptocurrency is haram and he is joined by other Shariah scholars from the Middle East and beyond including Shaykh Haitham Al Haddad who see crypto as high risk. Their argument is based on the notion that crypto itself does not hold enough credibility as a currency to be deemed to be halal¹⁷. However, many other Sharia scholars believe that crypto itself does confirm to Sharia money rules and Muslims are permitted to invest in crypto. Islamic scholars who believe that cryptocurrency money and digital assets are halal include Ziyaad Mahomed, Shariah Committee Chairman of HSBC Amanah Malaysia Bhd, and Mufti Faraz Adam. These views lend credence to the notion that Muslims can invest in crypto. Arguments in favour of crypto being deemed halal include:



- a. There is often a lack of riba (interest). Crypto operates on decentralised platforms without any central authority. This usually means there is no interest charged or payable.
- b. Crypto is used as a medium of exchange with a legitimate purpose in financial and economic transactions.
- c. Technologically, crypto is neutral. Scholars argue that it is the use of the crypto that determines if it is Sharia compliant or not.
- d. The fact that crypto is generally thought to be scarce means that it is easier to avoid speculation and uncertainty and this aligns with Islamic finance rules.

Islamic finance principles dictates that in order for income, or investing in any product or asset, to be deemed halal it has to meet certain criteria. The principles of Shariah law should be applied to the financial systems we operate in and there has been some discussion amongst Muslim scholars about whether rules devised centuries ago can still be applied to a technologically modern digital financial marketplace.

Whether cryptocurrency is halal or haram centres on the rules of Sharia law. Is cryptocurrency halal? For many Islamic scholars, the answer quite simply is yes. Shariah principles can be applied to modern crypto analysis and digital currencies as they are based on social justice, accountability and ethics which transcend all forms of financial transactions. As long as there is no illegal activity, then trading or investing in crypto should not be deemed to be contrary to Shariah principles.

4.2. Investments, Islamic Banking Law and Illegal Activities

There has been some discussion amongst Muslim scholars around the use of cryptocurrencies for illegal activities such as gambling, drugs, and money laundering. Critics of Bitcoin also argue that it is not legal tender as it is not backed by any central government that assigns its value and maintains regulatory standards, and it is therefore deemed to be speculated trading. However, Islamically the use of an item that is deemed halal for an unlawful purpose does not make the original item halal. Whether it is halal or haram depends on the multiple factors.

V. CONCLUSION

The digital technology is a situation that can't be rejected by the moslem community. In the future, the opportunity to use cryptocurrency in Islamic community transaction can't be negligence. So thus research regarding digital money in the form of cryptocurrency give us a long perspectives. Islamic law accepted money in a form of gold and silver. We conclude that the cryptocurrency can be halal if it is backed up by



gold or silver. Cryptocurrencies are categorized as customary money, namely commodities that are recognized as money because they are accepted by the concessions of the user community. Cryptocurrency is a digital currency that is the result of encryption algorithms in the technology field. Because it is in the form of encryption, this currency does not have a physical form. Cryptocurrencies contribute to the development of a modern financial system where every transaction is borderless. The fundamental weakness of cryptocurrencies is that there is no authority to control their fluctuations. This study proves that Bitcoin and Ethereum are types of cryptocurrencies that have very high volatility. Meanwhile, IDRT Rupiah Token and USDT are more stable types of cryptocurrencies where their fluctuations follow changes in exchange rates. Recommendations In terms of using digital money for modern financial transactions, we give recommendation for regulators to use Cryptocurrencies of the Token type. To further stabilize volatility, we also recommend using cryptocurrencies that are backed up with gold, not just backed up by fiat money such as IDR Rupiah Token and USD Token. With the gold backed up, it will return to the nature of Islamic law where the currency used has been standardized by gold. We give recommendation for practioners to be extremely careful by the fluctuations of cryptoassets and cryptocurrencies transactions even if it is backed up by fiat money such as Dollar or other currencies, because the fiat money are also fluctuated. We give recomendation for future researchers to add more samples of cryptocurrency to get a widely perspectives of cryptocurrency analysis.

REFERENCE

- Goh, G. D., Sing, S. L., & Yeong, W. Y. (2021). A review on machine learning in 3D printing: applications, potential, and challenges. Artificial Intelligence Review, 54(1), 63-94.
- Kethineni, S., & Cao, Y. (2020). The rise in popularity of cryptocurrency and associated criminal activity. International Criminal Justice Review, 30(3), 325-344.
- Santoso, S., Nita, S., & Koto, Z. (2022). Legal Protection and Tax Collection Mechanism for Investors Using Cryptocurrency Exchange in Indonesia. International Journal of Multicultural and Multireligious Understanding, 9(6), 339-350.
- Abasimel, N. A. (2022). Islamic Banking and Economics: Concepts and Instruments, Features, Advantages, Differences from Conventional Banks, and



Contributions to Economic Growth. Journal of the Knowledge Economy, 1-28.

- Milutinovic, Monia (2018), "Crypocurrency". Ekonomika. 64 (1):105-122. doi:10.5937/ekonomika1801105M. ISSN 0350-137X. Archived From The Original on 16 April 2022. Retrieved 18 April 2022
- TREND, Cryptocurrency, accessed on 11 February 2024 https://www.trendmicro.com/vinfo/us/security/definition/cryptocurrency
- Mukhlis Bahar, The use of Cryptocurrency in Indonesia According to Islamic Law, (2022), International Journal of Artificial Intelegence Research, Page 1

Patria Yunita, The Evolution of Money To Cryptocurrency: Are They Eligebleto be Islamic Digital Money,2022, Journal Middle East and Islamic Studies page 5

Shazia Hussain, What is cryptocurrencies and is it Halal?,2024, Qardus, accessed 11 February 2024.