

Analysis of Interest in Using Cryptocurrency as a Means of Payment in Indonesia

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ABSTRACT

Keywords: cryptocurrency, interest in use, means of payment.

The purpose of this study is to find out whether cryptocurrencies can be used as a means of payment in Indonesia and also to find out how to grow interest in using cryptocurrencies in Indonesia. This is based on the convenience offered by cryptocurrencies. The research method used is a qualitative research method with a data collection method using semi-structured interview techniques. The data analysis method uses the analysis method according to Miles and Huberman. The results of the study reveal that Indonesia is currently still unable to use cryptocurrency as a means of payment. This is due to several key factors including regulatory unpreparedness and lack of cryptocurrency literacy for the public. The results of the study also revealed that an effective way to increase interest in using cryptocurrencies in Indonesia is to educate about cryptocurrencies and increase financial literacy to the public.



Introduction

The COVID-19 pandemic has hit Indonesia since 2020. Many things cannot be done normally during COVID-19, including economic activities. However, this situation makes cryptocurrencies a lot of talk. This happened because during the COVID-19 pandemic, many businesses collapsed, but cryptocurrencies were the opposite. Cryptocurrency is a digital currency that is run through a system called blockchain. (Halaburda & Sarvary, 2016). Cryptocurrencies are run decentralized, i.e. transactions are not controlled by just one entity, but are managed by a large number of users called miners or miners. Cryptocurrencies became more popular during the COVID-19 pandemic because they can make money without the need to go outside the home. The presence of cryptocurrencies allows people to make money even if they have to stay at home. The many attractive features and security offered by the cryptocurrency ecosystem make it expected to be a choice for digital payments. One of the most well-known cryptocurrencies is Bitcoin. Bitcoin was first introduced in 2008 by Satoshi Nakamoto.

Cryptocurrencies are also starting to be looked at by international companies, for example, such as Tesla which has started accepting payments using Bitcoin. (Bezovski et al., 2021) Mentioned that other companies have also started to accept payments using

cryptocurrencies, such as AT&T, Namecheap, Expedia, Badoo, Microsoft, and many more. In Indonesia, cryptocurrencies are used as commodities or futures assets, but interest in using cryptocurrencies in Indonesia is still relatively small.

The small interest in using cryptocurrencies in Indonesia is due to the lack of financial literacy in Indonesia and the lack of information that mentions cryptocurrencies. It does not stop there, the challenge also comes from the government with the existence of Law Number 7 of 2011 concerning currency where the regulation states that the only currency recognized and allowed to be used as a medium of exchange is the rupiah. Bank Indonesia also regulates Electronic Money in BI Regulation No. 26/6/PBI/2018. However, these regulations still do not specifically regulate cryptocurrencies, so citizens are still hesitant and afraid to use cryptocurrencies. (Ter Ji-Xi et al., 2021) Examined the behavior of the intention to use cryptocurrencies in Malaysia. The study stated that Malaysian consumers prioritize the performance aspect of cryptocurrencies, which is a particular concern for women. Therefore, to encourage the use of cryptocurrencies should be marketed so that customers feel that the use of cryptocurrencies adds value to their lives in different ways, from a better experience in spending money to being more current and engaging in emerging phenomena, which can be of interest to many people.

From the above problems, researchers want to find answers about the interest in using cryptocurrencies and find out whether Indonesia can already use cryptocurrencies as payment. In other words, this study aims to analyze public interest in the use of cryptocurrencies in Indonesia and to find out Indonesia's readiness to use cryptocurrencies as a means of payment. This is related to the amount of information that is still confusing, making some people still hesitant to use cryptocurrency.

This research is expected to increase the financial literacy of the Indonesian people and be able to understand what cryptocurrency is. This research is also expected to foster public interest in conducting cryptocurrency studies, both in scientific interest and interest in the use of cryptocurrency, so that people can make cryptocurrency as one of the alternative investments.

Research Methods

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Data Analysis Methods

The data analysis approach used is the data analysis approach according to Miles et al. (2014), which explains that data analysis includes three flow of activities, namely data collection, data reduction, data presentation, and conclusion drawn. The coding process uses an inductive coding method where a code does not have to be specified before collecting data. The coding stages used are open coding and selective coding.

Table 1
Codes used in the study

Keywords	Kategorisasi
Potential, Ready, Unprepared	Indonesia's readiness to implement cryptocurrency as a means of payment
Regulation, Infrastructure	The country's provisions can be said to be ready to implement cryptocurrencies as a means of payment.
Taxes, taxation	Taxation of Cryptocurrency Transactions
Education, movement, literacy, digital rupiah	Boosting interest in using cryptocurrencies in Indonesia

The table above shows the code used to bring up the categories to be used as a key to creating a sub-discussion in the study. From the code, the researcher can determine what points will be discussed in the discussion.

Results and Discussion

Indonesia's Readiness in Implementing Cryptocurrency as a Means of Payment

According to (Hasani et al., 2022), cryptocurrency cannot yet qualify as a currency in Indonesia. Cryptocurrencies cannot be standardized because they are open programs and there is no central authority regulating them. In addition, cryptocurrencies do not have a stable value, so it is still far from being said to be a currency. Resource person C a cryptocurrency user who has been using cryptocurrencies for more than 10 years, said that Indonesia already has the necessary infrastructure to be able to implement cryptocurrency as a means of payment. Resource person B a senior cryptocurrency user also explained that Indonesia already has the potential to implement payments using cryptocurrencies, as long as government regulations also support this. This is supported by the research of (Susilowardhani et al., 2022) Which states that the opportunities and potential for the use of cryptocurrencies in Indonesia are very wide open. It's just that it does need to pay more attention to regulations because it is indeed the main obstacle that Indonesia has not been able to use cryptocurrencies as legal payments. However, the other four speakers agreed that Indonesia is still not ready to implement payments using cryptocurrencies.

Their reason is the same, which is that the current government still has not made regulations that specifically regulate transactions using cryptocurrencies. In addition,

resource person R a cryptocurrency content creator also said that Indonesia's unpreparedness in implementing payments using cryptocurrencies is because Indonesia is a developing country whose currency value is weaker than developed countries. Researchers have an opinion that Indonesia has been able to adopt cryptocurrency as a means of payment. In terms of regulation, the researcher revealed that there is still no openness from the regulator, namely Bank Indonesia, to be able to legalize the use of cryptocurrency as a means of payment in Indonesia, so most people are still hesitant to use and utilize cryptocurrency. As stated (Prasetyo & Latumahina, 2023) who said that Bank Indonesia issued a ban on the use of cryptocurrencies to ensure legal certainty from the use of cryptocurrencies, especially Bitcoin as a means of payment, that Bitcoin and other cryptocurrencies cannot be referred to as legal currencies or means of payment in Indonesia. Meanwhile, in terms of education, many Indonesians still do not know and know what cryptocurrency is. As stated by (Bhimani et al., 2022) education is strongly related to the adoption of cryptocurrencies because of the need to know the basis for operating cryptocurrency technology before starting to adopt the technology. Of these three conditions, researchers argue that cryptocurrencies still cannot be used as a means of payment in Indonesia because regulatory and educational factors are stronger than infrastructure factors.

Cryptocurrency Taxation

In terms of cryptocurrency tax treatment, resource person B argued that he did not agree with the imposition of taxes on cryptocurrencies. He reasoned that there has not been a clear return from the state for the payment of cryptocurrency taxes that will be paid later by cryptocurrency transaction actors. Even resource person B still doubts the return obtained by the community from paying taxes in general. However other sources have a different opinion, stating that they agree that cryptocurrencies are tax-burdened transactions. As conveyed by the R resource person who stated that Bitcoin in Indonesia has the same status as gold, namely as a commodity. If buying and selling gold is taxed, then it is natural that transactions using cryptocurrency or Bitcoin are also taxed. (Sukmariningsih et al., 2022) Have revealed that cryptocurrencies are classified as commodities by Article 2 of the Regulation of the Minister of Trade of the Republic of Indonesia Number 99 of 2018 concerning general policies for the implementation of crypto asset futures trading (Crypto Asset). That way, capital gains from cryptocurrency transactions can be subject to income tax as stipulated in Article 17 paragraph (1) as an update of the previous regulation, namely Law Number 36 of 2008. In addition, cryptocurrency that is included in crypto assets is not an item that cannot be subject to VAT (Value Added Tax) as per Article 4A Paragraph (2) of Law Number 42 of 2009 concerning VAT and PPnBM (Value Added Tax and Luxury Goods) so that it can be said that cryptocurrency is an object of VAT. Researchers argue that cryptocurrencies should be given appropriate taxes without burdening cryptocurrency users. If cryptocurrencies are taxed, it will help increase the country's revenue in terms of taxes. In addition, if given the appropriate rate then cryptocurrency users will not mind paying taxes to the state on cryptocurrency ownership or transactions. Moreover, if Indonesia treats cryptocurrencies

as a commodity like gold, then just like gold is taxed, cryptocurrencies can also be taxed. As said by (Sukmariningsih et al., 2022), Indonesia needs legal rules regarding the existence of digital assets and digital currencies. From these rules, tax law provisions are formulated so that the legal provisions of Income Tax on the transaction of one of the crypto assets, namely cryptocurrencies in Indonesia, can be obtained.

Factors That Make A Country Say It Can Implement Payments Using Cryptocurrency

El Salvador is one example of a country that already uses cryptocurrencies, specifically Bitcoin as a means of payment including transactions in shopping. (Gaikwad & Mavale, 2021). According to resource person C, if cryptocurrency is to be created as a means of payment in Indonesia, then it is likely to have a similar system to Gopay, Dana, and other E-Wallets. Resource person C stated that two important factors that a country can say to be able to implement payments using cryptocurrencies are regulation and taxation. Regulations must regulate the procedures for transactions with cryptocurrencies. Taxation must also be clear so that the government and the cryptocurrency transaction actors do not lose money and reach an agreement. Furthermore, the resource person R said that system security is one of the most important things so that the implementation of payments with cryptocurrencies can be successful. In addition, resource person R also stated that the system used must be trustworthy, as evidenced by the system that can be audited by parties outside the system. This aims to reduce and even overcome the abuse of authority in the management of the cryptocurrency system. Furthermore, according to resource person T, the country's provisions that are considered to be able to run a payment system using cryptocurrency are provisions that state that the means of payment in a country can use cryptocurrency, namely currencies other than the country's currency. (Sukarno, 2020) Give examples of countries such as Japan and Singapore that have legalized the use of cryptocurrencies. Japan legalized the use of cryptocurrencies in April 2017, with the creation of the Payment Service Act (PSA) regulation whose function is to protect users and provide registration for exchange with Japanese conventional money, namely the Yen with the owner of exchange services from crypto to conventional money. The researcher argues that three (3) factors can determine whether a country can be said to be able to adopt cryptocurrency as a means of payment. Namely regulatory factors, infrastructure factors, and community literacy factors. (Pandya et al., 2019) Mentioned at least two things that must be considered in the future to adopt cryptocurrency as a means of payment, namely regulatory factors and the Internet of Things (IoT), in other words, infrastructure.

The Interest of Indonesian Citizens in the Use of Cryptocurrency

El Salvador was the first country to use Bitcoin as a legal means of payment. Bitcoin in El Salvador was promoted by its president, Nayib Bukele, who stated that Bitcoin could improve El Salvador's economy by making banking easier for El Salvadorans. At the beginning of Bitcoin's legalization in El Salvador, people didn't like to use cryptocurrencies due to a lack of digital literacy. According to resource person H, we must understand that Bitcoin is a currency asset that until now cannot be taken by other

people, even countries, because of its very strict security. It is also mentioned that only Bitcoin can make transactions permissionless, borderless, anonymous, private, resistant to censorship, fast, cheap, irreversible, and uptime forever with no 24-hour and 365-day off. Resource person T argued that we as cryptocurrency community activists do not have the urgency to convince Indonesians to use cryptocurrencies, but we are more oriented towards educating Indonesian citizens about cryptocurrencies and increasing the digital and financial literacy of the Indonesian people. (Zhao & Zhang, 2021) said, financial literacy and investment experience have a significant positive effect on cryptocurrency ownership intentions.

According to resource person C, the decline in the value of cryptocurrencies could be the cause of people not being interested in cryptocurrencies. According to him, this happens because people feel more interested in cryptocurrencies when their value rises. After all, they feel profitable. However, resource person C stated, that what needs to be known is that the decline in the value of cryptocurrencies is a cycle that occurs every four years. Furthermore, the CT resource person advised to be able to intensify the cryptocurrency market. Namely by providing education to the public to understand that crypto assets such as Bitcoin are not for the short term, but for the long term. As mentioned by (Yoshino et al., 2020), financial literacy has a positive impact on the use of electronic money, the use of mobile payment applications, and at least the use of one or two fintech services (Financial Technology). The CT resource person also said that we need to increase the use of cryptocurrencies and show the advantages that cryptocurrencies have compared to conventional currencies to attract the interest of citizens to use cryptocurrencies. Regarding the cryptocurrency issue, Bank Indonesia plans to issue a Digital Rupiah. Resource person B argued that this digital rupiah and other cryptocurrencies would be at odds. Because Bank Indonesia as the creator of the digital rupiah will have an interest. In addition, resource person B predicted that if transactions using cryptocurrencies are allowed, then the direction will be the same as in several European countries. That is, cryptocurrency buying and selling transactions will be limited at the bank level, or if it is at an even more extreme level, it will be limited at the central bank level.

Speaker T also argued that the digital rupiah is not the same as crypto and Bitcoin. According to him, digital currencies only use blockchain technology. So the influence of the digital rupiah on cryptocurrencies is not too significant, but slowly in the future, the technology in crypto will be adopted by the digital rupiah.

Researchers argue that at least the public needs to be educated and improve their literacy about cryptocurrencies and other financial instruments so that people at least understand what cryptocurrency is. With the improvement of public literacy about cryptocurrencies, it becomes easier for people to decide whether to use cryptocurrencies or not. Although according to (Panos et al., 2020), financial literacy hurts the likelihood of owning cryptocurrency, researchers believe that if people have enough financial literacy, it will make it easier to choose between using cryptocurrency or not using cryptocurrency.

Conclusion

This research aims to find out the potential use of cryptocurrencies in Indonesia, one of which is by analyzing the interest in using cryptocurrencies as a means of payment in Indonesia. Several previous studies have stated that cryptocurrencies are not recognized by Bank Indonesia because Bank Indonesia only recognizes the Rupiah currency as the only currency that can be used as a medium of exchange and domestic payment in Indonesia. Based on the research that has been conducted, it has been found that four out of six speakers agree that Indonesia is not ready to implement cryptocurrency as a means of payment. Cryptocurrency as a crypto asset is the subject of commodity futures trading whose mechanism is carried out by an agreement and supervised by BAPPEPTI. This was approved by the Minister of Trade of the Republic of Indonesia with the issuance of Regulation of the Minister of Trade Number 99 of 2018.

In the discussion of potential factors, regulation is the most potential factor according to the research sources. This happens because the government is the determinant of people's attitudes towards cryptocurrencies. If the government does not make clear regulations on cryptocurrencies then most people will be hesitant to use cryptocurrencies. From the potential factors above, it can be said that currently, Indonesia is still unable and not ready to use cryptocurrencies as a means of payment. Furthermore, to attract public interest in cryptocurrencies, key parties such as crypto community activists should start educating the public about the benefits and advantages of using cryptocurrencies. By increasing public literacy about cryptocurrencies, it is hoped that public interest in cryptocurrencies will also grow. Furthermore, the government needs to play a role in educating the public about the advantages of cryptocurrencies and providing knowledge that cryptocurrencies can be an alternative for investment. The government also needs to prepare the necessary infrastructure so that cryptocurrencies can now be used as an alternative investment for the community. In the future, the infrastructure can be maximized to make cryptocurrencies can be used as a means of payment in Indonesia.

Bibliography

- Bezovski, Z., Davcev, L., & Mitreva, M. (2021). Current adoption state of cryptocurrencies as an electronic payment method. *Management Research and Practice*, 13(1), 44–50.
- Bhimani, A., Hausken, K., & Arif, S. (2022). Do national development factors affect cryptocurrency adoption? *Technological Forecasting and Social Change*, 181, 121739.
- Gaikwad, A., & Mavale, S. (2021). The impact of cryptocurrency adoption as a legal tender in El Salvador. *International Journal of Engineering and Management Research*, 11(6), 112–115.
- Halaburda, H., & Sarvary, M. (2016). Cryptocurrencies. In *Beyond Bitcoin: The Economics of Digital Currencies* (pp. 97–163). Springer.
- Hasani, M. N., Ramadhan, M., Mariyani, K., Setiawan, R., & Sucidha, I. (2022). Analisis cryptocurrency sebagai alat alternatif dalam berinvestasi di indonesia pada mata uang digital bitcoin. *Jurnal Ilmiah Ekonomi Bisnis*, 8(2), 329–344.
- Pandya, S., Mittapalli, M., Gulla, S. V. T., & Landau, O. (2019). Cryptocurrency: Adoption efforts and security challenges in different countries. *HOLISTICA—Journal of Business and Public Administration*, 10(2), 167–186.
- Panos, G. A., Karkkainen, T., & Atkinson, A. (2020). *Financial literacy and attitudes to cryptocurrencies*.
- Prasetyo, A. S., & Latumahina, R. E. (2023). Keabsahan Cryptocurrency Pada Sarana Investasi Di Indonesia. *Bureaucracy Journal: Indonesia Journal of Law and Social-Political Governance*, 3(1), 204–214.
- Sukarno, K. S. (2020). The use of cryptocurrency as a Payment Instrument. *3rd International Conference on Law and Governance (ICLAVE 2019)*, 366–370.
- Sukmariningsih, R. M., Nurudin, A., & Nursanty, E. (2022). Pengenaan Hukum Pajak Pada Cryptocurrency Dan NFT Di Indonesia. *Owner: Riset Dan Jurnal Akuntansi*, 6(2), 1644–1654.
- Susilowardhani, S., Bidari, A. S., & Nurviana, R. (2022). Regulation and the Future of Cryptocurrency in Indonesia. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 6(3), 2177–2184.
- Ter Ji-Xi, J., Salamzadeh, Y., & Teoh, A. P. (2021). Behavioral intention to use cryptocurrency in Malaysia: an empirical study. *The Bottom Line*, 34(2), 170–197.

Yoshino, N., Morgan, P. J., & Long, T. Q. (2020). *Financial literacy and fintech adoption in Japan*. ADBI Working Paper Series.

Zhao, H., & Zhang, L. (2021). Financial literacy or investment experience: which is more influential in cryptocurrency investment? *International Journal of Bank Marketing*, 39(7), 1208–1226.