



# Realizing The Importance of Rupiah Digital To Achieve Economic Growth In Sustainable Development Goals

Ayup Suran Ningsih<sup>1\*</sup>, Aprila Niravita<sup>1</sup>, Nurul Fibrianti<sup>1</sup>, Rini Fidiyani<sup>1</sup>, Bayangsari Wedhatami<sup>1</sup>, Ratih Damayanti<sup>1</sup>, Ferra Tiara Maharani<sup>1</sup>, Harumsari Puspa Wardhani<sup>1</sup>

<sup>1</sup> Faculty of Law, Universitas Negeri Semarang, Indonesia  
ayuupp@mail.unnes.ac.id

**Abstract.** Financial technology development in the banking world has a role in encouraging the transformation of the digital economy towards Sustainable Development Goals (SDGs) to improve the economy that continues to innovate according to people's needs. This innovation is found in information technology-based public payment instruments, this condition encourages Bank Indonesia to create a Digital Rupiah adopted from Central Bank Digital Currency (CBDC) as a legitimate digital currency. The implementation of the Digital Rupiah is used as a game changer in providing competitive advantages of Indonesian businessmen in dealing with international trading partners. Writing aims to; first, know and analyze the legislation regarding the Digital Rupiah as a valid digital currency in Indonesia after the establishment of the P2SK Law. Second, to analyze the opportunities and challenges of implementing the Digital Rupiah as a game changer in encouraging the transformation of the digital economy towards Sustainable Development Goals (SDGs). This study was applied with qualitative research and a normative juridical approach that analyzed various secondary data related to the issue of implementing the digital rupiah. The legality of the implementation of the digital rupiah is listed in Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector, but there is a challenge in implementing the digital rupiah that needs to be reviewed again, regarding the internal and external aspects of the country that affect it. Therefore, Bank Indonesia needs to conduct further studies governing the digital rupiah in BI Regulation. The factor of Indonesian people who are accustomed to implementing electronic money is an opportunity from the implementation of the Digital Rupiah through the Central Bank Digital Currency (CBDC).

**Keywords:** Digital Rupiah, UUP2SK, Economic Growth, Sustainable Development Goals (SDGs).

## 1 Introduction

The Rupiah has been a means of paying the cash of the Indonesian people since the beginning of independence and has been issued by the Central Bank of Indonesia (BI). Bank Indonesia (Indonesian: "Bank Indonesia") is the central bank of the Republic of Indonesia. There is an era of disruption in banking technology that presents digital banking products as a means of non-cash payment. The presence of non-cash payments makes Bank Indonesia's records in providing legal certainty to the public in non-cash transactions. This is based on BI's orientation in achieving digital rupiah inequality, maintaining stability in the payment system, and maintaining financial system inequality in creating ever-expanding economic growth towards *Sustainable Development Goals* (SDGs).

The SDGs era of economic disruptions brought about a diverse system of payment tools, around 2008 a means of payment called Bitcoin emerged. Bitcoin's legality does not require a Central Bank license but can be used as a means of payment from partner to partner. The ease Bitcoin offers as a means of payment makes it used in international trade and investment. This condition can be an opportunity for Indonesian business competition in global trade, but Indonesia's challenge does not provide Bitcoin legality as a legitimate means of payment. This condition is caused by there is no guarantee agency in cryptocurrency that does not have a trust element in the main principle of banking.

Bitcoin as a cryptocurrency is included in Indonesia due to the large number of foreigners in Bali on vacation. This foreigner exchanges Bitcoin for Rupiah to Money Changer or directly to traders who can receive payment using crypto currency. Bitcoin's presence in non-cash payment devices has the potential to replace a country's currency. Indonesia's move to minimize this by developing Central Bank Digital Currency (CBDC), several International Central Banks are developing this system. White paper and consultative is the implementation of the CBDC in the form of the Rupiah Digital currency. This action is known as "Project Garuda" which aims to explore CBDC so that it can be applied in Indonesia in the form of Rupiah Digital currency. The following elements are included in economic growth, including the use of appropriate human resources and appropriate decision-making and estimation to support a country's economic transformation.

The legality of the implementation of the Digital Rupiah is listed in Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector or often referred to as the P2SK Law. The P2SK Law was approved on September 20, 2022, with an omnibus law method aimed at making this P2SK Law the legal basis for all financial sectors in Indonesia. One of them regulates the legality of the implementation of the digital rupiah which mandates Bank Indonesia to make BI Regulation as a further regulation on the plan to implement the digital rupiah distribution. In this P2SK Law has 341 Articles and consists of 27 chapters, there are 17 laws related to the financial sector that were changed and integrated into one of the latest rules governing the financial sector.

People's Bank of China was the central bank of China that first developed CBDC in the form of Digital Yuan. This study was conducted by China from 2014, after which

in 2020 China disseminated CBDC prototype trials. The first trial of Digital Yuan was implemented in Luohu District, Shenzhen, and the second trial in Suzhou City in 2021. China's digital yuan will certainly have an impact on transaction tools in payments worth 83 billion yuan on May 31, 2022. The goal of Yuan Digital is to create a stable market mainly in international trade by using technology in livelihood, consumption, increasing domestic demand, and economic growth.

Data from the Central Statistics Agency of the Republic of Indonesia (BPS) stated that Indonesian people throughout the 2018-2022 period used cell phones or cell phones as much as 67.88%. This index continues to grow every year, resulting in Indonesia becoming the country with the highest use of smartphones. This is based on a report from We Are Social in 2022 which recorded 204.7 internet users through smartphones in Indonesia. In addition, the use rate of active telephone numbers is used by urban residents who tend to be larger than that of rural residents. This condition is due to the economy of urban people who often use effective and efficient information technology. Based on information from the Ministry of Information and Information that explained that the use of smartphones in Indonesia has reached around 167 million with a percentage of 89% of all Indonesians dominated by urban communities. This number continued to increase by 13 million or the equivalent of 3.6% over the previous period. The high usage of this smartphone is accompanied by the use of computers and easy internet access ownership individually. The percentage of computer ownership per house reached 20.05% and 66.33% of internet access ownership. This opportunity allows the need for the Digital Rupiah to be applied in Indonesia as a means of payment following one of the elements included in economic growth, namely the proper management of human resources to increase a country's economic growth (physical capital, labor force, and interaction). The implementation of CBDC is without using cartel money and exchanged for digital money. The existence of digital currency is implemented by Bank Indonesia to realize a cashless society. Other benefits of CBDC can be transferred at any time and without using internet quota, so CBDC users can tap each other's code using smartphones. This will certainly help people who have difficulty accessing the internet.

Based on these descriptions, this researcher aims to find out the implementation of the Digital Rupiah in Indonesian legality as well as the opportunities and challenges of implementing it. This research will discuss: First, the legality of the digital rupiah as the digital currency of the central bank of Indonesia after the enactment of the p2sk law. Second, the opportunities and challenges of implementing the Digital Rupiah as a game changer in encouraging the national digital transformation towards Sustainable Development Goals (SDGs). The urgency of this research is to find out how strong the legality of the digital rupiah will be if circulated so that it will find opportunities and challenges. This opportunity and challenge will be explained and provide solutions to be noticed by Bank Indonesia to immediately make BI Regulation which regulates more specifically about digital Rupiah mandated by P2SK Law.

## 2 Research Method

This study applied the normative juridical method by collaborating with the analysis of secondary data related to the issues to be studied. Normative juridical research is characterized by describing hypothetical factual problems. The approach method applied by applying the approach to various regulations is still in effect so that it is analyzed and researched. Law Regulation Number 4 of 2023 concerning the Development and Strengthening of the Financial Services Sector (UU P2SK) which is the basis for the digital rupiah implementation regulation will be studied further. This study compares interstate regulations, especially China, that have implemented CBDC related to digital rupiah distribution in Indonesia be examined. This study applied library studies to collect sources to be studied and analyzed. Some of the data obtained will be conducted more in-depth and comprehensive research and the results will conclude the problem formula.

## 3 Discussion

### 3.1 The Legality of the Digital Rupiah as the Digital Currency of the Central Bank of Indonesia After the Establishment of the P2SK Law to Achieve Economic Growth

The process of digitizing science and technology in the field of financial economics has fundamentally changed the lives of its people, including the use of the function of money as a means of payment. Digitalization is the process of changing an activity that is usually carried out directly transforming it into an activity that utilizes technology and is usually called a digital form activity that supports the existence of Sustainable Development Goals (SDGs). This causes many investors to present effective and efficient payment innovations. One of them is implementing digital currency in achieving increased efficiency, security, and ease in accessing information. Digital currency is an inclusive financial acceleration step by massively involving several people, even people who have not received services from banks to achieve economic growth. The government's efforts to support the existence of this digital currency by ratifying Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector or usually referred to as P2SK Law.

The application of digital currency must be adjusted to the conditions of its people and the applicable regulatory conditions. This regulation is used to strengthen the distribution of digital currency to have a valid legal status as a currency and is created by the government to facilitate all transaction processes. The legal status of digital currency must be accepted by each party, otherwise, the central bank as the issuer of digital currency that adopts Central Bank Digital Currency (CBDC) will face challenges from both legal and political aspects. The digital currency in Indonesia is called the Digital Rupiah which is listed in the P2SK Law.

The definition of digital rupiah according to Law P2SK is a digital rupiah currency issued by Bank Indonesia which has a domestic monetary obligation. The digital rupiah

also has functions that have been regulated in this regulation, including functions as a legal means of payment in Indonesian territory that are the same function as currency, as a legal medium of exchange, and as a store of value or a value storage device. The use of the digital rupiah has the same basis as the general use of cartel money and is converted to digital. The existence of the Digital Rupiah will not affect the amount of money circulating and the value of the Digital Rupiah currency tends to be stable. In addition, the digital rupiah became a risk-free central bank breakthrough in cross-country activities, especially to facilitate international trade payments.

The P2SK Act does not change the overall Law No.7 of 2011 on Currency, but only partially changes it. The amended provisions in Law No.7 of 2011 concerning the Digital Rupiah are only in Article 2, Article 11, Article 14A, and Article 19. Law P2SK gives BI an authority of attribution in expanding the scope of its new authority, but it still conforms to the limits of the provisions in introducing and distributing the digital rupiah. The limitation in the principle of artificiality given to BI shows that BI as a central bank can only perform duties that are authorized following the provisions of the law. The stipulation in P2SK Law regarding the digital rupiah is legally recognized as a form of currency in Indonesia, but following the provisions of Article 14A paragraph (5) states that the issuance of the digital rupiah should be further regulated in Bank Indonesia Regulation.

Riding the regulation of P2SK Law has different stages in managing the forms of capital (paper and metal) and digital rupiah money. The management of securities (paper and metal) goes through several stages, including the first thing that is done in the planning stage, when the planning stage then the printing stage which has to be adjusted to the target of the securities that will be issued, then it can be distributed, In addition, the cartel money can be withdrawn and withdrawn to the extermination stage. For the management of the digital rupiah, the provisions are stipulated in Article 14A, this article explains that the very simple digital rupiah management stage only goes through the planning stage, then the issuance and distribution stages, and in the end it goes to the entrepreneurship stage. In Article 14A paragraph (3) emphasizes the management of the digital rupiah, Bank Indonesia needs to pay attention to several aspects, namely: availability, stability, inclusion, development, and security.

In Law P2SK which regulates the management of cartal money, it is in Article 11 paragraph (2) which regulates the stage of money management where BI is required to coordinate with the government to regulate the circulation of money. At the printing stage, SOEs can contribute to the implementation of rupiah printing. In addition, the phase of expenditure, revocation, and withdrawal is carried out by BI as a single institution that has the authority to carry out these actions. This is in contrast to the management of the digital rupiah which is carried out when it is regulated in more detail in the BI Regulation which has been mandated by the P2SK Law, but until 2024 the BI Regulation regarding the digital rupiah has not been published.

Law P2SK has mandated BI to issue the digital rupiah as a digital rupiah currency, but this regulation is not enough to become the legal basis for the digital rupiah. This is because the digital rupiah management stage is a function of Bank Indonesia in the payment system. Law No.11 of 2008 concerning Information and Electronic Transactions can be an alternative to one of the foundations for the implementation of

the digital rupiah because it is part of electronic transactions. The need for further regulation to regulate the digital rupiah so that it can be used in transactions, by not reducing the function of the money itself.

Bank Indonesia in conducting digital rupiah management is carried out with the main purpose of providing digital currency that is a transformation of rupiah currency in this digital era that is worth circulating and can be used practically according to the needs of the community, as well as efforts to prioritize efficiency and national interests. Under the P2SK Law, Bank Indonesia is required to coordinate with the government. This coordination is implemented by exchanging information related to the publishing project and the mechanism for using the digital rupiah. In Law, P2SK regulates the position of the digital rupiah as the valid, recognized, and managed currency of the BI within the authority of the institution of the only Central Bank of Indonesia and regulates the scope of digital rupiah management. This scope includes planning, control, marketing, and entrepreneurship as well as other aspects that need to be considered. Other provisions also regulate the Bank Indonesia Regulation in the management of the digital rupiah, but until 2023 there were no further regulations on the digital rupiah in the implementation of the digital rupiah, including digital rupiah issuance process, digital rupiah circulation monitoring mechanisms, and digital rupiah circulation control mechanisms. to the aspect of protection against society necessary in realizing legal certainty.

### **The Application of Digital Currency in China**

In 2022, China received great attention in the eyes of the world for the success of implementing the CBDC implemented by the Central Bank of China called e-CNY in a trial program without borders. The Chinese government banned crypto due to its lack of legality but promoted e-CNY at the Beijing Olympics to facilitate international trade payments transactions made with the four major countries in the world following the m-Bridge project. China as a country that has a great influence on digital economic technology innovation synchronizes its national interests with its international interests, especially in world trade.

The development of digital currency carried out by China was centralized and maintained by the government's supervision. People's Bank of China (PboC) which issued the CBDC for the first time in the world by the Central Bank of China formerly called Digital Currency Electronic Payment (DCEP). The Central Bank of China began developing the Digital Yuan or Electronic Chinese Yuan (e-CNY) in 2014 until it was officially launched in 2022. Yuan Digital or e-CNY was designed by China to facilitate transactions in international trade related to the global financial system.

At the time of developing and promoting the digital currency China officially banned the use of US dollar-based cryptocurrencies in all transactions in international trade since 2017. The Central Bank of China banned cryptocurrency exchanges, but this prohibition did not prohibit ownership of cryptocurrency. In 2021, there was a complete ban on the use of cryptocurrency. This condition is because the Central Bank of China wants to minimize financial crimes and prevent economic instability.

In the process of implementing e-CNY, 23 cities across China are carried out in project programs. China has also promoted and introduced e-CNY at the Beijing

Olympics in 2022 to foreign athletes and tourists as an alternative means of payment in addition to visas and cash. From August 15 to September 23, 2022, based on a report from the Bank for International Settlements (BIS) stated that the Central Bank of China first conducted cross-border trials and successfully conducted the trials, followed by the United Emirates, Hong Kong, and Thailand.

The e-CNY usage report in September 2022 stated that about 250 million use digital Yuan as the CBDC most in demand and often used in international trade. A month later, it was reported that the value of e-CNY transactions reached 13.9 billion US dollars or 100 billion yuan. This condition resulted in the digital Yuan as an international CBDC transaction which had a great influence on international transactions. The ambition of the Central Bank of China to introduce the use of Yuan Digital internationally has attracted the attention of the Bank for International Settlements stating that Yuan Digital is one of the most actively traded and published CBDC tokens.

The steps taken by China in implementing e-CNY in the banking world as a means of payment are considered as breakthroughs in financial and digital finance technology as well as in the international financial system. This condition made China the front line in leading the race in financial technology development related to Central Bank Digital Currency.

The digital Yuan legality was revised on 23 October 2020 by the Central Bank of China which released the People's Bank of China Act which included digital and physical forms and this law became the basis of the issuance of the digital Yuan. The existence of this law also prohibits crypto circulation due to the approval of the Boao Forum for Asia which is attended by the Central Bank of China and approved by the Deputy Governor of People's Bank of China (PBOC). China's goal is to implement and develop the digital yuan or e-CNY through the CBDC to promote the yuan currency and minimize the level of US dollar dependence in the trading system that will certainly affect the national economy. Use in CBDC systems can be done without an internet connection using touch and touch features. In this feature, users only need to touch mobile devices together when they want to perform the transfer process. This financial technology breakthrough is expected by the Chinese government to ease and increase public enthusiasm for the digital Yuan in the global system.

### **3.2 Opportunities and Challenges for the Implementation of the Digital Rupiah as a Game Changer in Promoting Digital Economic Transformation towards Sustainable Development Goals (SDGs).**

The rapid development of information technology and increasingly sophisticated communication devices encourage digitalization in various aspects of people's lives, especially in economic and financial transactions towards Sustainable Development Goals (SDGs). This transaction process is usually carried out by banks through an online payment visa based on the process of transferring currency from the buyer's account to the seller's account. Banking is one of the industries that has a great influence on all transactions that can be done at any time so that consumers do not have to come directly to the bank. Starting from transfer activities, saving or taking money, applying for credit, international payments, and even to kiring. In 2016 there was a digital-based

interaction ratio with a face-to-face ratio of 400:1. This situation will continue to develop following the use of mobile connections in Indonesia.

The adoption of digital technology in the economic sector is indispensable, especially in analyzing data and cybersecurity that can be applied flexibly across sectors. The overall use of technology in the financial industry is used to increase efficiency in risk management and make it easier for consumers to do daily activities. This condition encourages the national digital transformation realized in the Garuda Project. This project is an innovation that collaborates the CBDC design and is known as the digital Rupiah. The use of digital currency has advantages in the speed and efficiency of transfer fees. Decentralized systems (blockchain) minimize the risk of failure in the system as a whole. Of course, there are weaknesses in this system due to the high volatility and high-risk financial instruments category that require a lot of energy sources.

The digital rupiah is a valid alternative payment tool in addition to cartel money. This digital transformation will not eliminate the existence of the circulation of the rupiah paper even though the digital rupiah will dominate the growing economy. This digital rupiah is different from cryptocurrency because it is developed privately and there is no transparency in terms of customer identity. Most Central Banks worldwide ban cryptocurrency as a means of payment because it is not controlled by the government. The development of this digitalization effect has made several central banks begin to study the CBDC, which is certainly different from crypto because it was created legally and managed by the monetary authorities of each country.

Referring to the pilot implementation of the digital Yuan project in Beijing, China, which carries out the full application of digital Yuan retail, transactions using digital Yuan use electronic money, as applied in Indonesia. The use of smartphones with the Quick Response Indonesia Standard (QRIS) application has been designed following Indonesia's national standards. Electronic money types are often used in Indonesia in transactions that have a semi-voluntary nature, because in public services some are required to use electronic money, for example in toll and parking payments. In addition, the technical use and ability factors of the community in adopting the use of digital money will make it easier for the community to switch from the use of cartal money to digital money. The development of the number of cards in Indonesia or the use of transactions using QRIS in the use of increasing digital money thus increasing the exponential growth of usage. This is in line with the progress of digital rupiah usage transactions that continue to increase due to the breakthrough in financial technology.

The adoption of Central Bank Digital Currency gives Indonesia innovation opportunities in the digital era in using digital money. The digital rupiah is expected to bring changes in Indonesia's transaction system and economy. In 2021 Bank Indonesia plans to research the digital Rupiah technology infrastructure. The digitalization process of the Indonesian economy made the creation of the digital rupiah to be one of the solutions for cashless transactions. This condition is due to Indonesian people who are accustomed to implementing digital money use. The condition can be seen from the number of cards used by Indonesian people in using digital money where the amount of transaction value is getting higher according to the exponential growth rate. In addition, Indonesian residents are used to implementing electronic money that certainly

understands various banking service products so that they understand better that electronics are superior to cartal money. The habit of business actors and people in Indonesia in implementing electronic money is used to ease, security, and needs. When entrepreneurs use digital money in international trade, it will greatly facilitate entrepreneurial activities and become one of the strategies used in international trade. The habit of using digital payments and transactions using mobile phones is used by the public and entrepreneurs because they think that electronic money will have a positive impact on all activities, especially in the economic sector.

Bank Indonesia in planning the issuance of the digital rupiah is used to be a legally recognized transaction tool in Indonesia end to end, of course, there are challenges in implementing it. According to the Governor of Bank Indonesia, there are several challenges in the process of issuing the Digital Rupiah or Central Bank Digital Currency as digital currency. First, that is the design of the digital rupiah for the issuance of distribution and controlled by the authorities of the Republic of Indonesia so that the use of this digital rupiah can be used such as cash payment equipment or cartel money. Second, collaboration between the payment system infrastructure in the financial market. Infrastructure as a payment tool used by business actors in Indonesia including MSMEs in making online payment processes. This integration became the basis of payments in the financial market to support the issuance of the Digital Rupiah. Third, which is the digital platform where Rupiah Digital, which is the blockchain, distributed ledger technology (DLT).

The creation of the Digital Rupiah is based on the needs of the public in the speed of the transfer process that can cross state boundaries and, of course, at an efficient cost. Decentralized blockchain technology will provide digital money transaction opportunities without a formal banking system regulation with long and inefficient administrative procedures. In 2019-2020, the Bank For International Settlement (BIS) conducted a survey and obtained the results that the World Central Bank wanted to create CBDC. Where the basic principles and the main alloys are listed in the BIS.

The basic principles and major alloys are based on the Bank for International Settlement (BIS) for design for Central Bank Digital Currency and cross border. The three main principles are consistency and harmony of private and public funds and promotion of innovation and efficiency. In addition to these basic principles, BIS applies alloys related to various features that must be fulfilled by the CBDC to be implemented in a country, namely related to instrument, system, and institutional features. All of these feature provisions are a requirement for the fulfillment of Central Bank Digital Currency in Indonesia based on the perspective of money equality, security system, efficiency, and a solid legal basis to provide legal certainty to digital Rupiah users.

The challenge regarding the implementation of the digital rupiah (CBDC) is related to other factors, namely the traditional habits of the community and the refusal to use digital money as a transaction tool due to the difficulty of accepting digital economic transformation and the feeling of more confidence in using cartel money. Demographic factors and accessibility of the community and business actors differ in terms of understanding the concept of the digital rupiah. Infrastructure factors are also a problem that occurs when people who want to transact do not have smartphones that do not

support the application. This is a question of how people who have cell phones but do not support the application for the digital rupiah. This is also a challenge in the application of financial technology in Indonesia. Most of the knowledge of Indonesian people who do not understand and know the concept of the Digital Rupiah is minimal. The implementation of accessibility and demographic conditions from each province in Indonesia is so diverse that institutions must develop several policies according to the characteristics of each province in increasing the use of the digital rupiah.

A serious challenge in the implementation of the digital rupiah is in the community or business actors who have not been able to use digital money at all in one of Indonesia's provinces. This means that there is still an option to use current cartal money in addition to the implementation of the digital rupiah. Concretely, in Indonesia, it is found in Papua province, where most of the people do not yet have cell phones, so they do not know how to use digital money. There are also other issues related to the use of digital money in society: the absence of internet access, double-debated balances, cybercrime, and top-up limits that cause transactions to fail for large nominal terms. Another problem is that not all merchants support the use of electronic money.

Other problems he often fears about cybercrime, so some people often feel worried in their use, so efforts are needed to minimize it. Minimizing all the challenges of implementing the digital rupiah must be accompanied by a solution, namely; mitigating the risk of cybercrime. Bank Indonesia needs to conduct regular security audits using technology that can be managed well by specialized officers, surveillance of security systems, and prevention by providing education to the public about the proliferation of fraud that can cause account balances to drain away. BI also needs to provide a guarantee of funds back if there is a mistake in BI's security management management system that has problems that cause losses to the community. This is done by BI to gain trust in the community. BI is required to provide various information regarding the benefits and methods of using the community's Rupiah to increase trust in the community. The information required includes the benefits, conception, operationalization, goals, and benefits of CBDC for the community and the economy, as well as the BI policy direction, design, approach, and benchmarking of the implementation of CBDC in other countries. In CBDC implementation, adequate information dissemination to the public and industry regarding risk mitigation, requirements, phased implementation, roadmap, legal basis, and others is very important. There needs to be a brief explanation, for example, through a video, regarding the plan to implement CBDC/e-IDR and its implications so that the public will want to switch to digital rupiah.

Public trust became a major key in the successful implementation of the digital rupiah as a legitimate means of payment. The main change is the use of the digital rupiah in terms of speed and transaction completion, especially across countries. The use of blockchain technology is used to increase system efficiency or cost in national transactions. This condition is what business actors in Indonesia need to maximize profits in the international world.

The relationship between international banks is desperately needed by the digital rupiah to form an agreement in processing transactions across countries using the Central Bank Digital Currency using a sawmill mechanism so that the dependence rate

on the US Dollar will decrease in the process of cross-country financial transactions. This certainly greatly benefits business actors in Indonesia because of the speed efficiency and transfer fees directly processed by the Central Bank.

## **4 Conclusion**

### **4.1 Conclusion**

The Central Bank of Indonesia's plan to issue the digital rupiah as the central bank's digital currency is guided by the implementation of the digital Yuan in China. The presence of the digital rupiah is based on a very profitable cryptocurrency but cannot replace the rupiah currency with the cryptocurrency so BI presents the digital rupiah. This digital rupiah adopts a private blockchain technology system to provide security to digital rupiah users. The legality of the existence of this digital rupiah has been regulated in Law P2SK which partially replaces Law No. 1. 7/2001 on Currency and will be regulated in Bank Indonesia Regulation. Indonesia already has a digital rupiah legal basis but not yet comprehensively, so it needs to be studied further that regulates various other aspects, such as user safety, compensation, sanctions, etc. Law P2SK gives Bank Indonesia attribution authority as an authoritative institution in conducting digital Rupiah management, where BI must coordinate with the Government regarding the planning of implementing the digital Rupiah. Coordination between BI and the Government can be made by exchanging various information related to the number of digital Rupiahs to be distributed, mechanisms, and case plans for the use of digital Rupiahs. The opportunity for the digital rupiah to be presented in Indonesia is due to the development of digital banking technology that continues to develop and people who are used to using e-money and are supported with various existing facilities, such as smartphones and internet access. There is an opportunity from the digital rupiah, of course, there will be challenges that will be presented. According to Gurbenur Bank Indonesia, the challenge of implementing the digital rupiah is a digital rupiah design that can be published and controlled by the state, collaborating between the payment system infrastructure in the financial market, and the platform that will be used in issuing the digital rupiah. In addition, there are challenging factors to implement the digital rupiah that come from the community, namely: the traditional nature of the community that rejects technology, the leakage of community data, the demographic and accessibility of the community, the people's knowledge and ability to accept and implement digital rupiah. The existence of this digital rupiah will encourage domestic economic growth that creates Sustainable Development Goals (SDGs).

### **4.2 Advice**

The recommendation before implementing the digital rupiah should be implemented by Indonesia in four stages from 2020 to 2030, including planning, development, pilot project, and implementation and referring to the implementation of the digital yuan. In P2SK Law, there is no detailed regulation regarding the digital rupiah, so according to

the mandate of P2SK Law, BI regulations are needed to regulate the regulation regarding the digital rupiah to be stronger and accompanied by significant sanctions on those who violate it. To minimize public anxiety in using the digital Rupiah application, Bank Indonesia should apply the latest technology in carrying out security and guarantee the customer's lost money if the error comes from the BI system. Then, the need for literacy and education of the Indonesian people regarding the digital rupiah is needed, because almost 57% of the Indonesian people do not know about the digital rupiah. This can be implemented with an explanatory video about the plan to implement the digital rupiah briefly and the positive impact it has.

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