

Implementing Monetary Policy: Ease of Transacting with Digital Currency

Fadya Dini¹, Renny Oktafia^{2*}

Universitas Pembangunan Nasional "Veteran" Jawa Timur, Surabaya, Indonesia
renny.oktafia.es@upnjatim.ac.id^{2*}

Abstract. This study aims to find out whether the use of digital transactions will change the monetary policy carried out by the central bank. Indonesia is one of the countries that is conducting research on the development of digital currency by the central bank, this is supported by technological advances that make people need transactions that are faster, safer and more efficient. This research will see whether the development of digital rupiah by the central bank will be accepted by the public, such as the use of e-money which is widely used by people in the modern era. This study used a qualitative method with a literature review approach. the results of the study found that, Until the current CBDC development, the central bank believes that the implementation of monetary policy is considered more effective and on target because the use of digital currency is directly supervised and executed by the central bank. the implementation of the use of digital currency for the future is considered to facilitate transactions and the public will easily access information about their transactions safely.

Keyword: central bank, digital currency, policy

I. Introduction

The development of increasingly global technology and information, both in the fields of education, industry, health, and the economy. developments in financial technology, especially in the development and changes in the barter payment process, have occurred thousands of years ago until the time of modern humans, then changed to iron and metal as the exchange rate for goods and services, followed by paper money as the exchange rate used today. seeing this means that humans are always making developments to facilitate payments or transactions with sellers. in the 21st century, mankind has used it a lot e-money as a means of payment.

Payment using e-money this is done in a non-cash manner or does not use physical cash, but with the help of technology that can transfer money from one bank to another as a means of transaction. from the development of technology that is increasingly innovative and efficient, many private parties are launching payment applications for easy payment using standard Indonesian quick response code(QRIS), therefore Bank Indonesia as the only state instrument that has the right to print and circulate money in the community responds in the form of research and research on digital currency or what we know as central bank digital currency(CBDC) . Conceptually, digital currency and physical currency have something in common, that is the nominal value is fixed and does not fluctuate.

The development of this digital currency has increased since the outbreak of Covid-19 which caused people to be unable to carry out face-to-face transactions. In fact, the process of digitizing the community has been pursued for a long time, for example by providing payment via qris which makes it easier for people to pay without having to carry a card because everything is available if we have a gadget. In order to follow the rapidly growing digitalization phenomenon, Bank Indonesia issued a digital rupiah as the central bank's digital currency, which is used as a digital means of payment. this will not eliminate the use of physical money as a complementary currency in the economy in Indonesia. according to Indonesian bank,

Bank Indonesia as a monetary policy maker found that since the pandemic occurred, electronic money transactions have increased and grown significantly because people choose to shop online because they feel it is more efficient and saves time. the governor of the Indonesian bank perry warjiyo revealed that the value of electronic transactions in 2022 would increase by 30.84 percent compared to 2021 of 28.72 percent..(Kristantyo Wisnubroto n.d.) . This increase did not only occur in Indonesia but globally, therefore many central banks conducted research regarding the development of digital currency as a complement to transaction tools and this digital currency is claimed to be safer than the e-money that people use today ((NFW/KAW) 2022a)

II. Literature Review

Monetary Policy

Monetary policy is a policy made and issued only by the central bank as a form of controlling a country's economy to maintain economic stability. This policy was carried out using several instruments such as maintaining the rupiah exchange rate , maintaining the money supply and controlling inflation (solikin 2003).

One of the studies on the effect of monetary policy on economic growth by Jul Fahmi Salim. This research finds that monetary policy is effective in improving Indonesia's economic growth. Where the exchange rate has a positive and significant effect, while inflation has a negative effect and a significant effect on economic growth. That means the government must be able to maintain the stability of the economy in the exchange rate and maintain the inflation rate so that economic growth is in a positive trend (Salim 2017).

In making monetary policy by central banks, it must be aimed at economic stability by controlling inflation, exchange rates and controlling interest rates. (Warjiyo 2007) Economic stability in Indonesia is very much maintained by monetary policy and fiscal policy from the government. If the policies taken are right and on target then the economy will be stable and can even positively increase or experience growth.

The development of transaction methods

Based on research conducted by Cut Nurul A'ala regarding the influence of perceptions of ease of use, effectiveness, and risk on interest in transacting using FinTech found that, in the development of digital payment systems or non-cash payments are influenced by people's lifestyles and technological advances (A'LA 2021).

Payment transactions through digital wallets or electronic money which are increasingly innovative and more practical make people choose to use digital wallets. According to Insight Asia's latest research entitled consistency that leads: 2023 e-wallet industry outlook shows that 74% of respondents use digital wallets for daily transactions (Carla Sheila Wulandari 2023)

Money is an important instrument for everyone because with money we can make transactions both in services and goods. and from these transactions the economy will experience a turnover. according to the journal regarding the development and thinking of money from time to time by Septi Wulan Sari states that money is the biggest innovation in world economic civilization. (Sari 2016) this is supported because the use of money shifts barter to a medium of exchange. Money is also a very good alternative, already for transactions

Use of Central Bank Digital Currency

The development of digital currency is a necessity for the central bank in maintaining and maintaining the sustainability of the financial system by placing the central bank in charge of its duties. In addition to the interests of the central bank in making better policies, CBDC is also something that launched out of public interest due to the current digitization process. The public's demand for digital money because of its convenience makes the development of CBDC considered important.

CBDC was developed because of a global environment that supports the digitization process in all existing sectors, besides that it is getting stronger because of the impact of Covid-19 which has made all people transact online. until 2021 requests by merchants who use digital payments reach 98% of which 59% make use of digital payments (Robert and Brown 2004)

III. Research Method

This research uses qualitative methods using literature review. In research using qualitative methods, researchers will emphasize descriptive analysis and will look at perspectives objectively and the theoretical basis will be used as a guide so that research is presented according to facts and according to objectives. (Muhammad Syafii 2022)

This research method uses literature review, this technique is used to collect sources of information related to research so that researchers can have a strong theoretical foundation related to the topics presented. presentation of this data is a type of secondary data (Sari 2016). the data collection method uses secondary data that comes from past research journals, e-books and other online media (Ausop and Aulia 2018)

IV. Results and Conclusions

The implementation of monetary policy by the central bank greatly influences economic growth and development, especially in Indonesia itself. Monetary policy is carried out by the central bank in order to maintain economic stability. This policy relates to developments in interest rates, circulation of money in society, inflation rates, etc. the central bank cooperates with the banking sector in managing the

circulation of money in the country as well as keeping the exchange rate from weakening and stable, with a positive tendency to rise .(Warjiyo 2007)

Table 1. banking system stability and monetary policy

<u>aspect</u>	<u>constraint</u>	<u>Solution</u>
Stability	<ul style="list-style-type: none"> • cash flow process • distribution mobilization • from savings public 	<ul style="list-style-type: none"> • keep trust society against intermediary agency finance • deposit mobilization deep society forms of credit make society is encouraged to save and investment .
Policy	<ul style="list-style-type: none"> • increase in inflation • fluctuation in exchange • rates market instability 	<ul style="list-style-type: none"> • bank control central through policy instruments monetary interactions between banks central and banking in all transactions finance in the money market related to policy instruments monetary • Control circulation of moneyin society

Digital developments that are increasingly global also affect the process of financial transactions in society, this has made banks issue more modern non-cash transaction products. therefore banking financial institutions must be able to be trusted by the public in this increasingly fast payment system. with these more modern and easier transactions, the circulation of money in society is also getting faster, therefore the central bank needs to supervise and carry out policies so that the country's economy remains stable. the importance of the central bank to oversee banking and see the nature of operations and also the products offered must concern the public interest so that people also believe in the existence of this banking.

Indonesia's increasingly digital economic growth has made almost all of society carry out a change process to become more digital and modern, this process has also been followed by traders ranging from SMEs to companies. This development gave rise to the concept of electronic commerce that asks consumers to make online payments or wire transfers. With the existence of ecommerce, people and traders also feel more effective and the transaction process can be carried out throughout Indonesia without buying directly. With the convenience of this transaction, several security issues such as online fraud cannot be ignored (Bernada 2017) . transaction development is developed in many ways, one of which is the use of QRIS. since the existence of covid-19 the use of qris is increasingly widespread in society, lots of umkm use QRIS as a digital transaction because many of them find it more effective and efficient because they don't have to bother providing coins besides that they don't have to calculate manual sales (Setiawan and Mahyuni 2020).

Tabel 2. Garuda project (navigating the rupiah digital architecture)

Aspect	constraint	Solution
Distribution	<ul style="list-style-type: none"> • CBDC spread of central bank to public 	<ul style="list-style-type: none"> • central bank ensure expansion financial inclusion to disadvantaged areas or all over the country
Infrastructure	<ul style="list-style-type: none"> • Is the launch digital currency will drive efficiency all over the layers public 	<ul style="list-style-type: none"> • Digital rupiah has a design and features that make it possible model development business. • Digital rupiah has a smart featurecontract, identify service , regulatory service, cryptographic , etc. that make the service respond effectively .

<p>Risk</p>	<ul style="list-style-type: none"> • Security guarantee in use digital currency • Deep money laundering cbdc 	<ul style="list-style-type: none"> • Indonesia bank as policy makers monetary guarantee money trust society with low risk and transaction certainty user . • Direct supervision of all transactions makes digital rupiah considered minimal in money laundering and all other cyber risks.
-------------	--	--

Digitalization of the economy and finance which has been increasingly massive since the pandemic, as well as increasing public interest in crypto. Threats also emerged from several sides, such as shadow banking and even shadow central banking. Seeing this problem, all of the world's central banks are carrying out digital transformation. This was taken because the central bank wants the public to use a safe, trusted and open transaction medium. cbdc is a solution issued by the central bank in bridging the needs of society in an increasingly digital era..(Robert and Brown 2004) the purpose of developing digital currency technology by central banks is to fulfill the basic function of currency, namely as a safe medium of exchange, its stability is maintained by monetary policy or fiscal policy, as well as its official and comprehensive use in the scope of the country's territory

Digital currency is currency in digital form. has the same value as physical currency or currency ((NFW/KAW) 2022b) digital currency is run with a system similar to cryptocurrencies for the benefit of security and efficiency in transactions. Initially, this digital currency was also known as cryptocurrency, which was carried out without the supervision of the government or directly supervised by the central bank. The most popular cryptocurrency is bitcoin, bitcoin itself is a product of cryptocurrency that has a complex and sophisticated algorithm level, but this bitcoin value is speculative or determined by a number of people or businesses that own bitcoin. In addition, cryptocurrencies are also not supervised by responsible authorities, so some people feel that it is not safe to use digital currency in the form of cryptocurrencies.(Ausop and Aulia 2018) However, technological developments are very fast and almost all sectors are entering the digital era, which makes financial technology too transformed to create security and comfort for its users. Companies operating in the field of private financial technology have actually issued electronic money since 2009, marked by the issuance of regulations regarding electronic money by Bank Indonesia. It has been a long time since Bank Indonesia, as the central bank, has been trying to digitize, especially when the Indonesian standard quick response code (QRIS) was launched which made it easier for transactions anywhere and anytime by simply scanning a barcode.

Of course, the digitization process being pursued by Bank Indonesia does not stop there, seeing that several countries have launched the use of digital currency for daily transaction activities for their people, therefore the central bank continues to make developments regarding this CBDC. one of the countries that have implemented the use of digital currency is the central bank of china which issues eCYN (yuan) which is supervised and operated by government authorities (Turner 2014). Digital currency is considered to be used as a complement to paper currency, metal and e-money. digital currency was created not to destroy the use of currency but as a companion, Apart from that, the existence of digital money from CBDC will make it easier for central banks to make and determine monetary policy to control the circulation of money within a country. The development of this digital rupiah is also not solely the central bank's wish to emulate private banks that make e-money. because on the basis of their use e-money and digital rupiah have differences. if we are going to use emoney we have to exchange our money in digital rupiah we can use it directly without having to exchange it because the value of digital rupiah is the same as when we use currency.

implementation of the use of CBDC in a payment system that is legally issued by the central bank will have an impact on the transaction system in society. transactions will be faster , more efficient and more effective because the central bank directly supervises the supply of money and facilitates the tracing of transactions for the central bank . The development of the CBDC cannot be separated from the interests of the central bank as an instrument for making monetary policy. Monetary policy is an important instrument for the sustainability of the country's economy. Indonesia itself has 2 economic policies, namely fiscal and monetary. Fiscal policy is decided by the government while monetary policy is decided by the central bank as the only legitimate bank to print and circulate money to the public. monetary policy in regulating the flow of money circulating in society by controlling inflation and controlling interest rates will be easier if

this digital currency is launched. with this cbdc it will be easier for the central bank to control inflation and implement several other monetary policies. because of the currency issued by this central bank

will be directly monitored and if the central bank needs to decide on a policy they will work directly with the system that is in the public so that the resulting impact will be faster and more targeted in determining this policy. Apart from that, the implementation of CBDC will minimize money laundering because the government and central bank can directly distribute policies to the public.

V. Conclusion

The implementation of the use of digital currency is a form of central bank support for the digitalization process. The public's need for transactions that are safer, easier, and more efficient has prompted the central bank to develop a central bank digital currency. The digital rupiah that is currently being developed is expected to be able to help the public in a faster transaction process and be open to all the information in it. This digital currency also concerns military policy by the central bank, with digital currency, all monetary policies will be implemented more easily, quickly, and on target because their use is directly supervised and controlled by the central bank

References

- (NFW/KAW). 2022a. "Mengenal Lebih Dekat Central Bank Digital Currency (CBDC)." *dirjen perbendaharaan direktorat pkn*. <https://djp.kemenkeu.go.id/direktorat/pkn/id/odading/2918-mengenal-lebih-dekat-central-bank-digital-currency-cbdc.html>.
- . 2022b. "Mengenal Lebih Dekat Central Bank Digital Currency (CBDC)." *kemenkeu.go.id*.
- A'LA, CUT NURUL. 2021. "PENGARUH PERSEPSI KEMUDAHAN PENGGUNAAN, EFEKTIVITAS DAN RISIKO TERHADAP MINAT BERTRANSAKSI MENGGUNAKAN FINANCIAL TECHNOLOGY (FINTECH)." 3(2): 6.
- Ausop, Asep Zaenal, and Elsa Silvia Nur Aulia. 2018. "Teknologi Cryptocurrency Bitcoin Untuk Investasi Dan Transaksi Bisnis Menurut Syariat Islam." *Jurnal Sositologi* 17(1): 74–92.
- Bernada, Tetanoe. 2017. "Dalam Transaksi E-Commerce Untuk Mendukung Pertumbuhan Ekonomi Digital Di Indonesia E- Commerce Transaction ' S Consumers To Support the Digital Economy Growth in Indonesia." *Jurnal Hukum dan Peradilan* 6(1): 1–24.
- Carla Sheila Wulandari. 2023. "DOMPET DIGITAL NAIK DAUN, MEMBETOT MINAT KALA PANDEMI." <https://www.bi.go.id/id/bi-institute/BI-Epsilon/Pages/Dompot-Digital--Naik-Daun,-Membetot-Minat-Kala-Pandemi.aspx>.
- Kristantyo Wisnubroto. "Transaksi Uang Elektronik Melejit." *indonesia.go.id*. <https://www.indonesia.go.id/kategori/indonesia-dalam-angka/6855/transaksi-uang-elektronik-melejit?lang=1>.
- Muhammad Syafii. 2022. "Metode Penelitian Kualitatif Adalah." *universitas muhammadiyah sumatra utara*. <https://umsu.ac.id/metode-penelitian-kualitatif-adalah/>.
- perry warjiyo solikin. 2003. *Kebijakan Moneter Indonesia*. <https://play.google.com/books/reader?id=Y5rWDgAAQBAJ&pg=GBS.PA2&hl=id&lr=>.
- Robert, By, and E Bob Brown. 2004. "Proyek Garuda, Menavigasi Arsitektur Digital Rupiah." (1): 1–14.
- Salim, Jul Fahmi. 2017. "Pengaruh Kebijakan Moneter Terhadap Pertumbuhan Ekonomi Di Indonesia Periode Tahun 2000: 1–2010: 12." *E-Kombis* III(2): 68–76. <https://digilib.uns.ac.id/dokumen/detail/23508%0Ahttps://digilib.uns.ac.id/dokumen/download/23508/NTA2OTM=/Pengaruh-Kebijakan-Moneter-Terhadap-Pertumbuhan-Ekonomi-Di-Indonesia-Periode-Tahun-20001-201012-Ratih-Dian-Yuniarti--F0107107.pdf>.
- Sari, Sepri Wulan. 2016. "Perkembangan Dan Pemikiran Uang Dari Masa Ke Masa." *An-Nisbah: Jurnal Ekonomi Syariah* 3(1).
- Setiawan, I Wayan Arta, and Luh Putu Mahyuni. 2020. "Qris Di Mata Umkm: Eksplorasi Persepsi Dan Intensi Umkm Menggunakan Qris." *E-Jurnal Ekonomi dan Bisnis Universitas Udayana* 10: 921.
- Turner, Barry. 2014. *Asian Development Bank Institute*.
- Warjiyo, Perry. 2007. "Stabilitas Sistem Perbankan Dan Kebijakan Moneter: Keterkaitan Dan Perkembangannya Di Indonesia." *Buletin Ekonomi Moneter dan Perbankan* 8(4): 429–54.