#### **RTP104**

# Physical currency or Crypto currency, which one will be better for our economy?

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#### Abstract

As the world transitions towards a cashless society, there is a growing debate on whether physical currency or cryptocurrency is better for the economy. While physical currency has been the traditional medium of exchange, cryptocurrencies are gaining popularity due to their decentralized nature and potential for lower transaction costs. This paper examines the pros and cons of each option, including factors such as security, ease of use, and potential for financial inclusion. Ultimately, the question of which one is better for the economy depends on a range of factors, including the specific needs and circumstances of each country.

**Keywords:** Bitcoin, Blockchain, Banknotes, cryptography, currency, financial system, means of exchange, security, consumers.

#### Introduction

For thousands of years, a key component of human civilization has been the use of currency as a form of trade for commodities and amenities. Physical currency also known as regular negotiable currency refers to the traditional type of currency such as paper notes, coins which are assigned by the government. Whereas, crypto currency is a digital form of transactional currency which uses cryptography for security (Kulkarni, 2020). Each currency has its own benefits and characteristics which are suitable in different areas of the economy. Besides, both physical and crypto currency have their own advantages and disadvantages which is why this paper is going to describe both types of currency very gently and give a certain opinion of the authors.

Both currencies have to be considered before determining which one is beneficial for the economy(Alhaji, 2022). It is important because it addresses the ongoing debate about the future of money and that's the reason the authors are choosing this matter. There are certain factors that will help individuals to identify which one is better like consumer preference, authorization of government and so on.

### **Objectives**

The objective of discussing the topic of physical currency versus cryptocurrency is to evaluate which one is better for the economy. This involves defining physical currency and cryptocurrency, analyzing their impacts on the economy, and comparing their advantages and disadvantages. Specifically, it is needed for individuals to evaluate the impacts of actual currency on inflation, taxation, and production costs, as well as the potential benefits of cryptocurrency in reducing transaction costs, facilitating cross-border transactions, and increasing financial inclusion. After evaluating both forms of currency, a recommendation can be made on which one is better suited for the economy and explain why.

## **Research Questions**

- How does using physical money versus cryptocurrency affect economic growth, and could cryptocurrency help improve it?
- How can policymakers and financial institutions manage the benefits and risks of adopting cryptocurrency?
- How are consumer accounts secured using cryptocurrency?

#### Literature review

From the research of Izwan Amsayr and Ethan Christopher we found that Crypto currency has the potential to revolutionize financial transactions by providing a decentralized, secure, and efficient method for conducting digital transactions. They got a major point. Because crypto currency is a form of transaction depending on whether we use it or not. But according to Ahmed et al. (2022), Physical currency, through its tangible form and wide acceptance, plays an important role in facilitating economic transactions and fostering economic stability. Besides, some other research shows that both types of currency have the potential to achieve the main throne of the economy (Grym, 2018). In the article of (Duque,2020), showed some great advantages of crypto currency such as the management system of this currency is very much

efficient and safe that a consumer can rest assured. So in order to find out which one is the best we need to go through deep down.

#### Discussions

Physical currency is a type of currency where people can not complete their transaction process in a short time but by using crypto currency people can transfer money faster and it is cheaper because people don't need to give extra charge for transferring their money. As for physical currency, paper notes or coins can be stolen easily which means it is not secured if the user of that money is not conscious. But on the other hand crypto currency is highly secured. In this currency "BITCOIN" is the widely known digital coin which is secured by a public ledger name "BLOCK CHAIN" (Minesso, et. al, 2020). In this chain where every block are connected with this unique #code which is why it is impossible to change the # code and hack it. But people who don't have the knowledge of using devices will face difficulty using this crypto currency where physical money can play a vital role. People can find banknotes and coins everywhere but when we talk about crypto currency people need to go through a long process in order to have that digital money. On the other hand, one of the key advantages of digital currency is its ability to assist people without access to traditional banking services, such as bank accounts and credit cards, to participate in the economy (Rose, 2015). In terms of the economy, physical currency and cryptocurrency have different implications. Physical currency is subject to inflation and is affected by government monetary policies, while cryptocurrency operates independently of central authorities, making it less susceptible to government intervention. However, The widespread use of cryptocurrencies could result in a shift away from conventional financial institutions, which would damage the stability of the economy and the government's ability to manage monetary policies effectively. However, there are also several challenges associated with both physical currency and cryptocurrency. Physical currency is susceptible to counterfeiting and theft, while cryptocurrency is prone to market volatility, hacking, and fraudulent activities (Williamson, 2022). There is also a lack of regulatory frameworks for cryptocurrency, which raises concerns about its legality and stability in the long run.

# Strategic path

In the author's opinion, the use of digital currency has the possibility to bring notable advantages in the economic system. However, it also

poses certain risks and obstacles that must be addressed. The government needs to educate the public about crypto- currency to promote its adoption. People around the world need to understand the working pattern of cryptocurrency and its advantages as well as drawbacks. So descriptive knowledge regarding cryptocurrency is highly required to embrace the new leading to speedy adaptation. Besides, in order to develop rules for digital currencies, governments need to leverage collaborative work with other businesses, which ensure safety and growth. This initiative advanced technology can be used while also protecting people's money. Additionally, investment in developing a secure infrastructure to support the use of cryptocurrency is must. Cryptocurrency transactions are secured through blockchain technology (Kulkarni and Patil, 2020). Therefore, the government needs to propose an adequate budget for the development of secure blockchain technology infrastructure to establish the security of transactions.

#### Conclusion

Digital currency offers a lot of advantages that could completely transform our economy to a great extent. Given that the digital currency is decentralized, there are less requirements for middlemen like banks, which lowers transaction costs and faster processing times. The use of digital currency may accelerate economic mobility, particularly for the people who lack access to traditional banking service. The need for balance between invention and usage to safeguard consumers and the financial system while simultaneously promoting economic growth can be corroborated by the digital currencies. Moreover, digital currency not only offers greater transparency but also provides security, and privacy compared to physical currency. Beyond shadow of doubt, employment of blockchain technology, all transactions are documented securely and lowering the feasibility of fraud and hacking. Furthermore, consumers have more privacy and anonymity with pseudonymous money exchange. Digital currency serves numerous benefits to our economy, it is important to draw a balance between innovation as well as stability. However, the adoption of digital currency must be gradual and regulated, for good it should not undermine the integrity of the traditional monetary system. The right regulatory frameworks as well as infrastructure must be in place to ensure the safe and efficient use of digital currency, which can result in a more inclusive and prosperous economy.

#### **References:**

- 1. Ahmed, A. A., Saidu, A. A., & Kawure, J. H. (2022). The Roles of Central Bank Digital Currency over Physical Currency. *International Journal of Social Science Education Communication and Economics (SINOMICS JOURNAL)*, 1(2), 75–92. https://doi.org/10.54443/sj.v1i2.10
- Aleksi. G, Bank of Finland, The great illusion of digital currencies https://publications.bof.fi/bitstream/handle/10024/43571/BoF ER\_1\_2018.pdf?sequence=1&isAllowed=y
- 3. Amsyar, I., Christopher, E., Dithi, A., Khan, A. N., & Maulana, S. (2020). The Challenge of Cryptocurrency in the Era of the Digital Revolution: A review of Systematic literature. *Aptisi Transactions on Technopreneurship (ATT)*, 2(2), 153–159. https://doi.org/10.34306/att.v2i2.96
- 4. Duque, J. J. (2020). State involvement in cryptocurrencies. A potential world money? *The Japanese Political Economy*, 46(1), 65–82. https://doi.org/10.1080/2329194x.2020.1763185
- 5. Ferrari, M. M., Mehl, A., & Stracca, L. (2020). Central bank digital currency in an open economy. *ideas.repec.org*. https://ideas.repec.org/p/ecb/ecbwps/20202488.html
- 6. Ji, Y., & Shen, Y. (2021). Introduction to the special issue on digital currency. *China Economic Journal*, *14*(1), 1–3. https://doi.org/10.1080/17538963.2020.1870283
- 7. Kulkarni, M. S., & Patil, K. (2020). Block Chain Technology Adoption for Banking Services- Model based on Technology-Organization-Environment theory. *Social Science Research Network*. https://doi.org/10.2139/ssrn.3563101
- 8. Rose, C. (2015). The Evolution Of Digital Currencies: Bitcoin, A Cryptocurrency Causing A Monetary Revolution. https://www.clutejournals.com/index.php/IBER/article/view/9353/9406
- 9. Williamson, S. D. (2022). Central bank digital currency and flight to safety. *Journal of Economic Dynamics and Control*, *142*, 104146. https://doi.org/10.1016/j.jedc.2021.104146

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