VIDYA - A JOURNAL OF GUJARAT UNIVERSITY

Peer-Reviewed, Multidisciplinary & Multilingual Journal

ISSN: 2321-1520 **E-ISSN:** 2583-3537

USING CRYPTOCURRENCY IN AFGHANISTAN

Mohammad Khalid Khawrin

Assistant Professor
Faculty of Law and Political Science, Kunduz University, Afghanistan
mk.khawreen@gujaratuniversity.ac.in / mk.ahmadzai786@gmail.com
https://orcid.org/0000-0003-3313-2061

Nooman Zadran

Department of M.Sc. IT Network Security
Gujarat University, Gujarat, India
noomanzadran293@gmail.com
Phone : +91 9316310603

Ahmad Helal

Kabul University of Medical Sciences Abu Ali Ibn Sina,
Kabul, Afghanistan
drhelalahmad@gmail.com

ABSTRACT

The world is on the brink of rewriting business and monitoring history. It is very crucial to mention academically how Afghan crypto-monitory transactions are taking place. even though it is a soft threat to official government organizations via tax evasion, money laundering, and terrorism financing. The qualitative method with content analysis was applied because the data was in textual form. The data was analyzed through Atlis.ti 9. First of all, the interviews were coded, and then themes were created. The result showed that Bitcoin and Binance had the most users, and there were six types of cryptocurrencies in Afghanistan. Furthermore, the advantages and disadvantages were highlighted. Lastly, it was highly suggested that the Afghan government have specific laws for general protection and to gain the benefits of the new world of high technology.

Keyterms: Digital currency, decentralized money, Binance, Ethereum, Tether

INTRODUCTION

Electronic money has the potential to replace cash as the principal method of making small-value payments, making them easier and less expensive for both customers and businesses (Al-Laham et al., n.d.). Furthermore, digital currency is any valuable cash, money, or money-like item that is largely handled, saved, or exchanged on digital computer systems, notably through the internet, and is referred to as digital currency. It is also known as digital money, electronic money, or electronic currency. Cryptocurrencies, virtual currencies, and central bank digital currencies are examples of digital currencies. Digital money can be saved in a distributed internet database, a centralized electronic computer database controlled by a firm or bank, digital files, or even a stored-value card (Al-Laham et al., n.d.). In addition, it is argued that digital money can be centralized, with a central point of authority over the money supply (such as a bank), or decentralized, with power over the money supply predefined or democratically agreed upon ("Digital Currency," 2022).

On the other hand, the freedom of humans gives an opportunity for them to also make something and give value for exchange with decentralized things. Moreover, the power centers are shifting because of the Fourth Industrial Revolution, which is focused on the digitalized industry. Cryptocurrency, for example, has the potential to disrupt the financial industry, the retail market, and global monetary policy. Our world is changing as a result of disruptive technologies such as the Internet, Mobile Internet, and the Internet of Things. On the one hand, society has acquired basic and affordable comforts at a lower cost, while on the other hand, many individuals have lost their employment (Limba et al., 2019).

Cryptocurrency is a synthesis word that has the meaning of secret money. Therefore, the decentralized digital currency is called "cryptocurrency." The white paper published by the enigmatic Satoshi Nakamoto in 2008 was the first appearance of the new cryptocurrency. This currency has the function of payments being made directly from one person to another without passing via a financial institution under the Nakamoto payment paradigm (Limba et al., 2019). In other words, cryptocurrency is a type of digital currency that is exchanged using distributed ledger technology and encryption methods (Gnan & Masciandaro, 2018). In addition, the centralized currency has

VIDYA - A JOURNAL OF GUJARAT UNIVERSITY
Peer-Reviewed, Multidisciplinary & Multilingual Journal
ISSN: 2321-1520 **E-ISSN:** 2583-3537

a specific place, rules, privileges, rights, responsibilities, and others can sue, and this center can sue in court and take and perform responsibilities. Hence, the centralized and decentralized currencies can be understood in the below diagram (Figure 1).

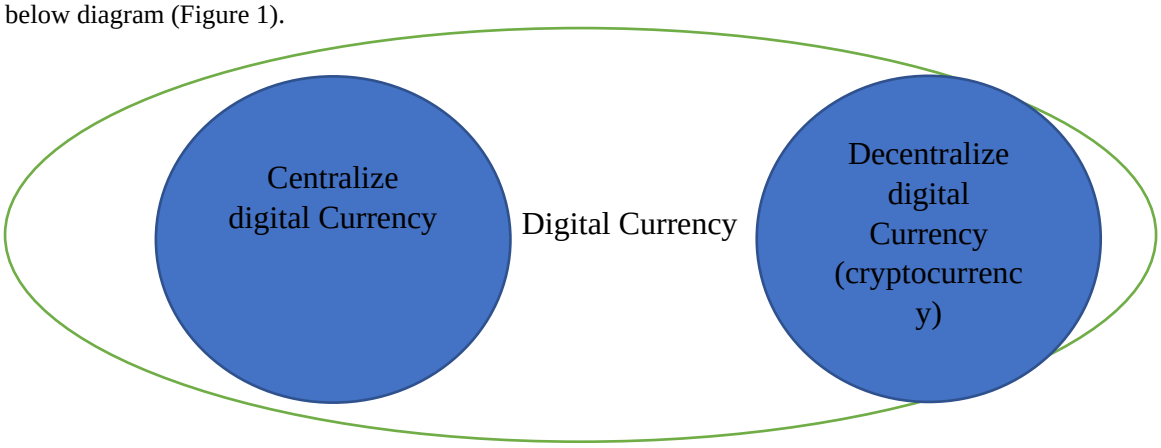

Figure 1 Digital Currency Model

Cryptocurrency bubbles are frequently fueled by fantasies of life-changing wealth. Instead, purchasers in Afghanistan are flocking to digital currency in the hopes of conserving what little wealth they have (Najafizada & Bloomberg, 2022). The cryptocurrency mining map illustrates that publicly known mining operations are distributed geographically, although there is a substantial concentration in some Chinese areas (Hileman & Rauchs, 2017).

Following the Taliban takeover, many Afghans are claimed to have turned to crypto trading to meet their financial demands, causing the country to progressively climb the crypto acceptance ladder. During the crypto boom of 2021, Afghanistan rated 20th out of 154 nations on Chainalysis' Crypto Adoption index. Afghanistan has jumped to sixth place in terms of crypto adoption based on peer-to-peer trading volume (CNBCTV18, 2022).

People used to bury their cash and jewels beneath their beds during previous crises. They've opted to bury it in crypto this time. Digital currencies are in high demand (Zimwara, 2022). Many Afghans have resorted to cryptocurrencies as a means of exiting the nation. The digital assets proved to be lifesavers, particularly for Afghan women who were unable to create bank accounts in their nation (NDTV Business Desk, 2022). In a nutshell, cryptocurrency is a sort of virtual currency that is built on cryptographic and electronic communication concepts (Vejačka, 2014).

LITERATURE REVIEW

Prasad believes that actual currency will be phased out. As major firms such as Facebook and Amazon enter the game, cryptocurrencies are going to evolve in unpredictable ways. Snowballing technologies are transforming finance and have already begun to disrupt how we invest, trade, insure, and manage risk as a result of the changes (Prasad, 2021). The worst-case scenario for a country operating on legacy financial tracks has been laid plain for many Afghans on the 15th of August 2021 in the forming of the Islamic Emirate of Afghanistan. A widespread cash shortage, shuttered borders, a falling currency, and fast-rising prices of essential items crush the Afghan trade and business. Many banks were forced to close their doors due to a cash shortage. Hundreds of Kabul citizens gathered outside bank offices in a hopeless attempt to withdraw funds from their accounts, going viral (Sigalos, 2021). However, recent advancements in distributed ledger technology and Blockchain technology have breathed fresh life into asset-backed currencies in the form of cryptocurrency (Lipton et al., 2018).

Common Types of Cryptocurrency

Some cryptocurrencies are utilized through daily USD prices for 100 consecutive days, including Bitcoin, Ethereum, Tether, Dogecoin, and Binance Coin (Charandabi & Kamyar, 2021). There are many types of cryptocurrency and some of the most popular are as below:

Bitcoin

Bitcoin is a decentralized, partially anonymous digital currency that is not backed by any government or other legal body and cannot be exchanged for gold or any other commodity. To preserve its integrity, it uses peer-to-peer networking and cryptography (Grinberg, 2011, p. 160).

VIDYA - A JOURNAL OF GUJARAT UNIVERSITY
Peer-Reviewed, Multidisciplinary & Multilingual Journal
ISSN: 2321-1520 **E-ISSN:** 2583-3537

Digital Gold Currency
In the mid-1990s, digital gold currency (DGC) was introduced, allowing for complicated, instantaneous, and irreversible financial transactions through the Internet. These systems quickly became popular because of the lack of constraints on usage or identification verification (Mullan, 2014a).

Binance
The ideas highlight worries about self-regulated exchanges like Binance, which serve as a broker, custodian, and central counterparty for clearing deals in addition to serving as a trading platform (Alexander et al., 2021).

Litecoin
Litecoin has progressed beyond fiat currency, and the boom of Litecoin mining began in October 2011. It's a type of digital decentralized money that's produced and stored digitally. It is not under anyone's control. Litecoins aren't printed like dollars or Thai baht; instead, they're created by a large number of individuals using software to solve mathematical problems on computers all around the world. It may be sent electronically in a matter of seconds, with very cheap transaction fees (Gibbs & Yordchim, 2014).

Ethereum
Ethereum is a blockchain with a Turing-complete programming language built-in. It has an abstract layer that allows anybody to define their ownership, transaction formats, and state transition algorithms. This is accomplished through the use of smart contracts, which are a collection of cryptographic rules that are only performed if specific criteria are satisfied. The Ethereum network uses a modified Greedy Heaviest Observed Subtree (GHOST) algorithm for consensus. It was intended to address the problem of network stale blocks. Stale blocks can develop if one group of miners in a mining pool has more computational power than the rest, causing the first pool's blocks to contribute more to the network and causing the centralization problem. The GHOST protocol takes stale blocks into account when calculating the longest chain (Vujicic et al., 2018).

Tether
It is believed that because Tether is the indisputable "stable coin," minting more Tether functions in the same way as monetary growth in cryptocurrency markets, increasing Bitcoin values. It also shows a surge in Tether trade after a drop in Bitcoin returns (Wei, 2018).

Dogecoin
Dogecoin is more of an inflationary leisured investigation of community-building around a crypto asset than it is an alternative deflationary numismatic tool. Dogecoin is a cryptocurrency asset type that has a market valuation of $10 billion as of mid-February 2021 (Chohan, 2021).
Policymakers should be aware of several significant dangers associated with choosing a largely passive and sluggish stance. For instance, “instability in the macroeconomic environment, loss of monetary control and policy, systemic risks, and susceptibility to severe downturns” (Bordo & Levin, 2017, p. 20).

Pros and cons of cryptocurrency
A cryptocurrency is a digital payment system that is similar to traditional currencies such as the US dollar, but it was created specifically for the exchange of digital data with no central power and controller. As Eswar Prasad explains, the financial world is on the verge of a tremendous upheaval that will affect corporations, bankers, governments, and, ultimately, all of us. Money's revolution will radically alter how regular people conduct their lives (Prasad, 2021). According to officials, criminals are increasingly adopting cryptocurrencies for illegal operations such as money laundering, terrorism financing, and tax avoidance (Houben & Snyers, 2018). The more difficult it is to predict the bitcoin cryptocurrency exchange rate, the more difficult it becomes (Tarasova et al., 2020).
Blockchain is simply a publicly accessible, distributed database that allows anybody to edit the underlying code and observe the current state of a transaction. After all, it's a peer-to-peer network (Jeyanthi, 2020).
Different dimensions benefit crypto-currencies based on Blockchain, such as improving the transparency of balances and transactions while also serving as a handy record-keeping tool. In comparison to traditional payment systems, it is more resistant to cyber-attacks and operational faults. When a payment is verified, the payee receives the funds instantly. When the owner submits their digital signature, the payments are authorized. Payments are not limited by geographical boundaries (Gnan & Masciandaro, 2018).
Blockchain-based cryptocurrencies have several drawbacks. For instance, Blockchain necessitates substantial energy inputs, which might result in greater transaction costs than are now charged in the domestic market. Payment finality happens after the transaction has been validated, which might cause products and services to be delayed. Due to the computer power and time delay necessary to confirm transactions, the Blockchain is not

VIDYA - A JOURNAL OF GUJARAT UNIVERSITY
Peer-Reviewed, Multidisciplinary & Multilingual Journal
ISSN: 2321-1520 **E-ISSN:** 2583-3537

scalable to relatively high volumes of payments. Payment finality is uncertain and one-way (Gnan & Masciandaro, 2018).

Research Problems

Since then, US sanctions on Afghanistan, collapsing banks, and the cessation of international aid and financial transfers have left the country's economy in shambles. An author argued that crypto is on the way to save the day (Silic, 2022). Traditional banking goods and services are unavailable in some parts of the world. Digital money delivers vital services and benefits for local users in nations or parts of the world with large non-bank populations (Mullan, 2014b). Furthermore, The Afghan people are said to have turned to cryptocurrencies to get through the financial crisis that erupted following the Taliban's capture of their country in August. The list of problems seemed endless, from cash shortages to bank and other financial institution closures in an economy that relies heavily on cash transactions. With non-governmental organizations like Western Union and SWIFT ceasing operations, cryptocurrency appeared to be their sole option for transferring payments (CNBCTV18, 2022, p. 18). International financial institutions' decision to halt funding to Afghanistan has made the economic recovery even more difficult, and the country's diplomatic isolation, as the Islamic Emirate of Afghanistan's administration refers to it, hasn't helped matters. However, a few young Afghans are avoiding the worst of the crisis thanks to digital currencies and their decentralized architecture, which are immune to international sanctions (AFP, 2022). Therefore, it is very important to scrutinize the digital currency and its usage in Afghanistan.

RESEARCH GAP

There is no academic research on digital currency usage in Afghanistan. That finds the solution of economic sanctions, business isolation, business transactions, monitory availability, and aid to the non-combatant population. In addition, it is important for economic and business diversity. This research would pave the way for current hurdles of poor and innocent civilians. Therefore, it is argued that the digital generation is struggling to find a digital solution.

Objectives of the study

To specify the cryptocurrencies used in Afghanistan.

Specific objectives of the study:

To differentiate from the common type of cryptocurrency type in Afghanistan.
To know the pros and cons of cryptocurrencies used in Afghanistan.

Research Questions

Q 1: How many types of cryptocurrencies are in use in Afghanistan?
Q 2: Which type of cryptocurrency is common and most usable in Afghanistan?
Q 3: What are the pros and cons of cryptocurrencies for Afghanistan?

METHODOLOGY

Method

There was no research to tackle the current conundrum of the Afghan nation. Therefore, this study was based on a qualitative research method. In addition, the data was available in a textual format. The content analysis method was used for the analysis.

Data collection

From August 22, up to April 25, 2022, six digital news agencies' websites via, Cointelegraph (Pessarlay, 2022), Fortune (Najafizada & Bloomberg, 2022), Aljazeera (AFP, 2022), CNBC TV 18 (CNBCTV18, 2022), CNBC (Sigalos, 2021), and NDTV (NDTV Business Desk, 2022), textual reports were selected for research. So a secondary data collection method was used. These news agencies interviewed 28 Afghan nationals who were inside Afghanistan and replied regarding the cryptocurrency.

Analysis tool

Atlas.ti qualitative analysis software version 9 was used for data analysis. First, data were inductively coded and then themes were made to answer the research questions relatively.

VIDYA - A JOURNAL OF GUJARAT UNIVERSITY
Peer-Reviewed, Multidisciplinary & Multilingual Journal
ISSN: 2321-1520 **E-ISSN:** 2583-3537

RESULTS AND FINDINGS

The research results depicted as below:

Table 1: Frequencies of participants of News interviews

	Gender of the participants		
News Agency name	**Male**	**Female**	Total
Cointelegraph	6	1	7
Fortune	5	0	5
Aljazeera	4	1	5
CNBC TV 18	2	1	3
CNBC	3	2	5
NDTV	2	1	3
Total of participants	22	6	28

Table 1 shows the number of participants who have given an interview to different new agencies. There were 28 participants, which consisted of 22 males and 6 females.

Table 2: Frequencies of cryptocurrencies used and reported by News interviews

Type of cryptocurrencies frequencies reported	News Document 1 (Coin telegraph)	News Document 2 (Fortune)	News Document 3 (Aljazeera)	News Document 4 (CNBC TV 18)	News Document 5 (CNBC)	News Document 6 (NDTV)	Totals Frequencies
Avax	0	1	0	0	0	0	1
Binance	4	0	2	1	2	0	9
Bitcoin	4	1	0	0	4	1	10
Ethereum	0	1	0	0	1	0	2
Stablecoin	2	2	0	0	0	0	4
Tether	4	0	1	1	0	0	6
Totals	14	5	3	2	7	1	32

Table 2 shows the different types of cryptocurrencies used by Afghans. Avax was reported by one participant, Binance was reported by nine participants, Bitcoin was reported by 10 participants, Ethereum was reported by 2 participants, Stablecoin was reported by 4 people, and Tether was reported by 6 participants of the study.

Q 1: How many types of cryptocurrencies are in use in Afghanistan?

Table 2 shows the Afghan interviewees' confessed of six types of cryptocurrencies used by Afghan businesses and civilians inside Afghanistan. These cryptocurrencies were via Avax, Binance, Bitcoin, Ethereum, Stablecoin, and Tether.

VIDYA - A JOURNAL OF GUJARAT UNIVERSITY
Peer-Reviewed, Multidisciplinary & Multilingual Journal
ISSN: 2321-1520 **E-ISSN:** 2583-3537

Q 2: Which type of cryptocurrency is common and most usable in Afghanistan?
Table 2 shows the Afghan interviewees. Most of the participants used Bitcoin and its frequency was 10. Secondly, Binance had more users. On the other hand, Avax was the least used cryptocurrency by Afghan users.

Table 3: Afghan news interviewees reported that cryptocurrency has below pros and advantages

Pros of cryptocurrencies	Number of interviewees responded with inductive code
Effectiveness and efficient for business transaction	27
New jobs and recruitments of employees	22
High level of profit	17
High level of protection	14

Q 3: What are the pros and cons of cryptocurrencies for Afghanistan?
Table 3 depicted the pros of Afghan cryptocurrency users as below:

Pros:

The data showed three big levels of theme via 27 participants' responses that cryptocurrency has effectiveness and efficiency for business transactions, as Habibullah Timori said, “Preserving of wealth, decentralized currency, sending, and receiving peer to peer.” 22 participants responded that crypto currency facilitates new jobs and recruitment of employees, as Maihan charged “commission of 1.5%” and “recruit digital literate people.” 17 participants’ clamed high level of profit. as Haqshanas said, “high demand, designed to retain their value, a 22-year-old student who now earns more than his doctor father, trades small amounts of digital assets that allow him to make some extra money." In addition, 14 participants argued that cryptocurrency has a high level of protection, as Ramin said, "Blockchain technology, countries riven by civil strife or war.”

Table 4: Afghan news interviewees reported that cryptocurrency has below cons and disadvantages

Cons of cryptocurrencies	Number of interviewees responded with inductive code
Unlawful activities	7
Unstable price	2
Pegged with dollar	3
Difficult to buy in Afghanistan due to weak ICT, internet, and electricity	4
Afghans have digital illiteracy	4
Money laundering and illegal financing	2
Difficult to exchange	1

Table 4 depicted the cons of Afghan cryptocurrency users as below:

Cons:

The data described the interviewees. Seven participants reported that it was unlawful activity. Such as Parisa Rahamati and Rahnavard said, “decentralized currencies,” and Rahnavard said, “take the power from governments and give it back to the people." Forough said, “Afghans started using Virtual Private Networks (VPNs) to mask their geographical location and IP address to make trades.” Two participants reported that it has an unstable price, as Forough said, "cryptocurrency, the price of which regularly swings wildly.” Three participants said that it was pegged to the dollar. As Forough said, “digital currencies are pegged to an asset such as the dollar.” Four participants reported that it is difficult to buy in Afghanistan due to weak ICT, internet, and electricity, as Ruholamin argued that “lack of internet access, electricity, and technology.” Four participants argued that the Afghans have digital illiteracy, as Rahnavard said, “the low literacy rate”, very hard to teach everyone.” Two participants argued that cryptocurrency is used for money laundering and illegal financing as Forough argued that “tied to drug trades, there’s a lot of scammers.” One participant person said that it is difficult to exchange as Rahnavard said, “Binance, it became difficult to deposit or withdraw crypto to or from the crypto exchange."

DISCUSSIONS

Cryptocurrency has benefits such as high level of profit, protection, and facilitate new jobs, business, and trade all over the world. Cryptocurrency took in an arena of illegal space; need more sophisticated technologies, and digital literacy. Similarly, Houben and Snyers discovered that there are more criminal activities with harm others property, money laundering, terrorism financing, and tax avoidance (Houben & Snyers, 2018). Moreover, it is very hard to understand the value changing rate in the future (Tarasova et al., 2020).

VIDYA - A JOURNAL OF GUJARAT UNIVERSITY
Peer-Reviewed, Multidisciplinary & Multilingual Journal
ISSN: 2321-1520 **E-ISSN:** 2583-3537

SUGGESTIONS

It is recommended to the Afghan government have specific laws and regulations for government, business organizations, and civilian interests; otherwise, cryptocurrencies may become a means of trade in the underground economy of Afghanistan.

REFERENCES

1. AFP. (2022, March 21). Crypto provides fix for some in crisis-hit Afghanistan. https://www.aljazeera.com/news/2022/3/21/crypto-provides-fix-for-some-in-crisis-hit-afghanistan
2. Alexander, C., Heck, D., & Kaeck, A. (2021). The Role of Binance in Bitcoin Volatility Transmission (arXiv:2107.00298). arXiv. https://doi.org/10.48550/arXiv.2107.00298
3. Al-Laham, M., Al-Tarawneh, H., & Abdallat, N. (n.d.). Development of Electronic Money and Its Impact on the Central Bank Role and Monetary Policy. 11.
4. Bordo, M., & Levin, A. (2017). Central Bank Digital Currency and the Future of Monetary Policy (No. w23711; p. w23711). National Bureau of Economic Research. https://doi.org/10.3386/w23711
5. Charandabi, S. E., & Kamyar, K. (2021). Using A Feed Forward Neural Network Algorithm to Predict Prices of Multiple Cryptocurrencies. European Journal of Business and Management Research, 6(5), 15–19. https://doi.org/10.24018/ejbmr.2021.6.5.1056
6. Chohan, U. W. (2021). A History of Dogecoin (SSRN Scholarly Paper No. 3091219). Social Science Research Network. https://doi.org/10.2139/ssrn.3091219
7. CNBCTV18. (2022, February 25). How crisis-hit Afghans are using crypto to pay for daily needs. Cnbctv18.Com. https://www.cnbctv18.com/cryptocurrency/how-crisis-hit-afghans-are-using-crypto-to-pay-for-daily-needs-12622532.htm
8. Digital currency. (2022). In Wikipedia. https://en.wikipedia.org/w/index.php?title=Digital_currency&oldid=1087936120
9. Gibbs, T., & Yordchim, S. (2014). Thai Perception on Litecoin Value. International Journal of Social, Education, Economics and Management Engineering, 8(8), 3.
10. Gnan, E., & Masciandaro, D. (Eds.). (2018). Do we need central bank digital currency? Economics, technology and institutions (The European Money and Finance Forum, Vol. 81). SUERF/BAFFI CAREFIN Centre Conference. http://hdl.handle.net/10419/193957
11. Grinberg, R. (2011). Bitcoin: An Innovative Alternative Digital Currency. 4, 50.
12. Hileman, G., & Rauchs, M. (2017). Global Cryptocurrency Benchmarking Study. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.2965436
13. Houben, D. R., & Snyers, A. (2018). Cryptocurrencies and blockchain. European Parliament, 103. https://doi.org/10.2861/263175
14. Jeyanthi, P. M. (2020). THEORIES OF CRYPTOCURRENCY, BLOCKCHAIN AND DISTRIBUTED SYSTEMS AND ENVIRONMENTAL IMPLICATIONS - Cryptocurrencies and Blockchain Technology Applications—Wiley Online Library. In G. Shrivastava, D.-N. Le, & S. Kavita (Eds.), Cryptocurrencies and Blockchain Technology Applications. https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119621201.ch12
15. Limba, T., Stankevičius, A., & Andrulevičius, A. (2019). Cryptocurrency as Disruptive Technology: Theoretical Insighs. ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES, 6(4), 2068–2080. https://repository.mruni.eu/handle/007/15832
16. Lipton, A., Hardjono, T., & Pentland, A. (2018). Digital trade coin: Towards a more stable digital currency. Royal Society Open Science, 5(7), 1–15. https://doi.org/10.1098/rsos.180155
17. Mullan, P. C. (2014a). Digital Gold Currency. In P. C. Mullan (Ed.), The Digital Currency Challenge: Shaping Online Payment Systems through US Financial Regulations (pp. 16–19). Palgrave Macmillan US. https://doi.org/10.1057/9781137382559_4
18. Mullan, P. C. (2014b). Who Uses Digital Currency? In P. C. Mullan (Ed.), The Digital Currency Challenge: Shaping Online Payment Systems through US Financial Regulations (pp. 13–15). Palgrave Macmillan US. https://doi.org/10.1057/9781137382559_3
19. Najafizada, E. & Bloomberg. (2022, April 25). Afghan crypto buyers aren't trying to strike it rich. They're just trying to keep what they have out of the Taliban's reach | Fortune. https://fortune.com/2022/04/24/afghan-crypto-buyers-keep-money-out-of-taliban-reach-stablecoin-herat/
20. NDTV Business Desk. (2022, January 24). Is Afghanistan's Financial Chaos The Perfect Test Case For Usefulness Of Cryptocurrencies? NDTV.Com. https://www.ndtv.com/business/as-afghanistan-plunged-into-economic-turmoil-many-citizens-embraced-cryptocurrency-2726598
21. Pessarlay, W. (2022, February 22). How are Afghans using crypto under the Taliban government? https://cointelegraph.com/news/how-are-afghans-using-crypto-under-the-taliban-government
22. Prasad, E. S. (2021). The Future of Money: How the Digital Revolution Is Transforming Currencies and Finance. Harvard University Press.

ISSN: 2321-1520 **E-ISSN:** 2583-3537

23. Sharma, K. (2022). ANALYSIS OF CRYPTOCURRENCY: AN ETHICAL CONJECTURE WITH REFERENCE TO INDIAN SCENARIO. Sachetas, 1(1), 1–7. https://doi.org/10.55955/110001
24. Sigalos, M. (2021, August 21). Inside Afghanistan's cryptocurrency underground as the country plunges into turmoil. CNBC. https://www.cnbc.com/2021/08/21/bitcoin-afghanistan-cryptocurrency-taliban-capital-flight.html
25. Silic, A. (2022, March 16). Afghans turn to cryptocurrencies amid US sanctions. BBC News. https://www.bbc.com/news/world-asia-60715707
26. Tarasova, T., Usatenko, O., Makurin, A., Ivanenko, V., & Cherchata, A. (2020). Accounting and features of mathematical modeling of the system to forecast cryptocurrency exchange rate. Accounting, 357–364. https://doi.org/10.5267/j.ac.2020.1.003
27. Tripathi, S., Chaubey, A., & Goel, I. (2022). AN EMPIRICAL ANALYSIS OF POTENTIAL CENTRAL BANK DIGITAL CURRENCY ADOPTION PROCEDURE BY INDIAN GOVERNMENT AND ITS IMPLICATIONS. Sachetas, 1(1), 32–38. https://doi.org/10.55955/110006
28. Vejačka, M. (2014). Basic Aspects of Cryptocurrencies. Journal of Economy, Business and Financing, 2, 75–83.
29. Vujicic, D., Jagodic, D., & Randic, S. (2018). Blockchain technology, bitcoin, and Ethereum: A brief overview. 2018 17th International Symposium INFOTEH-JAHORINA (INFOTEH), 1–6. https://doi.org/10.1109/INFOTEH.2018.8345547
30. Wei, W. C. (2018). The impact of Tether grants on Bitcoin. Economics Letters, 171, 19–22. https://doi.org/10.1016/j.econlet.2018.07.001
31. Zimwara, T. (2022, April 26). Report: Afghans Use Crypto to Curb Taliban's Influence on Their Financial Well-Being – Featured Bitcoin News. https://news.bitcoin.com/report-afghans-use-crypto-to-curb-talibans-influence-on-their-financial-well-being/