# Effect of Cryptocurrency Trading and Monetary Corrupt Practices on Nigerian Economic Performance

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# ABSTRACT

Digital financial trading has brought a new dimension of financial technology transactions to the globe. Cryptocurrency trading is one of the new dimensions. However, cryptocurrency trading is plagued with unlawful and monetary corrupt practices, unregulated foreign currency markets, and unknown party participants. Thus, it creates the unpredicted challenge of instigating fear in the investors' minds and scaring away economic agents, and in turn, it adversely affects economic activities. The research investigated the effects of cryptocurrency on the performance of the Nigerian economy. The specific objective was to examine the effect of cryptocurrency trading and monetary and monetary corrupt practices on Nigerian economic performance. The research used primary data through 98 copies of the questionnaire. Tobit regression method of analysis was applied to analyze the data. The finding reveals that cryptocurrency and monetary and monetary corrupt practices have a negative but significant effect on Nigerian economic performance with marginal effects of -0,172 and -0,734 with P < 0,05 as the significance level. The research concludes that cryptocurrency and monetary corrupt practices affect Nigerian economic performance. The research recommends that the government, through the Central Bank of Nigeria (CBN), should regulate and control cryptocurrency trading by using global digital financing system software. The software will monitor and control cryptocurrency trading in Nigeria to enhance cryptocurrency trading to contribute to and increase Nigerian economic activities.

Keywords: cryptocurrency trading, monetary corrupt practices, Nigerian economic performance

#### **INTRODUCTION**

A digital economy with a high level of digital currency trends and government regulation plays a vital role in achieving economic growth and development (Agu, 2020). Globally, literature has established that the digital currency economy fosters capital formation, economic activities, employment generation, poverty reduction, and economic growth. The number of poor masses worldwide remains unacceptably high. It is increasingly apparent that the benefits of economic growth have been spread unequally across regions and countries due to inadequacy in the technology digital currency economy, especially in developing economies (World Bank Group, 2018).

Cryptography-based applications are those that use cryptography. Cryptography has a long history, just like human history. Cryptography-based software is referred to as crypto-technology. In general, these software systems can implement a framework for

virtual data transfer. According to Agu (2020), the influence of cryptocurrency on the global economy is a modern development that has firmly rooted itself in the mainstream. It has been pointed out that cryptocurrency is either a fad or a pipe dream that will disappear in the next few years. Today, however, the situation is very different. Scholars in developed economies have shown that cryptocurrency has grown into a legitimate investment opportunity that is poised to have a major global impact. When the price of Bitcoin cryptocurrency increased from around 572,3 USD in August 2016 to around 4.764,8 USD in August 2017, it attracted much attention. As of 9th March 2019, it accounted for 64,01% of the overall value of all cryptocurrencies, with more than 7 million users (World Bank Group, 2018). Therefore, cryptocurrency can be linked the global economic activities.

Government and economic agents across the globe want to achieve desirable economic goals and objectives through digital financial systems as it can affect economic performance. According to Chuen, Guo, and Wang (2018), economic growth and economic value can be achieved through means of digital financial systems like cryptocurrency and regulated foreign exchange of currency. One of the challenges of cryptocurrencies structure is that it involves known and unknown parties. It is also unregulated by the intermediary financial authorities, which have created high-tension by various governments and monetary and fiscal policies authorities in rejecting and banning cryptocurrency institutional structure, especially in the developing economies like Kenya, Nigeria, and others. In economic transactions involving known and unknown parties, trust is necessary. If it fails to achieve it, it may result in economic loss. According to Vaz and Brown (2020), there is a need to incorporate fiat currency into cryptocurrency based on the cryptocurrency institutional structure due to its confidence and security issues.

In Nigeria, there are various problems attached to cryptocurrency (Agu, 2020). Cryptocurrency is prone to internet attacks due to its easy accessibility and broadcast of public blockchain in the network. Then, cryptocurrency can be used for money laundering due to the lack of government and monetary authorities' intervention. Cryptocurrency also has some security flaws which are explored by hackers and negatively affect economic activities. For instance, Ethereum as part of cryptocurrency is hacked, and 50 million dollars are lost (Price, 2016). This type of hack targets people with a large amount of cryptocurrency in their possession, so it reduces individual investors from transacting on Ethereum cryptocurrency. Similarly, according to Central Bank of Nigeria (2021), cryptocurrency creates challenges of high volatile foreign exchange rates, non-revenue producing assets to countries, and non-regulation around the usage of cryptocurrency. Hence, those challenges hinder economic performance in Nigeria. These challenges have forced the Central Bank of Nigeria (CBN) to enact laws that ban the transaction of cryptocurrency

in Nigeria.

Moreover, cryptocurrency is characterized by a volatility trend, which instigates fear in the investors' minds and scares away economic agents. In turn, it reduces economic activities (Mazikana, 2018). Then, cryptocurrency in most countries is not covered by the law, which may be abused and negatively affect economic growth, especially in developing economies like Nigeria (Agu, 2020). This issue indicates that without government regulation of cryptocurrency, the Nigerian economy may decline through the loss of investment in the Nigerian capital market, financial industry, and investment activities. However, no research, especially in Nigeria, has examined the effect of cryptocurrency trading on Nigerian economic performance. Considering these aforementioned problems and identified gaps, the researchers examine the effect of cryptocurrency trading and monetary and monetary corrupt practices on Nigerian economic performance.

is conceptually Cryptocurrency viewed a blockchain technology characterized by as decentralization, accountability, and unchangeability which digitalizes currency and uses encryption for its transactions on the Internet (Ameer, 2020). Cryptocurrency is a tool to support the development process in developing countries by growing financial inclusion, providing better traceability of funds, and enabling people to escape poverty (Nakamoto, 2008). Cryptocurrency can provide a major gain by overcoming a lack of social confidence and increasing access to financial services (Ammous, 2018).

Cryptocurrency can be featured in terms of Bitcoin, Ethereum, Litecoin, Dash, Ripple, Bitcoin Cash, Libra, Monero, and others (Agu, 2020). According to Holtmeier and Sandner (2019), there are several advantages of cryptocurrency. First, cryptocurrency combines important properties to foster trusts, such as accountability and transparency. It allows trust of free interactions between counterparties. Second, the decentralization of cryptocurrency is something that governments are unable to control. As a result, cryptocurrency is not limited to a single geographic region and can be exchanged anywhere in the world. Third, the speed of money transfer is increased by eliminating intermediaries. Fourth, cryptocurrency through a digital financial system enhances the financial inclusion of adult that has been excluded from the traditional financial system. Fifth, cryptocurrency creates employment opportunities through mining.

Despite the advantages of cryptocurrency, cryptocurrency is faced with many disadvantages, especially in developing economies (Agu, 2020). First, it is prone to online attacks. Second, it can be used for money laundering due to a lack of government involvement. Third, it has some security bugs that hackers abuse. Fourth, it is characterized by a high level of volatility, which instigates fear in the investors' minds. Fifth, it is not regulated and guided by government law. Then, economic activities are viewed as a short–and-long–term increase in supply and demand capacity that leads to activities for the population. It is accompanied by developing technology and the institutional and ideological necessary changes. As a result, it includes human and development indices, growth, structural and institutional changes, and business environment (Popoola, Ejemeyovwi, Alege, Adu, & Onabote, 2017).

Empirically, researchers have begun to focus on the concept of cryptocurrency. However, there is a dearth of literature on the connection between cryptocurrency and economic activities. For instance, Sovbetov (2018) examined the factors that determined cryptocurrency prices using Ethereum, Litecoin, Monero, Dash, and Bitcoin. Through the data collected from the secondary sources, the Auto-Regression Distance Lag (ARDL) analysis revealed that market beta, trading volume, and attractiveness of the currency influenced the prices of cryptocurrency. However, the research fails to capture how cryptocurrency was related to economic activities. Sami and Abdallah (2020) indicated that the cryptocurrency market had a direct relationship with the performance of the stock market. ElBahrawy, Alessandretti, Kandler, Pastor-Satorras, and Baronchelli (2017) attempted to focus on the capitalization of the cryptocurrency market and indicated that despite the appearance and disappearance of cryptocurrency, its market capitalization still increased, and the turnover was relatively stable. However, the economic activities are not captured in the studies. Mikhaylov (2020) indicated that EOS cryptocurrency was the most effective cryptocurrency in the cryptocurrency market while neglecting the role of cryptocurrency in economic activities.

Kuzubov, Shashlo, and Rodionov (2018) tried to link cryptocurrency market activities to economic prospects and directions to conclude that digital currency could be a means of financial transactions in the nearest future of its advantage, which was security. However, this study is not conducted in Nigeria. Similarly, Wu and Pandey (2014) investigated the relationship between cryptocurrency and investment assets. They demonstrated that Bitcoin was not that important as a currency, but it could enhance investment portfolio efficiency. The research also fails to capture the whole activities in the cryptocurrency market. Zhu, Dickinson, and Li (2017) analyzed the determinant of cryptocurrency price by focusing on the price of Bitcoin. The Vector Error Correction (VEC) model from the monthly data from 2011 to 2016 revealed that the custom price index, US dollar index, federal funds rate, and the price of gold determine the price of Bitcoin. However, the study is done in Nigeria, and the whole of cryptocurrency activities are not captured. Then, cryptocurrency was integrated by Oh (2018) in his equation on the money supply. It showed that the adoption of cryptocurrency had a linear relationship with the money supply. However, economic activities are excluded.

and Cong, He, and Li (2021), transaction fees play a part in the transition of Bitcoin from a mining-based structure to a market-based ecology. A game-theoretic model is created to describe the reasons that lead to the creation of transaction fees and miners' and users' strategic conduct. It focuses on the importance of mining rewards and trade volume and how microstructure elements like external structural limitations affect the bitcoin blockchain's dynamics and stability. Then, cryptocurrency is investigated whether it has intrinsic value based on the computational power of networks and network adoption or not (Bhambhwani, Delikouras, & Korniotis, 2019). The fact that miners spend actual money providing computer power to protect and maintain the blockchain supports the hypothesis. An ideally performing blockchain serves as a transactional medium and attracts users, developers, and intermediaries, resulting in an increase in the network size of the cryptocurrency. It discovers a positive and statistically significant association between price, processing power, and network size (adoption levels) that can be used to develop asset pricing variables.

Moreover, Nasekin and Chen (2020) used a cryptocurrency-specific lexicon proposed by Chen, Després, Guo, and Renault (2019) and statistical learning methods to investigate investors' sentiment on cryptocurrency. They used natural language processing methods for sentence-level classification and sentiment index construction, accounting for context-specific information and word similarity by learning word embeddings. They argued that the constructed sentiment indices were value-relevant for cryptocurrency market indices in terms of return and volatility predictability. Then, Pagnotta and Buraschi (2018) also looked at cryptocurrency valuation by characterizing Bitcoin demand as a function of available hash-rate and demonstrating that the equilibrium price was found by solving a fixedpoint problem. They discovered that price or hash-rate spirals amplified demand and supply shocks.

In Nigeria, few studies have been conducted on cryptocurrency. Jimoh and Benjamin (2020) examined the relationship between the volatility returns of cryptocurrency and exchange rates. The results using the Generalized Autoregressive Conditional Heteroscedasticity (GARCH 1.1). Exponential Generalized Autoregressive Conditional Heteroscedasticity (EGARCH 1,1), and Granger causality indicated that the instability in the cryptocurrency market influenced the stock market price in Nigeria. However, the study did not employ primary data to get the recent opinion and perception of Nigerians on the concept of cryptocurrency and monetary corrupt practices and their effect on economic activities. Also, Erdas and Caglar (2018) concluded that on cryptocurrency and stock market volatilities, the adoption could enhance the stock market and the rate of exchange behaviors in the Nigerian economy due to the nature of the country's exchange system.

According to Easley, O'Hara, and Basu (2019)

Salawu and Moloi (2018) delved into the

legislation of cryptocurrency in the Nigerian economy. The research focused on the views of the professionals in the accounting world. The descriptive statistics showed that professional accountants hoped to practice on the cryptocurrency markets if the Nigerian would legislate it. The study failed to bring in the economic activities in its objectives. Then, Agbo and Nwadialor (2020) examined developing economy and cryptocurrency by focusing on the African economy. They revealed that cryptocurrency had not been fully explored among the African countries, unlike the European countries. Ebelogu, Oriakhi, Ojo, and Agu (2019) conducted a qualitative study on how cryptocurrency could serve as a technological means to boost the Nigerian economy. They suggested that cryptocurrency could be a solution to end fiat currencies and serve as a tool for development in the nearest future despite the position of the Nigerian government.

The anchored theory for the research is Technology Acceptance Model (TAM) theory. The theory was developed by Davis (1989). It clarifies that potential customers or populace recognize and exploit financial system technology and innovation, which was explained. TAM proclaims that customers or populace are offered an alternative financial technology innovation which determines potential customers' or populace's choices on the means of banking or financial trading facilities. TAM enhances the digital financial system and financial technology accessibility and effectiveness to bank customers in their financial dealings and functions (Weerasinghe & Hindagolla, 2017).

TAM focuses on the behavioral intentions of the potential customers or populace or investors towards the digital financial system and Information and Communication Technology (ICT) users in financial dealings. TAM argues that the attitude of individuals or populace towards banking technology or digital currency system depends on their intentions and objectives regarding digital financing. Thus, it influences financial investors' or users' attitudes toward the perceived usefulness of financial technology and digital economy financing, enhancing economic performance. However, attitude and perceived usefulness are determined by ease-of-use technology. Embracing the TAM theory necessitates the consideration of end-users vis-à-vis usefulness user-friendliness of financing technology and (Henten, Olesen, Saugstrup, & Tan, 2003). From this TAM theory, utility and user-friendliness affect users' attitudes towards financial technology service or digital financing, which in turn increase economic activities and performance.

According to Henten et al. (2003), TAM theory is predisposed to the technological or technical aspects of banking technology while ignoring other factors, such as the users' social aspects, limited ability, time, environmental or organizational limits, and unconscious habits that limit the freedom to use technology. TAM is also criticized that the theory

fails to consider how online hackers, insecurity, and unregulated digital financial system affect investor's patronage and economic performance, especially in developing economies. Despite TAM theory being an anchored theory in the research to link the cryptocurrency in terms of digital financing system through financing technology in developing economies performance like Nigeria, it has shortcomings. Those shortcomings are purposive designing the model with thrift and generality and poor consideration for non-organizational setting (Cicea & Hincu, 2009; Venkatesh & Davis, 2000) and ignoring the factors which moderate the adoption of ICT financing in developing economies (Achugamonu, Taiwo, Ikpefan, Olurinola, & Okorie, 2016). TAM extensively embraces and greatly contributes to the prediction of an individual's usage of financing technological extension to developing economies (Fishbein & Ajzen, 2010). TAM is applied in the research to see how the use of cryptocurrency through digital financing technology improves Nigerian economic performance.

# **METHODS**

The research applies a survey design with a census (total enumeration) of 98 top and middle levels staff in CBN across various monetary policies units. The purposive sampling technique is also used in selecting the respondents because the top and middle executives of the CBN serve as staff with sound and proper policies on cryptocurrency and monetary corrupt practices enacted by CBN. Moreover, snowballing sampling or chain-referral method is used to extend and engage the top and middle executives of the CBN in the administration of the questionnaire. The primary source of data collection is adopted through the use of a questionnaire (see Appendix). The research focuses on top and middle executives in the CBN as the respondents to get a more accurate and sound reflection of financial system authorities regarding cryptocurrency and monetary corrupt practices link on economic performance in Nigeria. The research also uses Tobit regression as its method of data analysis.

The research model is formulated based on the objective that cryptocurrency and monetary corrupt practices affect Nigerian economic performance. Hence, the model is specified as

$$EP = \beta_0 + \beta_1 CRYP_i + \beta_2 MCP_i + e_i$$
(1)

It shows that EP as Economic Performance (Y), CRYP as Cryptocurrency Trading (X1), MCP as Monetary Corrupt Practices (X2),  $\beta 0$  as a constant term,  $\beta 1$ - $\beta 2$  as the beta coefficient of X1 and X2, and ei as the error term. The a priori expectations for the research are  $\beta 1 -\beta 2 < 0$ .

#### **RESULTS AND DISCUSSIONS**

The validity result for the studied variable is

shown in Table 1. It shows that the Kaiser-Meyer-Olkin measures (KMO) for all variables are greater than 0,5 and not larger than 1. It indicates that the indices are acceptable. On the other hand, Bartlett's test of sphericity has p-values of 0,000 for all variables with fewer values than 0,05. Then, the Average Variance Extracted (AVE) in the latent variables is greater than 0,5, and the composite reliability is more than 0,7. The construct's convergent and discriminant validity are found to be satisfactory by AVE and composite reliability. It implies that the instrument is valid.

The research instrument is reliable since the coefficient of the Cronbach's alpha is greater than 0,7. The Cronbach's alpha reliability for the subscale is shown in Table 2. The result for the reliability statistics depicts that the question items used to measure studied variables, such as economic performance, cryptocurrency trading, and monetary corrupt practices, are highly internal consistent since the Cronbach's alpha is greater than 0,70. Thus, the studied instrument is reliable.

The normality test for dependent and independent variables reveals skewness and kurtosis in the range of -1 and +1, as shown in Table 3. The result indicates that the normalcy assumption is met. As a result, the data are appropriate for inferential analysis. The data are transformed in the Statistical Package for Social Sciences (SPSS) and subjected to skewness and kurtosis to determine the normal distribution of the data. Therefore, the research shows

Table 1 KMO and Bartlett's Test for Each Variable in the Research Instrument

Variables	KMO Measure of Sampling Adequacy	Bartlett's Test of Sphericity	AVE	Composite Reliability (CR)	Remark
Economic Performance	0,855	854,742 (0,000)	0,592	0,654	Accepted
Cryptocurrency Trading	0,823	724,005 (0,000)	0,653	0,762	Accepted
Monetary Corrupt Practice	0,812	618,756 (0,000)	0,598	0,879	Accepted

(Source: Authors' Computation, 2021)

Table 2 Reliability	v Statistics
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Variables	Number of Items	Cronbach's Alpha	Remark
Economic Performance	7	0,745	Reliable
Cryptocurrency Trading	7	0,821	Reliable
Monetary Corrupt Practice	5	0,704	Reliable
Overall	19	0,954	Reliable

(Source: Authors' Computation, 2021)

#### Table 3 Normality Test of the Studied Variables

Variables	N Skewness		wness	Kurtosis			
_	Statistic	Statistic	Std. Error	Statistic	Std. Error		
Economic Performance	98	-0,564	0,111 0,458		0,222		
Cryptocurrency Trading	98	-0,335	0,111	0,239	0,222		
Monetary Corrupt Practice	98	0,000	0,111	-0,482 0,2			

(Source: Authors' Computation, 2021)

that data for the studied variables, such as economic performance, cryptocurrency trading, and monetary corrupt practice, are normally distributed.

Table 4 demonstrates that the variables have Variance Inflation Factor (VIF) less than 10 and a tolerance value greater than 0,1. It indicates that multicollinearity is unlikely. The VIF of all predictor variables is less than 10. Because the values of explanatory variables are more than 0,1, they are not significantly associated, so they cannot pose a severe problem. As a result, the data can be used to test hypotheses using Tobit regression analysis.

The influence of cryptocurrency trading on Nigeria's economic performance is depicted in Table 5, shown by Tobit multiple regression analysis results. The Pseudo  $R^2$  is utilized to determine the studied model's predictive capability. From the results, cryptocurrency trading and monetary corrupt practices have a negative and significant effect on economic performance in Nigeria. The Pseudo  $R^2$  of 0,483 indicates that the variations in the cryptocurrency trading and monetary corrupt practices explain 48,3% of the economic performance variation. Meanwhile, the rest (51,7%) is explained by error terms.

Table 5 also shows that the results of ANOVA (overall model significance) of the Tobit regression test reveal that the joint independent variables of cryptocurrency trading and monetary corrupt practices have a negative and significant effect on economic performance in Nigeria. The results can be explained by the F-value (56,795) and low p-value (0,000), which is statistically significant at 5% level. It implies that cryptocurrency trading and monetary corrupt practices are statistically significant in determining economic performance. Hence, at 95% confidence level, cryptocurrency trading and monetary corrupt practices influence Nigerian economic performance.

Furthermore, Table 5 shows the results of Tobit regression coefficients through marginal effect output. It reveals that negative effect is reported for all the variables for cryptocurrency trading ( $\beta = -0.188$ , p < 0.05), and monetary corrupt practices ( $\beta = -0.467$ , p < 0.05) at 0.05 level of significance. Based on the regression output from Table 5, the research rejects the null hypothesis that there is no significant effect of cryptocurrency Trading and monetary corrupt practices on economic performance in Nigeria. The research findings imply that without close monitoring and regulation of all forms of cryptocurrency by the governments or monetary regulators, there will be a high level of terrorism and banditry financing, cybercrime opportunities, and volatility of foreign exchange currencies. So, it will negatively affect economic growth in Nigeria. The findings are consistent with the research of Agu (2020), Mikhaylov (2020), Chuen et al. (2018), Salawu and Moloi (2018), among others. They agreed that an unregulated cryptocurrencies system caused monetary corrupt practices and a decline in economic performance.

# CONCLUSIONS

Cryptocurrency has been around for some years, especially in developed countries. The research concludes that cryptocurrency trading and monetary corrupt practices affect economic performance in Nigeria. Because CBN establishes that cryptocurrency trading is unregulated by the government, it enhances

Variables	Tolerance	VIF	Remark
Cryptocurrency Trading	0,619	1,615	No Multicollinearity
Monetary Corrupt Practice	0,560	1,785	No Multicollinearity

Table 4 Multicollinearity Test Results

(Source: Authors' Computation, 2021)

Table 5 Tobit Regression Output

Variables	Coefficient	Std. Error	<b>Marginal Effect</b>	Sig.
Constant	5,290	1,724	-	0,082
Cryptocurrency Trading	-0,188	0,049	-0,172	0,001
Monetary Corrupt Practice	-0,467	0,037	-0,734	0,005
Number of observations F $(2, 96) = 56,795$ Prob > F= 0,000 Pseudo R <sup>2</sup> = 0,483 Log Pseudo likelihood = 22,229				

Dependent Variable: Economic Performance

(Source: Authors' Computation, 2021)

money laundering, sponsor of banditry, and terrorism, among other corrupt practices. Thus, it negatively affects Nigerian economic performance.

Based on the findings, the research recommends that the government, through CBN, should regulate and control cryptocurrency trading by putting global digital financing system software in place. It will regulate and control cryptocurrency trading to enhance its contribution to Nigerian economic activities. Moreover, through monetary authorities, the government should prepare advanced digital financial technology that will enhance government or monetary authorities' alertness in using cryptocurrency trading by an individual for corrupt practices, such as money laundering, financing of terrorism, and banditry, among others. Then, the research contributes to knowledge that government or monetary regulators should properly monitor and regulate all forms of cryptocurrency and monetary transactions, channel the benefit of cryptocurrency, and regulate monetary economic policies towards economic activities to achieve economic performance.

The research implication is that if the government fails to regulate various forms of cryptocurrency, there will be a continuous increase in terrorism financing and high volatility of the foreign exchange rate, which may negatively affect Nigerian economic performance. Moreover, the research is limited to Nigeria. It only considers the top and middle-level staff of CBN. Therefore, further research should investigate the effect of cryptocurrency trading and corruption practices on economic performance across the West-African monetary currency zone.

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# REFERENCES

- Ahn, T., Ryu, S., & Han, I. (2007). The impact of web quality and playfulness on user acceptance of online retailing. *Information & Management*, 44(3), 263–275. https://dx.doi.org/10.1016/j. im.2006.12.008
- Achugamonu, B. U., Taiwo, J. N., Ikpefan, O. A., Olurinola, I. O., & Okorie, U. E. (2016). Agent banking and financial Inclusion: The Nigerian experience. *Proceedings of the 28<sup>th</sup> International Business Information Management Association Conference* (pp. 4418–4430).
- Agbo, E. I., & Nwadialor, E. O. (2020). Cryptocurrency and the African economy. *Economics and Social Sciences Academic Journal*, 2(6), 84–100.
- Agu, C. J. (2020). Impact of cryptocurrency on Africa's

economy. Retrieved from https://www.researchgate. net/publication/347089003\_Impact\_of\_ cryptocurrency\_on\_Africa's\_economy

- Ameer, R. (2020). What is cryptocurrency? [Everything you need to know!]. Retrieved March 8<sup>th</sup> 2021 from https://blockgeeks.com/guides/what-iscryptocurrency/
- Ammous, S. (2018). Can cryptocurrencies fulfil the functions of money? *The Quarterly Review of Economics and Finance, 70*(November), 38–51.
- Bhambhwani, S., Delikouras, S., & Korniotis, G. M. (2019). *Do fundamentals drive cryptocurrency prices*? Retrieved from https://wpcarey.asu.edu/ sites/default/files/george\_korniotis\_seminar\_paper\_ november\_8\_2019.pdf
- Central Bank of Nigeria. (2021). Response to regulatory directive on cryptocurrencies. Retrieved from https://www.cbn.gov.ng/Out/2021/CCD/CBN%20 Press%20Release%20Crypto%2007022021.pdf
- Cicea, C., & Hincu, D. (2009). Performance evaluation methods in commercial banks and associated risks for managing assets and liabilities. *Communications of the IBIMA*, 7, 97–101.
- Chen, C. Y. H., Després, R., Guo, L., & Renault, T. (2019). What makes cryptocurrencies special? Investor sentiment and return predictability during the bubble. *IRTG 1792 Discussion Paper*.
- Chuen, D. L. K., Guo, L., & Wang, Y. (2018). Cryptocurrency: A new investment opportunity? *The Journal of Alternative Investments*, 20(3), 16–40.
- Cong, L. W., He, Z., & Li, J. (2021). Decentralized mining in centralized pools. *The Review of Financial Studies*, 34(3), 1191–1235.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- Easley, D., O'Hara, M., & Basu, S. (2019). From mining to markets: The evolution of Bitcoin transaction fees. *Journal of Financial Economics*, 134(1), 91–109.
- Ebelogu, C. U., Oriakhi, J. E., Ojo, S. D., & Agu, E. O. (2019). Cryptocurrency (blockchain) technology as a means of leveraging the Nigeria economy. *International Journal of Advances in Scientific Research and Engineering (IJASRE)*, 5(12), 139–146.
- ElBahrawy, A., Alessandretti, L., Kandler, A., Pastor-Satorras, R., & Baronchelli, A. (2017). Evolutionary dynamics of the cryptocurrency market. *Royal Society Open Science*, 4(11), 1–9.
- Erdas, M. L., & Caglar, A. E. (2018). Analysis of the relationships between Bitcoin and exchange rate, commodities and global indexes by asymmetric causality test. *Eastern Journal of European Studies*, 9(2), 27–45.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. Psychology Press.
- Henten, A., Olesen, H., Saugstrup, D., & Tan, S. E. (2003). New mobile systems and services in Europe, Japan and South Korea. *The Stockholm Mobility* Roundatable 2003 (pp. 1–33).
- Holtmeier, M., & Sandner, P. (2019). The impact of

*cryptocurrencies on developing countries.* Retrieved from http://explore-ip.com/2019\_The-Impact-of-Crypto-Currencies-on-Developing-Countries.pdf

- Jimoh, S. O., & Benjamin, O. O. (2020). The effect of cryptocurrency returns volatility on stock prices and exchange rate returns volatility in Nigeria. *Acta Universitatis Danubius. Œconomica*, 16(3), 200–213.
- Kuzubov, A. A., Shashlo, N. V., & Rodionov, A. V. (2018). Cryptocurrency market: Prerequisites of formation, economic features, prospect directions of development. *Revista ESPACIOS*, 39(50).
- Mazikana, T. A. (2018). The impact of cryptocurrencies in Zimbabwe. An analysis of Bitcoin. Retrieved from https://www.researchgate. net/publication/333413415\_The\_Impact\_of\_ Cryptocurrencies\_in\_Zimbabwe\_An\_Analysis\_of\_ Bitcoins
- Mikhaylov, A. (2020). Cryptocurrency market analysis from the open innovation perspective. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 1–19.
- Nakamoto, S. (2008). Bitcoin: A peer-to-peer electronic cash system. *Decentralized Business Review*, 1–9.
- Nasekin, S., & Chen, C. Y. H. (2020). Deep learning-based cryptocurrency sentiment construction. *Digital Finance*, 2, 39–67.
- Oh, J. H. (2018). The foreign exchange market with the cryptocurrency and "Kimchi Premium". In 22<sup>nd</sup> Biennial Conference of the International Telecommunications Society (ITS): "Beyond the Boundaries: Challenges for Business, Policy and Society".
- Pagnotta, E., & Buraschi, A. (2018). An equilibrium valuation of Bitcoin and decentralized network assets. Retrieved January 20<sup>th</sup> 2019 from https://papers.ssrn. com/sol3/papers.cfm?abstract\_id=3142022
- Popoola, O. R., Ejemeyovwi, O. J., Alege, O. P., Adu, O., & Onabote, A. (2017). Stock market and economic growth in Nigeria. *International Journal of English Literature and Social Sciences*, 2(6), 97–106.

- Price, R. (2016). *Digital currency Ethereum is cratering because of a 50 million dollar hack*. Retrieved from https://www.businessinsider.com.au/dao-hackedethereum-crashing-in-value-tens-of-millionsallegedly-stolen-2016-6
- Salawu, M. K., & Moloi, T. (2018). Benefits of legislating cryptocurrencies: Perception of Nigerian professional accountants. Academy of Accounting and Financial Studies Journal, 22(6), 1–17.
- Sami, M., & Abdallah, W. (2020). How does the cryptocurrency market affect the stock market performance in the MENA region? *Journal of Economic and Administrative Sciences*, 37(4), 741–753.
- Sovbetov, Y. (2018). Factors influencing cryptocurrency prices: Evidence from Bitcoin, Ethereum, Dash, Litcoin, and Monero. *Journal of Economics and Financial Analysis*, 2(2), 1–27.
- Vaz, J., & Brown, K. (2020). Money without institutions, how can cryptocurrencies be trusted? Retrieved from https://www.researchgate.net/ publication/332472250
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204.
- Weerasinghe, S., & Hindagolla, M. (2017). Technology acceptance model in the domains of LIS and education: A review of selected literature. *Library Philosophy and Practice (E-Journal)*, 1–26.
- World Bank Group. (2018). Cryptocurrencies and blockchain. Retrieved from https://documents1. worldbank.org/curated/pt/293821525702130886/ pdf/Cryptocurrencies-and-blockchain.pdf
- Wu, C. Y., & Pandey, V. K. (2014). The value of Bitcoin in enhancing the efficiency of an investor's portfolio. *Journal of Financial Planning*, 27(9), 44–52.
- Zhu, Y., Dickinson, D., & Li, J. (2017). Analysis on the influence factors of Bitcoin's price based on VEC model. *Financial Innovation*, 3(1), 1–13.

# APPENDIX

#### QUESTIONNAIRE

## Cryptocurrency and Economic Performance Questionnaire (CEPQ)

# **DEMOGRAPHIC INFORMATION**

Gender :	[ ] Male	[ ] Female		
Age:	[ ] 18–28 years	[ ] 29–39 years	[	] 40–49 years [ ] 50–60 years
Marital Status:	[ ] Single	[ ] Married	[	] Others (Please Specify)
Nationality:	[ ] Nigerian	[ ] Foreigner		
Highest Education Lev	vel: [ ] BA/BSc/HND	[ ] MA/MSc/MPhil	[	] PhD
Professional Qualifica	tions: [ ] Please	e Specify		
Current Management	Level: [ ] Top	[ ] Middle	[	] Others (Please Specify)
Length of Service:	[ ] 0–5 years	[ ] 6–10 years	[	] 11–15 years [ ] 16–20 years
	[ ] 21–25 years	[ ] 26–30 years	[	] 31–35 years

#### CRYPTOCURRENCY

Please select the option that best describes your response to the following statements related to your experiences with cryptocurrency transactions by selecting the appropriate option on the scale below. SA-Strongly Agree= 6, A-Agree = 5, PA-Partially Agree= 4, PD-Partially Disagree= 3, D-Disagree= 2, SD-Strongly Disagree= 1.

## SECTION B: CRYPTOCURRENCY TRADING ----- X1

Cryptocurrency Trading							
	will you rate your experience in the following area yptocurrency transaction?	SA	A	PA	PD	D	SD
1	Cryptocurrency is trustless	6	5	4	3	2	1
2	Cryptocurrency is immutable	6	5	4	3	2	1
3	Cryptocurrency is decentralized	6	5	4	3	2	1
4	Elimination of double-spending	6	5	4	3	2	1
5	Anonymously blockchain transaction	6	5	4	3	2	1
6	Buy and hold strategy	6	5	4	3	2	1
7	Cryptocurrency is high volatile	6	5	4	3	2	1

# SECTION C: MONETARY CORRUPT PRACTICES ----- X2

	will you rate monetary corrupt practices relating yptocurrency trading?	SA	Α	PA	PD	D	SD
1	Online hacking	6	5	4	3	2	1
2	Money laundering	6	5	4	3	2	1
3	High level of security flaws	6	5	4	3	2	1
4	Unregulated transaction	6	5	4	3	2	1
5	Sponsoring terrorism through cryptocurrency	6	5	4	3	2	1

# SECTION D: ECONOMIC PERFORMANCE ----- Y

	will you rate Nigerian economic performance in e areas since the beginning of cryptocurrency in ria?	SA	Α	PA	PD	D	SD
1	High rates of growth per capita output	6	5	4	3	2	1
2	Increase in employment opportunity	6	5	4	3	2	1
3	High rates of structural transformation of the Nigerian economy	6	5	4	3	2	1
4	High rates of social transformation	6	5	4	3	2	1
5	High rates of political transformation	6	5	4	3	2	1
6	Increase in the propensity to trade	6	5	4	3	2	1
7	Increase in gross domestic product	6	5	4	3	2	1

# Thank You