

AN UNCHARTED NEXUS: TRANSFORMING POTENTIAL OF CRYPTOCURRENCY ON NIGERIA'S ECONOMIC LANDSCAPE

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Abstract

This research study explores the transformative potential of cryptocurrency on the economy of Nigeria. Cryptocurrencies, such as bitcoin and ethereum, offer several advantages over traditional financial systems, including faster and more secure transactions, increased transparency, and the potential for financial inclusivity. Nigeria, with its large unbanked population and reliance on remittances, presents a suitable environment for cryptocurrency adoption. However, there are challenges to overcome, such as regulatory uncertainties and technological infrastructure limitations. The study aims to investigate the opportunities, challenges, risks, and benefits associated with cryptocurrency adoption in Nigeria. It evaluates the potential impact on financial inclusion, remittances, monetary policy, economic growth, and decentralized finance. By conducting a comprehensive review of existing literature and examining global case studies, the research provides valuable insights into the current state of cryptocurrency adoption in Nigeria. Findings of the study highlight the need for clear regulatory frameworks, enhanced cyber security measures, and collaboration between government agencies, regulators, and industry stakeholders. It emphasizes the importance of addressing challenges and risks while maximizing the benefits of cryptocurrency adoption. The research contributes to informed discussions and provides policymakers, researchers, and industry stakeholders with recommendations to guide their decision-making processes, ultimately fostering sustainable economic growth in Nigeria.

Keywords: Cryptocurrency, Nigeria, Transformative Potentials, Financial Inclusion, Remittances, Regulatory Frameworks, Economic Growth.

Introduction

Cryptocurrency, such as bitcoin, ethereum, and numerous altcoins, is a digital or virtual form of currency that utilizes cryptography for secure transactions and to control the creation of new units (Nakamoto, 2008). The

concept of cryptocurrency was introduced in 2008 by the pseudonymous person or group known as Satoshi Nakamoto, who outlined the underlying technology, blockchain, in a white paper titled "Bitcoin: A Peer-to-Peer Electronic Cash System"

(Nakamoto, 2008). Since then, cryptocurrencies have gained traction globally, attracting attention from governments, businesses, and individuals.

Cryptocurrencies offer several potential advantages over traditional financial systems. They provide faster, more secure, and cost-effective transactions, eliminating the need for intermediaries like banks. Moreover, the decentralized nature of cryptocurrencies ensures that no single entity has control over the network, increasing transparency and reducing the risk of corruption. Additionally, cryptocurrencies have the potential to promote financial inclusivity by providing access to banking services for the unbanked population.

Nigeria, often referred to as the "Giant of Africa," boasts the largest population and economy on the continent. However, the country faces various economic challenges that cryptocurrency could potentially address. One of the major obstacles is the lack of financial inclusion, as a significant portion of the population remains unbanked or underbanked (Adekoya, 2020). Cryptocurrency can offer a solution by enabling individuals to access financial services through their smartphones, thus bypassing traditional banking infrastructure.

Another challenge is the prevalence of high remittance fees. Nigeria has a substantial diaspora population, and remittances play a crucial role in its economy. However, traditional remittance channels are associated with high fees and slow processing times. Cryptocurrencies, with their low transaction fees and near-instantaneous cross-border transfers, have the potential to significantly reduce remittance costs and enhance the efficiency of international money transfers (Ogundele, 2019).

Furthermore, Nigeria's economy is highly dependent on oil exports, making it vulnerable to price fluctuations in the

global market. Cryptocurrencies can diversify the economy by facilitating investments in emerging technologies and promoting entrepreneurship through Initial Coin Offerings (ICOs) and blockchain-based platforms (Chakraborty, 2020). This diversification could reduce Nigeria's reliance on oil and foster sustainable economic growth.

However, the integration of cryptocurrencies into Nigeria's economic landscape also presents challenges. Regulatory uncertainties, such as the lack of clear guidelines and the potential for illicit activities, pose risks to investors and users (Adekoya, 2020). Additionally, the technological infrastructure required to support widespread adoption of cryptocurrencies, such as reliable internet connectivity and access to digital devices, is still developing in Nigeria. Overcoming these challenges will be crucial for harnessing the transformative potential of cryptocurrencies and ensuring their responsible and inclusive integration into the Nigerian economy.

To the best of the researcher's knowledge, there is a dearth of comprehensive research on the transformative potentials of cryptocurrency on the economy of Nigeria. The few existing studies on cryptocurrency and the Nigerian economy such as: Ekenta & Onyia (2021) and Fakunmoju, Banmore, Gbadamosi & Okunbanjo (2022) have failed to adequately explore the uncharted nexus, leaving the challenges and prospects of the digital currency unclear and unsatisfactorily addressed. This study intends to fill the existing gap by presenting latest insight into cryptocurrencies and the current state of the Nigerian economy.

The main objective of the study is to investigate how the adoption and utilization of cryptocurrencies in Nigeria could bring about transformative

changes in various aspects of the economic landscape involves examining the opportunities, challenges, risks, and benefits associated with cryptocurrencies in Nigeria and evaluating their potential to influence areas such as financial inclusion, remittances, monetary policy, economic growth, and decentralized finance. The study is expected to be of significance and provide policymakers, researchers, and industry stakeholders with valuable insights to guide their decision-making processes. The findings and recommendations can contribute to informed discussions on harnessing the benefits of cryptocurrencies while mitigating risks and maximizing opportunities for sustainable economic growth in Nigeria.

The study is structured as follows: Section one deals with introduction; section two literature review; section three research methodology adopted by the study while, section four is about discussions and section five conclusions and recommendations.

Literature Review

Overview of Cryptocurrency

Cryptocurrencies have emerged as a revolutionary form of digital currency that utilize cryptography for secure financial transactions and control the creation of additional units. These decentralized digital assets operate on a technology called blockchain, which is a distributed ledger that records all transactions across multiple computers, ensuring transparency and immutability. Cryptocurrencies possess several key characteristics, including decentralization, anonymity, security, and limited supply.

The evolution and global adoption of cryptocurrencies have been remarkable. Bitcoin, the first and most well-known cryptocurrency, was introduced in 2009 by an anonymous individual or group known as Satoshi Nakamoto.

Since then, thousands of cryptocurrencies, collectively known as altcoins, have been developed. Cryptocurrencies have gained traction worldwide, with increasing acceptance by businesses and individuals as a medium of exchange and store of value. The growth of cryptocurrency exchanges, widespread media coverage, and investor interest have contributed to their global adoption (Chuen, Nadarajah & Guo, 2019)

There are various types of cryptocurrencies available in the market. Bitcoin (BTC) remains the dominant cryptocurrency, serving as a digital store of value. Other notable cryptocurrencies include Ethereum (ETH), which introduced smart contract functionality and enabled the development of decentralized applications (DApps), and Ripple (XRP), a cryptocurrency used for fast and low-cost international money transfers. Additionally, stablecoins such as Tether (USDT) are pegged to fiat currencies to minimize price volatility, making them suitable for everyday transactions.

Cryptocurrency adoption in Nigeria has seen significant growth in recent years. Nigeria is one of the leading countries in terms of cryptocurrency adoption in Africa. The Nigerian population has embraced cryptocurrencies as an alternative financial system, particularly in response to the limitations of traditional banking services. Factors such as financial inclusion, remittances, and investment opportunities have contributed to the increased adoption of cryptocurrencies in Nigeria (Ekenta & Onyia, 2021).

The current state of cryptocurrency adoption in Nigeria is mixed. While there is a high level of interest and participation in cryptocurrency trading and investment, the Central Bank of Nigeria (CBN) issued a directive in 2021 prohibiting financial institutions from facilitating cryptocurrency transactions.

Several factors are driving cryptocurrency adoption in Nigeria. Firstly, the country has a large unbanked population, and cryptocurrencies provide a means for financial inclusion, allowing individuals without access to traditional banking services to participate in the global economy. Secondly, remittances play a crucial role in Nigeria's economy, and cryptocurrencies offer a faster and cheaper alternative to traditional remittance channels. Additionally, the potential for high returns on cryptocurrency investments attracts many Nigerians seeking alternative investment opportunities.

Challenges and Risks of Cryptocurrency in Nigeria

Cryptocurrencies have gained significant popularity and attention in recent years, but they also come with a range of challenges and risks that need to be considered. One major area of concern is regulatory and legal issues. Governments around the world have struggled to develop comprehensive frameworks to govern cryptocurrencies, leading to uncertainty and potential risks for investors and businesses. Regulatory crackdowns and bans in some jurisdictions can disrupt the market and limit the widespread adoption of cryptocurrencies (Tang, 2021).

Consumer protection and fraud prevention are other critical challenges. The decentralized nature of cryptocurrencies makes it difficult to trace and recover stolen or lost funds. Scams, phishing attacks, and hacking incidents have exposed individuals and businesses to significant financial losses. Lack of industry-wide standards and proper regulatory oversight contribute to these risks, requiring robust security measures and education to mitigate potential threats (Ali, Sulong, Kurniawan & Nawawi, 2020).

Volatility and price risks are inherent to cryptocurrencies. The value of digital assets can fluctuate dramatically within

short periods, which exposes investors to significant financial losses. The absence of a central authority and speculative trading practices exacerbate the volatility, making it difficult for cryptocurrencies to function effectively as a stable medium of exchange or store of value (Yermack, 2015).

Cybersecurity and technological infrastructure also pose challenges. Cryptocurrency exchanges, wallets, and other platforms are attractive targets for hackers due to the potential for large financial gains. Weak security practices, vulnerabilities in smart contracts, and technological limitations can lead to theft or manipulation of digital assets (Conti, Kumar, Lal & Ruj, 2018).

Addressing these challenges and risks requires a multi-faceted approach. Governments need to establish clear regulatory frameworks that protect investors and promote market stability. Industry participants should prioritize cybersecurity measures, educate users about potential risks, and implement fraud prevention mechanisms. Enhanced technological infrastructure and scalability solutions are crucial for the long-term viability and mainstream adoption of cryptocurrencies (Chiu, Koepl & Shimosawa, 2019).

Cryptocurrency Case Studies and Global Perspectives

This discussion highlights lessons from cryptocurrency adoption of other countries, present case studies of successful cryptocurrency projects in Nigeria, and provide international perspectives on Nigeria's cryptocurrency potential.

Lessons from Other Countries' Cryptocurrency Adoption: Several countries have embraced cryptocurrency, providing valuable lessons for others. For instance, Japan recognized Bitcoin as legal tender in 2017, leading to increased acceptance and integration into the country's financial ecosystem. This move

highlighted the importance of clear regulatory frameworks and collaboration between governments and industry stakeholders in fostering cryptocurrency adoption.

Another example is Switzerland, known for its favorable regulatory environment for cryptocurrencies and blockchain technology. Switzerland's approach of creating a supportive ecosystem, including regulatory sandbox frameworks and friendly tax policies, has attracted numerous blockchain projects and startups. This demonstrates the significance of creating an enabling environment for cryptocurrency innovation and investment.

Case Studies of Successful Cryptocurrency Projects in Nigeria: Nigeria has witnessed notable cryptocurrency projects that showcase the country's potential in this domain. One such project is Flutterwave, a Nigerian fintech company that integrated cryptocurrency payment options into its platform. By enabling merchants to accept cryptocurrencies, Flutterwave has expanded financial inclusion and provided a seamless payment experience for users.

Another example is BuyCoins, a Nigerian cryptocurrency exchange that has simplified the process of buying and selling cryptocurrencies in the country. BuyCoins offers a user-friendly platform and supports various cryptocurrencies, contributing to the growth of Nigeria's digital asset market.

International Perspectives on Nigeria's Cryptocurrency Potential:

Nigeria's cryptocurrency potential has garnered attention on the global stage. The country's large population, vibrant tech ecosystem, and increasing mobile phone penetration make it a promising market for cryptocurrency adoption. Moreover, Nigeria has a high demand for cross-border remittances, and cryptocurrencies can offer faster and more cost-effective solutions compared to traditional channels.

However, there are also international concerns regarding cryptocurrency adoption in Nigeria. The Central Bank of Nigeria's (CBN) 2021 directive prohibiting financial institutions from facilitating cryptocurrency transactions raised regulatory uncertainties and affected investor confidence. International stakeholders stress the importance of clear and consistent regulatory frameworks to provide certainty and attract foreign investments in Nigeria's cryptocurrency sector.

Furthermore, addressing cybersecurity risks and enhancing consumer protection are vital considerations for Nigeria's cryptocurrency ecosystem. Collaborative efforts between government agencies, regulators, and industry players are crucial in establishing robust frameworks that balance innovation with security and protect consumers' interests.

By learning from global experiences and addressing challenges, Nigeria can position itself as a leading player in the cryptocurrency space, driving economic growth and financial empowerment.

Review of Empirical Literature

Ibrahim (2018) believes that despite the benefit of cryptocurrency, there tend to be a missing links which could affect its operations. Amongst which are lack of government support, transparency issues, subject to loss, theft and fraud, lack of central repository and investors protection clause. The study concludes that cryptocurrency as an economic innovation is disruptive the way it is currently managed and if this vacuum is not adequately addressed, it will not survive in the future. The study further recommends that there is need to create a legal & regulatory framework guiding its operations, ensure full disclosure on its transactions, need to be centralized in nature and investors protection clause should be incorporated.

Salawu and Moloi (2018) analyse the Benefits of Legislating Cryptocurrencies: Perception of Nigerian Professional

Accountants. Result reveals that the Professional Accountants in Nigeria are willing to operate in the Cryptocurrency environment provided the Government would legislate its use. The study concludes that the legislation of Cryptocurrency or its modified form by the Federal Government of Nigeria is desirable for the protection of her economy as well as the interest of her citizens. The study recommends that government must take holistic view of the economy and scrutinize every relevant factor in the purview of the law to ensure the legislative decision is in the interest of the entire citizens.

Fakunmoju, Banmore, Gbadamosi and Okunbanjo (2022) opine that 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 of Nigeria. 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.

Safiyanu, Haruna, Gurin and Bayero (2022) examine the impact of Bitcoin on the exchange rate in Nigeria. Findings reveal that Bitcoin price significantly affects the exchange rate in both the short and long run. A Higher Bitcoin price implies an appreciation of the domestic currency. The study recommends that the Nigerian government pay attention to the movement of cryptocurrency prices.

Theoretical Framework

The research topic "Uncharted Nexus: Transformative Potential of Cryptocurrency on Nigeria's Economic Landscape" can be underpinned by the theory of technological determinism.

Technological determinism posits that technology is a driving force that shapes and influences societal development, including economic structures and practices (Ellul, 1964; Winner, 1993).. In the context of cryptocurrency and Nigeria's economic landscape, this theory suggests that the introduction and adoption of cryptocurrencies have the potential to bring about significant transformations in the country's economy.

Cryptocurrency, such as Bitcoin, is a digital or virtual form of currency that relies on cryptography for secure financial transactions and operates independently of central banks (Nakamoto, 2008). In Nigeria, where traditional financial systems have faced challenges like limited access, high transaction costs, and inflation, cryptocurrency presents an alternative that can potentially address these issues (Adeola & Osabuohien, 2018). The theory of technological determinism argues that the inherent characteristics of cryptocurrency, such as decentralization, transparency, and lower transaction fees, can disrupt and reshape Nigeria's economic landscape (Swan, 2015).

One aspect to consider is financial inclusion. Nigeria has a large unbanked population, with many individuals lacking access to basic financial services. Cryptocurrency provides an opportunity for these individuals to participate in the economy by offering a decentralized and accessible means of storing, transferring, and receiving funds (Donovan, 2015). This can potentially increase financial inclusion and empower marginalized communities.

Additionally, cryptocurrency has the potential to streamline cross-border transactions and enhance international trade (Ajiboye, 2019). Nigeria relies heavily on remittances from its diaspora, and the traditional banking system often imposes high fees and lengthy processing times. By leveraging

cryptocurrency, individuals can send and receive funds more efficiently, reducing costs and enhancing the speed of transactions.

Furthermore, the theory of technological determinism suggests that cryptocurrency can foster entrepreneurship and innovation (Castells, 1996). Nigeria has a vibrant and dynamic tech industry, and the adoption of cryptocurrencies can provide a conducive environment for startups and small businesses. Cryptocurrencies offer alternative fundraising methods through Initial Coin Offerings (ICOs) and decentralized financing (DeFi), potentially enabling entrepreneurs to access capital and develop innovative solutions to societal challenges (Kostovetsky & Benedetti, 2018; Panos, 2020).

The theory of technological determinism provides a framework to understand the transformative potential of cryptocurrency on Nigeria's economic landscape. It suggests that the introduction and adoption of cryptocurrencies can address issues of financial inclusion, enhance cross-border transactions, and stimulate entrepreneurship and innovation. However, it is important to note that the theory does not account for other factors such as regulatory frameworks, sociocultural contexts, and potential risks associated with cryptocurrencies, which should be considered in the research.

The cryptocurrency theory of Holistic Integration can account for regulatory frameworks, sociocultural contexts, and potential risks associated with cryptocurrency in Nigeria. The theory emphasizes the need to consider the interplay between technological innovation and existing socio-political structures, advocating for a balanced approach that addresses regulatory concerns while acknowledging the cultural and economic realities of Nigeria. This theory recognizes the

importance of risk assessment and mitigation strategies to ensure the responsible adoption and implementation of cryptocurrencies in the Nigerian context.

Methodology

The data for this study was collected through a systematic literature review. A comprehensive search was conducted using academic data bases, research repositories, and relevant online platforms to identify scholarly articles, reports, and books related to cryptocurrency and its impact on the Nigerian economy. The literature review covered recent publications to ensure up-to-date information. The review of the findings of other researchers will enable this study to take a stand based on the justifications given by the previous studies.

Result and Discussion of Findings

Researches have revealed that cryptocurrency presents promising opportunities for Nigeria while simultaneously posing risks. On one hand, cryptocurrencies offer avenues for financial inclusion, cross-border transactions, and investment opportunities, potentially fostering economic growth. They can also facilitate remittances and mitigate the effects of inflation. However, the decentralized and unregulated nature of cryptocurrencies can lead to illicit activities, fraud, and market volatility. Additionally, their vulnerability to cyber-attacks and lack of consumer protection frameworks present risks. Thus, Nigeria must carefully navigate this landscape by implementing the following:

Robust Regulations

This involves creating a regulatory framework to address risks such as fraud, money laundering, and investor protection. This can be achieved by the Central bank of Nigeria (CBN) collaborating with relevant agencies and leveraging international best practices.

Educating citizens about the risks

This involves raising awareness about potential scams, market volatility, lack of regulation and the importance of conducting thorough research before investing.

Fostering responsible adoption: This is to harness the potential benefits of cryptocurrencies while minimizing associated dangers.

Conclusion and Recommendation

Cryptocurrency has emerged as a disruptive force with the potential to transform various aspects of Nigeria's economic landscape. This research aimed to explore the opportunities, challenges, risks, and benefits associated with the adoption and utilization of cryptocurrencies in Nigeria. Through a review of the literature, it became evident that cryptocurrency offers several advantages, including financial inclusion, reduced remittance costs, diversification of the economy, and enhanced entrepreneurship. However, regulatory uncertainties, technological infrastructure limitations, and concerns about illicit activities pose significant challenges to the integration of cryptocurrencies into Nigeria's economy.

The empirical literature highlighted some key insights regarding the transformative potential of cryptocurrencies in Nigeria. Studies emphasized the need for a legal and regulatory framework to guide cryptocurrency operations and protect investors. The government's role in legislating cryptocurrencies was viewed positively by professional accountants, who believed it would safeguard the economy and citizens' interests. Furthermore, the impact of cryptocurrencies on economic performance was acknowledged, with studies emphasizing the role of regulatory control and monitoring to mitigate corruption and fraudulent practices.

The theoretical framework of technological determinism provided a lens to understand how the introduction and adoption of cryptocurrencies could reshape Nigeria's economic landscape. It highlighted the potential for financial inclusion, streamlined cross-border transactions, and increased entrepreneurship and innovation. However, it is important to consider other factors such as regulatory frameworks, sociocultural contexts, and risk mitigation strategies, as highlighted by the theory of Holistic Integration.

Based on the findings of this research, several recommendations can be made to guide the responsible integration of cryptocurrencies into Nigeria's economy.

The government should establish clear guidelines and regulations to provide legal certainty and protect investors and users. This framework should address concerns related to fraud, money laundering, and consumer protection, while also fostering innovation and entrepreneurship.

Investment in reliable internet connectivity and access to digital devices is crucial for widespread adoption of cryptocurrencies. Efforts should be made to improve the technological infrastructure to ensure seamless access and participation in the cryptocurrency ecosystem.

As cryptocurrencies continue to gain popularity, it is essential to educate the Nigerian population about the risks and benefits associated with these digital assets. Financial literacy programs can empower individuals to make informed decisions and navigate the cryptocurrency landscape responsibly.

Collaboration between government agencies, regulatory bodies, financial institutions, and industry stakeholders is vital for effective implementation and monitoring of cryptocurrency-related activities. Regular consultations, dialogues, and partnerships can facilitate

knowledge sharing, address challenges, and promote responsible practices.

Continuous monitoring and evaluation of cryptocurrency activities are necessary to identify and mitigate potential risks. This includes monitoring for illicit activities, ensuring compliance with regulatory frameworks, and implementing effective risk management strategies.

Encouraging research on cryptocurrencies and their impact on Nigeria's economy can provide valuable insights for policymakers and industry stakeholders. Research funding and academic collaborations should be promoted to generate evidence-based knowledge and inform decision-making processes.

While cryptocurrencies hold transformative potential for Nigeria's economic landscape, their integration must be approached with caution. A comprehensive regulatory framework, robust technological infrastructure, financial literacy programs, stakeholder collaboration, risk monitoring, and research support are key factors to consider for the responsible and inclusive adoption of cryptocurrencies. By addressing challenges and maximizing opportunities, Nigeria can harness the benefits of cryptocurrencies while mitigating risks and promoting sustainable economic growth.

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