

# Challenges And Opportunities In Digital Currency Adoption In The Third World Countries

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## Abstract

This study explores the prospects and problems of digital currency adoption in developing countries. It adopts a systematic literature review (SLR) of research on digital currency, i.e. documentary method of inquiry for data gathering and content analysis. Results of the study reveal that the rate of digital currency adoption by private individuals is high. In contrast, corporate or states' adoption of the currency in the Third World is very low and sluggish. It further reveals that although digital currency is a better alternative to cash, it is associated with many risks that undermine or challenge its adoption among Third World countries. Such challenges include vulnerability to security breaches and distributed denial of service (DDOS) attacks, require basic technical skills and knowledge, high-level security risks, low technological interoperability and obsolescence, regulatory risks, etc. Among others, the paper recommends that central banks embark on critical studies to determine the risks associated with digital currency and its application to evolve appropriate reforms in the financial system that guarantee its adoption.

**Keywords:** Digital Currency, Central Banks, Third World, Adoption, Challenges, Prospects.

## INTRODUCTION

Money, as a means of exchange, has continued to change forms as the society that uses it changes. This change is associated with the need to satisfy emerging demands and challenges over the transactions between parties. Digitalization and technological innovations since the late 20<sup>th</sup> century orchestrated new forms of business transactions and channels of payments that increasingly connected money with technological devices (Begum, 2021; Zhu and Fu, 2020). New technologies orchestrated variable changes in the exchange of goods, services and resources and have led to the emergence of digital currency. Digital currency according to Begum (2021) is a digital file, an electronic computer database or a store value card. Temitope and Folorunso (2020,

p. 380) simply defined it "as money (the medium of exchange for goods and services) in the digital age", while "Money is a unit of account, a means of payment and a store of value". The digital currency and its payment system solve the liquidity problem of a country in international trade, helps to reconfigure and redescribe natural value chain of money in transaction processes and have the potential to contribute positively to the development of the financial system.

With the establishment of different digital cash companies in the early 1990s, digital currency has two main types, i.e. cryptocurrencies and virtual currencies, appeared. This has risen to over 15 000 digital currencies (DCS) as of December 2021, with most digital currencies using blockchain technology (Xiao and Ziyang, 2022). The prevalence of varieties of this currency is an indication that they perform different functions in international transactions. Digital currency transactions are carried out directly from one location to another in the electronic ecosystem without the involvement of financial institutions as mediators. They are usually stored in an electronic address with a unique public ID wherein many of such addresses can be collated into one known as an "electronic wallet".

However, it should be noted that the emergence of digital currencies in the 21<sup>st</sup> century diminished the use of cash and the banking hall or formal financial system as a medium of payment and transaction (Castrén et al., 2020; Temitope and Folorunso, 2020). Unlike the traditional financial system, digital currencies are difficult to regulate because of the involvement of different agencies at the national and global levels, thereby posing high-level risks. Nevertheless, these online payment systems for goods and services such as PayPal, mobile payments, and other transfer solutions like M-Pesa enjoy high-level security. National political and geographical boundaries and regulatory agencies do not limit digital currency transactions as they can be sent or received anywhere in the World through their electronic wallets (Dwyer, 2015; Milling, 2012). They orchestrated the evolution of mobile money and electronic transactions, which are faster and more convenient (Moreau, 2018).

Specifically, the global financial crisis of 2008 led to the lunch of a peer-to-peer cash system using Bitcoin as its currency in 2009. It emerged due to the inefficiencies of central banks and commercial banks in resolving the relationship between the supply and demand for money. This challenges the long-standing and unchanged financial payment systems, which rely on fiat currencies, particularly in advanced countries. It has equally triggered the need for transactions and payment innovation policies in the developing countries were highly regulated foreign exchange activities reign. Some began to adopt the digital currency regime while others are resisting it. Countries like Bangladesh, Algeria, Bolivia, Ecuador, Nepal, and the Republic of Macedonia banned digital currency activities (Banu et al., 2021). Consequently, this paper explores the rate of digital currency adoption and its challenges in Third World countries. It seeks answers to the following questions:

1. What is the rate of digital currency adoption in Third World Countries?

2. What are the significant challenges facing the adoption of digital currency in Third World Countries?

## **MATERIALS AND METHODS**

This paper adopts the documentary data gathering method. The approach investigates, categorizes, interprets, and identifies the essential findings and limitations of previous studies and written documents found in the private and public domain relative to the topic of study. The method extracts information from secondary data sources such as journals, books, workshop/conference and seminar papers, magazines, newspapers, and internet materials. The approach here is to engage in extensive literature review through thorough reading and methodological analysis of the contents of each of the documents adjoined to be relevant to the topic of inquiry.

The data generated from there was analyzed using content analysis. This is "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (Hsieh & Shannon, 2005, p.1278). The method here is to condense raw data into categories or themes based on valid inference and interpretations using inductive reasoning, sift the findings in the works, check the consistency of the opinions of either the authors and/or the actors, and evaluate such findings or ideas with other existing results on the subject. Through these methods, the paper concludes.

## **REVIEW OF EXTANT LITERATURE**

### **Money**

Goodhart(2019, p.22) conceptualized money as "a social artefact, which evolved to facilitate market trading between individual agents who were not so otherwise bound together by family, tribal or social ties that an immediate exchange of equivalent values in trade was unnecessary". Expressing its functions, some scholars define it as a unit of account that quantifies a price index, a medium of exchange, a means of payment, a store of value, and a commodity endowed with the power to be easily exchanged in a market. Different forms have evolved, such as gold, banknotes, and coins. Athanassiou(2017) classified the various forms of money using three main criteria, namely:

- i. The issuer, either the government or a private institution;
- ii. The form it takes, either physical or digital;
- iii. How transactions are settled, either centralized or decentralized.

Each form of money that functions as a medium of exchange requires a payment system, which enables parties to transfer value (McLeay, Amar & Thomas, 2014). The payment system comprises the mechanisms for money transfer, such as the rules, institutions, people, markets, and agreements that make the exchange of payments possible. Traditionally, the payment system is characterized by fiat money – one issued by the Central Bank as a legal tender. It has no intrinsic value because the state determines its value.

Technological innovations, digitalization, and globalization led to the emergence of electronic money, which equally relied on a central authority to declare it a legal tender. Electronic money is defined as "an electronic store of monetary value on a technical device that may be widely used for making payments to undertakings other than the issuer without necessarily involving bank accounts in the transactions, acting as a prepaid bearer instrument". However, modernization led to the emergence of digital currencies, which are not denominated as legal tender but have their unit of account, which in some circumstances can be used as an alternative to money. Digital currency exists only in an electronic form and serves as a medium of exchange on the internet. Examples of digital currencies are Ethereum, Cardano, Renmimbi, Bitcoin, Polkadot, cryptocurrencies, Litecoin etc.

Furthermore, digital currencies according to Truby (2018) are essential because they can assist the World in solving the problems that emanate from climate change and generate funds for climate finance programmes. Its transactions do not require brokers and the intervention of financial institutions like banks. Thus, it cuts the cost of the withdrawal of money or operational costs. It helps to undermine government chances and the ability to raise huge sums of revenue through sustainable inflation. Its transactions do not require brokers and the intervention of financial institutions like banks. Thus, it leads to cutting the cost of the withdrawal of money or operational costs. It helps to undermine government chances and the ability to raise huge sums of revenue through sustainable inflation.

### **Challenges of Digital Currency**

Li et al. (2019) identified the problems of digital currency as the decentralization of the supervision institution, hackers' attacks, etc. Consequently, they suggested introducing a global digital currency supervision system that shall consist of national and international supervision. Concurring with this point, Sapovadia (2018) stated that mobile technology is the most effective media to regulate digital currency, particularly among the non-served population. The author requested governments to create an expected regulation which will be business-friendly, fraud-proof, affordable and so on. However, Vandezande (2017) argues that such a legal framework can't be applied to all categories of virtual currencies.

### **Third World Countries**

The term "Third World" seems to mean different things to different people. Langley (1981) observed that some view it to mean states that emerged as a result of anti-colonial revolutions or struggles of the post-World War II era; some use it as a geographical representation of states in Asia (including the Pacific Islands), Africa, Latin America and the Caribbean; some use it to refer to non-aligned conditions during the East-West ideological rivalry or cold war; while others like Langley use it to identify a group of states that are defined and differentiated from others by a particular condition and an attitude. Most of these views lack empirical validation or verification because there are antithetical situations to their postulations.

For instance, the anti-colonial revolutions or struggle thesis is inaccurate because it fails to factor in some Latin American states that engaged in their "anti-colonial revolutions" over 150 years ago and including even the US, which fought against British colonialism. The geographical category or physical location theory equally fails because states like Japan, Australia, New Zealand, and China, among others, which are not counted as Third World, are included. Similarly, the non-aligned thesis is inaccurate because many Latin American states are Third World states aligned through the Rio Pact, while Cuba is aligned with the Soviet Union.

Nevertheless, the dominant position in the literature on the term Third World refers to "states having a systematic body of ideas about life and culture and promising alternatives to the socio-economic systems advanced by the eastern or western bloc" (Sigmund, 1967, p. 2). From the perspective of socio-economic conditions, it refers to the poor nations whose population of 2.8 billion constitutes 70% of total world population (United Nations, 1973) but with a total GNP of \$632 billion, which constitute 10.9% of the world GNP, an average per capita income of \$226, infant mortality of 125 per thousand as compared with 25 for the rich, 26.6% average literacy rate with rising malnutrition rate of 32.1% (Hobbs, 2010; Brandt, 1980). These, when compared with the wealthy states, reveal manifest and structural inequality and differentiate advanced industrial states from the less developing or poor states (Griffiths, 2010). Consequently, they are known as states that have been fighting or pushing for a New International Economic Order (NIEO). Their efforts led to the Bandung Conference of 1955, which was a meeting of Afro-Asian states, and the emergence of the "Group of 77" in 1964 has increased its membership to more than 138 as of 2020. The movement for a New International Economic Order (NIEO) expresses the ideology of encompassing egalitarian world socio-economic order that is re-distributive. Although Marxist in nature, it abhors Marxian revolutionary gimmicks (Osondu, 2020).

The term Third World refers to countries with substandard, underdeveloped, or underperforming conditions in specific fields which are in great need of development. The basic indices that classified them as Third World include the state of their political rights and civil liberties, gross national income (GNI), Human Development Index (HDI) and subsistence, low per capita income and poverty level, excessive dependence on agriculture, rapid population growth and high unemployment, lower levels of human capital, and level of freedom.

## **DATA COLLECTION AND ANALYSIS**

### **Rate of digital currency adoption in the Third World Countries**

From available data in the literature, there are 152 countries or independent nations categorized as the Third World. It is cumbersome to provide a complete list of these countries here. However, this section interrogates the rate of digital currency adoption by these countries. The results of the investigation are at two levels, namely: the rate of private or individual adoption among the citizens

of these 152 countries and the rate of corporate or government adoption of the currency among them.

First, the literature reveals that digital currency adoption among citizens or residents of Third World Countries and other parts of the World is skyrocketing. Chainalysis Team (2021) showed that as of the 2<sup>nd</sup> quarter of 2020, the total global private adoption rate was 2.5%, but by the end of the 2<sup>nd</sup> quarter of 2021, the adoption rate had grown by over 3.9%. In 2021, over 300 million people worldwide will be using digital currency, while over 18,000 businesses are already accepting them as means of payment. The observed increase in the rate of digital currency usage is manifesting more in countries with emerging markets, such as Kenya, Nigeria, South Africa, Tanzania, Vietnam, Venezuela etc., due to the prevalence of huge volumes of the transaction on the peer-to-peer (P2P) platforms (Onyango, 2021). Citizens of Central and Southern Asia, Latin America, and Africa send more web traffic to P2P platforms than Western Europe and Eastern Asia (Xiao and Ziyang, 2022). The negative impact of currency devaluation in these countries drives residents or individuals to buy and use digital currency to preserve their savings and embark on international transactions such as private remittances or for commercial purposes such as engaging in international trade. Nevertheless, this accounts for increases in digital currency adoption in general and does not cover Third World Countries alone. Chainalysis Team (2021) presented the total number of these users in a table that is herein adapted for this paper as follows:

Table a: Private users of Digital Currencies by Countries of origin

<b>Country</b>	<b>Number of crypto owners</b>	<b>Percentage of the population</b>
Ukraine	5,565,881	12.73%
Russia	17,379,175	11.91%
Venezuela	2,941,502	10.34%
Kenya	4,580,760	8.52%
USA	27,491,810	8.31%
South Africa	4,215,944	7.11%
Nigeria	13,016,341	6.31%
Colombia	3,122,449	6.14%
Vietnam	5,961,684	6.12%
India	100,740,320	7.30%
Thailand	3,629,713	5.20%
Brazil	10,373,187	4.88%
United Kingdom	3,360,591	4.95%
Pakistan	9,051,827	4.10%
Philippines	4,360,579	3.98%
South Korea	1,942,933	3.79%
Peru	1,233,892	3.74%

Belarus	352,498	3.73%
Australia	857,553	3.36%
France	2,179,654	3.34%
Latvia	62,091	3.29%
Hong Kong	245,012	3.27%
Canada	1,206,627	3.20%
Malaysia	1,019,405	3.15%
Netherlands	521,404	3.04%
Ghana	934,482	3.01%
Argentina	1,327,067	2.94%
Turkey	2,476,418	2.94%
Georgia	115,241	2.89%
Ecuador	482,496	2.73%
Indonesia	7,285,707	2.66%
Germany	2,191,986	2.62%
Chile	500,125	2.62%
Lithuania	70,254	2.58%
Slovakia	140,249	2.57%
Spain	1,173,340	2.51%
Poland	945,298	2.50%
Mexico	3,189,799	2.47%
Slovenia	50,940	2.45%
Estonia	32,032	2.41%
Morocco	878,168	2.38%
Portugal	241,389	2.37%
Belgium	272,990	2.36%
Bangladesh	3,742,571	2.27%
Sweden	228,309	2.26%
Czech Republic	238,285	2.23%
Romania	423,496	2.20%
Italy	1,309,499	2.17%
Singapore	549,903	9.40%
Panama	85,779	1.99%
Iran	1,649,897	1.96%
El Salvador	125,873	1.94%
Austria	171,578	1.91%
Cameroon	499,423	1.88%
Finland	104,241	1.88%
Greece	194,860	1.87%

Dominican Republic	201,516	1.86%
Bolivia	215,461	1.85%
Tanzania	1,095,494	1.83%
Switzerland	157,695	1.82%
Uganda	828,022	1.81%
New Zealand	85,008	1.76%
Egypt	1,791,852	1.75%
Bulgaria	120,842	1.74%
Republic of Serbia	151,954	1.74%
Kazakhstan	324,325	1.73%
Norway	93,640	1.73%
Ireland	84,704	1.72%
Cyprus	20,139	1.67%
Japan	2,079,653	1.64%
Mozambique	499,115	1.60%
Togo	131,221	1.59%
Montenegro	9,955	1.59%
Mauritius	20,007	1.57%
United Arab Emirates	152,077	1.54%
Croatia	62,150	1.51%
Sri Lanka	321,641	1.50%
Costa Rica	75,913	1.49%
Zambia	271,781	1.48%
Rwanda	188,410	1.45%
Nepal	423,840	1.45%
Malta	6,371	1.44%
Uruguay	50,119	1.44%
Denmark	79,451	1.37%
Bosnia & Herzegovina	45,002	1.37%
Hungary	131,365	1.36%
Moldova	54,377	1.35%
Cambodia	225,368	1.35%
Benin	161,981	1.34%
Guatemala	239,375	1.34%
Jamaica	39,214	1.32%
Saudi Arabia	452,778	1.30%
Ivory Coast	343,067	1.30%
Jordan	129,071	1.27%
Israel	109,493	1.27%



Puerto Rico	35,851	1.25%
Senegal	203,874	1.22%
Luxembourg	7,325	1.17%
Trinidad and Tobago	16,377	1.17%
Mali	232,172	1.15%
Macedonia	23,639	1.13%
Kuwait	47,949	1.12%
Namibia	28,529	1.12%
Armenia	33,270	1.12%
Congo	61,302	1.11%
Nicaragua	73,594	1.11%
Madagascar	301,061	1.09%
Angola	349,536	1.06%
Botswana	25,010	1.06%
Barbados	3,022	1.05%
Paraguay	75,010	1.05%
Tunisia	122,890	1.04%
Lebanon	70,158	1.03%
Uzbekistan	344,047	1.03%
Honduras	101,815	1.03%
Syria	177,824	1.02%
Albania	28,559	0.99%
Qatar	28,591	0.99%
Iceland	3,387	0.99%
Bahrain	16,685	0.98%
Ethiopia	1,127,264	0.98%
Kyrgyzstan	63,199	0.97%
Oman	49,467	0.97%
Azerbaijan	98,217	0.97%
Burkina Faso	197,532	0.94%
Maldives	5,108	0.94%
Haiti	107,752	0.94%
Yemen	278,315	0.93%
Suriname	5,474	0.93%
Iraq	375,328	0.93%
Malawi	176,240	0.92%
The Bahamas	3,576	0.91%
Sudan	101,798	0.91%
Brunei	3,979	0.91%

Myanmar	494,815	0.91%
Gabon	20,241	0.91%
Belize	3,569	0.90%
Macao	5,828	0.90%
Papua New Guinea	79,245	0.89%

Secondly, while the rate of private individuals' adoption of digital currencies is rising, anecdotal evidence shows that the rate of states' or countries' currency adoption is sluggish (Xiao and Ziyang, 2022). A country's currency adoption manifests in its establishment or launching of Central Bank Digital Currencies (CBDCs). According to the Atlantic Council's CBDC tracker, only very few countries in the Third World, i.e., Nigeria, the Bahamas, the 9 Eastern Caribbean States, and Cambodia, have officially launched Central Bank Digital Currencies (CBDCs) as of October 2021 (Rathburn, 2022). 81 other countries (including the 1<sup>st</sup> and 2<sup>nd</sup> World countries) are exploring the opportunities and proposing to launch the CBDC.

Buttressing further, Burghartz(2021) noted that the disruptions of global economic and financial transactions during the Covid-19 pandemic facilitated different countries' development of interest in establishing a CBDC. Bank of International Settlement (BIS) survey reveals that over 60 central banks began to actively research the potential for CBDCs, with 60% of these banks experimenting with the technology and 14% running pilot projects on it (Burghartz, 2021). This number doesn't exclude the 1<sup>st</sup> and 2<sup>nd</sup> world countries. For example, these countries include the central banks of China, Sweden, Singapore, and South Korea. It is inevitable, therefore, to infer that the rate of Third World Countries' adoption of digital currencies is meagre. They are still sceptical about its potency.

### **Challenges of Digital Currency Adoption in the Third World Countries**

Although private or individual user numbers, transaction volume and valuation are increasing across the board in digital currency matters, governments in the Third World are sceptical and slow in adopting it. Some countries have even resorted to an outright ban on digital currency and transactions. Adjunct to this, many other factors are challenging and hindering the currency's adoption in the Third World.

For instance, digital currencies and online exchanges are extremely vulnerable to security breaches and distributed denial of service (DDOS) attacks (Burghartz, 2021). Gavin Andresen, the chief scientist at the Bitcoin Foundation, noted, "Attackers try to exploit any system where they think they can profit and get away with it, whether that is robbing banks, stealing online banking credentials, or attacking a bitcoin exchange". This is because of the anonymous nature of their transactions. Usernames, email addresses and encoded passwords may be leaked, making fraudulent trading possible. When such an experience occurs, it leads to shutting down the site and

trading engine for many hours, which leads to market slump. Thus, the transactions reliant on the honesty and integrity of the parties involved.

Consequently, lack of regulation is a serious challenge to digital currency adoption in the Third World. There are enormous security challenges that must be addressed by founders and stakeholders of digital currencies. The prevailing susceptibility to attacks from criminal organizations and hackers makes investors and countries sceptical of adopting digital currencies/CBDC. Recourse mechanisms should be in place to enable consumers to retrieve or recoup their funds if security and regulatory measures fail to protect value against theft, misappropriation or value loss during transactions. This provides opportunities for increased adoption of the currency. In the case of untraceable fund loss, guidelines need to be established to investigate the regulator and the consumer. The loss of traceable or hacked funds will also need to be accounted for by selecting a reconciliation process. This process should accept reimbursement requests via due process, but at some cost to the consumer to fund investigation procedures and deter moral hazard effects. This mechanism will be essential to promoting consumer trust and the adoption of digital Currency (Berger, 2017).

Furthermore, digital currencies are effectively used by money launders and investors in contraband/illegal commodities. They are easily used on black market sites such as 'Silk Road' to sell or pay for illegal substances or items (Begum, 2021). Countries of the Third World became sceptical because this undermined the strength and profitability of their formal economy and national currency. Therefore, they are quick to disparage digital currencies. In addition, Begum (2021) observes that the dynamics of digital currency activities require basic technical skills and knowledge of how the blockchain works. Digital currency transactions are not without some financial and security issues. Therefore, investors or participants should consult and also know some of the common risks associated with digital currencies, such as: loss or destroy private keys, Cyber security risks, Peer to peer transactions risk, loss of confidence, rules for preventing or restricting digital currency transactions, currency exchange risk, digital currency taxation, liquidity risk, risk of price changes, business hour risks, bankruptcy risks, and network slow down risks (Begum, 2021, p. 3).

Most countries of the Third World cannot embark on mass awareness and information dissemination about these risks, and they lack the requisite knowledge and ability on how to contain or counter these risks. Consequently, they embark on an avoidance strategy. Further, the widespread adoption of digital currency in the Third World requires a sufficient level of financial literacy among the population, which will enhance their understanding of the value of the currency and how to use it (Stewart, 2017). Further, there are high-level security risks involved in storing all forms of a country's wealth electronically. In the orthodox cash system economy, countries hold foreign reserves and other forms of reserves like Treasury bills, which they rely on as safety nets or stocks of wealth against financial crises. The digital currency system is bereft of this provision.

Complicating this, Raskin and Yermack (2016) argue that the digital currency system, if adopted by Central Banks, undermines the privacy or even security of individuals' wealth and opens up the possibility and risk of Central Banks siphoning or manipulating people's accounts to offset the country's fiscal debts. This risk of theft of people's wealth may replicate itself in the activities of hackers (Meilejohn et al., 2013). This implies that the country's accounts or wealth could also be vulnerable to such Ponzi schemes or fraudsters, thereby subjecting the bank and/or its staff to reputational risk and collapse (Camera, 2016; Barrdear and Kumhof, 2016).

Legislations and regulations that ensure formal access to user information and are subject to strict substantive legal processes should be promulgated. The application of special judicial warrants to grant access to transactional data may be an option here. To preserve consumer trust and usage, such a special judicial warrant should not be administrative or routine in nature but always granted by a Judge upon proving a prima facie case. Third World countries are facing prevalent low technological interoperability and obsolescence with little or no effort on the part of their governments to update existing technological systems. This enables a potential systemic risk of cyber fraud amid large flows of digital currencies (Prasad, 2018). This exposes recent technological and economic system innovations such as digital currency to fragmented uptake and security breaches (Prasad, 2018). They are incompatible and require substantive efforts to harmonize existing technological systems and ensure interoperability, which most countries ignore. For this, the digital currency system turns into an instrument/structure of destabilization of the entire financial system among the Third World economies (Wen, 2018).

The obsolescence of fractional reserve banking is another challenge hindering the adoption of digital Currency among Third World countries. If the Central bank adopts digital currency, the role of commercial banks and intermediations as "custodians of deposits" automatically becomes obsolete (Accenture, 2017; Raskin and Yermack, 2016; Berger, 2017). The storage of wealth in accounts at commercial banks becomes inconveniencing, costly and insecure (Berger, 2017). The commercial banks, on their part, cease to accumulate central bank reserves and contribute to the money multiplier as primary intermediaries of credit. Thus, countries became sceptical of its adoption because it would endanger the banking system's stability and trigger bank runs.

However, with the adoption of digital currency, commercial banks and businesses can save costs related to bulk cash management, cash distribution and logistics (Raskin and Yermack, 2016). Immediate and seamless payments without intermediaries reduce reconciliation costs in securities clearing and settlement by 50% (Mainelle and Milne, 2016). Quick interbank clearing and settlement of transactions further imply reduced operational processes and lower operational risk associated with multiple-day settlement lags (Bech and Garratt, 2017).

The literature equally identified regulatory risks as a key challenge that hinders the adoption of digital Currency by Third World countries. Its adoption can potentially alter both

national and international payment systems fundamentally. The new medium of exchange holds survival risks for existing financial and payment regulations if an enabling regulatory environment is not created for the new system. It will significantly challenge existing laws on the definition of legal tender, its supervision and the distribution of digital currency as legal tender (Prasad, 2018). It will further require the reformation of financial and banking regulation to define the functions of the currency, how it interacts with existing payment systems and its distribution and storage account-based for customers. All these are delaying the adoption of the money and undermining national confidence in the currency.

In the Third World, access to connectivity, low speed of connectivity, and the cost of mobile data, mainly in the rural geographies, present a serious hurdle for low-income individuals in adopting and using digital devices for financial services (Stewart, 2017). Nevertheless, increases in potential market scale possibilities for digital currency can provide some scope for digital handset financing and distribution. The currency's adoption could also be improved by utilizing mobile money operators as intermediaries to translate mobile money into digital currency and vice versa. The Central Banks can subsidize digital currency network connectivity costs.

Adequate policies can lead to the mitigation of these challenges. For instance, technological advances are already enhancing inclusion and efficiency (Demirgüç-Kunt et al., 2018), while some policymakers are pioneering innovation and adopting their technologies by updating policy frameworks and promoting digital literacy (D'Silva et al., 2019). Equally, banking and eligible non-banking systems are upgrading their services and offer 24/7 real-time payments (Petralia et al., 2019; Bech et al., 2017). There is a global rise of non-bank e-money issuers such as e-commerce platforms or telecom operators that conveniently store on and exchange funds from a phone or online services through digital channels and physical agent locations.

### **Summary/Conclusion**

Globalization and digitization have led to the emergence of an international digital currency system, which seeks to serve as a means of selling and buying goods and services. Private people or individuals are adopting it with speed across the globe, particularly in the Third World. Despite its advantages, such as increasing the country's total GDP, the potential to solve national liquidity problems etc., the rate of official or formal adoption of the currency system in the Third World is slow. This is because many countries are sceptically researching it and proposing a programme for its adoption endlessly. This has been attributed to many factors challenging its operations, which have been elucidated in this paper.

This paper recommends that various Third World governments should allow the digital transaction platform to facilitate international trade in goods and services. Their different central banks should conduct critical empirical studies on digital currency and its application in the financial sector to offer tough financial system reforms to address all the observed weaknesses of the currency system.

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