THE IMPACT OF DIGITAL PAYMENT SYSTEMS IN FACILITATING CROSS BORDER TRADE UNDER THE AfCFTA

(August 2021 Research Report)

Partners:

1.0 INTRODUCTION

The world has often been described as a global community with nations having to depend on one another for exchange of goods and services. At the center of these transactions among individuals, groups or entities is the issue of the medium of exchange and payment systems. According to the IMF[1], in a seminal publication in 1994, payment systems consist of a set of rules, institutions and technical mechanisms for the transfer of money. The evolution of digital payment systems can be traced to 1918 when the Federal Reserve of the USA first moved currency via telegraph. Interestingly, participants in the market economy did not show much interest until the early 1970s when commercial banks in the USA and other advanced economies began to process cheques through electronic means (Graham 2003).

[1] International Monetary Fund (IMF) Publication. The Payment System – Design, Management and Supervision – Edited by Bruce J. Summer, printed 1994.

On the African continent, studies have shown that the success in digital payments only became pronounced in the early 2000s. During this period, commercial and retail banks adopted digital-led transaction strategy to reach customers through mobile telephony.
In an article by Mavadiya[2], it was recounted that M-Pesa operating in Kenya became the most successful mobile phone based financial service in the developing world. This means that the potentials are great for the African continent, particularly with the advent of the African Continental Free Trade Agreement (AfCFTA).

The creation of the AfCFTA in 2018 set for itself a core objective on the need to "enhance the competitiveness of the economies of State Parties within the continent and the global market". Now that 37 countries have duly ratified the AfCFTA and trading commenced since January 2021, the opportunity is now ripe for African countries to ensure that digital payment systems are developed to facilitate cross – border trade within the continent. A robust digital payment system will no doubt complement the efforts being undertaken to boost intra African trade.

GITFiC's August 2021 paper will consider an overview of digital payment, and discuss the structure of digital payment systems with focus on adopting a continental single digital currency which is expected to facilitate the operationalization of the AfCFTA.

[2] MovadiyaMadhvi. There is more to Digital Payments in Africa than M-Pesa. Date accessed: 9th August, 2021; www.finextra.com/the-long-read/44

2.0. CROSS BORDER TRADING WITHIN GHANA AND AFRICA

There has been a growing body of research into cross border trading, particularly the informal aspect of trading which has people crossing over border posts to engage in retail buying and selling. These studies took into consideration the various Regional Economic Communities on the continent, such as COMESA (Common Market for Eastern and Southern Africa), SACU (Southern African Customs) and ECOWAS (Economic Community of West Africa States).

Ghana is a founding member of the ECOWAS which was established by the Treaty of Lagos in 1975. The current trading system adopted by the ECOWAS Member States is termed as the ETLS (Ecowas Trade Liberalisation Scheme). This means that neighbouring countries such as Togo, Burkina Faso, Cote d'Ivoire can import goods into our commerce of trade, in so far as they qualify under the Rules of Origin. Cross border trading under the ECOWAS has been largely informal. In a recent publication by Kakare[3], the ECOWAS and the West Africa Economic and Monetary Union (UEMOA) have introduced projects and programmes to reduce barriers to and facilitate regional trade with the assistance of several development partners. Their research recommended that there is a need for border-specific approaches since they can vary from one border to the other.

The African Trade Policy Centre in 2009 considered the informal cross border trading situation within the East African Community (EAC). It was found that women constituted the majority of the trading community, and the market participants were actually

[3]Karkare, P., Bruce B., ApikoP., and Kane M.. A System, Not An Error: Informal Cross-Border Trade In West Africa. 2021

comfortable with the old way of conducting informal trading. They expressed concerns about formalization under customs protocol and introduction of common currency.

A study by Peberdy in 2015 focused on the importance of informal cross border trade and found that a significant proportion of traders crossing through the border posts surveyed were women, with only Malawi and Zambia unexpectedly having large number of men involved in informal cross border trade.

The study also identified that majority of traders crossing into a country with goods to sell were citizens of the country. It was observed that the most traders travelled across the border posts for short visits. Goods traded across the surveyed borders included; groceries, second-hand clothing, car parts, construction materials etc.

Beyond the misconception that cross border trading is largely about smuggling and tax evasion, the study found that traders make relatively significant contribution to duties collected at the border posts. Furthermore, due to the largely informal nature of transactions undertaken at the border posts, the study observed that digital systems of payment were quite low.

3.0. OVERVIEW OF DIGITAL PAYMENT SYSTEMS

Several studies have looked at the system of digital payment systems. According to Kalakota and Whinston[4], "electronic payment is a financial exchange that takes place online between the buyer and the seller. The content of this exchange is usually in the form of digital financial instrument (such as encrypted credit card numbers, electronic

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[4]Kalakota, R. &Whinston, A.B. (1997), "Electronic Commerce", A Manager's Guide. Reading, Addison Wesley 153 pp.

checks, or digital cash) that is backed by a bank or an intermediary, or by a legal tender." E-payment can be defined as 'payment by direct credit, electronic transfer or credit card details, or some other electronic means, as opposed to payment by cheque and cash'. It was also defined as a payer's transfer of a monetary claim on a party acceptable to the beneficiary. Overall, the digitalization of payments has gained more steam in the past four to five years, and more changes are expected in the future, owing to the rapid pace of technological development and the growing rate of intra African trade. Besides convenience and security, there is a strong push for contactless payments in the post-COVID world, which has given further impetus to digital payment innovation all over the globe.

In embracing the digitisation phenomenon, the AfCFTA is seeking to introduce and implement a payment system known as the PAPSS (Pan African Payment and Settlement System).

3.1 PAPSS UNDER THE AFRICAN CONTINENTAL FREE TRADE AGREEMENT

The AfCFTA is about to experience a system of digitalization process of transactions through the institution of the PAPSS which is being developed under the supervision of the African Export-Import Bank (Afreximbank). The African Union Heads of State formally adopted this system in July 2019 to support the implementation of the AfCFTA. PAPSS is expected to create new financial flows and successfully facilitate trade and other economic activities among African countries. The PAPSS is anticipated to minimize the financial cost of cross border trade and improve financial integration as well as boost intra- African trade and investment competitiveness.

The system will allow a small trader in Ghana to freely import goods from Sierra Leone using the Ghana Cedi; without thinking of his ability to buy a third currency, exchange and settlement costs and the length of time it takes for payment to arrive. To facilitate the implementation of the PAPSS, the Afreximbank has created a US$1bn AfCFTA adjustment facility to "enable countries to adjust in an orderly manner to sudden significant tariff revenue losses" which may be occasioned by the immediate implementation of the Agreement. This will undoubtedly help in cushioning State Parties as they may lose some form of revenue under the tariff liberalization under the Agreement.

This project which is being developed in collaboration with the Afreximbank will facilitate payments as well as formalize some of the unrecorded trade due to prevalence of informal cross-border trade in Africa. In all, the key benefits of implementing a Pan African Payment and Settlement System include use of local currency in intra-African trade payment which will lead to increase in intra-African trade, proper operation of the African single market in payment services, reduction in transaction costs for consumers; reduction in duration and time variability of cross-border payments across Africa, reduction in liquidity requirements of commercial banks for cross border payments, reduction in liquidity requirements of central banks for settlement as well as its own payments, reduction on reliance on informal means of payments for informal traders.

PAPSS is a centralized payment and settlement infrastructure for intra-African trade and commerce payments. The system is to facilitate transactions in Africa in a more simplified and positive manner beyond the traditional reliance on hard currencies in regional trade payments leading to a saving of more than US$500 billion in payment transactional costs per annum for Africa[5]. Currently, cross-border payments in Africa typically involve a third-party currency, such as the US dollar or euro, making transactions slow and expensive.

3.2 PAYMENT SYSTEMS IN GHANA

In 2007, the Bank of Ghana rolled out the Ghana Interbank Payment and settlements Limited (GhIPSS) as a subsidiary. Its mandate is to implement and manage interoperable payment system infrastructures for banks and nonbank financial institutions in Ghana. GhIPSSis mandated to migrate Ghana into an electronic payment society by providing the right infrastructure that will support the introduction of various electronic payment products and services. GhIPSS is to ensure that we use less cash and more of electronic forms of payment such as bank cards, mobile payments, internet banking, Automated Clearing House among others. Arising from the GhIPSS has been the introduction of systems including the E-zwich, Gh-Link, Mobile Money Interoperability, QR Code etc.

To ensure that the payment system runs well, it must be subjected to a robust legal and regulatory framework that gives assurances to all parties. Therefore, in 2019, government further introduced the Payment Systems and Services Act, 2019 (Act 987), under the supervision of the Bank of Ghana, to consolidate the laws relating to payment systems, payment services and to regulate institutions in electronic money business.

The advent of this legislation has ensured that significant achievements are being chalked to deepen financial intermediation and improve financial inclusion.

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[5]The Pan-African Payments and Settlement System (PAPSS). (2021). Retrieved 1 July 2021, https://afcfta.au.int/en/pan-african-payments-and-settlement-system

AfCFTA would have a strong impact on intra-regional trade which is estimated to expand by more than 80 percent but relatively limited adverse effects on trade with non-member countries "trade diversion"[6]. Increased intra-regional trade would add about US$60 billion to African exports and support ongoing diversification efforts.

3.3 IMPACT OF CROSS BORDER PAYMENT SYSTEMS ON INTRA AFRICAN TRADE

Countries with more advanced manufacturing sectors hold a potential for growth if they can access a larger less-fragmented African market. The signing of the landmark AfCFTA in March 2018 offers hope for increased intra-African trade and ties into the

African Union's Agenda 2063 for trade liberalization and improved trade on the continent. However, while the free flow of goods and services is crucial in boosting intra-regional trade, the movement of financial flows across borders is equally important.

In the research undertaken by SWIFT Data (2017), financial parties still rely on the US dollars as the preferred payment method when trading across Africa and globally. However, recent data released by SWIFT in 2020 indicates a shift towards intra-Africa clearing and trade, and a rise in the use of local currencies and digital Payment's systems[7]. Informal cross border trade is more widespread across Africa compared to other developing regions of the world and amounts to a significant portion of economic activity. [8]There has been a clarion call for an evaluation of cross-border payments with

[6]Abrego, L., Amado, M. &Gursoy, T., Nicholls, G. & Perez-Saiz, H.. (2019). The African Continental Free Trade Agreement: Welfare Gains Estimates from a General Equilibrium Model. IMF Working Papers. 19. 10.5089/9781498314398.001

[7]SWIFT DATA. (2017). Africa Payments: Insights into African transaction flows. Retrieved from http://file:///C:/Users/bridg/OneDrive/Documents/swift_wp_africa_payments.pdf

[8]Koroma, S., Nimarkoh, J., You, N., Ogalo, V. &Owino, B. Formalization of informal trade in :Trends, experiences and socio-economic impacts. Accra, Ghana: Food and Agricultural Office of the United Nations. http://www.fao.org/3/a-i7101e.pdf

traditional banks, as they turn out to be so slow and expensive that some people resort to delivering physical cash through an airplane courier service.

4.0 OVERVIEW OF DIGITAL CURRENCY

One of the ways being advanced to address trade payment challenges has been the development of a digital currency. The conventional or traditional method involves the exchange of physical cash and financial instruments such as cheques, bank notes etc.

Already digital currencies adopted worldwide include the crypto currency such as Bitcoin, Dogecoin, Ethereum, Litecoin etc. The crypto currency industry has since the 1980s gained gradual popularity with recent transaction volumes hitting over a trillion dollars. Crypto currency is a digital or virtual currency that uses cryptography for security. Crypto currencies provide a secure, instant, and nearly free option for cross-border financial transactions that will make it easier for businesses to take advantage of the new business landscape. Crypto currency is hard to forge because of this security feature. The determining characteristic of crypto currency, and probably the most attractive, is its organic nature as the fact that it is not issued by any central authority. The main benefits of using crypto currency as a means of payment for trade makes transfer of funds easier between two parties in the transaction. These transactions are facilitated through the use of public and private keys for security purposes. These fund transfers are carried out with minimal processing costs, allowing users to avoid the large fees for online transactions charged by most banks.

In Africa, there has been growing call for the adoption of a digital currency in the ordinary course of commerce and exchange of goods and services. Some critics have pointed to the non-regulated nature of crypto currency, and the inherent high risks in terms of currency volatility.

Notwithstanding, the Bank of Ghana has recently announced the design and piloting of a digital currency called the ‘e-cedi’. The project is said to be collaboration between the Bank of Ghana and Giesecke + Devrient to pilot a digital currency with banks, payment service providers, merchants, consumers and other relevant stakeholders. It is expected to broaden the financial landscape and facilitate payments without a bank account, contract, or smartphone, thereby boosting use of digital services amongst the citizenry.

It has been argued by proponents of the digital currency issues on the need for a digital currency to be adopted as medium of payment to execute financial services under the AfCFTA. We at **GITFiC** believe that with the right legislation, understanding and application, digital currency will become a tool to resolve much inefficiency in Africa’s financial system and bring the benefits of this free trade agreement to the doorstep of the continent’s citizens.

Digital currency offer an alternative to the current payment system, with fewer challenges in currency convertibility and a more inclusive system that is designed to replace the delay in adopting a single currency. Incorporating the informal sector into the AfCFTA will not only help these businesses directly but supports the wider growth of their country's economies. In Eastern Africa, informal cross-border trade (ICBT) was worth as much as 80% of the value of formal trade.

The adoption of the crypto payments systems under the AfCFTA will play a major role in facilitating the cross-border trade by ensuring efficiency in transaction while making them fast and less costly since there is no need for a third currency. This digital money can often be transferred cheaper, as crypto currencies allow worldwide financial transfer without the need of an intermediary institution or the need of a third currency. In addition, the speed of money transfer is increased by eliminating intermediaries.

5.0. GITFiC RECOMMENDATIONS

GITFiC, having considered the prospects of digital currency in Ghana and on the African continent coupled with its impact on cross border trade, it is pertinent to draw out the following recommendations:

We at **GITFiC** believe that:

1. State parties under the AfCFTA should Endeavour to formulate policies to ensure the regulation of the digital currency as it presents a viable means to improve financial inclusion.

2. The **GITFIC** wishes to re-echo the recommendation given by the Vice President of Ghana, Dr. Mahamadu Bawumia at the 5th **GITFIC** Conference on the need for the PAPSS architecture to allow national banks of State Parties to connect so as to ensure seamless operationalization and financial integration.

3. There is the need for governments to encourage and invest adequately in financial technology (fintech) particularly startup businesses to boost technology transfer.

4. Since cross border trade across the continent has been found to be largely informal, it is recommended that programs are rolled out to build institutional capacity among stakeholders and businesses particularly in the informal sector.
5. Following the announcement by the BOG to pilot a digital currency, it is recommended that periodic impact assessments are undertaken, and such finding shared with the AfCFTA Secretariat and the monetary zones on the continent (for eg: West African Monetary Zone - WAMZ).

6. Implementing agencies of the AfCFTA protocols to conduct periodic empirical studies on the various modules to inform policy decisions.

7. The AfCFTA should assure and guarantee that at least 1% of all Transactional Revenues under the PAPSS are remitted to Central Banks of the contracting State Parties. This, we at **GITFiC**, believes will spike the interest and commitment in ensuring the success of the PAPSS.

6.0 CONCLUSION

As a policy think tank institution (**GITFiC**), we know the impact of COVID-19 pandemic has been devastating as economic activities have slowed down in many sectors particularly in the trade and tourism industries. However, one can conclude the situation has underscored the need for economies to embrace digitization and digital payment systems.

The emergence of digital currencies such as Bitcoin, Litecoin have attracted significant attention, with Ghana having started a pilot exercise on a digital currency known as 'e-cedi'. On the continental level, the Pan African Payment and Settlement Systems (PAPSS) being developed by the Afreximbank and the AfCFTA will provide a major relief for the cross-border payments to boost intra-African trade. By this, cross border traders who take advantage of the digital processes under PAPSS will not have to rely on third party currency to undertake transactions.

While critics have pointed to the inherent risks and unregulated nature of crypto currency as a mode of payment systems in cross-border trade, **GITFiC** cannot deny that digital currency industry has the potential to promote trade facilitation and reduce transactional cost. This research has shown that digital payment systems can make a great mark in the formal and informal trading sector if the requisite structures of regulation, trust, and policy are put in place. Digital currency is an emerging industry that can improve financial inclusion.

REFERENCES

Abrego, L., Amado, M. &Gursoy, T., Nicholls, G. & Perez-Saiz, H.. (2019). The African Continental Free Trade Agreement: Welfare Gains Estimates from a General Equilibrium Model. IMF Working Papers. 19. 10.5089/9781498314398.001

AFREXIMBANK.(2020). Informal Cross-Border Trade in Africa in the Context of theAfCFTA. Cairo.

Agimo (2004). Better Practice Checklist for E-Payment. Australia Government Information Management Office [Available online] http://www. agimo.gov.au/publications/2000/04/better_practice_ checklist_for_epayment (2013-10-14).

Boshkov, T. (2019).Blockchain and Digital Currency in the World of Finance. *BlockchainAndCryptocurrencies*. doi: 10.5772/intechopen.79456

International Monetary Fund (IMF) Publication. The Payment System – Design, Management and Supervision – Edited by Bruce J. Summer, printed 1994.

Kalakota, R. &Whinston, A.B. (1997), "Electronic Commerce", A Manager's Guide. Reading, Addison Wesley 153 pp.

Karkare, P., Bruce B., Apiko P., and Kane M.. A System, Not An Error: Informal Cross-Border Trade In West Africa. 2021

Peberdy Ann, Sally & Crush, Jonathan &Tevera, Daniel & Campbell, E &Zindela, Nomsa&Raimundo, Ines & Green, T &Chikanda, Abel &Tawodzera, Godfrey &Cau, B. &Mokhomane, Z.. (2015). Transnational Entrepreneurship and Informal Cross Border Trade with South Africa.

SWIFT DATA. (2017). Africa Payments: Insights into African transaction flows. Retrieved from http://file:///C:/Users/bridg/OneDrive/Documents/swift_wp_africa_payments.pdf