



Munich Personal RePEc Archive

Finternet in Africa: Preparing Africa for the financial system of the future

Ozili, Peterson K

2024

Online at <https://mpra.ub.uni-muenchen.de/122166/>
MPRA Paper No. 122166, posted 24 Sep 2024 14:33 UTC

Finternet in Africa: Preparing Africa for the financial system of the future

Peterson K. Ozili

Abstract

The finternet is an emerging concept in global finance. The finternet is a term used to describe financial systems that are interconnected to one another like the internet. The finternet is a vision of the financial system of the future and Africa cannot be left behind in the race to transition to the finternet. But for this to happen, there is a need to understand what the finternet really is, what it means for Africa, the benefit for African countries, the mechanisms that exist today that will bring Africa closer to the finternet and the changes that need to be made today to prepare African countries for the finternet. This article explores the concept of the finternet, its definitions, benefits, and the strategies to help African countries transition to the financial system of the future which is the finternet.

Keywords: finternet, financial system, financial services, interconnectedness, Africa, African countries, internet

To Cite: Ozili, P. K. (2025). Finternet in Africa: Preparing Africa for the Financial System of the Future. In *Global Economic Interconnectedness: International Trade and Finance* (pp. 95-104). IGI Global.

1. Introduction

This study explores the prospects of the finternet in Africa. Many African countries are already witnessing the digital transformation of the financial system. Practically, we see the digital transformation of the financial system in our daily lives especially in our ability to obtain a quick loan from online lenders, make payment for groceries using a payment card, pay a taxi fare using a mobile app, obtain a mortgage through online channels, and make payment for merchandise through a payment card which is inserted into point-of-sale (POS) devices.

The digital transformation occurring in the financial systems of the region is faster in some African countries such as Kenya, Egypt, South Africa, Nigeria, and Mauritius and slower in other African countries such as Lesotho, Chad, Sao Tome and Principe, and Libya. These positive developments do not downplay the fact that many people in African countries still use cash and prefer cash payment because cash is still the dominant means of payment in some African countries. Rather, the positive developments emphasize the fact that most African countries are slowly migrating to digital payments and a digitized financial system at their own pace due to their unique country characteristics (Kumaga, 2011; Kizza, 2013; Mader, 2018; Ozili, 2020).

The gradual digital transformation of the financial system which we are witnessing today in African countries is being enabled by the proliferation of mobile phones, digital payment systems, deployment of RTGS systems, ultra-fast internet connectivity and emerging digital ID systems which are making financial transactions faster, easier, and more efficient for a lot of people in African countries (Raji, 2020; Ferguson, Soutter and Neubert, 2019). However, despite the ongoing digital transformation in the financial system of many African countries, many financial transactions are still slow, they take a long time to complete and settle, many payment systems are not interoperable with other payment systems, and some payment processing are still done using paper, which makes the entire payment system architecture less than efficient and makes the financial system underdeveloped. In poor African countries, internet connectivity is too costly, basic financial services are unavailable for many people, cross-border transactions are very expensive, and the process of payment for international trade is onerous and frustrating. This calls for the need to find a wholistic solution that address

these issues and prepare African financial systems for a transition to the financial system of the future.

A possible solution to address these problems in African countries is the finternet. The Finternet is essentially the internet of interconnected financial systems. The term 'finternet' was first used in Carstens and Nilekani (2024)'s article. They used the term 'finternet' to convey the possibility of connecting global financial systems into one in the form of a web to mimic the internet (Carstens and Nilekani, 2024). Understanding how the finternet would work in Africa is important because African countries cannot operate in isolation from the world. African financial systems need to be connected to each other and connected to the financial systems in other continents so that people in African countries can access the financial services they want which are available in other countries but are not available in their own countries. It would enable Africans to access and enjoy the financial services available in other jurisdictions especially if those financial services have better quality than the financial services offered in their own domestic jurisdiction.

This study contributes to the African financial development literature that examine the developmental opportunities and challenges in African financial systems (see, for example, Allen, Otchere and Senbet, 2011; Demirgüç-Kunt and Klapper, 2012). The present study adds to the literature by examining the changes that need to be introduced to prepare African financial systems for the finternet disruption. This study also contributes to the finance literature that examine the interconnectedness of global financial systems (see, for example, Bhar and Nikolova, 2013; Roukny, Battiston and Stiglitz, 2018). The present study adds to this literature by examining how African financial systems could connect to global financial systems in a seamless and effective way. This study further contributes to the literature that explore the recent technological developments in the financial system (see, for example, Hsu, Tian and Xu, 2014; Azarenkova et al, 2018). The present study adds to this literature by examining the possibility of building technology enabled interconnected financial systems.

The rest of the paper is structured as follows. Section 2 presents the definition of the finternet and its benefits for African countries. Section 3 identifies the existing mechanisms that bring African countries closer to the finternet era. Section 4 suggests some strategies to consider to bring Africa to the finternet age. Section 5 presents the conclusion of the article.

2. Understanding the finternet: definitions and benefits for Africa

The finternet is essentially a web of many financial systems connected to one another like the internet through a special type of technology infrastructure that enables people operating in one financial system to access and use the financial products and services offered in other financial systems seamlessly and at low cost. It may also be viewed as many financial ecosystems connected to one another through some technology infrastructure that enable individuals and firms operating in one financial ecosystem to access and use the financial products and services offered in other financial ecosystems seamlessly and at low cost. The finternet can be seen as the internet of financial systems or the internet of financial ecosystems. The goal of the finternet is to lower the barriers between different financial systems and different financial ecosystems (Carstens and Nilekani, 2024).

The benefit of the finternet for individuals and households in African countries is that the finternet will allow individuals and households to transfer any financial asset to anyone in any location in the world at any time using any digital device and at low-cost. The finternet would make financial services available to anyone regardless of their age, income, gender, race, sexuality, ethnicity or disability, thereby increasing financial inclusion in all demographic segments of society. The benefit to African firms is that firms will be able to raise equity capital, working capital and debt from anywhere in the world. For example, a small and medium scale enterprise (SME) business in Congo can source its working capital from a microfinance bank in the Netherlands at low cost and also obtain a loan from a commercial bank in Singapore at the same time to meet its financing needs while the creditors will benefit from having a well-diversified equity and debt portfolio.

3. Existing mechanisms that bring Africa closer to the finternet era

Several mechanisms exist today that can bring African countries closer to a finternet world. Some of these mechanisms already exist. Others are close to being developed and are worth exploring in this section.

3.1. Technologies that convert financial assets to digital assets

There are existing technologies that convert financial assets (e.g., bonds, debentures, debt, equity, etc.) into digital assets simply by the push of a button so that financial assets can move in digital form across borders without breaching regulations. This will enable financial assets to be deposited in more than one location as the owner of the asset wills. In the finternet world, the owners of financial assets in African countries can use this technology to transfer financial assets across jurisdictions and also use the technology to buy financial assets in other jurisdictions by the push of a button.

3.2. Technologies that convert physical assets to digital assets

There are existing technologies that enable the conversion of physical assets (e.g., building, cars, land, etc.) into digital assets simply by the push of a button so that the owner of the physical assets can move the asset in digital form across borders without breaching regulations, and the transferred digital assets will be transferred back to physical assets through physical purchase of the asset in a different location. In the finternet world, the owners of physical assets in African countries can use this technology to transfer physical assets across jurisdictions and also use the technology to buy physical assets in other jurisdictions by the push of a button.

3.3. The pan-African payment and settlement system

There is the pan-african payment and settlement system (PAPSS) which is already connecting all African countries through trade and payments. The PAPSS is the only cross border financial market infrastructure that enables instant, secure, and simplified payment transactions relating to trade in African countries. The PAPSS ensures instant transfer of money in local currency from one party in an African country to another party in a different African country. The PAPSS will contribute to ushering African countries into the finternet because the PAPSS

can enable a trader in Lagos Nigeria to purchase a wristwatch from Dakar Senegal and make payment in local currency without the hassle of converting the local currency to US dollars.

3.4. Cross-border central bank digital currency

Some African central banks have indicated that they will explore central bank digital currency (CBDC) for cross border payments to attract remittances. Many African countries are already developing CBDCs. What is unique about cross border CBDC is that it enables instant digital settlement of domestic and international payments at low cost, and it can be designed to be interoperable with the CBDC of other countries through a multi-CBDC arrangement so that CBDC users in African countries can purchase goods in Europe and make CBDC payment for the purchased goods. As a result, cross border CBDC will draw Africa closer to the finternet world by giving individuals in many countries access to central bank money in the form of CBDC which they traditionally do not have access to. In the finternet world, individuals in African countries will be able to access and purchase several units of the CBDC of other countries, thereby giving Africans access to the central bank money of other countries.

3.5. The creation of the African central bank

Intense work is ongoing to establish an African central bank by 2028. The African central bank will be established as the financial arm of the African Union. The goal of the African central bank is to build a common monetary policy framework, issue a single African currency and accelerate economic integration for all African countries. More importantly, the African central bank will be used as an instrument to unify all African financial systems by reducing cross border payment barriers, establishing multilateral payment systems, promoting exchange rate stability and promoting international monetary cooperation among African countries. The establishment of the African central bank will usher Africa closer to the finternet because the African central bank will be used as an instrument to accelerate the interconnection of all African financial systems so that African citizens can access payment, credit, and insurance, and other financial products and services that are available in other African countries.

4. Strategies to consider to bring Africa into the finternet age

African countries can adopt several strategies in preparation for the transition to the finternet era.

4.1. Issue new regulations to breakdown silos in the African financial system

The financial system in African countries is made up of many siloed sub-systems or components that serve customers, debtors, creditors, and investors. Each component serves a specific function, and regulations are put in place to prevent one component from fully integrating or interfering with other components, but such regulations create siloed compartments in the financial system. To be a part of the finternet world, financial regulators and bank supervisors in African countries will have to issue new policies or regulations that fully integrate all parts of the siloed financial system. This will pave the way for the much-needed interconnection of the financial system of many African countries.

4.2. Remove institutional barriers to the finternet

Many institutional barriers prevent people in one African country from accessing the financial services available in other countries. These barriers may be linked to legal systems, laws and financial surveillance systems or institutions that prevent people from accessing cross border financial services. There is a need to minimize these barriers so that people can make genuine legitimate demand for foreign financial services and make payments from their domestic country.

4.3. Remove political barriers through reorientation

Political actors in African countries may use their executive powers to prevent citizens from accessing the financial services that are available in other countries due to historical enmity with other African countries or non-African countries. This may be linked to conflict, past slavery, or the need to preserve a country's national pride and heritage. Such political barriers will prevent people from accessing cross-border financial services. There is a need for re-orientation among political actors about the benefits of having interconnected financial systems. Such reorientation can help to remove political barriers so that people can make genuine legitimate demand for foreign financial services from their domestic country and

access the financial services they need which may be available in other countries but is unavailable in the domestic African country.

4.4. Attain high levels of digital financial inclusion

If African countries do not attain a high level of digital financial inclusion, it would be difficult to realize the vision of finternet in Africa. Digital financial inclusion means that banked customers can use digital technologies such as mobile phones, fintech apps, and bank apps to access and use digital financial services in the formal financial system remotely. Without attaining a significant level of digital financial inclusion, it would be difficult for banked customers in one African country to access the digital financial services offered in the financial system of other countries (Ozili, 2022). To enable the transition to a finternet world, African countries must ensure that banked customers have digital access to the financial system so that they can use their digital devices to access the digital financial services offered in other African countries or in non-African countries.

4.5. Transition to a modern digital payment system of the future

Many African countries will need to overhaul their existing old and archaic digital payment system and transition to a modern digital payment infrastructure to prepare for the finternet. All African countries need a modern digital payment system that can connect with existing and new networks beyond SWIFT, and it should be able to offer more choice to individuals and firms. The modern digital payment system should also support all types of cross-border payments, have extended operating hours and should be synchronisable and interoperable with existing and new third-party interfaces so as to allow outside operators to connect with the modern digital payment system and ease the movement of funds and digital assets from one African country to other African countries and non-African countries. The modern digital payment system could be a modern real-time gross settlement (RTGS) system or other types of payment system infrastructure.

5. Conclusion

This study explored the finternet for Africa. The finternet will put African citizens at the centre stage by lowering barriers to African financial systems and ensuring that African customers can access the financial services available in the financial system of non-African countries. This article also identified the mechanisms that exist today that can accelerate Africa's transition to the finternet as well as the possible strategies that can aid this effort. While the finternet offers many benefits to customers or users of financial services, there is a need to proceed with caution with the finternet agenda especially in Africa because resistance to the finternet is likely to be very strong in African countries due to the desire of African regulators to protect their financial systems from external financial shocks that may trigger financial crisis when their financial systems are open, or due to the presence of a strong national culture that promotes patronage of domestic financial services at the expense of foreign financial services. Despite this, in the future, African policymakers will face increasing pressure to transition to the finternet. At that time, they will consider the benefits and risks of the finternet, and hopefully make the best decision.

Reference

- Allen, F., Otchere, I., & Senbet, L. W. (2011). African financial systems: A review. *Review of Development Finance*, 1(2), 79-113.
- Azarenkova, G., Shkodina, I., Samorodov, B., & Babenko, M. (2018). The influence of financial technologies on the global financial system stability. *Investment Management & Financial Innovations*, 15(4), 229.
- Bhar, R., & Nikolova, B. (2013). Measuring the interconnectedness of financial institutions. *Economic Systems*, 37(1), 17-29.
- Carstens, A., & Nilekani, N. (2024). *Finternet: the financial system for the future* (No. 1178). Bank for International Settlements.
- Demirgüç-Kunt, A., & Klapper, L. F. (2012). Financial inclusion in Africa: an overview. *World Bank policy research working paper*, (6088).

Ferguson, K. K., Soutter, L., & Neubert, M. (2019). Digital payments in Africa-how demand, technology, and regulation disrupt digital payment systems. *International Journal of Teaching and Case Studies*, 10(4), 319-340.

Hsu, P. H., Tian, X., & Xu, Y. (2014). Financial development and innovation: Cross-country evidence. *Journal of financial economics*, 112(1), 116-135.

Kumaga, D. (2011). The challenges of implementing electronic payment systems—The case of Ghana's E-zwich payment system.

Kizza, J. M. (2013). Mobile money technology and the fast disappearing African digital divide. *African Journal of Science, Technology, Innovation and Development*, 5(5), 373-378.

Mader, P. (2018). Contesting financial inclusion. *Development and change*, 49(2), 461-483.

Ozili, P. K. (2020). Contesting digital finance for the poor. *Digital Policy, Regulation and Governance*, 22(2), 135-151.

Ozili, P. K. (2022). Digital financial inclusion. In *Big Data: A game changer for insurance industry* (pp. 229-238). Emerald Publishing Limited.

Raddant, M., & Kenett, D. Y. (2021). Interconnectedness in the global financial market. *Journal of International Money and Finance*, 110, 102280.

Raji, R. (2020). Digital financial inclusion in Africa: an analytical assessment of Kenya & Nigeria. *Africa Current Issues*.

Roukny, T., Battiston, S., & Stiglitz, J. E. (2018). Interconnectedness as a source of uncertainty in systemic risk. *Journal of Financial Stability*, 35, 93-106.