Agpaytech's Research
23rd July, 2024

THE PAYMENT CHOICE DEBATE

Single Currency, CBDC or Interoperable Mobile Money in Africa?

Agpaytech

Executive Summary

A patchwork of currencies, financial systems, and varying levels of technological adoption characterizes Africa's economic landscape. In the quest for economic growth, financial stability, and improved financial inclusion, African nations choose between adopting a single currency and enhancing interconnected mobile money interoperability or maybe central bank digital currency.

For some experts, the quest for unionizing the financial system is long overdue. However, the choice of approach and technical framework is behind. With the complexity of payment systems and varying levels of infrastructural development in Africa, single currency, interconnected mobile money systems, or multi-CBDC platform have their unique opportunities and challenges.

While the Vice President of the Republic of Ghana, His Excellency Dr. Bawumia has called for interoperable mobile money, the African Union 55th meeting session hinted at working out the common modalities or framework towards a single currency by 2025.

This report analyzes the potential and challenges of each option, examining their impact on economic growth, financial stability, and financial inclusion, as well as their influence on cross-border payment systems.

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Introduction

A single money for the whole of the African region is an official objective of the African Union (AU).

The creation of a typical African currency has long been a pillar of African unity, a symbol of the strength that its hope will emerge from success with efforts to integrate the continent.

As a common currency and payment system for Africans is on the table, different monetary zones aim to launch and use a common currency.

On 9th September 1999 at a summit in Sirte, Libya, Muammar Gadaffi presented his vision of a borderless United States of Africa.

He envisioned a United Africa with one president, a united defense force, a single currency, and one trade and foreign policy.

The creation of a single currency dubbed ECO has not received greater attention nor has any roadmap published yet.

On the 7th of July 2024, during the ECOWAS 5th Ordinary Session of the Authority of Heads of State and Government took note of the conclusion of the Practical Modalities for the creation of the ECO.

The authorities advised the Commission to submit a draft Supplementary Act defining the modalities for the participation of Member States in the Monetary Union at its first Ordinary Session in 2025.

On the other hand, the Vice President of the Republic of Ghana, Dr. Mahamudu Bawumia has suggested that given the difficulty African countries could encounter in having a single currency to facilitate trade, interconnected payments such as mobile money interoperability, are better to strengthen trade and payment among African Countries.

There is also a growing number of financial experts that support interlinked systems such as mobile network payments, FinTech instant payment and multi-central bank digital currencies as the means to achieve instant cross-border payments than single currency.

With time and technological advancement, does the single currency ideology fit to address the cross-border payment challenges in the African continent?

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Monetary Harmonization Challenges in Africa

All over the world, monetary policy has been a tool used by governments, central banks and other authorities to gain control over sovereignty and promote economic growth in the interest of the nations or regions.

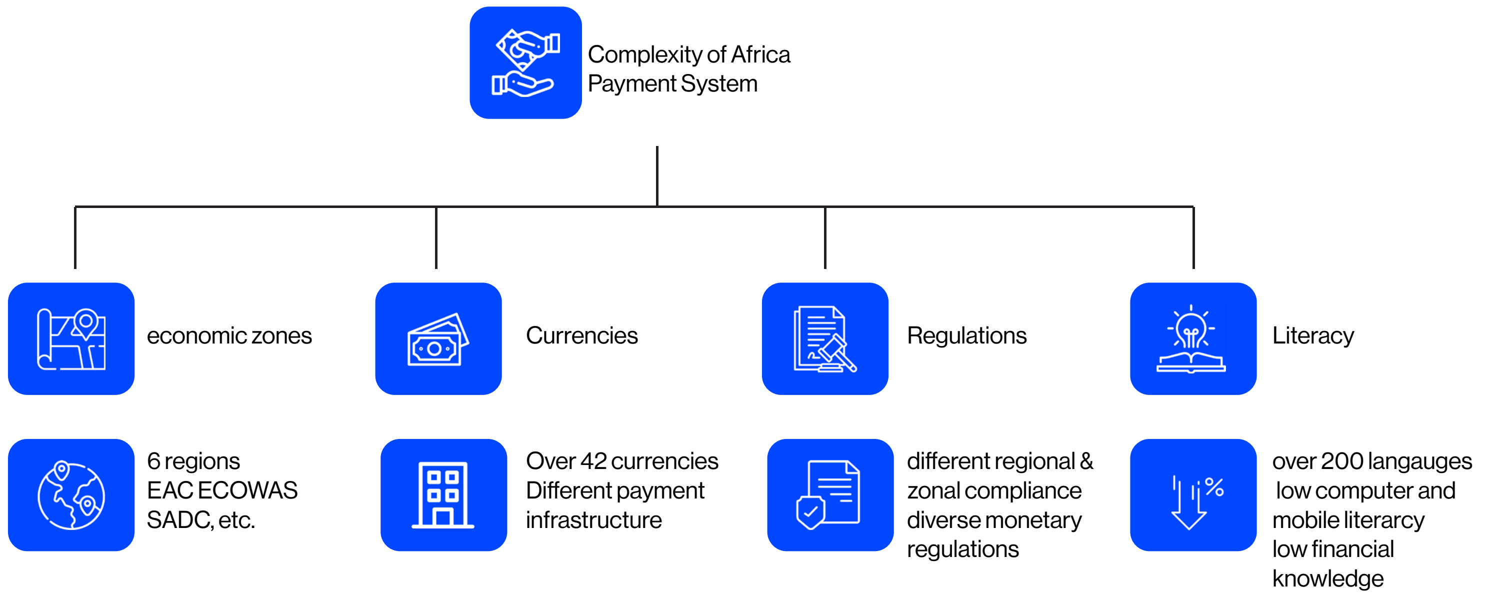
For instance, the power of an integrated monetary structure in a globalized world has been demonstrated by the success of the single European currency, the Euro, which has become crucial to many recent economic developments in Europe by providing more effective means of conducting business and utilizing the institutional and human resources of the continent to foster greater prosperity (Ekekwe, 2008).

But the cross-border payment challenges either stemming from the single currency, interoperable mobile money or central bank digital currency (CBDC) has its side effects. The question remains "What monetary or payment challenges does Africa need to address?

A Complex Payment Environment

The complexity of payment systems in Africa cannot be attributed to one reason. It spans both hard and soft skills such as regulation issues, currency decentralization, diverse economic unions, language barriers, and technological or technical and infrastructural challenges. These challenges have required more middlemen or correspondent players to complete transactions from one country to the other. Moreover, it has increased costs related to multi-currency transactions and FX (forex exchanges).

Figure 1: African payment complexity



Source: Agpaytech

The Currency Matters

It could have been much easier to use one to three countries' currencies as the main trading currency in Africa. But what challenge would that address? Is it regulatory, exchange rate, interoperability, speed, cost or? According to the AfCFTA Secretariat, there are over 42 currencies in the continent, and this remains a constraint to intra-Africa trade due to the need to use international currencies for the transaction.

The notable currencies are the West African CFA franc, used in 8 independent countries, and the Central African CFA franc, used in 6 other nations.

Their relative stability is guaranteed to utilize the fixed exchange rate that is pegged to the Euro. However, the only local currency ranked among the most traded in the international forex market is the South African Rand, placed at 20th position globally. Multiple websites confirmed that the Libyan Dinar had been Africa's most robust currency.

45.1%

The US dollar accounted for more than 45.1% of payments from Africa in 2017.

6.2% to 4.6%

However, the British pound has seen a decrease in use from 6.2% to 4.6%.

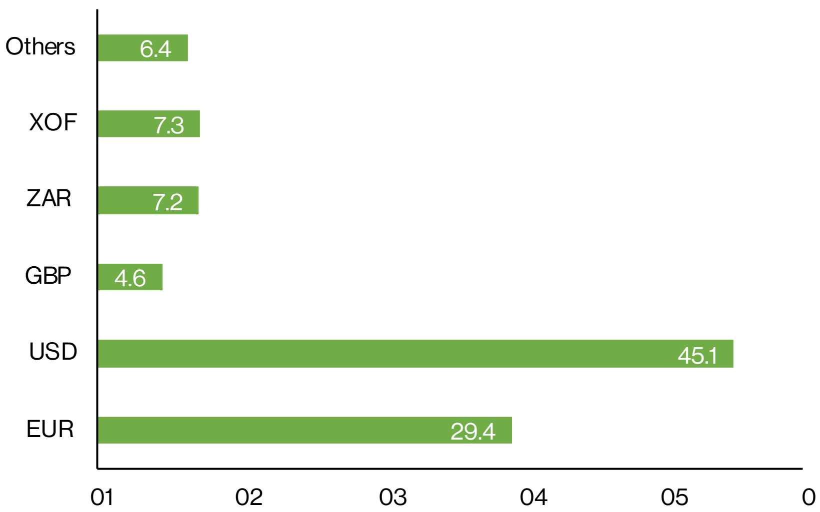
29.4%

The Euro is increasing in importance, by 29.4%.

7.3%

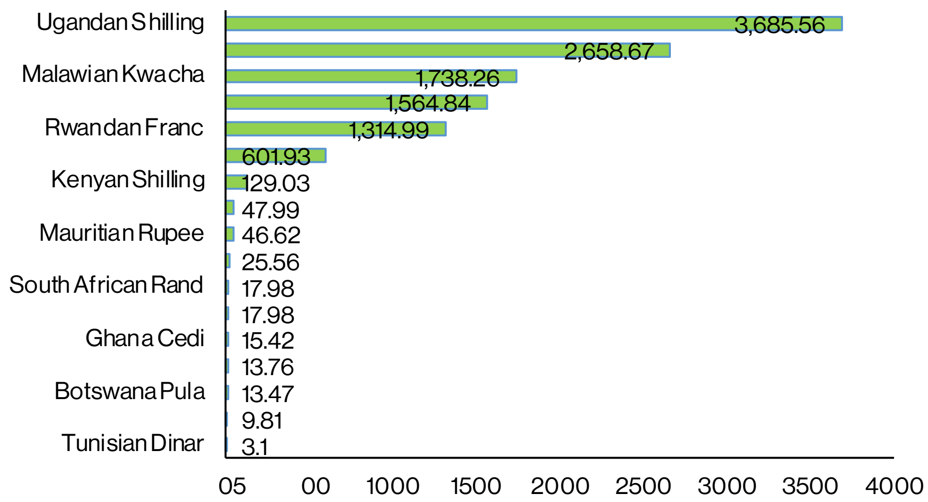
The use of local currencies, including the West African franc and South African rand, is increasing. The use of the franc for cross-border payments has overtaken the rand and the pound, accounting for 7.3% of payments in 2017.

Figure 2: Africa's currency usage for cross-border commercial payments



Source: Source: SWIFT BI Watch, 2017

Figure 3 African country's FX rate against the USD 14/7/24



Source: Agpaytech

Governance of Payment System

One central pillar for a robust financial payment system is the legislation that regulates the financial market.

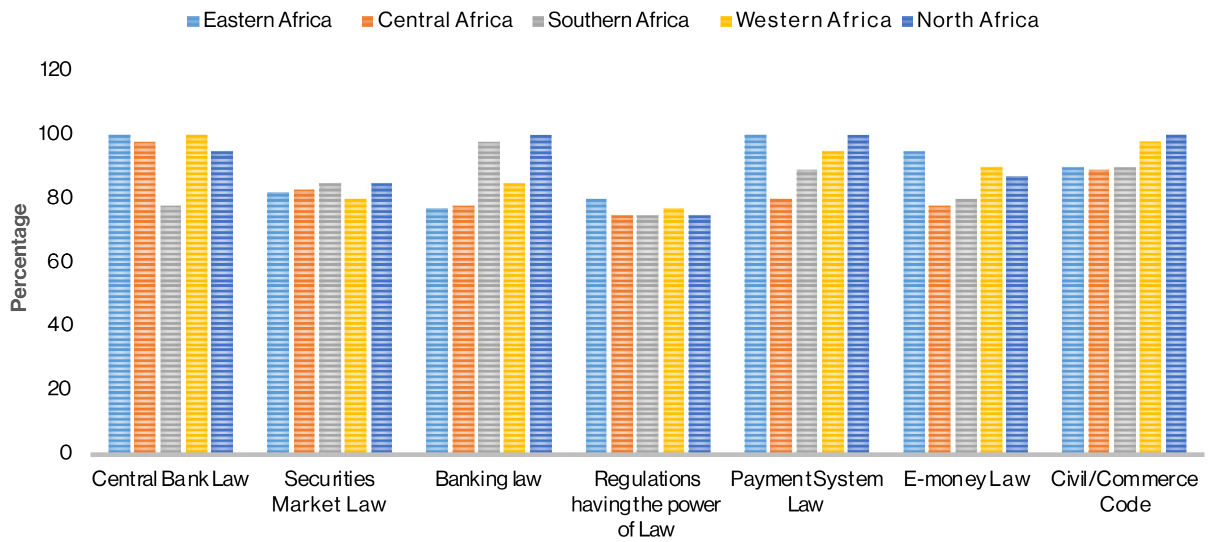
The governance of the financial payment system needs sanity and legal structures that cover the payment and securities settlement systems, payment services, licensing of payment service providers, and payment oversight arrangements.

The legal payment structures are fragmented in Africa, and each country has its unique settlement regulations and requirements. There is no unified payment facility for all the currencies in the independent states in Africa.

However, Africa Union (AU) is working towards issuing common currency and denominations for all its members states.

Figure 4 illustrates that Sub-Saharan Africa and, the Middle East & North Africa have 100 percent central bank laws regulating their financial industry.

Figure 4: Legislation regulating payment and settlement systems



Source: Agpatech

There is no unified payment facility for all the currencies in the independent states in Africa.

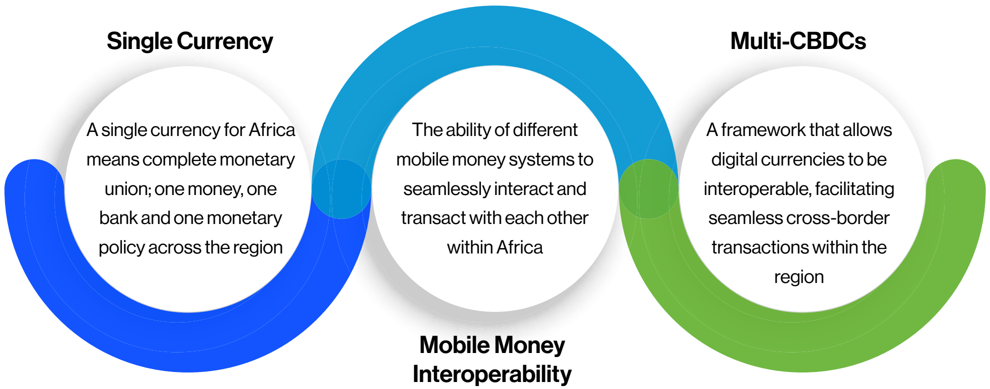
91% & 63%

Moreover, the report found that payment system laws were 91% and 63% in SSA and MENA. Besides, e-money law was poor in these economic regions and worldwide.

The Debate: Single Currency vs. Mobile Money Interoperability vs. Multi-CBDCs

Africa is at a crossroads in its financial evolution. As the continent seeks to enhance its economic integration and financial inclusion, three major options are under consideration that could bring the whole African region under one umbrella: adopting a single currency (ECO), improving mobile money interoperability, and implementing multi-central bank digital currencies (multi-CBDCs).

Figure 5: Single Currency vs. Mobile Money Interoperability vs. Multi-CBDCs

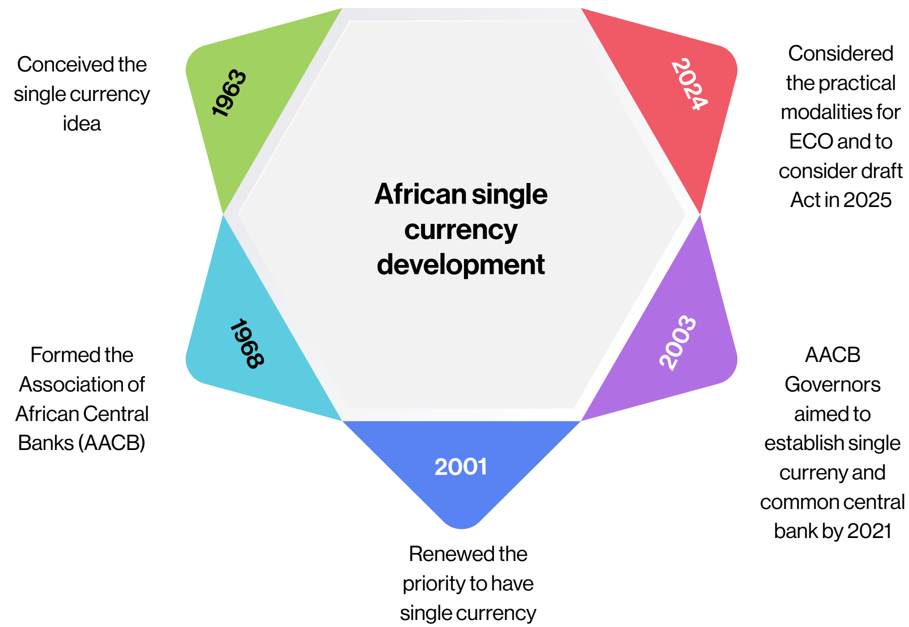


Source: Agpaytech

Single Currency for Africa

The goal of a single African currency has been a symbol and pillar of unity that aims to integrate and strengthen the African Union (AU). The project was created in 1963 and renewed the priority in 2001 when all the 53 member states endorsed the deal. In August 2003, the Association of African Central Bank Governors announced that it would work for a single currency and common central bank by 2021. Already, there are five regional economic blocs (West, East, Central, Southern, and North Africa) regions.

Figure 6: African single currency development



Source: Agpaytech

Potentials of the Single African Currency

- **Economic Integration:** A single currency could significantly enhance economic integration across African nations, reducing transaction costs, eliminating exchange rates, and facilitating trade and investment across the region.

- **Price Stability:** A unified currency could contribute to price stability by eliminating currency risks and creating a more predictable economic environment.

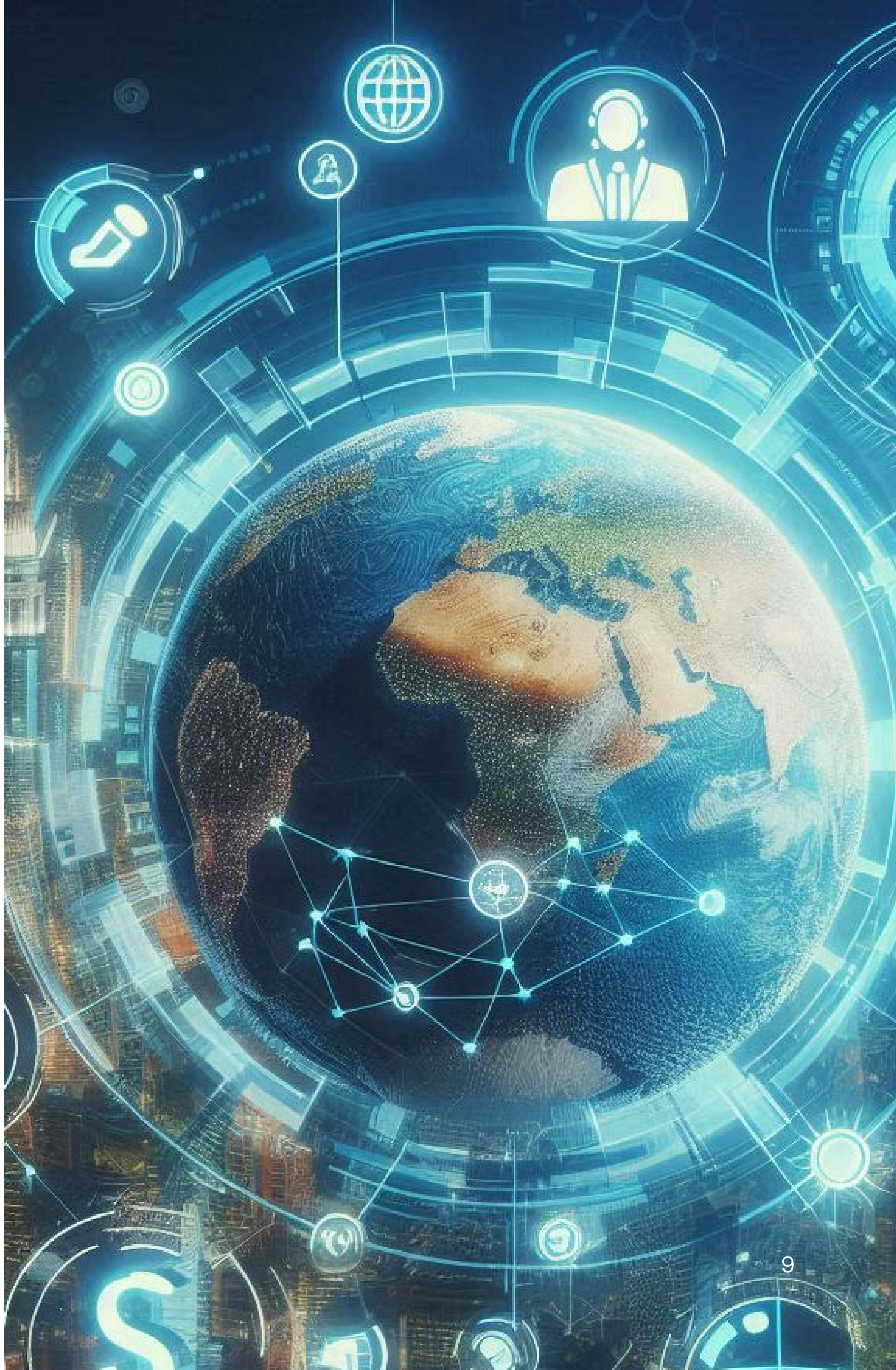
- **Enhanced Monetary Policy:** A single monetary policy governed by a central authority could lead to more effective macroeconomic management and reduced inflation rates leading to greater economic stability and predictability.

Challenges of the Single African Currency

- **Economic Disparities:** Africa's diverse economies, with varying levels of development, could face challenges in adopting a single currency. Economies with weaker financial systems might suffer from the transition.

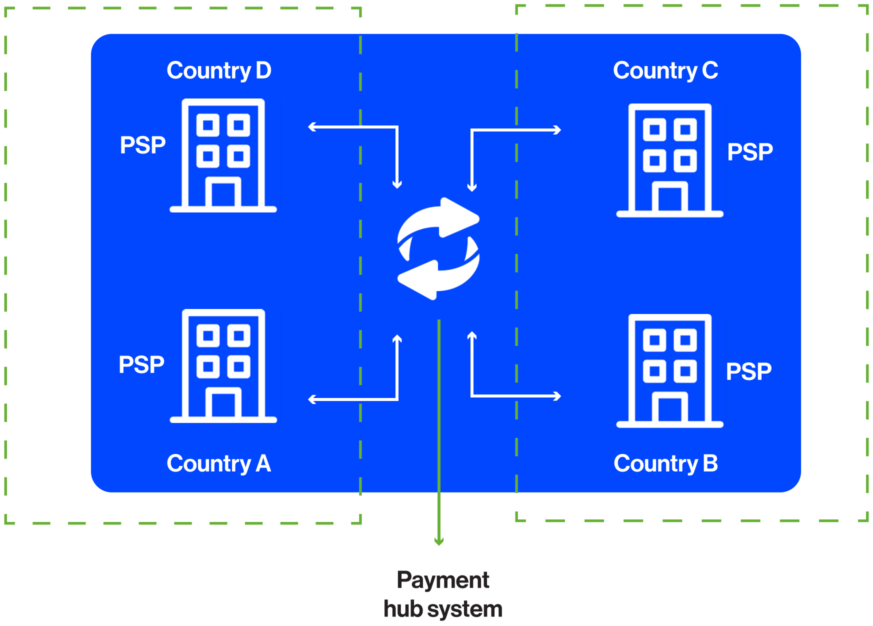
- **Sovereignty Concerns:** Countries may be reluctant to cede control over their monetary policies, fearing a loss of economic sovereignty.

- **Implementation Costs:** Establishing a single currency would require significant financial and logistical investments, including the creation of a central bank and harmonizing economic policies.



Regional Mobile Money Interoperability

Figure 7: Common Mobile money platform



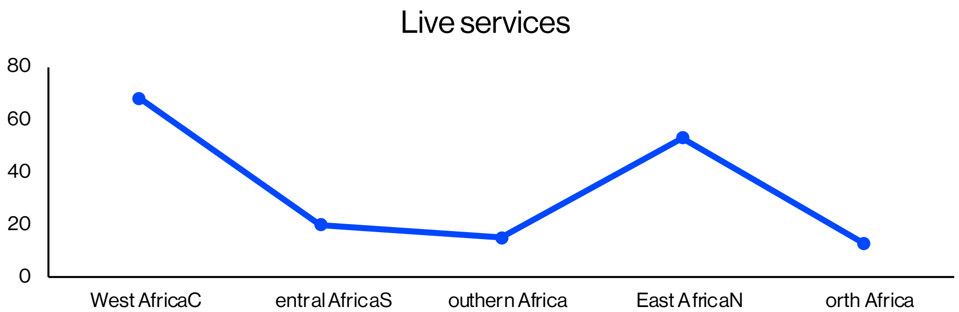
Mobile money has revolutionized financial transactions in Africa, providing an accessible and inclusive financial system for millions of people. The rapid adoption of mobile money services has significantly contributed to financial inclusion, especially among the unbanked populations.

Currently, mobile money services in Africa have seen exponential growth over the past decade. Countries like Kenya, Ghana, and Tanzania have been at the forefront of this revolution. Approximately 144 mobile money providers operate in Sub-Saharan Africa, with two companies such as M-Pesa, MTN MoMo and Orange Money accounting for a significant share of the market (Statista, 2024).

Services from M-Pesa, MTN Mobile Money, and Airtel Money have become household names, providing a range of financial services including money transfers, bill payments, and savings. Mobile money interoperability is a policy that allows transactions between users of different mobile money operators and aims to foster competition among these operators while enhancing access to financial services.

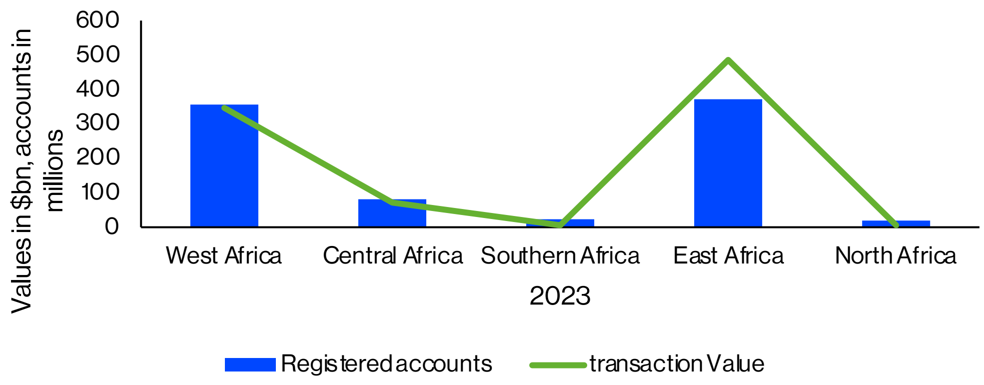
However, for mobile money to reach its full potential, scalability and interoperability across different networks and countries are crucial to connecting every part of cities and persons within the African continent.

Figure 8: Mobile money live lines in Africa by region



Source: GSMA

Figure 9: Mobile money live lines in Africa by region



Source: GSMA

Potentials of Mobile Money Interoperability in Africa

- **Financial Inclusion:** Mobile money interoperability can enhance financial inclusion by providing accessible and affordable financial services to the unbanked and underbanked populations across Africa.
- **Cost-Effective:** Implementing mobile money interoperability is less costly and complex compared to establishing a single currency. It leverages existing infrastructure and technologies.
- **Ease of Implementation:** Enhancing mobile money interoperability is technically feasible and less costly compared to introducing a single currency or multi-CBDCs. Many African countries already have robust mobile money ecosystems.

Challenges of Mobile Money Interoperability in Africa

- **Regulatory Coordination:**
Effective interoperability requires coordinated regulatory frameworks across countries, which can be challenging to achieve.
- **Security Concerns:**
Ensuring the security of transactions across interoperable platforms is critical to maintain trust and prevent fraud.
- **Infrastructure Requirements:**
Adequate technological infrastructure and reliable internet connectivity are necessary for successful implementation, which may be lacking in some regions.

Multi- Central Bank Digital Currencies (CBDCs)

Like in the other continents, many central banks in Africa are exploring the possibility of issuing CBDCs that will be minted, controlled, and issued by the state.

Although many African nations have announced their interest in issuing CBDC, few have released the proof-of-concept or plan, while others are researching the feasibility of the project.

Previously, the Agpaytech Survey indicated that 67.3% of central banks in Africa have not shown interest or are yet to make pronouncements on their intent to issue CBDC. Also, 32.7% which represent seventeen (17) countries in Africa are in different stages of CBDC development (research, pilot, or launch).

Nigeria and Ghana are in the advanced stages of the CBDC exploitation. For instance, Nigeria is the first and only country that has launched its eNaira in Africa as of October 2021. Where traditional banking infrastructure faces challenges, CBDCs hold immense potential to foster financial inclusion and drive economic growth.

However, the successful implementation of CBDC projects in Africa requires a cohesive framework that addresses the diverse needs and challenges across the continent.

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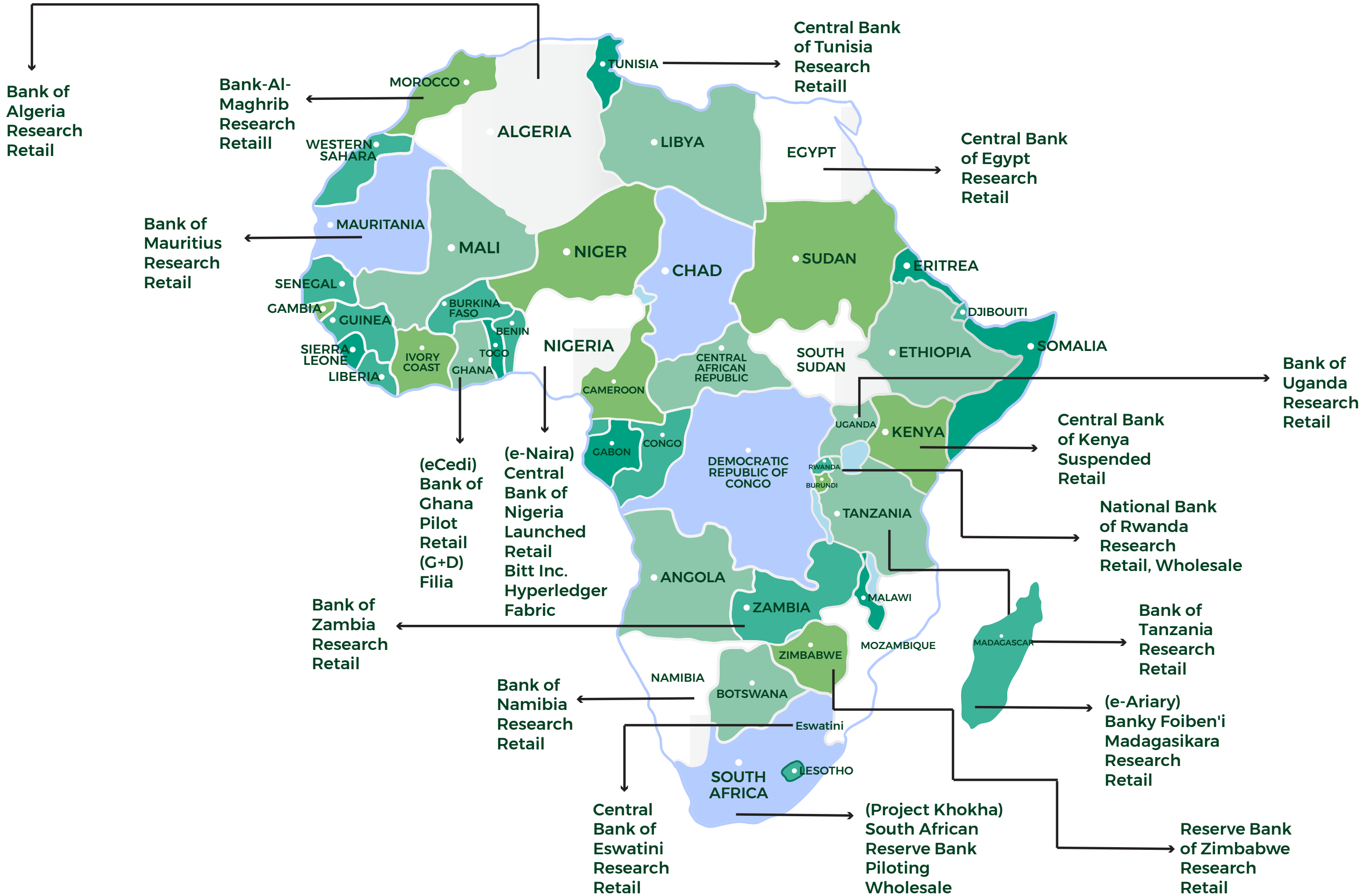
Figure 10: CBDCs in Africa



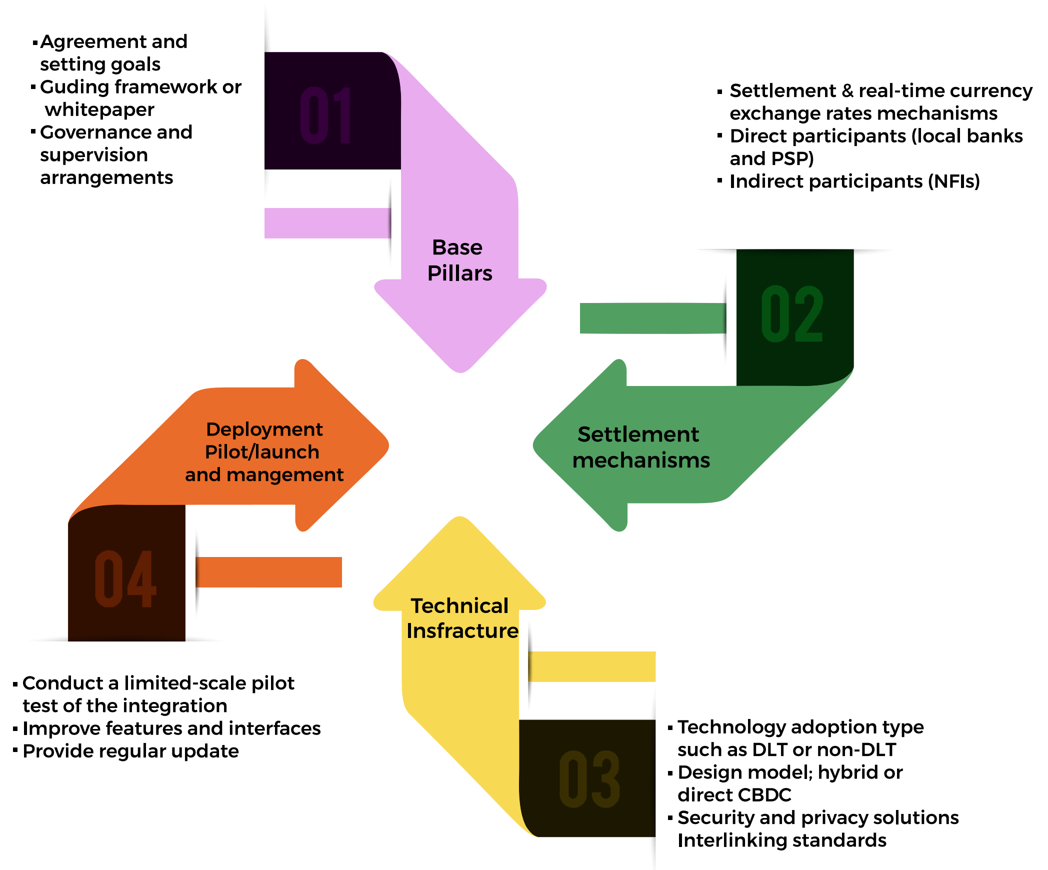
Source: Agpaytech

A framework for the interlinking of CBDC

In Africa, where traditional banking infrastructure faces challenges, CBDCs hold immense potential to foster financial inclusion and drive economic growth.

However, the successful implementation of CBDC projects in Africa requires a cohesive framework that addresses the diverse needs and challenges across the continent.

This paper presents a comprehensive framework for the interlinking of CBDC projects in Africa, outlining key stakeholders, conditions, and principles necessary for its realization. This principle is anchored in base pillars, technical infrastructure, settlement mechanisms and deployment.



- **Agreement and Setting Strategic Goals**

This is the starting point. The countries or central banks in the African region that have the idea to create a common CBDC interface for usage need to come together and agree on key principles, align major differences and work towards common goals or direction. At this stage, the participating central banks should decide on the type of CBDC they intend to issue on a common platform; either wholesale, retail CBDC, or both.

- **Guiding Framework / White paper**

Central banks seeking to link or create CBDC may not have the same financial infrastructure, language, currency, time zones and laws. Therefore, a white paper would consider the basic requirements, architectural framework, deployment plan, maintenance and sustainability mechanism to ensure objectivity in the project.

- **Governance and supervision arrangement**

Harmony in the governance and supervision and mechanism among the participating central banks is necessary. This includes the cooperative arrangement on data. usage, how to store the customers' data, onboarding mechanism, evaluating risk, and fraud uncertainties. The supervision arrangement spells out the central banks' extent of influence, dialogue process, and operational risk of the multi-CBDC project. Under the governance model, participants define the powers and roles of the infrastructure owners, technical operators, intermediaries and users to help provide day-to-day administration of the linked arrangement.

Benefits of Linking CBDCs

- **Enhanced Monetary Control:**
Multi-CBDCs allow central banks to maintain control over their monetary policies while facilitating cross-border transactions.

- **Financial Stability:**
CBDCs can enhance financial stability by providing a secure and reliable means of digital transactions, reducing reliance on volatile cryptocurrencies.

- **Innovation and Efficiency:**
Multi-CBDCs can foster financial innovation and efficiency, leading to improved payment systems and economic growth.

Challenges of Linking CBDCs

- **Technological and Cybersecurity Risks:**
Implementing and maintaining secure CBDC systems requires significant technological investment and robust cybersecurity measures.

- **Regulatory Harmonization:**
Coordinated regulatory frameworks are necessary to ensure the smooth operation of multi-CBDCs, which can be complex and time-consuming to establish.

- **Public Acceptance:**
Achieving widespread public acceptance and trust in CBDCs may be challenging, particularly in regions with limited digital literacy.

Table 1: The single payment choice

Approach	Potentials	Challenges	Examples
Single Currency	Simplifies trade and investment across the continent	Loss of monetary policy control for individual countries	Euro in the European Union
	Reduces currency exchange costs and risks	Requires high levels of economic and political integration	
	Enhances economic stability and integration	Implementation is complex and time-consuming	
	Eliminate cross-border transaction costs	Risk of uneven economic shocks affecting all member states	
Mobile Money Interoperability	Increases financial inclusion and accessibility	Requires cooperation and standardization among mobile network operators and banks	M-Pesa in Kenya and MTN in Ghana allow transfers to other networks MTN Mobile Money (several African countries)
	Facilitates cross-border remittances and payments	Cybersecurity risks and potential fraud	
	Reduces reliance on traditional banking infrastructure	Regulatory challenges in harmonizing policies across different countries	
	Boosts local economies by enabling easier transactions		
Multi-CBDCs	Enhances the efficiency and security of cross-border payments	Technological and infrastructure challenges in implementation	Project Dunbar (a collaboration of central banks including South Africa) eNaira (Nigeria) + eCedis
	Allows central banks to retain control over monetary policy	Need for international cooperation and coordination	
	Reduces costs associated with currency conversion and remittances	Regulatory and legal hurdles in different jurisdictions	
	Promotes financial innovation and inclusion	Privacy concerns and the risk of surveillance	

Source: Agpaytech

Conclusion

Each option presents unique benefits and challenges. A single currency could enhance economic integration but requires overcoming significant economic disparities and implementation costs. Mobile money interoperability offers a practical and cost-effective solution to boost financial inclusion but requires coordinated regulatory efforts and robust infrastructure.

Multi-CBDCs provide a balanced approach, maintaining monetary control while fostering innovation, but they demand substantial technological investments and regulatory harmonization.

For Africa, improving mobile money interoperability appears to be the most feasible and immediate step towards enhancing financial inclusion and economic integration.

It leverages the existing mobile money infrastructure and can be implemented at a lower cost compared to the other options. However, a phased approach that includes exploring multi-CBDCs could provide long-term benefits, particularly as technological and regulatory frameworks evolve.

Ultimately, a hybrid strategy that initially focuses on mobile money interoperability while gradually developing the infrastructure and regulatory environment for multi-CBDCs might offer the most sustainable path for Africa's financial future.

Takeaways:

Single Currency: Offers significant economic integration benefits but poses challenges in terms of loss of monetary sovereignty and implementation complexity.

Mobile Money Interoperability: Enhances financial inclusion and reduces transaction costs but requires significant cooperation between mobile operators and banks and faces cybersecurity risks.

Multi-CBDCs: Provides secure and efficient cross-border payments while allowing central banks to retain control over monetary policy but faces technological, regulatory, and privacy challenges.

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About Agpaytech Ltd.

Agpaytech Ltd. is a company pioneering in the Fintech space with a focused approach to building robust technologies for e-commerce Card Processing Solutions for Payment Service Providers (PSPs). Additionally, we provide Compliance and Regulatory Umbrella, Remittance-as-a-Service (RaaS), Banking-as-a-Service (BaaS), Foreign Exchange, Cross Border Payments, and digital currency technology.

We also provide practical white paper research support to central banks, government and private institutions, economic organizations, and NGOs in Africa. Our services expand from research projects, state-of-industry reports, project assessment, data collection, and consulting services in the fintech space.

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