Association des Banques Centrales Africaines

Association of African Central Banks

ASSOCIATION OF AFRICAN

CENTRAL BANKS (AACB)

44th ORDINARY MEETING

OF THE ASSEMBLY OF GOVERNORS

(Banjul, The Gambia, August 5, 2022)

2022 SYMPOSIUM OF GOVERNORS ON THE THEME:

«DIGITAL INNOVATIONS AND THE FUTURE OF THE FINANCIAL SECTOR: OPPORTUNITIES AND CHALLENGES FOR CENTRAL BANK DIGITAL CURRENCIES»

(Banjul, August 4, 2022)

DRAFT REPORT

ACRONYMS

AACB: Association of African Central Banks

AC: Advanced Countries

ACB: African Central Bank

ACDCP: African Centres for Disease Control and Prevention

AfCFTA: African Continental Free Trade Area

AfDB: African Development Bank

AMCP: African Monetary Cooperation Programme

AMI: African Monetary Institute

ASEA: African Securities Exchanges Association

AU: African Union

AUC: African Union Commission

BCEAO: Banque Centrale des Etats de l'Afrique de l'Ouest

CBE: Central Bank of Egypt

DLT: Distributed Ledger Technology

DRC: Democratic Republic of Congo

ECB: European Central Bank

ECOWAS: Economic Community of West African States

EE: Emerging Economies

GDP: Gross Domestic Product

HIPC: Heavily Indebted Poor Countries

IMF: International Monetary Fund

MDGs: Millennium Development Goals

MDRI: Multilateral Debt Relief Initiative

PPP: Public-Private Partnership

REC: Regional Economic Community

SSA: Sub-Saharan Africa

SDGs: Sustainable Development Goals

STC: Specialized Technical Committee

EXECUTIVE SUMMARY

The 2022 AACB Governors' Symposium was held on August 4, 2022, in Banjul, The Gambia. The objective of the Symposium was to promote exchanges between Central Bank Governors, policymakers, international institutions, and the academic world on the unprecedented progression of digital technologies. The Symposium's proceedings were organized into four (4) plenary sessions on the following themes:

1. Impact of Digital Innovations on Financial Inclusion in Africa and the Future of Traditional Financial Intermediaries;
2. The Rise of Digital Currencies and Implications for Monetary Policy and Financial Stability;
3. Are Central Bank Digital Currencies an Effective Alternative to the Development of Unregulated Crypto-Currencies?
4. Experiences sharing on the main theme of the Symposium.

The sessions were facilitated by Governors and Experts and followed by panel discussions.

Until the late 1980s and even the early 1990s, access to non-cash payment services was provided directly through a bank account. However, with the emergence of electronic money, access to finance has been facilitated by the non-banking sector and sometimes in collaboration with the banking sector.

The rise of non-bank institutions, particularly Mobile Network Operators (MNOs), has brought a different dimension to financial inclusion. Indeed, in Sub-Saharan Africa (SSA), mobile money account ownership increased from 21% in 2017 to 33% in 2021, raising the number of adults with an account in a bank or regulated financial institution from 33% to 55% between 2017 and 2021.

Additionally, Central Banks currently operate in a rapidly changing digital environment on account of technological changes, innovation, and changing consumer preferences that have affected the global monetary and financial system over the past half-century and also culminated in dematerialization. These changes have also been reflected in a growing interest in crypto-assets (Bitcoin and others), Central Bank Digital Currency (CBDC), payment and financial services provision by major technology companies, and increased adoption of digital payment options during the COVID-19 pandemic.

Among these private digital currencies, the crypto-assets, whose nature as money is challenged, carry varied risks and challenges because they are not dependent on any monetary authority and are not guaranteed. Beyond these challenges, their anonymity and opacity could facilitate illegal activities, including money laundering, terrorist financing, small arms and light weapons purchases, and tax evasion.

Given the aforementioned risks and the preserving monetary sovereignty, most Central Banks are considering the possibility of introducing public digital money. Moving towards public digital currency could create an opportunity to introduce innovative payment services, diversify financial services and service providers, and facilitate international payments.

Despite their potential benefits, Central Bank Digital Currencies (CBDCs) have implications for the conduct of monetary policy and could cause disruptions to financial markets, leading to monetary and financial instability.

Notwithstanding their potential impact on monetary policy and financial stability, CBDC could be one of the major innovations in Central Banking in the coming decade that would foster payments efficiency and monetary sovereignty.

At the end of the Symposium, the following key recommendations were made:

1. African Central Banks, considering the adoption of CBDCs, were encouraged to carefully evaluate and weigh the benefits against the challenges and risks, considering the local context and internal capacity.

2. Central Banks were urged to continue researching and exploring CBDC design conditions that should preserve their central role in supplying a trusted form of public money.

3. Given the risks induced by digital innovations, Central Banks were encouraged to improve their cooperation since accelerating the digital payments integration process in Africa requires the standardization of the cross-border financial landscape to facilitate their supervision.

4. Governments and Central Banks were urged to ensure that technological innovation does not inadvertently contribute to excluding individuals, especially those from vulnerable groups.

5. Central Banks were urged to focus on assessing the implications of innovative technologies for monetary and financial stability rather than seeking to regulate technology or innovation.

1. INTRODUCTION

The Central Bank of The Gambia organized the Association of African Central Banks (AACB) Governors' Symposium at Sir Dawda Jawara International Conference Centre in Banjul, The Gambia, on August 4, 2022, on the theme "Digital Innovations and the Future of the Financial Sector: Opportunities and Challenges for Central Bank Digital Currencies", as a prelude to the 44th Ordinary Meeting of the Assembly of Governors, held on August 5, 2022. One hundred and twenty-eight (128) participants (see Annex), including Governors and senior Officials of Central Banks, as well as Senior Officials of partner institutions, and regional and international organizations, participated in the Symposium to exchange views, among others, on the opportunities offered by technological innovations and challenges for the financial sector. In addition, resource persons (Governors, Speakers, etc.) presented extensively discussed papers. This report presents a summary of the proceedings.

2. OPENING CEREMONY

The opening ceremony was marked by three speeches that were delivered respectively by Mr. Buah Saidy, Vice-Chairperson of the AACB, Honourable Governor of the Central Bank of The Gambia (CBG), Mrs. MALANGU KABEDI MBUYI, Chairperson of the AACB, Honourable Governor of the Banque Centrale du Congo (BCC), and His Excellency Mr. Adama Barrow, President of the Republic of The Gambia.

On behalf of the President of the Republic of The Gambia, Mr. Saidy first welcomed all participants to The Gambia. He expressed his thanks and appreciation to fellow Governors and all other dignitaries for attending this important conference. The Honourable Governor of the CBG indicated that after starting to recover from COVID-19, African economies are again beset by another major external shock emanating from the war between Russia and Ukraine. This situation led the International Monetary Fund (IMF) to revise the global growth forecasts in July to 3.2% in 2022 from 6.1% a year earlier. In addition, he invited his fellow Governors to be aware of the Central Banks' role in building resilience towards climate change since climate-related risks have implications for economic and financial stability.

Mr. Saidy also stated that the major external shocks experienced since the 2006 food crisis had provided lessons and opportunities to consolidate African solidarity, adhere to multilateralism and shift global markets towards Africa. He also indicated that improving financial inclusion was crucial and that technological innovation could drive financial inclusion. He further emphasized that the focus should be on leveraging existing technologies to expand access to finance for low-income or less privileged as well as vulnerable segments of the population. In this context, he added that the theme of the Symposium was relevant to Africa on account of the potential of digital innovations to increase the Continent's economic development through financial inclusion, economies of scale, and lower transaction costs.

In his closing remarks, the Honourable Governor of the Central Bank of The Gambia stated that digital innovations could also open opportunities for digital currencies to be considered by Central Banks. However, these may pose regulatory challenges that experts should explore.

The Honourable Governor Mrs. MALANGU KABEDI MBUYI, AACB Chairperson, expressed her deep gratitude to His Excellency the President of the Republic of The Gambia, Mr. Adama Barrow, for agreeing to participate in this important event, despite his busy schedule. She also thanked the Gambian authorities for the warm reception given to the participants and all the measures taken for the excellent organization and success of these meetings.

She highlighted that uncertainties about the growth prospects of the global economy, particularly African economies, have intensified with the emergence of new variants of COVID-19 and the effects of the war in Ukraine, therefore putting Central Banks in the spotlight, given the unprecedented worldwide inflationary pressures. She, nonetheless, pointed out that all these exogenous shocks and challenges are opportunities for further reflection and research to strengthen Africa's payment systems, which are essential guarantees for developing trade and economies at the regional and continental levels.

In conclusion, the AACB Chairperson expected that the discussions during this Symposium would provide the lessons to address the challenges identified in a world where innovations and technological advances are propelling economic growth.

His Excellency Mr. Adama Barrow, President of the Republic of The Gambia, welcomed participants to the 44th AACB meeting and noted that the theme of the Symposium was appropriate as African countries were looking forward to adopting a single currency and a common Central Bank. He also commended the AACB ongoing African Payment Systems Integration Project efforts.

Furthermore, he argued that digital innovations have transformed the global financial landscape on the back of the emergence of digital wallets, mobile transfers, blockchain technologies, and interconnected payment systems. He added that these innovations, which have the potential to scale up and accelerate Africa's economic development, create opportunities for Central Banks to consider the use of digital currencies. However, he noted that these developments come with regulatory challenges.

In addition, the President of the Republic of The Gambia called on fiscal policy experts to take proactive measures on the global challenges that adversely impact African economies. To conclude, he emphasized the need to build resilient economies to ensure job creation as well as women, and youth employment in Africa to raise the living standards on the Continent and transform our nations into higher-income countries. He, after that, declared the Symposium open.

3. KEYNOTE SPEAKER

In his opening remarks, Mr. Mamadou D. Barry, Resident Representative of the International Monetary Fund (IMF) for The Gambia, indicated that despite the economic recovery from the disruptive effects of the pandemic, risks remain due to the economic consequences of the war in Ukraine. He therefore called for solid coordination of fiscal and monetary policies and, above all, strengthening the independence of Central Banks. This is to help meet policy objectives by avoiding de-anchoring of inflation expectations that could delay the return to price stability.

He also stressed that Central Banks have always been at the cutting edge of financial technology and innovation but were currently facing new and unprecedented challenges on account of rapid and ongoing progress in digital technologies that have increased the prospects for adopting of new forms of money. For example, in Sub-Saharan Africa (SSA), it is reported that mobile money usage tripled between 2014 and 2021 from 11.6% of the population aged 15 years and above to 33.2%.

Mr. Barry specified that the concept of digital currencies included digital currencies or payment instruments issued by both Central Banks and the private sector. Private sector issuances include MPesa, Kenya's mobile money transfer service, and stablecoins and crypto-assets such as Bitcoin, which were unbacked and highly volatile. He expressed confidence in the growing use of digital currencies, given their fast and global adoption and also aided by the increased use of digital technology during the COVID-19 pandemic.

After observing that Africa was leading in using digital currency accounts, he further said that three African countries (Kenya, South Africa, and Nigeria) were among the top 10 in the crypto adoption index in 2021. Furthermore, in October 2021, Nigeria became the first country in Africa and the second in the world after the Bahamas to issue a Central Bank Digital Currency (CBDC), the e-Naira. In April 2022, the Central African Republic also became the first country in Africa and the second in the world, after El-Salvador, to adopt Bitcoin as legal tender and official currency alongside the existing fiat currency, the CFA franc.

In outlining the benefits of CBDCs, he stated that they are generally more stable than crypto-currencies and could provide cheaper and faster payments as well as foster financial inclusion. CBDCs could also facilitate cross-border transfers and payments, reducing the high cost of remittances to Sub-Saharan Africa, estimated at 8% of the transfer amount in 2020. In addition, CBDC can facilitate timely and targeted transfers on account of its possible wide adoption by the population.

After drawing lessons on the adoption of CBDCs that could be relevant to Africa, Mr. Barry stated that the design and adoption of CBDCs should address confidentiality and integrity in data handling, cyber risk, financial integrity risk, financial/banking sector instability, and digital infrastructure as well as knowledge gaps confronting several Central Banks.

In closing, he urged African Central Banks considering the adoption of CBDCs to carefully evaluate and weigh the benefits against the challenges and risks in light of the local context and internal capacity. To be successful, CBDCs need to be accompanied by sound macroeconomic, supervisory, and regulatory policies that reinforce confidence in the local currency. In addition, the private sector digital payment services should be carefully studied and monitored to prevent some systemically important operators from posing systemic risks that could affect the financial sector. In this regard, he reaffirmed the IMF's strong commitment to work with Central Banks seeking to adopt CBDCs.

4. FIRST SESSION

4.1 Introduction

This session on the theme "*Impact of Digital Innovations on Financial Inclusion in Africa and the Future of Traditional Financial Intermediaries*" was chaired by Mr. Abdoulie S. Jallow, Deputy Governor of the Central Bank of The Gambia (CBG), and presented by Mr. Mazen Bouri, Lead Financial Sector Specialist, World Bank, and Mr. Richard Ketley, Director, Genesis Analytics. The panel was composed of Dr. Denny Kalyalya, Governor of the Bank of Zambia, and Prof. Kelfala Morana Kallon, Governor of the Bank of Sierra Leone.

4.2 Summary of the presentation

Mr. Mazen Bouri's presentation focused on recent advances in technological innovations and their impact on market structure and the role of instant payments as well as Central Bank Digital Currencies (CBDCs) in promoting access to financial services.

He observed that until the late 1980s and even in the early 1990s, access to payment services (other than cash) was directly through a bank account. However, the proliferation of mobile phones provided a significant breakthrough by allowing account holders to access their funds electronically, first through a linked debit card and then through internet banking and mobile banking.

The introduction of electronic money has revolutionized the sector by creating a new payment instrument that continued to meet the needs of all customer segments. Also, the rise of non-

banks, particularly Mobile Network Operators (MNOs), has been noted as the driver of financial inclusion. Indeed, the 2021 Global Findex survey results revealed that 76% of adults worldwide had an account at a bank or regulated financial institution, representing a 50% increase in account ownership between 2011 and 2021. For example, in developing economies, account ownership increased from 63% of adults in 2017 to 71% in 2021. In Sub-Saharan Africa (SSA), 55% of adults had an account in a bank or regulated financial institution in 2021, compared to 43% in 2017. Compared to other regions of the world, the increase in financial inclusion in SSA was primarily driven by mobile account ownership, with mobile money account ownership increasing from 21% in 2017 to 33% in 2021. In addition, half of the adult population in SSA has made or received a digital payment.

These significant technological advances that have increased financial inclusion in SSA were driven primarily by the COVID-19 pandemic, which accelerated the move towards digital payments. In addition, the social distancing requirements and the increased digitization of payments to the government as well as policies and measures to promote the adoption of digital payments, have also been supportive of digital adoption.

Technological innovations have also helped redefine business models in the payment market space. According to the recent World Bank Group report on FinTechs and the Future of Finance, technological innovations have helped intensify competition by opening up the payments market to non-banks and reducing payment service fees while accelerating the speed of transactions (real-time payments).

At the same time, while new entrants challenged incumbents, innovation could have a paradoxical centralizing effect and a tendency to increase concentration by shifting dominant market positions from incumbents to BigTech companies. Thus, the market could be termed a "barbell" between a small group of prominent multi-product players (banks, BigTechs) on one side and a group of small service players (FinTechs and other players) on the other side.

In addition, technological innovations such as prompt payments and CBDCs were essential in promoting access to financial services. Instant payment systems make funds immediately available to the payee 24/7 basis. They have been adopted in many jurisdictions worldwide, such as person-to-person (P2P) or person-to-business (P2B). They provide new opportunities for merchants to accept customer payments without relying on merchant acquirers. With fast payments, merchants can, for example, sell goods through a website, email exchange, or social media and receive direct and immediate payment into their accounts without requiring to integrate that website into a payment gateway.

Central Bank Digital Currency (CBDC), a Central Bank liability issued in digital form, can be used as a means of exchange and payment, store of value, settlement asset, and unit of account. Convertible into physical cash and commercial bank money when requested and with legal tender status, CBDCs designs can be either token or account-based. They are also intended for money markets or wholesale or retail financial transactions.

While some Central Banks consider CBDCs as the catalyst for innovation, others see them more as a potential complement to existing initiatives. CBDCs have many potential benefits, including lower transaction costs, instant access, increased competition, better government payments, and efficient cross-border transactions. In addition, retail CBDC offers users more safety and convenience for peer-to-peer payment.

However, some disadvantages are associated with it, notably, the potential disintermediation of commercial banks and possible direct competition it may create in the market and among users, particularly in some developing countries. Beyond these disadvantages, there is a reputational risk that the Central Bank might incur from issuing CBDCs if they are subject to glitches, cyber-attacks, or human errors. CBDCs are also associated with the risk of privacy infringement for users as they may leave traceable digital footprints, allowing governments to track every payment.

Furthermore, before embarking on the CBDCs project, the country needs to ensure the availability of appropriate technology infrastructure, enabling the regulatory environment and government institutions necessary to support the project. In this regard, the World Bank proposed in April 2021 to interested countries a framework to help them analyze the advantages and disadvantages of CBDCs and the appropriate design features.

Finally, Mr. Bouri emphasized that innovative payments required access to technology and knowledge of how to use that technology. In this regard, he noted the need to ensure that innovation did not inadvertently contribute to the exclusion of individuals. He further called for fundamental enablers (ICT and energy infrastructure) and sector enablers (financial infrastructure), as well as consumer enablers (digital and financial literacy), to address key barriers that could undermine the promotion of financial inclusion. In this context, he indicated that Central Banks have a crucial role to play and can continue to count on the support of the World Bank in the shared quest towards universal financial inclusion.

The second presentation, delivered by Mr. Richard Ketley, Director of Genesis Analytics, focused on the theory of digital disruption, African evidence and results, and regulatory issues.

Regarding the theory of digital disruption, the Presenter indicated that technological change had contributed to the emergence of new communication channels and digital platforms that have affected the banks' role in financial intermediation. Today, there is evidence from most African countries that BigTech finance appears to be most effective when traditional financial intermediation has yet to play its expected roles (e.g., Ant Financial[1] and MPesa FinTechs).

Digital innovation is therefore changing the face of conventional banking globally. Indeed, the concept of branch banking is declining with the number of branches, falling from around 540 branches/million persons in 1995 to about 325 branches/million population in 2018 in Europe, a drop of approximately 40% over the period. New entrants can leverage digital channels for relatively cheap market entry through web portals and mobile apps, targeted marketing through social media, and IT infrastructure cloud services.

In retail lending, the share of non-bank originators has doubled from the pre-crisis level. In payments, new entrants such as Paypal and Stripe specialize in facilitating payments for online purchases and provide interconnections in an increasingly globalized world. As a result, these new entrants have accumulated significant market share resulting in increased competition.

Concerning the evidence and results in Africa, it should be noted that traditional payments are made outside the banking system, providing an opportunity for FinTechs / BigTechs. Indeed, traditional banks participate in only 5% of the volume of payment transactions in Africa. Therefore, the mobile money eosystems led by Mobile Network Operators (MNOs), which already have significant market share in many countries, provide the most crucial platforms in

[1] / Ant Financial is a Chinese FinTech, a subsidiary of the Alibaba Group, which operates worldwide.

Africa. For example, in Kenya, the volume of retail payments, dominated by MPesa, continued to grow strongly. As a result, mobile transaction volume increased from 59% in 2016 to 78% of the total transaction volume in 2021.

In addition, next-generation merchant service providers have developed cross-border capabilities that include inventory, storage, and payment with any instrument. By accessing private equity and venture capital, FinTechs have built more resources than any single bank.

These digital innovations have a significant impact on the African banking sector. They have led to increased competition for fee income, significantly affecting the banks' overall profitability. For example, in Kenya, MPesa's fee income (KES 83 billion in 2020), which is on an upward trend (10.7% between 2018 and 2020), has become more significant than that of the entire banking sector (KES 44 billion in 2020). On the contrary, the banking sector experienced 8.3% decline between 2018 and 2020. In addition, the loss of opportunities by banks in the mass market is observed with banks exiting such markets, such as FNB in Tanzania. There is also a declining investment in bank branches and Automated Teller Machines (ATMs). In Kenya, for example, the number of ATMs has fallen from 2,600 in 2016 to 2,400 in 2021, a decline of 7.7% in 5 years.

In addition, many individuals increasingly use digital financial services from banks and FinTechs to meet their banking needs. For example, 54% of adults in Kenya used mobile money in 2019 compared to 25% for bank loans, 10% for mobile credit, and 5% for personal bank loans.

Furthermore, including financial services would complement most platforms' business models, which can become intermediaries for customers and financial institutions. This introduction of additional new intermediation interfaces could be labelled "reintermediation." While consumers may welcome it, integrating financial services into digital ecosystems could pose a serious threat to banks because these online platforms capture most of the existing rents and much of the customer data by standing between banks and customers.

Given these challenges, the regulatory response will largely determine future outcomes. For example, the digital revolution can improve efficiency, enhance the diversity of supply, and ensure a more competitive financial system that improves financial inclusion. However, it may put pressure on the margins of traditional operators, leading to increased risk-taking and also triggering competition in capturing the rents in the sector.

The regulators must therefore be careful in identifying new threats to financial stability arising from new forms of systemic risk. Without any policy intervention, loosely regulated entrants could crowd out banks.

To conclude, it was noted that the concept of systemically important financial institutions and infrastructures is becoming broader. Thus, platforms used by the Big Techs to provide financial services are also likely to become systemically significant. In this regard, light regulation of new entrants into the industry may foster competition. Still, it may destabilize incumbents by decreasing their profitability and increasing their risk-taking incentives, as well as transferring systemic risks to non-bank entities.

4.3 Summary of panel discussions

Two Central Banks (Zambia and Sierra Leone) led the panel discussions.

Technological innovations have changed the balance of the market with the emergence of new financial services and product providers. FinTechs have provided financially excluded people the

opportunity to make transactions at lower intermediation costs. In addition, digital innovation has helped to reduce cash transactions and transaction volumes. Today, financial transactions can be initiated from anywhere on account of digital innovations such as mobile phones.

Digital innovation has therefore fostered financial inclusion and should be promoted. FinTechs, for instance, can now mobilize national savings, even from the informal sector. In this regard, FinTech companies should be given the means to push innovation forward. The changes in products brought about by digital innovations are similar to repackaging products, keeping the same products while changing only the packaging.

Although these changes in the financial system impact banks, they should be encouraged because banks have sufficient financial resources to innovate in order to adapt to this new environment.

However, there are risks associated with these financial innovations, including financial instability, cyber threats, and money laundering.

In Zambia, the financial inclusion rate was low before 2018. Also, during the COVID-19 pandemic, a lack of financial education was noted, even at the staff level of financial institutions. However, efforts at the national level have been made to reform the financial sector to promote financial inclusion. Under the leadership of the Ministry of Finance, which has been a critical player, a Task Force has been set up to drive reforms. As a result, the enabling legislation was revised in 2018. These various reforms have brought about significant changes in the economy, particularly in mobile payments, and have contributed to a substantial increase in the financial inclusion rate.

In Sierra Leone, the financial inclusion rate was also low. In this regard, some actions were taken to promote financial inclusion. For example, awareness campaigns were launched for youth, women, and the most vulnerable to encourage the financial system to avoid discrimination. In addition, in line with the National Strategy for Financial Inclusion, the Bank of Sierra Leone developed a new consumer protection framework for retail financial services to improve women's access to financial services.

4.4 Conclusion of the Chairperson

Closing the session and given the risks induced by digital innovations, the Chairperson invited the Central Banks to improve their cooperation. In this regard, he also noted that accelerating the digital payments integration process in Africa requires the standardization of the cross-border financial landscape to facilitate their supervision which should be entrusted to the Central Banks. In addition, the Chairperson stressed that supervision and regulatory intervention should focus on the activities and the financial technology rather than the institutions (FinTechs and others) conducting the activity or providing the technology.

5. SECOND SESSION

5.1 Introduction

This session was chaired by Mr. Kona Yerukunondu, First Deputy Governor of the Bank of Mauritius (BoM). The theme, entitled *"The Rise of Digital Currencies and Implications for Monetary Policy and Financial Stability",* was presented by Mr. Lesetja Kganyago, Governor of South African Reserve Bank (SARB), and Mr. Benjamin Vonessen, Senior Adviser in the Directorate for International and European Relations, European Central Bank (ECB). The panel consisted of Dr. Franck Bassambié Bationo, Director General of Economy and Money, Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO), Mr. Michael Atingi-Ego, Acting Governor, Bank of Uganda, and Mrs. Leonie DUNN, Deputy Governor, Bank of Namibia (BoN).

5.2 Summary of presentations

The presentations by Mr. Kganyago and Mr. Vonessen generally focused on the opportunities and challenges of Central Bank Digital Currency (CBDC), the implications for monetary policy and financial stability, and safeguards to control the use of CBDCs. Specifically, Mr. Vonessen reported on the international micro-financial consequences of introducing CBCDs and the digital euro project.

Central Banks are operating in a rapidly changing digital environment, which has affected the global monetary and financial system over the last half-century through "dematerialization." This change has been reflected in a growing interest in crypto-assets (Bitcoin and others), the advent of stablecoins (a subset of crypto-assets), entry of BigTech firms into payment and financial services, and increased adoption of digital payment technologies during the COVID-19 pandemic.

Unlike Central Bank money and previous forms of private money, which have contributed to the broader establishment of Central Banks around the world, crypto-assets and stablecoins are borderless. They employ a decentralized model of maintaining a ledger through distributed ledger technology (DLT) which is fundamentally different from the centralized record-keeping model. It is important to note that the monetary system is based on the complementarity between public and private money.

The introduction of CBDC can have several advantages on account of the opportunities it creates. CBDCs have allowed for offering of innovative payment services, diversified financial services and service providers, and also facilitated international payments. In addition to providing an opportunity to modernize the monetary and financial system, CBDCs have also reduced the cost and complexity of maintaining physical cash as a medium of exchange and promoted the development of regional payment integration. They have also helped to promote innovation in digital payments and financial services and facilitate cross-border remittances by providing a lower-cost infrastructure.

Despite these advantages, CBDCs are also associated with risks. There is a risk of significant shifts from bank deposits into CBDCs, changes in the monetary policy transmission and implementation, abrupt changes in the structure of the financial system, and increased latent risk of bank panics. The extent of these effects depends on the degree and speed of adoption of CBDCs. The advent of CBDC creates uncertainties, including those related to the future shape of the financial system, and the frameworks, design, and use of CBDC.

Issuance of CBDCs is not necessarily inevitable, but the cost of failure is extremely high, especially for monetary policy and financial stability. Research shows that the implications of CBDCs for monetary policy depend on the structure of the national financial system, intended use, and CBDC design, which should have country-specific characteristics (remuneration/limits) and idiosyncratic conditions. CBDC design refers to the choices made about the type of functionality built into a CBDC, i.e., limits on the value of private assets in CBDC, personal data, and anti-money laundering concerns, as well as limits on access to a CBDC (wholesale and/or retail payment), etc. The strategic implications differ depending on the choices made.

For example, introducing a wholesale CBDC is not expected to significantly impact monetary or financial stability because wholesale CBDCs and Central Bank reserves operate similarly within the current structure, which places the Central Bank in the centre of the payments system. Central Banks have expertise in managing these operational processes and understanding their policy implications. They have solid experience in this field. The challenges for wholesale CBDCs are those related to the potential concentration of risk because the use of DLT also means that the settlement asset, the Central Bank account, and the settlement system are all integrated into a single platform. It would also be necessary for rules and procedures regarding the finality of payment settlement to be in place in the context of wholesale CBDCs.

The introduction of retail CBDCs could alter the monetary system, leading to a large structural migration of bank deposits (following withdrawals) into CBDCs, due to their perceived superior safety and stability. This could also lead to partial disintermediation of commercial banks, threatening the viability of their current business models. For example, withdrawing deposits could increase bank funding expenses, reduce credit availability, and raise credit costs for households and businesses, impacting the size of the Central Bank's balance sheet.

To address deposit outflows, banks could borrow from Central Bank, fund wholesale, run-down excess reserves, or cut loans. Alternative funding sources may be more expensive or volatile. As a result, responses and effects are likely to be heterogeneous across banks. According to Nakaso 2001's study on the Japanese banking crisis of the 1990s, deposit outflows from failed banks on the last day of the announcement of bank failures ranged from 13% to 32% in the first month. These dynamics could trigger spillover disruptions across financial markets, and induce monetary and financial instability. However, imposing limits on CBDC holdings could also mitigate disintermediation.

On the other hand, retail CBDCs could potentially enhance financial stability in the face of a growing multitude of private offerings in the crypto-asset and private stablecoin space, providing the utility that end users are looking for when turning to these digital but riskier alternatives. Moreover, if remunerated, retail CBDCs could also strengthen the pass-through of policy rate changes to bank funding costs and lending rates.

Specifically, Mr. Vonessen addressed the implications of introducing CBDC internationally. Indeed, the possibility of cross-border CBDC using (non-resident access/multi-CBCDs) may have international macro-financial consequences and impact on monetary policy, capital flows, and the exchange rate. Indeed, the use of CBDCs at the international level (whose demand will be determined by their remuneration) may improve the efficiency of cross-border payments. In this regard, if a major economy introduces CBDCs, international cooperation and reflection on the non-residents' use and the related consequences are necessary due to the international spillovers induced by CBDCs.

To control the use of CBDCs, the potentially effective measures to be considered should depend on several factors, namely the CBDCs' quantities, their prices, and in-crisis situations. However, safeguards to limit the use of CBDCs may restrict their usability and the welfare of users, although these measures are potentially effective in ensuring the control of CBDCs in circulation.

Regarding the digital euro project, it is indicated that the digital euro would be a Central Bank liability made available in digital form for use in retail payments. The digital euro is based on 5 core principles, namely:

i. Convertibility at par (not a parallel currency);

ii. Liability of the Eurosystem (Central Bank money issued and controlled by the Eurosystem);

iii. European solution (wide accessibility on equal terms in all euro area countries);

iv. Market neutrality (not crowding out private solutions);

v. Trusted by end users (trusted solution over time).

Like these principles, there are also general requirements that the digital euro must meet. These are the ability to control its quantity in circulation, cooperation with market participants, compliance with the regulatory framework, safety and efficiency in fulfilling the Eurosystem's goals, and its easy accessibility throughout the euro area. After launching the investigation phase of the digital euro in July 2021, the Eurosystem Governing Council's decision to launch the operational phase of the digital euro was expected in September 2023.

Like its global counterparts, the South African Reserve Bank (SARB) has conducted thorough reflection through several projects addressing interbank settlement using wholesale CBDCs, the tokenisation and transfer of financial assets on a distributed ledger network, and the complexities of international settlement using a multi-CBDC platform. These considerations have led to the establishment of structures, including the creation of a FinTech unit in August 2017, to monitor and better understand the development of appropriate policy responses and regulatory frameworks in response to changes arising from financial technology.

To conclude, it should be noted that CBDC could be one of the major innovations in Central Banking in the coming decade. Its adoption aims to allow citizens to use Central Bank money because of the declining role of cash, safeguarding payments efficiency and monetary sovereignty. However, it currently needs to be determined whether widespread CBDC issuance (retail or wholesale) is likely or even inevitable and what the specific implications for monetary policy and financial stability would be, given the broad range of design options and associated implications. Thus, Central Banks should continue to research and explore CBDC design conditions to preserve their central role in supplying a trusted form of public money, whether digital or not. In this regard, they should understand the implications for ensuring their continued capacity to provide timely and appropriate responses to the rapidly changing digital payments environment.

5.3 Summary of panel discussions

The panel discussions were made by three Central Banks (BCEAO, Uganda, and Namibia).

The three Central Banks reported an increase in mobile payments. However, despite this situation, cash transactions remain essential. In this regard, Central Banks should assist stakeholders in developing payment systems to reduce cash outflows.

The increasing use of private digital currencies in transactions worldwide has been noted in recent years. Specifically, the BCEAO has indicated that crypto-currencies exist in its jurisdiction outside any regulation. In this regard, discussions are underway to establish a regulatory framework.

In light of this situation, introducing a Central Bank Digital Currency could provide other alternatives to consumers to mitigate risks associated with using crypto-currencies. Usually, Central Banks reported the non-existence of CBDCs in their jurisdiction due to some difficulties related to, among others:

- The fear of international reserves loss;
- The importance of the refinancing volume (25% of credits to the economy for the BCEAO);
- The problems of induced financial instability;
- The likely large bank deposit outflows.

However, in Namibia, research has been conducted based on the South African experience to establish CBDC. A pilot investigation is underway. In addition, the Bank of Namibia has a legal mandate to work on regulating digital assets. Thus, a regulatory framework was developed to strengthen digital collaboration with partners.

It was noted that the creation and management of money require monetary authority. However, in the case of digital currencies, it would be challenging to supervise the financial system as digital currencies are not created by institutions or entities that can be supervised.

Furthermore, Central Banks raised the issue of the impact of the introduction of CBDCs on implementing monetary policy. It was noted that CBDCs may or may not affect monetary policy. In general, the impact could depend on interest rates. For example, monetary policy could be affected by a significant portion of Central Bank deposits being transformed into CBDCs. Because of interest rates, CBDCs could be a substitute for Central Bank deposits, adversely impacting banks' balance sheets. As a result, the Central Bank's lending power could be reduced.

Thus, the effect of CBDCs on monetary policy would depend on their design and the substitution with deposits that compete with CBDCs. A well-designed CBDC could contribute to improved financial inclusion. In addition, if it comes from outside, it could impact monetary policy transmission channels.

The introduction of CBDC provides an additional instrument for Central Banks to regulate the policy rate and supervise prices.

In addition, one concern remains the infrastructure of the financial system. Indeed, several CBDCs may coexist, and in this situation, the way to manage them may be a concern regarding the infrastructure.

In the presence of CBDC, the possibility of using the exchange rate must also be considered, as Central Banks may need more resources to manage this rate.

Central Banks have also raised concerns about how to use deposits and reserves if a CBDC were introduced.

To conclude, it was recommended that a proper legal framework is needed to better define the use of CBDCs before their adoption. To ensure the financial system's stability, CBDCs should be based on a simple design to allow the financial system to adapt. The importance of incorporating the views of the originator and beneficiary in the design of CBDCs was emphasized. It is also essential to be equipped with the right technology.

5.4 Conclusion of the Chairperson

The Chair of the session stressed that digital currencies offer opportunities but also carry risks and challenges that are crucial to consider.

6. THIRD SESSION

6.1 Introduction

Chaired by the Honourable Jolue Aloysius Tarlue, Governor of the Central Bank of Liberia, this session focused on the theme "*Are Central Bank Digital Currencies an Effective Alternative to the Development of Unregulated Crypto-Currencies?*". The presentations were made by Dr. Hassan Mahmud, Director of Monetary Policy, Central Bank of Nigeria (CBN), and Mr. Luca Ricci, Division Chief of the Africa Department, International Monetary Fund (IMF). The panel consisted of Professor Florens D. A. M. Luoga, Governor of the Bank of Tanzania, Dr. Phil Mnisi, Governor of the Central Bank of Eswatini, and Mr. Mouhamed Lamine Conté, Deputy Governor of the Banque Centrale de la République de Guinée (BCRG).

6.2 Summary of presentations

The presentations by the Director of Monetary Policy at the Central Bank of Nigeria (CBN) and the IMF Mission Chief focused on the digital payments landscape in Africa, digital currencies, the opportunities and challenges raised, and experiences in Africa, particularly Nigeria's expertise with CBDC adoption.

A decline in the use of cash has been recorded locally and globally. At the same time, there has been a sharp increase in digital payments in Africa, especially private currencies (crypto-currencies), even though the Continent is behind other regions in digitization. However, according to studies, only 33% of the population in Sub-Saharan Africa (SSA) has Internet access, which is much lower than other Emerging and Developing Economies (EMDEs) and Advanced Economies (AEs). This situation is linked to inadequate human capital, insufficient IT infrastructure and investments, and a poorly developed business environment.

Despite these shortcomings, Africa has made considerable progress in finance thanks to FinTechs that have revolutionized access to finance in Africa. Although traditional access to finance is still low in SSA compared to the rest of the world (ROW), digital access to finance (as measured by the number of mobile money accounts per capita) remains higher and exceeds traditional access in SSA. The number of registered mobile money accounts and bank accounts per 1,000 adults stood at about 800 and 700 in SSA in 2018, respectively, compared to about 300 and 1,600 in the ROW.

Thus, using mobile money has promoted financial inclusion in many African countries. Moreover, mobile money allows for cheap and fast transactions without a bank account, potentially reaching remote areas, small firms, poor people, and the informal sector.

It is crucial to mention that there are two types of digital currencies, namely private currencies and Central Bank currencies.

Private digital currencies are non-legal currencies issued by private entities without a central authority. Therefore, they are not a commitment of the Central Bank. They are stable currencies that are backed by currencies such as the US dollar (e.g., Tether), commodities (e.g., DAI), or smart contracts (e.g., Terra) to stabilize their value.

Furthermore, crypto-currency use is also on the rise in Africa. The search for efficient, reliable, cheaper, and anonymous payment systems (for remittances, cross-border transactions, etc.) drives the adoption of crypto-currencies, despite their volatility. Africa accounted for about 3% of the global share of crypto-currency usage between July 2020 and June 2021. Kenya and Nigeria are in the top 10 of the Global Crypto Adoption Index for 2021, while Ghana, South Africa, Tanzania, and Togo are in the top 20. On the public front, the Central African Republic announced adopting Bitcoin as a legal tender (inside a monetary union) in April 2022, raising legal and policy challenges.

There are several reasons for the private use of crypto-currencies. These include sending and receiving remittances, conducting business transactions for speculation and investment purposes, circumventing local currency and capital flow restrictions, and storing value against hyperinflation and currency depreciation.

As they are not under the control of any central authority, crypto-currencies present several risks and challenges. Indeed, given their anonymity and opacity, they can be used to fund illegal activities, including money laundering, terrorist financing, small arms and light weapons purchases, and tax evasion. Furthermore, recent reports indicate that crypto-currencies have been used to fund terrorist activities, further damaging their image as a legitimate medium of exchange. In addition, crypto-currencies have become more widely used as speculative assets rather than means of payment,

which explains the high volatility of their prices. For example, the price of Bitcoin, which surpassed USD 65,000 on November 8, 2021, dropped to below USD 20,000 on July 1, 2022.

Furthermore, unlike fiat currency accompanied by the full faith of monetary authority, crypto-currencies do not have any intrinsic value and do not generate returns by themselves. For example, the price of a stock reflects the activity and production of the producing firm and the value that economic agents place on their goods, unlike crypto-currencies which do not reflect fundamentals. Investors buy them only hoping their use and acceptability will rise, pushing their demand and, consequently, the price.

Finally, crypto-currencies are issued by unregulated and unlicensed entities, which implies that their use goes against the critical mandates of the Central Banks as the issuer of legal tender. Thus, using crypto-currencies in many countries is a direct contravention of existing law. For example, in Nigeria, all banks had earlier been forbidden, through the CBN's circular, not to use, hold, trade and/or transact in crypto-currencies.

Given these risks and challenges, the Financial Stability Board (FSB), on February 16, 2022, warned of global financial stability risks from rapidly growing crypto-asset markets. The European Central Bank (ECB), on March 22, 2022, also cautioned that crypto-assets could represent a "major loophole" to bypass sanctions. In addition, the IMF strongly called for a comprehensive, consistent, and coordinated global regulatory framework for crypto-assets.

Central Bank Digital Currency (CBDC) is a legal tender in contrast to crypto-currencies. CBDC exists in two forms: "retail" CBDCs that would be used as a digital extension of cash, and "wholesale" CBDCs, which qualified institutions could only use as a settlement asset in the interbank market. Thus, retail CBDC is used similarly to banknotes to make retail payments (P2P and P2B). In contrast, the wholesale system enables transactions between financial institutions, Central Banks, and entities holding accounts with Central Banks.

CBDC has many advantages, including increasing the efficiency of payment systems, promoting cross-border payments, broadening the tax base, improving the monetary policy, safeguarding the financial system, etc. In economic terms, it can reduce handling by 5% to 7% and deepen financial inclusion. For the Government, CBDC is a reliable mechanism for distributing fiscal stimulus measures to citizens and reducing tax leakages from tax evasion and illicit financial flows. For other stakeholders, it unlocks new revenue and growth opportunities and creates sustainable value pools by opening up new market segments.

In addition, CBDCs are not interest-bearing but provide transparency of transactions, as it is possible to ensure their traceability since they operate through banks. They could be an alternative to crypto-currencies, entailing low risks.

However, one of the challenges is the management of the volume of transactions, the amount of CBDCs in the relevant jurisdiction, and their impact on policy rates, especially if there is excess liquidity that induces inflationary pressures. Other challenges are related to the lack of digital infrastructure, the internal capacity of Central Banks (human capital, legal framework, and regulation), etc.

CBDCs also present potential risks that can be overcome by implementing appropriate policies. These include risks related to the disintermediation of the banking system, financial risks due to lack of expertise and capacity, risks of loss of privacy, etc.

Moreover, introducing CBDC should not replace the need to continue relying on sound macroeconomic policies. Monetary and fiscal policies must ensure low and stable inflation and a

sound monetary policy framework capable of anchoring expectations. There should also be a unified exchange rate to ensure that the exchange rate premium in the parallel market, for example, does not create an incentive to use CBDC for remittances or transactions. In addition, fiscal sustainability and external stability must be preserved so that fiscal and external imbalances cannot create speculation that could lead to a significant and sudden drop in the value of the domestic currency and cause currency substitution (including foreign CBDCs and crypto-currencies).

In this regard, the design of CBDC must be based on the following fundamental principles:

- Maintenance of the stability of the monetary and financial system, as the issuance of a new form of money should in no way impede or interfere with a Central Bank's ability to pursue its monetary and financial stability;

- Coexistence: CBDC would need to coexist with and complement other existing forms of money;

- Ensuring innovation and efficiency, as CBDC should remain open to innovation and competition and be upgraded with changing user needs and technological improvements.

Given the interest in crypto-currencies that are not under the control of Central Banks, 86% of them are actively studying the potential of CBDCs, 60% are experimenting with the technology, and 14% are deploying pilot projects, according to a 2021 survey of Central Banks around the world conducted by the Bank for International Settlements (BIS). With this in mind, the Nigerian monetary authorities have decided to adopt the "e-Naira" in October 2021. The adoption of the e-Naira was aimed at meeting the demand of Nigerian households and businesses for fast, efficient, and reliable payments while benefiting from a resilient, innovative, inclusive, and competitive payment system.

In addition, this project aimed to improve the availability and use of the Central Bank's currency, encourage financial inclusion, reduce the cost of processing cash, reduce the cost and improve the efficiency of cross-border payments, facilitate migrant remittances, increase tax collection, etc.

At the rural level, introducing CBDCs could be of great importance as CBDCs could boost the country's economy and financial culture despite all the challenges if these agricultural and rural economies work with CBDCs. In this regard, there is a necessity to have a robust supervisory policy defined centrally by Central Banks. Thus, it is highly recommended to have indicators for digital currencies that would monitor and regulate them.

The decision to create the e-Naira was characterized by two phases, the preparatory phase of introducing legislation to increase competition in the banking sector. Collaboration with financial institutions was necessary to identify the risks of introducing CBDC. Banks were invited to be innovative as well. The second phase focused on regulations to control digital payments. The CBN and IMF established a global platform where transactions will be carried out.

After Nigeria, other African countries have launched projects to implement CBDCs. For example, a pilot survey is underway in Ghana, and other countries (Kenya, Madagascar, Mauritius, Namibia, Rwanda, Tanzania, Uganda, Zambia, and Zimbabwe) are in the research stage.

In conclusion, innovations are underway in the money and payments area, opening the way for a future digital monetary system that continuously adapts to serve the public interest. However, structural flaws make the crypto universe unsuitable as the basis for a monetary system because crypto-currencies often rely on unregulated intermediaries that pose financial risks. The CBDCs could provide an alternative to private digital monies/payments, particularly to crypto-currencies. In this regard, a system based on the Central Bank's money offers a sound basis for innovation, ensuring stability and interoperability of services domestically and across borders. However, CBDCs need to be

well-designed to be widely accepted and accompanied by sound macroeconomic policies and policy frameworks that build confidence in the local currency and promote financial inclusion, among other things. Thus, global collaboration across Central Banks and the private sector would be necessary to ensure adequate interoperability and a sound regulatory framework.

6.3 Summary of panel discussions

The panel discussions were led by three Central Banks (Tanzania, Eswatini, and Guinea).

Their presentations highlighted the growing interest in crypto-currencies by the population, especially in Africa. However, while these currencies have contributed to increasing inclusion in Africa and speeding up payments, they present some risks due to their instability and high volatility.

The introduction of CBDC is not aimed at replacing existing private currencies but at complementing them to preserve Central Bank sovereignty. It could provide an alternative to private digital currencies and could be used to fight against money laundering.

There is no known crypto-currency in Guinea, but the recently enacted law gives its Central Bank the mandate to regulate digital currencies. In this regard, a study is underway to analyze the opportunity to issue a CBDC. The objective is to promote financial inclusion by reducing the use of cash in transactions since cash in circulation represents 35% of the money supply. The aim is also to increase financial services, as only 26% of the population is banked, including mobile services. In addition, adopting CBDC would reduce the high cost of issuing cash and safeguard the population's interests.

In common currency zones or those where Central Banks are in the process of integration, concerns have been raised about CBDC design. For example, in Eswatini, part of a currency zone with South Africa, Namibia, and Lesotho, the introduction of CBDC could affect other countries. In this regard, a working group has been set up to study the conditions and modalities of issuing a CBDC in Eswatini.

Central Banks identified some difficulties in introducing CBDCs, particularly the regulatory framework. Other challenges to be met for CBDC implementation include the following:

- The low level of financial education to reduce liquidity preference;
- Energy consumption by digital currencies.

In conclusion, despite their success, crypto-currencies cannot perform all the functions of a currency, although they have seemed to fill a gap in the payments market. Thus, introducing CBDCs should complement the progress already made in mobile money/banking development. In this regard, CBDC introduction should preserve the stability of the monetary and financial system, and an adequate legal framework should be established for CBDCs and mobile money/banking to ensure that they become alternatives to private digital currencies that are growing on the Continent.

6.4 Conclusion of the Chairperson

The Chairperson of the session noted that CBDCs could be an alternative to private digital currencies, which are experiencing a surge in demand in Africa. He also noted that digital payments are essential in Nigeria and invited other African countries to follow this example.

7. FOURTH SESSION

7.1 Introduction

This session was also chaired by the Honourable Jolue Aloysius Tarlue, Governor of the Central Bank of Liberia. It focused on "Sharing experiences on the main theme of the Symposium". The following five papers were presented in this session:

- "Egyptian digital innovation", presented by Mr. Sameh Eishall, Assistant Sub-Governor for Information, Technology Sector, Central Bank of Egypt;
- "Ghana's CBDC pilot: the eCedi", presented by Dr. Kwame A. Oppong, Director of FinTechs and Innovations, Bank of Ghana;
- "Sharing experiences on digital currency", presented by Mr. Ivan-Bacale Ebe Molina, Member of the Government in charge of monetary policy, Banque des Etats de l'Afrique Centrale (BEAC);
- Sharing experiences on digital innovation, presented by Honourable RWANGOMBWA John, Governor, National Bank of Rwanda (NBR);
- Sharing experiences on digital innovation, presented by Dr. Emmanuel M. Letete, Governor, Central Bank of Lesotho.

7.2 Summary of presentations

Presentations focused on crypto-currencies, the opportunities and challenges of Central Bank Digital Currencies (CBDCs), and actions undertaken to encourage digital innovations.

Regarding the experience with crypto-currencies, it was noted that in most countries, these currencies exist. Specifically:

In CEMAC, it was stated:

- The selling of crypto-assets (Limocoins/Liyeplimal) on the financial market by an unregulated entity;
- The unilateral adoption of Bitcoin as a legal tender on April 22, 2022, by the Central African Republic.

However, Central Banks noted that the issuance of crypto-assets presents risks for the financial system, including:

- The lack of a regulatory framework for crypto-assets and FinTechs;
- The impact on monetary policy and financial stability;
- Cybersecurity;
- Money laundering and terrorist financing;
- Barriers to updating consumer data.

The emergence of crypto-currencies has led to abuses that have resulted in the spoliation of many people due to the lack of supervision and oversight of these investment operations by regulatory authorities.

To deal with these challenges and effectively fight against the proliferation of crypto-currencies, some Central Banks or Supervisors adopted conservative measures to prohibit the conversion of crypto-assets by credit institutions. However, considering the number of actors offering investment services on the crypto-currency markets in Africa and the interest created among the population, this solution could be more effective. In this context, some Central Banks have adopted other measures to implement:

- A legal framework to regulate the activity of crypto-assets and FinTechs;
- A legal framework to support and encourage digital payments;
- A national financial inclusion framework to improve the financial services offered.

In addition, introducing a public digital currency has been considered an alternative to crypto-currencies that could provide users with a more trusted digital currency based on the fundamentals. Therefore, it is stated that the issuance of a CBDC should be based on the following pillars:

- Governance;
- Interoperability;
- Inclusivity, so that the currency is accessible to everyone regardless of the location and type of payment;
- Infrastructure.

Central Banks noted that an introduction of CBDC could help:

- Promote financial inclusion;
- Stimulate competition in the payment systems;
- Strengthen the transmission channel of monetary policy;
- Ensure financial stability by providing consumers with a public form of money for the digital era, backed by the Central Bank;
- Reduce the costs of payments and payment service providers.

Despite progress made so far, financial inclusion is subject to other factors, such as the availability of reliable electricity supply and communication network infrastructure, which pose challenges.

In this context, some Central Banks adopted the following specific actions:

Thus, the Central Bank of Egypt (CBE) proceeded to:

- Establish a FinTech policy by signing an agreement between the CBE and regulators to ensure sound governance;
- Launch a FinTech platform in 2019;

- Strengthen collaboration between universities and the CBE by establishing programs to find solutions to the problems raised;

- Establish a fund to invest in young talent. This fund allows them to access capital in the life cycle of FinTechs.In the CEMAC Zone, following the unilateral adoption of Bitcoin by the Central African Republic, the Monetary Authorities have examined the compatibility of the country's crypto-assets with the principles and rules of the CEMAC Monetary Union and the single currency. Thus, they have taken the following actions:

- The adoption of precautionary measures by the supervisor (COBAC) aimed at prohibiting the conversion of crypto-assets into FCFA by banks;

- The development of a draft proposal for texts to regulate the activity of crypto-assets and FinTech;

- The reflections were carried out to establish CBDC.

For its part, the National Bank of Rwanda:

- Supported interoperability between payment systems;

- Conducted an active public awareness campaign to increase the financial inclusion rate to 77% by 2020;

- Undertook initiatives to facilitate access to credit.

On the other hand, Ghana has made a lot of progress in CBDC design in recent years. For example, a pilot investigation is underway to introduce a public digital currency, the eCedi. This digital currency will be inclusive and can be used for all types of payments that could be instantaneous and also be made without an internet connection. The system will be designed to support a large volume of transactions. Furthermore, it is planned to implement transaction identification codes to address the security risk. In addition, a survey has been conducted to establish a financial inclusion registry for its promotion, despite the shortcomings related to electricity and communication network infrastructure availability.

In Lesotho, a digital strategy has been developed through the Government's digital transformation project. Thus, basic infrastructure and a robust framework have been established to digitize government services in phase I. Phase II, currently underway, will introduce digital finance and financial inclusion, especially in rural communities.

7.3 Conclusion of the Chairperson

In conclusion, the Chairperson of the session indicated that African countries had made progress in financial inclusion through financial innovations.

8. RESOLUTIONS OF THE SYMPOSIUM

1. African Central Banks considering the adoption of CBDCs were encouraged to carefully evaluate and weigh the benefits against the challenges and risks, taking into account the local context and internal capacity. To be successful, CBDCs need to be accompanied by sound macroeconomic, supervisory, and regulatory policies that reinforce confidence in the local currency. In addition, the private sector of digital payment services should be carefully studied and managed to prevent some private, systemically important operators from posing systemic risks that could affect the financial sector.

2. Central Banks were urged to continue researching and exploring CBDC design conditions that should preserve their central role in supplying a trusted form of public money, whether digital or not. In this regard, Banks were encouraged to seek an understanding of the requirements for ensuring their continued capacity to provide timely and appropriate responses to the rapidly changing digital payments environment.

3. Given the risks induced by digital innovations, Central Banks were encouraged to improve their cooperation since accelerating the digital payments integration process in Africa requires the standardization of the cross-border financial landscape to facilitate their supervision. Central Banks should also collaborate globally with the private sector to ensure adequate interoperability and a sound regulatory framework.

4. Governments and Central Banks were urged to ensure that technological innovation does not inadvertently contribute to excluding individuals, especially those from vulnerable groups. Thus, Banks were called upon to put in place fundamental enablers (ICT and energy infrastructure) and sector enablers (financial infrastructure), as well as consumer enablers (digital and financial literacy), to address key barriers that could undermine the promotion of financial inclusion. In this context, Banks could continue to benefit from the World Bank support.

5. Central Banks were urged to focus on assessing the implications of innovative technologies for monetary and financial stability rather than seeking to regulate technology or innovation.

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	97. Mrs. Liz Mukasa Samula	Economist
	98. Mrs. Karolyne Aketcha	Economist
BANK OF ZAMBIA	99. Dr. Denny Kalyalya	**Governor**
	100. Mr. Martin S. Mwiinga	Executive Assistant to Governor
	101. Mr. Jonathan M. Chipili	Director
	102. Mr. Francis Z. Mbao	Senior Economist
RESERVE BANK OF ZIMBABWE	103. Mr. Mupunga Nebson	Deputy Director
AFRICAN UNION COMMISSION (AUC)	104. Mrs. Sekwi Charumbira Ndinaye	Policy Officer Economic Policy
	105. Mrs. Manhando Rumbidzai Treddah	Economist

	106. Mrs. Mandy Mayakufa	Programme Assistant, Department of Economic Development
AU – AFRICAN INSTITUTE FOR REMITTANCES (AIR)	107. Mr. Amadou Cisse	Executive Director
	108. Mr. Hailu Kinfe	Senior Policy Officer
COMESA MONETARY INSTITUTE	109. Dr. Thomas Bwire	Senior Economist
EUROPEAN CENTRAL BANK (ECB)	110. Mr. Benjamin Vonessen	Senior Adviser
FINANCIAL STABILITY BOARD (FSB)	111. Mr. Rupert Thorne	Deputy Secretary General
GENESIS ANALYTICS	112. Mr. Richard Ketley	Director
WEST AFRICAN MONETARY AGENCY (WAMA)	113. Mr. Momodou B. Saho	Director General
WEST AFRICAN MONETARY INSTITUTE (WAMI)	114. Dr. Olorunsola E. Olowofeso	Directeur General
	115. Mrs. Maimuna John-Sowe	Director, Research and Statistics
AACB SECRETARIAT	116. Dr. Djoulassi Kokou Oloufade	Secrétaire Exécutif
	117. M. Abdoulaye Ndoye	Auditeur au Cabinet Grant Thornton
	118. M. Acho Théodore Yapo	Chargé d'Etudes
	119. M. Yao Arthur Koffi	Webmaster
	120. M. Mamdou Seye	Archiviste
	121. M. Mountaga Mbow	Comptable
	122. Mme Imily Dieng Mbaye	Assistante de Direction
INTERPRETERS AND TRANSLATORS	123. Mr. Abdou R. Diagne	Freelance
	124. Mr. Ousseynou Tall	Freelance
	125. M. Kebba Jarju	Lead Interpreter
	126. Mr. Alhagi Ceesay	Interpreter
	127. M. Cherno Omar Barry	Translator
	128. M. Passokona Sylla	Translator