



Distr.
LIMITED

CS/CMI/CCH/CCGCB/XXVIII
November 2024

Original: **ENGLISH**

**COMMON MARKET FOR EASTERN
AND SOUTHERN AFRICA**

2024 Symposium of Governors of COMESA Central Banks on (i) Digital Banking and the impact of Cyber Security and other emerging risks to Central Banks in the COMESA region; and (ii) The era of using Big Data and Machine Learning (ML) in Central Banks and Financial Institutions: Implications for Monetary Policy

07 November 2024
Ezulwini, Kingdom of Eswatini

REPORT OF THE SYMPOSIUM

07/11/24 (LK-TB-joo)

A. INTRODUCTION

1. The 2024 Symposium of Governors was held on November 7, 2024 in Ezulwini, Kingdom of Eswatini and preceded the 28th meeting of the COMESA Committee of Governors of Central Banks held on 9th November, 2024 at the same venue, on the following two themes:

1. Digital Banking and the impact of Cyber Security and other emerging risks to Central Banks in the COMESA region.
2. The era of using Big Data and Machine Learning (ML) in Central Banks and Financial Institutions: Implications for Monetary Policy.

B. ATTENDANCE

2. The Symposium was attended by Governors, Deputy Governors and delegates from twelve (12) COMESA Member Central Banks, namely, the Central Banks of Burundi, Djibouti, D.R. Congo, Egypt, Eswatini, Kenya, Libya, Sudan, Malawi, Uganda, Zambia and Zimbabwe. Also, in attendance were invited guests, including Hon. Neal Rijkenberg, the Minister of Finance of the Kingdom of Eswatini and Chief Guest; Hon. Chileshe Mpundu Kapwepwe, the Secretary General (SG) of COMESA, members of the board and of the Monetary policy advisory committee of the Central Bank of Eswatini; Guest speakers: Professor Victor Murinde, Executive Director of the African Economic Research Consortium and Ms Audry Mnisi, Chief Information Security and Risk Officer, Ghana Association of Banks, and representatives from COMESA Secretariat, COMESA Monetary Institute and COMESA Clearing House (CCH). The list of participants is annexed to this report.

C. OPENING OF THE SYMPOSIUM

3. In opening the Symposium, Dr. Phil Mnisi, the Governor Central Bank of Eswatini, Chair and host of the 28th meeting of the COMESA Committee of Governors of Central Banks welcomed the delegations to the Kingdom of Eswatini.

4. Beginning with the theme on “Digital Banking and the impact of Cyber Security and other emerging risks to Central Banks in the COMESA region”, he noted that the banking sector in the COMESA region has witnessed tremendous transformation in recent times, with transformative potential for financial inclusion, efficiency and economic growth both in the region and the world. However, he observed that these opportunities come with significant regulatory challenges, given the cybersecurity and other emerging risks concerns. He noted that as financial services increasingly move online, the risk of cyberattacks has escalated into one of the most pressing concerns for Central Banks, financial institutions (FIs) and consumers of financial services. He cautioned that as digital innovations are embraced, Central Banks must remain vigilant to technological vulnerabilities, regulatory compliance, consumer protection and potential income inequality. He noted that this underscores the need for Central Banks and FI’s to strengthen cyber-security protocols, collaboration and information sharing, scale up capacity building and training and public awareness campaigns as well as strengthen regulatory frameworks.

5. Regarding the theme on “the era of using Big Data and Machine Learning (ML) in Central Banks and Financial Institutions: Implications for Monetary Policy”, he noted that the rapid advancements in technology is revolutionizing the way economic data is gathered, analysed and utilized in gaining insights into consumer behaviour, economic trends, and market dynamics. He observed some of the potential benefits and monetary policy implications of BD and ML for Central

Banks, including but not limited to enhanced forecasting, informed decision-making, risk assessment and management, monetary policy transmission and financial inclusion. He however cautioned that in integrating BD and ML, Central Banks must safeguard data privacy and security, enhance capacity building and ensure equitable access to these technologies.

6. The SG of COMESA also made a statement and thanked Dr. Phil Mnisi for excellent hospitality. Noting that the symposium was timely, the SG observed that the future of the financial system is digital banking yet there are serious challenges of cybersecurity. The SG highlighted the transformative role of digital banking on trade in COMESA region, noting that the region faces significant challenges in financial accessibility and trade efficiency. The SG observed that digital banking presented a transformative solution to these challenges, including that digital banking promotes financial inclusion. In many parts of COMESA, traditional banking services remain out of reach for millions. Digital banks, however, can operate with lower overhead costs, allowing them to offer services to the underserved populations.

7. The SG noted that digital banking enhances transparency in financial transactions. Traditional banking systems often struggle with issues of illicit financial flows and opaque ledger entries. With digital banking, every transaction is recorded and can be traced, reducing the risk of fraud and mismanagement. This transparency builds trust among investors and businesses, creating a more favourable environment for trade and investment. In addition, digital banking has the ability to harness data analytics to provide valuable insights into market trends and consumer behaviour. In addition, the rise of digital banking fosters innovation. Fintech companies are emerging across the region, creating new solutions that address local challenges, from peer-to-peer lending platforms to mobile payment systems. Supporting these startups can create a vibrant ecosystem that stimulates entrepreneurship and job creation. Also, digital banking will streamline cross-border transactions.

8. The SG reiterated that for digital banking to reach its full potential, there was need for supportive policies and regulations. Governments and regulatory bodies need to create an enabling environment that fosters innovation while ensuring consumer protection. Central Banks in the region should promote digital banking while navigating the complexities posed by cyber security threats and other emerging risks. Cyber-attacks can undermine public trust in financial institutions, disrupt payment systems, and lead to significant financial losses, potentially destabilizing economies. The SG observed that it is imperative that all Central Banks in the region ensure that they bolster cyber defences, invest in advanced technologies, and foster a culture of security awareness within their jurisdictions to mitigate these risks.

9. On his part, Hon. Neal Rijkenberg, the Minister of Finance of the Kingdom of Eswatini and Chief Guest at the symposium noted that the advancements embedded in the themes for discussion come with significant challenges, particularly in the realm of cyber security, data breaches, and technological failures to which Central Banks and FIs are increasingly seen as prime targets. He particularly observed that in the COMESA region, where many financial institutions are still strengthening their cyber defences, proactive measures must be taken to safeguard the systems and protect financial assets of the citizens. In this context, he advised on the need for Central Banks to enhance cyber security frameworks and collaboration among the institutions within country jurisdictions.

10. He further noted that BD is now allowing for the collection of vast amounts of information—from transaction records to social media sentiments—enabling users to capture economic realities in real-time. Additionally, he noted that ML algorithms are helping to empower extraction of insights from Big datasets, identify patterns, and make predictions about future economic

conditions with greater accuracy than ever before. This, he noted, presents Central Banks with possibilities to use BD and ML to analyze millions of data points to anticipate economic trends, understand the behaviour and enhance forecasts for inflation, and dynamically adjust monetary policy to optimize economic stability and growth, but cautioned that these opportunities come with challenges. Thus, he observed that it is imperative that this journey is approached with a commitment to cyber security and continuous learning.

D. PROCEEDINGS OF THE SYMPOSIUM

Key Messages on Digital Banking and the impact of Cyber Security and other emerging risks to Central Banks in the COMESA region

11. Governors listened to the key note address on this theme that was given by the guest speaker, Ms. Audry Mnisi.

12. The presentation covered the perspectives on cyber security, in particular, aspects for ensuring the confidentiality, integrity, and availability (CIA) of digital assets for business continuity, risk management, and financial Integrity. Governors further took note of why Central Banks should be concerned about cybersecurity, including that breaches on Central Banks can have widespread repercussions on the financial system ecosystem, potentially disrupting financial services and undermining economic stability; amplify systemic risk and compromise sensitive information.

13. The presentation to the Governors also included lessons so far learned from cyberattacks, including that: some attacks have shown evidence of international cybercriminal networks targeting African banks; cyber-attacks are significantly underreported due to reputational concerns and less stringent disclosure requirements; the urgent need for cybersecurity skill development in the African banking sector; and that banks face the challenge of rapidly expanding digital services for financial inclusion while ensuring robust security – where often times, banks find themselves sacrificing security in their efforts to expand services. Governors noted the top 3 cyber threats actors, including organized criminal groups (OCGs) – known to be deploying cross cutting edge hacking tools and skills and specialize in Cybercrime-as-a-Service (CaaS); financially motivated nations i.e., states largely known to have limited access to global financial systems; and internal staff which ostensibly is the most dangerous.

14. The presentation also covered the role of Central Banks in mitigating cybersecurity and emerging risks, particularly around policy and regulatory oversight, collaboration with industry and government, and building resilience. It was noted that Central Banks should issue cyber security standards for FIs and enforce compliance with global frameworks such as ISO/IEC 27001, NIST. They should also enhance partnerships for sharing intelligence on emerging cyber threats with other actors and on national and international frameworks such as SWIFT and FATF for secure transactions; and establish dedicated cyber response teams and running industry-wide cyber drills for preparedness.

15. In terms of call to action, Central Banks must play a proactive role in policy-making and oversight, strengthen their cybersecurity infrastructure, invest in capacity building for cybersecurity professionals in the banking sector, enhance collaborative efforts with other stakeholders to tackling cyber risks and ensure that regulated FI's Board Composition include cyber skills.

DISCUSSIONS

16. The panel discussed the need for commercial banks collaborate with each other and the Bankers Association, working with regulators to identify and address gaps in cyber security.

17. The discussants emphasized the need for collective action in response to cyber-attacks, rather than raising defences individually. They also highlighted the opportunities in digital banking, particularly mobile money, and the role of Central Banks in supporting fintechs rather than hindering them. They noted that vulnerabilities in small fintechs can have significant impacts, and Central Banks should set minimum security standards for new products while playing a leading role in innovation and technology to effectively regulate fintechs. The importance of collaboration and sharing experiences to tackle cybersecurity issues was stressed, along with the critical need for capacity building.

18. The panel discussed the readiness of Central Banks for AI and how to leverage it for efficiency to ensure Central Banks stay ahead. Data can be utilized to inform policy, and AI can facilitate the collection of this data.

19. It was further observed that there has been a significant evolution in banking with the adoption of new technologies to deliver digital banking services, with some jurisdictions indicating nearly 98% of all banking transactions being digital. Financial inclusion has improved, displacing cash, and the digital revolution is transforming how money moves.

20. The panel emphasized the importance of utilizing regional payment channels to enhance trade opportunities, with customers now demanding convenience, affordability, and interoperability across different technologies. They noted that cybersecurity requires specialized skills. While Central Banks possess diverse skill sets, there is value in collaborating and strategizing to upskill in response to evolving cyber risks. Examples include building institutional capacity by training staff and boards, upscaling training curriculum, leveraging on training centres among others.

21. The panel discussed costs of cross border payments, which remain high mainly due to currency convertibility and acceptability. Unfortunately, this remains the biggest hindrance to cost reduction despite huge investments made in infrastructure. They noted that Regional Economic Communities with single currencies have lower cross border costs and perhaps a COMESA Monetary Union, when achieved, will solve this problem.

22. The panel emphasized the importance of investing in financial literacy across all sectors and collaborating on regulation, rather than working in silos, as cyber criminals often collaborate. Investment in cybersecurity software and intelligence is crucial. There is merit in considering the establishment of a cybersecurity hub for COMESA, where members can report threats and issues when incidents occur, as these will likely affect other member Central Banks.

Key Messages on the Theme: “The Era of using Big Data and Machine Learning in Central Banks and Financial Institutions: Implications for Monetary Policy”

23. Governors noted the presentation on this theme by the guest speaker, Professor Victor Murinde.

24. Governors noted the focus of the presentation was on the era of using Big Data (BD), Artificial Intelligence (AI) and Machine Learning (ML) to better understand, how advances in BD,

AI and ML are impacting Central Banks and financial institutions; and the implications of these developments on monetary policy.

25. The presentation highlighted that BD comprises datasets that are too large or complex to be dealt with by traditional data processing application software, characterized by the following 5 Vs: Volume, Veracity, Value, Velocity and Variety. On AI, the presentation noted that International Finance Corporation (IFC) defines AI as “the science of making machines act in rational, intelligent ways”. ML is the process of using mathematical models of data to help a computer learn without direct instruction.

26. The presentation highlighted the following applications of BD, AI and ML in Financial Institutions. Asset management where AI and ML have the potential to increase the efficiency and accuracy of operational workflows, enhance performance, strengthen risk management, and improve customer experience. Algorithmic Trading where AI can be used in trading both to provide trading strategy suggestions and to power automated trading systems that make predictions, choose the course of action and execute trades. AI-based models and BD are also increasingly being used by banks and fintech lenders to assess the creditworthiness of prospective borrowers and make underwriting decisions.

27. The presentation highlighted the following challenges and potential risks of BD, AI and ML. Risk of tacit collusions where AI and ML cause similar trading behaviours among different entities due to the use of similar algorithms and data-driven strategies. Also, the deployment of AI and BD in finance requires different skills which only a few of the workers and leaders in finance have. AI and ML technologies are likely to render some workers jobless as machines replace humans in automated processes.

28. The presentation also provided several applications of BD, AI and ML in Central Banks, including where Inflation Targeting, AI and ML tools can predict inflation trends by analyzing vast datasets and identifying patterns that may be otherwise detected by traditional methods, helping Central Banks set more accurate inflation targets. AI can also allow Central Banks to analyze economic data, including real-time financial transactions and market trends as well as model complex economic scenarios and predict the effects of interest rate changes on the economy. BD and AI can be an effective tool of communication and can ensure policy decisions are well understood by the public, and inflation expectations are kept well-anchored. Big Data, AI and ML can help Central Banks monitor global economic conditions, as well as predict and analyze exchange rate fluctuations by processing large datasets from different sources. BD, AI and ML can allow Central Banks to analyze spending patterns and money flows and predict demand and anomalies in financial behaviour which can help Central Banks monitor and adjust money supply. On monetary policy transmission, AI tools can allow for real-time monitoring of economic indicators such as inflation rates, employment figures, and consumer spending as well as simulation of the monetary policy transmission mechanisms.

29. The presentation noted the following key priorities for application of BD, AI and ML for Central Banks. Scenario Analysis where AI models can allow Central Banks to simulate various economic scenarios and assess the potential impacts of different policy decisions. Effective Communication Strategies by analyzing how different messages are received by the public and financial markets, to enhance the credibility and transparency of monetary policy, leading to more stable market expectations. BD can also enhance stakeholder engagement, including the public, financial institutions, and government bodies; by understanding the concerns and expectations of these groups through data analysis.

30. The presentation highlighted the following challenges and limitations. Handling BD including collecting and accessing information, infrastructure, and high data security measure are resource intensive. In addition, underlying quality of data may be low for public authorities like Central Banks. The fast-paced development of these technologies challenges current regulations and raises ethical and regulatory concerns about their application. Unethical use of AI models can be used to spread false information and data, facilitate fraud or launch cyberattacks.

DISCUSSIONS

31. The panel noted some challenges on big data:

- (i) Black box effect – not knowing what is going in and out and skill is needed to test data accuracy.
- (ii) Skills set and training required to assess and use the data with accuracy, timely and for forecasting.
- (iii) Determining a strategy and having dedicated reviews of it.

32. The panel highlighted the need for Central Banks to have clear governance on handling data. Data is key and without it, even the best tools to handle data are not useful. The need to ensure that central bank infrastructure can scale up to secure it is crucial.

33. The panel highlighted the role of stakeholder engagement to enable authorisation to reliable sources of data as opposed to scrapping, as unstructured data requires careful handling. There is a challenge getting data from African countries and perhaps having an African Economics Association could help in this regard.

34. The panel discussed the need to have clear strategies about cloud services. Currently, some Central Banks use cloud services due to various reasons such as, heavy cost of investments in storage infrastructure, scalability of storage and availability of the service. The downside of cloud services is the bandwidth to collect and push data through as well as high cost of subscriptions in foreign currency. The panel also noted the need to undertake incremental investment in ICT infrastructure as technology advances. The panel touched on the need to keep learning and applying hand-on experience in the light of new knowledge, with the understanding that relationships are not linear.

35. The panel discussed on confirming the output of AI, stating that we will continue to need the old economic models to confirm results from blackboxes until we really understand what happens in these blackboxes.

RECOMMENDATIONS

36. ***Governors noted the following recommendations from the symposium that Central Banks could consider:***

- (i) ***Developing regional cybersecurity standards and establishing information sharing mechanisms as well as build cyber resilience through continuous monitoring and testing, e.g. establish a COMESA Cyber Threat Intelligence Center and harmonized regulatory framework for fintech and digital banking;***

- (ii) Fostering innovation while managing risks through creating regulatory sandboxes and innovation hubs, balanced approach to fintech regulation and encouraging responsible innovation;***
- (iii) Strengthening digital capabilities through capacity building of staff in Cybersecurity, investing in advanced data analytics and incrementally modernizing IT infrastructure;***
- (iv) Adopting collaborative approaches with regulated FI's, at regional and international levels on digital banking policies and Public Private Partnerships for cybersecurity; and***
- (v) Carrying out a collaborative benchmarking exercise to identify IT and Cybersecurity skills gaps in the region, to facilitate possible exchange programmes.***

E. CLOSURE OF THE SYMPOSIUM:

37. In closing the symposium, Dr. Felicia Kunene Dlamini, Deputy Governor, the Central Bank of Eswatini, thanked Ms. Audrey Mnisi and Prof. Victor Murinde, the key note speakers for sharing their insightful presentations. She thanked the panelists for their valuable contributions. She also thanked all participants and all those involved in servicing the symposium.

Annex 1

LIST OF PARTICIPANTS/LISTE DES PARTICIPANTS

BURUNDI

1. Mrs. Irène KABURA MURIHANO, Deputy Governor, Banque de la République du Burundi, Av. Du Gouvernement, B.P. 705, Bujumbura, Burundi; Email:
2. Mr. Ntangorane Georges, Directeur des Etudes Economiques, de la Statistique et de la Coopération; Banque de la République du Burundi, Av. Du Gouvernement, B.P. 705, Bujumbura, BurundiPhone +257 694 610 93/+257 222 04015; Email; gntangorane@brb.bi

CONGO DR

3. Mr. Lumuna Alain Difumba, Deputy Director, Economic Analysis, Banque Centrale du Congo, Boulevard Colonel Tshatshi, B.P. 2697, Kinshasa 1, République Démocratique du Congo. Email: difumba@bcc.cd
4. Ya'ngembe Cedric Egwake, Economist, Banque Centrale du Congo, Boulevard Colonel Tshatshi, B.P. 2697, Kinshasa 1, République Démocratique du Congo. Email: egwake@bcc.cd
5. Mbelu Mutoba, Bevi David, Chief Data Officer, Banque Centrale du Congo, Boulevard Colonel Tshatshi, B.P. 2697, Kinshasa 1, République Démocratique du Congo. Email: m.mbelu@bcc.cd

DJIBOUTI

6. Robert Carton Mohamed, Directeur des Etudes, Banque Centrale de, Djibouti, B.P. 2818, Avenue St. Laurent Du Var, République de Djibouti: Email: mohamed.robert@banque-centrale.dj

EGYPT

7. Dr. Naglaa Nozahie Atik, Governors Advisor for African Affairs Sector, Central Bank of Egypt, 54 Elgomhoreya Street, 11511, Cairo, Egypt: Email: Naglaa.Nozahie@cbe.org.eg
8. Dr. Ahmed Sahloul, Assistant Sub-Governor, Macroprudential Sector, Central Bank of Egypt, 54 Elgomhoreya Street, 11511, Cairo, Egypt: Email: Ahmed.Sahloul@cbe.org.eg
9. Mr. Osama Abdelrahman, Deputy General Manager, African cooperation Sector, Central Bank of Egypt, 54 Elgomhoreya Street, 11511, Cairo, Egypt: Email: Osama.Abdelwahed@cbe.org.eg

ESWATINI

10. Dr. Phil Mnisi, Governor, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: philm@centralbank.org.sz

11. Mrs. Felicia Dlamini-Kunene, Deputy Governor, Central Bank of Eswatini, Umntsholi Building Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: feliciad@centralbank.org.sz
12. Dr. Patrick Ndzinisa, Deputy Director, Policy Research and Macroeconomic Analysis, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: patrickn@centralbank.org.sz
13. Linda Dlamini-Khumalo, Deputy Director, Operations , Fintech, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: lindak@centralbank.org.sz
14. Sihle Mabuza, Lead Specialist, Macroprudential, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: Sihlem@centralbank.org.sz
15. Zandile Mabundza, Deputy Director, Financial Surveillance, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: zandilem@centralbank.org.sz
16. Mduduzi Mtesetfwa, Lead Specialist, Financial Surveillance, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: mduduzim@centralbank.org.sz
17. Sabelo Gama, Deputy Director, Operations, Payment Systems, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: sabelog@centralbank.org.sz
18. Vusumuzi Dlamini, Lead Specialist, Macroprudential, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: vusumuzid@centralbank.org.sz
19. Thandeka Simelane, Senior Economist, Policy Research, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: thandekam@centralbank.org.sz
20. Sive Kunene, Senior Economist, Policy Research, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: sivek@centralbank.org.sz
21. Bongani Dlamini, Principal Economist, Policy Research, Central Bank of Eswatini, Umntsholi Building, Mahlokohla Street, P. O. Box 546, Mbabane, Eswatini. Email: bonganid@centralbank.org.sz

KENYA

22. Mr. Michael R. Eganza, Director, Banking and Payment Services, Central Bank of Kenya, Haille Sellasie Avenue, P. O. Box 60000, Nairobi, Kenya. Email: rundume@centralbank.go.ke

23. Mr. William Nyagaka, Director, CBK Institute of Monetary Studies, Central Bank of Kenya, Haille Sellasie Avenue P. O. Box 60000, Nairobi, Kenya: Email: NyagakaW@centralbank.go.ke
24. Mr. Grivines O. Peter, Central Bank of Kenya, Haille Sellasie Avenue P. O. Box 60000, Nairobi, Kenya: Email: petergo@centralbank.go.ke
25. Ms. Maureen T. A. Odongo, Central Bank of Kenya, Haille Sellasie Avenue. P. O. Box 60000, Nairobi, Kenya: Email: OdongoMTA@centralbank.go.ke

LIBYA

26. Ahmed Kuraim Faraj, Head of Foreign Relations Section, Governor's Office, Central Bank of Libya, El-Fateh Street, Email: akuraim@cbl.gov.ly
27. Abdelader Salem, Central Bank of Libya, El-Fateh Street, Email: ASalem@cbl.gov.ly

MALAWI

28. Dr. Wilson Banda, Governor, Reserve Bank of Malawi, : Convention Drive City Centre, P. O. Box 30063, Lilongwe 3, Malawi, Email: msoko@rbm.mw
29. Dr. Mark Lungu, Director, Public Relations, Reserve bank of Malawi, : Convention Drive City Centre, P. O. Box 30063, Lilongwe 3, Malawi, Email : Mlungu@rbm.mw
30. Dr. Esmie Koriheya Kanyumbu, Senior Financial Markets Development Analyst, Reserve bank of Malawi, : Convention Drive City Centre, P. O. Box 30063, Lilongwe 3, Malawi, Email : ekanyumbu@rbm.mw

SUDAN

31. Khair Mohamed Ahmed, Central Bank of Sudan, Gamhoria Street-Almogoran, P. O. Box 313, Khartoum, Sudan: Email:

UGANDA

32. Tumubweinee Twinemanzi, PhD, Executive Director, National Payment Systems, Bank of Uganda, Plot 37/45 Kampala Road, P. O. Box 7120, Kampala, Uganda, Email: ttwinemanzi@bou.or.ug
33. Doreen Rubatsimbira, Deputy Director, Bank of Uganda, Plot 37/45 Kampala Road, P. O. Box 7120, Kampala, Uganda, Email: dkrubatsimbira@bou.or.ug
34. Karolyne Aketcha, Economist, Bank of Uganda, Plot 37/45 Kampala Road, P. O. Box 7120, Kampala, Uganda, Email: kaketcha@bou.or.ug

ZAMBIA

35. Dr. Francis Chipimo, Deputy Governor, Bank of Zambia, Bank Square, Cairo Road, P. O. Box 30080, Lusaka, Zambia: Email: pmulendele@boz.zm

36. Mr. Patrick Mulendele, Executive Assistant, Bank of Zambia, Bank Square, Cairo Road, P. O. Box 30080, Lusaka, Zambia: Email: pmulendele@boz.zm
37. Mr. Peter Zgambo, Director, Statistics, Bank of Zambia, Bank Square, Cairo Road, P. O. Box 30080, Lusaka, Zambia: Email: pzgambo@boz.zm
38. Mukosha Zulue, Assistant Manager - Payment System, Bank of Zambia, Bank Square, Cairo Road, P. O. Box 30080, Lusaka, Zambia: Email: mzulu@boz.zm
39. Mukosha Faith Zulu, Assistant Manager – PSO, Bank of Zambia, Bank Square, Cairo Road, P. O. Box 30080, Lusaka, Zambia: Email: mzulu@boz.zm
40. Jimmy Couvaras, Assistant, Payment Systems Development and Operations, Director, Bank of Zambia, Bank Square, Cairo Road, P. O. Box 30080, Lusaka, Zambia: Email: jcouvaras@boz.zm
41. Dr. Gregory C. Nsofu, Director, ICT, Bank of Zambia, Bank Square, Cairo Road, P. O. Box 30080, Lusaka, Zambia: Email: gnsoufu@boz.zm

ZIMBABWE

42. Dr. John Mushayavanhu, Governor, Reserve Bank of Zimbabwe, 80 Samora Machel Avenue, P. O. Box 1283, Harare, Zimbabwe; Email: ngorova@rbz.co.zw
43. Dr. Moris Bekezela Mpofu, Executive Assistant & Advisor to the Governor, Reserve Bank of Zimbabwe, 80 Samora Machel Avenue, P. O. Box 1283, Harare, Zimbabwe: Email: BMpofu@rbz.co.zw
44. Mr. Samuel Tarinda, Deputy Director, Economic Research, Modelling and Policy Division, Reserve Bank of Zimbabwe, 80 Samora Machel Avenue, P. O. Box 1283, Harare, Zimbabwe: Email: starinda@rbz.co.zw
45. Dr. Josephat Mutepfa, Deputy Director, National Payments System, Reserve Bank of Zimbabwe, 80 Samora Machel Avenue, P. O. Box 1283, Harare, Zimbabwe: Email: jmutepfa@rbz.co.zw
46. Mr. Tawanda Mubvuma, Deputy Director, External Affairs and Stakeholders Engagement, Reserve Bank of Zimbabwe, 80 Samora Machel Avenue, P. O. Box 1283, Harare, Zimbabwe: Email: tmubvuma@rbz.co.zw

COMESA SECRETARIAT

47. H.E. Chileshe M. Kapwepwe, Secretary General, COMESA Secretariat, Ben Bella Road, P. O. Box 30051, Lusaka, Zambia, Email: Secgen@comesa.int
48. Mr. Gabriel Masuku, Director, Legal and Corporate Affairs, COMESA Secretariat, Ben Bella Road, P. O. Box 30051, Lusaka, Zambia, Email: GMasuku@comesa.int
49. Ms. Maluba S. Sinyambo, Executive Support Officer, COMESA Secretariat, Ben Bella Road, P. O. Box 30051, Lusaka, Zambia, Email: MSinyambo@comesa.int

50. Daniel Banda, COMESA Secretariat, Ben Bella Road, P.O. Box 30051, Lusaka, Zambia, Email: DBanda@comesa.int
51. Ms. Christine Chibamba, COMESA Secretariat, Ben Bella Road, P.O. Box 30051, Lusaka, Zambia, Email: CChibamba@comesa.int
52. Emanuel Kateule Auk, IT Support, COMESA Secretariat, Ben Bella Road, P.O. Box 30051, Lusaka, Zambia. Email: EKateule@comesa.int

COMESA MONETARY INSTITUTE (CMI)

53. Dr. Lucas Njoroge, Director, COMESA Monetary Institute, P. O. Box 65041 00618, Nairobi; Email: LNjoroge@comesa.int
54. Dr. Thomas Bwire, Senior Economist, COMESA Monetary Institute, P. O. Box 65041 00618, Nairobi; Email: TBwire@comesa.int
55. Mr. Jacob Omondi Oyoo: Senior Administrative Assistant, COMESA Monetary Institute, P. O. Box 65041 00618, Nairobi; Email: JOyoo@comesa.int
56. Ms. Faith Njau, Administrative Assistant, COMESA Monetary Institute, P. O. Box 65041 00618, Nairobi; Email: FNjau@comesa.int;

COMESA CLEARING HOUSE (CCH)

57. Mrs. Jedidah Ndebele, Executive Secretary, COMESA Clearing House, P. O. Box 2940, Harare, Zimbabwe, E-mail: Jndebele@comesach.org;
58. Mr. Lynos Dzenga, COMESA Clearing House, P. O. Box 2940, Harare, Zimbabwe, E-mail: Ldzenga@comesach.org

GUEST OF HONOUR

59. Hon. Neal Rijkenberg, Minister for Finance, P. O. Box Eswatini

GUEST SPEAKERS

60. Ms. Audry Mnisi, Banking Ops, Risk & Cybersecurity Specialist, Ghana Association of Banks (GAB), No. 12 Tafawa Balewa Avenue, GA-029-4444, North Ridge Accra, Ghana Association of Banks, Email: Audrey.mnisi-mireku@gab.com.gh
61. Prof. Victor, Murinde, Executive Director, African Economic Research Consortium: Email: Victor.Murinde@aercafrica.org;

INTERPRETORS

62. Ms. Tina Nsakadi, Mhlambaryati 155 Okleyh: Tel No.+268 76033431; Email: dditumba@gmail.com
63. Mr. Peter Inampasa, H/No. 293 Mpolonjoni; Tel No. +268 76590144; Email: inampasapeter@gmail.com

TRANSLATOR

64. Mr. Chris HARAHAZWE, Freelance Translator, Tel: +254 740 869067, Email: chrishara2k@gmail.com