CAIM

OXFORD MARTIN SCHOOL

HIGHLIGHTS OF THE 2023 MEFMI REGION FORUM FOR DEPUTY PRINCIPAL / PERMANENT SECRETARIES IN THE MINISTRIES OF FINANCE / ECONOMIC PLANNING AND DEPUTY GOVERNORS IN CENTRAL BANKS

THEME: CLIMATE CHANGE AND CENTRAL BANKING

WEDNESDAY, 24 MAY 2023

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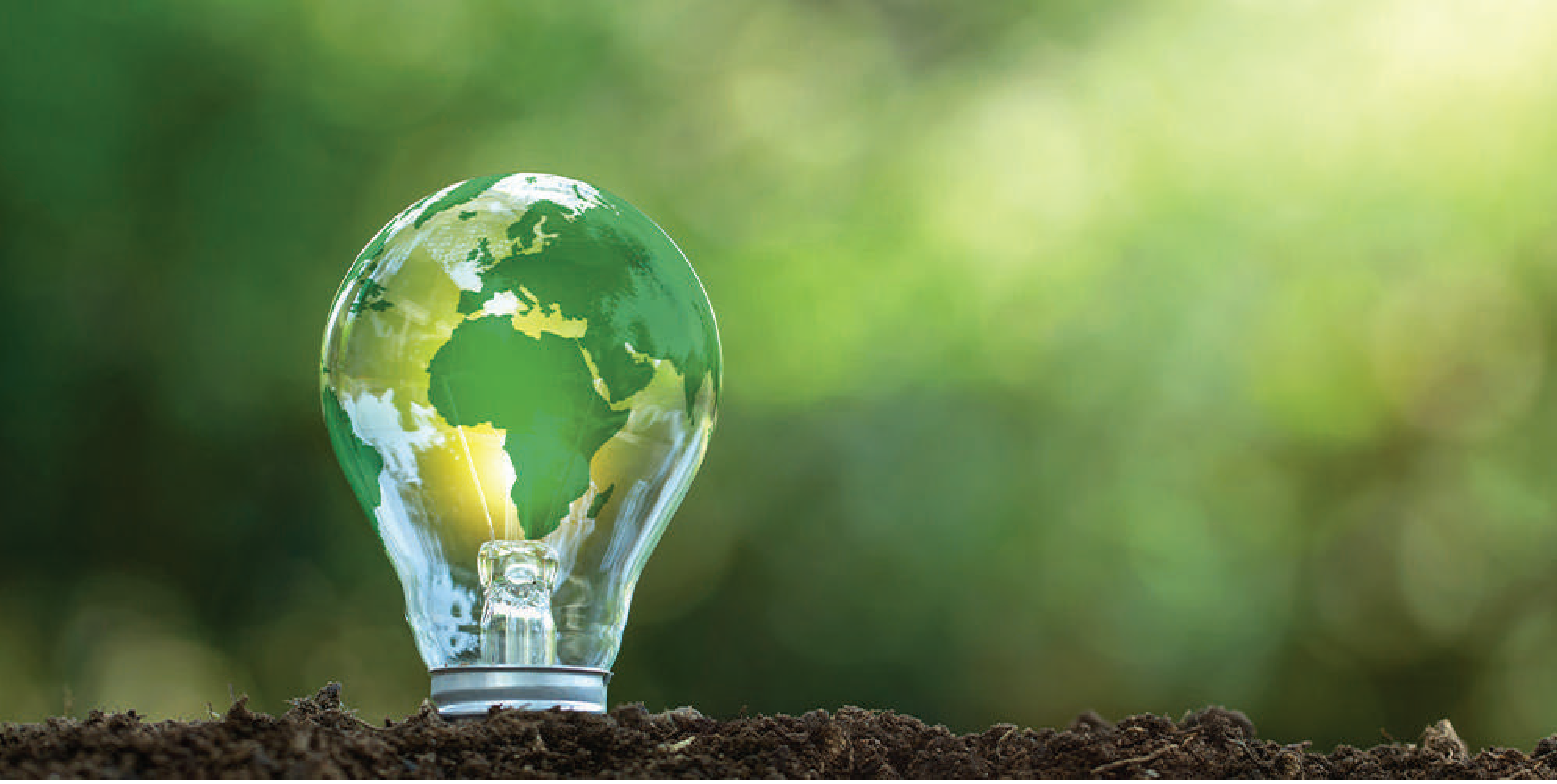


EXECUTIVE SUMMARY

The debate on the macroeconomic and financial implications of climate change has gained momentum in the recent past. There is agreement that climate shocks have the potential to undermine global macroeconomic and financial stability.

In order to build resilience to climate shocks, the international community is collaborating globally to develop best practices, share knowledge and produce guidance on mitigating the impact of climate-related shocks. However, there is still a need for coordinated policy frameworks, regulations, and actions to adequately mitigate and address the effects resulting from such risks.

In line with the on-going global discussion, the theme for the 2023 MEFMI Forum focused on Climate Change and Central Banking. Topical issues related to climate change, natural risks, and responsible investing were discussed during the Forum.

The speakers outlined that climate related risks are causing disruptions to economic activities leading to increased financial system vulnerabilities and macroeconomic gaps.

The 2023 Forum explored the theme in the context of the following topics:

i. Climate Change and its impact on Macroeconomic and Financial Management.

ii. Integrated Nature and Climate Stress Tests for Central Banks.

iii. A Perspective on Responsible Investing for Reserves and Other Official Institution Portfolios.

The discussions during the Forum were forward-looking, with participants agreeing that climate change and natural risks are a major threat to countries' economic and financial stability, globally. The effects emanating from these risks are not isolated, therefore, the actions require a coordinated response.

In addition, the policy prescriptions require contextualisation and identification of the most critical for developing countries.

Moreover, the associated cost of mitigation and adaptation calls for the involvement of both the public and private sectors. In particular, the financial sector has an important role in financial resource mobilisation such as institutionalising ESG in the financial sector.

The meeting further deliberated that there are several opportunities for Africa arising from climate-related issues in terms of industrialisation, which could be translated into renewable energy and innovative environment-friendly products.

This will ultimately enhance the continent's industrialisation efforts. Attracting financing flows requires the design and implementation of adequate policies aligned to the expectations, metrics, and strategies used by providers of capital in climate change and ESG.

Incorporation of responsible investing could be done through investment and policy-making processes.

Key lessons from the forum included:

i. While communities in this region contribute a minuscule proportion to global warming, they are likely to suffer disproportionately from the effects of climate change. This is expected to manifest through increased flood risk, destruction of infrastructure, and vulnerability to changes in rainfall patterns, possibly causing famine in some locations.

ii. The Carbon Border Adjustment Mechanisms (CABM), a carbon tariff on carbon-intensive products imported into the EU, may further hamper Africa's efforts to export into Europe. One way to mitigate its impact on two-way trade and constraining of the GDP growth of African economies is to grow, encourage and prioritise intra-African trade.

iii. There was great emphasis on capacity-building imperatives, mainly to address the transition, as adaptation is paramount.

1. WELCOME AND OPENING SESSION

The welcome remarks were delivered by Dr. Louis Kasekende, the MEFMI Executive Director. He welcomed delegates and speakers to the 2023 Forum.

Dr. Kasekende recognised the Chief Executive Officer (CEO) of CAIM, Mr. Roberts Grava, and expressed gratitude for the financial support provided by CAIM for the fora since 2017.

He emphasised that the theme of the 2023 forum on Climate Change and Central Banking was chosen due to the challenges and issues imposed by climate change, as well as its impact on macroeconomic and financial management in MEFMI countries. He commended the delegates for making time to attend the Forum.

Dr. Kasekende noted that the devastating impact of climate change across the globe, including the MEFMI region, calls for policymakers to urgently incorporate the issues in decision-making, given the impact of climate-related shocks in undermining the region's macroeconomic and financial stability.

He emphasised that of primary concern is the frequency of climate-related shocks and mentioned that in the first half of the year 2023, two of the MEFMI member countries were severely affected by Cyclone Freddy, resulting in loss of life and destruction of key infrastructure accompanied by distortions to the macroeconomic environment.

In this regard, he presented that the Forum was motivated by a need to provide greater understanding and explain the potential impact of climate change on the macroeconomy. Broadly, the aim is to facilitate the transition to climate-resilient economies across the MEFMI membership.

In conclusion, he said that the Forum proceedings are expected to help member countries assess their readiness in response to any imbalances caused by climate change and assist MEFMI in developing capacity-building and technical assistance interventions to support sustainable macroeconomic policy formulation.

Dr. Louis Kasekende
MEFMI Executive Director

2. Remarks by CAIM

In his introductory remarks, Mr. Roberts Grava, the CEO of CAIM, stated that the year 2022 was a challenging year for reserves managers and fixed-income markets in general. He briefly reflected on some of the storms experienced in the financial markets over the last year. He said the topic has been part of every conversation with central banks that CAIM has had in the recent past.

Key points highlighted in his presentation are:

i. Returns in government bonds were negative in 2022 and market volatility continued into the beginning of 2023;

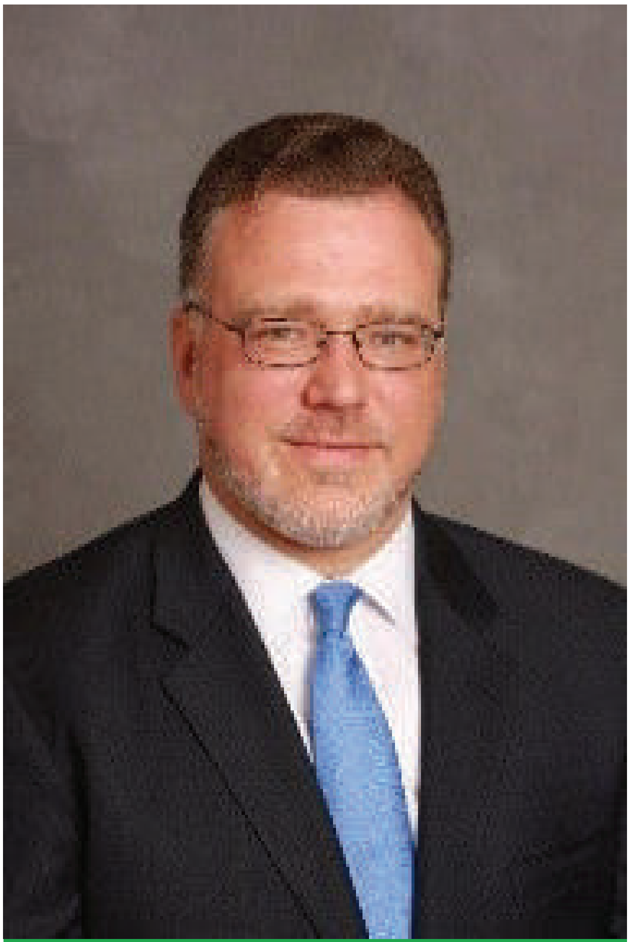
ii. The beginning of the year 2023 has seen quite significant aftershocks in the fixed income space, especially in the space where many central banks tend to concentrate on reserves holdings, which is the short to medium-term point of the yield curve.

iii. Expectations for income and capital preservation were low in 2021, with a resurgence in 2023.

iv. Repriced assets: the asset pricing is positive and forward looking, and the expectation of returns to investment is back.

v. Central banks need to maintain investment policies that have served them well over the previous decade.

vi. Central banks need to maintain their strategic positions as long as they generate positive results and re-evaluate positions when faced with significant change as part of strategic consistency in the face of adverse markets.



Mr. Roberts Grava
CAIM Chief Executive Officer

FORUM PRESENTATIONS AND DISCUSSIONS

SESSION 1

Session 1: Climate Change and its Impact on Macroeconomic and Financial Management
Presenters: Dr. Nicola Ranger and Professor Christopher Adams, Oxford Martin School
Discussant: Dr. Michael Atingi-Ego, Deputy Governor, Bank of Uganda
Moderator: Mr. Ebson Uanguta, Deputy Governor, Bank of Namibia

Mr. Ebson Uanguta
Deputy Governor, Bank of Namibia
Moderator

In his session introductory remarks, Mr Uanguta , the Moderator, noted that the macroeconomic impacts of climate change are affecting gross domestic productivity, agriculture, and people's lives.

He further noted that the frequency and severity of the weather-related disaster is lowering productivity.

Extreme weather events disrupt economic activity, leading to financial losses, and thereby increasing macroeconomic gaps.

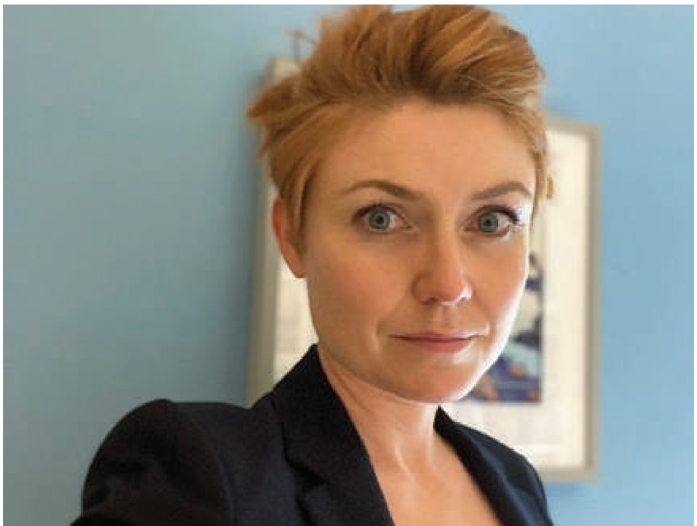
He mentioned that these risks could increase financial system vulnerabilities through losses to the financial system by sudden repricing of large classes of assets. As the frequency and severity of climate-related risks increase, a very important consideration for monetary and fiscal authorities, as well as regulators, is to reflect on the scope of responsibility they wish to carry in managing climate-related shocks.

He concluded by saying that addressing climate change and its related risk will require a comprehensive and coordinated approach that encompasses all sectors of society.

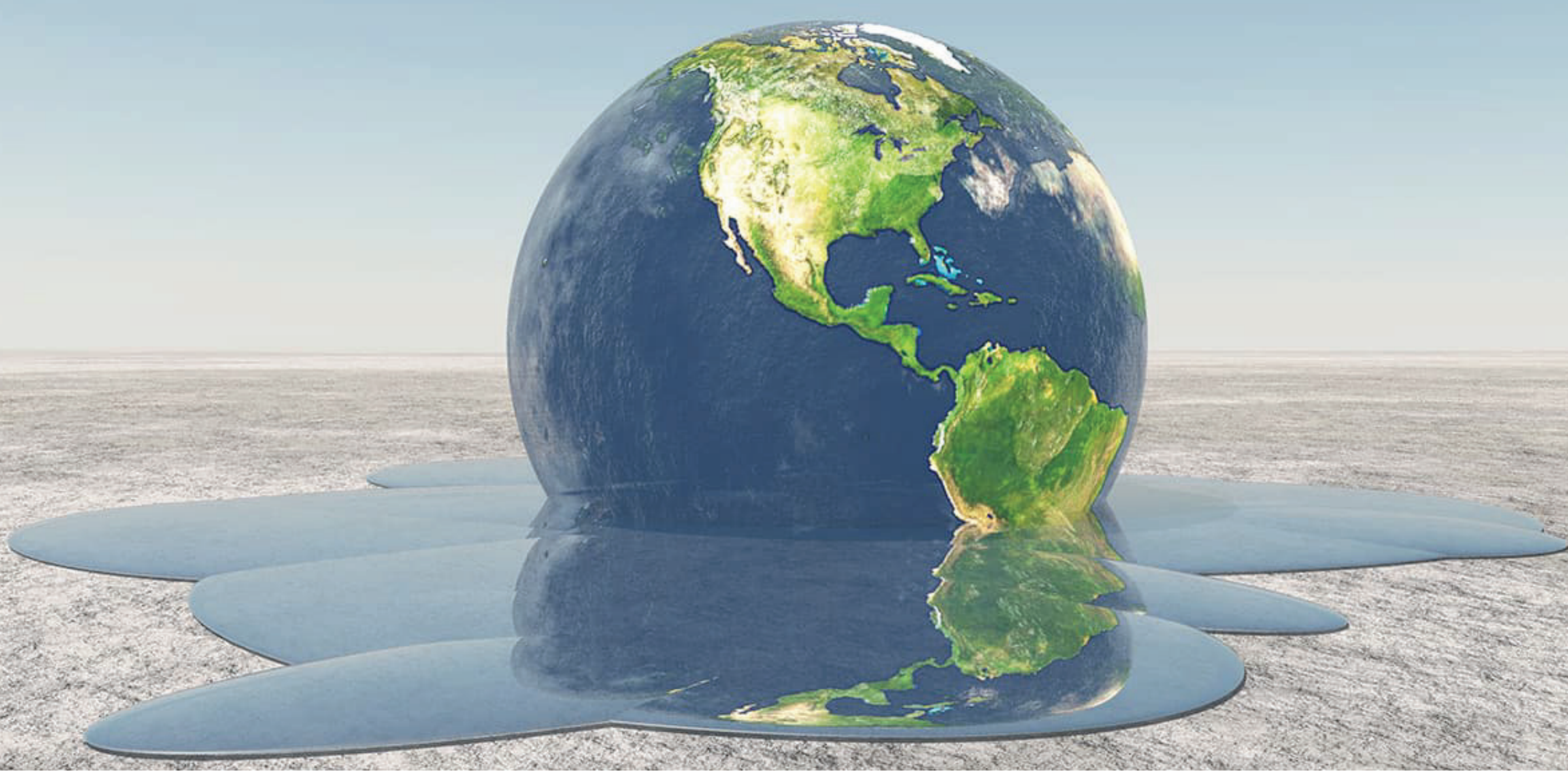
The speakers for this session were Dr Nicola Ranger and Professor Christopher Adam from the Oxford Martin School.

They highlighted the preliminary findings of a system issues paper on Climate Change and its impact on Macroeconomic and Financial Management, identifying some of the key themes that are likely to face central banks and ministries of finance over the coming years and decades.

Dr Nicola Ranger presented the first part of the presentation.



Dr. Nicola Ranger
Oxford Martin School



Highlights of the presentation

i. Climate change is a huge challenge for the planet as a whole. It raises a lot of important issues about the role of key agencies on the policy front.

ii. The presentation identified some of the key areas where central banks and ministries of finance serve as critical agents in policy delivery and formulation.

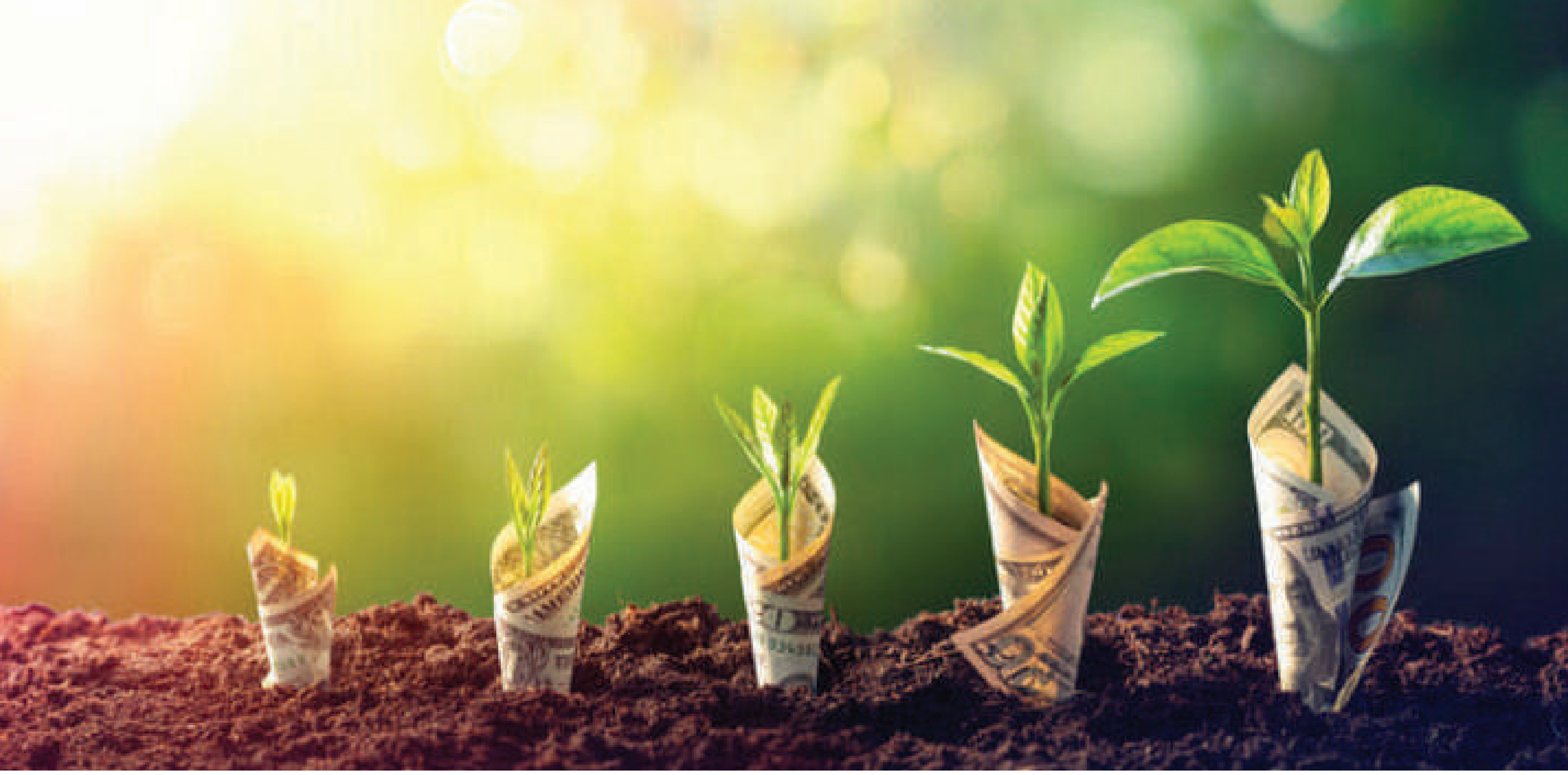
iii. In terms of climate change, under Article 2 of the Paris Agreement, the increase in global temperatures must be kept below 1.5 degrees above pre-industrial levels. However, temperatures are projected to rise more than 1.5 degrees even under an optimistic scenario, to about 1.8 degrees. Taking a more pessimistic view on the goals that have been laid out by countries, potentially up to around 2.7 degrees will be achieved. Overall, this means that the world is not on course to meet the 1.5 degrees and the developing economies will be most severely impacted through climate change and its impacts on economies and societies.

iv. Currently, MEFMI countries contribute around 2% of global emissions collectively and this is mainly from agricultural activities. Therefore, MEFMI countries are small contributors to the problem compared to other countries. For instance, Africa's emissions are only about 15% of the USA's emissions.

v. In terms of physical climate change, coastal areas are exposed to rising sea levels and potentially higher storm risk, significant increases in temperature, including extreme heat and changes in precipitation, and more extreme rainfall. That could drive higher and often localised flood risk in some areas. A lot of these risks can be offset through good adaptation.

vi. What does this mean for central banks and ministries of finance? There are two dimensions to this question.

- Transition risks: These are risks associated with the global transition towards a lower carbon economy. The key risks to the MEFMI economies are coming from the international side, in terms of changes in prices, and changes in markets globally. Transition risks come from the changing markets, potential for stranded assets, changing demands, and changing investor sentiments related to this global transition. However, the biggest transition risk is likely to come from the international changes in demand and investor sentiments.



- Physical climate risks : Domestic risks, as well as regional and international risks arising from extreme climate events, can lead to both direct damages to assets but also changes in productivity, commodity prices, etc.

vii. The above risks interact within the wider macro economy and interact with all other financial volatilities happening in parallel. This causes potentially changing fiscal risks, potentially changing costs of capital, cost of financing, increasing volatility from the international system with risk to pricing and inflation, and potential financial risks as well related to the growing transition.

viii. There are also opportunities arising from this, including opportunities for new markets, opportunities for new types of external financing, and opportunities to attract greater investment in transition and adaptation.

ix. The Network for Greening the Financial System (NGFS) now has over 100 central banks and supervisors globally collaborating to develop best practices in this area and share knowledge, as well as produce guidance around these areas.

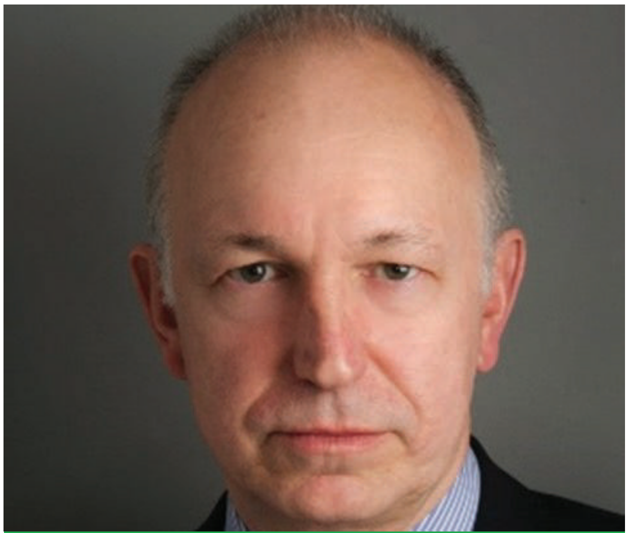
x. The implications for financial sector macroprudential stress testing abound. One of the key starting points is scenario analysis. There is a lot of guidance available on how to do this, and a lot of good examples across Africa as well.

Professor Christopher Adam presented the second part of the presentation on the implications for macro policy formation and management, and economic policy formation. He presented on the below main blocks for thinking through the implications of climate change on economic policy:

i. Structural adjustment: these models focus on changes in the relative prices of the supply side of the economy and the movement of labour and capital between sectors and the implications on productivity. This model is used in research institutions or planning departments within governments and is likely to be developed in a collaborative way with international organisations.

ii. Models on macro-fiscal policy - These are the kind of models that ministries of finance, in collaboration with central banks, and often external partners would be seeking to use to understand medium-term macro-fiscal dynamics. These are quantitative frameworks that allow policymakers to think through implications for public expenditure for the design of tax systems, the mobilisation of revenues, and critical thinking about public borrowing and the relationship with private capital flows.

iii. He argued that monetary policy frameworks, at least at the moment, remain relatively unchanged in a fundamental sense, even though there is a need to think very carefully about the implications of climate change and the volatility associated with climate change, and how these factors influence policy choices. He also argued that the frameworks are built around a set of core objectives, typically providing an anchor for the price level in a coherent, credible fashion, but with appropriate weight put on concerns over output stabilisation, employment, and exchange rate stability. Recognising the trade-offs between each of these frameworks typically will have supplementary objectives very often around market development and stability.



Professor Christopher Adam
Oxford Martin School

SESSION 2

Session 2: Integrated Nature and Climate Stress Tests for Central Banks

Presenters: Mr. Kelvin Massingham (FSD Africa), and Mr. Charlie Dixon (McKinsey)

Discussant: Dr. Michael Atingi-Ego, Deputy Governor, Bank of Uganda

Moderator: Mr. Ebson Uanguta, Deputy Governor, Bank of Namibia

Session two was presented by Mr. Kelvin Massingham from FSD Africa and Mr. Charlie Dixon from Vivid Economics, McKinsey. Their presentation explored issues of nature, including its importance, and global developments on global warming.

Mr. Kelvin Massingham started off the session by introducing nature and why it is important.

In addition, he spoke about how the nature risks impact the real economy and the financial sector. he also touched on the role of central banks in dealing with nature risks.

Mr. Kelvin Massingham
(FSD Africa)

He further presented that In the longer-term, economic stability risks, and climate change are a much larger systemic risks that we face. More recently, destruction of the biodiversity on which we depend is an existential threat for humanity. For central banks that are concerned with financial stability, this is a systemic risk requiring attention.

He also shared insights from the world economic forum's global risk report over the last 5 years. The report is informed by top executives and experts across the world with respect to the biggest global risks over the next 10 years. The findings indicated that risk perceptions are largely dominated by environmental risks, both climate risks and nature-related risks. In 2023, the top four risks were all environmental risks.

He explained the concept of nature as referring to the natural world in which we live, and the diversity of living organisms that exist within the world, including us as humans. The definition can be broken down into four major components: land, oceans, freshwater, and atmosphere. He also explained the difference between nature and climate risks, which are distinct but related, and both critical.

The distinction between the nature and climate risks includes the following:

i. Nature risks can amplify climate risks and vice versa;
ii. Nature loss is typically a more localised process;
iii. Nature risks are more multifaceted than climate risks; and
iv. Nature risk management can build on progress made with climate risk.

He also introduced the concept of natural capital, which means nature is an asset, like production capital or human capital. Natural capital is the cornerstone of Africa's growth. Africa is rich in natural capital and is dependent on it to sustain its economic and social growth.

Global efforts to respond to the nature crisis have gained significant momentum, beginning to appear on regulatory, policy, and private sector agenda. Developments in the global nature agenda include, among others, the Montreal Agreement to protect the stratospheric ozone layer by phasing out the production and use of ozone-depleting substances as finalised in September 1987.

He concluded by presenting on the global biodiversity framework by the European Central Bank, which is starting to require that financial institutions like banks manage both climate and nature risks together. This entails a whole lot of nature, target and benchmark work happening, as well as industry initiatives where the private sector is starting to make commitments to integrate this into their operations.

Mr. Charlie Dixon took over the second part of the presentation on the complex interplay between nature and economic sectors. In particular, he discussed why this interplay is relevant for financial stability, central banks, financial institutions, and the clients they serve.

The types of interactions between nature and the real economy sectors fit into two different categories:

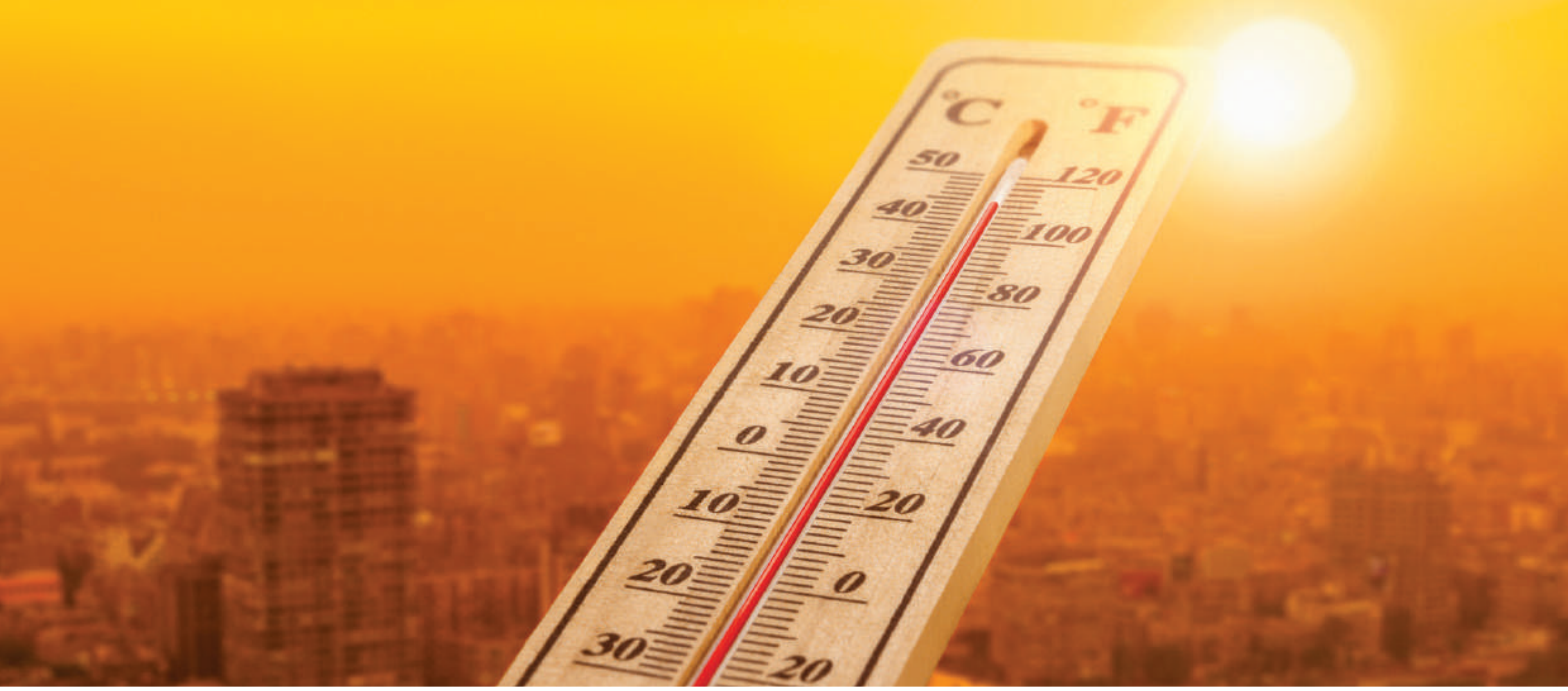
i) Interaction through dependencies - The extent to which a business is dependent on a service tthat nature provides. For instance, agriculture and manufacturing businesses depend on nature.

ii) Interaction through impacts - This is how a business or different sectors within a country impact the health and the quality of local ecosystems or environmental assets . There are different ways in which nature can impact the economy, for example, pollution from the agriculture sector in terms of fertiliser and pesticide use, emission of wastewater, as well as potential contamination of different mining sites, land use, and deforestation, associated primarily with the agriculture, extractors, industry, etc.

There are multiple transition channels of nature and environmental risks into financial risks. Transition risks are slightly different. Here we need an external factor, generally some kind of regulation or consumer action that penalises or rewards businesses based on the impacts that they have.

The most common policy or regulation that has been enacted aims to reduce deforestation in different countries or sectors. If that type of policy or regulation introduces a new cost for these businesses because of the deforestation that they create, that then creates a burden for the business.

Mr. Charlie Dixon
VIVID Economics



Key Discussion Points and Takeaways

The following key points arose from the discussions after the two (2) presentations in this session:

i. There is a need to quickly come up with an agenda for handling climate and nature risks in financial sustainability. There is also a need for technical assistance because the MEFMI region is at the centre of the impact.

ii. The two presentations discussed risks related to climate change and nature. However, there are several opportunities for Africa arising from these issues in terms of industrialisation. For instance, opportunities exist in developing products that are environmentally friendly, such as renewable energy.

iii. There is a need to build capacity for nature and climate issues.

iv. There is a need for enhanced policy coordination within central banks and with Finance Ministries.

v. Common risks can be dealt with more efficiently through regional initiatives.

vi. Data is key and more localised research is imperative. 'You can't manage what you can't measure (Peter Drucker).

vii. Policies should be anchored on the country's development needs. Policy instruments that support the pricing of climate risk in credit, development of new collateral and reserve requirements frameworks, de-risking of credit to climate adaptation and mitigation products, etc are necessary.

viii. Climate-related risks impact both macroeconomic and financial sector management simultaneously., Policy response may require coordination within central banks, albeit without subjugating monetary policy to financial sector policy formulation.

ix. Conducting country climate diagnostics to determine the most appropriate and impactful adaptation and mitigation measures that speak to country development needs is key.

x. Monetary policy frameworks need to be updated to specifically cater for climate risk, and some out-of-the-box thinking is needed to develop additional policy instruments.

xi. Mobilising private and public sector financial resources and utilising them prudently/cost-effectively to address the biggest climate risks to the region in a well-coordinated manner including through National Development Plans should be high on the agenda of both central banks and ministries of finance.

SESSION 3

Session 3: A Perspective on Responsible Investing for Reserves and Other Official Institution Portfolios

Presenter: Ms. Jade Coysh, Responsible Investment Specialist, Momentum

Discussant: Dr. Yamungu Kayandabila, Deputy Governor, Bank of Tanzania

Moderator: Mr. Roberts Grava, CAIM Chief Executive Officer

Ms. Jade Coysh's presentation looked at the importance of responsible investing, and how to implement a responsible investment strategy. It also covered the meaning of investing responsibly, its importance, and how to implement a responsible investment strategy.

Highlights of the presentation

i. Responsible investment should be implemented in the best way possible. According to its definition, there are different perspectives adopted, depending on the objectives to be achieved.

ii. There are different types of investing responsibly, namely:
- Traditional investing, where the strategy will have very little consideration of ESG within the process.
- Responsible investments that generally look at ESG from a risk perspective. This means that parts of the investment universe are excluded to mitigate a lot of ESG risks.
- Sustainable investment which looks from an opportunistic perspective,and actively pursues opportunities within the ESG space.
- Impact investing, where an investor specifically looks for an environmental, and social objective for their portfolios and what investments should meet.

Ms. Jade Coysh

Responsible Investment Specialist,
Momentum Global Investment Management

- Overall, the main aim of all these strategies is to generate financial return, though the ESG risk components are included within the process.

iii. Investing responsibly is becoming increasingly important to investors and the number of policy interventions globally, is increasing. This is in response to social expectations, regulatory and political trends, corporate behaviours, investment drivers, and investor expectations.

iv. Empirical studies show that environmental risks are increasingly considered the most severe long-term risks.

v. Challenges to investing responsibly include greenwashing, divergent regulation, resource availability, data quality and availability, investment horizon, asset class specific, different views, and opinions, unknown output from new regulations, and transition.

vi. There is an urgent need for countries to work together to meet climate change and ESG goals because it is not a single-country problem.

vii. The United Nations Principles for responsible investment is an initiative that essentially promotes the use of ESG integration in investment since 2006. So far thousands of investors have been signing up for the initiative. The initiative is heavy on reporting, and the signatories are held to account. The UN 6 principles essentially say we are going to integrate ESG in our investment process and work together.

Key Discussion Points and Takeaways

The following key points arose from the discussions after the presentation in this session:

i) Some countries are considering incorporating responsible investment and mainstreaming it in investment decisions, for example, in strategic asset allocation frameworks.

ii) Some countries' networks of central banks and supervisory authorities are having initiatives for greening the financial system by trying to collectively integrate related risk into financial stability matters.

iii) There is a need to develop policy frameworks that consider responsible investment and the need to effectively manage foreign reserves and ensure economic stability.

iv) Traditionally, central banks' frameworks for managing reserves have been based on the following pillars: liquidity, safety, and return. There is a need to include these aspects of environmental sustainability in investment frameworks. There is also a need to equip our portfolios to include green investments, as well as engaging in the adaptation of sustainable practice.

v) Climate change is a reality and can affect foreign reserves.

vi) There is a need to build capacity in MEFMI member countries to manage climate-related financial risk.

vii) There is a big spectrum of ways to incorporate responsible investing. It can be incorporated into the investment and policy-making processes, as regulators incrementally move up the spectrum from the simplest types of techniques to a bit more active engagement towards responsible investing. Of the MEFMI countries, Uganda and Kenya are members of the network of central banks and supervisors for greening the financial system, which has been in place for a few years. Tanzania is expected to be joining soon.

viii) It is important to understand the metrics and strategies used by providers of capital in climate change, ESG and responsible investing, how those are put together and what are the expectations.

ix) It is currently difficult to close the disconnect between commercial banks which are moving fast on investing responsibly, whereas mobilising resources for adaptation and mitigation is largely behind. However, countries should continue to invest in increasing awareness and sharing knowledge about climate change and responsible investing.

x) MEFMI Secretariat acknowledged the continued support in developing knowledge products and also in disseminating those knowledge products. This allows the Institute to be an active participant in the development of products, and in sharing and disseminating those products.

WRAP-UP AND VOTE OF THANKS

The wrap-up of proceedings of the day and the vote of thanks were presented by Mr. William Matambo, Deputy Governor of the Reserve Bank of Malawi. Delivering his remarks, Mr. Matambo expressed gratitude to the Crown Agents Investment Management for their consistent financial support since 2017.

In addition, he expressed gratitude to the Oxford Martin School and Financial Deepening Africa (FSD Africa) for the rich contributions to the various topics discussed. He thanked the MEFMI Secretariat for putting together the virtual Forum, which was very successful. Appreciation was extended to all participants for making time to attend the event and for their valuable contributions during discussions.

He mentioned that the Forum was motivated by a need to provide greater understanding and explain the potential impact of climate change on the macroeconomy and, more specifically, on financial stability and monetary policy.

Mr. William Matambo
Deputy Governor of the Reserve Bank of Malawi

He further expressed hope that participants were challenged by the issues raised during discussions, and that the information, knowledge, and experiences shared in this Forum will be of great use to fiscal and monetary policymakers as they mainstream climate change in the respective macroeconomic and financial management frameworks, policy measures and regulations.

4. FORUM PROGRAMME

CLIMATE CHANGE & CENTRAL BANKING

TIME	TOPIC	PRESENTER	MODERATOR
09:00 – 09:15	Welcome and Introductions	**Dr. Louis Kasekende,** MEFMI Executive Director	**Ms. Zinhle Mkhari** MEFMI Public Relations Manager
09:15 – 09:30	Remarks by CAIM	**Robert Grava** CAIM Chief Executive Officer	**Dr. Louis Kasekende,** MEFMI Executive Director
09:30 –10:00	Session 1 **Climate Change and its Impact on Macroeconomic and Financial Management**	**Nicola Ranger & Christopher Adams** Oxford Martin School	**Mr Ebson Uanguta** Deputy Governor, Bank of Namibia
10:00 – 10:30	Session 2 **Integrated Nature and Climate Stress Tests for Central Banks**	**Kelvin Massingham & Charlie Dixon** FSD Africa and Vivid Economics by McKinsey	
10:30 – 10:40	**Discussant**	**Dr Michael Atingi-Ego** Deputy Governor, Bank of Uganda	
10:40 –11:10	**Floor Discussions**	**All**	
11:10 –11:30	**Health break**		
11:30 –12:00	Session 3 **A Perspective on Responsible Investing for Reserves and Other Official Institution Portfolios**	**Jade Coysh** Responsible Investment Specialist, Momentum Global Investment Management	**Robert Grava** CAIM Chief Executive Officer
12:00 – 12:10	**Discussant**	**Dr. Yamungu Kayandabila** Deputy Governor, Bank of Tanzania	
12.10 –12:30	**Floor Discussion**	**All**	
12:30 –12:45	**Vote of Thanks**	**Mr. William Matambo** Deputy Governor, Bank of Malawi	**Patrick Mutimba,** MEFMI Director Financial Sector Management Programme

Rapporteur – Cristina Dimande **Event Director – Public Relations Manager, Ms. Zinhle Mkhari**