Network for Greening the Financial System

Executive summary

First comprehensive report

A call for action
Climate change as a source of financial risk

April 2019

NGFS

Central Banks and Supervisors
Network for Greening the Financial System

Executive summary

In the October 2018 progress report, NGFS members acknowledged that ***"climate-related risks are a source of financial risk. It is therefore within the mandates of central banks and supervisors to ensure the financial system is resilient to these risks."*** The legal mandates of central banks and financial supervisors vary throughout the NGFS membership, but they typically include responsibility for price stability, financial stability and the safety and soundness of financial institutions. Even though the prime responsibility for ensuring the success of the Paris Agreement rests with governments, it is up to central banks and supervisors to shape and deliver on their substantial role in addressing climate-related risks within the remit of their mandates. Understanding how structural changes affect the financial system and the economy is core to fulfilling these responsibilities.

Climate change is one of many sources of structural change affecting the financial system.[1] However, it has distinctive characteristics that mean it needs to be considered and managed differently. These include:

- **Far-reaching impact in breadth and magnitude:** climate change will affect all agents in the economy (households, businesses, governments), across all sectors and geographies. The risks will likely be correlated with and potentially aggravated by tipping points, in a non-linear fashion. This means the impacts could be much larger, and more widespread and diverse than those of other structural changes.
- **Foreseeable nature:** while the exact outcomes, time horizon and future pathway are uncertain, there is a high degree of certainty that some combination of physical and transition risks will materialise in the future.
- **Irreversibility:** the impact of climate change is determined by the concentration of greenhouse gas (GHG) emissions in the atmosphere and there is currently no mature technology to reverse the process. Above a certain threshold, scientists have shown with a high degree of confidence that climate change will have irreversible consequences on our planet, though uncertainty remains about the exact severity and time horizon.
- **Dependency on short-term actions:** the magnitude and nature of the future impacts will be determined by actions taken today, which thus need to follow a credible and forward-looking policy path. This includes actions by governments, central banks and supervisors, financial market participants, firms and households.

While today's macroeconomic models may not be able to accurately predict the economic and financial impact of climate change, climate science leaves little doubt: action to mitigate and adapt to climate change is needed now. The NGFS recognises that there is **a strong risk that climate-related financial risks are not fully reflected in asset valuations**. There is **a need for collective leadership and globally coordinated action** and, therefore, the role of international organisations and platforms is critical.

The NGFS, as a coalition of the willing and a voluntary, consensus-based forum provides **six recommendations** for central banks, supervisors, policymakers and financial institutions to enhance their role in the greening of the financial system and the managing of environment and climate-related risks. The recommendations are not binding and reflect the best practices identified by NGFS members to facilitate the role of the financial sector in achieving the objectives of the Paris Agreement.

Recommendations n°1 to 4 *are aimed at inspiring central banks and supervisors – NGFS members and non-members – to take these best practices on board when it fits within their mandate. Parts of these recommendations may also be applicable to financial institutions.*

Recommendation n°1: Integrating climate-related risks into financial stability monitoring and micro-supervision.

Important steps in this regard include:

a) Assessing climate-related financial risks in the financial system by:

- mapping physical and transition risk transmission channels within the financial system and adopting key risk indicators to monitor these risks;

1 The report focuses on climate-related risks rather than environment-related risks.

- conducting quantitative climate-related risk analysis to size the risks across the financial system, using a consistent and comparable set of data-driven scenarios encompassing a range of different plausible future states of the world;
- considering how the physical and transition impact of climate change can be included in macroeconomic forecasting and financial stability monitoring.

b) Integrating climate-related risks into prudential supervision, including:

- Engaging with financial firms:
  - to ensure that climate-related risks are understood and discussed at board level, considered in risk management and investment decisions and embedded into firms' strategy;
  - to ensure the identification, analysis, and, as applicable, management and reporting of climate-related financial risks.
- Setting supervisory expectations to provide guidance to financial firms as understanding evolves.

Recommendation n°2: Integrating sustainability factors into own-portfolio management.

Acknowledging the different institutional arrangements in each jurisdiction, the NGFS encourages central banks to lead by example in their own operations. Without prejudice to their mandates and status, this includes integrating sustainability factors into the management of some of the portfolios at hand (own funds, pension funds and reserves to the extent possible).

Notwithstanding that the focus of central banks incorporating environmental, social and governance (ESG) aspects into their portfolio management has been on own funds and pension portfolios, some voices have called for an extension of this approach to monetary policy. Going forward, the NGFS considers exploring the interaction between climate change and central banks' mandates (beyond financial stability) and the effects of climate-related risks on the monetary policy frameworks, paying due regard to their respective legal mandates.

Recommendation n°3: Bridging the data gaps.

The NGFS recommends that the appropriate public authorities share data of relevance to Climate Risk Assessment (CRA) and, whenever possible, make them publicly available in a data repository. In that respect, the NGFS sees merit in setting up a joint working group with interested parties to bridge the existing data gaps.

Recommendation n°4: Building awareness and intellectual capacity and encouraging technical assistance and knowledge sharing.

The NGFS encourages central banks, supervisors and financial institutions to build in-house capacity and to collaborate within their institutions, with each other and with wider stakeholders to improve their understanding of how climate-related factors translate into financial risks and opportunities. The NGFS also encourages relevant parties to offer technical assistance to raise awareness and build capacity in emerging and developing economies.

__Recommendations n°5 and 6__ do not fall directly within the remit of central banks and supervisors but point to actions that can be taken by policymakers to facilitate the work of central banks and supervisors. Parts of these recommendations may also be applicable to the private sector.

Recommendation n°5: Achieving robust and internationally consistent climate and environment-related disclosure.

The NGFS emphasises the importance of a robust and internationally consistent climate and environmental disclosure framework. NGFS members collectively pledge their support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The NGFS encourages all companies issuing public debt or equity as well as financial sector institutions to disclose in line with the TCFD recommendations. The NGFS recommends that policymakers and supervisors consider further actions to foster a broader adoption of the TCFD recommendations and the development of an internationally consistent environmental disclosure framework.

Recommendation n°6: Supporting the development of a taxonomy of economic activities.

The NGFS encourages policymakers to bring together the relevant stakeholders and experts to develop a taxonomy that enhances the transparency around which economic activities (i) contribute to the transition to a green and low-carbon economy and (ii) are more exposed to climate and environment-related risks (both physical and transition). Such a taxonomy would:

- facilitate financial institutions' identification, assessment and management of climate and environment-related risks;
- help gain a better understanding of potential risk differentials between different types of assets;
- mobilise capital for green and low-carbon investments consistent with the Paris Agreement.

To some extent, recommendations n°1-4 require the implementation of recommendations n°5-6, but this does not preclude central banks and supervisors from acting now.

Going forward, the NGFS will continue its work as long as its members deem it necessary and useful. The lesson drawn from the first sixteen months of NGFS activity is that climate change presents significant financial risks that are best mitigated through an early and orderly transition.

To ensure such a smooth transition, there is still a significant amount of analytical work to be done in order to equip central banks and supervisors with appropriate tools and methodologies to identify, quantify and mitigate climate risks in the financial system. This calls for a close and specific dialogue with academia and for further technical work to translate the NGFS recommendations or observations into operational policies and processes.

More precisely, the NGFS is planning to develop:
(i) a handbook on climate and environment-related risk management for supervisory authorities and financial institutions;
(ii) voluntary guidelines on scenario-based risk analysis;
(iii) best practices for incorporating sustainability criteria into central banks' portfolio management (particularly with regard to climate-friendly investments).

This report has been coordinated by the NGFS Secretariat/Banque de France.
For more details, go to *https://www.banque-france.fr*
or contact the NGFS Secretariat *sec.ngfs@banque-france.fr*

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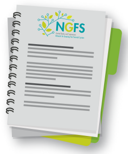
Origin of the NGFS

8 **central banks and supervisors**
established a Network of Central Banks and Supervisors for Greening the Financial System.

Since then, the NGFS has grown to
34 Members **5 Observers**
representing 5 continents.

The NGFS is a coalition of the willing.
It is a voluntary, consensus-based forum whose purpose is to share best practices, contribute to the development of climate –and environment– related risk management in the financial sector and mobilise mainstream finance to support the transition toward a sustainable economy.

The NGFS issues recommendations
which are not binding but are aimed at inspiring all central banks and supervisors and relevant stakeholders to take the necessary measures to foster a greener financial system.



NGFS composition and governance

Chair
Frank Elderson

Secretariat
Morgan Després

Plenary Members and Observers

NGFS members' jurisdictions cover:

31%
of the global population

Source: United Nations, 2017.

Supervision of **2/3**
of the global systemically important banks and insurers

Source: Financial Stability Board, 2018.

45%
of global greenhouse gas emissions

Source: Global Carbon Budget, 2017.

44%
of the global GDP

Source: World Bank, 2017.

Functioning of the NGFS

The NGFS aims to accelerate the work of central banks and supervisors on climate and environmental risk and on scaling up green finance. The NGFS' work could feed into the work of existing international regulatory bodies. It does not aim to replicate the work conducted elsewhere, but to build on and enrich it where necessary. The NGFS' diverse membership allows for close coordination between the various ongoing international initiatives on issues of common interest. To this end, the NGFS has kept close contact with the Sustainable Banking Network (SBN), the Sustainable Insurance Forum (SIF) and the recently created Sustainable Finance Network (SFN), initiated by IOSCO, and the UNEP Financial Initiative.

The NGFS has structured its work into **three workstreams** dedicated to:

- **supervising of climate and environmental risks** (WS1, chaired by Ma Jun from the People's Bank of China);
- **analysing the macrofinancial impact of climate change** (WS2, chaired by Sarah Breeden from the Bank of England);
- **scaling up green finance** (WS3, chaired by Joachim Wuermeling from the Deutsche Bundesbank).[2]

2 Joachim Wuermeling will be replaced by Sabine Mauderer, Member of the Executive Board of the Deutsche Bundesbank, as chair of the WS3 as of April 2019.

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