



29th May 2018

WS2 – Macrofinancial workstream

Mandate and workplan from 2018 to April 2020

Chair of the workstream: Sarah Breedon (Prudential Regulation Authority - Bank of England)

Composition: Banco de España, Bank of England, Banque de France, Bank for International Settlements, BaFin, European Central Bank, De Nederlandsche Bank, Banco de Mexico, Oesterreichische Nationalbank, Bundesbank.

Member of the Secretariat: Guillaume Richet-Bourbousse (Banque de France).

A. Mandate and orientation of the analysis

WS2- Macrofinancial workstream: *WS2 is a multi-year programme whose medium term objective will be to develop an analytical framework for assessing climate-related risks (including the impact of climate change and policies to mitigate it), the aim of which will be to size the impact of climate related risks on the economy both in the central case and in the event of tail scenarios. It will also aim to determine the timeframes in which risks could materialize. For the initial year of the group, WS2 will focus on the transmission channels of climate-related risks to both the macroeconomy and the financial system, taking into consideration second round effects and feedback loops. It will consider both physical and transition risks. This workstream will conduct a literature review, identify examples of analytical initiatives undertaken by NGFS members and other organisations and identify areas where further research is needed. This mapping exercise will feed into the Network Members' research programmes and will help mobilise academia. It will also provide insight on integrating climate risk analysis into macroeconomic and financial stability surveillance, leveraging already existing analysis and will seek to build on the risk analysis undertaken in respect of individual firms in Workstream 1. The group will seek to coordinate with the ESRB Sustainable Finance workstream to minimise overlap.*

The initial phase of the work of the WS2 will run until April 2020. It will be focus on climate-related risks (including both physical and transition risks), and will be structured around the following four key questions:

1. How can climate change and the transition impact upon the macroeconomy?

This will consider the macroeconomic implications of increased physical risk, the policy changes necessary to transition to a low carbon economy, and the associated risks (implications of a late transition, technological breakthroughs, political risks associated with a transition etc.). It will consider how these factors are likely to feed through to future

supply and demand, considering second round effects and feedback loops. This will include theoretical channels and empirical evidence from the literature. It will provide an overview by stock-taking current key environmental-economic methodologies for integrating climate-related risks into macroeconomic models (macro-economic impacts of mitigation pathways and cost of climate change impacts, such as reduced productivity, migration flows etc). And it will draw on examples of how market stakeholders (including those implementing the FSB Task Force on Climate related Financial Disclosures - TCFD) and policymakers assess such risks, whether in a central case or as downside scenarios and over what horizons (with their in-house forecasting models, surveillance or with other quantitative environmental-economic modelling).

2. How can climate change and the transition impact upon financial stability?

Taking into account the results of the previous analysis related to the impacts on the macroeconomy, this section will consider the financial stability implications of increased physical risk, the policy changes necessary to transition to a low carbon economy, and associated risks (implications of a late transition, technological breakthroughs, political risks associated with a transition etc.). Furthermore, the second round effects and the feedback effects of climate change and the transition from the real economy to the financial system will be analyzed. It will look at how these types of risks manifest themselves in the risk profiles of different financial instruments and on the balance sheets of different types of financial institutions. It will seek to understand how climate-related risks (climate change and climate policies) can create broader systemic risk either by aggregating microprudential risks or directly through macroprudential impacts, and to consider whether the mechanisms which create systemic risks from climate change are different to “traditional” financial stability risks (including concentrated and correlated risks, and the possibility of feedback loops). It will consider how authorities assess vulnerability to climate change risks in their financial stability surveillance, for example what tools they have to do this assessment: risk indicators/monitors, stress testing, climate change mitigation scenarios, etc. It will consider what relevant metrics could be for financial stability risk assessment. It will bring together some of the key findings and methodologies from authorities which already have such tools.

3. What are examples of good practices?

Drawing on the first two stock-taking elements above, this third element will synthesise examples of good practices for assessing the potential impact of climate change and the transition on the macroeconomy and on financial stability.

4. Where are the gaps in our collective knowledge? What are the priority questions which need answering?

Building on the analysis above, the WS2 will identify priority areas for deepening the Network’s collective understanding of the impact of climate change and the transition on the macroeconomy and on financial stability. It will be a call to arms for researchers to work on the areas of highest relevance to Network members, and guide further work developing frameworks and toolkits to advance risk assessment and surveillance.

The macrofinancial impacts of broader environmental risks (impact of pollution, resource degradation and detrimental effects on biodiversity for instance) will not be considered in the initial phase of the work of the WS2.

The work of WS2 is expected to feed into the first NGFS progress report to be issued by April 2019.

B. Membership and working practice

The group will consist of representatives from all interested NGFS members. In addition, the workstream will gather input from relevant stakeholders, as appropriate. For instance, the group will seek to engage with International Organisations, private sector participants and academics to ensure a wide range of views are represented.