

Programme

Central banking and climate-related financial risks

11-13 December 2023, Mexico City, Mexico

Level: Introductory

Format: Residential

Venue: CEMLA (Rodrigo Gómez Auditorium)

Length: 12 hours of learning, starting on December 11 and ending on December 13

Pre-requisites: None

Background and Rationale

The multiple manifestations of the climate crisis have brought a previously unknown spectrum of financial risks to the fore. Weather events and chronic shifts in temperature, as well as changes in policies and consumer preferences brought about by the transition to a low-carbon economy, are only a few examples of potential drivers of financial risks that can spill over to the banking sector and the broader economy.

As market actors have increasingly acknowledged the relevance of these risks, central banks have also started to take action to address them in their daily operations, monetary policy and supervisory activities. Transnational fora like the Network for Greening the Financial System (NGFS) have also played a pivotal role in facilitating the exchange of best practices among central banks and the design of crucial tools for the analysis and supervision of these risks, such as climate scenarios.

In this context, Latin American countries have witnessed an increasing number of initiatives on climate risks and sustainable finance. For instance, the Central Bank of Brazil has extensively integrated environmental and social risks within its prudential framework. It has also committed to strengthening supervision over the interaction of these aspects with traditional financial risks.

In the light of these developments, it is of utmost importance for central banks and supervisory authorities to understand as well as to engage in a constructive dialogue on climate-related risks. Sharing and learning from best practices are essential steps which could contribute to the global sustainable finance agenda. Against this backdrop, the training course will examine how climate-related risks have profoundly transformed, and may transform in the not-so-distant future, the role of central banks. It will also provide a unique platform to discuss the lessons that could be learned from the experiences of other central banks and jurisdictions.

The training course will familiarise participants with the definition of climate-related risks and their interlinkages with financial risks as traditionally intended. It will explore the impact of climate change on assets' price and value (and subsequently on banks' balance sheets) as well as on the broader macroeconomic context. At the same time, the course will highlight the challenges of quantifying these risks and potential approaches to do so. It will touch on recently designed and applied tools, such as stress testing and scenario analysis.

Moreover, the course will provide an overview of the responses to climate risks at all levels of central banks' activities, ranging from their market operations to monetary policy and supervisory powers. By drawing from authoritative examples and illustrations from various jurisdictions globally, it will prompt participants to critically reflect on ways to rethink central banks' analytical tools in order to tackle the risks and financial stability implications arising from climate change. Additionally, it will draw attention to the potential of new tools, like transition plans, which enable banks to report the risks they are facing in the net-zero transition.

The programme will be delivered during a 2.5 days course and will involve 12 hours of in-person learning. It will merge frontal classes with concrete examples and illustrations and practical activities. There will be extensive opportunities for exchange among participants about how central banks could most effectively tackle these emerging and ever-evolving challenges.

Learning Objectives

- Explore the main climate-related risk drivers and their transmission channels to the banking sector and the broader economy.
- Critically reflect on the link between financial sector's exposure to the implications of climate change and central banks' mandate.
- Compare relevant cross-border experiences where how central banks have considered, and could consider, climate-related risks as part of their operations.
- Understand how climate-related risks affect macroeconomic factors and how monetary policy may address such risks.
- Introduce participants – in a non-technical way - to the challenges of measuring climate-related risks and to the possible methodologies for assessing them at bank and system level.
- Discuss some of the existing prudential tools and policies for the effective management of climate-related financial risks as well as the key questions emerging when adjusting such tools and policies.
- Analyse how climate-related risks have affected and may affect supervisory powers and practices.

Detailed Schedule

11 December 2023

13:30 – 14:00 *Welcome & registration*

14.00 – 15.00 **Session 1 – Getting started, led by EUI (Federica)**

- Introductory remarks, *Tour de Table*
- Expectations from the course
- Programme outline
- Ice breaking activity
- Quiz on climate-related risks

15.00 – 15.30 *Coffee break*

BLOCK 1 – An introduction to climate-related financial risks

15.30 – 17.00 **Session 2 – A snapshot of Climate-Related Financial Risks, led by EUI (Irene)**

- Defining climate-related financial risks
- Categorisation and illustrations of the financial risks posed by climate change (physical risks, transition risks) and their drivers
- Macro-economic transmission channels to the broader economy
- Micro-economic transmission channels and the effects of climate change on financial risks (credit risk, market risk, operational risk, reputational risk)
- Amplification of climate-related financial risks
- Challenges to the identification and assessment of climate-related financial risks

17.00 – 17.30 Time for Q&A with instructors

12 December 2023

9.00 – 10.15 **Session 3 – Measuring climate-related financial risks, led by EUI (Irene and Katarzyna)**

- Overview of approaches to modelling risks: data models, scenario analysis and stress testing
- Introduction to climate stress tests and scenario analysis
- Direct exposures and risks
- Indirect exposures, network analysis, contagion models
- A simple policy model example

10.15 – 10.45 *Coffee break*

10.45 – 12.30 **Session 4 – Deep-dive into selected tools to approach climate risks, led by EUI (Irene and Katarzyna)**

- Climate stress testing at policy institutions: purpose and best practices

- A primer on scenario design and the choice of a horizon: short-term and long-term scenarios
- Sneak peek into scenario analysis based on the Network for Greening the Financial System (NGFS) work
- Examples based on recent central bank analysis
- Case-study

12.30 – 13.00 Time for Q&A with instructors

13.00 – 14.15 *Lunch*

BLOCK 2 – Rethinking central banks’ tools in the light of climate-related financial risks

14.15 – 15.30 Session 5 – Central banks’ responses: an overview, led by EUI (Agnieszka)

- Embedding climate goals within central banks’ mandates: ‘primary’ v. ‘secondary’ objectives, monetary and non-monetary policy tasks
- An overview of the potential responses to climate-related risks: central banks’ operations, monetary policy, supervisory functions
- Role of international frameworks and fora (BCBS, NGFS, regional initiatives)
- Case study: ECB’s 2021 Action Plan as a comprehensive and ambitious response, MNB Green Programme, Bank of England
- Discussion on CB independence/trade-offs between different objectives

15.30 – 16.00 *Coffee break*

16.00 – 17.00 Session 6 – Group activity: “Greening” banks’ operations and monetary policy, led by EUI

- Participants will be split in groups of 5 and briefed about the tasks.

17.00 – 17.30 Time for Q&A with instructors

13 December 2023

9.00 – 10.30 Session 7 – “Greening” micro-prudential and supervisory tools, led by EUI (Agnieszka and Sergio Sequeira)

- The integration of ESG risks across the three micro-prudential pillars – global (BSCB) and EU (CRR/CRD) approaches
- Pillar 3 – disclosures, prudential vs corporate disclosures (TCFD and other standards)
- Pillar 2 – supervisory practices, ECB Guide as test case
- Pillar 1 – capital requirements, including targeted treatment of green/dirty exposures (green supporting factor/brown penalising factor)
- Discussion on novel (forward-looking) regulatory tools: transition plans as a supervisory tool, supervisory expectations and powers on climate-related risks, climate stress tests (legal perspective)
- BCB practices as test case (20 minutes)
- Q&A (10 minutes)

10.30 - 11.00 *Coffee break*

- 11.00 – 12.30 **Session 8 – A systemic view: financial stability implications of climate risks, led by EUI (Katarzyna and Irene)**
- The systemic implications of climate-related risks and possible policy options: risk buffers, leverage ratios, countercyclical capital buffers
 - The debate on adjustments to capital requirements: “green supporting” factor, “brown” penalizing factors, differentiated reserve requirements from a macroprudential/systemic perspective
 - Open questions and research gaps
 - The case of “green” supporting factors vs “brown penalizing factors”
- 12.30 – 13.10 **Session 9 – A look ahead on sustainable finance markets (supported by a few facts and figures), led by EUI (Federica)**
- Sustainable finance as an opportunity
 - Overview and comparison of sustainable finance instruments (green, social and sustainability-linked bonds and loans, securitization)
 - Recent trends and challenges
 - Deep dive into one example of sustainable finance instrument
- 13.10 – 13.40 Time for Q&A with instructors
- 13.40 – 13.45 **Concluding remarks**

Suggested Readings

- Basel Committee on Banking supervision. Climate-related risk drivers and their transmission channels (2021) <https://www.bis.org/bcbs/publ/d517.pdf>
- Basel Committee on Banking supervision. Principles for the effective management and supervision of climate-related financial risks (2022) <https://www.bis.org/bcbs/publ/d532.pdf>
- Battiston S and others. A Climate Stress-Test of the Financial System. (2017) 7 Nature Climate Change 283 <https://www.nature.com/articles/nclimate3255>
- ECB, ESRB. The macroprudential challenge of climate change (2022) https://www.esrb.europa.eu/pub/pdf/reports/esrb.ecb.climate_report202207~622b791878.en.pdf
- Alexander K. and Lastra, RM. International Banking Regulation and Climate Change (2022). <https://ssrn.com/abstract=4290785>
- Monasterolo I, Climate change and the financial system (2020) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3479380#
- Monnin P, Robins N. Supporting the just transition: a roadmap for central banks and financial supervisors (2022) INSPIRE Sustainable Central Banking toolbox – Policy Briefing Paper 10

<https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2022/12/INSPIRE-Sustainable-Central-Banking-Toolbox-Policy-Briefing-Paper-10.pdf>

- NGFS, Climate change and monetary policy: initial takeaways. 2020.
https://www.ngfs.net/sites/default/files/medias/documents/climate_change_and_monetary_policy.pdf
- NGFS. Adapting Central Bank Operations to a Hotter World - Reviewing Some Options NGFS Technical Document (2021) NGFS Technical document <https://www.ngfs.net/en/adapting-central-bank-operations-hotter-world-reviewing-some-options>
- Smolenska A., Central Bank Supervisory Role: Micro-Prudential Supervision and Regulation of ESG Risks, Forthcoming in: Kern Alexander and Seraina Grünwald (eds.). Central Banking and Sustainability (Cambridge University Press) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4446375

Suggested Videos

1. Kern Alexander – *banking regulation and environmental sustainability*. 5m22s.

Description: In this #FBFpill, Kern Alexander, Professor of International Financial Law and Banking Regulation at Zurich University and EUI, discusses how banks, and banking regulation in particular, can contribute to environmental sustainability objectives.

Link: https://www.youtube.com/watch?v=LhGt3kw_RMs

2. Linda Zeilina – *The potential of ESG Investing*. 6m07s.

Description: In this #FBFpill, Linda Zeilina, founder & CEO of the International Sustainable Finance Centre, discusses ESG – environmental, social and governance – investing and why it has the potential to transform economies and finance.

Link: <https://www.youtube.com/watch?v=dtEzaVxar1k>

3. Julia Symon, Gonzalo Gasós, and Maria del Carmen Sandoval (moderator) – *Should bank capital requirements be adjusted for the climate risk profile of assets?* Discussion. 1h06m (OPTIONAL)

Description: The event of the #FBFDiscuss series features Julia Symon (Head of Research and Advocacy, Finance Watch) as a proponent and Gonzalo Gasós (Senior Director of Prudential Policy and Supervision at the European Banking Federation) as an opponent, discussing if capital requirements should be used as a policy tool to encourage green and sustainable investments, or if they should they follow a risk-based approach.

Link: <https://www.youtube.com/watch?v=kZ8HaURVfw8>