



CENTRAL BANKS' AND SUPERVISORY AUTHORITIES' RESPONSES TO CLIMATE-RELATED RISKS

On Oct. 13, 2022, Toronto Centre convened a meeting of central bank governors and heads of supervision authorities from developing and developed countries. The purpose was to explore how international standard setters and national authorities are responding to the impact of climate-related risks on the financial system.

This was the third roundtable discussion hosted by Toronto Centre on this important subject. At the first two roundtables, in October 2021 and April 2022, the discussion focused on how supervisory authorities and central banks have responded to climate-related risks. They have done so by:

- developing their understanding of the changing nature of climate-related risks and the impact of climate change on their countries and on their financial sectors
- assessing how climate-related risks relate to their mandates and objectives, including for financial stability and financial inclusion
- discussing climate-related risks with financial institutions and other stakeholders
- promoting the “public good” collection and sharing of data, analysis, scenarios, good practice, principles, and guidance by international organizations.¹

Babak Abbaszadeh, CEO of Toronto Centre, welcomed the guests, outlined the objectives of the discussion, and thanked funders for their support of the Centre’s mission. Babak highlighted the Toronto Centre Climate Risk Toolkit for Financial Supervisors, published in September last year.²

Babak also observed that he was beginning to hear from supervisory authorities that supervisors are not there just to monitor risks; they are also an important part of the stakeholder community. As such, they are – and should be – part of the solution. Is it time for supervisors and central bankers, who are typically seen as technical bureaucrats, to start being advocates of regulatory change, policy change, and legislative change?

The discussion was moderated by **Alan AtKisson** (Assistant Director-General and Director, Department of Partnership and Innovation, Swedish International Development Cooperation Agency). Leading the discussion were **Jameel Ahmad** (Governor, State Bank of Pakistan) and **Sabine Mauderer** (Member of the Executive Board of the Deutsche Bundesbank and Co-chair of the Network of Central Banks and Supervisors for Greening the Financial System, or NGFS).

The discussion focused on data, climate scenarios, and green transformation.

RECORD OF PROCEEDINGS³

Recent climate-related events

Some recent climate-related events, including in Pakistan and Bangladesh, have starkly demonstrated the vulnerability of some countries that are very low carbon emitters. This highlights the global nature of the climate change problem, the need for the involvement of

¹ Records of the proceedings of the previous roundtables can be found at https://www.torontocentre.org//videos/Roundtable_discussion_proceedings_October_2021.pdf and https://www.torontocentre.org//videos/Roundtable_Discussion_Proceedings_April_2022.pdf

² The Toronto Centre Toolkit can be found at <https://res.torontocentre.org/guidedocs/Climate%20Risk%20Toolkit.pdf>

³ The discussion was conducted under the Chatham House rule – the themes reported here reflect the sense of the discussion but do not attribute observations to individual speakers.



global institutions and standard setters, and the need for close cooperation among authorities, both nationally and internationally.

Data

Participants agreed there is a lack of sufficient data on climate-related risks relevant to the supervision of financial and monetary systems. We need more climate data that can be used by central banks and other authorities to inform regulatory decision-making. There would also be advantages to aligning and harmonizing such data across countries. Compiling, processing, and analyzing data on a more standardized basis should help supervisory authorities and central banks assess the impact of climate change, and learn lessons from the experiences of other countries. But a global effort is required to overcome the lack of data and the lack of standardization.

International initiatives are making some progress with this. Participants mentioned assistance from the World Bank and the United Nations on data collection and processing, and from the International Finance Corporation on the assessment and accounting treatment of credit losses. Meanwhile, the International Sustainability Standards Board has the capacity and the opportunity to establish common accounting standards, which in turn can facilitate more comparable data and public and regulatory reporting.

Several challenges were discussed. First, in the absence of internationally agreed standards (and notwithstanding the work of the Task Force on Climate-Related Disclosures), corporate and financial institutions are building their own business models and developing their own data sources and reporting.

Second, supervisory authorities need to decide what data they want to collect from financial institutions. They also need to decide how that data will be integrated into supervisory work, including the assessment of financial institutions' financial positions and risk management practices, and stress and scenario testing. Financial institutions will need to be instructed about data reporting processes and collection. Supervisory and other authorities need to develop their capacity to analyze these data, both domestically and internationally.

Third, competing systems are being developed for public reporting and for reporting to supervisory and other authorities. This can be seen across Europe, the U.S., Asia, and at the national level. A lot is going on, but it needs to be better aligned so investors can make decisions based on comparable and consistent public reporting.

Equally, however, participants agreed we should not be too pessimistic about this data issue. More and more data are being produced and becoming available. Moreover, data are improving over time, which should be recognized as a step forward. It is important that supervisory authorities and central banks identify the gaps and find ways to fill them.

There is also an increasing degree of convergence across international standards for climate-related reporting and accounting. However, there will always be some differences across international standards, and across the national implementations of these standards. It may be better – and certainly more realistic – to create and build upon small successes, rather than try to introduce a single harmonized global system. That would overestimate the global capability to cooperate.

Stress testing

Supervisory authorities and central banks (and indeed financial institutions) already conduct regular stress and scenario tests on individual financial institutions and on parts of the



financial sector. The new challenge is how to integrate climate-related risks into the stress testing process.

Participants discussed various aspects of this issue. The first one related to the data problem – the lack of credible data on climate-related risks and on the potential impact of these risks on financial institutions and on the financial system.

Second, data collection alone will not be sufficient. It is also necessary to process and analyze data within climate-related stresses and scenarios for insights into the impact of climate-related risks for financial institutions.

Third, there is also a need for more forward-looking data. For example, parts of the insurance sector and its supervisors have good historic data on physical risks and their impact on insurance claims. There has also been some modelling of the impact of climate change on the magnitude of physical risks. However, in practice, the severity of physical risk events has been underestimated – the current situation differs from past experience. There has therefore been a greater emphasis on scenario analysis that does not just set out pathways for climate change, but also the possible physical risk that might arise from each pathway.

Fourth, in this context participants mentioned the climate scenarios developed and refined by the NGFS. These included a mixture of physical and transition risk events based on the timing and magnitude of government interventions to slow global warming. These scenarios have already been applied by some supervisory authorities and central banks and found to be useful in highlighting potential impacts on the financial system. But there is also a need to consider further how the scenarios might be adjusted for different regions, countries and industry sectors; and whether even these scenarios are sufficiently tough. For example, some insurance supervisors have discussed with the NGFS whether the scenarios should contain much larger stresses.

Fifth, one purpose of traditional stress and scenario testing is to consider whether individual financial institutions (or financial systems more generally) have taken on too much of some types of risk, and hold too little capital against these risks. What is the equivalent of this for climate-related stress and scenario tests?

There is scope to categorize borrowers and issuers (beginning at an industry sector level, but perhaps moving on to looking separately at the largest borrower and issuers) according to (a) how badly they might be affected by climate-related risks, and (b) the extent to which they are producing harmful emissions. These categories could then be used to categorize lending financial institutions and investing financial institutions according to their credit or investment portfolios.

Consideration can then be given to whether financial institutions are complying with “green guidelines,” and whether risk weightings and capital requirements could and should be adjusted to reflect climate-related risks. It was noted, however, that although the above categories (a) and (b) may be closely correlated in terms of transition risks, this may not be the case for physical risks. For example, some industry sectors in some countries may be vulnerable to physical risks, but they may not themselves generate harmful emissions.

Finally, climate-related risks can be considered in terms of their impacts on traditional risks such as credit, insurance, market, conduct, and operational risks. However, many financial institutions – even some larger ones in developed economies – are still not integrating



climate-related risks into their risk management. So we are far from where we need to be, in terms of basic risk management let alone stress and scenario testing.

Green transformation financing

Participants also discussed the role of supervisory authorities and central banks in facilitating, encouraging, incentivizing, and supervising a swift and ambitious green transformation.

One starting point is to consider the mandates of supervisory authorities and central banks, some of which are much broader than others. Some authorities have interpreted their mandates – especially where these cover financial stability, the safety and soundness of financial institutions, and efficient market functioning – to allow a growing focus on the transformation of economies to carbon neutrality or other net zero targets. The Bank of England is a leading example of this, becoming increasingly involved in many aspects of this transformation and the role of the financial sector. This has included growing pressure on companies, including financial institutions, to target and measure, with precise milestones, their own progress towards consistency with a net zero outcome. The European Union may be heading towards something similar.

A different mandate challenge arises in countries that are severely affected by climate change – such as economies with large agricultural sectors – but do not contribute significantly to global emissions. Economic, financial, and price stability are major issues for these countries, but it is less clear what steps they can take to reduce or mitigate the climate-related risks they face.

A second starting point is to consider the position of investors and lenders. Better disclosure will enable investors and lenders to take a closer look at the climate credentials of corporates and projects, and the risks of investing in them or lending to them. Some countries are competing to establish their capital markets as green hubs. However, there are problems here around the shortage of well-formulated projects to reduce emissions or improve adaptation. And even where projects do exist, many are risky and there is not always agreement on how to spread the risks across international financing institutions, national governments, corporates, investors and lenders. This is a major challenge, including for supervisors in bank-based financial systems. One key issue is whether it is appropriate to finance major transformation projects through bank lending rather than through equity. Deepening capital markets and encouraging inward investment are difficult to achieve, as past experience has shown.

Another aspect of green transformation is the distribution of guidelines and principles on green issuance, investment, and lending. Again, this takes us back to questions about data availability and quality, the role of global standard setters, and the role of markets and supervisory authorities in monitoring whether financial institutions are meeting these guidelines and principles.

Finally, participants discussed the role of labelling, and whether it could contribute to more sustainable investments. Could the label even become mandatory? The general mood on this was negative. One issue here was the role of rating agencies, who set their own standards and have an inherent conflict of interest in being paid by issuers for the rating of green bonds. Common and well supervised standards would help here. Another issue was whether labelling is the problem, as opposed to identifying and managing innovative low-carbon projects and investments. Labelling does not create such projects.



Conclusion

Participants noted the progress being made on data, climate scenarios, and green transformation. Even small steps and small successes could be built upon and provide the foundation for more substantial progress. However, more work is required in all these areas, not least in finding more global solutions to the global problem of climate change and climate-related risks.

Participants also noted the growing roles and influence of supervisory authorities and central banks in climate discussions. In part, this reflects the importance of the financial sector. There is an old saying that “money talks.” The increasing focus and prioritization on climate-related issues by the authorities that manage and supervise financial systems is itself saying a lot and is having an impact.

In addition, there is scope for greater cooperation between supervisory authorities and central banks and governments, and for this to result in governments taking climate-related legislative initiatives. This cooperation can be encouraged within the existing mandates of supervisory authorities and central banks.