

# Supervisory and Regulatory Approaches to Climate-related Risks

## Overview of the responses to the consultation

### 1. Introduction

On 29 April 2022, the FSB published an interim report on supervisory and regulatory approaches to climate-related risks<sup>1</sup> to assist supervisory and regulatory authorities in developing their approaches to monitor, manage and mitigate risks arising from climate change and to promote consistent approaches across sectors and jurisdictions. The FSB received 27 written responses from a variety of stakeholders.<sup>2</sup>

In addition, the FSB organised a virtual public workshop on 19 May to gather further feedback on the consultation report. Over 300 people attended the workshop.

This document summarises the comments raised in the public consultation and sets out the main changes made to the final report in order to address them.

### 2. Summary of feedback received

#### General comments

##### *Comments received*

Respondents welcomed the report and its objective to foster a more consistent approach to addressing climate-related risks across sectors and jurisdictions, as well as the report's recommendations. In some cases, however, respondents had comments and suggestions on the overall role of the report.

Some respondents asked for further clarity on how the report will be used in regard to further policymaking and how the FSB plans to engage with other standard-setting bodies (SSBs). A few respondents queried how the report fits in the context of several regional and national data requirements already in place or awaiting implementation. Another respondent suggested further

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<sup>1</sup> See [Supervisory and Regulatory Approaches to Climate-related Risks: Interim Report - Financial Stability Board \(fsb.org\)](https://www.fsb.org/publications/supervisory-and-regulatory-approaches-to-climate-related-risks-interim-report).

<sup>2</sup> Non-confidential responses are available on the FSB's [website](https://www.fsb.org/consultations).

clarifying the differences in business model between asset managers and banks or insurance companies and how regulatory and supervisory approaches may therefore differ.

Two respondents were of the view that the FSB should not take immediate action on supervisory and regulatory approaches to climate-related risks, either data collection and reporting or on systemic risk.

By contrast, some respondents suggested that the report go further in its recommendations. One respondent noted that measuring the financial risks from climate change is a stochastic problem, implying extreme future uncertainty, which requires a stochastic solution that would involve a much broader collection of data. A few non-profit organisations (NGOs) were of the view that the report should take account of double materiality, by including not only climate-related risks to the financial system but also the impact of the financial system on climate change. also suggested that the FSB take a precautionary approach to address climate-related risks, by prioritising reducing risk even where there is not full certainty about its magnitude or probability.

### *Changes in response to comments*

Based on comments received, the final report:

- Further clarifies in its upfront messaging the context in which it is issued; i.e. that it is a point-in-time snapshot of jurisdictions' approaches and of the early stage of development of approaches. It also reiterates the urgency of action to address climate-related risks and that, while reliable data is the basis for effective risk assessment and management, early action is needed even though there are shortcomings in current data.
- Provides relevant updates, to the extent possible, on any advancements the SSBs and jurisdictions have made on supervisory and regulatory approaches to climate-related risks.
- Clarifies the areas where further work is needed, including on macroprudential tools and policies, and how the report will be used, by linking the report to the broader work under the FSB Roadmap (including the next steps under the Roadmap to follow up on the recommendations through future consideration of a peer review and of an update to the recommendations, and also the further work mentioned in the Roadmap (action 3 of block 4) on macroprudential tools), and by asking the SSBs to consider in their sectoral work the recommendations in the report.
- Further clarifies how regulatory and supervisory approaches may differ for asset managers based on their business model.

Several respondents suggested actions that, although very important, are outside the remit of the report. For instance, one suggestion was to look at the adverse impacts of the financial system on climate change. However, the FSB and the FSB Climate Roadmap are focused on the financial risks from climate change, reflecting the FSB's financial stability mandate. This would include consideration of identified negative externalities or feedback loops (if any) from financial sector decisions that affect the climate and then feed back into financial risks (which may be identified for instance through scenario analyses or examination of the financial risk

implications of transition plans). Hence, this aspect is brought out in the report, but otherwise no changes are introduced to the report.

## Supervisory and regulatory reporting and collection of climate-related data from financial institutions

### *Comments received*

#### *Climate-related data for supervisors' and regulators' identification of exposures and understanding of the impacts of climate-related risks*

Some respondents suggested that the report place more emphasis on forward-looking data, such as quantifying risk of stranded assets, and that regulators should develop forward-looking metrics and common standards for such metrics. Another respondent proposed using a common set of standards for measuring Scope 3 emissions such as the Partnership for Carbon Accounting Financials (PCAF) framework.

Some respondents suggested enhancing the list of examples of information collected by authorities (Table 1), by adding examples of qualitative and quantitative information, clarifying how certain elements were classified or prioritised. One respondent noted that it was critical to have high-quality raw data on sectors or economic activities impacted by transition and physical risks, while another respondent noted that the report should recognise financial institutions' reliance on data produced by corporates, which may not be provided by corporate disclosures alone. The same respondent asked for clarification of the purpose of the varied set of information set out in section 2 of the report, including whether they are intended as guidance for regulators and supervisors or a menu of options to consider. They also suggested that the report could indicate the level of maturity of different types of data and the associated challenges that financial institutions face in gathering them.

One respondent noted that because future uncertainty in relation to the impact of climate change is so extreme, the most important climate-related data that authorities need to understand relates to the future uncertainty of every risk factor relevant to each asset, based on that asset's physical location.

#### *Reliability of reported climate-related data*

On ways to increase the reliability of climate-related data reported by financial institutions, some respondents welcomed the report's recommendation on assurance and verification, the use of financial institutions' internal audit function to review the data and potential need for third-party verification mechanisms.

A number of comments were made on the use of third-party assurance. Some respondents raised caution about the third-party assurance on climate-related regulatory and supervisory data and that pros and cons should be examined thoroughly. Concerns included the potential burden on financial institutions associated with the costs and skills needed for third-party verification, as well as implementation challenges. Several respondents highlighted the need to develop guidance on the qualification of verification bodies and verification methods based on

international frameworks and ensure that third-party verifiers are well regulated to avoid conflicts of interest and promote transparency of methodologies and data used. One respondent called for alignment with other SSBs and the TCFD on the use of third-party verification. Other respondents suggested that third-party verification should be introduced in corporate disclosures first, given that financial institutions are reliant on corporate data, data quality and external controls. One respondent highlighted that the FSB-developed Legal Entity Identifier (LEI) can serve to link financial and non-financial information and contribute to the work of third-party verifiers.

On the broader topic of data reliability, one respondent raised the need to clarify the potential conflicts between ensuring reliability, granularity and comparability of data over an accelerated timeframe. Another respondent noted that strong governance, processes and controls by financial institutions alone would not necessarily increase reliability, given that financial institutions are heavily dependent on data provided by non-financial corporates. One respondent noted that data reliability was not a new topic and that authorities could rely on existing processes to ensure reliability. Another respondent suggested that two elements were essential to increase data reliability, namely the pairing of asset-level physical location information with future-uncertainty distributions and the development of common standards and an agreed taxonomy at global level to allow full-scale modelling of data.

#### *Elements of a common high-level definition of climate-related risks*

Many respondents agreed with the elements identified in the report of a common high-level definition of climate-related risks. Some respondents proposed modifications or additions to the definitions of transition and physical risks. One suggestion was to clarify that climate-related risks are a driver rather than a standalone risk category because they would materialise only through their potential significant negative impact on traditional risk categories (e.g. credit risk, market risk). Other suggestions included taking account of disruption risk and distinguishing weather-related events from climate-related events. Others proposed to further align the definitions with those of other bodies such as the European Banking Authority (EBA) or of the SSBs such as the Basel Committee on Banking Supervision (BCBS).

Some respondents highlighted that litigation risk could result from manifestations of physical and transition risks and was managed as part of operational risk in existing risk management frameworks. As such, they cautioned against suggesting that litigation risk should be defined, assessed, or managed on a standalone basis. One respondent queried what regulatory approach would be taken to liability risk if defined separately and who would provide the definition.

Other comments proposed to include other definitions relevant to climate-related risks, such as of time horizon, double materiality, proportionality, carbon-intensive industries or greenwashing.

#### *Comments on proposed recommendations*

Overall, respondents are supportive of the recommendations set out in the report on supervisory and regulatory reporting and collection of climate-related data from financial institutions. In particular, a number of respondents welcomed the phased approach set out in recommendation 4, starting with the reporting of qualitative information supplemented with increasingly available

quantitative information, and moving towards higher reporting standards and/or mandatory reporting requirements. Other respondents supported the recommendation to use proxies and estimates in the absence of available data and suggested the need to provide high-level guidance at a global level on the use of proxies and estimates to increase consistency and comparability of data.

Some comments related to clarifying the recommendations. A number of respondents highlighted that clear objectives and scope should be set for data needed by regulators and supervisors to avoid overburdening financial institutions and ultimately authorities. For instance, one suggestion was that supervisory data collection should focus on the usability and availability of data for financial institutions internally, including for capital allocation, strategic decision-making and underwriting purposes. Some of these respondents mentioned proportionality and materiality as being important principles that should be more strongly emphasised in the report. Another respondent asked for continued assessment of potential systemic interlinkages to better understand the way in which climate change represents a systemic risk before recommending more data collection.

Some suggestions focused on the interlinkages between supervisory and regulatory reporting and disclosure frameworks, and proposed further sharpening the distinction between the two, acknowledging that the focus is currently on developing disclosure frameworks, or carrying out public-private sector discussions at global level to further analyse the relationship between supervisory reporting, Pillar 3 requirements and corporate disclosure requirements that affect financial institutions. A few respondents suggested building regulatory reporting requirements on existing disclosure frameworks such as the TCFD framework.

Some respondents asked for more recognition of the climate information value chain, noting that financial institutions rely on information produced by non-financial corporates that is not always disclosed, for example on counterparties' GHG emissions and forward-looking data. One of the respondents suggested calling for more progress to be made in addressing data gaps from the real economy, raising awareness of the G20 on this issue and proposing that authorities work with financial institutions to develop integrated frameworks that address issues through the climate data chain.

There were different views on the level of granularity of the recommendations. Several respondents asked for more information on how to address the recommendations in the report, notably on how to achieve more convergence of supervisory and regulatory approaches and how differences are expected to be reconciled. One respondent suggested issuing standards on commonly agreed forward-looking quantitative indicators and a few others asked for some guidance on materiality of information. One respondent suggested that supervisors and regulators issue binding standards for financial institutions to ascertain data on their GHG emissions. Another respondent suggested that that authorities mandate firm-level disclosure of all assets under those firms' purview, including their supply chain, as well as the physical location of each of those assets. By contrast, some other respondents advocated for a principle-based approach providing sufficient flexibility for financial institutions in designing their risk management and data collection approaches. One respondent proposed that the FSB facilitate technical dialogue between authorities and industry on technical aspects of climate-related data management, in order to identify a suite of common approaches that could be recognised at jurisdictional levels. Another suggestion was to encourage authorities to publish good practice

documents as more financial institutions report climate-related information, which could benefit smaller undertakings.

A few respondents made suggestions on how to increase consistency of approaches across jurisdictions and sectors, such as establishing public data repositories in a coordinated way, encouraging the use of consistent data templates and adding the LEI to data elements of reporting templates. On the latter point, the importance of the LEI was noted for identifying, for instance, the most carbon-intensive companies, in a unique and consistent way.

### *Changes in response to comments*

Based on comments received, the final report:

- Streamlines section 2.1.4 of the interim report on relevant data for supervision and regulation (including moving Table 1 in Annex and making relevant adjustments to its components) and 2.4.1 on standardised regulatory reporting requirements; removes any overlap/duplication.
- Highlights that the use of third-party verification to increase reliability of information reported to regulators and supervisors would need to be accompanied with appropriate standards and regulation; highlights the importance of assurance of corporate climate-related disclosures and point to international initiatives on assurance of climate-related disclosures such as the work of IOSCO, the International Auditing and Assurance Standards Board (IAASB) and the International Ethics Standards Board for Accountants (IESBA).
- Clarifies that, to the extent litigation risk is captured in operational risk, it should be explicitly identified and addressed.
- Strengthens the need to set clear objectives and scope for regulatory and supervisory data collection in line with authorities' respective mandates, provide examples of such objectives, and strengthen the references to the need for proportionality.
- Further clarifies how climate-related regulatory reporting intersects with corporate disclosure and other disclosure requirements.
- Acknowledges more explicitly financial institutions' reliance on the climate data value chain and articulate how ongoing international initiatives under the FSB Roadmap in particular, on corporate disclosures, will help in bringing along the real economy.
- References the FSB work on the LEI and its potential for increasing the reliability of climate-related data used and reported by financial institutions.
- References ongoing initiatives under the FSB Climate Roadmap that are relevant to the matters discussed in the report (e.g. work on forward-looking data, disclosures).

## Incorporating systemic risks into supervisory and regulatory approaches

### *Comments received*

#### *System-wide aspects that should be considered*

Many respondents agreed with the need to promote further consistency across jurisdictions and sectors regarding the identification of system-wide aspects of climate change and highlighted the need for international coordination.

An industry association covering banks suggested that the effects of climate-related risks occur more at micro level than at macro level and that there is no need for industry-wide measures, but rather a bank-individual analysis, e.g., through stress tests and scenario analyses.

Some respondents suggested that a system-wide approach should go beyond the financial system as risks related to climate change start outside the financial system. They suggested that the feedback loop is not properly framed in the document as it gives the impression that the loop starts with the financial intermediaries cutting funding to carbon-emitting companies, while the report should highlight that these decisions are made in response to the strategies of customers and counterparties, where service relationships exist. As such, they suggested that the feedback loop affecting the provision of transition financing, insurance, or capital in support of decarbonization starts with decisions made in the real economy.

A few NGOs suggested that the impact of the financial system on climate change should also be considered, as financial institutions are “endogenous” actors whose activities also have an impact on climate change and that the feedback loops between the financial sector and the real economy should look into a number of factors such as inequality of income, food prices and respect of human rights.

A respondent also noted that the report does not paint the full picture of impacts to disadvantaged communities, what these impacts might mean for the financial system, and how they raise issues of responsibility for risks and impacts. Finally, an insurance association suggested that there is no evidence to justify the conclusion that insurers are particularly vulnerable to system-wide impacts from climate change and that it should be recognised that in many or even most cases the impact on insurers’ solvency may be very limited due to their ability to take mitigating actions such as changing investments, repricing or redesign of products or no longer accepting the risks.

#### *Current supervisory and regulatory tools and policies*

Many respondents expressed the view that the report does not sufficiently explore the extent to which risks (e.g., credit, market, operational) are already considered or mitigated in the prudential framework such as in internal models or in external ratings, nor does it explore the extent to which these risks are already taken into account in accounting data. At the same time, some respondents highlighted that no climate-related amendment to the current prudential framework is warranted and any discussion regarding such amendments should start with a targeted gap analysis on whether there are elements introduced by climate-related risks that are not yet effectively captured. According to a respondent, calls for higher capital requirements

would be a hindrance to the transformation of the economy, because capital is needed to achieve it.

Some respondents noted that measurement tools with respect to climate-related financial risks are still in the early stages of development and may produce results that are incomplete or not properly validated/back-tested against empirical evidence and hence regulators should be cautious in assessing whether and to what extent current prudential frameworks account for climate-related risks.

### *Comments on proposed recommendations*

Many respondents support the call for consistency and alignment with international standards when it comes to stress testing and scenario analysis. However, one respondent noted that the local jurisdictional context should also be considered and that such initiatives should continue to be led by jurisdictional regulators to ensure consistency and alignment for sectors.

Many comments mentioned that the report should clearly differentiate between the terms “scenario analysis” and “stress testing”, which typically assesses the potential impacts of transitory shocks to near-term economic and financial conditions. Inappropriately conflating these two risk management processes would both undermine the integrity and reliability of existing stress testing exercises and present a poor view of climate-related financial risks by attempting to shoehorn them into an existing stress testing framework. Several respondents also raised concerns that drawing conclusions from scenario analysis exercises that would lead to regulatory or supervisory actions on capital would be premature.

Some respondents cautioned supervisors about the interpretation of the results and the comparability of the exercises among entities or regions, given that methodologies have not converged yet, and suggested that they should refrain from drawing firm conclusions from the exercises, particularly over the longer time horizons. They also stated that it would be very premature to include these risks in the macroprudential framework, as it is not clear how microprudential supervisors include them in their supervisory process.

On the other hand, a second group of respondents suggested that authorities should expand their existing capital adequacy regimes to include climate stress testing with eventual adjustments to both liquidity and capital requirements.

Some respondents suggested that the design of prudential tools for addressing potential systemic vulnerabilities related to climate risk would benefit from a more structured assessment, including a stronger definition of how asset “fire sales” or exposure-related shocks could result from climate risks.

Apart from stress testing and scenario analyses, respondents raised other issues for further consideration, such as the oversight and engagement of financial institutions’ transition plans, which are evolving rapidly. They expressed the view that prudential authorities in particular should clarify whether and how financial institutions’ Net Zero activities are relevant to their micro- or macroprudential mandates.

Finally, an insurers association cautioned against prescription in the own risk and solvency assessment (ORSA) processes and claimed that insurers should decide for themselves how to perform this assessment based on the nature of the risks in their business.

### *Changes in response to comments*

Based on comments received, the final report:

- Distinguishes between scenario analysis and stress testing, including their respective purpose, and clarifies that the most common tool being used to increase authorities' and firms' understanding of climate-related risks is scenario analysis.
- Refines the description of feedback loops to recognise that risks may start in the real economy.
- Clarifies areas where relevant FSB work is being conducted (e.g. work to more systematically assess and better understand climate-related financial vulnerabilities and potential financial stability impacts).

The interim report acknowledges the very early stage of regulatory and supervisory approaches and notes that scenario analysis is being used as an exploratory tool to increase authorities' and financial institutions' understanding of climate-related risks, rather than to inform capital requirements. The final report further clarifies this point. In addition, some comments related to the need to further explore the extent to which risks are already considered or mitigated in the prudential framework. SSBs such as the BCBS and IAIS are conducting or have completed their gap analysis against their prudential frameworks. The final report includes up-to-date information on this work.

## Early considerations on other macroprudential tools and policies

### *Comments received*

Industry associations covering banks and insurers are consistent in their responses that consideration of macroprudential tools, such as additional capital requirements and use of buffers, is early / premature at this stage as institutions continue to develop measurement and quantification tools to assess climate-related risks and impacts.

Respondents suggested starting with a microprudential approach. One respondent suggested stress testing framework as the best means to assess capital adequacy. One respondent suggested Pillar 2 approach on internal capital and liquidity adequacy for the banking sector and any changes to capital requirements should stem from Pillar 2 instead of Pillar 1.

Another set of respondents suggested the FSB to take a more holistic and thorough approach to cost and benefits of potential tools. This included adequately addressing whether current supervisory or regulatory tools enable climate risks to be appropriately accounted for, and whether or not specific macroprudential tools are warranted. They were of the strong view that Pillar 1 capital requirements are not warranted and a gap analysis be conducted against the prudential framework to start.

Other respondents pointed to the risk of decline in financial institutions' ability to lend to the real economy and impairing financial stability with the introduction of additional capital requirements and brown penalizing factor, risk of double counting when introducing a new buffer capital requirement, consideration of unintended consequences.

One respondent suggested the issue is not of capital adequacy but rather the strategic orientation of the institution and its guidance, such as on credit risk processes. One respondent indicated there is no need for regulatory intervention. One respondent indicated there is no systemic risk to the insurance sector and therefore it is premature to consider development of new measures.

On balance, a few NGOs advocated on the need for both microprudential and macroprudential approach, such as concentration limits, capital requirements and systemic risk buffers. They indicated that there is no need for trade-off consideration and banks do not have obstacles to lending activities. One respondent pointed to the need to consider the cost of inaction and keeping status quo.

### *Changes in response to comments*

The industry has raised the primary concern that consideration of macroprudential tools is premature at this stage, as institutions continue to first develop measurement and quantification tools to assess climate related risks and its impact. Respondents suggested microprudential / Pillar 2 supervisory approach and the need to assess cost benefit or trade off of potential measures. In balance, other respondents, such as NGOs, raised the primary concern that there is a need for macroprudential policy response along with microprudential as there is a risk of inaction / remaining status quo and the build-up of systemic risk.

As the backdrop, SSBs such as the BCBS and IAIS are conducting or have completed their gap analysis against their prudential frameworks.

The final report:

- Further acknowledges the early stage of financial institutions' development of measurement and quantification tools.
- Provides relevant updates, to the extent possible, on any advancements the SSBs have made on their gap analysis and work underway related to Pillar 1 / capital and Pillar 2 supervision.
- From a policy perspective, clarifies why it is important to explore the potential for a macroprudential policy response in parallel with microprudential measures. Provides more context on how this work will evolve in future stages, informed by the work of SSBs and financial authorities.

## Areas of future work

### *Comments received*

In terms of proposed areas of future work for the FSB, respondents' suggestions varied including:

- Research differences in transition risk in equity instruments vs. debt instruments and clarity on the identification of “carbon intensive sectors or exposures”.
- Sufficiently explore the extent to which risks (e.g., credit, market, operational) are already considered or mitigated in the prudential framework such as in internal models or in external ratings.
- Undertake a more holistic and thorough approach to the cost and benefits of the potential tools that could be adopted. An assessment of the unintended consequences that such tools could have regarding the ability of the financial sector to provide the financing necessary for the transition.
- Supervisory approaches on oversight and engagement of financial institutions' transition plans.
- Further public-private discussions at global level to analyse the relationship between supervisory reporting, Pillar 3 and corporate disclosure requirements that affect financial institutions.
- Implications of inaction and continuing with the current status quo.
- Second order effect" and "risk transfers between sectors" in detail.
- EMDEs' challenges, starting with a stocktaking exercise to assess the early lessons learnt from advanced economies' experiences and identify the needs for supervisors in the EMDEs with recommendations to address those challenges would be useful.
- Financial inclusion and the challenges effecting financially excluded and underserved groups were not communicated within the report.

### *Proposed future work*

Future areas of work for the FSB (after the completion of the final report) could include:

- Deeper understanding of the role of transition plans in prudential risk management and financial stability, in coordination with the SSBs and NGFS
- Consideration of the implications for EMDEs and smaller financial institutions, including any areas where further guidance may be useful.

In the medium to longer term:

- Follow up on the recommendations of the report through future consideration in 2024 of a peer review of jurisdictions and consideration of an update to the recommendations in 2025, as mentioned in the FSB Roadmap 2022 progress report<sup>3</sup>
- Deeper analysis of potential macroprudential measures, along with cost benefit / trade-off considerations, based on further work conducted by authorities and SSBs.
- When further progress has been made on regulatory and supervisory reporting as well as corporate disclosure requirements, consider further analysis on the interactions between regulatory and supervisory reporting, Pillar 3 and corporate disclosure requirements on climate-related information.

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<sup>3</sup> FSB (2022) *FSB Roadmap Progress Report*, July.

## Annex: Full list of respondents

- American Property Casualty Insurance Association (APCIA)
- Bank Policy Institute (BPI)
- Bloomberg
- Bundesverband Investment und Asset Management (BVI)
- Canadian Bankers Association (CBA)
- Ceres
- European Banking Federation (EBF)
- Finance Watch
- French Institut des Actuares
- General Insurance Association of Japan (GIAJ)
- Geneva Association
- German Banking Industry Committee
- Glasgow Financial Alliance for Net Zero (GFANZ)
- Global Legal Entity Identifier Foundation (GLEIF)
- Institute of International Finance (IIF), International Swaps and Derivatives Association (ISDA), Global Financial Markets Association (GFMA)
- Insurance Europe
- International Banking Federation (IBFed)
- Japanese Bankers Association (JBA)
- Polish Bank Association
- Public Citizen
- Reclaim Finance
- Riskthinking.AI
- Risk Management Association's Climate Risk Consortia
- SOMO
- Toronto Centre

- US Chamber of Commerce
- World Council of Credit Unions