

16th February 2022

Mr. Pablo Hernández de Cos, Chairman
Mr. Neil Esho, Secretary General
Basel Committee on Banking Supervision
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Re: Comments in Response to the Consultative Document on Principles for the effective management and supervision of climate-related financial risks

Dear Mr. Hernandez de Cos and Mr. Esho:

The International Swaps and Derivatives Association (“ISDA”) and the Global Financial Markets Association (“GFMA”) and their members “the Industry” appreciate the opportunity to respond to the Basel Committee on Banking Supervision’s (“BCBS”) consultative document on the “on Principles for the effective management and supervision of climate-related financial risks” (the “consultation”).

The Industry welcomes the BCBS guidance to foster alignment of supervisory standards and practices for addressing climate-related financial risks. Furthermore, we support the BCBS’s intention to achieve a balance in fostering effective risk management practices for climate-related financial risks and providing a common baseline for internationally active banks and supervisors, while maintaining sufficient flexibility to support necessary innovation in a fast-evolving landscape and associated practices.

The global nature of climate-related financial risks means that the BCBS has a key role to play to help coordinate and accelerate the development of common principles to support banks in developing the expertise and building capacity to identify, assess, and manage climate-related financial risks. The systemic nature of climate-related financial risks also means that the BCBS is well placed to help identify risks and issues across financial institutions (and other financial intermediaries such as insurers), and as such can play a determinant role in helping establish good risk management practices.

We welcome the recognition that climate-related financial risks are drivers of existing risks and banks are at a developmental stage in embedding these into their existing risk management frameworks, thus we encourage supervisors to take a phased approach towards introducing climate risk related expectations. This will allow for methodologies to mature, for greater standardisation to be developed, data availability to increase and for consistency across jurisdictions to grow.

Financial markets and derivatives have a big role to play in supporting the effective allocation of capital and the transition to a low carbon economy and management of climate related financial risks, including e.g. through price discovery and transparency, providing innovative ways to access capital, means for issuers and investors to hedge risk etc. and we welcome an approach to ensure existing and new instruments support this.

In the context of a fast-evolving landscape, the effective co-ordination and alignment of prudential and supervisory principles globally is critical. The Industry is keen for consensus to be developed between financial regulatory bodies and believe the BCBS can also support the sharing of best practice and the development of a common understanding of how to address climate-related financial risks across the financial system. Particular areas include:

- **Foster international co-ordination to close data gaps and develop methodology:** One of the major challenges in addressing climate-related financial risks is the lack of historical data and the uncertainty about future changes and impacts. There are also significant data gaps, e.g. with respect to data on physical climate risk. Similarly, alignment of prudential

treatment globally is critical to foster the continued evolution and innovation of banks' climate-related financial risk management efforts. Multiple, similar regulatory requests on climate risks is a significant burden on banks and the principles should reflect the need for streamlining among supervisors and institutions.

- **Ensure climate-related financial regulation is risk-based** and aligned on a cross sectoral basis to avoid un-intended consequences e.g. alignment on the approach on climate-related financial risks between the banking and insurance industry, given that climate change might result in an increase in risk premia for a range of financial assets.
- **Build capacity on climate risk modelling and scenario analysis:** As part of our recommendation for a phased approach, given the paucity of data, the BCBS should not urge supervisors or banks towards a prescriptive approach. Banks are likely to start with a more qualitative approach until data improves and as such climate stress tests should be conceived as learning exercises with no impact on banks' capital requirements. Indeed, for a robust quantitative portfolio wide assessment of climate risks, advancements across data availability, comparability, and reliability are important to assess the potential impacts of climate risks on the performance of financial assets. We support the development of a principles-based approach, leveraging common standards including e.g., Network for Greening the Financial System (NGFS), Representative Concentration Pathways (RCPs), and International Energy Agency (IEA) to accelerate the development of good practice to foster comparability of information. Such initiatives can work best as a joint industry and regulatory initiative. Examples include the setting up of the Climate Financial Risk Forum (CFRF) in the UK.
- These objectives align to some of the principles already published by the US Climate Finance Working Group and which is supported by several trade associations.¹

Furthermore, institution size should not be viewed as the sole driver for assessing proportionality, other criteria should be taken into account such as business model or geographical location/presence.

Regarding the potential application of the consultation principles to broader environmental risks in the future, environmental risks are generally already captured within risk frameworks and any further work would need to identify any gaps that exist from current risk measurement approaches for broader environmental phenomena – an approach that does not lend itself to simply expanding climate risk guidance to cover environmental risks. For example, transition risk related to environmental issues will evolve depending on the level of regulation introduced across different sectors and how these impact industries. Any further BCBS work on environmental risks would also need to begin with an aligned, clear set of definitions of the environmental risks in question.

We would welcome clarification from the BCBS on **expectations and timelines for implementation** of the Principles in a phased manner. Such clarity will be essential for banks to plan and prioritize. In this respect the BCBS should incorporate flexibility to account for differences across regions and institutions on the basis banks with a different geographical presence might face different types of risks, with different likelihood, impacts and severity, and hence might follow a different **prioritization order** (e.g. physical risk might be higher priority for a bank with clients located in an area frequently affected by floods or fires, and therefore might require a much more granular analysis).

Finally, shorter term climate-related financial risks can arise from the introduction of new regulation from different governments. The Industry would encourage the BCBS, Central Banks and national financial market regulators to engage actively and transparently to help coordinate communication amongst industry, regulators and policy makers to help ensure coordinated action that supports a smooth transition and mitigate the risks of un-intended consequences both from an economic and prudential standpoint.

¹ [Coming Together on Climate Risk – International Swaps and Derivatives Association \(isda.org\)](https://www.isda.org/coming-together-on-climate-risk/)

Our feedback is structured as follows: in first part we answer questions 1 and 2 of the consultation² under the specific comments provided for each of the principles in the consultation and in the second part we provide separate response to question 3 related to environmental risks.

The Associations appreciate your consideration of our comments and proposals and remain at your disposal to discuss any of these comments in more detail

Respectfully submitted,



Panayiotis Dionysopoulos
Head of Capital, ISDA
pdionysopoulos@isda.org



Allison Parent
Executive Director, GFMA
aparent@gfma.org

² <https://www.bis.org/bcbs/publ/d530.htm>

Q1: Has the Committee appropriately captured the necessary requirements for the effective management of climate-related financial risks and the related supervision? Are there any aspects that the Committee could consider further or that would benefit from additional guidance from the Committee?

Q2: Do you have any comments on the individual principles and supporting commentary

Q3: How could the transmission of environmental risks to banks' risk profiles be taken into account when considering the potential application of these principles to broader environmental risks in the future? Which key aspects should be considered?

A] Feedback to the proposed principles

Principle 1: Banks should develop and implement a sound process for understanding and assessing the potential impact of climate-related risk drivers on their businesses and on the environments in which they operate. Banks should consider material climate-related financial risks that could manifest over various time horizons and incorporate these risks into their overall business strategies and risk management frameworks. [Reference principles: BCP 14, SRP 30, Corporate governance principles for banks]

1. This principle is already in the process of being implemented in several jurisdictions with inaugural supervisory climate stress testing exercises ongoing or completed in the UK ³ and Europe⁴, and a growing body of disclosures. In Asia, Singapore⁵ and Hong Kong⁶ have also finalised their respective supervisory guidelines on climate risk management, and other jurisdictions are working toward finalising similar guidelines. As acknowledged by the BCBS, climate risk is a risk driver that will impact the existing risks (credit risk, operational risk, market risk...). Climate risk factors can **positively or negatively** impact the current risk categories. We therefore think this paragraph could be clarified accordingly: “....., *assessing the potential positive or negative impact of climate-related risk drivers...*”.
2. It would be helpful to define “short, medium and long term horizon” in the context of these Principles, allowing for consistency and comparability across banks.

Principle 2: The board and senior management should clearly assign climate-related responsibilities to members and committees and exercise effective oversight of climate-related financial risks. The board and senior management should identify responsibilities for climate-related risk management throughout the organisational structure. [Reference principles: BCP 14, SRP 30, Corporate governance principles for banks]

3. We believe this principle would benefit from further clarification and differentiate **better between the governance expectations for a bank’s board relative to its senior management**. We recommend framing this principle to clarify that the board (or delegated committee) is responsible for oversight, while senior management is responsible for developing, implementing, and establishing a bank’s climate-related financial risk management efforts. The principle should also retain sufficient flexibility to reflect the diversity of board structures, for instance the prevalence of dual board structures in different jurisdictions. Indeed, there will not be a one size fits all approach to climate governance and it is likely to evolve over time.

As drafted, this principle would currently require the assignment of climate-related responsibilities to individual board members and specific committees. Therefore, we suggest the following amendment to avoid ambiguity and give sufficient flexibility to different board structures and how to meet those expectations (for example via a Board Committee or named individual director, a specific scheme of management delegation or some other governance structure):

³ <https://www.bankofengland.co.uk/stress-testing/2021/key-elements-2021-biennial-exploratory-scenario-financial-risks-climate-change>

⁴ <https://www.bankingsupervision.europa.eu/press/pr/date/2022/html/ssm.pr220127~bd20df4d3a.en.html>

⁵ <https://www.mas.gov.sg/regulation/guidelines/guidelines-on-environmental-risk-management>

⁶ <https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2021/20211230e2a1.pdf>

*'According to their respective roles, the board and senior management should clearly assign climate-related responsibilities to members ~~and~~ or committees and exercise effective oversight of climate-related financial risks. **Further**, according to their respective roles, ~~the board and~~ or senior management should identify responsibilities for climate-related risk management throughout the organisational structure.'*

In so doing, this amendment would also avoid conflict with the general principle of collective responsibility of the board and the provisions of some national laws. By allowing responsibilities to be assigned to board members **or** committees, this principle would also be in line with the solution defined by ECB in its expectations for Eurozone banks. Furthermore, in general other principles should not designate specific responsibility to the board to reflect their oversight role and be mindful of consistency with this principle for example we do not support the wording in paragraph 24 which requires "the board and senior management **should ensure** that climate-related financial risks, where material, are clearly defined and addressed in the bank's risk appetite framework".

Principle 3: Banks should adopt appropriate policies, procedures and controls to be implemented across the entire organisation to ensure effective management of climate-related financial risks. [Reference principles: BCP 14, SRP 30, Corporate governance principles for banks]

We believe the flexibility regulators and supervisors are providing in terms of methodologies, as well as proportionality, needs to be maintained over time given the large-scale investments required for the development of methodologies and internal systems. The need for a **degree of flexibility with** respect to the specific risks that are measured and reported, will allow regulators to take account of regional differences, different bank structures and priority areas.

Principle 4: Banks should incorporate climate-related financial risks into their internal control frameworks across the three lines of defence to ensure sound, comprehensive and effective identification, measurement and mitigation of material climate-related financial risks. [Reference principles: BCP 26, SRP 20, SRP 30]

No comment

Principle 5: Banks should **identify and quantify climate-related financial risks** and incorporate those assessed as material over relevant time horizons into their **internal capital and liquidity adequacy assessment processes**. [Reference principles: BCP 15, BCP 24, SRP 20, SRP 30]

4. The global nature of climate-related financial risks means that the BCBS has an important role in **establishing globally aligned principles to help support banks in developing the expertise and building capacity to identify, assess, and manage climate-related financial risks**, although further work is needed to understand the relationship between climate-related risk and liquidity risk in order to better understand how such risks can be incorporated into liquidity planning. The same applies for capital management and we elaborate in more detail below.
5. While banks already incorporate short-term/evolving physical risk into capital planning, we note that it will be difficult to meet traditional capital model standards (e.g. comparable robustness, conservativeness and model validation) for climate risk. Consequently, it will be challenging in the short term to integrate climate-related financial risks within Pillar 2 models. To the extent that banks are expected to incorporate climate-related financial risk into their capital planning process, it is critical that the capital planning framework maintains its existing parameters, especially as relates to time horizon, plausibility, and expected and unexpected losses. In respect of time horizons, the BCBS is asked to confirm that reference to **'relevant time horizons' does not intend to modify**

the prevailing time horizons used in current capital and liquidity adequacy assessments (e.g. 3 years). At the same time the CRD6 proposal in Europe introduces three time horizons (short, medium and long) for climate considerations⁷. While banks should consider the impact of longer time horizons (for example, in stress testing) there is a lack of clarity on the expectations around how these are considered and assessment of risks that might fall outside of the time-horizon of an existing capital or liquidity adequacy framework..

6. The Industry focus to date has been on the identification and evaluation of potential climate-related financial risks under different scenarios, with a focus on assessing potential materiality for different risks, over different time horizons and potential strategic implications. This has also helped identify some shortcomings and challenges including data limitations and complexities from the range of potential different scenarios and time horizons
7. We appreciate the focus of the BCBS on **material** climate-related risks and support the articulation in the proposed principles. The BCBS can support the further development of climate scenarios analysis in the following areas:
 - a) **Consensus around available scientific and economic forecasts and range of scenarios.** For example, Network for Greening the Financial System (NGFS), Representative Concentration Pathways (RCPs), and International Energy Agency (IEA) scenarios can be used to meet regulatory and risk management needs if financial institutions follow a set of similar principles laid out by BCBS, and individual banks can then tailor their approach to reflect their bank specific business models and risk profiles
 - b) **Further international coordination and collaboration on the development of climate-risk models and scenarios** – including further development of sectoral level granularity and coverage / standardisation of terminology
 - c) **Solutions to overcome a lack of relevant granular data and development of robust climate-related financial risk model frameworks**
 - d) **Regulators to support and co-ordinate benchmarking initiatives** (e.g. on common portfolio to support calibration of climate risks - building on the publication of exploratory stress test exercise results and / or initiatives such as PACTA⁸)
8. The Industry welcomes the BCBS's position that **quantifying the capital and liquidity impacts of these risks through incorporation into ICAAPs and ILAAPs will need to happen "iteratively and progressively."** We also recommend leveraging qualitative over quantitative assessments as institutions phase into incorporating climate-related financial risk into ICAAP and ILAAP.
9. **It will be important to avoid unintended consequences through premature quantification of capital impacts without common understanding, and potential disruptive incentives.** For example, capital charges improperly applied might impede innovation or lead to a decline in the availability of capital / financial instruments required to support transition pathways.
10. While we support and acknowledge the BCBS's high level, principles-based approach, we have concerns about the 'gold plating' of these principles, into much firmer expectations surrounding quantitative capital adequacy measurement in many jurisdictions and urge the BCBS to guide supervisors against setting such expectations individually at this stage. We understand that the BCBS is reviewing the current capital framework to identify any gap and shortfall against climate-related financial risks and would strongly encourage BCBS members to wait for the final findings of this work and related recommendations before adjusting their local capital frameworks. Any uncoordinated adjustment at the local level would result in distortion in capital allocation for international banks, while fragmenting the response to increasing global financial resilience to climate related financial risk.

⁷ CRD Proposal: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0663&qid=1641564801135>

⁸ The Paris Agreement Capital Transition Assessment (PACTA) has been developed by the 2nd Investing Initiative with backing from UN Principles for Responsible Investment, PACTA enables users to measure the alignment of financial portfolios with climate scenarios as well as to analyse specific companies.

Principle 6: Banks should **identify, monitor and manage all climate-related financial risks** that could **materially impair their financial condition**, including their capital resources and liquidity positions. Banks should ensure that their risk appetite and risk management frameworks consider all material climate-related financial risks to which they are exposed and establish a reliable approach to identifying, measuring, monitoring and managing those risks. [Reference principles: BCP 15, SRP 30]

11. The Industry is supportive of this principle and visibility of how the prudential framework is likely to be developed will help ensure a coherent approach to the identification, monitoring, and management of climate-related financial risks. **Effective and timely management of transition risks will require transparent and well managed government policy communication and appropriate collaboration between regulators and Industry.**
12. The BCBS is asked to acknowledge that the development of bank risk management frameworks to embed climate-related financial risks is iterative and will continue to evolve alongside wider developments, such as the availability of better quality granular data.
13. The Industry notes that there is a growing disparity between the increasing availability of transition risk data versus less available physical risk data. Consequently, banks' ability to understand and analyse physical risks are constrained without better, consistent market-wide data to help them in balancing these two risk types. Principle 12 sets out areas which merit additional research.
14. In the context of global interconnectedness and tight timelines to meet global targets, it will be important that policy developments do not unduly diverge between bodies and jurisdictions. Global consistency will support banks in embedding climate-related financial risks into their risk management frameworks, including across operating entities in different geographies. The BCBS is asked to help limit any "policy shocks" and global inconsistencies.
15. There are various risk mitigation measures and establishing limits directly for climate risks may not be the most relevant example for individual banks. We suggest removing 'such as establishing internal limits' within paragraph 26 so that the language is not as prescriptive or suggest changing the language to: "Where appropriate, banks should consider risk mitigation measures such as **but not limited to** establishing internal limits for the various types of material climate-related financial risks to which they are exposed".

Principle 7: Risk data aggregation capabilities and internal risk reporting practices should account for climate-related financial risks. Banks should seek to ensure that their internal reporting systems are capable of monitoring material climate-related financial risks and producing timely information to ensure effective board and senior management decision-making. [Reference principles: BCP 15, SRP 30, Principles for effective risk data aggregation and risk reporting]

16. Data limitations are a significant challenge that impact accuracy of projections. Banks first need to identify materiality of climate related financial risks before producing reporting. Cadence of data reporting should remain at the discretion of individual firms using a “proportionality” principle (e.g. banks can consider starting with the most material business activities, risk stripes, sectors, countries, etc, then expanding over time). Financial institutions should have flexibility to develop reporting and data aggregation capabilities that they deem appropriate in line with their risk tolerance and materiality (for example frequency of reporting, scope, and reporting audience such as senior management and/or board).

Principle 8: Banks should understand the impact of climate-related risk drivers on their credit risk profiles and ensure credit risk management systems and processes consider material climate-related financial risks. [Reference principles: BCP 17, BCP 19, SRP 20, Principles for the management of credit risk]

17. We welcome the BCBS’s recognition that climate is a risk driver that can impact the whole spectrum of existing risk types. For example, climate risk may drive credit risk from obligors with physical or transition risk exposure, reputation risk from increased stakeholder concerns about financing high carbon industries, and operational risk from physical climate risks to banks’ facilities.
18. We support the BCBS’s approach, reflected in principles 8 – 11, that banks should understand the impact of climate-related risk drivers on their existing risk profiles. We would note that banks are in the process of integrating governance of climate-related risks into existing risk management frameworks and governance structures, covering all the traditional risk categories.
19. We note that Principle 8 understandably focus on the impact of climate on bank’s credit risk, which is the priority risk category for traditional balance sheet lenders. With regard to other risk categories however, we suggest that the BCBS Principles **propose a phased approach to integrating climate risk**, based on materiality. It is important to note that integration of climate risk into banks’ policies and processes is dependent on the outcomes of quantification of the bank’s climate-related financial risks. Banks are continuing to explore the impact of transition and physical risks on credit decisions as analytical approaches evolve and the climate data environment expands. Integration of climate risk into the credit granting and monitoring process is nascent and will improve with maturity of climate risk measurement techniques.
20. We kindly request clarification on BCBS references to due diligence and onboarding (paragraph 32) and scope of businesses this is referring to.
21. As raised in the overarching comments, we believe that size of a bank should be avoided as the only driver for assessing proportionality. Assuming that large or smaller banks are more or less vulnerable to ESG risks simply because of size is not accurate. We suggest other criteria should be taken into account such as business model or geographical location/presence. For instance, a small bank could be very exposed to intensive carbon sectors. Regarding the geographical location, there are countries more exposed to certain climate risks (floods, earthquakes, etc.), so the impact climate risks would have for a bank, will depend on where the bank’s clients are located rather than its size.

Principle 9: Banks should understand the impact of climate-related risk drivers on their **market risk positions and ensure that market risk management systems and processes** consider material climate-related financial risks. [Reference principles: BCP 22]

22. Banks should be given enough time to build the capabilities to understand the impact of climate-related risks drivers on their market risk positions, if deemed material. We support a phased-in approach given the evolving nature of climate risk management.
23. Climate-related financial risk as a driver of market risk is generally deemed less material than other risks, such as credit risk, given the relative short time horizon for market risk. Accordingly, approaches to incorporating climate-related financial risk drivers into market risk management systems and processes, may be relatively less progressed. Banks request flexibility to consider the impact of climate risk drivers on market risk positions for those business activities deemed relevant or material.
24. By nature, established market risk methodologies and tools operate on the basis of markets having timely information and reflecting that effectively in pricing. This relies on **timely communication and information on government and regulatory bodies on forthcoming policies** and individual firms' disclosures and transition plans. As such, the Industry would welcome active engagement from the BCBS on policy developments to support this.
25. The Industry recognises the usefulness of scenario analysis and the incorporation of climate risk consideration in firms existing stress testing frameworks as a tool to explore the relevance of climate-related financial risks to a bank's trading book. Though, given liquidity and shorter term nature of trading book positions, banks may not deem this risk as material and should have flexibility around how to incorporate climate into market risk measurement. See the response to Principle 12, which sets out some of the considerations associated with incorporating climate-related risk drivers into existing scenario analysis frameworks.
26. We note that market prices are reflective of all existing perceived risks including climate-related risks to supply and demand. As such, isolating climate-related risk drivers for market risk will be operationally challenging. More directly, market sentiment and impacts are naturally included as volatility and idiosyncratic pricing behaviour find their way into VaR and stress modelling.
27. We also caution that proprietary considerations should be taken into account in any guidance to ensure banks trading desks strategies are not revealed thereby placing them at a disadvantage.
28. In paragraph 36, the term "liquidity" may be interpreted in different ways, as can the idea of closing out exposures. We recommend clarifying as follows: "Such scenario analysis could, for example, feature variation in *price performance liquidity* across assets exposed to climate-related risk ~~and assume variation in the speed at which exposures could reasonably be closed out.~~"
29. While we recognize the importance of this principle, we would like to highlight that its practical implementation will require time: the impact of climate-related drivers on financial instruments, trading book and market-to-market exposure is particularly difficult to assess given the limited price signals that we currently see (e.g. discount curves and price curves not fully capturing transition risk). Consequently, the integration of climate risk into market risk frameworks is less advanced than for credit risk. Supervisors should consider that climate-related risk management has a different maturity across different categories (i.e. impact on credit risk vs. market risk vs. liquidity risk, etc.) and should define their expectations and requirements accordingly.

Principle 10: Banks should understand the impact of climate-related risk drivers on their liquidity risk profiles and ensure that liquidity risk management systems and processes consider material climate-related financial risks. [Reference principles: BCP 24, Principles for sound liquidity risk management and supervision].

30. **From a model perspective**, we would note the **mismatch of time horizon** of the models widely applied in the market and long-term climate risk scenarios, which cover a time horizon of 30yrs. Current risk measure models are not developed for such long time horizons, especially with regard to liquidity risk. Moreover, banks capital planning is not targeted to support future capital decisions in 30yrs due to the fact that uncertainty increases based on accumulating assumptions.
31. Banks may therefore integrate climate risk management into liquidity risk frameworks and processes in phases, proportional to materiality, and consider qualitative applications ahead of quantitative, if appropriate.

Principle 11: Banks should understand the impact of climate-related risk drivers on their operational risk and ensure that risk management systems and processes consider material climate-related risks. Banks should also understand the impact of climate-related risk drivers on other risks and put in place adequate measures to account for these risks where material. This includes climate-related risk drivers that might lead to increasing strategic, reputational, and regulatory compliance risk, as well as liability costs associated with climate-sensitive investments and businesses. [Reference principles: BCP 25, Principles for the sound management of operational risk, Principles for operational resilience, SRP 20, SRP 30]

No Comment

Principle 12: Where appropriate, banks should make use of **scenario analysis**, including stress testing, to assess the resilience of their **business models and strategies to a range of plausible climate-related pathways** and determine the impact of climate-related risk drivers on their overall risk profile. **These analyses should consider physical and transition risks as drivers of credit, market, operational and liquidity risks over a range of relevant time horizons.** [Reference principles: BCP 15, Stress testing principles]

32. Any final principle on scenario analysis should explicitly differentiate between scenario analysis and supervisory stress testing (the former being about resilience and strategy and the latter being about capital adequacy). Climate scenario exercises differ from traditional stress testing exercises, which typically assess the potential impacts of transitory shocks to near-term economic and financial conditions.
33. Scenario analysis is an important tool to explore the potential impacts of climate-related financial risks on portfolios and the overall business model, as well as informing areas for further development. Industry supports its use, however, both climate scenario analysis and climate stress testing exercises have so far mainly been applied in an exploratory manner using assumptions and simplifications given the limitation in the data and methodologies to date. Therefore, we believe at this stage climate stress tests should be conceived as learning exercises with no impact on capital.
34. There are a number of challenges which need further consideration in order for scenario analysis and stress testing to continue to develop good practice. These include:
 - a. the ability to capture the impacts on the trading book in response to a ‘climate-related pathway’ is limited by the ability / sufficiency of information to link longer-dated climate scenarios to the transmission mechanisms, to risk drivers and pricing of traded instruments (inc. derivatives) over different time horizons

- b. taking high level scenarios such as NGFS, RCP or IEA and allow banks flexibility to develop more granular scenarios
 - c. in a traded environment the nature of risks is likely to be different to what scenarios typically address from a credit risk standpoint. Current regulatory exercises tend to focus on credit risk and market risk considerations are at an early stage: for example, market risk coverage of the upcoming ECB test is focusing on a single risk driver (carbon price) and instantaneous impact on the portfolio (mapped to NACE codes)
 - d. a lack of information on potential government policies and ability to adequately reflect how markets would assess the credibility of a counterparty's transition plan mean substantial simplifications need to be made (e.g. static balance sheet) which can limit the value of such exercises on an aggregated basis, especially when it comes to long-term scenarios. NGFS initiatives provide credible baseline scenarios but the ability to add firm relevant granularity is important
 - e. objectives and limitations of stress tests need to be thoroughly explained and understood – e.g. the use of a static balance sheet can be very difficult to apply and explain in the context of market risk, while giving results that can easily be misinterpreted
 - f. practical implementation will require time: to ensure an approach based on materiality, granular stress tests could be performed for selected counterparts, as opposed to a broad brush portfolio analysis..
 - g. as outlined in the BCBS paper, 'Climate-related risk drivers and their transmission channels, April 2021,' further research including across the following topics, would be beneficial:
 - i. the transmission channels between climate-related financial risks and the financial risks that might impact the trading book
 - ii. the impact of physical risks on financial markets – this is an area that is less developed than transition risks, and while it is understood that severe weather events have the potential to lead to higher volatility in financial markets, specific asset level, as well as more systemic impacts (e.g sovereign impact) and how they would play out over different time horizons is not well understood
 - iii. the extent to which climate-related financial risk is already priced into fixed income and equity markets
 - iv. how sensitive banks' market risk is to abrupt changes arising from climate-related information
35. In the context of these challenges, scenario analysis is best considered as exploratory at this point in time. Further, primarily due to lack of data, bank approaches remain very top-down and with limited instrument or firm specific considerations. It is requested that expectations underpinning scenario analysis remain proportionate to firms, given their size and risk profiles. That being said, scenario analysis should consider a broader suite of all risks beyond corporate debt and equity securities for a more comprehensive analysis (e.g. Interest Rates, Commodities, Exchange rates etc.).
36. Notwithstanding, scenario analysis has an important role to play as part of the existing suite of risk tools. Coordination and joint research to address current challenges is welcomed to accelerate the development of good practice and foster comparability of information. For example: NGFS type initiatives, consideration of sovereigns, sector / asset specific and cross jurisdictional impacts, and support with impact calibration, e.g. through benchmark and aggregate publication of stress test results. Joint industry and regulatory initiatives have the potential to drive progress, for example the setting up of the Climate Financial Risk Forum (CFRF) in the UK.

37. In addition, scenario analysis is also an important tool at a system-wide level to help explore interactions between different players across different sectors (e.g. banks and insurers) and geographies that cannot easily be captured by individual firms. The BCBS has significant opportunity to drive progress in this area.

38. To conclude, we urge the BCBS to be **more precise in its use of the terms ‘scenario analysis’ and ‘stress testing’ and introduce greater distinction between them when the Principles recommend their use.**

- We view scenario analysis as exploratory exercises that enable firms to identify key areas of the business model that could be impacted by climate risk (both transition and physical) events. Learnings from these exercises should also inform the firm’s modelling strategies as the industry gradually develops more sophisticated capabilities.
- These exercises are inherently different from traditional macroprudential stress tests as long time horizons, dynamic balance sheet, and sector and counterparty level granularity add significant analytical complexity. Given the paucity of reliable data, limited standardized client disclosure, and highly emergent modelling approaches, we believe it is **premature to use scenario analysis results from a supervisory standpoint to assess capital requirements and adequacy.**
- Indeed, supervisors conducting pilot climate stress tests have been careful to state that they **will not have implications for banks’ capital requirements.**
- We therefore urge the BCBS to be cautious in its wording and **highlight that supervisory climate stress testing exercises need to be sufficiently robust.**
- We would draw a parallel with the early BCBS work on the advanced measurement approach (AMA), where the BCBS focused on an emerging framework and ensured the methodology was robust before introducing a related capital charge.

Principle 13: Supervisors should determine that banks’ incorporation of material climate-related financial risks into their business strategies, corporate governance and internal control frameworks is sound and comprehensive. [Reference principles: BCP 9, BCP 14, BCP 26, SRP 20]

39. Given the current lack of data as well as different definitions, a phase-in approach for banks is important.

Principle 14: Supervisors should determine that banks can adequately identify, monitor and manage all material climate-related financial risks as part of their assessments of banks’ risk appetite and risk management frameworks. [Reference principles: BCP 15, SRP 20, SRP 30]

40. Given the current lack of data as well as different definitions, a phase-in approach for banks is important.

Principle 15: Supervisors should determine that banks comprehensively identify and assess the impact of climate-related risk drivers on their risk profile and ensure that material climate-related financial risks are adequately considered in their management of credit, market, liquidity, operational, and other types of risk. Supervisors should determine that, where appropriate, banks apply climate scenario analysis. [Reference principles: BCP 17–25, Principles for sound liquidity risk management and supervision, Principles for the sound management of operational risk, Principles for operational resilience]

41. Given the current lack of data as well as different definitions, a phase-in approach for banks is important.

Principle 16: In conducting supervisory assessments of supervised banks' management of climate-related financial risks, supervisors should utilise an appropriate range of techniques and tools and adopt adequate follow-up measures in case of material misalignment with supervisory expectations. [Reference principles: BCP 8, BCP 9, SRP 10, SRP 20]

42. Given the current lack of data as well as different definitions, a phase-in approach for banks is important.

Principle 17: Supervisors should ensure that they have adequate resources and capacity to effectively assess supervised banks' management of climate-related financial risks. [Reference principles: BCP 9]

43. Given the current lack of data as well as different definitions, a phase-in approach for banks is important.

Principle 18: Supervisors should consider using climate-related risk scenario analysis, including stress testing, to identify relevant risk factors, size portfolio exposures, identify data gaps and inform the adequacy of risk management approaches. Where appropriate, supervisors should consider disclosing the findings of these exercises. [Reference principles: Stress testing principles]

44. The Industry recognises that climate-related risk scenario analysis is a very useful exercise to support joint industry and regulator engagement and efforts to understand potential impacts, limitations, and improve joint understanding of what needs to, or can be done.
45. Exercises to date have been exploratory with substantial limitations and it is appropriate that they are considered as such and not result in binding commitments or public disclosures. The Industry agrees with the BCBS that it is premature for such exercises to inform capital or disclosure requirements.
46. There could be a **benefit from suggesting common principles** which banks could choose to follow to leverage when creating internal scenarios and frameworks.
47. Supervisors should balance the value of climate-related risk scenario analysis exercises, with the fact that banks are already expanding effort into incorporating climate change into their risk framework and considering internal scenario analysis approaches. Supervisor led scenario analysis / stress-test exercises are incremental to this alongside an existing and demanding programme of stress tests in various jurisdictions.
48. The BCBS should advise that where an exercise is conducted by a consolidated supervisor there should be **no need for duplicative subsidiary level exercises in host jurisdictions**, unless there are specific & exceptional circumstances. In future there may be a need for an internationally coordinated process to avoid duplication of supervisory climate scenario exercises to ensure consistency that group and local scenarios are sufficiently aligned.
49. In the interests of making these exercises more useful we recommend focusing on a risk-based approach as this would provide more value from a risk management perspective.
50. Attempts to accelerate the development of macro-level climate views may come at the expense of accuracy, leading to potentially misleading results providing a false sense of safety.
51. The Industry would kindly request that the BCBS make available a road map to illustrate their short to longer term plans in this space.

B] Feedback to Question 3 on Environmental Risks

How could the transmission of environmental risks to banks' risk profiles be taken into account when considering the potential application of these principles to broader environmental risks in the future? Which key aspects should be considered?

52. Environmental risks are generally already captured within risk frameworks and any further work would need identify any gaps that exist from current risk measurement approaches for broader environmental phenomena – an approach that does not lend itself to simply expanding climate risk guidance to cover environmental risks. While climate risk management is an immature discipline with a paucity of reliable data sources and tools and infrastructure capabilities in various stages of development, the assessment of the financial impacts to wider environmental risks is at an even earlier stage. There is a need for coordination to support a smooth incorporation of any new regulation by well thought out and aligned sets of definitions, standards and supporting regulatory treatment.
53. There is a role for the BCBS to contribute to further research into the impact of non-climate, environmental financial risks on the financial system. While there are commonalities and synergies in considering broader environmental risks in continuation with climate risks, banks' management of climate-related financial risk cannot be simply copied and pasted for environmental risks. Any further BCBS work on environmental risks would also need to begin with an aligned, clear set of definitions of the environmental risks in question.

Annex:

CONVERGENCE BETWEEN SUPERVISORY STATEMENTS AND THE 6 BCBS SUPERVISORY PRINCIPLES (PART 1)

Principle	Australia	Canada	China	EU	Hong Kong	India	Indonesia	Japan
Principle 13: Supervisors should determine that banks' incorporation of material climate-related financial risks into their business strategies, corporate governance and internal control frameworks is sound and comprehensive.								
Principle 14: Supervisors should determine that banks can adequately identify, monitor and manage all material climate-related financial risks as part of their assessments of banks' risk appetite and risk management frameworks.								
Principle 15: Supervisors should determine that banks comprehensively identify and assess the impact of climate-related risk drivers on their risk profile and ensure that material climate-related financial risks are adequately considered in their management of credit, market, liquidity, operational, and other types of risk. Supervisors should determine that, where appropriate, banks apply climate scenario analysis.								
Principle 16: In conducting supervisory assessments of supervised banks' management of climate-related financial risks, supervisors should utilise an appropriate range of techniques and tools and adopt adequate follow-up measures in case of material misalignment with supervisory expectations.								
Principle 17: Supervisors should ensure that they have adequate resources and capacity to effectively assess supervised banks' management of climate-related financial risks.								
Principle 18: Supervisors should consider using climate-related risk scenario analysis, including stress testing, to identify relevant risk factors, size portfolio exposures, identify data gaps and inform the adequacy of risk management approaches. Where appropriate, supervisors should consider disclosing the findings of these exercises.								

© 2021 Deloitte Touche Tohmatsu

 No convergence  Minimal convergence  Semi-convergence  Strong convergence  Full convergence

7

CONVERGENCE BETWEEN SUPERVISORY STATEMENTS AND THE 6 BCBS SUPERVISORY PRINCIPLES (PART 2)

Principle	Malaysia	NZ	Philippines	Singapore	S. Korea	Thailand	UK	US
Principle 13: Supervisors should determine that banks' incorporation of material climate-related financial risks into their business strategies, corporate governance and internal control frameworks is sound and comprehensive.								
Principle 14: Supervisors should determine that banks can adequately identify, monitor and manage all material climate-related financial risks as part of their assessments of banks' risk appetite and risk management frameworks.								
Principle 15: Supervisors should determine that banks comprehensively identify and assess the impact of climate-related risk drivers on their risk profile and ensure that material climate-related financial risks are adequately considered in their management of credit, market, liquidity, operational, and other types of risk. Supervisors should determine that, where appropriate, banks apply climate scenario analysis.								
Principle 16: In conducting supervisory assessments of supervised banks' management of climate-related financial risks, supervisors should utilise an appropriate range of techniques and tools and adopt adequate follow-up measures in case of material misalignment with supervisory expectations.								
Principle 17: Supervisors should ensure that they have adequate resources and capacity to effectively assess supervised banks' management of climate-related financial risks.								
Principle 18: Supervisors should consider using climate-related risk scenario analysis, including stress testing, to identify relevant risk factors, size portfolio exposures, identify data gaps and inform the adequacy of risk management approaches. Where appropriate, supervisors should consider disclosing the findings of these exercises.								

© 2021 Deloitte Touche Tohmatsu

 No convergence  Minimal convergence  Semi-convergence  Strong convergence  Full convergence

8