



2020

CLIMATE RISK SYMPOSIUM:

Q&A



2020 Climate Risk Symposium: Follow-Up Q&A With Supervisors and Practitioners

In the first part of our [2020 Climate Risk Symposium](#) in November 2020, leading supervisors and risk practitioners explored the financial system's resilience in the face of climate change. The event was one of GARP's most well attended in 2020, with a range of thought-provoking questions from the audience, some of which we were unable to address at the time. Many of those questions were excellent ones and we didn't want to waste the opportunity to provide clarity. We hand-picked those that we thought had the greatest application and posed them to our panellists. And here are the results. Thanks to the UK Prudential Regulation Authority (PRA), Hong Kong Monetary Authority (HKMA), and practitioners, Alan Smith (HSBC) and Colin Church (Citigroup), for their input. Can you spot your question?



ANSWERED BY THE PRA:

Q: Is climate risk emerging as a separate risk function or a cross-cutting risk?

A: Climate risks emerge across the traditional Basel risk categories (credit, market and operational). As such we anticipate that, in the end-state, climate risks should be embedded within the teams that look at those risks rather than as a standalone team. However, climate risk management is likely to be a dynamic and evolving field for a number of years so we appreciate that capacities need to be built up. In the short- to medium-term many firms will therefore see value in having a central team that is able to focus on climate risks and work with subject matter experts to develop new processes, policies, and procedures, and embed them throughout a firm's operations.

Q: For regulators and banks, how can we manage the absence of backtesting for climate risk models? How can we ensure to build up a correct framework to gather data and then backtest/evaluate performance of our models?

A: We accept that climate change means that past data on credit risk will not be an indicator of the future. This is why scenario analysis is important to making judgemental overlays. While we do not have past data that is representative of the future in this case, that is not a reason to ignore a known future risk in credit risk assessments.

Comprehensive bottom-up modelling is likely to come some way down the line and this is a question which traditional statistical approaches might not be able to answer. For example, counterparty-level, statistically robust models which translate scenarios into Probability of Defaults (PDs) and Loss Given Defaults (LGDs) for their credit exposures represent particular challenges. Firms are encouraged to think creatively about how to fill any gaps that not having such models creates, this could include the increased use of expert judgements alongside top-down assessments. As focus and investment on climate risks continues to increase we expect that the issue with data gaps will close over the coming periods.

We expect firms to use credit analysis and expert judgement for well-selected exposures, sectors, or segments, to assess the potential impact of scenarios on credit ratings, impairments, PDs, LGDs, and/or RWAs, and then use some form of mapping or extrapolation to quantify the impact on their balance sheets. Firms should consider how they will use the existing process for incorporating expert judgement overlays in the credit risk assessment process. Other potential changes in the distribution of risk across the system (such as the mitigation of risk through insurance) should be considered.

Back-testing is therefore also challenging for credit risk analysis because, whatever happens with emissions (whether they continue to rise or are successfully stabilised and reduced), empirical evidence will not necessarily be representative of the future. Similarly to the above, firms will need to use expert judgements and available data in this space.

The PRA will cast a critical eye on the modelling approaches used by firms as part of our qualitative assessment of climate risk management abilities, which will also cover climate related processes, governance, risk appetites, and allocation of responsibilities.

Q: Banks can only implement if clients provide data, which may or may not be available. How is this factored into the thinking about the banks' roles?

A: Sizing climate risks requires specific data which sometimes need to be sourced directly from clients and counterparties. This requires firms to build up capability and will inevitably take some time to complete, especially where active discussions with clients are needed. A risk-based approach should be taken in prioritising the work.

Ultimately, clients' views on their exposure to climate risk should be explicitly factored into the credit process. In addition, firms should develop their own view on the risks to sense-check and complement clients' views, especially where clients' views are not available.

Key factors that can help determine the risks to a client are their activities (e.g. whether the activities are exposed to climate policies) and a client's asset locations (e.g. whether these locations are exposed to physical climate risks).

We anticipate that obtaining data from counterparties and clients will get easier over time, as increased disclosure requirements come into play and as international reporting standards are developed. Until such time as better information is available, banks should pilot approaches, make assumptions, extrapolate from samples, and use proxies where necessary.



ANSWERED BY THE HKMA:

Q: Could Arthur Yuen share a little bit more on the recent HKMA-IFC alliance and how this can help drive building capacity in the region.

A: The Alliance for Green Commercial Banks is a new global initiative. Starting in Asia, the International Finance Corporation (IFC), in partnership with the HKMA, will work to support financial institutions on their journey to become leading green banks. It will bring together financial institutions, research institutions, and technology providers from across Asia to develop, build, and boost the capacity for green finance and promote climate investments.

Specifically, the Alliance will:

- Promote the development of Green Commercial Banks
- Serve as a peer-to-peer learning platform for banks to acquire knowledge, tools, and business information for their green transition
- Foster member collaboration and grasping of opportunities of green and climate-related investment across emerging markets
- Facilitate dialogue to advance the green finance development.

The HKMA's vision to serve as the hub for green finance among commercial banks in Asia, and the extensive experience of IFC in the field, will drive success of these joined forces in delivering the objectives including capacity building.

Q: For the regulators, from a wider sustainability perspective, are “social” issues being investigated at all?

A: From a wider perspective, sustainability issues include those concerning climate change, environment, and social issues. All these sustainability issues are relevant for banks.

Among these issues, however, climate change is of particular importance for us. Certain characteristics of climate change (such as its far-reaching impacts in terms of breadth and magnitude, irreversibility, and dependency on short-term actions) are distinct from the other broader sustainability issues and require our imminent action. Moreover, the transmission channels and financial risk implications of climate change are more evidenced and prominent as compared with those of other sustainability issues. It is therefore on this basis that the HKMA considers climate change as the initial focus of our actions.

However, this does not imply that the wider sustainability issues can be ignored. In fact, the HKMA expects banks to establish an effective process for managing reputation risks (including those associated with sustainability issues) that is appropriate for the size and complexity of their operations.

Q: Regulatory stress testing is a way to gauge institutions against their peers. Climate change stress testing should be collaborative as the problem is global in nature. How can we make this happen? The track record of regulatory coordination on stress testing is not good (CCAR vs BoE vs EBA). Why should we expect improved consistency of approach for analysis of climate change risks?

A: Compared to conventional regulatory stress testing which has been in place for many years, climate change stress testing is a new area evolving on multiple fronts in terms of methods, techniques, or data. Added to such complexity, the multi-discipline and global nature of climate change creates rooms for regulators to work together.

In fact, collaboration among regulators on climate risks stress testing could help minimize the risk of fragmented approaches and regulatory burden on internationally active banks. It also enhances comparability of results.

Authorities have been collaborating under different international platforms (e.g. Network for Greening the Financial System (NGFS) and Basel Committee on Banking Supervision (BCBS)) in addressing climate-related issues and this paves the way to convergence. In particular, the NGFS published a set of climate scenarios which provides a common reference framework and serves as a useful starting point for supervisors to consider in developing a more consistent approach.



ANSWERED BY THE PRACTITIONERS:

Q: Do you think climate risk needs to be built into business continuity?

A: Yes, as the potential impacts arising from the physical risks of climate change should be an inherent part of any business continuity plan and the operational resilience agenda. The continuity of business (COB) toolkit would apply to any variety of disruptive climate risk scenario events of weather, flood, fire, etc. notably amongst them. It is important that such scenarios are forward looking and informed by the emerging scenario libraries of potential future temperature alignment pathways for physical risks.

Q: Is there a reliable climate risk taxonomy we can refer to in identifying relevant risks for our respective firms?

A: A foundational decision, before even incorporating climate risk into a firm's taxonomy, is the decision as to whether to consider climate risk as a distinct, level one risk within the taxonomy, or whether it is a "transverse" risk impacting the full suite of risks within the firm's pre-existing risk taxonomy on the basis that they will all be impacted by climate risk, transition or physical — to a greater or lesser degree. There is not at this point a single prescriptive industry standard taxonomy of climate risk. However that said rating agencies and large banks appear to have very common definitions of "higher risk" industries with regards to transition risks; and focus portfolio types (mortgages, commercial real estate, vulnerable sovereigns, etc) for both physical and transition risks — which provide a useful reference point in developing institutional risk focused taxonomies.

Q: Measurement is a real problem as there doesn't seem to be a consistent standard for measuring emissions and reduction toward a zero target. What does the panel believe is required to get to a consistent measurement standard like we have for measuring financial value?

A: A high level concerted effort of multinational supervisory and industry groups will be required. Consolidating current multifarious measurement frameworks into common risk assessment relevant industry standards is a critical path priority for all. The recent paper on “Measuring Portfolio Alignment” published on the TCFD Hub in Q4 2020 (<https://www.tcfdhub.org/resource/measuring-portfolio-alignment-assessing-the-position-of-companies-and-portfolios-on-the-path-to-net-zero/>) provides thinking into the processes and insights needed to drive a consistent standard.

Q: Any thoughts on Paris Agreement Capital Transition Assessment (PACTA), Science Based Target initiatives (SBTi), and other financial tools available regarding measuring of the alignment of financial portfolios with climate scenarios?

A: Useful initiatives are hopefully on the way to more aligned, universally recognized common disclosure standards. Each method has its merits and their individual pros and cons, especially when one considers the specific context of the commercial, strategic, and risk management use case. Over time one would hope that there could be closer alignment and potentially a joint methodology incorporating both alignment measurement and warming potential, and observed greenhouse gas reductions, drawing on the strengths of each approach. It is important that there is a move in this direction. Potentially, capital allocators' real world impact through engagement could bring both parties together and lead to a final framework and standard which is even more effective than the individual parts.

Q: The track record on regulatory coordination on stress testing is not good (Comprehensive Capital Analysis and Review vs Bank of England BoE vs European Banking Authority). Why should we expect improved consistency of approach for analysis of climate change risks?

A: To date through NGFS and less formal arrangements regulatory coordination on the broad climate supervisory agenda and core principals has been good, facilitating scalable cross border implementation solutions. That said maintaining a harmonized approach as the agenda progresses into a more granular implementation mode may well be challenging. Common disclosure conventions, voluntary and mandatory, are and will likely remain much more challenging to harmonize as many of these conventions are not the sole prerogative of financial supervisors and their common standard setting bodies.

Q: In terms of building out infrastructure over the long-term, what sort of specific steps are you taking?

A: The key, foundational step is to define how and where climate risk is defined in the firm's strategy and risk taxonomy. This establishes the foundation of the ownership and stewardship of the risk. Once done, this begins to shape the organisational design and operating model. It is one which will need to evolve as the business and risk around climate risk and sustainability matures over the coming years.

Q: What would be the best way to incorporate climate risk into the credit risk assessment of banks?

A: One way to start is by focussing on the high-risk transition portfolios — which are initially more likely to be in the wholesale credit books — and build the data and capabilities from there in a pragmatic incremental manner. Such an approach starts with building a qualitative understanding of the transition profile of these portfolios and as data quality gets better, ultimately building up to a quantitative transition scoring approach to inform decision making. Given the time horizons involved, it will be important to work with customers closely over the transition period, using judgement informed by both the analytics and the qualitative data.

Q: What do you consider to be the greatest challenges when it comes to translating climate risks to financial risks?

A:

1. Data — its different nature, time horizons, availability — both looking forward and historically;
2. Commercial and risk management capabilities to manage the specific and different characteristics of climate change;
3. Culture and mindset — the ability to make decisions and trade-offs that are more complex than otherwise seen previously.

Q: What are the components of climate risk and how are you going to link it with Financial Risks?

A: See the response above about how to define and incorporate climate risk into the risk taxonomy. On the basis that climate risk is defined as a transverse risk, it will impact and be a driver into each of the categories of financial risk within a risk taxonomy (i.e. wholesale credit risk; retail credit risk; market risk; treasury risk).

Q: Have you been able to measure when your loan book will go to neutral zero? What it would take from a bank management perspective? Differences for corporate, SME, mortgages, consumer asset classes?

A: Firms are at the very initial stages, assessing and developing the necessary temperature alignment and warming potential methodologies. Please see the comments on PACTA/SBTi as to some of the important considerations in developing this methodology.

Q: How do you feel about banks making Net Zero announcements without detailed plans to meet them? Is this a problem?

A: By making a public commitment, the banks are making an important first step to an end goal which is known and required — the need to achieve “Net Zero” in order to keep the average temperature rise to 1.5 degrees. In doing so they are setting a mechanism by which they can be held accountable by the market and regulators which is important. Given the urgency of acting over the coming decade on temperature alignment, it is arguably better, and more responsible, to move without having all the full data and methodology worked out given that time is of the essence.

Q: Just wondering if there is actually a lack of data or is there really a lack of knowledge to interpret all the data that is there and use it?

A: Both. Effective climate business and risk management will require enhanced capability and knowledge on both of these fronts.



garp.org

ABOUT GARP | The Global Association of Risk Professionals is a non-partisan, not-for-profit membership organization focused on elevating the practice of risk management. GARP offers role-based risk certification — the Financial Risk Manager (FRM®) and Energy Risk Professional (ERP®) — as well as the Sustainability and Climate Risk (SCR®) Certificate and on-going educational opportunities through Continuing Professional Development. Through the GARP Benchmarking Initiative and GARP Risk Institute, GARP sponsors research in risk management and promotes collaboration among practitioners, academics, and regulators.

Founded in 1996, governed by a Board of Trustees, GARP is headquartered in Jersey City, N.J., with offices in London, Washington, D.C., Beijing, and Hong Kong. Find more information on garp.org or follow GARP on LinkedIn, Facebook, and Twitter.

HEADQUARTERS

111 Town Square Place
14th Floor
Jersey City, New Jersey
07310 USA
+1 (201) 719.7210

LONDON

17 Devonshire Square
4th Floor
London, EC2M 4SQ UK
+44 (0) 20 7397.9630

WASHINGTON, D.C.

1001 19th Street North, #1200
Arlington, Virginia
22209 USA
+1 (703) 420.0920

BEIJING

1205E, Regus Excel Centre
No. 6, Wudinghou Road
Xicheng District,
Beijing 100011, China
+86 (010) 5661.7016

HONG KONG

The Center
99 Queen's Road Central
Office No. 5510
55th Floor
Central, Hong Kong SAR, China
+852 3168.1532