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**LEARNING FROM THE 2021/22
CLIMATE BIENNIAL EXPLORATORY
SCENARIO (CBES) EXERCISE IN THE UK:**

**INSURER CONSULTATION
WORKSHOP
January 2023**

WORKSHOP SUMMARY



Imperial College
London



University of
Reading



The
Alan Turing
Institute



Science and
Technology
Facilities Council



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EXPLORATORY SCENARIO (CBES) EXERCISE**

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Authors:

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INTRODUCTION

This document provides a summary of the discussions at the Insurance workshop on January 16th 2023 for the project: “Learning from the 2021/22 Climate Biennial Exploratory Scenario (CBES) Exercise”. It should be read alongside the survey report and the recommendations report. The workshop was facilitated by the UK Centre for Greening Finance and Investment (CGFI) in collaboration with the Climate Financial Risk Forum (CFRF) and hosted by the Association of British Insurers. All insurer CBES participants were invited to attend (both general insurers and life insurers). The goal of the workshop was to gain feedback on the draft survey findings and recommendations. In particular, it aimed to validate the findings of the survey and ensure the interpretation provided in the survey report was correct. A further goal was to test and augment the recommendations developed by CGFI based on the survey. The workshop was held under Chatham House Rules. As such, no comments are attributed.

This work has been funded by the UKRI Natural Environment Research Council as part of the UK Centre for Greening Finance and Investment (NERC CGFI Grant Number NE/V017756/1).

ATTENDEES

Insurers represented: (in the room): Aviva, AIG, AXA XL, AXA UK, Legal and General

Insurers represented (online): AXA XL, AXA UK, RSA insurance, Phoenix Group, Direct Line, Lloyds of London, M&G, Lloyds Banking Group

ABI team: Rebecca Lea

CGFI team: Nicola Ranger (Oxford), Hannah Bloomfield (Bristol) (*in the room*), Mark Bernhofen (Oxford), Juan Sabuco (Oxford), Jason Lowe (Leeds/UKMO), Len Shaffrey (Reading), Paul Bates (Bristol), Jimena Alvarez (Oxford) (*online*)

CFRF team: Jo Paisley and Maxine Nelson (GARP)

WORKSHOP SUMMARY

Part 1: CBES Findings

On capability building of CBES:

- Agreed that it had a positive impact and it helped raise the awareness of scenario analysis at the senior level.
- Emphasis on bad timing of the exercise, particularly for insurers – it was really bad and wasn't organized because the same teams were working on multiple regulatory deadlines at same time (Solvency 2).
- Emphasis that industry does NOT have the resources for this to be bi-annual as the name suggests. Example that this year the same teams within life insurers (and asset managers) are focussed on delivering the new FCA disclosures required this year for the first time. This is a massive exercise requiring running metrics for hundreds of portfolios.
- Climate scenario modelling is still quite a niche area, and this type of activity cannot be passed over to a general stress testing team.

On impacts at client facing level

- Many counterparties could not share transition plans at the level of granularity and detail that was required for the counterparty analysis. Either this was not available, or this would, for example, require them to disclose information that they have not disclosed externally yet. More time would be needed by counterparties to go through all the internal processes for them to share information.
- It was recommended that the Bank of England consider asking firms specifically to disclose the information needed for CBES ahead of the exercise. Participants also noted additional challenges with transition plans:
 - Even if these transition plans were available, how useful would they be for financial institutions as no guarantee the companies will stick to the plans.
 - Difficulties in assessing what is a credible transition plan. The first step would be getting good disclosures and then using those for planning.
- Participants noted that, given this, this part of the exercise should not be repeated again at this point – high expense for little return - most of the responses received were unusable for the exercise. Participants felt it was unclear what this part of the exercise was trying to achieve and if it was actually necessary for macro-prudential regulation. The results were considered spurious for a specific stock/asset.
- Noted that for general insurers, CBES encouraged them to engage with clients at higher risk
- It was noted (more in the context of other financial regulation) that discussing the results with policy holders is challenging as insurers do not see how the

policy holders can appreciate the complexity of the analysis, data and assumptions behind it.

On the adequacy of the design of the exercise

- Participants reiterated that CBES was the ‘start of a journey’, so definitely can be seen as ‘adequate’ (i.e. the language of the question’) as long as you ‘don’t get too hung up on the numbers’. It was considered adequate for the types of questions that participants felt they should be trying to answer with it, i.e. a broad comparison of the size of physical vs. transition risks (although we can debate the details of both). Findings were thought of as the “start of the journey” and they did not focus too much on the actual outputs of the exercise.
- It was noted that what is meant by scenario analysis has moved on a lot since the CBES exercise. CBES was very good for starting to understand how to begin to grapple with climate risk but the scenarios were too smooth – it doesn’t give a feel for potential shocks. It was noted that PRA19 might have been more useful as this included ‘minsky moments’. CBES assumed smooth, globally coordinated action, which seems unrealistic.
- Noted that the scenarios provided were not a good representation of a shock to the economic system. Physical risks were very much understated globally – “bad but not too bad”. The messages that came out were appropriate for the scenarios run, but participants suggested that the scenarios were not appropriate on physical risk.
- More guidance is needed on how you compare physical and transition risks. One participant noted that the board got quite involved in the interpretation of the CBES results in this respect, and thinking about how to communicate these risks. It was noted that care needs to be taken in comparing transition risk to physical risk as the outcomes are very different – e.g. post transition will be a greener economy with opportunities to enhance revenues, while physical risk is a pure drag on revenues through imposing a cost of doing business.
- It was noted that one of the reasons for the understated outcome of physical risk was because it did not account for indirect impacts such as disruption to supply chains. Physical risk estimates seemed inconsistent with evidence of real changes being seen and the state of the evidence on future climate risk. Created issues in communicating results to Boards.
- Static balance sheet assumption (e.g. that businesses’ continue to operate as normal and that insurers still hold the same assets) meant that the exercise did not support meaningful discussions at Board level. E.g. it meant that businesses with deteriorating credit keep operating and FIs keep holding the asset (noted that the FTSE assumptions seemed a more realistic approach to risk assessment). It meant could not advance the discussions on quantified risks or

scaling with the Board. However, participants noted that moving from a static to a dynamic balance sheet would be incredibly difficult from an insurance side.

- Time issue was key. It was quickly recognised that there would be insufficient time to develop what was needed in the time given. If there were more clearly defined pathways before the exercise it could help with more processes and analysis being done in-house.
- Each scenario was made up of a lot of underlying scenarios and these were not always consistent, which made using them very difficult. For example equity exposure could be calculated based off the FTSE, or from the climate teams results with the static balance sheet, but the results were quite different.
- Counterfactual was not as specified as other scenarios which created challenges.
- It was noted that the construction of assumptions in the scenarios/counterfactual was more important as a driver of uncertainty than the modelling approaches.
- The counterfactual just was not fully specified, and long discussions with the Bank of England about it. This needs to be just as specified as all the other scenarios.
- Participants stressed that for future exercises more thinking about the questions the regulator wants answered will help get the best metrics for the task.

On the usability of results

- What do we mean by usability? There is now greater thinking about what a climate risk would look like. This was a direct impact of the CBES exercise, which is a positive. It moved the conversation on climate risk to another level of maturity. It provided an important input to a wider discussion and qualitative information.
- But how much would participants actually use the numbers from a specified stress test directly? Not much, but the process is very usable.
- It was noted however that it is disingenuous to expect participants to directly use outputs. No regulatory stress test is just picked up and dropped into internal risk management.
- It was also noted that CBES made extremely good progress and no more could have been expected; if you compare for example, to Solvency II, which took years and a lot of investment to get it to the stage it is now. Inevitable this is just a first step.
- Noted that in future, a more specific scenario similar to a standard stress test appropriate.

- Participants discussed the dilemma of the regulatory body. Is there a risk that the regulator could inadvertently slow down the transition by influencing financial strategy – e.g. if it provided scenarios that did not appropriately represent (a) the risks and (b) the likely pathway of action. The reality is that a huge disruption is needed to support the transition, but regulatory action might inhibit this if the scenarios are not right.

General Insurer-specific feedback

- Translation into physical risk models: participants noted that there should be more collaboration between PRA and the vendor models to get the scenarios more easily incorporated into vendor CAT models. There was a bit of an opportunity missed that it was not done this time, but could be incorporated in the future. Lessons from CBES need to feed back into vendor models.
- CBES was useful in that it got participants to look at a lot more perils than they would typically look at and develop broader capabilities. Much more than the traditional US hurricane focus of GIs. Participants were then able to learn across the perils which models were most fit for purpose and develop a more comprehensive cross-peril approach.
- Why is a climate stress test so different to GIST or LIST? In those exercises, participants are given the impacts and then they are just applied, so you do not need to be climate expert. It's simple. But designing the exercise this way would not have delivered the same capability benefits. With CBES, participants needed capability to create the impacts first, so the exercise design was more beneficial in terms of capability building versus GIST/LIST.
- Noted that for GI, engaging counterparties required a different approach that did not fit well with the design of the exercise.

Part 2: Recommendations

Addressing data gaps

- Participants noted that data gaps have been talked about for a number of years and it is still an issue, and not improving quick enough.
- Participants do not have the disclosure of a corporate on their exposures which means to do a risk assessment you have to use proxies and this is not an accurate picture of the risk. Even for a 'simple' metric like historical carbon intensity, there are huge assumptions in the methods of translating the gross numbers down to asset level.
- Participants noted the even greater challenges in data beyond traded assets. International assets are also a huge challenge.

- The Bank of England sought the wisdom of the market, which ended up seeking the wisdom of a few key third party providers. Firms needed support from people that had thought about climate risk before. The time issue meant this third party support was critical.
- Third party actors will need to continue to play a key role. For example, the insurance companies job is not to go out and collect 1000's of bits of data (n.b. life insurers different to banks as they are retail providers). Suppliers doing that and verifying that through a third party makes much more sense for everyone. But it was noted that clearer standards are needed and ways of auditing to ensure data providers are robust.

Enhancing scenario analysis and stress testing capabilities, usability and application

- Participants noted that it is important that this is embedded across firm's capabilities (i.e. not siloed). That is how it will become embedded in the decision-making process. Particularly around the newly developed climate expertise.
- Standard supervision from regulators is now requiring new climate capabilities and this is expected to ensure that the skills are maintained without needing another CBES exercise in the next 5 years. There is enough momentum and planned internal development that it should be self-maintaining without another exercise.
- This should be part of the normal insurance stress test. Should become business as usual.
- It was noted that repeating CBES as it stands would be limited value in the sector. It needs to be looked at through a different lens.
- Having something that articulates what good practice is across multiple dimensions would be useful. Would help firms understand what gaps they have in a coherent way.
- Some participants noted that assuming central banks want to work with the NGFS scenario, there would be advantages in making less adjustments to it in future CBES style exercises to ensure that it could be modelled correctly.

Interpretation of CBES

- One participant noted that the issue with physical risk is that it is happening very far in the future. So applying a discounting approach does not capture the entirety of the risk (e.g. if rates rise, that probably makes the physical risk smaller).
- Physical risks were also unrealistic as given the analysis did not account for management actions. It was considered unlikely FIs would continue to hold a risk if it increased a lot. But the static balance sheet approach meant that the

physical risk was quite conservative. For example, there are conduct risks that are being built up that are not being represented (e.g. conduct risks associated with withdrawing insurance from certain areas).

- Incorporating a dynamic balance sheet might open the door on representing conduct risks (e.g. repricing risk every year then you could put prices up or stop pricing a particularly high risk, transferring the risk onto policy holders. – FloodRe could stop insuring UK buildings, which widens the hap, and then some homes possibly can't get mortgage cover, or need specialist providers to do this).

Improving scenario design and methods to enhance usability of scenario-analysis for risk management and business planning

- Participants noted that the NGFS at the moment is not an adequate standard for these types of analyses.
- NGFS does not provide the data you need to do percentage changes in each peril.
- It was considered important to get a collective scientific and technical working group together going forward to advance practice and scenarios. This would, for example, allow for some consistency to look at impacts across the broader industry.
- Participants considered that there would be benefits in sharing best practices across the industry and coming up for a collective plan to tackle the largest areas of uncertainty.