



Joint Stress Test Exercise with the Prudential Regulatory Authority 2019

Scenario Specification, Guidelines and Instructions

June 2019

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INTRODUCTION

The Bermuda Monetary Authority (“BMA”) and the Prudential Regulatory Authority (“PRA”) will be conducting a joint exercise on natural catastrophe and economic scenarios for Property and Casualty insurers reflecting commitment to transparency, supervisory cooperation and information sharing by both Authorities, in line with the Insurance Core Principles (ICP) of the International Association of Insurance Supervisors (IAIS).

Many London market insurers are exposed to similar risks to those based in Bermuda; furthermore, UK based insurers cede a significant proportion of risks to Bermuda based reinsurers. This joint exercise will allow us to understand the interdependencies between London Market and Bermuda-based reinsurers in more depth.

OBJECTIVES

JOINT STRESS TEST EXERCISE AND COORDINATION OBJECTIVES	
Groups resilience	Test the resilience of insurance insurers operating across UK and Bermuda jurisdictions including at least the UK and Bermuda
Interconnectedness	Enhance our understanding of the interconnectedness between our different jurisdictions, especially from the reinsurance premium and claims flows, in the event of our stress scenarios;
Supervision	Inform and prioritise our supervision of some of the largest insurers we supervise.

SCOPE OF THE EXERCISE FOR BMA REGULATED INSURERS

A sample of nine large Bermuda commercial insurers (“Class 4” and “Class 3B”) with material natural catastrophe business both in the UK and on a global basis have been selected to participate in this joint exercise. The BMA has already informed the nine selected insurers of their participation.

SCENARIOS TO BE TESTED

The scenarios to be tested by Bermuda insurers are Scenarios 1 to 5 as per PRA General Insurance instructions document for the joint scenarios with the Bermuda Monetary Authority which are appended to this document (Enclosure a)). The scenarios are summarized below.

Increasing deterioration in the economic environment

Insurers are requested to assess their Balance Sheet against the following scenarios

Scenario 1: A parallel downward shift in risk free interest rates of 100 bps; a widening in corporate bond spreads dependent on their current credit rating (e.g. 150bps for AAA rated assets); and a fall in other asset values (including equities down 30%, commercial property down 40% and residential property down 30%).

Please ignore any references to matching adjustment (MA) and Solvency II balance sheet and do not perform stress tests for the valuation of pension scheme liabilities.

Please also note the mapping to BSCR ratings on the Credit spread shock (p. 10 of the PRA General Insurance instructions document for the joint scenarios with the Bermuda Monetary Authority):

- For fixed income assets, firms should apply the following stresses to credit spreads. For avoidance of doubt, the credit rating and Credit Quality Step (CQS) referred to in the table below is the pre-stress rating/CQS.

Credit Rating (non-MA fund)	Credit Quality Step (MA fund)	BSCR Rating	Credit Spread increase
		0	0bps
AAA	0	1	150bps
AA	1	2	170bps
A	2	3	200bps
BBB	3	4	300bps
BB and lower and unrated	4+	5+	400bps

- The credit spread increase will apply to all types of bonds that do not qualify as 'sovereign' and does not vary by duration or sector.

Liability shock

The following scenarios are assumed to occur against the backdrop of a deteriorating economic scenario as defined under Scenario 1 (e.g. Scenario 2 should consider the impact of three US hurricanes and a parallel shift to risk free rates of 100 bps):

Scenario 2: A cluster of three US hurricanes making landfall in continental US leading to \$181bn of industry loss in aggregate.

Scenario 3: A severe earthquake of magnitude ~8.0 along the San Andreas fault followed by an aftershock of magnitude ~7, leading to \$103bn of industry loss in aggregate and disruption to supply chains.

Scenario 4: An extremely severe earthquake of magnitude ~ 8.0 with its epicentre close to Tokyo followed by a tsunami, generating circa \$60bn of industry loss in aggregate.

Scenario 5: A large UK windstorm and a large UK flood leading to some £22bn of losses in aggregate to the UK insurance sector.

ACCOUNTING AND REPORTING

Insurers are requested to provide a separate submission, on a Bermuda Economic Balance Sheet (EBS) and Bermuda Enhanced Capital Requirement (ECR) basis.

Insurers are required to provide their EBS and ECR as at 31/12/2018 and to project them to as at 31/12/2019 for only major changes such dividend releases, capital injections or major risk profile changes.

Similarly for each stress, insurers are also required to quantify the impact on capital and surplus as at 31/12/2019. Qualitative (only) information on management actions will be requested.

Where there is likely to be a material change to the ECR post stress, insurers are asked to provide an estimate of the ECR if different to the Base Case. Insurers should make reasonable assumptions e.g. scaling is acceptable where it would not lead to materially different results to a more detailed calculation. Furthermore, changes in risk margin can be approximated.

Insurers should complete all scenarios unless they can demonstrate that, given their specific risk coverage, the impact is immaterial. In this case immateriality is defined as less than 5% of total gross written premium.

Insurers should include a breakdown of all reinsurers where expected recoveries are more than 5% of the total recoverable amounts (gross of collateral).

SUBMISSION TEMPLATE

For each stress scenario, insurers are required to submit a number of outputs that are standard across scenarios within the Excel template provided – the “Joint Stress with the PRA - Template”.

In certain scenarios we ask for additional information that will allow the BMA to assess the calculation and impact of each stress in greater detail.

DEADLINE FOR SUBMISSION

Submission of the completed Excel template is required by **17:00 on Monday 30 September 2019**.

The Excel workbook should be saved ensuring that **Insurer Name** are contained within the file name and the subject of the email. Submissions should be sent to riskanalytics@bma.bm.

GOVERNANCE REQUIREMENTS

On submission, the CEO, CFO or CRO and the principal representative are required to confirm they are satisfied with the submission and that the information provides a reasonable estimate of the capital and surplus and their ECR after each stress scenario.

PRESENTATION OF THE STRESS TEST RESULTS TO THE BMA

The BMA encourages insurers to present their stress test results shortly after the formal submission date to help our understanding of the impact of the stresses and any issues that arose in completing this exercise. This need not contain any additional information, but reflects the value of a two-way dialogue to help understand the thought process and the underlying issues in greater depth.

Individual insurer supervisors will be using the stress test submission as part of their ongoing supervisory reviews and the stress test results will inform the insurer's supervisory risk score.

Insurers should ensure that the quantitative and qualitative information provided is clear and sufficient.

PUBLIC DISCLOSURE

The BMA will not publish any insurer specific information as part of this exercise. Where there is a need to take insurer specific supervisory action, the BMA will do so as part of our normal supervisory engagement with the insurer.

The BMA intends to publish its findings at an aggregate level during Q1 2020, drawing attention to sectoral findings or learnings of interest at a market level.

QUERIES

All queries should be submitted to riskanalytics@bma.bm copying in the insurer's BMA supervisor.

REGULATORY EXCHANGE OF INFORMATION

Formal exchange of information between the BMA and the PRA will be in line with our Memorandum of Understanding (MOU).

Where participating insurers have operations in both the UK and Bermuda, information will be shared in line with that provided under the existing supervisory college arrangements.

Where insurers do not have any operations in the UK, the BMA will only share aggregate information, ensuring that individual insurers are not identifiable.

In support of the objectives outlined above both Authorities expect to share aggregated information such as gross and reinsurance recoverables following each stress, the aggregated impact of investment losses from the economic scenario and additional learnings or observations on insurer feedback to the extent that these were common issues.

USE

This stress test exercise is not being used to set additional capital on insurers by either the PRA or the BMA. Instead, the results from the exercise will inform and advance the supervisory work of the PRA and the BMA. Were one of Authorities to identify any prudential issues of concern for an insurer, this would be followed up as part of its supervision as usual. Where the issue could be common across both jurisdictions, the PRA and BMA could carry out joint investigations, subject to the agreement of the insurer. To the extent the exercise contributes to more focussed regulatory investigations, this would ultimately be less burdensome on our regulated insurers.

MARKET COMMUNICATION

The PRA and BMA will also be coordinating the publications of our key findings from the exercise. Only aggregate results and findings will be published drawing attention to sectoral findings or learnings of interest at a market level. No insurer specific information will be published.

ENCLOSURES

- a) **PRA General insurance instructions document for the joint scenarios with the Bermuda Monetary Authority: available at <https://www.bankofengland.co.uk/prudential-regulation/letter/2019/insurance-stress-test-2019>**
- b) **Joint Stress with the PRA - Template.xls**