Bank of England PRA

MR.01.02 - Market risk sensitivities

General comments

This template should be reported half-yearly where applicable in accordance with SS 7/17.

In this template all monetary amounts are entered in £m and should be reported to the nearer £m.

CELL(S)	ITEM	INSTRUCTIONS
Basic data		
R0010	Legal name of the reporting firm	Legal name of the reporting firm
R0020	Firm Reference Number (FRN)	Firm Reference Number (FRN)
R0030	Date of valuation	Identify the ISO 8601 (yyyy-mm-dd) code of the date identifying the last day of the reporting period.
Data items for base balance sheet and sensitivity tests		
C0010	Assets	Total value of assets as reported on balance sheet
C0020	Best estimate liabilities	Gross best estimate liability
C0030	Risk margin	Risk margin
C0040	TMTP	Transitional Measure on Technical Provisions. This should be recalculated after allowing for each sensitivity and reported as a positive value
C0060	Other liabilities	Other liabilities is a balancing item. C0020+C0030-C0040+C0060=C0070
C0070	Total liabilities	Total value of liabilities as reported on balance sheet
C0080	Excess assets over liabilities	Excess assets over liabilities should be calculated as: Assets less Total liabilities.
C0090	Adjustments to Own Funds	Adjustments to Own Funds should be calculated as: Own Funds after TMTP less Excess assets over liabilities
C0100	Own Funds after TMTP	Own Funds after TMTP
C0110	SCR	Solvency Capital Requirement
C0120	Capital Surplus	Capital surplus should be calculated as: Own Funds after TMTP less SCR.
Base balance sheet and sensitivity tests		
R0070	Base Balance Sheet	Balance sheet as reported at the valuation date
R0080	Sensitivity 1	Equity prices fall by 25%.

<table>
<tr><th>CELL(S)</th><th>ITEM</th><th>INSTRUCTIONS</th></tr>
<tr><td></td><td>– Equity prices fall</td><td></td></tr>
<tr><td>R0090</td><td>Sensitivity 2

– Property prices fall</td><td>Property prices (commercial and residential) fall by 25%.

Please make no adjustment to the stress to allow for any future movements already anticipated in the current balance sheet.

Please include the impact of a fall in property and other financial instruments with underlying property exposure such as social housing loans, and mortgages.

Sensitivity 2 tests the impact of a fall in property and other financial instruments with underlying property exposure (such as social housing loans and mortgages).</td></tr>
<tr><td>R0100</td><td>Sensitivity 3

– Interest rates rise</td><td>Interest rates rise by 100 bps across the term structures of both government bond yields and PRA risk free rates.

Sensitivity 3 tests the impact of a rise in the PRA risk free interest rate only. To facilitate this, the other rates (e.g. government bond yield, corporate bond yield) also rise with this interest rate and hence spreads are unchanged.</td></tr>
<tr><td>R0110</td><td>Sensitivity 4

– Interest rates fall</td><td>Interest rates fall by 100 bps across the term structures of both government bond yields and PRA risk free rates. If necessary, interest rates should be allowed to go negative.

Sensitivity 4 tests the impact of a fall in the PRA risk free interest rate only. To facilitate this, the other rates (e.g. government bond yield, corporate bond yield) also fall with this interest rate and hence spreads are unchanged.</td></tr>
<tr><td>R0120</td><td>Sensitivity 5

– Government bond spreads rise</td><td>All government bond spreads over PRA risk free rates rise by 50 bps; i.e. PRA risk free rates and the yield on other assets are unchanged but Government bond yields rise by a uniform 50 bps across the curve.

Sensitivity 5 is similar to Sensitivity 3 and 4, but government bond yields are assumed to rise whilst the PRA risk free rates are unchanged. Corporate bond yields (and the yield on other assets) are assumed to remain unchanged to ensure the corporate spread with respect to the PRA risk free rate is unchanged.</td></tr>
<tr><td>R0130</td><td>Sensitivity 6

– Credit spreads widen</td><td>Firms should apply the following stresses to each rating for the credit spreads sensitivity.

<table>
<tr><th>Credit Rating</th><th>Credit Quality Step</th><th>Credit Spread increase</th></tr>
<tr><td>AAA</td><td>0</td><td>125 bps</td></tr>
<tr><td>AA</td><td>1</td><td>175 bps</td></tr>
<tr><td>A</td><td>2</td><td>250 bps</td></tr>
<tr><td>BBB</td><td>3</td><td>300 bps</td></tr>
<tr><td>BB and lower</td><td>4+</td><td>400 bps</td></tr>
</table></td></tr>
</table>

CELL(S)	ITEM	INSTRUCTIONS
		and unrated | | This should reflect a uniform widening across the curve for a given credit rating, assuming that Fundamental Spreads are unchanged. Sensitivity 6 involves a widening of credit spreads while keeping the PRA risk free rate and government bond yield unchanged. This sensitivity is intended primarily to capture corporate bond exposures, but results based on other definitions of spread exposure are also acceptable. Firms should explain and provide detail where an alternative stress has been used which represents equal severity to the stress specified. Provide further information that is available, for example, significant supranational exposures which may materially affect the impact of the sensitivity.
R0140	Sensitivity 7 – Asset downgrades	The impact of 20% of assets by market value (both inside and outside the MA portfolio) downgrading from the current Credit Quality Step (CQS) to the next CQS. The downgrade of 20% of assets by market value should apply uniformly across all assets, including sovereign exposures, credit risky assets, and internally restructured assets. Participants should also apply the stress to exposures where the risk is related to the credit rating of a counterparty, e.g. reinsurance counterparties. For example, the stress should be applied assuming that a 20% of each credit risky asset in each credit rating bucket (AAA, AA, A, BBB, BB & B) downgrades by one full rating (i.e. following the downgrade 80% of AAA rated assets remain AAA and 20% move to AA). In the case of reinsurance counterparty exposures, participants should quantify exposure in terms of the amount held as counterparty default adjustment (CDA) in respect of the reinsurance assets. Participants should then take an approach of assuming that specific reinsurance counterparties (including intragroup counterparties) downgrade in descending order of exposure size until the proportion (in terms of the total CDA amount) that downgrade is at least 20% and that the selection is considered unlikely to understate the impact of the requested stress. Participants should consider whether this selection of counterparty exposures is likely to understate the impact of the requested stress compared to other approaches, and if so should propose an alternative, more representative stress (with supporting commentary). Participants should assume that the market value of the bonds is unaffected (i.e. the stress should be a change in the liability value only). Similarly, the calibration of the Fundamental Spreads by sector, rating and term should be assumed to be unchanged.

CELL(S)	ITEM	INSTRUCTIONS
		For assets which are at CQS 6 pre-stress, it should be assumed that the whole asset defaults, with a recovery rate of the current market value. Participants may assume rebalancing actions for the MA portfolio, which are credible and practical to be implemented in a post-stress environment, for the calculation of the technical provisions (TP). Internal model participants should use their existing methods of rebalancing the MA portfolio within the SCR calculation, provided these have not been exhausted by the TP calculation post-stress. They should also provide details of the management actions taken and clear justification of their ability to continue to support the level of MA assumed in stress. Standard formula firms need not rebalance their MA portfolio. Sensitivity 7 involves downgrade of all assets. In the narrative note, please provide a high-level summary of the impact of rebalancing actions for the MA portfolio, which are assumed for the technical provisions calculation.
R0150	Sensitivity 8 – Inflation rise	An increase in the market implied inflation by a uniform 50 bps across the curve. Sensitivity 8 tests the impact of a rise in implied inflation. To facilitate this, the fixed income government bond yield remains unchanged and the real yield for inflation-linked bonds fall. Likewise, the fixed income corporate bond yield remains unchanged and the real yield for inflation-linked corporate bonds fall.
R0160	Sensitivity 9 – GBP exchange rates fall	GBP exchange rates fall by 25% (against all other currencies). The stress should be interpreted as increasing the value of assets held in currencies other than GBP by 33% in GBP terms.
N/A	Narrative note	Please provide a brief description for other liabilities and adjustments to Own Funds in a separate document. Please include an explanation for significant changes in Own Funds and SCR since the previous submission. Please also explain reasons for any significant changes in the sensitivities of the Own Funds and SCR to different stresses since the previous submission. Please provide supplementary information explaining how the impact on any financial instruments with underlying property exposure has been included in the property sensitivity. Please explain in narrative form how approximations (e.g. to estimate changes to the risk margin) have been performed. Please provide any commentary or further explanation, including a narrative description of the following:

<table>
<tr><th>CELL(S)</th><th>ITEM</th><th>INSTRUCTIONS</th></tr>
<tr><td></td><td></td><td>(a) Potential management actions of the form identified in paragraph 3.5 of the PRA Supervisory Statement (SS) 7/17 ‘Solvency II: Data collection of market risk sensitivities’. Please provide the level of stress at which the action is initiated and the estimated beneficial impact on solvency. Please also comment as to whether such management actions could be implemented irrespective of market conditions, or whether financial markets are assumed to function in an orderly way. Firms should consider whether the planned management actions in response to stressed scenarios are realistic, credible, consistent with regulatory expectations, and achievable.

(b) Any material changes to the previously described range of management actions (not of the type identified in paragraph 3.5 of the supervisory statement).</td></tr>
<tr><td>N/A</td><td>Notes</td><td>Firms should not make any changes to their SCR calculation, e.g. take credit for new management actions not assumed in the base case. Firms are not expected to recalibrate their models following the stresses.

The PRA expects the calculation basis of the information to be consistent with Solvency II data reported to the PRA as far as practicable.

Please allow the size of volatility adjustment to change for the best estimate liabilities calculation following the sensitivity (especially for the credit spread sensitivity (sensitivity 6)). When calculating the change in volatility adjustment following the sensitivity, please assume that the reference portfolio remains the same as the reference portfolio as at the valuation date. For example, as at 31 December 2023, following the credit spread sensitivity the increase in VA would be:

<table>
<tr><th></th><th>[A]</th><th>[B]</th><th>[A] x [B]</th></tr>
<tr><td>Composition of the currency representative portfolio of assets other than central government and central banks bonds.</td><td>GBP</td><td>Increase in credit spread (bps)</td><td>Weighted credit spread (bps)</td></tr>
<tr><td>Finan_0</td><td>8%</td><td>125</td><td>10.00</td></tr>
<tr><td>Finan_1</td><td>6%</td><td>175</td><td>10.50</td></tr>
<tr><td>Finan_2</td><td>18%</td><td>250</td><td>45.00</td></tr>
<tr><td>Finan_3</td><td>14%</td><td>300</td><td>42.00</td></tr>
<tr><td>Finan_4</td><td>0%</td><td>400</td><td>0.00</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>CELL(S)</th><th>ITEM</th><th>INSTRUCTIONS</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Finan_5</td><td>0%</td><td>400</td><td>0.00</td></tr>
<tr><td>Finan_6</td><td>0%</td><td>400</td><td>0.00</td></tr>
<tr><td>Nonfinan_0</td><td>6%</td><td>125</td><td>7.50</td></tr>
<tr><td>Nonfinan_1</td><td>4%</td><td>175</td><td>7.00</td></tr>
<tr><td>Nonfinan_2</td><td>22%</td><td>250</td><td>55.00</td></tr>
<tr><td>Nonfinan_3</td><td>21%</td><td>300</td><td>63.00</td></tr>
<tr><td>Nonfinan_4</td><td>1%</td><td>400</td><td>4.00</td></tr>
<tr><td>Nonfinan_5</td><td>0%</td><td>400</td><td>0.00</td></tr>
<tr><td>Nonfinan_6</td><td>0%</td><td>400</td><td>0.00</td></tr>
<tr><td>Total</td><td>100%</td><td>N/A</td><td>244.00</td></tr>
</table>
<table>
<tr><td>Weighted average credit spread</td><td>244.00</td><td>See above table</td></tr>
<tr><td>Currency weights for “other assets”</td><td>30.4%</td><td></td></tr>
<tr><td>Multiplicative factor as set out in Article 77d of the Solvency II Directive</td><td>65%</td><td></td></tr>
<tr><td>Increase in VA (bps)</td><td>48</td><td></td></tr>
</table>
</td></tr>
<tr><td>N/A</td><td>Summary of sensitivities</td><td>Please see the table below.</td></tr>
</table>

Bank of England PRA

Sensitivity	Equity prices	Property prices	PRA risk free rate	Government bond yield	Government bond yield less PRA risk free rate	Corporate bond yield	Credit downgrade	Implied inflation	GBP exchange rate
1 (Equity)	Fall	No change	No change	No change	No change	No change	No change	No change	No change
2 (Property)	No change	Fall	No change	No change	No change	No change	No change	No change	No change
3 (IR up)	No change	No change	Rise	Rise	No change	Rise	No change	No change	No change
4 (IR down)	No change	No change	Fall	Fall	No change	Fall	No change	No change	No change
5 (GSS)	No change	No change	No change	Rise	Rise	No change	No change	No change	No change
6 (Credit Spread)	No change	No change	No change	No change	No change	Rise	No change	No change	No change
7 (Downgrade)	No change	No change	No change	No change	No change	No change	Downgrade of bonds	No change	No change
8 (Implied inflation)	No change	No change	No change	No change to fixed rate bonds Real yield for inflation-linked bonds falls.	No change to fixed rate bonds Real spread for inflation-linked bonds goes falls.	No change to fixed rate bonds Real yield for inflation-linked bonds falls.	No change	Rise	No change
9 (FX)	No change	No change	No change	No change	No change	No change	No change	No change	Fall