

- c) For any fixed income instruments for which a credit rating is not available from any of the rating agencies named in step (a) or step (b) (as per the insurer's selection), the insurer may elect to either leave the assets as unrated (i.e. BSCR rating 8) or obtain the BSCR rating from the National Association of Insurance Commissioners (NAIC) Securities Valuation Office (SVO) rating.

C2.3j The table below contains, for each credit rating agency, the rating categories for which their ratings are allowed for BSCR purposes (marked with 'X'). Additionally, the NAIC SVO ratings may be applied for otherwise unrated assets in accordance with the previous paragraph.

Credit Rating Agency	Principal Office	Financial institutions, brokers and dealers	Insurance companies	Corporate issuers	Issuers of asset-backed securities	Government securities, municipal securities, foreign government securities
Moody's Investor's Service*	U.S.	X	X	X	X	X
Standard and Poor's*	U.S.	X	X	X	X	X
Fitch Ratings*	U.S.	X	X	X	X	X
Dominion Bond Rating Service*	U.S.	X	X	X	X	X
A.M. Best Company*	U.S.		X	X	X	
Kroll Bond Rating Agency*	U.S.	X	X	X	X	X
Egan Jones Rating Company*	U.S.	X	X	X		
Japan Credit Rating Agency*	Japan	X	X	X		X

*) As determined by the SEC.

C2.3k The mapping of credit ratings to BSCR ratings are:

BSCR Rating	Standard & Poor's	Moody's	AM Best	Fitch
1	AAA	Aaa	aaa	AAA
2	AA+ to AA-	Aa1 to Aa3	aa+ to aa-	AA+ to AA-
3	A+ to A-	A1 to A3	a+ to a-	A+ to A-
4	BBB+ to BBB-	Baa1 to Baa3	bbb+ to bbb-	BBB+ to BBB-
5	BB+ to BB-	Ba1 to Ba3	bb+ to bb-	BB+ to BB-
6	B+ to B-	B1 to B3	b+ to b-	B+ to B-
7	CCC+ to CCC-	Caa1 to Caa3	ccc+ to ccc-	CCC+ to CCC-
8	Below CCC-	Below Caa3	Below ccc-	Below CCC-

BSCR Rating	KBRA	DBRS	Egan-Jones	Japan Credit Rating Agency
-------------	------	------	------------	----------------------------

1	AAA	AAA	AAA	AAA
2	AA+ to AA-	AA (High) to AA (Low)	AA+ to AA-	AA+ to AA-
3	A+ to A-	A (High) to A (Low)	A+ to A-	A+ to A-
4	BBB+ to BBB-	BBB (High) to BBB (Low)	BBB+ to BBB-	BBB+ to BBB-
5	BB+ to BB-	BB (High) to BB (Low)	BB+ to BB-	BB+ to BB-
6	B+ to B-	B (High) to B (Low)	B+ to B-	B+ to B-
7	CCC+ to CCC-	CCC (High) to CCC (Low)	CCC+ to CCC-	CCC+ to CCC-
8	Below CCC-	Below CCC (Low)	Below CCC-	Below CCC-

BSCR Rating	NAIC SVO
1	-
2	-
3	1
4	2
5	3
6	4
7	5
8	6

- C2.31 A BSCR rating of 0 (not included above) has been provided for certain high-quality fixed-income investments, specifically sovereign bonds and bond mutual funds.

Additional Guidance

Figures are to be reported in thousand units ('000s)

- C2.ii. Although the insurer does not need to prepare its financial statements in thousands units, the Authority requires insurers to report its statutory financial statements and economic balance sheet in thousands as this impacts the capital charges calculated in the BSCR model. The insurer may attach its Statutory Financial Return under "Other Attachments" to provide the BMA with a more accurate financial position

Applying a BSCR Rating to unquoted internally rated investments

- C2.iii. Insurers that have developed an internal rating for unquoted investments shall apply a BSCR rating of 8. Nevertheless, if an insurer would like to request permission to use an equivalent scale of these investments in their BSCR filing, the insurer shall request such permission in writing to the BMA and include details on the internal rating assessment and a proposed equivalent scale to the BSCR Rating scale. Only upon approval shall the insurer reclassify an unquoted investment from BSCR Rating 8.

Government National Mortgage Association, Federal National Mortgage Association and Federal Home Loan Mortgage Corporation are not eligible for BSCR Rating 0

D.SUMMARY

D1. FEATURES – BSCR ON CURRENT BASIS

Background

- D1.1 The Summary exhibit has seven key features: Required Capital and Surplus, Available Statutory Capital and Surplus, MSM, ECR and TCL, Ratios, Solvency Capital Distribution chart and Regulatory Action Level graph. Each feature is described below. At the bottom of the page the BSCR formula for combining the various risk capital charges is displayed. The only financial data input into the Summary exhibit is the BMA-approved Capital Contribution of the insurer.

Required Capital and Surplus

- D1.2 The BSCR is determined according to the following formula:

$$\begin{aligned}
 BSCR = & \sqrt{C_{fi}^2 + C_{eq}^2 + C_{LTint}^2 + C_{Curr}^2 + C_{Conc}^2 + C_{LTcred}^2 + (C_{LTmort} + C_{LTsl} + C_{LTTr})^2 + C_{LTmorb}^2} \\
 & \text{cont'd } \sqrt{C_{LTlong}^2 - .5 \times (C_{LTmort} + C_{LTsl} + C_{LTTr}) \times C_{LTlong} + C_{LTVa}^2 + C_{LTOther}^2 + C_{op} + C_{adj}} \\
 & + \left[BSCR_{Corr} - \left(\sqrt{C_{fi}^2 + C_{eq}^2 + C_{LTint}^2 + C_{Curr}^2 + C_{Conc}^2 + C_{LTcred}^2 + (C_{LTmort} + C_{LTsl} + C_{LTTr})^2 + C_{LTmorb}^2} \right. \right. \\
 & \left. \left. \text{cont'd } \sqrt{C_{LTlong}^2 - .5 \times (C_{LTmort} + C_{LTsl} + C_{LTTr}) \times C_{LTlong} + C_{LTVa}^2 + C_{LTOther}^2 + C_{op} + C_{adj}} \right) \right] \\
 & \times \text{TransitionalFactor}
 \end{aligned}$$

Where:

C_{fi} = capital charge in respect of fixed income investment risk;

C_{eq} = capital charge in respect of equity investment risk capital;

C_{LTint} = capital charge in respect of interest rate and liquidity risk;

C_{curr} = capital charge in respect of currency risk;

C_{conc} = capital charge in respect of concentration risk;

C_{LTcred} = capital charge in respect of credit risk capital;

C_{LTmort} = capital charge in respect of long-term insurance risk – mortality;

C_{LTsl} = capital charge in respect of long-term insurance risk – stop loss;

C_{LTTr} = capital charge in respect of long-term insurance risk – riders;

C_{LTmorb} = capital charge in respect of long-term insurance risk – morbidity and disability;

D2. FIXED INCOME INVESTMENT RISK

Background

- D2.1 There are various categories of assets comprising of bonds, loans and other miscellaneous investments that are used to determine the Fixed Income Investment Risk capital charge.
- D2.2 Where applicable, the amounts must reconcile to the appropriate line(s) of the insurer's Form 4 EBS or to the schedules prescribed by or under the Rules for the relevant year.

Fixed Income Investment Risk Capital Charge

- D2.3 The fixed income investment risk charge calculation can be summarised by the following formula:

$$C_{fi} = \sum_i \chi_i \times Flastclass_i \times \mu_r, \quad \text{where:}$$

i = ranges over the classes set out below;

χ_i = BMA supplied asset class capital charge factor for type of fixed income asset class i ;

$Flastclass_i$ = value of investment in fixed income asset class i and

μ_r = additional diversification adjustment factor applied to cash and cash equivalent balances, or 1 for other asset classes.

Items

a) Corporate and Sovereign Bonds

Line Item		Statement Source – The Rules
1	BSCR rating 0	Based on Schedule II EBS and IIA EBS, line 1, column (1).
2	BSCR rating 1	Based on Schedule II EBS and IIA EBS, line 2, column (1).
3	BSCR rating 2	Based on Schedule II EBS and IIA EBS, line 3, column (1).
4	BSCR rating 3	Based on Schedule II EBS and IIA EBS, line 4, column (1).
5	BSCR rating 4	Based on Schedule II EBS and IIA EBS, line 5, column (1).
6	BSCR rating 5	Based on Schedule II EBS and IIA EBS, line 6, column (1).
7	BSCR rating 6	Based on Schedule II EBS and IIA EBS, line 7, column (1).
8	BSCR rating 7	Based on Schedule II EBS and IIA EBS, line 8, column (1).
9	BSCR rating 8	Based on Schedule II EBS and IIA EBS, line 9, column (1).

b) Residential Mortgage-Backed Securities