

C. Solvency Margin Ratio

1. Solvency Margin Ratio

Since the fiscal year ending in March 1998, life insurers in Japan have been disclosing their solvency margin ratio. It is calculated as follows:

$$\text{Solvency Margin Ratio (\%)} = \frac{\text{Total Amount of Solvency Margin}^a}{\text{Sum Total of Risks}^b \times \frac{1}{2}} \times 100$$

^a The "Total Amount of Solvency Margin" (numerator) is the total of the following:

= Total Capital + Price Fluctuation Reserve + Contingency Reserve + General Bad Debt Reserve + 90% of Variance of the Estimate of Other Securities* + 85% of Unrealized Gain or Loss on Real Estate* + Debt Capital Instruments + Deductible Items, and others.

* If these values are negative, 100% of the value is applied instead of 90% or 85%.

^b The "Sum Total of Risks" (denominator) is calculated as follows:

$$= \sqrt{R_1^2 + (R_2 + R_3 + R_7)^2} + R_4$$

The above "R"s represent the following risks respectively:

R₁: Underwriting Risk – Risk of massive insurance payouts following a disaster or catastrophe.

R₂: Assumed Interest Rate Risk – Risk that investment return falls below the assumed interest rate.

R₃: Asset Management Risk – Risk of a drastic devaluation of assets because of a crash in stock prices or sharp fluctuation in the currency market, and risk of a sharp increase in irrecoverable loans due to failures of borrowing companies.

R₄: Business Management Risk – Business risk in excess of normal expectations.

R₇: Minimum Guarantee Risk – Risk related to the minimum guarantee for benefits of variable insurance and variable annuity products.

2. Early Warning Measures

Early warning measures were introduced by the FSA for the purpose of ensuring appropriate business operation of life insurers and protecting policyholders. The following is the outline of the measures.

Category	Solvency Margin Ratio	Directive
None	200% and over	None
Category 1	100% to less than 200%	Submission and implementation of a business improvement plan
Category 2	0% to less than 100%	a. Submission and implementation of a plan for adequate solvency of insurers b. Prohibition or limitation of dividends c. Prohibition or limitation of policy dividends or distribution of surplus to policyholders d. Change in calculation method of premium for policies to be newly underwritten e. Prohibition or limitation of directors' bonuses, limitation of other operating costs, etc.
Category 3	Less than 0%	Partial or total suspension of operation for a limited period

- Even if the solvency margin ratio is less than 0%, a company may be classified as category 2 if real net assets (= assets - liabilities - price fluctuation reserve - contingency reserve, etc.) are positive.

- Even if the solvency margin ratio exceeds 0%, a company may be classified as category 3 if real net assets are negative.