



AMERICAN ACADEMY *of* ACTUARIES

March 29, 2004

Mr. Stuart Wason
Chairperson
Insurer Solvency Assessment Working Party
International Actuarial Association
360 Albert
Ottawa, Ontario
Canada

Dear Mr. Wason:

The American Academy of Actuaries' Risk Management and Solvency Committee previously commented on the International Actuarial Association's (IAA) Insurer Solvency Assessment Working Party's (ISAWG) report entitled "A Global Framework for Insurer Solvency Assessment." We again thank the ISAWG for that opportunity. To augment the views of our March 25 letter, we would like to offer the following chapter-specific comments for your consideration:

Chapter 2: Executive Summary

1. Perhaps short-term solvency and liquidity should be addressed within the executive summary.
2. New business is excluded from consideration when valuing risks, without explanation (Paragraph 2.18.) We believe new business should be considered if, and only if, by doing so would increase a company's capital solvency needs.

Chapter 3: Capital Requirements

1. We recommend "target capital (TC)" (Paragraph 3.4) be changed to "target regulatory capital (TC)," similar to the notation in Paragraph 3.6. The current phrase might be interpreted to suggest that the purpose of the paper is to determine a company's capital needs rather than to establish a threshold point whereby regulators should scrutinize the company to determine if it is weakly capitalized. Then, the absolute minimum capital (MC) is the "final threshold requiring maximum supervisory measures."
2. We support lower capital requirements for participating business with significant current dividends. We also strongly prefer rewording Paragraphs 3.44 and 3.45 to include the basic restrictions that can exist for reflecting adverse experience while eliminating the newly created concept of "policyholders' reasonable expectations" that could create legal problems in the US.

Chapter 4: Framework for Solvency Assessment

1. For U.S. property and casualty insurers, the suggestions regarding confidence levels for solvency measures (Paragraph 4.28) present several issues. First, in the United States, securities regulators and auditors are increasingly challenging conservative valuations used in financial statements.

Second, in the case of general insurance, loss reserves, which constitute the largest liability on most general insurers balance sheet, are not conservatively stated, except to the extent that they are not generally discounted. Third, it is not clear that loss distributions are well enough known to reliably state reserve level at the 90% or higher confidence level. Finally, even assuming that these levels could be reliably measured, given what is known about the variance and potential inaccuracy of general insurance loss distributions, it is unlikely that the U.S. industry could afford to maintain capital levels to support reserves at confidence levels greater than 90%.

2. Assuming that a “total balance sheet requirement” is specifically defined such as a 90 CTE result, or 99th percentile then solvency assessment is “relatively independent of the accounting system”. If this is not the case, the total balance sheet requirement may vary from country to country and company to company.
3. Paragraph 4.11 recognizes that the quality of assets available in a given country may vary. This section of the paper does not, however, address any issues regarding the availability of capital and the intensity of demand for available capital varying by country.

Chapter 5: Insurer Risks

1. We do not agree with the assignment of risks in this table (Paragraph 5.27): a) All risks are assigned to invested assets and liabilities. In the U.S., some of these risks are not borne by the insurance company, but rather by the policyholder. We think the framework should concentrate on the risks borne by the company. b) The foreign exchange risk included in the market risk/insurance contract box is insignificant for U.S. liabilities. c) The table suggests that credit risk is not applicable to insurance contracts which suggests that there is no credit risk associated with the embedded options of insurance liabilities. If a company hedges those options with a third party, there is counterpart credit risk. Health insurers may have a counterpart credit risk with some health care providers.”
2. Operational risk has been defined to exclude strategic, reputational and systemic risks with no explanation (Paragraph 5.32.) We believe these risks should be included in Pillars II and III.

Chapter 6: Standardized Solvency Assessment

1. In general, we were confused with the organization of this chapter. Our interpretation of the approach was that the standardized assessment covered the calculation of minimum capital for Pillar I. We assume that some of the more sophisticated methodologies discussed within this chapter are appropriate, and only practical, for a Pillar II calculation or for weakly capitalized companies under Pillar I. We suggest a clearer distinction of methodologies between Pillar I (jurisdiction-wide minimum capital) and Pillar II (company specific minimum capital.)
2. There is significant discussion devoted to mortality risk within Section 6.3. For U.S. life insurers, mortality risk is relatively stable and can be one of the smallest risks assumed. This risk is only significant within certain lines of business or for certain insurers, such as writers of super-select term insurance.
3. Methodologies for counting claims for non-life insurance vary from insurer to insurer. Claims may be counted by a claim or a claimant basis or by coverage within a LOB, and reinsurance assumed or ceded changes counts and/or severity. This would seem to indicate that using industry factors for claim counts might be less than ideal. The data used in the calculations of expected losses has to be verifiable and credible.
4. The risk associated with changes in the overall economy appears to be missing from Section 6.5. Claim levels, incidence and termination rates, are impacted by changes in inflation and unemployment.

5. We are not sure that we agree with the logic of including settlement risk (or bid/ask risk) as a risk for which minimum capital must be calculated. This risk seems immaterial, and not a risk that would have any bearing on a company's solvency position.
6. The quantification of minimum capital for credit risk and market risk is described in Section 6.6 as being related to the level of assets. We are unclear whether the report refers to the credit risk associated with the assets backing liabilities, assets backing liabilities plus minimum capital, or all insurer assets.
7. The delineation of market risk (Section 6.7) is confusing for U.S. life insurers. Specifically, the ALM risk can be interpreted to include most of the other risks described. For interest sensitive liabilities, credit and market risk can be significant. For non-interest sensitive liabilities, credit and market risk can affect the presentation of accounting results, but have little bearing on economic risks. The paper seems to suggest that a set level of risk is assumed when a product is priced and any experience deviations around that level require capital. With interest sensitive liabilities, the interaction of the assets and liabilities is an inherent part of managing capital and financial strength.
8. The distinction between Type A and Type B risks in this section appears to complicate the calculation, rather than simplifying the calculation.
9. If minimum capital is to evolve beyond a factor times an exposure amount, as is the approach with U.S. NAIC, we do not see how anything short of modeling integrated asset and liability cash flows will suffice to capture the credit and market risks. The approach suggested dealing with option adjusted duration calculation is fraught with significant difficulty. OADs are difficult to interpret for many U.S. life insurance products. Calculating capital based on OADs would likely not produce an appropriate answer. Similarly, using a bucketed maturity approach has complexities that would also produce unacceptable results.
10. In paragraph 6.12 the WP arbitrarily assigns an operational risk capital requirement in the range of 10-20% of the otherwise determined capital requirements. We believe this number may be too high for insurance companies.
11. We are confused by the variables identified within Paragraph 6.15 and 6.16. $C(j)$ within 6.15 appears to represent the total balance sheet requirement (reserves plus any capital), while in 6.16, $c(j)$ appears to represent only the capital portion. If reserves are equal to $m(j)$, the capital requirement should be equal to $m(j)k(j)v(j)$.
12. Paragraphs 6.27 and 6.28 should be moved after Paragraph 6.29. In effect, you are illustrating the use of the Poisson distribution to estimate mortality volatility.

Chapter 7: Advanced Solvency Assessment

1. We believe the discussion of risk pass-through products (Section 7.3.2) belongs in Chapter 6 in the calculation of market risk. Given the prevalence of risk pass-through products in the US, we don't think the recognition of risks associated with these products can be relegated to the calculation of company specific Pillar II capital.
2. Standardized versus advanced: Could have included an alternative practical U.S. approach where a general standardized formula identifies those companies that are potentially weakly capitalized and they, and only they, must do modeling -- perhaps extensively for the regulators. All other modeling and capital efforts are the responsibility of the individual company.
3. Model consistency: Paper should suggest criteria to provide meaningful comparison of model results between two companies.

Chapter 8: Reinsurance

1. In a strictly theoretical context, the statement in Paragraph 8.7 "Note that reinsurance protection is normally at the price of a reduction in the expected earnings of the cedant" is accurate. However, cycles in reinsurance rates swing significantly, as does profitability. Reinsurance pricing decisions are more a function of competition, desire to grow and the cost of capital, rather than a calculation of "the price of a reduction..."
2. The statement "Reinsurance can therefore be a useful alternative for (solvency) capital" in Paragraph 8.17 could be expanded to say this depends on the financial strength of the reinsurer as indicated by external ratings and RBC scores.

Again, we appreciate the opportunity to participate in the review of the IAA's report. If you have any questions or would like additional rationale regarding our comments, please feel free to contact me or Ethan Sonnichsen, the Academy's policy analyst for risk management and financial reporting, at (202) 785-7866. We look forward to continued dialogue on this very important issue.

Sincerely,



James F. Reiskyt
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