



AMERICAN ACADEMY *of* ACTUARIES

**Report on Total Adjusted Capital Adjustment for
Modified Coinsurance (Modco) Reinsurance**

**Presented by the American Academy of Actuaries' Life Capital Adequacy
Subcommittee to the National Association of Insurance Commissioners' Life Risk-
Based Capital Working Group**

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Total Adjusted Capital Adjustment for Modified Coinsurance (Modco) Reinsurance

Recommendation

In the calculation of Total Adjusted Capital (TAC), 50 percent of the liability for policyholder dividends is included in capital. It is recommended that the dividends used in this calculation are to be reduced/increased to the extent that liability for policyholder dividends is ceded/assumed under modified coinsurance agreements. The reduction/increase is limited to the amount of the dividend liability on which Modco interest is credited to the reinsurer.

Modified Coinsurance Defined

Under Modco, the significant risks of the block of business to be reinsured are transferred to the reinsurer, while the insurer maintains control and primary responsibility for the assets and liabilities of the block. This is accomplished by designating in the contract the transfer of the net policy liabilities to the assuming entity and an immediate transfer back, to the extent of the Modco deposit. (For more background see Life, Health & Annuity Reinsurance by John E. Tiller, Jr., FSA and Denise Fagerberg Tiller, FSA.)

Modified Coinsurance and the NAIC Life RBC Formula

Beginning in 1999, the Life Risk-Based Capital (RBC) formula was modified to recognize the risk transfer that accompanied Modco transactions. Specifically, the formula was amended to reduce a ceding company's C-1, C-2, and C-3a for the appropriate amount of risk transferred to the reinsurer, and to increase an assuming company's C-1, C-2, and C-3a by similar amounts. Since the ceding company maintains control of all of the assets and liabilities under these agreements, the ceding company needs to provide the assuming company with the appropriate detail for the assuming company to complete its RBC calculation correctly.

The present RBC formula appears to assess the Modco risk appropriately. However, it does not make an adjustment to TAC to reflect the possible transfer of the dividend liability.

Liability for Policyholder Dividends as an Element of TAC

Since the introduction of the Life RBC formula in 1992, 50 percent of the liability for policyholder dividends has been an element of TAC. Rationale for this treatment can be found in the November 27, 1991 Report of the Industry Advisory Committee to the Life Risk Based Capital Working Group:

“It is widely recognized that dividends provide a general cushion against potentially adverse future experience. To reflect this cushion, the Committee recommends that 50% of the dividend liability be included in Total Adjusted Capital. The 50% factor can be supported by the fact that, on participating policies, the insurer records a full liability on December 31 for all dividends to be paid the following calendar year. No equivalent liability is required for other products, so an adjustment is deemed appropriate. However, in recommending the 50% factor, the Committee is not suggesting that 50% of the dividend liability is truly surplus nor that annual statement accounting should be changed to reduce the dividend liability by half.”

Sources of Funds for Policyholder Dividends

Funds available to be declared as dividends develop from experience more favorable than guaranteed. The experience factors typically include investment, mortality, and expense elements. Thus, there is ordinarily a very close tie between performance of these risk factors and dividend scales.

Implications of the Current Approach and Recommended Solutions

Earlier, we observed that the Life RBC formula properly reflects the risk transfer inherent in Modco reinsurance agreements, but makes no adjustment to TAC as a result of the agreement. We will now consider the RBC impact for a monoline life insurance company that implements a 100 percent Modco transaction. Its RBC amount will be substantially reduced, as most of the risks in its book will be transferred to the modco reinsurer. Its TAC will continue to be calculated in the same manner as before. Our monoline company not only benefits from the dramatic reduction of C-1, C-2, and C-3a, but it continues to enjoy substantially unchanged TAC, even though the liability for policyholder dividends is generally included in the Modco reinsurance. This result seems to provide the monoline company with a double benefit from the reinsurance--a reduction in the RBC amount, while maintaining TAC credit. Since the policyholder dividend liability is not generally available to mitigate any other risk issues, it seems appropriate to scale back the ceding company's credit for policyholder dividends to the portion not ceded under the Modco reinsurance agreement. Such a change will bring risk and TAC measures more into line for these transactions and is easy to implement, given that the portion of the dividend liability included as a modco reserve is now identified on the Liability page of the statement. Note, that this recommendation does not alter Annual Statement Instructions; it only impacts the Life RBC calculation.

We will also consider this same situation from the standpoint of the Modco reinsurer. The reinsurer has agreed to assume the investment, mortality, expense, and dividend risks on this book of business. We have already recognized that dividends provide a cushion against adverse experience, yet the Modco reinsurer does not currently receive TAC credit for the portion of the dividend liability it has agreed to assume. Creation of a TAC credit for the reinsurer, identical to that removed from the ceding company, would serve to bring the risk and capital calculations back in line for both groups of companies. It is easy to implement as explained earlier and, again, does not alter Annual Statement Instructions; it only impacts Life RBC. Finally, it may have the impact of keeping more of these transactions onshore and fully subject to U.S. regulation and review, to the extent that risk and capital measures would be better aligned for Modco reinsurers.