



# AMERICAN ACADEMY *of* ACTUARIES

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## REINSURANCE RESERVE CREDIT

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### Introduction

This practice note was prepared by a work group organized by the Life Valuation Subcommittee of the American Academy of Actuaries (Academy). The work group was charged with developing a description of some of the current practices that could be used by actuaries in the United States regarding reinsurance reserve credit.

The practice note represents a description of practices believed by the work group to be commonly employed by actuaries in the United States in the year 2004. The purpose of the practice note is to assist actuaries in the determination of reinsurance reserve credit that may be taken on financial statements. However, no representation of completeness is made; other approaches may also be in common use. Events occurring subsequent to the date of publication of this Practice Note may make the practices described herein irrelevant or inappropriate. It should be recognized that the information contained in the practice note provides guidance, but is not a definitive statement as to what constitutes generally accepted practice in this area. This practice note has not been promulgated by the Actuarial Standards Board, nor is it binding on any actuary.

The Academy welcomes your comments and suggestions for additional questions to be addressed by this practice note. Please address all communications to Amanda Yanek, Life Policy Analyst at [yanek@actuary.org](mailto:yanek@actuary.org).

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This practice note is divided into three sections:

- Section A: General Issues Regarding Reinsurance Reserve Credit
- Section B: Reinsurance Reserve Credit Issues Relating to the Valuation of Life Insurance Policies Model Regulation
- Section C: Reinsurance Reserve Credit Issues Relating to Asset Adequacy Analysis

## **Section A: General Issues Regarding Reinsurance Reserve Credit**

### ***Q1. What is required to receive proper reserve credit for reinsurance?***

**A1.** In general, if a company wishes to take statutory reserve credit for reinsurance agreements, then (i) the reinsurance agreement should satisfy risk transfer regulations and (ii) the reserve credit should be adequately secured as detailed under applicable laws, regulations, and standards. See Q2 for applicable laws, regulations, and standards regarding risk transfer and credit for reinsurance.

In practice, there are four general methods to secure statutory credit:

- i) The reinsurer is deemed to be an “authorized” reinsurer in the state in which a ceding company desires statutory credit;
- ii) If the reinsurer is not authorized, assets equal to the reserve credit claimed are either withheld by the ceding company, or if transferred to the reinsurer, are held by that reinsurer in a trust that meets all applicable regulations regarding reserve credit trusts;
- iii) The reinsurer provides a Letter of Credit (LOC) meeting all of the requirements of the Credit for Reinsurance Regulation, as discussed in Q2, and in an amount at least as great as the reserve credit claimed;
- iv) Any other method or means acceptable to the ceding company’s applicable regulatory authorities.

Note that there is nothing inherently wrong or unlawful if a reinsurance agreement fails to satisfy the above two requirements. Failure to satisfy the above requirements does not negate the existence of the agreement. The result of failing these requirements might be that the company would not receive the statutory credit.

### ***Q2. What regulations, laws, Actuarial Standards of Practice (ASOPs), etc. regarding credit for reinsurance would the actuary normally take into account?***

**A2.** Most states craft their reinsurance regulations after two model regulations. These model regulations are the “Life and Health Reinsurance Agreements Model Regulation” (commonly known as the “Model Regulation”) and the “Credit for Reinsurance Model Regulation” (better known as the “Credit for Reinsurance Regulation”). There is some variation among states, but most states have enacted these agreements as drafted, or they follow the rules as outlined in the Accounting Practices and Procedures Manual (the Manual), published by the National Association of Insurance Commissioners (NAIC).

The Manual incorporates *Statement of Statutory Accounting Principles No. 61* (SSAP 61). Paragraphs 17 through 20 of SSAP 61 discuss transfer of risk within reinsurance agreements. The Model Regulation is incorporated as Appendix A-791 of SSAP 61. Appendix A-791 also incorporates in question and answer format, certain clarifying

questions. These questions and answers provide additional guidance to regulatory authorities in interpreting aspects of the Model Regulation.

Both yearly renewable term (YRT) and certain non-proportional agreements, such as stop loss and catastrophic, are exempt from the Model Regulation and Appendix A-791. However, the Manual includes some language that provides guidance as to the definition of YRT agreements as defined by the Model Regulation. The Manual also adds some clarification on non-proportional agreements.

SSAP 61 also incorporates Appendix A-785, which is modeled after the Credit for Reinsurance Regulation. The Credit for Reinsurance Regulation provides the rules concerning securing statutory credit, discussing reinsurance with authorized reinsurers, reserve credit trusts, and letters of credit.

The Valuation of Life Insurance Policies Model Regulation (Regulation XXX, Appendix A-830) specifically addresses the definition of YRT reinsurance and limitations on reserve credit. The actuary may wish to refer to Section B of this practice note for clarifying discussion of these issues.

Lastly, Actuarial Standard of Practice 11 (ASOP 11) has been developed to provide guidance with respect to the actuary's professional work relating to financial statements containing material reinsurance transactions involving life insurance (including annuities) or health insurance risks.

***Q3. Is a company required to have a signed reinsurance agreement in place to take statutory credit?***

**A3.** Section 5 of the Model Regulation states that a binding letter of intent will often suffice for the period in which the reinsurance agreement is entered into. To satisfy the Model Regulation, the binding letter of intent should state clearly the intentions of the parties, and should state that a reinsurance agreement will be completed within a certain period of time after the signing of the letter of intent, not exceeding 90 days. Some actuaries interpret this to imply that failure to enter into a reinsurance agreement within the timeline outlined in the letter of intent may jeopardize a company's ability to take statutory credit for the agreement in future periods.

***Q4. What is "mirror reserving"? My reinsurer's state of domicile is different than my company's. Does that reinsurer have to establish reserves that mirror my reserves?***

**A4.** Though reserving regulations attempt to create consistency among states, at any given time there will be different reserve requirements among certain states. Some actuaries believe that if a company enters into a reinsurance agreement with a reinsurer that is domiciled in a state with less stringent reserve requirements, then the reinsurer can establish lower reserves. This could create a situation where the ceding company would be allowed to take a larger reserve credit than the reserve that is being established by the reinsurer for the same covered risks.

To avoid such a situation, certain states require the ceding company not to reduce its reserves by an amount greater than that established by the reinsurer. Often, this forces the ceding company to either negotiate with its reinsurer that the reinsurer hold the higher reserve, or to take less of a reserve credit than it could justify under its own state's reserve regulations.

Some actuaries believe that unless the ceding company negotiates with its reinsurer that the reinsurer will hold mirror reserves, the reinsurer is under no obligation to hold the higher reserve. If the reinsurer agrees to hold the higher reserve, the ceding company will be able to take the larger reserve credit, but the cost of the reinsurance agreement may increase since the reinsurer will be holding higher reserves.

In order to ensure compliance with these mirror reserving requirements, some ceding companies communicate with their reinsurers prior to the end of the reporting period to agree on the reserve credit to be reported.

***Q5. My reinsurer calculates its reserves separately, using the same basis as my company does for its reserve credit. Would this satisfy the mirror reserving requirement?***

**A5.** Even if the reinsurer calculates the reserves on the same basis as the ceding company, the insurer and the reinsurer could produce different reserve amounts. Also, there is often a delay in reporting items to the reinsurer, so the reinsurer will not necessarily have the same inventory of business as the direct company. Some actuaries believe that, in a mirror reserving state, neither of these reasons is sufficient for a ceding company to take reserve credit for anything other than the amount posted by the reinsurer.

***Q6. How is a reserve credit determined for non-proportional reinsurance, such as an aggregate cap on benefit payments?***

**A6.** Paragraph 37 of SSAP 61 contains requirements for determining reserve credit for non-proportional reinsurance. It states that, "to reflect reserve credit on a prospective basis, the entity will need to demonstrate that the present value of expected recoveries using realistic assumptions, to be realized from the reinsurer are in excess of the present value of reinsurance premiums guaranteed to be paid by the ceding entity under the terms of the contract."

Some actuaries believe this can only be measured accurately by modeling the impact of the reinsurance over a broad range of scenarios. The modeling usually directly recognizes the impact of any non-proportional features of the reinsurance program, such as aggregate claim caps and/or deductibles. Other actuaries believe that the mere existence of non-proportional features, such as a cap on benefit payments, could jeopardize the ability to take even partial credit for a reinsurance agreement.

***Q7. How does the actuary normally treat the reinsurance of an existing block of business?***

**A7.** The treatment of gains and losses arising from indemnity reinsurance agreements relating to in force business are addressed in paragraphs 45 through 47 of SSAP 61.

Paragraph 46 defines a gain or loss on indemnity reinsurance “as the net experience under the reinsurance contract within a calendar year. Net experience (underwriting gains or losses) includes ceded premiums, claims, expense allowances, reserve adjustments, and IMR liability adjustment, and experience refunds and dividends.”

Gains and losses are accounted for differently, and the parties to a treaty may reflect differing financial effects in their respective Annual Statements resulting from the same reinsurance transaction. The treatment of gains related to reinsurance of in force blocks of business that occur in the initial calendar year are to be accounted for in accordance with Appendix A-791, paragraph 3 of the Accounting Practices and Procedures Manual, which states that “any increase in surplus net of federal income tax resulting from reinsurance agreements entered into or amended after the effective date of the Codification which involve the reinsurance of business issued prior to the effective date of the agreements shall be identified separately on the insurer’s financial statement as a surplus item and recognition of the surplus increase as income shall be reflected on a net of tax basis as earnings emerge from the business reinsured.” Under current NAIC Annual Statement instructions, the surplus adjustment is booked to line 51.4 (Change in Surplus as a Result of Reinsurance), within the Capital and Surplus Account section of the Summary of Operations. Some actuaries refer to this accounting treatment as “below-the-line” accounting.

To effect this requirement, some actuaries do not adjust reserves, but book all line items (including Federal Income Tax) in the Summary of Operations as would be the case without the requirement, except commissions (ceded) which is adjusted by the after-tax impact of the transaction in order to zero out the net gain after tax and move it to line 51.4 within the Capital and Surplus Account section of the Summary of Operations. Other actuaries may use different line item adjustments that result in the same adjustment to the net gain after tax.

Some actuaries believe that the accounting treatment for gains resulting from in force reinsurance transactions, as set forth in paragraph 3 of Appendix A-791, does not apply to YRT reinsurance.

Paragraph 47 of SSAP 61 states that “losses that occur in any year of an indemnity reinsurance contract are immediately recognized.” The phrase “indemnity reinsurance contract” generally includes in force reinsurance agreements. Some actuaries refer to this accounting treatment as “above-the-line” accounting.

If all or a portion of an assumed in force block of business is “contemporaneously” retroceded (paragraph 47 of SSAP 61), any resulting net gain (net of retrocession) recognized by the reinsurer is accounted for in the same way as a gain resulting from

an in force reinsurance agreement, i.e. “below-the-line”. Any net loss is immediately recognized in the company’s earnings, i.e. “above-the-line”.

If the reinsurance is recaptured, all income and surplus effects of the reinsurance arrangement are reversed in the reporting period in which recapture is effective.

Paragraph 45 of SSAP 61 requires that interest-related gains or losses (net of Federal Income Tax) associated with the reinsurance of an in force block of business that represents more than one percent of the ceding company’s General Account liabilities (Annual Statement Page 3, line 26) be credited or charged to the Interest Maintenance Reserve (IMR) and amortized into income in future accounting periods. A methodology for determining the amount of any gain or loss that is interest-related is laid out in the NAIC Annual Statement instructions for the IMR Calculation Form, line 3.

***Q8. Is it permissible under statutory accounting to reflect a reserve credit on a policy that exceeds the reserve that would be set up for the policy if there were no reinsurance?***

**A8.** The Exposure Draft for the revision of ASOP No. 11 states, “The actuary should calculate adjustments for reinsurance ceded using assumptions that are consistent with those underlying the calculation of the direct values, except as otherwise indicated by the terms and conditions of the reinsurance agreement, even though the direct financial statement values (before reinsurance) and the adjustments for reinsurance ceded are generally determined separately.”

Terms and conditions that may vary between direct and ceded business include premium mode, policy fee, and modal loadings. These differences can result in a reserve credit on ceded reinsurance that exceeds the before reinsurance amount. Some actuaries believe that it is appropriate to fully reflect these differences in calculating reserve credit on ceded reinsurance. However, other actuaries believe it is not appropriate to set up a reserve credit on ceded reinsurance that exceeds the before reinsurance reserve amount.

## **Section B: Reinsurance Reserve Credit Issues Relating to the Valuation of Life Insurance Policies Model Regulation**

***Q9. Are there issues related to YRT, e.g., reserve credit limited on YRT when reinsurer elects optional exemption for YRT under the Valuation of Life Insurance Policies Model Regulation?***

**A9.** As noted above, YRT reinsurance is exempted from the Life and Health Reinsurance Agreements Model Regulation. Note, however, that Appendix A-791 states that a treaty labeled as YRT will not qualify for this exemption “if the surplus relief in the first year is greater than that provided by a YRT treaty with zero first year reinsurance premium and no additional allowance from the reinsurer.”

Generally, a ceding company calculates the statutory reserve credit for YRT reinsurance as the unearned statutory net premium based on the mode of the reinsurance premium. As an alternative, some companies use an unearned gross premium.

One specific issue related to YRT reinsurance reserve credit comes from the Optional Exemption for Yearly Renewable Term Reinsurance (the Optional Exemption) in the Valuation of Life Insurance Policies Model Regulation (Regulation XXX). If the assuming reinsurer elects the simplified reserve calculation allowed under the Optional Exemption, then the ceding company’s reserve credit is limited to the reserve held by the assuming company for the affected policies (see Section 6.E.(6) of Regulation XXX). The industry practice as to how companies comply with this provision is still developing. It is unclear whether the responsibility falls on the ceding company (as the ceding company needs to support its reserve credit) to determine if the assuming company has made the election and, if so, determine the amount of the reserve. Or the burden may be on the assuming company to inform the ceding company that the assuming company has made the Optional Exemption (because the ceding company has no way of knowing this unless the assuming company tells it). Regulation XXX does not provide guidance on this issue. While, in practice, assuming companies are making use of the Optional Exemption, at this time there do not appear to be any developments in the area of communication between ceding and assuming companies concerning the optional exemption.

***Q10. Would the ceding company actuary usually take into account any analysis done in conjunction with setting X factors on a gross basis for Regulation XXX business when establishing reserve credit?***

**A10.** Some actuaries believe that, yes, it is usually preferable for the actuary to take into account any X-factor analysis performed. Actuarial Standard of Practice No. 40, Compliance with the NAIC Valuation of Life Insurance Policies Model Regulation with Respect to Deficiency Reserve Mortality (ASOP 40) states that “anticipated

mortality should be assessed and X factor classes should be created on a gross basis.” It also says that “anticipated mortality on ceded business should not be materially different from the anticipated mortality of the X factor class from which the business is ceded. If the difference is material, the appointed actuary should consider creating separate X factor classes.” Some actuaries therefore believe, if anticipated mortality is the same for gross and ceded business and the same X factors are used for both, it is normally preferable for any X factor analysis and any resulting changes in X factors to be applied to both gross and ceded business. Alternatively, if the actuary has determined that gross and ceded anticipated mortality is significantly different and has created separate X factor classes, then subsequent X factor analysis and changes to X factors would usually be applied separately to gross and ceded X factor classes.

***Q11. How is reserve credit determined for reinsurance of policies subject to Actuarial Guideline XXXVIII (AG 38), The Application of the Valuation of Life Insurance Policies Model Regulation?***

**A11.** AG 38 applies to all policies subject to Regulation XXX. AG 38 is simply additional guidance on how to apply Regulation XXX to certain policy designs. The reserve credit calculated by the ceding company should take into account the provisions of Regulation XXX, the guarantees (or lack thereof) and provisions in the reinsurance treaty, the guidance provided by and intent of AG 38, as well as the regulations, SSAPs, and ASOPs outlined in A2.



## **Section C: Reinsurance Reserve Credit Issues Relating to Asset Adequacy Analysis**

***Q12. How is reinsurance reserve credit treated in asset adequacy analysis--are the reserves reduced by the amount of the reinsurance credit or does the actuary treat the reinsurance as an asset that produces cash flows in future years?***

**A12.** Reinsurance cash flows are a function of direct liability cash flows. Therefore, some actuaries prefer to determine the adequacy of reserves for a block of business involving significant reinsurance ceded by testing the net reserve held (after reinsurance) against the present value of net cash flows after reinsurance. Those that take this position prefer to base the net reserve on a gross reserve and a reserve credit, which are based on the same assumptions. The cash flows are usually modeled in an integrated fashion involving both the direct business and the reinsurance ceded on the same assumptions. If the cash flow model involves multiple scenarios with different assumptions, then both the direct and reinsurance cash flows in a given scenario would normally be modeled according to the particular assumptions of that scenario. If it is not feasible to model the direct business and the reinsurance ceded in the same model, then they would usually be modeled separately according to consistent assumptions. The actuary typically is careful to prevent the net present value of cash flows (direct less reinsurance) from being distorted by inconsistencies between the direct value and the reinsurance value.

***Q13. My company has a reinsurance agreement in place. We anticipate that we will recapture the agreement within the next five years. Would it be preferable for my asset adequacy analysis to assume that recapture occurs, or to assume that the agreement remains in place?***

**A13.** Asset adequacy analysis generally reflects management's actual strategy, but some actuaries believe it is not necessary for asset adequacy analysis to assume that management will exercise a voluntary option if that option is likely to have a negative financial impact. In a stochastic projection, some actuaries believe it is preferable for the treatment of the potential recapture to be consistent across all scenarios. This means that the actuary would typically set assumptions as to when and how recapture will occur, if at all. The assumptions may vary according to conditions, but normally would not vary arbitrarily between scenarios, based on results. Some actuaries believe it is usually preferable for the actuary not to assume that recapture will occur unless the reinsurance agreement specifies that a unilateral right of recapture exists under the conditions present at the time. In other words, they believe it is usually preferable for the actuary not to assume that the reinsurer will cooperate in a bilateral recapture agreement. Similarly, if the reinsurance agreement specifies that recapture *must* occur under a given set of conditions, even though no reserve credit may be allowed under the reinsurance regulations, these actuaries believe it is normally preferable for asset adequacy analysis to reflect that. If the reinsurance agreement does not require recapture, then it is not normally necessary for the actuary to assume that recapture

will occur, even if that is management's intent, since management still has the right to change its mind.

***Q14. If I have an agreement with a reinsurer of questionable financial situation, would I usually take this into account in my asset adequacy analysis?***

**A14.** Any event which is beyond management's control and which may have a significant negative financial impact would usually be considered in asset adequacy analysis, but it is often difficult to quantify the impact of a financially weak reinsurer. One way of dealing with this is to calculate the "maximum exposure" to this reinsurer, i.e., the amount of financial loss which is likely to occur if the reinsurer cannot pay any claims over an extended period of time. If the reinsurer's financial condition may vary according to economic conditions, then it can also be helpful to define which scenarios are most harmful and what the maximum exposure would be in those scenarios. The actuary may also choose to consider what countermeasures may be available to mitigate this risk.