

CP 341 Model Solutions

March 2026

1. Learning Objectives:

1. The candidate will understand different types of traditional and advanced reinsurance transactions for life insurance.

Learning Outcomes:

- (1b) Understand the key aspects of automatic and facultative reinsurance
- (1c) Explain various methods and perform financial statement calculations of reinsurance transactions, including yearly renewable term, coinsurance, modified coinsurance, and funds withheld arrangements

Sources:

Tiller, 4th edition, Chapter 4 and 5

Commentary on Question:

Overall, this question requires candidates to demonstrate an understanding of different structures of reinsurance, including the use of SPV. Candidates performed as expected overall.

Solution:

Your colleague makes the following statements:

1. YRT reinsurance provides sufficient relief from risks associated with annuities.
 2. A modified coinsurance treaty would provide surplus relief if ABC were using an unauthorized reinsurer.
 3. YRT reinsurance is typically more cost prohibitive than coinsurance or modified coinsurance.
- (a) Critique each statement.

Commentary on Question:

Candidates performed well in critiquing the statements. A common mistake was not considering the collateral requirements associated with unauthorized reinsurers under a ModCo arrangement.

1. Continued

- (1) False
YRT primary focus is mortality and morbidity risk. Annuity risk is primarily longevity and investment risk which is not suited for YRT. Therefore, YRT would not provide meaningful surplus relief or risk transfer for an annuity block. Mod-Co or Coinsurance would be better suited for annuities.
- (2) Partially true
Modified coinsurance (ModCo) is mainly used to reinsure products with cash values or asset risks, and also to provide surplus relief with unauthorized reinsurers. It lets the ceding company keep assets for investment while gaining surplus relief. However, since assets and reserves aren't legally transferred, regulators may require collateral or funds withheld for reserve credit with unauthorized reinsurers.
- (3) False
YRT treaties are generally less administratively burdensome than coinsurance or modified coinsurance making them less expensive to implement.
- (b) Recommend the form of reinsurance that should be used by ABC Insurance for its whole life block.

Commentary on Question:

Candidates performed poorly, often recommending YRT, which has insufficient risk capital reduction.

Coinsurance is the appropriate method for the following reasons:

- Coinsurance transfers mortality risk from insurer to reinsurer, which is the primary focus of the agreement.
 - Although YRT does transfer morbidity risk, only the net amount of risk is transferred, whereas coinsurance can transfer the needed amount via the quota share.
 - Coinsurance transfers the reserve, providing capital relief under RBC frameworks. YRT only transfers the C-2 component of RBC.
- (c)
- (i) Describe three conditions under which the use of an SPV might be a viable solution for ABC.
- (ii) Identify the components of the SPV that are utilized, in the event of losses, before losses are allocated to investors.
- (iii) Explain two other protections that the SPV structure provides to investors.

1. Continued

Commentary on Question:

Candidates performed poorly, as many candidates did not demonstrate a good understanding of the SPV structure and the different types of funds, their purposes, and the risks involved. For part (i), alternative answers involving regulatory acceptance and legal/operational feasibility also received credit. For part (iii), alternative answers discussing built-in risk buffer such as the margin for deviation, additional regulatory safeguards, also received credits.

(i)

Low cost of capital

- The cost to fund the capital is lower than other forms of reinsurance, assuming the required investor return and upfront capital requirements are reasonable.

Capital Relief Objective

- If the primary focus is capital relief, as opposed to risk transfer. Reserves required under guideline AXXX are typically redundant when compared to the economic reserve, this causes capital strain.

Investor Risk Appetite

- The structure must align with investors' desire for low exposure to losses. To remain viable, the capital required by investors (or regulators) must not be so high that the transaction becomes economically unattractive for ABC.

(ii) Economic reserves: The amounts needed in reserves to fully mature the risks reinsured. The economic reserves should emerge from the cash flows of the risks reinsured and not require additional funding. The investor can assume that these reserves will provide for benefits and expenses with some margin left with a high degree of confidence.

Required capital: An amount which the investor believes sufficient to fund any deviations in losses that might occur beyond the economic reserves.

The total of the economic reserves and the required capital should be sufficient to fund any claims and expenses to a very high degree of confidence under significant adverse developments. Within the SPV, they serve as a first layer of protection before any potential investor loss exposure.

(iii)

Legal structure: Placements of the funds in different trusts depending on the purpose of the funds, and with clear terms and instructions. The trust structure enables the segregation of funds and protection of investor's funds.

1. Continued

Conservative Reserve and Underwriting Design Mitigates Investor Risk: Cash flow projections and reserve requirements are conservatively structured and reviewed by actuaries and regulators. Economic reserves include a margin for adverse deviation, and additional capital-mutually agreed upon by sponsor and investor-acts as a buffer, protecting investor capital unless all prior protections are exhausted.

2. Learning Objectives:

2. The candidate will understand the fundamentals of risk transfer between two counterparties.

Learning Outcomes:

- (2a) Describe the elements within reinsurance treaties
- (2b) Describe the elements and considerations of risk transfer between counterparties, and evaluate their impact on reinsurance agreement provisions
- (2c) Explain the considerations and process of managing insolvency of the ceding and assuming parties within a reinsurance transaction

Sources:

Life, Health & Annuity Reinsurance, Tiller, John E. and Tiller, Denise, 4th Edition, 2015
•Ch. 9: Risk Transfer Considerations

Risk Transfer Practice Note, AAA November 2022

CP341-105-25: Lapse Risk and Capital Management Strategies: Back in the Spotlight

Commentary on Question:

Candidate performance was fair on this question.

Solution:

- (a) Explain the conditions under which reinsurance on a medical insurance product would qualify as reinsurance under FASB.

Candidates generally did poorly on this question. Most candidates were able to list the two conditions under which a medical insurance product would qualify as reinsurance. However, explanation of the two conditions was also required for full credit.

Medical insurance product is classified as **short-duration contract** type. Two conditions must be met for risk transfer to be deemed to have occurred for the reinsurance on medical insurance product to be qualified as reinsurance. The reinsurer must assume significant insurance risk, and it must be reasonably probable to realize a significant loss.

Significant Insurance Risk: This means that both the amount and timing of the reinsurer's payments must depend on and directly vary with the underlying claims.

2. Continued

Significant Loss: Significance of loss shall be evaluated by comparing the present value of all cash flows and the present value of the amounts paid or deemed to have been paid to the reinsurer. This requires an evaluation of all contract provisions.

- (b) Compare and contrast the following two methods of testing the presence of risk transfer in a reinsurance contract:
- 10-10 Rule
 - Expected Reinsurer Deficit (ERD) Method

Candidates generally did well on this question. Definition of the two methods and comparison on their treatment of distribution/tail risk were required for full credit.

The **10-10 Rule**. A reinsurance contract transfers sufficient risk if there is at least a 10% chance of a 10% loss for the reinsurer. This means that the underwriting loss at the 90th percentile must be at least 10% of the ceded reinsurance premiums, where both underwriting loss and premiums are understood to be present values. However, this method has limitations as it ignores the information in the remainder of the tail of the distribution. Also, the 10% probability and 10% loss thresholds are arbitrary, which may not be suitable for all reinsurance structures.

The **Expected Reinsurer Deficit (ERD) method** is a more robust approach. It calculates the product of the probability that the reinsurer experiences a net loss on a present value basis and the expected present value of loss that the reinsurer will experience in the event of a loss. A treaty is typically considered to exhibit risk transfer if the ERD is greater than 1% of expected present value of premiums, which is consistent with the "10-10 Rule" (10% loss multiplied by 10% chance equals a 1% ERD). The ERD method is more flexible and can be applied to a variety of reinsurance structures covering insurance portfolios with different risk characteristics.

- (c) Describe two advantages and two disadvantages of entering into a mass lapse treaty, for each of ABC Life's lines of business.

Candidates' performance was fair on this question. Most candidates were able to discuss some advantages and disadvantages for each line of business but were not comprehensive and received partial credit. Regulatory scrutiny and attachment/detachment point were the most commonly missed points.

2. Continued

For **guaranteed savings products with low guaranteed interest rates, advantages** include the following:

Mass lapse treaties can help manage solvency volatility, especially in portfolios with guaranteed savings products and low guaranteed interest rates. These products are vulnerable to lapse risk when interest rates rise, as savings products with low guarantees are underperforming, and policyholders have incentive to lapse their existing policies in favor of transferring their savings to more remunerative investment avenues. Mass lapse treaties act as catastrophe cover for such events.

Large, affluent policies sold through banks, financial advisors and brokers show higher lapse rates. Their policyholders tend to act more rationally and therefore lapse more frequently when the interest rates are rising. The distributors are also incentivized to offer clients term deposits or other proprietary funding products as a convenient alternative to insurance savings product. Policyholders may be directed toward actively managed asset management products, which boast higher asset management fee in light of augmented yields. Mass lapse treaties act as catastrophe cover for such events.

Disadvantages include the following:

Structuring mass lapse treaties involves regulatory scrutiny, pricing challenges and basis risk. The treaties are not yet standardized across jurisdictions.

They mainly cover the more extreme mass lapse events with attachment point of approximately 20% and detachment point of 40%, leaving insurers exposed to more frequent but moderate lapse events.

For **term life insurance products and medical insurance products, advantages** include the following:

While less exposed to rates-driven factors, term life and medical insurance products may still suffer from reputational or regulatory events. Mass lapse treaties can offer coverage for such scenarios including downgrades in ratings, public disclosure of regulatory measures taken against the company, scandals and their ensuing rumors etc.

Another pivotal macroeconomic factor that precipitates a pronounced surge in lapses revolves around a reduction in disposable income. When policyholders face a diminished real value financial inflow, they may have to terminate the insurance policies to sustain their lifestyle. Inflation is one of the factors affecting the disposable income. Unemployment is another factor.

2. Continued

Disadvantages include the following:

Term life and medical policies often include surrender penalties and tax incentives, which are incentives for policyholders to retain their policies, reducing lapse risk. The risk of mass lapse decreases because of the greater prevalence of insurance protection components and the limited availability of financial alternatives. The cost of mass lapse cover may outweigh the benefits.

Policies sold through in-house agency networks show lower lapse rates, reducing the need for mass lapse protection.

- (d) Recommend one alternative to entering into a mass lapse treaty for managing lapse risk, for each of ABC Life's lines of business.

Most candidates did poorly on this question. The key driver of guaranteed savings product lapses is interest rates. Solutions focusing on other product features and reinsurance arrangements were given partial credits if sufficiently explained. For term and medical products, product feature and reinsurance solutions that were not the most relevant were also given partial credit with proper explanation.

For **guaranteed savings products with low guaranteed interest rates** which are distributed through banks, financial advisors, and brokers, managing lapse risk is critical. One alternative to mass lapse treaty is the use of rates-driven hedging strategies, such as swaptions. These instruments can help mitigate the impact of rising interest rates, which often incentivize policyholders to lapse their policies in search of better returns elsewhere.

For the **term life and medical insurance products** sold through an in-house agency network, the lapse risk profile is different. Distribution agreements are important for this portfolio to manage lapse risk. Since the policies are sold through channels that the insurer controls more directly, such as in-house agents, ABC Life has greater leverage to enforce practices that support policyholder retention. Investing in agent training, performance incentives tied to persistency, and long-term relationship management can significantly reduce lapse rates. Moreover, maintaining a strong brand and customer service culture within these channels can help preserve trust and loyalty, even during challenging times.

3. Learning Objectives:

3. The candidate will understand regulatory frameworks for reinsurance transactions across US, Canadian, and global jurisdictions.

Learning Outcomes:

- (3b) Describe and evaluate elements of reinsurance requirements within the Canadian regulatory framework
- (3d) Understand IFRS and OSFI requirements related to reinsurance

Sources:

CP341-110-25: LICAT Guideline 2025, Chapter 10: Reinsurance

CP341-111-25: OSFI Guideline B-3, Sound Reinsurance Practices and Procedures

Commentary on Question:

Candidates did well on this question.

Solution:

- (a) Explain the differences in DEF's capital treatment when ceding business to a registered reinsurer versus an unregistered reinsurer.

Candidates generally did well on this question. Most candidates were able to identify the adjustment/deductions to available capital with unregistered reinsurance and received partial credit. However, few candidates mentioned the collateral requirement and additional credit risk and market risk implied. The model solution does not represent the only accepted answers, candidates were also given credit if they mention BSB is calculated net of registered reinsurance.

According to the LICAT Guideline, there will be deductions to Available Capital related to unregistered reinsurance, such as the aggregate positive liabilities ceded. Consequently, the Company would likely want to negotiate collateral or a letter of credit with the reinsurer in order to reduce those Available Capital deductions, but this would incur additional credit and market risk requirements.

- (b) Critique each of the above proposed items.

Most candidates did well on this question. Correct assessment and revision for each item is required for full credit. Most candidates did not mention that the ceding limit to any reinsurer should be established on total exposure. For the first statement, candidates that identified ceding limits should be lower than 100% were also given credit.

3. Continued

According to OSFI Guideline B-3, none of the four items are sufficient for the RRMP.

1. The RRMP should be overseen by Senior Management, not the Appointed Actuary.
2. Ongoing monitoring should include other items indicated in Guideline B-3. One example is the reinsurer's ability to continue paying claims.
3. The Company cannot rely solely on third parties and must do its own due diligence on the financial strength of the reinsurer.
4. It is not sufficient to limit the exposure to a reinsurer relative to other reinsurers within the pool. The Company must also limit total exposure to each counterparty.

4. Learning Objectives:

4. The candidate will understand and be able to explain practices for administering and managing reinsurance arrangements.

Learning Outcomes:

- (4a) Describe features and considerations related to reinsurance administration.
- (4c) Describe the concept of reinsurance counterparty credit risk and evaluate methods to reduce such risks.

Sources:

CP341-117-25: Collateral Structures in the Bermuda Long-term Insurance Market
Tiller, 4th edition, Chapter 23: Reinsurance Administration

Commentary on Question:

Candidates overall performed well on this question. Many candidates lost points from unfocused answers that were not relevant to the directive being asked or simply repeated back information given within the stem.

Solution:

- (a) Explain why STIC might have minimal concerns about counterparty risk with this reinsurer.

Commentary on Question:

Candidates overall performed poorly on this part, with only a few calling out term products as not being asset intensive as a main reason.

The reinsurance arrangement is not with products that are asset intensive, which reduces the risk. The lack of collateral suggests that Reinsurer A has a sufficiently high credit rating from a verified credit rating agency, with a rating of A- or better, reducing the risk of default. As the reinsurer is also based in the US, it should be NAIC qualified and meet local regulatory protections and guardrails.

- (b) Explain how the ModCo structure impacts the assets backing the reinsured business.

Commentary on Question:

Candidates performed very well on this part, with many citing that, under ModCo, STIC would not have to transfer assets. Few candidates remarked on the ModCo cash flows (Gains/Losses) between STIC and the reinsurer.

Under ModCo, the assets backing the reinsured business stay with the ceding company. Therefore, STIC does not have to liquidate assets to transfer them to the reinsurer.

4. Continued

Thus, the financial gains or losses of the underlying assets and liabilities are transferred to the reinsurer, not the assets themselves.

Further, the cedent retains legal ownership of the assets, typically within the cedent's jurisdiction in a collateral account, so in this case the assets remain in the US and are not transferred to Bermuda.

- (c) STIC's Chief Legal Officer has reviewed the draft reinsurance agreement with Reinsurer B and states "if STIC monitors the quality of assets to be transferred to the collateral account, then all of the risk involved will be sufficiently mitigated."

Critique the Chief Legal Officer's statement.

Commentary on Question:

Candidates performed fairly on this part. Many failed to state that the CLO is incorrect, often relying on less committed language. Many were able to identify other risks that STIC would be exposed to.

The Chief Legal Officer's statement is incorrect because:

- No transfer of assets occurs.
 - The ModCo structure already allows the cedent to retain control of the assets, which reduces counterparty credit risk, and monitoring the quality of assets does not affect this.
 - The reinsurance arrangement still has risks – counterparty risk, credit risk on the assets, liability risks as well as legal, regulatory and other risks.
- (d) Reinsurer C has offered a coinsurance arrangement with assets held in trust. STIC's Chief Legal Officer insists that the assets in trust should equal 110% of the statutory reserves and the cedent should retain full and unencumbered audit rights on the collateral account.

Explain why the Chief Legal Officer would want these conditions.

Commentary on Question:

Candidates performed well on this part. About half the candidates remarked on overcollateralization.

4. Continued

The amount of collateral is typically tied to the required statutory reserves. The CLO would like excess assets posted to the collateral account to provide additional security to ensure overcollateralization.

By having audit rights over the collateral account, STIC can exercise these rights at their discretion. This gives the company additional ability to independently monitor the assets in the collateral account and enforce its contractual rights in the event of a breach.

- (e) STIC has a mature and complex technology landscape and has seen a push in recent years to shorten the quarterly financial reporting cycle.

Recommend the most appropriate reinsurance administration method.

Commentary on Question:

Candidates performed very well on this item, with many correctly stating self-administration as the most appropriate method (bulk reporting was also accepted).

STIC should use self-administration for this reinsurance agreement.

1. STIC can tailor the administration process to align with their own IT systems, workflows, and regulatory requirements, rather than adapting to the reinsurer's system. This can ensure the reinsurance administration does not cause any increased reporting timelines
2. STIC likely already performs most of the functions required and adding communication with the reinsurer is likely to be functionally easier to do and not disrupt reporting timelines.

5. Learning Objectives:

1. The candidate will understand different types of traditional and advanced reinsurance transactions for life insurance.

Learning Outcomes:

- (1d) Explain reasons for using inforce reinsurance, approaches used for inforce reinsurance, and advantages and disadvantages of each approach
- (1e) Demonstrate knowledge of different forms of reinsurance for different products; specifically, PRTs/longevity swaps, annuity coinsurance, and life insurance yearly renewable term
- (1f) Describe and evaluate types of non-proportional reinsurance transactions
- (1g) Describe and evaluate types of reinsurance transactions for annuity contracts

Sources:

Tiller, 4th edition, Chapter 5: Advanced Methods of Reinsurance

Tiller, 4th edition, Chapter 17: Nonproportional Reinsurance

Tiller, 4th edition, Chapter 19: Annuity Reinsurance

Pension Risk Transfer in Canada and the U.S., SOA Research Institute, Simmons, 2022

Commentary on Question:

Overall, the question is testing candidates' understanding of different types of reinsurance solutions applied to a hypothetical scenario. Candidate performance was fair on this question overall.

Solution:

- (a) Explain four of the risks that are transferred through a terminal funding contract and how transferring them supports the company's objective.

Candidates performed well, where many candidates correctly explained the risks of terminal funding contracts.

A terminal funding annuity contract transfers key risks from the pension sponsor to the insurer. The following four risks are typically assumed by the insurer:

1. **Longevity Risk** – The insurer bears the risk that annuitants live longer than expected, increasing total benefit payouts. This directly reduces the sponsor's uncertainty around future obligations.
2. **Investment Risk** – The insurer guarantees the benefits regardless of future investment returns. This protects the sponsor from poor asset performance impacting benefit funding.

5. Continued

3. **Interest Rate Risk** – The insurer assumes the risk that prevailing interest rates may fall, increasing the present value of liabilities. This mitigates funding volatility for the sponsor.
4. **Administrative and Benefit Election Risk** – The insurer handles the complexity of benefit form elections (e.g., annuity vs. lump sum) and timing, removing variability in payout timing from the sponsor’s projections.

Together, these transfers align well with the company’s goal of minimizing long-term funding volatility.

- (b) Explain how the company’s ability to achieve its objective is affected by the following SPV investor expectations:
1. The company’s funding of the SPV
 2. The investor’s return target
 3. The investor’s loss tolerance

Candidates performed poorly, as many could not demonstrate a clear understanding of the SPV structure.

Investors in SPVs expect:

Funding Expectation: Investors expect a high level of funding to reduce their risk of loss. If regulatory reserves don’t meet this level of funding significant upfront or ongoing capital contributions to the SPV from the company will be needed to reduce investor uncertainty.

Return Target: Due to the low uncertainty, investors expect to earn a return on assets plus an additional modest spread which is an additional cost for the SPV.

Loss Tolerance: Investors with low loss tolerance may want the SPV structured to shift more residual risk back to the company through performance triggers or capital calls, which reintroduces funding uncertainty.

- (c)
- (i) Identify four typical characteristics of stop-loss insurance.
 - (ii) Assess the extent to which each of the identified characteristics aligns with the company’s objectives.

Candidates were able to correctly identify stop loss reinsurance features, but fewer were able to provide analysis that tied to the scenario given in the question.

5. Continued

Four characteristics of stop-loss insurance and their alignment with company values are:

Post-Claim Premium Increase

Stop-loss coverage typically reprices after a claim; future premiums are likely to increase following a large loss.

Misaligned: This undermines funding stability, as contributions may rise significantly in years following a claim.

No Guaranteed Renewability

Stop-loss coverage is often written on a short-term basis and may not be renewable under the same terms.

Misaligned: The inability to rely on coverage in the long term introduces uncertainty in future funding obligations.

Layered on Top of Proportional Reinsurance

Stop-loss is frequently used in conjunction with proportional reinsurance, which handles the baseline cash flows.

Aligned: When combined with proportional structures, stop-loss can help cap extreme outcomes while the underlying funding remains stable.

Premiums Based on Projected Claims + Fixed Fee

Premiums are often a function of expected claims plus a margin or fixed charge, requiring long-term forecasts.

Misaligned: Forecasting expected claims over many years introduces model risk and funding variability, which conflicts with the objective of stable, predictable funding.

- (d) Recommend the most appropriate strategy for the company to manage or transfer these pension liabilities.

Candidates performed well, where many made the correct recommendation with sufficient explanations for full credits. Those who did not provide sufficient explanations only received partial credits.

The recommended approach is to purchase a terminal funding annuity contract, as it best meets the company's objective of reducing or eliminating funding uncertainty. It is the only option that provides full risk transfer—eliminating investment risk, longevity risk, and funding volatility. By comparison the SPV (captive structure) retains economic exposure and requires complex setup, long-term governance, and capital contributions. The stop-loss reinsurance arrangement would be novel, expensive to set up and difficult to price.

6. Learning Objectives:

3. The candidate will understand regulatory frameworks for reinsurance transactions across US, Canadian, and global jurisdictions.

Learning Outcomes:

- (3a) Describe and evaluate elements of reinsurance requirements within the US regulatory framework
- (3c) Understand US GAAP and US Stat requirements related to reinsurance

Sources:

Tiller, 4th edition, Chapter 11: US Regulation of Reinsurance

CP341-107-25: NAIC Model Laws: Credit for Reinsurance Model Law

CP341-109-25: Guide to Reciprocal Jurisdiction, Certified and Authorized Reinsurers

Commentary on Question:

Overall performance on the question was fair. Many candidates were able to explain the impact of NAIC ratings, reinsurer certification, and non-admitted status on reserve credit. Candidates struggled to provide adequate detail for part c.

Solution:

- (a) Assess the impact of NAIC accreditation and codification requirements on the company's ability to take reserve credit for each of the reinsurance options.

Commentary on Question:

Candidates performed fairly on this question. Credit was lost mainly by not specifying justification for both types of treaties and by assuming that Bermuda being a reciprocal jurisdiction would automatically provide reserve credit.

The NAIC accreditation program ensures that states maintain consistent regulatory standards for financial solvency by requiring the adoption of model laws and regulations related to reinsurance.

Quota Share Treaty

For the quota share treaty with the certified UK reinsurer, XYZ Life can take partial reserve credit since a certified reinsurer is a non-U.S. reinsurer domiciled in a qualified jurisdiction such as the UK.

The amount of reserve credit depends on the reinsurer's NAIC rating, which determines the percentage of required security, ranging from 0% to 100% based on financial strength.

The certified reinsurer must also meet NAIC minimum capital, surplus, and certification requirements.

6. Continued

Excess of Loss Treaty

For the excess-of-loss treaty with the non-admitted Bermuda reinsurer, the company cannot automatically take reserve credit because non-admitted reinsurers do not qualify unless they meet specific conditions.

To take full reserve credit, the company would need to secure collateral equal to 100% of the ceded reserves, typically through trust funds or letters of credit.

- (b) Explain how the company could secure reserve credit under NAIC rules for option #2.

Commentary on Question:

Candidates performed poorly on this question, with many listing avenues of reserve credit not related to posting security/collateral. Many candidates cited methods such as Funds Withheld/trust account, which were given partial credit.

As a non-admitted reinsurer, the Bermuda reinsurer does not automatically qualify for reserve credit. To secure credit, the company must provide security, typically 100% of ceded liabilities, held in the U.S. and under the ceding insurer's exclusive control.

Acceptable forms of security include:

- Cash.
- NAIC SVO-listed securities that are admitted assets.
- Clean, irrevocable, unconditional Letters of Credit (LOCs) from a qualified U.S. financial institution.

- (c) Explain the financial implications to the ceding company of the reinsurer's certification status and financial strength rating.

Commentary on Question:

Candidates performed poorly on this question. Since it was a 3-point question, much more detail was expected than provided in many instances. Candidates were expected to explain impact on certification status, impact to financial strength rating, and financial implications to the ceding company.

Because the U.K.-based reinsurer is certified, it may provide reduced collateral to the U.S. ceding company, unlike an unauthorized reinsurer that must generally post 100% collateral. The amount of collateral required is tied directly to the reinsurer's financial strength rating under the NAIC system for certified reinsurers, which uses a sliding scale based on the lowest of the ratings assigned.

6. Continued

An A-rated reinsurer would fall into a higher “Secure” category (Secure-1 to Secure-4), with collateral requirements ranging from 0% to 50%. A BBB-rated reinsurer would be classified as Secure-5, requiring 75% collateral.

For the ceding company, lower collateral requirements mean less capital is tied up in trusts or letters of credit. This reduces both the cost and administrative burden of collateral arrangements and frees up capital for investment, growth, or dividends, thereby improving surplus relief. By contrast, the higher collateral required with a BBB-rated reinsurer creates greater capital strain, making the arrangement less efficient. A stronger-rated reinsurer thus offers the ceding company greater flexibility in capital management and reinsurance strategy.

7. Learning Objectives:

1. The candidate will understand different types of traditional and advanced reinsurance transactions for life insurance.

Learning Outcomes:

- (1h) Understand the role of private equity involvement in the global reinsurance market and the use of offshore reinsurance

Sources:

CP341-104-25: Private Equity and Life Insurers (2023)

CP341-103-25: Rising Tide of Offshore Reinsurance (30 May 2023)

Commentary on Question:

Overall performance on this question is fair.

Solution:

- (a) Critique each of the above statements.

Candidate generally did well on this question. Correct assessment and explanation of each statement were required for full credit.

1. An offshore affiliated reinsurer may have lower capital requirements. For example, Bermuda focuses on economic capital and can have lower required capital for certain products compared to the U.S.
2. This statement may be true. U.S. state laws restrict investment holdings, and an offshore jurisdiction may not impose similar restrictions, which could allow for riskier investments (below investment grade, illiquid, etc.) with higher returns.
3. U.S. taxes may be reduced but won't be zero. At a minimum, there will be a federal excise tax on reinsurance premiums.
4. There's no reason involving private capital that would require an affiliated reinsurer to be onshore. There has been a rising trend of offshore reinsurers backed by private capital.

- (b) Explain three reasons why the cession of a significant quota share of this business to the affiliated reinsurer may be considered credit negative by the company's rating agency.

Most candidates did very poorly and only received partial credit for this question as they missed the fact that the reinsurer is affiliated and did not show sufficient understanding of factors that would affect credit rating. Correctly listing three reasons and brief explanation of each was required for full credit.

7. Continued

1. There is less transparency for investors into offshore company's financials. For example, standard financial metrics may not tell the whole story.
2. The offshore company may have less strict governance and inadequate controls in place, increasing overall risk.
3. Less capital requirements may mean the offshore affiliate is insufficiently capitalized to mitigate risks.

8. Learning Objectives:

2. The candidate will understand the fundamentals of risk transfer between two counterparties.

Learning Outcomes:

- (2c) Explain the considerations and process of managing insolvency of the ceding and assuming parties within a reinsurance transaction.
- (2d) Explain the types, uses, and functions of captive reinsurance transactions.

Sources:

Tiller, 4th Edition, Chapter 20: Captives

Tiller, 4th Edition, Chapter 10: Insolvency and Reinsurance

Commentary on Question:

Overall, candidates performed well on this question, with many receiving full points on (a) and (b). Candidates struggled with part (c) with many providing unrelated, weak, or unsubstantiated considerations.

Solution:

- (a) Explain the advantages and disadvantages of such a captive.

Commentary on Question:

Candidate performance was fair. Many were able to list several valid advantages and disadvantages. Four of each were expected for full credit.

Advantages include:

- Attracting and retaining large producers of business as it will be an incentive like employee stock ownership plans.
- Participating producers should write better quality risks since they are participating in the risk.
- Similarly, it should produce a higher volume of business because participating producers will want to place more business with the company to earn more than simply commissions.
- Producers can potentially increase their income by earning profits from the captive.

Disadvantages include:

- Higher expenses for the administration of the captive.
- All the additional effort and work may not pay off since there's no guarantee the captive will result in more or better-quality production.
- If profits don't materialize, producers will become dissatisfied with the company.

8. Continued

- Producers will likely need to defer immediate compensation to participate in an uncertain endeavor.

(b)

- (i) Assess the group's concern.
- (ii) Revise the captive ownership and participation structure to address this concern.
- (iii) Explain the drawbacks of your revised structure.

Commentary on Question:

Candidates performed very well on this part. Points were lost by not clearly stating whether the concern was valid in part (i), vague or irrelevant statements in (ii), and only listing one valid drawback of the proposed structure from (ii) for part (iii).

(i) The group's concern is valid since agents would share the overall profits and losses equally, which means producers with good experience will see reduced profits due to the poor experience of business submitted by other producers.

(ii) To address this concern, I recommend changing the structure so that producers only share in the profits of the business that they sell. This would alleviate the concern about a producer's profits being reduced due to other producers selling poor business.

(iii) The drawbacks of this new structure include increased complexity leading to higher administrative expenses as well as significantly higher risk to individual agents if their own experience is poor.

- (c) Recommend three specific proactive steps that the company can take to limit the captive's insolvency risk.

Commentary on Question:

Candidate performance was poor on this question. Candidates lost points by either not providing relevant steps or providing too few substantial steps.

I recommend the following steps:

- (1) Seed the captive with strong initial capital beyond minimum regulatory requirements.
- (2) Set and maintain high standards for continued producer participation in the captive.
- (3) Purchase stop loss insurance for each producer's account so that a few early claims do not bankrupt an account.