Seeing Beyond Risk Canadian Institute of Actuaries Institut canadien des actuaires Voir au-delà du risque

Report

Report of the CIA Task Force on the Appropriate Treatment of Reinsurance

Task Force on the Appropriate Treatment of Reinsurance

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Memorandum

To: All Life and Property and Casualty Practitioners

From: Doug Tozer, Chairperson
Task Force on the Appropriate Treatment of Reinsurance

Jacques Tremblay, Chairperson
Practice Council

Date: October 3, 2007

Subject: **Report of the CIA Task Force on the Appropriate Treatment of Reinsurance**

Deadline for Comments: December 3, 2007

Over the last few years, securities and insurance regulators, rating agencies and media from around the world have been paying closer attention to reinsurance transactions. In particular, reinsurance transactions which tend to result in a reduced degree of risk transferred, sometimes referred to as Finite Reinsurance, have been under heavy scrutiny. In Canada, the Office of the Superintendent of Financial Institutions (OSFI) has become interested in the treatment of reinsurance, and has asked the Canadian Institute of Actuaries to look into this matter further.

The report that follows was prepared by the Task Force to provide guidance on reinsurance to the actuarial and insurance community in Canada. It provides a brief overview of reinsurance and risk transfer principles, paying attention to the emerging international consensus. It provides guidance on assessing risk transfer in a reinsurance contract for accounting and valuation purposes, and examines other related topics such as finite and financial reinsurance, side agreements, mirroring, bifurcation and reinsurance counterparty risk.

In accordance with the Institute's Policy on Due Process for Approval of Practice-Related Material other than Standards of Practice, this research paper has been unanimously approved by the Task Force on the Appropriate Treatment of Reinsurance and has received final approval for distribution by the Practice Council on May 16, 2007.

This report, including recommendations and opinions paper, is being circulated for comments. After the comment period, it will be issued as an educational note. Please contact Doug Tozer at DTozer@munichre.ca if you have any comments or questions.

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INTRODUCTION

The Practice Council (PC), the Committee on Life Insurance Financial Reporting (CLIFR) and the Committee on Property and Casualty Insurance Financial Reporting (PCFRC) have reviewed the CIA Standards of Practice (SOP) addressing the topic of reinsurance. The focus of the review was on the adequacy of the SOP and the potential need for modifications, improvements or additional guidance. The PC, CLIFR and the PCFRC each concluded that the current SOP are adequate with respect to the treatment of reinsurance and that no immediate changes are necessary.

However, the PC, CLIFR and the PCFRC believe that more clarity and direction would be appropriate with respect to the definition of reinsurance and its eventual financial and capital treatment for an insurance entity. In this regard, in June of 2005, the PC issued a memorandum of guidance on the "Appropriate Treatment of Reinsurance". That memorandum summarized key principles and SOP pertaining to the appropriate treatment of reinsurance in actuarial work. It also announced the PC's intention to form a task force, including external stakeholders, to examine reinsurance-related topics in greater depth. The task force was mandated to develop additional recommended guidance and to consider the need for potential modifications to SOP.

Specifically, the task force's mandate is as follows:

> *The focus of the task force will be on finite reinsurance, the degree of risk transfer in reinsurance transactions, side agreements, stop loss arrangements and reinsurance counterparty risk. The task force will consist of Life and P&C actuaries from the Committee on Life Insurance Financial Reporting (CLIFR) and the Property and Casualty Insurance Financial Reporting Committee (PCFRC) and will invite participation from reinsurance practitioners, federal and provincial regulators, the Insurance Bureau of Canada (IBC), the Canadian Life and Health Insurance Association (CLHIA) and the Canadian Institute of Chartered Accountants (CICA). The task force will develop a research paper or an educational note on these matters. The task force will consider and suggest, if deemed necessary, potential modifications to the SOP.*

The report is intended to supplement the CIA SOP in an effort to achieve some consistency in how actuaries deal with reinsurance. Probably the most important area of supplement is in the concept of risk transfer as the CIA SOP are silent in this area.

DEFINITIONS

The task force has concluded that International Financial Reporting Standard 4 (IFRS 4) contains the most comprehensive definitions relating to insurance and reinsurance and the ones that are most consistent with current Canadian Generally Accepted Accounting Principles (GAAP). Therefore, in this report the following definitions, which are based on the IFRS 4 definitions, are applicable:

Insurance contract:	A contract under which one party (the ***insurer***) accepts significant ***insurance risk*** from another party (the ***policyholder***) by agreeing to compensate the ***policyholder*** if a specified uncertain future event (the ***insured event***) adversely affects the ***policyholder***. Compensation is defined by the ***insurance contract*** terms.
Insurer:	The party that has an obligation under an ***insurance contract*** to compensate a ***policyholder*** if an ***insured event*** occurs.

Policyholder:	A party that has a right to compensation under an ***insurance contract*** if an ***insured event*** occurs.
Insured event:	An uncertain future event that is covered by an ***insurance contract*** and creates ***insurance risk***.
Insurance risk:	Risk, other than ***financial risk***, transferred from a ***policyholder*** to an ***insurer***. A new risk created by an ***insurance contract*** is not an ***insurance risk***. In particular, lapse or persistency risk (i.e., the risk that the ***policyholder*** will cancel the contract earlier or later than the ***insurer*** had expected) is not an ***insurance risk*** because the payment to the ***policyholder*** is not contingent on an uncertain future event that adversely affects the ***policyholder***.
Financial risk:	The risk of a possible future change in one or more of a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract.
Reinsurance contract:	A contract under which one party (the ***reinsurer***) accepts significant ***reinsurance risk*** from another party (the ***cedant***) by agreeing to compensate the **cedant** if specified uncertain future event(s) (the ***reinsured events***) adversely affect the **cedant**. Compensation is defined by the **reinsurance contract** terms.
Reinsurer:	The party that has an obligation under a ***reinsurance contract*** to compensate a ***cedant*** if a ***reinsured event*** occurs.
Cedant:	A party that has a right to compensation under ***reinsurance contract*** if a ***reinsured event*** occurs.
Reinsured events:	Uncertain future events that are covered by a ***reinsurance contract*** and create ***reinsurance risk***.
Reinsurance risk:	Risk, other than ***financial risk***, transferred from a ***cedant*** to a ***reinsurer***. A new risk created by a ***reinsurance contract*** is not a ***reinsurance risk***. For Life Business, ***policyholder*** lapse or persistency risk (i.e., the risk that a ***policyholder*** will cancel the contract earlier or later than the ***insurer*** had expected) is a ***reinsurance risk*** because the payment to the ***cedant*** is contingent on uncertain future event(s) that adversely affect the ***cedant***.

BACKGROUND

Overview of Reinsurance Concepts and Terminology

In order for this report to focus on the key issues it has been written assuming that the reader has a basic understanding of reinsurance concepts and terminology. Readers who wish to enhance their basic reinsurance knowledge are encouraged to refer to other sources. Two good sources are; Life, Health & Annuity Reinsurance (2005) by John E. Tiller, FSA, Denise Fagerberg Tiller, FSA, MAAA and Reinsurance (1997) by Strain Publishing.

Finite Reinsurance

The terms "finite reinsurance" and "financial reinsurance" are widely used but are difficult to define precisely. Generally speaking, "finite reinsurance" contracts are associated with the P&C reinsurance industry and have the effect of limiting the reinsurer's downside loss, whereas "financial reinsurance" contracts are more common in the life reinsurance industry and they tend to be associated with signifying the motivational intention of the parties rather than limiting the reinsurer's downside loss.

In the International Association of Insurance Supervisors' (IAIS) Guidance Paper on Risk Transfer, Disclosure and Analysis of Finite Reinsurance, "finite reinsurance" is stated to be "*a generic term used to describe an entire spectrum of reinsurance arrangements that transfer limited risk relative to aggregate premiums that could be charged under the contract.*" The guidance paper goes on further to say that "*…there is no accepted global definition of finite reinsurance…*" The American Academy of Actuaries Risk Transfer Practice Note contains a similar assessment of "finite reinsurance" as it says "*...there is no universally accepted definition of the term finite…*" In general, "finite reinsurance" is used to denote reinsurance where risk transfer is, in some way, limited. The IAIS Guidance Paper on Risk Transfer, Disclosure and Analysis of Finite Reinsurance also contains additional definitions of "financial reinsurance" which indicate that this categorization of reinsurance contracts has financial and strategic motivations taking precedence over the insurance risk transfer motivation.

The task force concurs that the terms "finite reinsurance" and "financial reinsurance" are ambiguous terms and for that reason believes that classifying reinsurance contracts into "finite/financial" and "non-finite/traditional" is not useful and could possibly be misleading. Therefore, this report will not try to define "finite reinsurance" and "financial reinsurance" but rather it presents the various types of limitations that can exist in reinsurance contracts. Consequently, the remainder of this report does not use the terms "finite reinsurance" and "financial reinsurance." The task force believes, however, that this report provides guidance on all reinsurance contracts including those contracts that can be described as "finite/financial."

Reinsurance and the Actuary

CGAAP Valuation of Policy Liabilities

For both Life and P&C insurers, the valuation of policy liabilities is governed by the General SOP. Further guidance is provided in the practice-specific SOP including educational notes and other guidance.

Subsection 2130 of the SOP directs the actuary to establish liabilities that are consistent with the insurers accounting policy, and that consider the future net cash flow arising from in force policies at the balance sheet date. Paragraph 2130.05 specifies that the cash flows are net of reinsurance.

Consistency in the context of reinsurance treatment means that the actuary would ensure that the liabilities provide consistently for cash flows gross of reinsurance, and reinsurance cash flow. In valuing the features of a reinsurance contract, the assumptions used have to be consistent with the gross cash flows. For example, if the reinsurance contract specifies that a particular feature becomes triggered under a certain assumption, the actuary would reflect that feature consistent with the assumption made for the gross cash flow.

The actuary of the ceding company needs to consider the possibility that the reinsurer will exercise its options to its advantage (i.e., anti-select against the insurer), and vice-versa. This requires the actuary to test the various features of the reinsurance contract, assuming that each party exercises the option to their advantage. The final policy liability is generally the largest resulting liability. Although it is not directly stated, it is implied that in conducting these tests, the actuary would consider all cash flows arising from the reinsurance treaty.

Although not directly stated in the CIA SOP, the task force believes that it is strongly implied that:

a) the valuation considers all cash flows arising from the reinsurance contract;

b) all modifications and side agreements to the reinsurance contract are required to be considered; and

c) the credit rating of the reinsurer is to be taken into account.

Regulatory Capital Treatment of Reinsurance

Federally or provincially regulated Life and P&C insurers and reinsurers in Canada are required to determine their capital adequacy according to regulatory guidelines or regulations. The capital requirements are generally calculated using a factor-based approach, and as such, are not always well suited to recognizing the effects of reinsurance on the risk profile of the insurer. The factors are applied to exposure bases which are generally net of reinsurance but the treatment of reinsurance is a "black or white" decision (i.e., if a reinsurance contract is in place the ceding company receives 100% reinsurance credit).

CURRENT REINSURANCE ACCOUNTING PRACTICE

Reinsurance Accounting and Deposit Accounting

When a contract is accounted for as reinsurance, all premiums, allowances and expenses under the contract are included in revenues and expenses, and claims recoveries under the contract are estimated in the valuation of insurance policy liabilities and are also included in revenues and expenses. This is referred to as "reinsurance accounting", and when this is not appropriate under generally accepted accounting principles, "deposit accounting" must be applied to the contract instead.

Under "deposit accounting", the premium paid or received is initially recorded as an asset or liability (the "deposit"). For contracts that do not transfer significant underwriting risk, the present value of expected recoveries is also reflected in the carrying value of the deposit, and changes in estimates of the deposit are included in interest income or expense. For contracts that transfer underwriting risk but no significant timing risk, the deposit changes to reflect the unexpired portion of coverage inherent in the premiums, which is reflected in expense, and also to reflect the present value of cash flows from future loss recoveries, which is included in losses for the period. The primary reference for deposit accounting is American Institute of Certified Public Accountants Statement of position 98-7, "Deposit Accounting: Accounting for Insurance and Reinsurance Contracts that Do Not Transfer Insurance Risk."

Relevant Accounting Standards

In considering whether risk has been transferred under a reinsurance agreement, the actuary must be aware of the applicable accounting standards and related regulatory requirements that are applicable to the valuation of insurance policy liabilities.

There are currently three principal different sets of GAAP that may be relevant; Canadian GAAP, United States GAAP (US GAAP), and IFRS. In addition, Canadian regulatory requirements narrow the range of choices available within GAAP for P&C insurers. The rules applicable to reinsurance are summarized below.

Canadian GAAP

For P&C insurers, Accounting Guideline AcG-3 provides minimal guidance on reinsurance risk transfer, while for life insurers, CICA 4211 effectively embeds CIA standards and the Canadian Asset Liability Method (CALM) in Canadian GAAP. However, with the recent implementation of the Financial Instruments accounting rules of CICA 3855, a reinsurance contract that principally involves the transfer of financial risks is no longer exempt from the general accounting rules of CICA 4211 and CALM, and is required to be classified as a financial instrument. This will require life insurers to consider the classification of reinsurance arrangements that may transfer significant financial risks as well as insurance risks.

Both the non-life and life Canadian GAAP pronouncements make general statements that in order to account for a contract as reinsurance, the contract should transfer risk, and AcG-3 further states that the risk transferred should be insurance risk. Contracts that do not transfer insurance risk should follow deposit accounting. No quantitative tests or other detailed guidance are provided in authoritative Canadian GAAP literature.

As a result, life insurers have typically not applied any quantitative testing of risk transfer for reinsurance, and in the past, the commonly expressed view has been that this is not necessary since the classification of reinsurance does not affect the cash flows from reinsurance contracts one way or the other, when completing a CALM valuation.

In contrast, P&C insurers have been significantly affected by Canadian regulatory requirements, as described in the following section.

Canadian Regulatory Requirements

Canadian GAAP is required for financial reporting to Canadian regulators. However, regulators have the statutory right to specify the use of accounting rules that may not be in accordance with GAAP. To date, regulators have only acted to narrow the range of alternatives available under GAAP.

For P&C insurers, OSFI Guideline D-7 effectively imports US GAAP for assessing reinsurance risk transfer. This guideline incorporates language drawn from Statement of Financial Accounting Standards 113 (FAS 113), which is described in more detail below.

It should be noted that there is no OSFI requirement for life insurers similar to Guideline D-7, and so regulatory requirements for life insurers have not forced the use of US GAAP rules for reinsurance for life insurers.

United States GAAP

US GAAP pronouncements for reinsurance risk transfer are relatively complex and only a general conceptual summary is provided here. The principal source is FAS 113.

- FAS 113 makes a distinction between short-duration and long-duration insurance contracts, as follows.
- For ***short-duration insurance contracts***, two tests must be passed to determine that risk has been transferred:

  a) *"The reinsurer assumes significant insurance risk under the reinsured portions of the underlying contracts.*

  b) *It is reasonably possible that the reinsurer may realize a significant loss from the transaction.*

  A reinsurer shall not be considered to have assumed significant insurance risk under the reinsured contracts if the probability of a significant variation in either the amount or the timing of the payments by the reinsurer is remote."

  FAS 113 also provides that <u>both</u> the amount and timing of the reinsurer's payments should depend on and directly vary with the amount and timing of claims settled under the reinsured contracts. Contract provisions that would delay timely reimbursement of claims could also rule out the use of reinsurance accounting, as can other risk-limiting contract features that limit the amount of loss to the reinsurer.

- For ***long-duration insurance contracts*** (typically life and health contracts), as for short-duration contracts, there must be a reasonable possibility that the reinsurer may realize a significant loss from assuming insurance risk, and that risk must come from the mortality risk and/or morbidity risk in the underlying insurance contracts.
- "Significant loss" is considered to mean a net overall loss on the reinsurance contract (measured based on the present value of cash flows), not just a significant claim under the contract. It can be difficult to meet this test in reinsuring inherently profitable blocks of business, even if there are no "finite/financial reinsurance" aspects to the agreement. As a result, it is possible that a contract that transfers insurance risk could nevertheless not qualify for reinsurance accounting under US GAAP.
- "Paragraph 11" exemption – FAS113.11 provides that if the amount of risk transfer is judged to be insufficient, reinsurance accounting can still be applied if the reinsurer has "stepped into the shoes" of the ceding insurer, so that the reinsurer has taken on "substantially all" of the insurance risk that is present. However, "substantially all" is strictly interpreted to mean effectively 100%, so that it cannot be used if there has been any modification of the risk, retention or participation features by the ceding company. This provision is effectively the only basis under which US GAAP would allow reinsurance accounting for the reinsurance of inherently profitable insurance contracts.
- Quantitative testing – There is an expectation that quantitative testing of cash flows would be used to demonstrate that sufficient risk has been transferred. While not part of any authoritative guidance, "at least a 10% chance of at least a 10% loss" is a commonly expressed rule-of-thumb. It is also accepted that in some instances, such as earthquake catastrophe coverage, a lower percent chance of a relatively larger loss would be acceptable.

International Financial Reporting Standards

International Financial Reporting Standards (IFRS) have been adopted as GAAP in most of Europe and in many other jurisdictions outside of the United States. The Canadian Accounting Standards Board has announced that it is intended that Canadian GAAP will converge with IFRS over time.

To date, IFRS does not provide complete guidance on the accounting measurements for insurance contracts, but further standards are under development in this area. However, current IFRS standards do include robust definitions of insurance contracts and other provisions relevant to reinsurance.

IFRS Standard 4 *Insurance Contracts* ("IFRS 4") applies to all insurance contracts, including reinsurance contracts, and defines an insurance contract as:

> "A contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder." *(IFRS 4 Appendix A)*

and further defines insurance risk as:

> "Risk, other than financial risk, transferred from the holder of the contract to the issuer." *(IFRS 4 Appendix A)*

Also, IFRS 4 B23 states that:

> "Insurance risk is significant if, and only if, an insured event could cause an insurer to pay significant benefits in any scenario, excluding scenarios that lack commercial substance (i.e., have no discernible effect on the economics of the transaction). If significant additional benefits would be payable in scenarios that have commercial substance, the condition in the previous sentence may be met even if the insured event is extremely unlikely or even if the expected (i.e., probability-weighted) present value of contingent cash flows is a small proportion of the expected present value of all the remaining contractual cash flows."

Also, IFRS 4 B19 (b) gives examples of items that are not insurance contracts:

> "Contracts that have the legal form of insurance but pass all significant insurance risk back to the policyholder through non-cancellable and enforceable mechanisms that adjust future payments by the policyholder as a direct result of insured losses, for example, some financial reinsurance contracts or some group contracts."

IFRS 4 does not provide quantitative guidance in assessing significance, and it requires that "an insured event could cause an insurer to pay significant benefits in any scenario," rather than requiring that an overall loss on the reinsurance contract could plausibly arise as is the case under US Statement of Financial Accounting Standards 113. As a result, IFRS 4 appears to allow a wider range of reinsurance contracts to be given reinsurance accounting than would be the case under US GAAP. For example, it is clearer under IFRS 4 that catastrophe covers are expected to receive reinsurance accounting.

Normally, insurance and reinsurance contracts measured in accordance with Canadian actuarial practices will reflect all contractual rights or obligations, so that unbundling would be permitted but not required under IFRS. IFRS 4 provides that "unbundling" or "bifurcation" of a contract between insurance and deposit components is ***required*** if some contractual rights or obligations would not otherwise be recognized and measured in the balance sheet of the insurer, so long as the deposit component can be reliably measured. Unbundling is ***permitted*** but not required otherwise, and might be done if the preparer believes that this provides better disclosure**.**

THE CONCEPT OF RISK TRANSFER

Key Principles of Risk Transfer

Risk transfer can be a complicated subject to define and describe. Most insurance and reinsurance professionals believe they have an intuitive understanding of the concept of risk transfer from a high level but have probably not delved into the specifics. To set the stage for a deeper risk transfer understanding, the task force has identified the following four key principles that provide a framework for risk transfer and risk transfer assessment.

Risk Transfer Principle #1: *There are several approaches that can be used to assess the existence of risk transfer.*

There is no single test or rule that will be applicable in assessing the existence of risk transfer for each and every type of contract. In some contracts, it may be obvious that risk transfer exists even in the absence of any specific test.

Possible approaches to assessing risk transfer are discussed in detail throughout the remainder of this paper.

Risk Transfer Principle #2: *Professional judgment will be required when assessing the existence of risk transfer.*

Professional judgment will be either in the form of selecting appropriate historical data to study or in setting parameters for models that will be used to perform a quantitative test or in documenting qualitative assessments. For both Life and P&C reinsurance, actuaries and other relevant professionals will assess risk transfer.

SOP paragraph 2130.02 requires the actuary to "coordinate the valuation with the insurer's accounting policy…so that the policy liabilities...conform to the presentation of the income statement." This requirement means the Appointed Actuary must assess risk transfer for each reinsurance contract. If the Appointed Actuary does not reach a similar conclusion on risk transfer as is being presented in the financial statements then a qualified opinion must be considered.

Risk Transfer Principle #3: *The entire agreement consisting of the reinsurance contract and all written and verbal agreements and correspondence must be considered in assessing the existence of risk transfer.*

This principle is consistent with the valuation principle in the SOP. Risk transfer must be assessed based on all commitments the parties have made to each other regardless of whether those commitments are included as part of the reinsurance contract document. Reinsurance contracts are typically composed of a written contract and may contain one or more amendments that occur subsequent to the introduction of the reinsurance contract. Each of these needs to be

considered in assessing risk transfer regardless of whether they have been included in the reinsurance contract document or not.

A reinsurance contract could also be modified by verbal agreements or by other written documents that may not be obvious amendments. The actuary must make a reasonable effort to be informed of each and every commitment made by any authorized party. Further discussion on side agreement can be found later in this report.

Risk Transfer Principle #4: *The existence of risk transfer must be assessed at inception of the contract and every time a change to the contract that significantly alters the expected future cash flows of that contract is made.*

Risk transfer does not need to be continually assessed. Events that occur during the normal course of the contract do not trigger a need for a reassessment. An example of such a feature is the build up of a Claims Fluctuation Reserve. Another example is when the reinsurer earns significant profits over time such that if this level of profits had been included in the risk transfer assessment performed at issue then the risk transfer would be negated.

However, risk transfer may need to be reassessed any time a modification to the contract is made. Examples of changes requiring risk transfer reassessment are: a revision to the reinsurance premium rates, a revision to the coverage levels other than a linear increase or decrease in the quota share, the addition or deletion of a new insurance coverage, the addition or deletion of an option (e.g., recapture with or without penalty). Prior to reassessing risk transfer, the actuary would first review the previous assessment to determine if it is still applicable after the change.

Assessing the "Existence" of Risk Transfer

To begin the exercise of assessing the "existence" of risk transfer the actuary would ask the following question:

"Does the reinsurance contract protect the ceding company from negative financial impacts that result from one or more adverse events?"

If the answer is a clear "yes" then risk transfer exists and conversely if the answer is clearly "no" then risk transfer does not exist. There are, however, many situations where the answer to this question is not simple and the actuary must perform a risk transfer assessment in order to prove the existence of risk transfer.

Key principle #1 states, "*There are several approaches that can be used to assess the existence of risk transfer.* All approaches, however, fit into two broad categories that are generally recognized in developed global insurance markets when assessing risk transfer. These categories are a) Qualitative Assessment and b) Quantitative Testing.

The usual process would be for the actuary, or other relevant professional, to first, qualitatively assess if risk transfer is "reasonably self-evident". If the actuary does not conclude that risk transfer is "reasonably self-evident" then the actuary must either expand the qualitative assessment or perform a quantitative test.

The actuary would not conclude that quantitative testing is always better proof than qualitative assessment or vice versa. The type of approach used will depend on the risk being transferred and the nature of the contract. There are situations where quantitative testing might lead to the wrong conclusion (e.g., a pandemic cover with a very high attachment point). In addition, the

actuary may find that a combined approach works best. For example, a qualitative assessment may be done for the overall contract with a quantitative test performed on one particular contract feature. One approach is often sufficient to prove the existence of risk transfer and several approaches rarely, if ever, sufficiently enhance the proof to justify the extra work.

Further discussion on how the actuary actually performs these assessments follows.

Qualitative Assessment

a) "Reasonably Self-Evident" Risk Transfer exists when it is intuitively obvious that the contract protects the cedant from future events that could adversely affect the cedant's financial position. In assessing "reasonable self-evidence" the actuary would focus on answering the question "if the reinsured event happened is protection afforded" and not on how probable the event is or how much risk is transferred. Low frequency/high severity risks are commonly transferred in reinsurance contracts and comprise most of the "reasonably self-evident" class of contracts. Examples of these contracts are casualty excess of loss reinsurance where coverage is in excess of an attachment point and there is no cap on losses and specific event reinsurance such as natural catastrophe covers.

   A "reasonably self-evident" qualitative assessment would be restricted to contracts that a) are done on arms-length terms, and b) where there are no potentially limiting risk transfer contract features as defined later in this paper. Contracts that do not meet these requirements must be assessed using either an expanded qualitative assessment (i.e., a separate assessment of the restrictive feature) or a quantitative assessment.

   If the above conditions are met then the actuary can conclude that the reinsurance contract has "reasonably self-evident" risk transfer and minimal documentation is required.

   The actuary would also be aware that for many "reasonably self-evident" risk transfer contracts, sophisticated computer models with which to perform a quantitative test may either not be available or may lead to inconclusive results.

b) If the above conditions are not met, then the actuary would next consider whether expanding the qualitative assessment will lead to a conclusion that risk transfer exists. This is typically the next step where a quantitative test usually can not be done either because relevant historical data are not available or the risk does not lend itself to mathematical models. Examples where an expanded qualitative assessment may be appropriate are reinsurance contracts with occurrence limits or contracts that would fit the "reasonably self-evident" conditions except they contain one or more potentially limiting features or are related party transactions.

   In risk limiting feature situations, the actuary can typically qualitatively assess the restrictive feature by isolating the financial impact of the feature under one or more adverse scenarios. In situations where reliable historical data or computer models are not available to make this assessment, the actuary will need to develop other comparables. As well, for related party transactions, it is important to assess the market consistency of the reinsurance premium being charged in relation to the risk being transferred.

   Qualitative assessments that are not "reasonably self-evident" usually require substantially more documentation to prove risk transfer exists. The actuary would err on the side of too much documentation rather than not enough in these situations.

Quantitative Testing

Quantitative testing is typically used to assess the existence of risk transfer when the risk being transferred lends itself to mathematical analysis and relevant data are available. Mortality reinsurance with an experience refund feature, quota share reinsurance with a sliding scale allowance and stop loss contracts are examples where quantitative testing is typically performed.

Computer models that perform scenario testing can be built to perform the test. In many cases, these models are derived from the pricing, valuation or Dynamic Capital Adequacy Testing (DCAT) work performed. Relevant data are either based on historical results of the business in question or similar business. Scenario testing can either be deterministic or stochastic and income statement, Conditional Tail Expectation (CTE) or Tail Value at Risk (TVAR) measures are all acceptable measures.

Commonly, quantitative tests will demonstrate that the cedant is "significantly" protected from adverse financial effects due to "plausible" insurance outcomes. "Significantly" and "plausible" will be defined based on the contract's particular characteristics. "Significantly" is relative to the financial outcome of an adverse scenario while "plausible" is defined in the DCAT Educational Note.

In addition to compiling results of a quantitative test the actuary would document how the testing supports the risk transfer conclusion.

Assessing the "Extent" of Risk Transfer

Once it has been proven that a risk transfer exists, then the actuary needs to have a clear view on the extent of the risk transfer for liability determination and financial statement presentation.

For P&C business, traditionally frequency and severity of loss (and hence the presence of risk transfer) have been assessed separately. However, current thinking (e.g., US GAAP and OSFI Guideline D-7) is that frequency and severity would be combined when assessing risk transfer. The uncertainty in both timing and amount risk would be present for the contract to be treated as reinsurance. Timing risk can generally be determined by looking at the contract features.

For Life business, it is not necessary to assess the effects of the transfer of timing risk and amount risk separately nor is it necessary to separately assess frequency and severity since the CALM method will accurately reflect the combination of these. The challenge is to appropriately define future cash flows, which may be scenario dependent, particularly when the reinsurance contract contains potential risk limiting features.

For both Life and P&C business, consideration of the extent of the risk transfer is as important for regulatory capital calculations as it is for liability determination and financial statement presentation. Current regulatory capital requirements (i.e., Minimum Continuing Capital and Surplus Requirement (MCCSR) for Life insurers and Minimum Capital Test for P&C insurers) assume that risk transfer in a reinsurance contract is absolute (i.e., the reinsurance risk is completely and permanently transferred to the reinsurer). This assumption is usually appropriate when reinsurance contracts are written at market terms which are the vast majority of reinsurance contracts currently in the Canadian marketplace. However, regulatory capital formulas do not reflect the wide array of possible limitations on risk transfer that can exist in reinsurance contracts. One example of where regulatory capital formulas break down in this regard is where the reinsurer contains an option that allows it to unilaterally alter the terms of the reinsurance (e.g., the reinsurer can force early recapture or commutation of claims).

Limitations of Risk Transfer

There is a wide variety of reinsurance contracts currently used in the Canadian marketplace. Many of these contain features that have the potential of limiting the risk transfer from the cedant to the reinsurer. Generally, these features are integral parts of the reinsurance contract and without them the reinsurer may not be willing to accept the risk or the price would be prohibitively high to the ceding company. It is important to note, however, that the mere presence of any of these features in a reinsurance contract does not mean that risk has not been transferred. Rather, their presence is an indication that additional work needs to be performed by the actuary to assess the "existence" and "extent" of the risk transfer. Some of these limitations are obvious (e.g., a corridor in a stop loss contract) while others need further study (e.g., a contractual recapture at the option of either party under pre-set conditions). Following is a list of potential risk limiting features of reinsurance contracts that is intended to give the actuary an indication of the types of features that require specific analysis in order to determine both the existence and extent of risk transfer. This list is not meant to be exhaustive but rather it is illustrative.

The list is organized into two broad categories: a) Terms Set in Advance and b) Experience Based Renewals.

a) Terms Set in Advance

i) Profit sharing

"Profit sharing" provisions are interchangeably referred to as profit sharing, profit commissions, experience rating provisions or experience refund provisions. Typically, the assuming company is willing to offer profit sharing to the ceding company due to the asymmetry of the spectrum of possible results where in the absence of such a feature, the probability and/or magnitude of favourable scenarios far exceeds the probability and/or magnitude of unfavourable scenarios.

For Life reinsurance, profit sharing arrangements are prevalent in the reinsurance of Group Life and A&S business and to a much lesser extent in Individual Life reinsurance contracts. Profit sharing amounts are determined by a pre-agreed formula, and take into account premiums, claims, and expenses. Percentages of profit sharing vary, and are often related to the size of the reinsured block of business and/or the amount of profit that emerges from the calculation.

For P&C reinsurance, profit sharing in reinsurance contracts is most often encountered on proportional contracts. Profit commission will return a pre-agreed percentage of any profits to the ceding company. Profits will be determined according to a pre-defined formula that takes into account premiums, claims and expenses. Other forms of profit sharing, such as experience rating refunds and no-claims rebates, may also be encountered, but are not common in the Canadian marketplace.

When assessing risk transfer, the actuary would be careful when there is a pre-determined expectation of large profit sharing. Such an expectation might be indicative of insufficient risk transfer. Also, absence of a loss carry-forward provision (used in the determination of the refund amounts) might reflect an expectation of the reinsurer that the possibility of loss in any one accounting period is remote. And finally, negative

experience refunds (i.e., the ceding company makes the assuming company whole for its losses) can negate risk transfer to the assuming company.

ii) Adjustability of reinsurance premiums and/or commissions

In these situations the reinsurance contract will either limit or adjust the amounts payable by/to the reinsurer under the contract. A typical example would be an adjustable commission on a proportional contract (with or without debit/credit carry forward provision), where the final commission payable to the ceding company will be based on the experience of the contract, within a pre-established range. A swing rate on a non-proportional contract will work similarly to the adjustable commission, except that the "adjusted" reinsurance premium rate to be applied to the contract will be based on the loss experience, within a pre-agreed range. Other examples include limits or caps on loss ratios, and loss corridor provisions on proportional contracts, which work similarly to a sliding scale commissions.

iii) Pre-set limits to timing of payments

Some contract features which restrict the timing of payments may indicate an intention to limit risk transfer. For example, some contracts may contain payment schedules or funds withheld provisions which may indicate such an intention. These and other contract features, however, may exist to facilitate the administration of the treaty, and do not necessarily indicate an intention to limit risk transfer. A clause that requires cash settlement on a quarterly basis for example, does not necessarily imply that risk transfer is not present, as long as the quarterly settlement has no restrictions and reflects the entire amount due according to the reinsurance contract. Professional judgment will be required to determine if any contract features that influence the timing of payments actually limit risk transfer.

iv) Expected duration of contract

For Life reinsurance, the presence of early recapture options might indicate that reinsurance is not intended for a long period of time. Recapture charges are typically assessed if the cedant exercises their recapture option. These charges usually take one of two forms: charges that are independent of past profitability of the reinsurance contract (e.g., a fixed per thousand of in force recaptured) or dependent on past profitability of the reinsurance contract. When the charges are independent of past profitability, risk transfer is not likely limited as long as the factors are reasonable. A cedant's motivation for this type of arrangement is typically a temporary need for capital, uncertainty regarding capital, or uncertainty with respect to a new product or product line. The cedant may be highly motivated to recapture business once their comfort level with the business increases. If the amount of the charges depends on past profitability, then this may be an indication that there has been limited intention to transfer risk on a permanent basis and further investigation is almost always necessary. For example, there is insufficient risk transfer if the assuming company can force recapture and is made whole for prior losses such as a deficit repayable on termination.

In P&C reinsurance, early recapture can be done through a commutation clause. Commutation clauses exist in most Ontario automobile excess of loss contracts, stating that accident benefit claims will be commuted back after a certain number of years, often

5 to 10 years. Other contracts allow commutation of claims or funds withheld after one or two years, sometimes in cases where no claims have been incurred. The funds withheld consist of a portion of the reinsurance premium that was paid into the fund and from which claims payments are made. This fund will be commuted back to the cedant when there are no claims. Generally, these clauses do not limit risk transfer but nevertheless the actuary would review these clauses when assessing risk transfer.

v) High front-end reinsurance commissions

For Life reinsurance, it is not uncommon to have reinsurance contracts that have payment schedules with high front-end allowances and accounts to which certain payments are applied. Such contracts may contain specific payment schedules, and therefore can be considered to have some element of financing. The presence of these provisions does not necessarily mean that risk transfer has been limited. High front-end allowances are often requested by cedants in order to offset their acquisition costs, especially when significant amounts of risk are reinsured. The cedant retains very little risk, and consequently may request significant up-front assistance in offsetting some of the cash costs associated with issuing a policy. Reinsurers are willing to support requests for high initial allowances, but are also keen to limit their lapse risk, which can create significant losses if early lapses are higher than expected. In these cases, the actuary should review the up-front reinsurance commissions to ensure they are reasonable.

vi) Counterparties

Contracts between companies that cede business back to the original cedant or an affiliate of the original cedant would be closely analyzed to ensure reserves and required capital is not being inappropriately arbitraged away.

vii) Other specific examples that the actuary should take care in assessing risk transfer are:

- coinsurance premiums that significantly exceed the premiums collected by the ceding company from its policyholders;
- Yearly Renewable Term (YRT) premiums that significantly exceed the ceding company's valuation mortality assumption;
- reinsurance allowances significantly lower than the ceding company's allocable direct expenses net of the reinsurer's own expenses (if coinsurance premiums are on original terms);
- limits on proportional contracts, especially absolute dollar, on aggregate claims reimbursement (e.g., a cap on a single catastrophic event);
- stop loss contract whereby the attachment point is above the ceding company's valuation assumption or there is a short termination notice (i.e., if experience is approaching the trigger, then the contract is cancelled and the trigger is reset at a higher level just to get capital relief);
- claims fluctuation reserves funded upfront where an extra premium is not justified;
- reinsurance between affiliated companies; and
- reinsurance transacted at non-market terms.

b) Experience Based Renewals

i) Future terms based on past experience

Reinsurance premium rates that are dependent on past experience are common. Where contracts are annually renewable, this does not limit the extent of the risk transfer. However, if reinsurance premium rates are guaranteed to recover any portion of prior year losses, then risk transfer is limited unless the ceding company has the ability to retain the business or place the reinsurance elsewhere.

Multi-year contracts where renewal is not at the cedant's option would also be closely reviewed by the actuary. Although a multi-year contract does not restrict risk transfer by itself, this type of contract often includes other features that would limit risk transfer. For example, an excess contract may call for a significant increase in premium should there be a loss in a prior year, thereby virtually guaranteeing payback. Another example would be a proportional contract with a commission debit/credit carry forward provision.

ii) Forced renewals

These provisions require that if a contract is in deficit, that the cedant is obligated to cede future business to the reinsurer until at least the losses are eliminated. The purpose of these provisions is to prevent a cedant from moving the business before the reinsurer can recover the deficit. If the future business ceded is at market terms then it is possible that risk transfer is not limited but the actuary needs to assess each case individually.

OTHER ISSUES

Side Agreements

Reinsurance contracts may be modified or amended by other agreements, sometimes subsequent to the effective date of the original contract. These modification agreements, generally referred to as "amendments", are clearly documented, sometimes in the form of a letter, and are usually included with or attached to the original reinsurance contract papers. In this report, amendments are considered part of the reinsurance contract.

For the purpose of this section, side agreements are agreements made between a cedant and a reinsurer that are not directly incorporated into the reinsurance contract. Side agreements can be either written or verbal. Side agreements can obscure or misrepresent the nature or intent of a reinsurance contract. In extreme situations, side agreements may even negate any true transfer of risk. As well, they can cause confusion and ambiguity in administration and at time of claim settlement

.In order to comply with the SOP, the actuary would pay special attention to all side agreements, particularly analyzing their intent, and be suspicious when there is an apparent lack of disclosure as it may indicate appropriate accounting treatment may not be followed. To reiterate a statement made under Key Principle # 3 – "The actuary must make a reasonable effort to be informed of each and every commitment made by any authorized party."

A special case of a side agreement is one which places a requirement on the ceding company to enter into future reinsurance contracts with the reinsurer. Side agreements of this type could be an indicator that risk transfer on an existing contract is limited, possibly even non-existent, particularly if the requirement depends on the historical profitability of an existing reinsurance

contract. The task force feels that risk transfer is not impaired due to the existence of such a requirement provided the future reinsurance be transacted on market terms at that time. However, if the side agreement requires the future reinsurance agreement to be on non-market terms, then this likely leads to limited risk transfer under the current reinsurance agreement and the actuary would assess both the existence and extent of risk transfer as impacted by this option.

Both the Office of Superintendent of the Financial Institutions (OSFI) and the Autorité des Marchés Financiers (AMF) strongly discourage the use of side agreement used in conjunction with reinsurance contracts.

Mirroring and Communication

Conceptually speaking, ceded reinsurance liabilities determined by the cedant would be substantially similar to assumed reinsurance liabilities determined by the reinsurer for the same contract. If these liability amounts are exactly equal, it is often referred to as mirror reserving, or mirroring. The mirroring concept is based on the premise that both the cedant and the reinsurer would have exactly the same view of both the risk(s) being transferred and the value of those risk(s). In a rules-based accounting and valuation environment, where the method and assumptions used in liability determination are prescribed, this concept has considerable merit. For Life reinsurance, this is especially true in situations where the reinsurer has limited access to policy data. In such instances, the best source of liability calculations is, in fact, the ceding company. For P&C reinsurance, the reinsurer receives the case reserves from the ceding company, and could also rely on the ceded Incurred But Not Reported (IBNR) calculation from the cedant.

In the US, a few states require mirror reserving for statutory reserves. However, the prevailing opinion in the international actuarial community is that mirror reserving should not be required.

For Life reinsurance in Canada, in particular individual business, mirroring is likely to be inappropriate. First, each actuary is responsible for setting assumptions for all contingencies and for all cash flow payments based on his or her own best estimate assumptions. These best estimate assumptions are based at least, in some part, on each company's experience and the actuary's view of future experience. Differences can, and would, certainly occur for mortality, morbidity, lapse, expense and investment income assumptions. Expenses incurred and investment income earned by the cedant and the reinsurer will be different resulting in different valuation assumptions being used by each actuary. What may not be obvious is why there are differences in mortality, morbidity and lapse assumptions. In the cedant's case, experience is based on its own observed mortality, morbidity and lapses, each of which is influenced by its underwriters, sales force, and product characteristics. The reinsurer's experience, however, will be based on the concept of pooling of risks across companies, and the pooled experience that contributes to the assumptions of the reinsurer can, and likely will, be different from that of the cedant. As a result, legitimate differences do occur between the ceded and assumed reserves due strictly to assumption differences. Even if by coincidence the best estimate assumptions and margins for adverse deviations are similar enough that the initial ceded and assumed liabilities are close enough where it is perceived that mirroring is occurring, differences can, and likely will, emerge over time as assumptions or margins are revised to reflect the most recent experience.

For P&C reinsurance, although the reinsurer could easily rely on the cedant's IBNR estimate for proportional business, each actuary may have his or her own view of the expected development

of the particular treaty. The reinsurer's assumption will also be based on an aggregation of treaties, which will not necessarily develop similarly to the sum of the individual treaties. For non-proportional reinsurance, reliance on the ceding company's estimate is further complicated by the layering since a reinsurer may not be participating on all layers, or may have a different share of each layer. A cedant's IBNR estimate will also be based on a small amount of excess information such that the data set is too small to be credible, whereas the reinsurer will combine all treaties to produce more credible sets of data. This will usually result in a different set of assumptions.

Without a mirroring requirement and in the absence of communication between the actuaries, it is possible that the cedant and reinsurer actuaries have quite different views on the risk that is being transferred. This can result in material differences between the ceded liabilities determined by the cedant actuary and the assumed liabilities determined by reinsurer actuary. This may or may not be appropriate. A mirroring environment does not prevent these differences but it has the advantage of highlighting these differences quickly, as there is a process on at least an annual basis where there is a comparison of the reserves.

The task force's view is that a principles-based environment does not have a "natural" safeguard that ensures the cedant and reinsurer actuaries have a similar view of the risk being transferred. There are, however, processes that can be put in place that mitigate or eliminate this concern. The most fundamental safeguard is one of data integrity. For Life reinsurance, a validation process that can and would be performed by the administration area involves a reconciliation at a high level of policy counts, reinsurance amounts at risk, and in-force premiums by, say treaty, will confirm at a minimum the inventory. This reconciliation in theory would reflect only timing differences, as most reinsurance in Canada is transacted electronically. Nonetheless, it does serve as a useful check.

For P&C reinsurance, it is often appropriate for cedant and reinsurer actuaries to confer on unusually large individual losses or recent catastrophic events in order to ensure that appropriate and sufficient provisions for losses are recognized. Often reinsurers do not have the same level of data as the cedants, as they are one step further removed from the client. Consequently reinsurers place considerable reliance on the cedant for access to this information.

For reinsurance that is transacted on a coinsurance or proportional basis, the contingencies generally mirror those of the ceding company. Again, it is important to identify the terms of coverage.

A second important safeguard is communication between the cedant and reinsurer actuaries. This is most important for reinsurance contracts that are customized to the cedant's risk profile such that they are not necessarily straightforward. Such cases have the greatest opportunity for differences in interpretation. Mitigation techniques can involve communication between administration and pricing staff at both companies, but could also involve communication between the Appointed Actuaries of both the cedant and the reinsurer. It is the responsibility of the actuaries at both the cedant and reinsurer to ensure there is a common understanding of the risks being reinsured, and that the interpretation of those risks is consistent. Each would be familiar with the contracts, and it would be appropriate that, for any new arrangements that are outside what would be considered standard reinsurance arrangements, the actuaries of both companies concur on the risks transferred. For material or unusual reinsurance arrangements it is best practice for the actuaries of the cedant and the reinsurer to discuss the risk transfer aspects

of the reinsurance contract at inception of the contract and any time afterwards where a material change has occurred to the contract.

Bifurcation

There has been considerable discussion recently in some jurisdictions over the bifurcation of contracts. Bifurcation involves separating contracts into their basic constituents, including identification of those portions that are insurance versus those that are not. One purpose of this is to identify those portions of contracts that might not have risk transfer elements. Those aspects of the contracts then would be considered non-risk-transfer, and might be subject to deposit accounting. This might negate some reserve or capital credits taken by the ceding companies.

In reality, reinsurance contracts are not intended to be bifurcated. They are only valid contracts in their entirety. Individual components would not necessarily be intended to be issued on their own. They are only intended to be available as part of an entire package.

Suppose Company A ceded business to Reinsurer B on a coinsurance basis. Suppose also that Company A received an upfront commission of 150% of the first year commission. In order for Reinsurer B to achieve its profit targets, it needs to charge a higher premium from Company A in the renewal years. Bifurcation, in an extreme sense, might suggest that each risk would be unbundled. In this instance, the recovery of the upfront commission would be unbundled from the pure insurance risk. It would then be required to be treated as a loan, and non-insurance accounting would prevail.

This example illustrates the potential impact of contract bifurcation. A reinsurer would never only offer a loan. An upfront commission or allowance is only obtainable by the ceding company if there is an accompanying risk contract. The upfront commission is the result of the ceding company wishing to defray some of its own upfront cash strain. One can also view this as the reinsurer in a coinsurance situation taking some share of the upfront underwriting costs, sales costs, and agent commissions that are incurred by the ceding company.

Reinsurance Counterparty Risk

While reinsurance reduces both earnings volatility and probability of ruin, it exposes the cedant to credit risk either because the reinsurer will be unable to pay claims or because the amount reimbursed will differ from that which the cedant has expected to collect.

The SOP require the actuary to consider all cash flows, including reinsurance cash flows, when setting reserves. Paragraph 2130.05 states:

> *The comprised cash flow should include the effect of:*
>
> *retrospective premium, commission, and similar adjustments,*
>
> *experience rating refunds,*
>
> *reinsurance ceded,*
>
> *subrogation and salvage*
>
> *the exercise of policyholder options, and*
>
> *the deemed termination at the end of the term of its liabilities of each policy then in force.*

The SOP further require the actuary to consider the financial condition of its reinsurers. Paragraph 2130.16 states:

> As respects consistency, the actuary would, for example, ensure that the policy liabilities
>
> > provide for any risk of asset depreciation (C-1 risk) and of interest rate change (C-3 risk) for any deposit liabilities which the actuary did not value and which are separately reported without such provision, and
> >
> > provide consistently for cash flow gross of reinsurance and reinsurance cash flow, except that reinsurance cash flow would also take account of the financial condition of the reinsurer.

Paragraph 2130.30 amplifies this:

> > The recovery on account of reinsurance ceded would take account of the financial condition of the reinsurer.

For P&C insurance, SOP Section 2200 provides specific direction on the valuation of policy liabilities. This section re-emphasizes that policy liabilities reflect reinsurance, but a specific margin for adverse deviations is required to be placed on the amount of reinsurance ceded. Paragraph 2250.05 specifies that margins for adverse deviations are required for recovery from reinsurance ceded, and 2250.08 and 2250.10 specify that the margin be determined as a percentage (0-15%) of the best estimate ceded claim and premium liabilities. The degree of margin depends on the actuary's assessment of the uncertainty of recovery (e.g., as evidenced by the history of disputes with a reinsurer). This would also take into account the credit worthiness of the reinsurer's.

For Life insurers, there is no further guidance related to reinsurance provided in section 2300.

The risk that future reinsurance receivables (or ceded unpaid claims) are not recoverable is to be provided within the policy liabilities. The intent of the SOP is that the policy liabilities include a provision for future reinsurer default, similar to any other default provision. Similar considerations apply when taking credit for future receivables from policyholders (including reinsurers) arising from deficit recoveries, experience rating, etc. (paragraph 2130.25).

This task force believes that in normal circumstances, any credit provision be represented as a margin against best estimate assumptions. In the event that likelihood is high that a future reinsurance receivable will not be realized in its entirety, it is the joint responsibility of the actuary and the accountant to ensure that such individual situations are reflected appropriately in the balance sheet.

When estimating if a credit provision is necessary, and the amount of such a provision, the actuary would consider the following factors:

- The rating from rating agencies such as Standard & Poor's or A.M. Best;
- Any history of dispute on claims;
- Whether the reinsurer or book of business is in runoff;
- The expertise of the reinsurer;
- The diversification of the reinsurer;
- The quality of the reinsurer's retrocession; and

- The MCCSR/TAAM ratio for a life reinsurer, or the MCT/BAAT ratio for a P&C reinsurer.

The above situation would be contrasted to the situation where the insurer has paid a claim and is awaiting money from the reinsurer (current reinsurance receivable). In such an instance, if a claim is in dispute, or the collection is outstanding for a certain number of months, accounting rules would dictate setting up a reserve for bad debt. Although the advice of the actuary may be sought for establishing this reserve, the bad debt account would not be part of the actuary's estimate of policy liabilities.

Concentration risk is not intended to be the same as counterparty credit risk. Concentration risk is the risk of excess exposure to a single counterparty, and needs to be considered and addressed by the company's risk management policies. Good risk management practice would include the monitoring of counterparty exposure, procedures for the approval of additional counterparties, and ongoing monitoring of counterparties either for credit or for impacts due to large-loss events.

APPENDIX

Date	Author	Document title
No date	Moore, Drab, Christie, Shah	IAS Applied to Property and Casualty Insurance - Overview of Reserving Issues
No date	AICPA	Evaluating Risk Transfer in Reinsurance of Short-Duration Contracts
Mar 5, 2004	ACLI, NAMIC, PCIAA, RAA	Response to AICPA Paper
Mar 29, 2004	Myles J. Tilley, CPA	Property and Casualty Reinsurance Accounting Guidance: A Historical Perspective
May 18, 2004	AAA	Response to the AICPA Paper
Dec 7, 2004	NAMIC, RAA	Accounting and Disclosure for Property and Casualty Reinsurance Contracts
May 25, 2005	AAA	Proposed Survey on Risk Transfer for Finite Reinsurance Products
June 3, 2005	Culp & Heaton	The Uses and Abuses of Finite Risk Reinsurance
June 13, 2005	AAA	Request for Suggestions on Risk Transfer Analysis
Aug 1, 2005	AAA	Risk Transfer in P&C Reinsurance: Report to the Casualty Actuarial Task Force of the NAIC
Sept 1, 2005	Eastwood & Clyne	Magazine Article: The Problem with Financial Reinsurance
Oct. 31, 2005	AAA	Reinsurance Reserve Credit
Nov. 2, 2005	LePan	Letter to Senate Banking, Trade and Commerce Committee on Finite Reinsurance
Nov. 1, 2005	AAA	Reinsurance Attestation Supplement 20-1: Risk Transfer Testing Practice Note
Nov. 1, 2005	Tillinghast Towers Perrin	Update: New NAIC Reporting Requirements for Risk Transfer
Nov 30, 2005	IAA	Practice Guideline: Accounting for Reinsurance Contracts under IFRS
Jan. 1, 2006	Group of Thirty	Executive Summary: Reinsurance and International Financial Markets
May 26, 2006	FASB	Bifurcation of Insurance and Reinsurance Contracts for Financial Reporting
July 23, 2006	IAIS	Guidance Paper on Risk Transfer, Disclosure and Analysis of Finite Reinsurance (Draft)

RECOMMENDATIONS AND OPINIONS OF THE CIA TASK FORCE ON THE APPROPRIATE TREATMENT OF REINSURANCE

CIA Standards of Practice (SOP)

The task force believes that the current SOP, when properly applied, are adequate with respect to reinsurance. However, in an effort to provide further clarity and guidance with respect to reinsurance, the task force recommends that they be augmented in two ways:

- Consider adding a section to the SOP that explicitly states that when determining policy liabilities, the actuary must consider the entire policy contract along with any other contracts attached to, or subsequent to the contract, including reinsurance contracts and side agreements. While the task force members believe this is already implied by the SOP, we believe a direct statement addressing this "head on" adds further clarity.
- Consider eliminating differences between the Life and the P&C sections of the SOP, particularly with respect to the level of margins necessary to provide for reinsurance counterparty risk. For P&C insurance, a specific margin range is noted in subsection 2250 whereas the Life insurance sections are silent on this topic.

Principle versus a Rules-Based Approach

The task force members strongly believe that it is not advisable to espouse a rules-based approach in assessing the existence of risk transfer. A rules-based approach is not consistent with current Canadian and international accounting rules, and a rules-based approach cannot be comprehensive enough to capture all situations. In the case of potential risk limiting features, it would be impossible to anticipate the labelling, use, circumstances and effect of every risk limiting feature and as a result a rules-based approach would tempt practitioners to "manage to the test." Rather, the task force members believe that maintaining the current principles-based framework for making professional judgement is the prudent approach.

Regulatory Capital Formulae

The task force members believe that as long as portions of regulatory capital formulae remain factor-based then they may not recognize the fact that risk transferred in a reinsurance contract is not always completely and permanently transferred. Moreover, the task force members believe that the assessment of complete and permanent risk transfer should be left to the judgement of the Appointed Actuary when making regulatory capital calculations. External Audit, External Actuarial Review and, for Life business, the MCCSR Report that is required beginning at 2006 year-end provide sufficient controls that reasonable judgement is being applied.

Mirroring of Liability Amounts

The task force members strongly believe that mirroring of liability amounts (sometimes referred to as "reserve mirroring") by the cedant and the reinsurer is <u>not</u> appropriate for accounting purposes. Reserve mirroring is inconsistent with Canadian GAAP and IFRS principles and, in

the task force's view, will in many cases lead to inappropriate liabilities for the reinsurer (assuming the reinsurer must mirror the amounts calculated by the cedant).

Bifurcation of Reinsurance Contracts

The task force members strongly believe that requiring bifurcation of reinsurance contracts into insurance and financial components is not appropriate for accounting purposes. Bifurcation is not required under Canadian GAAP and IFRS principles and the complexity, impracticality and cost of broad application of the bifurcation of reinsurance contracts in financial reporting is likely to greatly exceed any benefit derived from increased transparency.