Risk Transfer? … The Wrong Question?

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Introduction

A great deal of energy is expended around the world regularly by insurers, reinsurers, auditors, and insurance regulators in the discussion, analysis, and documentation of whether various reinsurance contracts contain "enough risk transfer". Sadly, the results of these interactions are rarely completely satisfying, and it may very well be due to the fact that we are asking ourselves the wrong question in the first place.

Ahead of the impending introductions of two new international regimes (IFRS 4 Phase II and Solvency II), RGA would like to take you on a brief trip to consider the question of how or whether accounting and capital regulations could be drafted to avoid this unfortunate situation. Could we not have regulations that lead us to ask a helpful and answerable question about reinsurance contracts?

Even if the answer to this is negative in practice, we hope that making the journey with us helps make dealing with the resulting reality a bit easier in the future.

Why do we ask the risk transfer question?

To begin our journey, let us remind ourselves why this troublesome question is even asked in the first place. The simple underlying reason is – or should be – to determine the *appropriate portrayal of the impact of a reinsurance contract on a given set of financial statements*. Ideally this would break down nicely into these three distinct steps and key questions, to which we will return regularly throughout this document:

Key Questions

1. What is the objective of the financial statements in question?
2. What are the quantitative principles or methods through which that objective is achieved for insurance liabilities?
3. What is the effect of the reinsurance contract under those principles or methods?

As a concrete example to clarify these questions, let us examine Canadian GAAP as it existed in the early 1990s. Canadian GAAP's answers to the three points above could have been expressed as follows:

Key Answers

1. The objective is to provide a fair representation of the financial position of the insurer, based on best estimate assumptions *reflecting all contingencies* plus a *defined level of conservatism*
2. Reserves are calculated on a prospective cash flow projection basis, using the assumptions consistent with answer #1
3. Reinsurance is simply an additional set of cash flows whose projection according to answer #2 needs to be carried out and whose impact needs to be included in the financial statements

In Canada, as a result of these points, there has never been any need to agonize over the impact of reinsurance in the local GAAP financial statements.

The actuary and the accountant simply need to agree on the projected reinsurance premiums, claims and other cash flows.

How can this be so simple? Why is Canada one of the exceptions? The answer appears to lie in key question #2. Let us look at the situation is other countries.

The typical situation

In contrast to the Canadian example, many other countries – most of continental Europe prior to Solvency II, the U.S., and much of pre-IFRS Asia – have or had at least some material parts of their local financial statements (either or both of the accounting or solvency capital system) where the answers to the three key questions would be as follows:

1. The objective is to represent the financial position of the insurer, reflecting some contingencies, and including a perhaps-undefined level of conservatism.
2. Reserves are calculated with one or more of the following:
    a. a retrospective basis (e.g., using actual past premiums paid as a starting point);
    b. ignoring some future contingencies (e.g., ignoring future persistency or expenses);
    c. with arbitrary adjustments or limitations (e.g., surrender value floor on reserves); and/or
    d. where assumptions are labeled “best estimate” but are believed by many to include an “appropriate” level of conservatism.
3. Reinsurance, especially modern contracts tailored to risk management needs, can, unfortunately, not be accommodated in such an inflexible and non-transparent system. How do you reflect reinsurance, whose important effects are mostly in the future, and which might legitimately selectively cover some contingencies, and whose pricing will be economically based on the full set of future cash flows and contingencies of the reinsurance agreement?

Actuaries and accountants have stumbled over this last question for many years in these countries, creating the situation described in the introduction to this document. Reinsurance has been transacted in increasingly helpful and innovative forms, creating a need for some method to be chosen to reflect the impact of reinsurance. The methods chosen have generally echoed the arbitrariness highlighted in points #2a-d of the list immediately above. This nicely parallels the Canadian example, where the answers to key questions #2 and #3 align with one another with respect to their simplicity and clarity.

As a symptom of the underlying issues in these other countries, the risk transfer question is often oversimplified and becomes one of these binary questions:

- Do I get reserve credit for this reinsurance?
- Is this reinsurance? Yes or no?

But why must it be a binary choice? In contrast, for example, the Canadian case allows a continuous set of answers to key question #3, depending on the measured impact of the projected cash flows.

Can the insurer and reinsurer get different answers?

Some actual past cases about questions of risk transfer that have received great public exposure have been those where an additional question has entered the discussion: should the insurer and the reinsurer have roughly ‘mirror’ treatments of the same reinsurance agreement (e.g., the reinsurer has a reserve roughly equal to the reserve reduction taken by the insurer)? Public debate often misses key subtleties, and in this case it is the issue of whether

the insurer and reinsurer are reporting on the same accounting basis (e.g., both on French GAAP, or one on French GAAP and one on U.S. GAAP).

In the case where the insurer and the reinsurer are reporting on the same accounting basis, it would seem uncontroversial that rough mirror accounting treatment should result; any differences should reflect differences in assumptions or company-specific facts or circumstances. Where two different accounting bases are in question, the answer is less clear. Depending on the goals and principles of each accounting basis, it is conceivable that legitimately different treatments will result. Further complicating the issues and the public discussion is that most insurers and reinsurers have more than one accounting basis under which they report (e.g., French GAAP and IFRS) and these can each have slightly different goals and principles.

Having successfully operated globally via local operations and with clients subject to a myriad of different accounting bases, RGA has learned to navigate these confusing issues. For example, in cases where RGA and a client report under the same accounting basis, RGA goes to great lengths to ensure that both counterparties arrive at the same or similar accounting treatment for a given reinsurance contract.

What about capital requirements?

The sections above have implicitly focused on the balance sheet and income statement of the insurer. The risk transfer issue, however, also arises with regard to capital requirements. Every country has some sort of calculation of minimum capital requirements (an off-balance-sheet calculation), the result of which gets compared with actual capital (an on-balance-sheet value). The question of whether the impact of reinsurance is correctly reflected in that off-balance-sheet calculation is very similar to the balance sheet version of the question explored above.
Let's look at continental Europe pre-Solvency II as an example. The solvency requirement there boils down mostly to "4% of reserves and 0.3% of insurance sum at risk". The 0.3% element presumably covers the insurance risk. But for this year or for longer? Forever? And what about the 4% element: what does it cover - investment risk? Operational risk? Asset-Liability-Matching risk? Persistency risk? The lack of clear answers to these questions is why the reinsurance credit question usually again became a binary choice and why the regulators applied arbitrary limits to the reduction

in minimum capital requirements that an insurer could take for reinsurance (i.e., 15% reduction for the 4% factor and 50% reduction for the 0.3% factor).

One worthy attempt to create sense out of arbitrary and opaque capital regulations, at least as they relate to judging the impact of reinsurance, is to rephrase our recurring question as "does the insurer pass the risk for which the regulator is requiring capital?" A rule which, for example, required capital to be held to cover 100% of negative reserves could reasonably be argued to be related to persistency risk. Under such a system, a tailored reinsurance transaction that passed solely the persistency risk should be grounds for the insurer not being required to hold the 100% of negative reserves component of required capital. Cases that allow such a work-around are unfortunately more the exception than the rule and the arbitrary binary situation above is the norm.

The counter-example to this case is found in the same region, with the imminent and ever-evolving Solvency II requirements. See the later section "Solvency II" for a more-detailed exploration of this issue.

Learning from the past

In an ideal world, we would learn from these past experiences and observations and we would design better new systems that addressed these issues. In such a world, IFRS 4 Phase II ("Insurance Contracts") and Solvency II would easily capture the impact of various sorts of reinsurance in a suitably sensitive way and would avoid arbitrary, binary oversimplifications and the need to try to answer unanswerable questions. They would thereby not even need a definition of risk transfer or of reinsurance.

Though neither IFRS 4 Phase II nor Solvency II has yet been finalized, it is, however, already possible to make some confident predictions about whether we will soon be in that ideal world.

Solvency II

The designers of Solvency II's balance sheet and capital requirements recognized the problems highlighted above with the old European system. As a result, Solvency II's balance sheet and Solvency Capital Requirement (SCR)[1] both have clearly defined goals and methods, which make the reflection of reinsurance simple, giving these answers to our key questions:

	SII Balance Sheet	SII SCR
Objective	Market value of assets and liabilities	Amount required to withstand a 99.5% 1-year shock
Principles and Methods	Reserves calculated using true best estimates, covering all contingencies, plus a risk margin defined in terms of cost of capital and future SCRs	Choose shocks which represent the 99.5% likelihood scenario over the next 12 months and rerun the balance sheet calculations on this basis
Impact of Reinsurance	Just another set of cash flows	Just another set of cash flows

As a result, Solvency II does not have a definition of "sufficient risk transfer" or of "reinsurance" (see following page). The regulations simply require the actuary and accountant to project reinsurance cash flows for the balance sheet and SCR according to the same principles and with the same methods as for all other cash flows.

[1]In practice, Solvency II's "Solvency Capital Requirement" (SCR) is the minimum level at which an insurer can operate its business without avoidable regulatory intervention. The lower "Minimum Capital Requirement" (MCR), also defined in Solvency II, is well below the level a company in good standing would wish to hold and is, in large part, not relevant to the planning and management of a viable company.

Doesn't Solvency II have a Risk Transfer Definition?

Solvency II does contain some requirements for recognizing "risk-mitigation techniques", which do make clear reference to "risk transfer", and which do apply to reinsurance. However, these are not fundamental new requirements relative to the rest of Solvency II, but instead are essentially merely clarifications and reminders about how to apply the principles of Solvency II in the case of reinsurance and other risk mitigation techniques. For example, these provisions cover legal enforceability, connected transactions, and the risk of default of the reinsurer. They do not, however, attempt to define a likelihood or magnitude of loss or a qualitative level of risk transfer (e.g. "reasonable" or "significant"). Instead, Solvency II's core building blocks of best estimate cash flow projections, of risk margins based on cost of capital and of 99.5% one-year confidence interval shocks make this unnecessary.

IFRS 4 Phase II

The designers of IFRS 4 Phase II seem to not be headed for the same actuarially satisfying result as Solvency II. The reason for this can be attributed to two closely linked factors. First, from a more mechanical perspective, IFRS 4 Phase II will contain several retrospective methods and arbitrary limitations with respect to insurance liabilities. This is seen clearly in the core principle that initial reserves be set high enough so as to *eliminate any gain at issue* (arbitrary limitation) relative to the initial premium or deposit from the policyholder (retrospective). Second, from a more fundamental perspective, the architects of IFRS 4 are trying to avoid volatility in the resulting income statement. They clearly believe that such volatility would be inappropriate and unhelpful for the users of insurance company financial statements. However, the inherent volatility of long-term life insurance liabilities in a fair value (like IFRS) or market value (like Solvency II) framework has resulted in difficulties in finalizing IFRS 4 Phase II. See following page for more information about IFRS's risk transfer and (re)insurance definitions.

What about the 10/10 rule?

The state of New York enacted the first regulations to address the issue of accounting for reinsurance that did not transfer sufficient risk. Regulation 102, passed in 1985, only allowed the insurer to take reserve credit on its U.S. statutory accounts for reinsurance if that reinsurance contract:

(i) transferred all of the significant risk inherent in the business reinsured and

(ii) did not contain specified prohibited clauses (e.g., reinsurer able to force unilateral recapture).

The state of California's Insurance Bulletin 1989-3 was the next landmark in this development. The U.S. National Association of Insurance Commissioners (NAIC) later adopted a variation on these regulations which has since been enacted, more or less, by all U.S. states for U.S. statutory accounts. For U.S. GAAP accounts the relevant standard is Financial Accounting Standard 113 (FAS 113), which requires a reinsurance contract to have a "reasonable possibility of significant loss" in order to qualify for reinsurance accounting (as opposed to deposit accounting). The most famous risk transfer test, however, actually doesn't exist in any of the life and health regulations: the "10/10 rule" (i.e., that a loss of 10% must be able to occur with a 10% likelihood) is found in the NAIC's Statement of Statutory Accounting Principles #61, which applies to non-life reinsurance. Nonetheless, the "10/10 rule" has been frequently quoted in life and health reinsurance circles, but here it is merely one attempt by actuaries and accountants to practically implement the FAS 113 wording.

Latest on IFRS Reinsurance and RiskTransfer Definitions

IFRS does promisingly dictate that ceded reinsurance be treated in the same way as incoming insurance. This does not, however, yield ideal results, because the treatment of incoming insurance is itself subject to some retrospective elements and arbitrary limitations. As a result, and based on the current draft of IFRS 4 Phase II "Insurance Contracts", the IFRS standards appear to be headed more for a qualitative description of what reinsurance is (e.g., like U.S. GAAP), than to letting it be determined by broader quantitative IFRS principles (e.g., like Solvency II). In its current emerging form, IFRS has no separate quantitative risk transfer requirements, but there are requirements referring to "significant risk", "commercial substance", and other subjective elements. From some perspectives IFRS appears to be based on sound principles (e.g., prospective cash flow projections to determine "fulfillment value" of insurance liabilities), but the presence of arbitrary restrictions and retrospective elements (e.g., no gain at issue relative to initial premium) overrides these beneficial principles for the purpose of determining whether reinsurance can be simply accommodated.

Closing thoughts

Given the amount of time and energy expended in the development of IFRS and Solvency II by intelligent professionals with good intentions, we should not conclude that the lessons from the past were simply ignored or misunderstood. An alternate conclusion explaining the current situations with IFRS and Solvency II is that insurance, especially long-term life insurance, is fundamentally complex and volatile, and that attempts to make it simple and stable are fraught with difficulty. Solvency II and IFRS 4 Phase II show the rough choice to be made:

- Do you capture the complexity and volatility and thereby have a complicated standard to apply, but where the incremental inclusion of reinsurance is simple (i.e., Solvency II); or
- Do you strive for simplicity and stability of results, concealing the true nature of the business and thereby making the inclusion of reinsurance awkward (i.e., IFRS 4)?

A system that chooses the seemingly simpler latter path is destined to have subjective requirements with respect to risk transfer and reinsurance, which will be difficult to apply and which leave us asking ourselves the troublesome risk transfer question that started this document. Conversely, a system based on clear, sound, and unadulterated principles will have no problem with risk transfer or reinsurance, and will let us ask the simple correct question: what is the effect of the reinsurance contract under the principles of the financial statements in question?

We hope that this brief journey has given you a fresh perspective on an old topic and that you are now better-equipped to deal with the practical issues that will arise in the future.

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