

SAM Common Errors: Non-Life Insurance

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Introduction

The introduction of Solvency Assessment and Management (SAM) to the South African insurance market has brought with it both rewards and challenges. This series of articles looks at some of the challenges that insurers face in the completion of regulatory returns and that have been observed in the Comprehensive Parallel Run (CPR). More specifically, these articles will:

- Outline challenges experienced by insurers in the completion of the Quantitative Reporting Template (QRT)
- Highlight areas where insurers may be applying incorrect standards in the calculation of the Solvency Capital Requirement (SCR)
- Identify areas where the standard formula, accompanied with slightly different business practices, could result in different capital requirements for similar (if not identical) risks

This series of articles will address these issues for both Life and Non-Life insurers. This article deals specifically with non-life insurers and the issues they face.

Catastrophe risk

EXPOSURE DATA

A number of non-life insurers struggle to obtain sufficiently granular data to complete the scenario based calculations. The range of issues experienced by insurers differ greatly depending on the quality of their data. Many insurers have taken to an approach of *grossing up* exposures although this is strictly not allowed by Attachment 8 of FSI 4.3 in the prudential standards which states that “... exposure data must be allocated to the zone carrying the highest capital charge in each case.”

In instances where the sum insured data is unknown, the factor based approach should be used. The factor-based approach can result in capital requirements that are significantly higher¹ when compared with the scenario-based calculation. As such, many insurers are reluctant to use the factor-based approach and have used extensive approximations.

¹ The use of the factor-based approach can result in a capital requirement 20 times higher when compared with the scenario-based approach.

DEFINITION OF SUM INSURED

The prudential standards make reference to the *sum insured* value. However, there are a number of insurers making use of alternative definitions of *sum insured*. Some insurers still make use of the policy limit, expected maximum loss, or probable maximum loss. The use of these alternative definitions can result in a significantly lower capital requirement.

Furthermore, insurers need to make sure that the appropriate sums insured are included in the calculations. By way of example, for the commercial and residential buildings one must ensure that *loss of rent* is included in the sum insured value.

Commercial insurers may also find it challenging where a single sum insured may cover building and contents, or multiple perils. In these instances it may be difficult to allocate the sum insured value to the relevant category.

MAN-MADE CATASTROPHE RISK

Even insurers that have detailed address information available find the requirement to calculate which risks are within *200m* of each other to be challenging. Whilst one can make use of geocoders, addresses are often not sufficiently well formatted to geo-code all locations accurately.

Furthermore, although possible, the calculation of pairwise distances can be a complicated calculation. As such, many insurers have used approximations for these calculations.

NO CATASTROPHE RISK

A number of insurers have decided not to calculate catastrophe risk for specific lines of business, where they believe there is little (or no) catastrophe risk. However, the prudential standards (FSI 4.3 section 7) state that “Where an insurer considers some of their insurance policies to have no material exposure to non-life catastrophe risk, the insurer may apply to the Prudential Authority for an exemption to calculate the capital requirement for non-life catastrophe risk for these policies.”

Insurers are only allowed to exclude motor warranty business from the catastrophe risk calculation. All other lines of business, including various value-added products (VAPs), can only be excluded following an application to the Prudential Authority.

INDIVIDUAL XOL REINSURANCE

A number of insurers make allowance for individual excess of loss (XOL) reinsurance arrangements in the calculation of their catastrophe risks. This is particularly common for trade credit (and similar) risks. However, the standard formula (for a credit risk) seeks to test a recessionary event and not a single large loss. As such, allowance for these types of reinsurance arrangements is not consistent with the standard formula.

Lapse risk

Very few non-life insurers calculate lapse risk as part of their SCRs, despite a number of non-life insurers writing annual (and longer-term) policies. However, in the calculation of the technical provisions, allowance is made for the future profits that will arise out of these contracts. As such, there is (in most instances) a lapse risk, particularly if a pro rata premium is refunded to the customer. Should there be a mass lapse of policyholders, the insurer (on a SAM basis) would incur a loss for these policies.

Premium and reserve risk

RECOVERIES AND SIMILAR AMOUNTS

Recoveries (and other amounts) will not always be tracked by individual claim. As such some insurers have difficulty in allocating these amounts to the different lines of business. Some insurers have used a pro rata allocation based on the value of the gross outstanding claims. This can cause problems in that the recoveries will often differ (significantly) by line of business. This distorts the calculation of reserve risk.

UNALLOCATED LOSS ADJUSTMENT EXPENSES (ULAE)

The prudential standards require that reserve risk calculation should “...include unallocated loss adjustment expenses.” Many insurers often do not calculate an amount for ULAE—or they have difficulty in allocating the ULAE to the different lines of business. The calculation of reserve risk must include the ULAE reserves for each line of business.

NON-PROPORTIONAL REINSURANCE PREMIUMS

FSI 4.3 section 5 states that “Earned premiums should be net of applicable reinsurance. Applicable reinsurance includes proportional reinsurance (e.g. surplus) and certain non-proportional reinsurance (e.g. risk excess-of-loss), to the extent that they can be allocated to a specific (sub-)line of business.”

Insurers are typically removing all reinsurance premiums—even those that spread across multiple lines of business, such as catastrophe cover.

COUNTERPARTY DEFAULT IMPAIRMENT RISK

The impairment relating to counterparty default of risk-mitigating contracts must be calculated at a sub-module level. That is, a separate calculation must be performed for premium and reserve risk as well as for each catastrophe event. Insurers should also only be calculating the additional impairment risk. This can be challenging when the market risk calculation is performed independently.

Risk margin calculation

In calculating the risk margin, many insurers allow for the runoff of the entire SCR. Typically, the reserves transferred relate mainly to claims reserves. As such there will be reduced catastrophe risk and premium reserve risk. The inclusion of the full catastrophe risk (or premium risk) could potentially significantly overstate the risk margin calculation. Care should thus be taken to ensure that allowance for catastrophe risk and premium risk is only made where appropriate.

Contingency policies

There are a number of non-life insurers that issue so-termed *contingency policies*. However, the treatment of these policies is not consistent across the industry. In some instances these policies are renewed annually, whilst in other instances only a top-up premium is paid. As such, there is a significantly different calculation of the premium risk. Furthermore, a number of insurers have looked to apply a *stop loss* arrangement to these policies—although this stop loss should probably be applied for each underwriting year.

Non-life underwriting risk workbook issues

The Financial Services Board (FSB) has not updated its workbook. A number of insurers have struggled to update the non-life underwriting workbooks to cater to the changes in the prudential standards, as well as the unique characteristics of their reinsurance arrangements. It is very easy to make a mistake in this process.

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