Features of Non-proportional Reinsurance

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Naren Lalloo

Munich RE

NOT IF, BUT HOW

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Agenda

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1. Overview
2. Gross Net Retained Premium Income
3. Minimum / Deposit Premium and MDP adjustment
4. Reinstatement Premiums

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01 Overview

Overview

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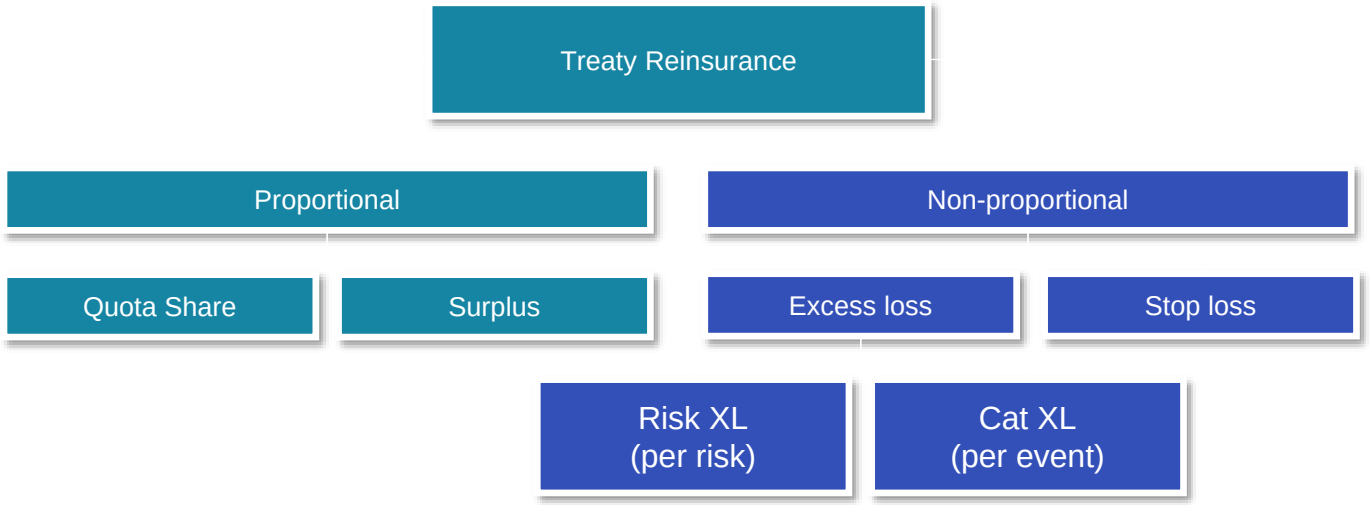

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02

Gross Net Retained Premium Income

Gross Net Retained Premium Income

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Gross Net Retained Premium Income

- **Proportional:**
  - Reinsured pays a portion of the original gross premium (OGP) to Reinsurers. (In proportion to the sharing of the risk.)
- **Non-proportional:**
  - The balance of premium is **retained** by the Reinsured and protected by Non-proportional Reinsurance. This = **Gross Net Retained Premium Income** (GNRPI).

03

Minimum / Deposit Premium and MDP adjustment

Minimum / Deposit Premium and MDP adjustment

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- The Reinsurer calculates the premium that the Insurer must pay for Non-proportional reinsurance treaties.
  - Reinsurance underwriters price the business (using the Insurer's prior loss experience, estimated premium income, exposure info. etc) and come up with a **rate** per layer.
  - This rate could be a **flat** rate or a **variable** rate. (Mostly flat rates in our market.)
  - This rate is applied to the GNRPI to arrive at the amount of premium that the Reinsured must pay to Reinsurers for the cover.
  - Reinsurers allow a 10% discount in case the Reinsured does not meet their estimated premium income.
  - This 90% premium payment due by the Reinsured is called the **'Minimum and Deposit Premium' (MDP) or 'Deposit Premium'.** (MDP only in our market.)

Calculation

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Example: MDP

Exercise:

EPI: R 450,000,000

Rate: 0.1556%

MDP: 90%

Payable: Half Yearly

Calculation

450,000,000 x 0.1556% = 700,000

700,000 x 90% = 630,000

630,000/2 = 315,000

MDP Adjustment

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- The MDP / DP is paid to Reinsurers in installments – usually quarterly or semi-annually in advance.
- At inception of the treaty, the rate is applied to the **estimated** GNRPI. (Hence the premium paid by Reinsured is a **deposit** premium.)
- At expiry of treaty period, the **actual** GNRPI will be known.
- A premium adjustment is calculated and the difference between the estimated and actual premium is determined. (Referred to as the “MDP adjustment.”)
    - If actual GNRPI x rate > MDP / DP: additional premium is due to the Reinsurer.
    - If actual GNRPI x rate < MDP / DP:
        - For MDP: no refund of premium by Reinsurer to Reinsured because it was a ***minimum*** and deposit premium.
        - For DP: Reinsurer must refund the difference to the Reinsured because it was a **deposit** premium only i.e. no minimum premium was required.

Calculation

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Example: MDP adjustment

Exercise:

EPI: R 450,000,000

Layer 1

MDP: R 630,000, payable in 2 equal instalments.

Adjustable at a **rate** of: 0.1556%

Calculate the adjustment premium if:

1. The actual GNRPI = R 455,000,000

2. The actual GNRPI = R 400,000,000

Solution

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Example: MDP adjustment

Solution:

1) If actual GNRPI = R 455,000,000, adjustment premium =

455,000,000 x 0.1556% = 707,980 less MDP 630,000 = 77,980.

Additional premium to be paid by Reinsured to Reinsurer = R 77,980.

2) If actual GNRPI = R 400,000,000, adjustment premium =

400,000,000 x 0.1556% = 622,400. This is 7,600 less than the MDP of 630,000.

Therefore:

- No additional premium due by Reinsured.
- Reinsurer does not have to refund the amount of 7,600 to the Reinsured because this is a **minimum** & deposit premium.

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04

Reinstatement Premiums

Reinstatement Premiums

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- The Reinsured has to pay **additional premium** when the cover is reinstated.
  - Reinstatement premium can be any / all of the following:
    - ➢ “Free” ie pre-paid (Reinsurers will price for this.)
    - ➢ Any percentage of the premium eg 100%; 50%; 125% etc
    - ➢ Pro-rata to amount reinstated.
    - ➢ Pro-rata to time remaining until treaty period expires. (Not given in our market.)
      - Most treaty reinstatement conditions are ‘100% additional premium to time, pro-rata to amount’.
- Reinsurers off-set the reinstatement premium against the claim payment.

Reinstatement Premiums

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Reinstatement Premium formulae:

Pro rata to amount, 100% to time

$$\frac{\text{Loss to Cover}}{\text{Cover}} \times \text{Premium}$$

Pro rata to amount and time

$$\frac{\text{Loss to Cover}}{\text{Cover}} \times \text{Premium} \times \frac{\text{time (days) left before treaty}}{365 \text{ days}}$$

Calculation

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Example: Reinstatement Premiums

Example:

- XoL Treaty R 500,000 xs R 200,00 for 1 Jan – 31 Dec
- 1 reinstatement 100% additional premium to time, pro rata to amount
- Premium (MDP) = R 25,000
- Claim = R 600,000 on 1 Sept

Exercise

Calculate the reinstatement premium:

- In accordance with the condition above
- As above but pro rata to time and amount.

Calculation

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Example: Reinstatement Premiums

Solution:

- *Reinstatement Premium*

= 400,000** x 25,000

500,000

= R 20,000

** R 600,000 – R 200,000 (priority) = loss to cover.

2. Reinstatement Premium

= 20,000 x 4/12 = R 6,666

Calculations

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Example: Reinstatement Premiums Adjustment

Solution:

- *Reinstatement Premium Adjustment*

= 400,000** x 30,000

500,000

= R 24,000 Less Paid R20 000 = R 4 000 additional R/I Premium

** R 600,000 – R 200,000 (priority) = loss to cover.

2. *Reinstatement Premium Adjustment*

= 24,000 x 4/12 = R 8 000 Less Paid R6 666 = R 1 334 additional R/I Premium

Questions!

Naren Lalloo

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Thank you for your attention!

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