Mass lapse reinsurance: An effective risk management tool

An overview and key considerations for (re)insurers

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Mass lapse reinsurance is a risk management tool used by insurers to protect against the adverse financial impact of a mass lapse on their portfolio. An informal survey conducted by the European Insurance and Occupational Pensions Authority (EIOPA)¹ in the last quarter of 2023 revealed that most national supervisors (nine out of 11) have identified at least one mass lapse reinsurance agreement within their jurisdictions, with the majority of these agreements being established since 2020.

(Re)insurers have shown renewed interest in mass lapse reinsurance, particularly in light of interest rate risks over recent years. With the objective of achieving supervisory convergence on this topic, EIOPA published a consultation paper² on mass lapse reinsurance transactions. Released on 8 November 2024, the consultation invites feedback until 7 February 2025. The market has positively received this publication as it offers insights into key regulatory considerations and provides an opportunity for stakeholders to share their input.

In this paper, we explore the heightened lapse risk in recent years and provide an overview of typical features of mass lapse reinsurance transactions currently on the market. We then delve into the recent consultation paper from EIOPA, summarising the main findings and potential implications for both existing and new reinsurance transactions.

Introduction to Solvency II lapse risk

Lapse risk is one of the primary risks faced by life insurers and is a key component of the Solvency II Solvency Capital Requirement (SCR) for many companies. Under Solvency II, lapse risk is defined as "the risk of loss, or of adverse change in the value of insurance liabilities, resulting from changes in the level or volatility of the rates of policy lapses, terminations, renewals and surrenders."³



The SCR for lapse risk is determined by the maximum loss under three lapse scenarios:

- A 50% permanent increase in lapse rates (lapse up)
- A 50% permanent decrease in lapse rates (lapse down)
- A mass lapse stress scenario, which applies a 40% instantaneous shock to in-force policies (70% for management of group pension funds).

The SCR shocks only apply to policies where the shock bites. For insurers that have policies with a negative liability (i.e., projected future income exceeds future outgo) or where the liability is lower than the surrender value, the mass lapse risk is often the biting shock leading to a significant capital requirement.

Heightened lapse risk in Europe

In recent years, many European life insurers have grown increasingly concerned about the rising exposure to lapse risk, with certain countries more affected than others due to the types of products sold in their markets. A major factor driving the rise in lapse rates has been the increase in interest rates, which has influenced policyholder behaviour for several reasons. Firstly, a high interest rate environment, along with rising inflation, has led to a higher cost of living. This economic pressure has resulted in policyholders surrendering their savings products as disposable income tightens. Additionally, the rise in interest rates has intensified competition for insurance products. For instance, in Italy, competition from BTPs (Italian government bonds), high-yield bonds and higher returns on deposit accounts is expected to have increased the likelihood that policyholders will withdraw from their insurance products as they look to other attractive alternatives.

EIOPA (6 September 2024). The Role of Reinsurance in Promoting Healthy Markets. Retrieved 22 January 2025 from https://www.eiopa.europa.eu/rolereinsurance-promoting-healthy-markets-2024-09-06_en.

^{2.} EIOPA (8 November 2024). EIOPA Consuls on Mass-Lapse Reinsurance and Reinsurance Termination Clauses to Enhance Guidance on Risk Mitigation Techniques. Retrieved 22 January 2025 from https://www.eiopa.europa.eu/eiopa-consults-mass-lapse-reinsurance-andreinsurance-termination-clauses-enhance-guidance-risk-2024-11-08_en.

EU (November 2009). EUR-Lex: Directive 2009/138/EC. Retrieved 22 January 2025 from https://eur-lex.europa.eu/legalcontent/EN/ALL/?uri=celex%3A32009L0138.

The extent to which rising interest rates increase lapse risk exposure depends on product features. When interest rates rise, the value of guaranteed surrender options can increase for certain products, making surrenders more attractive. If the current market value of assets is lower than the surrender value of the policies, insurers may need to realise capital losses to fund the surrender values. This problem is exacerbated in some markets where laws enable consumers to withdraw from or lapse their policies with minimal financial consequences. Where permitted, companies have applied surrender penalties to offset losses from early redemption. However, in recent years, many companies have reduced these penalties to make their savings products more attractive to customers.

The insurance market has also faced other headwinds, such as the recent administration of Italy's Eurovita, which has damaged consumer confidence and resulted in a surge of lapses. It is not unreasonable to anticipate that similar problems could emerge in other markets.

The heightened exposure to lapse risk has brought mass lapse reinsurance into the spotlight once again for life insurers. One of the benefits of lapse risk reinsurance is that it reduces the undertaking's exposure to lapse risk, and therefore reduces the lapse capital charge.

Overview of mass lapse reinsurance

Mass lapse reinsurance protects the insurer against the adverse financial impact of a mass lapse in its portfolio. Subject to meeting regulatory requirements, it may be possible to use mass lapse reinsurance as a risk mitigation technique in the calculation of the lapse SCR, where the mass lapse stress is the biting SCR stress. As a result of providing risk mitigation, it can also provide a more optimal capital position when the mass lapse SCR significantly exceeds the lapse up and lapse down SCR, i.e., mass lapse is the most onerous stress and is expected to remain materially so.

At the time of writing, we are aware of mass lapse treaties in at least 10 European countries, with multiple treaties present in Ireland, the UK, Italy and the Netherlands.

In the following sections, we will explore the key aspects of a mass lapse reinsurance treaty.

ATTACHMENT & DETACHMENT POINTS

In a mass lapse treaty, there is typically a prespecified attachment point, where the payout from the reinsurer kicks in, and a detachment point where the reinsurer's payout is capped. The insurer is liable for any payout beyond the detachment point.

Figure 1 shows a sample payout chart from a reinsurer to the cedant.

FIGURE 1: SAMPLE PAYOUT CHART FROM REINSURER TO CEDANT



• Insurer retains the risk exposure below the attachment point (e.g., 20% in the chart).

When lapse rates in a given period exceed the defined attachment point, payment from the reinsurer is triggered.

S The reinsurer's payment is capped at the defined detachment point (e.g., 40% in the chart). Risk exposure in excess of the detachment point is retained by the insurer.

The attachment point is often set at around 20%. This level allows the insurer to effectively manage and reduce risk by transferring potential losses to the reinsurer while avoiding excessive costs, as the hedge is initially out-of-the-money at the start of the contract. A detachment point of 40% is common. This aligns with the 40% mass lapse shock under the Solvency II standard formula, beyond which additional capital relief diminishes.

REINSURANCE PREMIUM

Reinsurance premiums for mass lapse reinsurance are usually expressed as a percentage of the capacity at risk (e.g., the reduction in the SCR). The premium rates will depend on various factors, such as supply and demand in the market, the riskiness of the business reinsured (e.g., volatility of lapse experience) and the term of the treaty.

DURATION AND MEASUREMENT PERIOD

In order to maintain full capital relief for the reinsurance structure, it is necessary to ensure that the risk mitigation is initially longer than 12 months in duration. Consequently, treaties are often structured as two- or three-year contracts with a 12-month measurement period. The measurement period is often referred to as the risk window (i.e., the period over which the lapses are aggregated to determine the amount of the claim). The treaties can have renewal provisions, effectively creating a multiyear term contract. This approach has been used to permit the riskmitigating effect of the reinsurance treaty in future years to be reflected in the risk margin calculation, thereby further reducing risk margin requirements. As previously mentioned, EIOPA has issued a consultation paper, which has expressed concerns about the use of 12month measurement periods. We discuss this issue in more detail below.

Impact on required capital

Mass lapse reinsurance reduces the overall SCR by mitigating the impact of mass lapse events (to the extent the mass lapse risk is reinsured). It is worth noting that companies will still have to calculate the lapse up and lapse down SCRs—these shocks may become the biting lapse shock after mass lapse reinsurance is applied. It is important to consider this when setting the reinsurance coverage. In addition, the use of mass lapse reinsurance increases the counterparty default risk SCR due to the exposure to the reinsurer.

It is also worth noting that, while mass lapse reinsurance will lower the capital requirement for mass lapse risk, the net impact may be less than the notional amount of the reinsurance coverage purchased due to diversification. However, the reduction in underwriting SCR leads to a lower risk margin and hence increases own funds, somewhat offset after allowing for reinsurance premiums.

The combined effect of the reduction in SCR and increase in own funds generally leads to an increased solvency coverage ratio and higher free assets. The actual impact will depend on the company's risk profile and the nature of the reinsurance contract. Figure 2 below shows an illustrative example of a notional company demonstrating the impact of reinsurance.

In this example, the SCR reduces by €75 million due to lower lapse risk, offset by a higher counterparty default risk SCR and lower loss-absorbing capacity of deferred taxes (LACDT). Technical provisions reduce by €10 million due to a lower risk margin, offset by the cost of reinsurance (note that in practice the reinsurance premium would technically be reported as a negative reinsurance recoverable on the asset side, but it is included in the technical provisions in this example for simplicity). This has the net effect of increasing solvency coverage by 49% to 249%. The actual impact of reinsurance will depend on the risk profile of the company and the reinsurance arrangement.

EIOPA's publications on mass lapse reinsurance arrangements

In July 2021, EIOPA issued its "Opinion on the Use of Risk Mitigation Techniques by Insurance Undertakings,"⁴ highlighting the need for a proper balance between the risk effectively transferred and the capital relief in the SCR for such techniques. Following this, in November 2024, EIOPA issued a consultation paper on the annexes to this opinion, with a particular focus on mass lapse reinsurance. The deadline for submitting feedback on the consultation is 7 February 2025.

Below, on page 4, we discuss some of the key considerations from EIOPA's guidance.



FIGURE 2: ILLUSTRATIVE SOLVENCY II IMPACTS BEFORE AND AFTER REINSURANCE

⁴ EIOPA (12 July 2021). Opinion on the Use of Risk Mitigation Techniques by Insurance Undertakings Retrieved 22 January 2025 from https://www.eiopa.europa.eu/opinion-use-risk-mitigation-techniques-insuranceundertakings-2021-07-12_en.

EFFECTIVENESS OF RISK TRANSFER

EIOPA's opinion on the use of risk management techniques primarily expressed concerns about a potential imbalance between risk transfer and capital relief in recently developed reinsurance structures. The opinion states:

"Where there is a significant deviation of the SCR due to a reduction in the SCR that is not commensurate with the extent of the risk transferred or due to an inappropriate treatment within the SCR of any new risks that are acquired in the process, insurance and reinsurance undertakings should consider that the risk-mitigating technique does not provide an effective transfer of risk."

Insurers must therefore demonstrate that there is a real transfer of risk in the reinsurance contract and that it is not purely designed to reduce regulatory capital. Companies can justify this by performing scenario analyses to show that the reinsurance provides protection in a broader range of scenarios than the scenario driving the Solvency II requirement.

An example of how scenario analysis can effectively be used is discussed in EIOPA's consultation paper. EIOPA states that the attachment point of a mass lapse reinsurance treaty should be set based on the risk profile of the undertaking and the portfolio being reinsured. It then states that undertakings should assess in the own risk and solvency assessment (ORSA) whether the attachment point leads to a capital relief that is commensurate with the real risk transfer, using scenario analysis.

MEASUREMENT PERIOD

The measurement period of the treaty is one of the main areas of focus in the consultation paper. This is interpreted as the risk window or cover period, not to be confused with the duration or maturity of the treaty representing the contractual term.

EIOPA notes that, in the market, the duration of treaties is typically two or three years, and it has not identified any contracts with measurement periods longer than 12 months. EIOPA expresses concerns that a 12-month measurement period may not absorb losses arising from multiyear mass lapse events that last more than one year—for example, a multiyear mass lapse event that spans more than 12 months could significantly reduce own funds but may not trigger the treaty, potentially leaving the company without sufficient capital to absorb the losses.

EIOPA presents two options for the measurement period and seeks stakeholder feedback: a measurement period longer than 12 months, or a 12-month rolling period. This is likely to spark substantial discussion among both cedants and reinsurers, as the outcome could materially change the structure of some existing arrangements (we are aware of some treaties that already apply a 12-month rolling period). EIOPA has already received feedback indicating that the capacity of the reinsurance market to provide mass lapse reinsurance with measurement periods longer than 12 months may be limited.

BASIS RISK

As noted in EIOPA's opinion, reinsurance is also not considered an effective risk of transfer if there is an inappropriate treatment of any new risks acquired in the process within the SCR. One such risk might be basis risk, which arises when the reinsurance coverage does not perfectly match the loss exposure of the cedant. This discrepancy can result in the cedant being exposed to losses despite having reinsurance in place.

Article 210(2) of the EIOPA Level 2 Delegated Act requires a reinsurance arrangement to "...not result in material basis risk or in the creation of other risks, unless this is reflected in the calculation of the Solvency Capital requirement." The EIOPA Q&A no. 1597 has further clarified the case that, when material basis risk is present, it can be reflected in the calculation of the standard formula SCR, provided the risk is covered by the risk modules in the standard formula. For example, the risk mitigation effect of reinsurance in a specified currency can be reflected in the SCR, because the remaining currency risk is reflected in the currency risk module of the standard formula.

In the case of a mass lapse risk, any material basis risk cannot be reflected in the standard formula SCR by reducing the risk mitigation effect of the reinsurance. Hence insurers need to justify that the treaty does not introduce material basis risk.

Basis risk is a primary focus in EIOPA's consultation, and the paper analyses some relevant elements of mass lapse reinsurance treaties to consider when assessing basis risk. EIOPA expects that, to demonstrate the treaty provides an effective risk transfer without creating material basis risk, companies should assess whether the treaty coverage closely mirrors the changes in the value of the risk exposure under a set of risk scenarios This involves evaluating whether there are material differences in the risk-mitigating capacity of the treaty across the different scenarios.

We now delve into EIOPA's analysis of basis risk in more detail:

(i) Defining lapses

When assessing potential material basis risk, insurers should consider the definitions of a policy "lapse" or "discontinuance" that qualifies for a reinsurance claim under the mass lapse treaty. In Solvency II, discontinuance includes surrender, lapse without value, making a contract paid-up, automatic nonforfeiture provisions or exercising other discontinuity options or not exercising continuity options. All forms of mass discontinuance should be included in the mass lapse treaty for the contract to be effective. If there is any exclusion of mass lapse events and/or a discontinuity option from the treaty, insurers should assess whether material basis risk exists, for example by considering scenarios with different combinations of mass lapse events and/or exercise rates for each discontinuance under Solvency II.

(ii) Exclusions

Exclusions in the terms and conditions can create basis risk. Some reinsurance arrangements exclude certain events from coverage, such as mass lapse events due to legislative changes, market behaviour, broker recommendations, financial deterioration or internal product switching. The standard formula for mass lapse scenarios includes all such events without exception, meaning exclusions create basis risk. Even if exclusions reflect low-probability events, mass lapse scenarios themselves are extreme and rare, making these exclusions potentially significant.

Insurers are expected to align exclusions in treaties with their risk management strategies. However, minimising exclusions helps reduce basis risk from an SCR perspective. In cases where the treaty includes exclusions, insurers should assess whether material basis risk exists.

(iii) Basis for the calculation of the claim

Claims within treaties can be defined using various concepts that may differ from Solvency II parameters, such as economic loss after lapses, e.g., value of in-force (VIF), or capital losses from the sale of securities. While insurers should define claims to fit their risk management strategies, using Solvency II parameters simplifies the SCR calculations.

When claims are defined using non-Solvency II parameters, insurers must explain the differences between Solvency II losses in own funds and the claims defined in the treaty, and how these differences are considered for SCR calculations.

(iv) Parameters in the treaty

Mass lapse events can unfold over time, with lapse rates increasing as the event progresses. The amount of the reinsurance claim depends on expected lapses, which directly impact the profitability of an insurance portfolio. If the treaty bases the reinsurance claim on lapse parameters at the event's onset, the actual risk-mitigating effect may be lower than initially assessed, leading to material basis risk.

EIOPA notes that fixing the value of the treaty parameters at the start of the measurement period would help minimise any basis risk. If the parameters are not fixed at the start, then companies should assess whether this leads to material basis risk.

(v) Cliff-edge effect

EIOPA notes that most of the observed mass lapse treaties define claims as losses from lapses exceeding the attachment point, covering a range (e.g., 15% to 35%). However, some treaties observed cover all lapses once the attachment point is exceeded, leading to a sharp cliff-edge effect around the attachment point. In reality, losses increase gradually and continuously as lapse rates increase. This discrepancy therefore creates basis risk, as the risk mitigation does not accurately reflect the pattern of real losses. Consequently, such treaties can result in a non-commensurate SCR reduction. EIOPA concludes that their risk-mitigating effect can only be accurately measured through a (partial) internal model.

(vi) Termination clauses

EIOPA highlights the potential basis risk arising from early termination clauses that allow the reinsurer to unilaterally terminate the contract with short notice. Such clauses undermine effective risk transfer, as the reinsurer could end the contract just as lapses approach the attachment point. To ensure effective risk transfer, the residual measurement period and duration after early termination should be sufficient, ideally not less than 12 months, to prevent material basis risk.

Some treaties also incorporate special termination clauses that allow the reinsurer to terminate the contract under specific circumstances, such as the insurer failing to maintain adequate service levels or accuracy to retain policyholders, insolvency, regulatory restrictions on the (re)insurance business, supervisory measures imposed on the insurer or the insurer's solvency ratio falling below a certain threshold (e.g., 110%). These events could trigger or be triggered by a mass lapse event. If the reinsurer can cancel the treaty on short notice in these cases, it may indirectly exclude certain mass lapse events from coverage, creating material basis risk. EIOPA notes that, if special termination clauses are included, they should allow the mass lapse cover to continue for a residual measurement period that is not significantly shorter than the initial period, thereby helping to reduce basis risk.

RISK MARGIN

The consultation paper also examines the impact of mass lapse reinsurance transactions on the risk margin calculation, particularly how many years the arrangement should be reflected. Many of these transactions are linked to long-term contracts which might last significantly longer than the initial reinsurance treaty duration. When projecting future SCRs associated with long-term contracts, insurers must make assumptions on potential replacements of reinsurance contracts, including mass lapse treaties. While it is straightforward to adjust the risk margin calculation to account for the existing reinsurance arrangement over the contract's duration, the consultation appears to offer an option for cedants to extend the risk margin benefit, subject to certain conditions. Specifically, the undertaking must:

"(1) clearly justify that the risk that the mass lapse reinsurance treaty cannot be replaced due to an absence of liquidity in the market is not material and (2) accurately estimate the risk that the cost of replacing existing reinsurance arrangements may increase."

The paper notes that insurers should consider that the uncertainty of these assumptions increases with longer projection horizons.

REINSURER'S PERSPECTIVE

EIOPA highlights that reinsurance undertakings applying the standard formula and accepting mass lapse risk should calculate the mass lapse capital requirement scenarios based on the underlying direct insurance contracts. They highlight that, in some cases, reinsurers have classified the risk as a non-life risk and have not calculated any life mass lapse capital requirement, leading to a significant understatement of the SCR.

The paper also addresses other areas, including liquidity risk, the estimation of the risk-mitigating effect and the importance of having clear and unequivocal terms and conditions in treaties to avoid legal risk.

The publication represents a significant development in the mass lapse reinsurance market. Feedback on the consultation is open until 7 February 2025, and (re)insurers will be closely monitoring feedback to the publication. Some insurers with existing mass lapse reinsurance arrangements have already begun analysing the paper to determine whether their current treaties satisfy the proposed criteria set forth by EIOPA, or if amendments might be required in the future.

Steps for successful implementation

In this section, we outline some keys steps to successfully implement a new mass lapse treaty. In our experience, the entire process, from initial planning to final execution, can take approximately six to 12 months, depending on the complexity of the portfolio. The first step usually involves conducting a feasibility assessment to evaluate the potential benefits of mass lapse reinsurance and issues to consider, whilst also considering alternative risk mitigation measures. If a decision is made to proceed, the next step is usually to engage with reinsurers on the market. Reinsurers will require data on the portfolio and key metrics such as historical lapse experience in order to determine the price and parameters of the reinsurance. As with any reinsurance contract, insurers must also conduct thorough due diligence to assess the financial stability and reputation of shortlisted reinsurers.

Insurers should also provide an assessment of whether the relevant regulatory requirements have been met, and proactively engage with relevant stakeholders, including the regulator, to address any potential concerns. Early engagement, ongoing communication and prompt responses to the regulator feedback are essential in facilitating a smooth application. It is also important to seek an actuarial opinion, and the regulator may also request an ad hoc ORSA that considers the impact of the reinsurance treaty.

Conclusion

As companies become increasingly concerned about rising lapse risk exposure, mass lapse reinsurance provides a strategic solution for insurers to effectively manage this risk. By entering these reinsurance arrangements and reducing risk, insurers can also optimise their capital requirements and solvency positions. For a successful implementation, (re)insurers need to thoroughly address the associated risk management and regulatory considerations. (Re)insurers with existing treaties, or those considering new arrangements, will need to carefully review the details and closely monitor the responses to EIOPA's consultation paper and subsequent final guidance.

If you are interested in discussing any of the topics discussed in this paper in more detail, please reach out to the authors of this briefing note, or your usual Milliman consultant.

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