Mass Lapse Risk in European Life Insurance

A gray rhino awakening

Gallagher Re

GRAY RHINO SERIES

Executive Summary

- As interest rates rise, life insurers are increasingly aware of the capital losses that could result from rising policyholder lapses. The continuing cost-of-living crisis for consumers is also increasing the likelihood they will cancel policies and/or take their money elsewhere.

- The macroeconomic drivers of a mass-lapse event are complex and difficult to model. But the consequences are clear and could be catastrophic for the industry: large fixed-income portfolios sold at a capital loss to fund surrender values, leading to material mismatch in the duration of assets and liabilities. Driven by an extended period of low interest rates and bond yields, European insurers have moved their portfolios toward less liquid assets in recent years.

- Ratings agencies have taken note, examining this risk in detail in recent reports. Lapse risk is distributed unevenly across Europe, with insurers in some markets more exposed than others, and different mitigating factors involved.

- Lapse risk has been formally recognized by European regulators for some time, requiring insurers to hold sufficient capital under lapse up, lapse down and mass lapse scenarios. The mass lapse is defined under Solvency II as a one-off first-year shock where 40% of life policies immediately lapse (70% for some specific categories).

- Should lapse rates accelerate the situation could rapidly deteriorate. As we saw during the 2008 crisis, the collapse of a major insurer could even be a systemic risk. Mindful of this, a growing number of insurers are seeking reinsurance solutions to manage this lapse risk, as well as liquidity risk, and protect their bottom line.

- Coverage can be configured to transfer lapse risk to reinsurers, where the reinsurance policy responds if lapse rates are higher or lower than expected. The cover also provides a substantial Solvency II benefit, largely through lapse solvency capital requirement (SCR) reduction and from some risk margin relief.

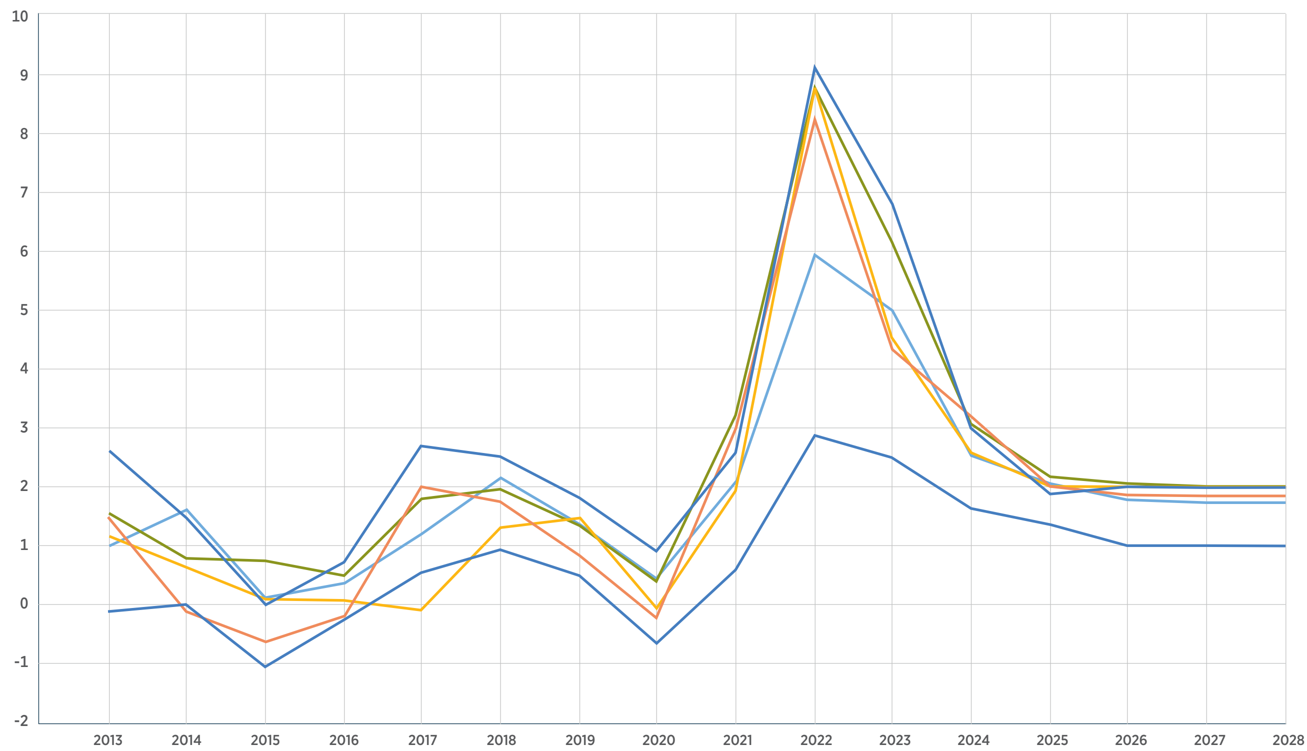
- The list of European countries where lapse reinsurance transactions have been executed is growing, with an increasing number of first precedents of these transactions receiving the local regulators' blessings, recognizing the risk management benefits of lapse reinsurance solutions.

As politicians and business leaders grapple with inflation, low growth and the threat of recession, the life insurance sector has a particular concern: the risk that their customers might abandon them.

Recession could impact the life insurance business in many ways, such as affecting the new business growth trajectory or reducing investment returns earned on asset portfolios. Another key risk is that recession could focus customers' minds on whether they can afford insurance, and if too many allow their policies to lapse at once, it could create acute financial problems for carriers.

As the IMF noted in the July update[1] to its 2023 Economic Outlook, the global economy is experiencing peaking inflation and low growth. The institution estimated growth will decline from 3.5% in 2022 to 3% this year and next, as central banks hike interest rates to get a handle on rising prices. Growth in Europe is set to be even more muted, projected to fall to 0.9% in the Euro area and 0.4% in the UK, with slight rebounds in 2024 to 1.5% and 1%, respectively.

Inflation rate, average consumer prices (Annual percent change)



Source: IMF, 2023

France Germany Italy Spain Switzerland United Kingdom

Inflation is also expected to fall, easing from a world average of 8.7% in 2022 to 6.8% in 2023 and 5.2% next year, but that is still quite high compared to recent history. Many consumers are still struggling with a cost-of-living crisis.

Inflation has driven up the cost of goods, services and, crucially, borrowing, with the cost of debt typically rising faster than any increase in investment returns. Some life insurance customers may have to make tough choices about discretionary purchases of financial products. But a potentially even larger lapse risk could arise if a lot of existing customers simply take their money elsewhere.

Moreover, as interest rates rise, new investment and savings products are being introduced with higher rates than older ones. That increases the risk that customers will begin to view existing, in-force life policies as less attractive, having seen better returns on offer from banks and other providers.

Lapse risk

The rate of surrenders, as well as paid-up and other discontinuances, being higher or lower than the insurer's best estimate assumptions, where such a difference results in a diminution of the insurers' economic own funds.

As *Insurance Asset Risk* noted in a May article[2] on mass lapse risk for life carriers in France, "two-year [bank] deposit rates leaped over the past 12 months from barely 0.5% to exceed 2%." This has brought banking products closer to the point of providing a more attractive alternative to life insurance savings products in that market.

Growing lapse risk highlighted by analysts

This rising lapse risk for European life insurers has recently been highlighted by ratings agencies, such as Moody's and Fitch Ratings.[3]

Insurers in France and Italy were identified by both agencies as being more exposed to lapse risk. These countries offer consumers the right to withdraw or lapse their policies at any time, with no or limited cost.

However, even in these markets, Fitch argued,[4] this is mitigated by insurers' strong liquidity profiles and sophisticated asset and liability management techniques, coupled with the robust regulatory frameworks.

Across other European countries, the agency added, lapse risk is less prominent, either due to restrictions on withdrawing from policies or, in markets like the UK, because other types of life insurance product predominate that are less exposed to lapses.

Causes versus effects

It is never comfortable to lose business, but if it happens at scale during a period of rising interest rates, that brings further difficulties for life insurers. It is a particular worry for life insurers in continental Europe, where rising interest rates have also driven down the market value of the fixed-income assets in their portfolios.

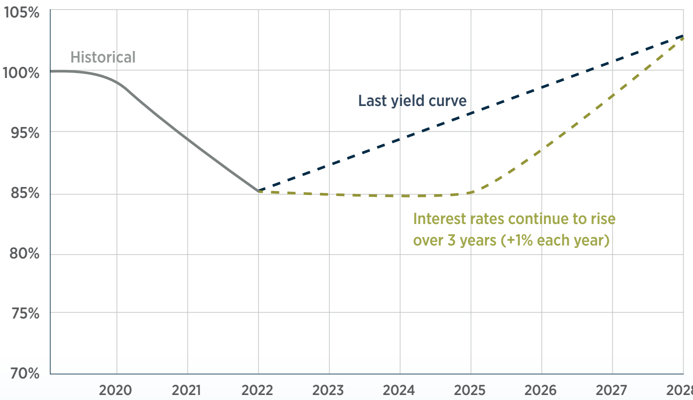
As Gallagher Re noted in its *Global Life, Accident and Health Newsletter*[5] in March, this may mean insurers' portfolios are worth less than the surrender value of in-force policies and/or the levels they are required to hold under statutory technical provisions.

European insurers have moved their portfolios towards less liquid assets in recent years. According to statistics from the European Insurance and Occupational Pensions Authority (EIOPA),[6] the average portfolio was invested 33% in government bonds and 31.5% in corporate bonds in 2019, with only 10.4% in unlisted equity, 4.9% in mortgages and loans, and 2.5% in property. By 2022, investments in government and corporate bonds had dropped to 29.1% and 28.7% respectively; while unlisted equity allocations rose to 14.9%, mortgages to 6.1% and property to 3.5%. All else equal, these assets can be expected to be harder to sell.

The lapse risk faced by life insurers is twofold:

- The economic environment is driving up the likelihood of policyholders surrendering, which is a complex policyholder behavior risk that the actuarial community may not have sufficient historical data to quantify.
- Meanwhile, the increase in interest rates over the past year has amplified the consequence of a mass lapse event. Insurers may need to sell assets to pay surrender values for customers and, if they do so while bond values are low, they may need to realize a capital loss on their balance sheets. This is demonstrated with the following chart showing the market value of a portfolio invested in 10-year bonds, rolled annually and perfectly matched with the liabilities. In 2022, due to the hike in the interest yield curve, the market value of this portfolio would have decreased by 15%, exposing the insurer to potential loss in the case of forced sales.

Bond portfolio % market value to book value



Source: Gallagher Re

In the graph below, the dotted lines represent two potential forward-looking scenarios. The blue scenario assumes a frozen interest yield curve for the next few years; it would take five years for the portfolio to recover its 2020 book market value. The second scenario, represented by the green line, shows an annual parallel shift of the yield curve of 100 basis points per year over the next five years.

While the magnitude of the policyholder behavior risk remains uncertain, the devastating consequence of a potential mass lapse event is significant enough to warrant inclusion in carriers' long-term risk management strategies. Lapse risk is highly sensitive to both the level of interest rates and the speed of changes. This means the insurance industry will continue to be exposed for the next couple of years.

> "Volatility of lapse and interest rate exposure is a key concern for our clients. Our team has structured and placed lapse solutions that have been specifically designed to target both interest rate and lapse risk mitigation, and achieve comprehensive cover with reasonable costs."
>
> Franck Pinette
> Head of Global Life, Accident & Health, Gallagher Re

Distribution of lapse risk

While the abiding concern for the life insurance industry is a sharp increase in interest rates that could drive customers to either cancel products or look to transfer their investment to an alternative, the degree to which individual markets are exposed to lapse risk is ultimately driven by the underlying product mechanisms.

Countries where the life insurance product is focused on savings business include most of continental Europe. Buyers of life cover in such markets are typically given guarantees that the policy can be redeemed at book value, should the policyholder choose to do so. This makes lapse risk more acute for insurers in those markets.

In the UK, by contrast, life insurers have stopped offering fully guaranteed savings products. The mainstream products are unit linked products or with-profit products. While lapse risk remains relevant for the life insurers in the UK, the risk exposure, measured by the Solvency II capital requirement, is not as material as it is for their European peers.

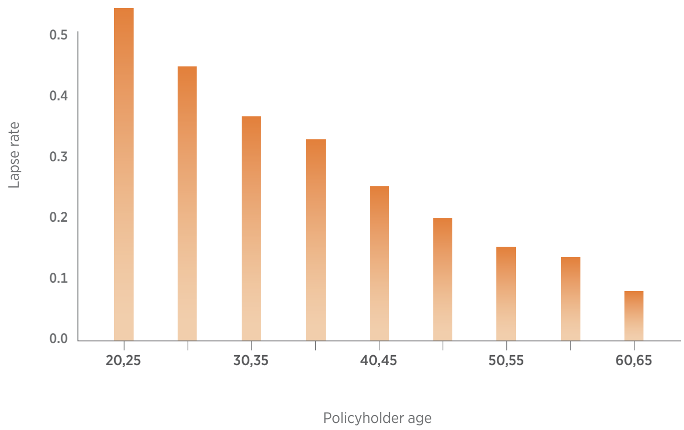
While the lapse rate is typically fairly stable across Europe, it has increased in some territories, according to Gallagher Re's analysis. Some of the most exposed markets are Italy, France, Belgium and Spain.

In Italy, the increase is being driven in part by high-net-worth individuals whose life insurance policies are managed by third parties. Those managers are motivated to switch products when market conditions favor it. These kinds of portfolios have a higher lapse rate at some insurers, though they represent an admittedly small proportion of their overall life insurance business.

It is also easier for customers in the Italian market to move their investments to another company, given the greater level of competition between providers, and fewer tax incentives for retaining capital in a life insurance policy.

Another factor that can help life insurers determine their exposure to lapse risk is the demographic profile of the markets that they operate in. Younger policyholders are much more likely to cancel their life policies or let them lapse, according to a recent presentation to the UK Institute and Faculty of Actuaries.[7]

Comparative lapse rate for life insurance policies by age cohort



Source: Karthik Tumuluru, MetLife/Institute and Faculty of Actuaries

There are good intuitive reasons for this. Policyholders nearing retirement are more likely to see the value of holding on to a product that they have invested in over a number of decades, while younger policyholders may feel the impact of economic conditions on their real income more keenly. For that reason, they may view the product as more disposable or transferable to an alternative they believe will work better for them.

Mitigating factors

For the most part, life insurance tends to be quite a sticky business. Closing one savings product and opening a new one could appear too onerous to many customers.

In addition, life insurance customers are not necessarily sophisticated investors, and may not be aware of changes in market conditions that could make an alternative savings or investment product more attractive.

There are also market-specific mitigants, often related to domestic tax laws. In France, for example, a significant proportion of life insurance customers buy policies for inheritance tax planning purposes. Policyholders would incur significant fiscal penalties should they surrender these insurance policies, while their beneficiaries could receive the capital on a tax-free basis if the policies are not surrendered. There is also less appetite for lapsing during the first eight years of a French policy's duration, as buyers will be subject to capital gains tax on any earnings over that period.

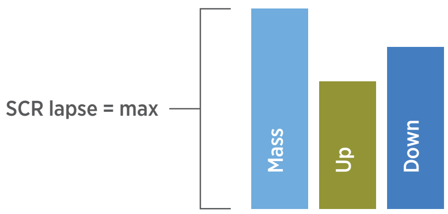
How is lapse exposure measured?

Lapse risk has been formally recognized by European regulators for some time, with a mass lapse event defined under Solvency II as a one-off first-year shock where 40% of life policies immediately lapse (70% for some specific categories).

Under the Solvency II framework, lapse risk can be measured as the loss in own funds under a lapse scenario due to the resulting lower net present value of future profits when lapse rates differ from best estimate.

The standard formula defines the lapse SCR as the maximum loss under three lapse scenarios: a mass lapse scenario, a lapse-up scenario and a lapse-down scenario (see diagram).

Solvency II standard formula shocks



Mass lapse: One-off first-year shock where 40% of retail life policies and 70% of group life policies immediately lapse

Lapse up: 50% permanent increase in the level of lapse/paid-ups/premium holiday/dynamic lapse assumptions

Lapse down: 50% permanent decrease in the level of lapse/paid-ups/premium holiday/dynamic lapse assumptions

Source: Gallagher Re

Internal model users may design their models differently, with their own calibration of the one-in-200 stresses, which are typically less onerous compared to the standard formula. However, Gallagher Re noted significant increases in lapse SCRs across both standard formula and internal model users in Europe in the earlier part of this year.

> "Where historically unit-linked policies were the main driver of lapse SCR, it is now the traditional saving policies with considerable volume in continental Europe driving up the exposure. For some of our clients, the lapse SCR has been multiplied by a factor of five."
>
> Etienne Busson
> Deputy Head EMEA, Accident & Health, Gallagher Re

With the recent changes in the economic environment, insurers' thinking on mass lapse risk has evolved as they become more aware that not only is the risk far more tangible than previously thought, but that the economic consequences could be highly significant if the risk were to materialize.

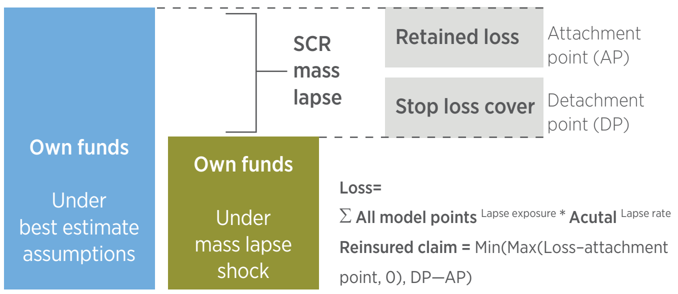
Gallagher's analysis suggests that far from designing specific interactions with the Solvency II formula to gain a capital advantage, insurers are increasingly focusing on active management of lapse risk. This approach is being encouraged by regulators.

Reinsurance solutions for lapse risk

Reinsurance coverage for mass lapse risk has existed for some time, but solutions were typically focused on risk and unit-linked products. Since 2022, there has been growing appetite for coverage applicable to traditional savings products, as life insurers seek to reduce their exposure to the growth in lapse rates and incorporate reinsurance into their risk management strategy for unrealized capital losses.

Italy was one of the first countries where life insurers began to transact for lapse risk on traditional savings products. Appetite for purchasing lapse risk reinsurance also began to pick up in Scandinavian countries a few years ago. And with the rise in interest rates over the past year across Europe, interest in the coverage has grown in other highly exposed markets like France, Spain and Belgium.

Illustration of a reinsurance structure



Source: Gallagher Re

The reinsurance cover provides a key risk mitigation tool for life insurers. The structure pictured in the diagram is for a high-level program, but illustrates how coverage can be configured to transfer lapse risk to reinsurers, where the policy responds if lapse rates are higher or lower than expected.

The most common structure available in the market is focused on transferring tail risk using a stop-loss structure, with the insurer retaining a layer of loss within their own risk appetite and transferring the more remote layer of risk to the reinsurer, leading to more favorable terms.

The biting lapse stress scenario can be mass lapse, lapse up or lapse down. If two out of the three lapse stresses lead to similar amounts of loss, a reinsurance cover can be structured combining a one-year mass lapse cover with a multi-year lapse-up or lapse-down cover.

The cover also provides a substantial Solvency II benefit, both through lapse SCR reduction and risk margin relief, and can often be achieved with a competitive premium rate between 1.5% and 2%.

The list of European countries where lapse reinsurance transactions have been executed is growing, with an increasing number of first precedents of these transactions receiving the local regulators' blessings.

A mass lapse scenario could be thought of as a catastrophe for the life insurance market and, just as carriers in the non-life market routinely purchase reinsurance cover for catastrophe events, life insurers are increasingly considering it a risk management tool. The recent uptick in lapse rates is focusing minds. Policyholder behavior is complex—and consequently difficult to model—but the adverse consequences are severe and are driving concerns about how insurers protect their balance sheets.

The focus is also widening beyond the extreme of the mass lapse scenario to encompass the less dramatic, but nonetheless significant, impact of an increased lapse rate on capital exposures.

Black swan to gray rhino

As noted above, the macroeconomic drivers of a mass lapse event are difficult to predict. What might turn a slow decline in the attractiveness of insurance products into a mad stampede of customers for the door?

The possibility is not as remote as insurers might think. An individual insurance company could be hit with operational or credit issues, or even a cyber attack, which, coupled with negative publicity, could persuade policyholders of the need to withdraw their capital—a dynamic that has been observed all too recently in the banking sector.

In marketwide terms, a change in the regulatory structure of a particular jurisdiction—a revised tax regime or legal framework, for example—could create structural issues for life insurers that might ultimately spook policyholders, especially if the implications are highlighted for them by rating agencies and the media.

However, if domestic life insurers are able to access reinsurance capacity from international carriers, this can help spread out the mass lapse risk over a diverse geographical portfolio.

This would reduce the impact on any one individual market and ensure that a wider pool of capacity remains available to protect life insurance capital.

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1 World Economic Outlook Update, IMF, July 2023
2 Bolting for the door—could ‘mass lapse’ risk trigger ‘mass bond sales’ at French lifers?, *Insurance Asset Risk*, May 2023
3 European life insurers face potential losses from bond portfolio lapses: Moody’s, *Reinsurance News*, April 2023
4 European Life Insurers’ Liquidity Profile Sufficiently Strong to Face Higher Lapses, Fitch Ratings, May 2023
5 Lapse Risk and Reinsurance as a Mitigation Tool, Gallagher Re, March 2023
6 Financial Stability Report, EIOPA, December 2022 (p.66)
7 Models for Classifying Policyholder Lapse, presentation to the Institute and Faculty of Actuaries by Karthik Tumuluru, MetLife

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