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Reinsurance of Persistency Risk

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01 November 2016



Why are we here?

Insurers turn to reinsurers for lapse risk
cover

Risk.net, July 2015

... lapse risk is an area where non
proportional-type reinsurance structures are
developing...

IRC of the IAA, September 2015

ASR buys mass lapse reinsurance

InsuranceERM, August 2016



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Agenda

- What is persistency risk and is it insurable?
- History of lapse risk transfer
- What is changing
- Further considerations



What is persistency risk?

What is persistency risk?

Shock Lapse

Lapse Parameter

Anti-selective
lapse

Is lapse risk “insurable”

Many definitions, here is one:

- Loss is definite and financially **measurable**
- The loss is **random** in nature and should guard against **adverse selection**
- Determinable **probability distribution**

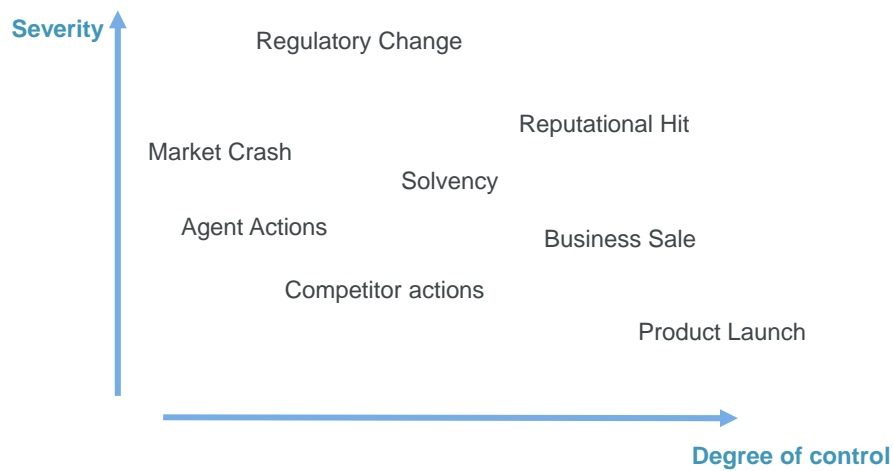
Is lapse risk “insurable”

Can a lapse loss be measured?



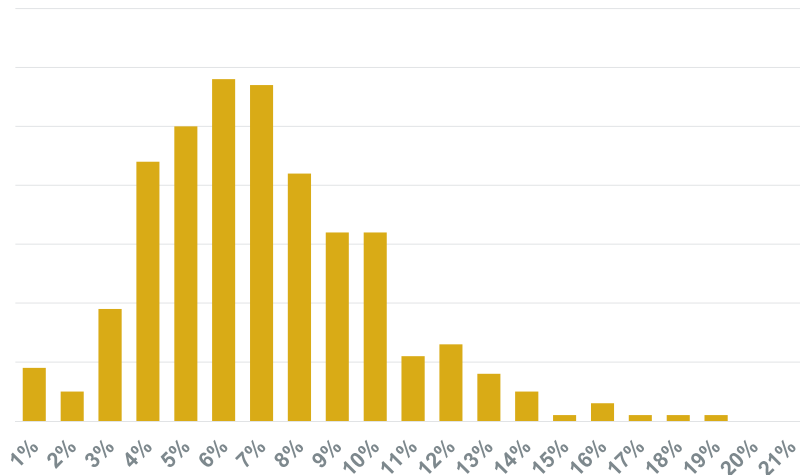
Is lapse risk “insurable”

Is the loss random in nature?



Is lapse risk “insurable”

Is there a determinable distribution?



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Is lapse risk “insurable”

Conceptual challenges, but not insurmountable:

- Loss is definite and financially **measurable**
 - Clear definitions of loss
- The loss is **random** in nature and should guard against **adverse selection**
 - Ensure alignment of interest
 - Consider exclusions carefully
- Determinable **probability distribution**
 - Choice of portfolios
 - Is a full distribution required?



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History of lapse risk transfer

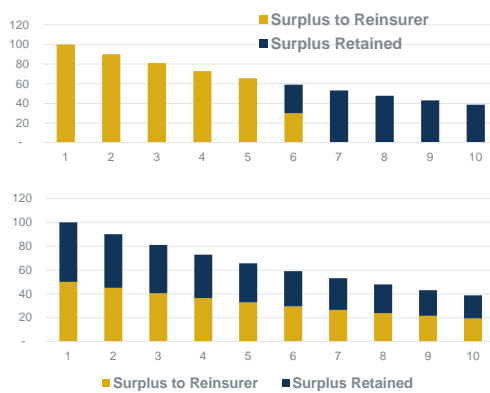
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Some historic examples

- Lapse risk has been transferred for many years, e.g.

— Fin Re: First layer of risk retained by cedent

— Coinsurance: Risks shared equally



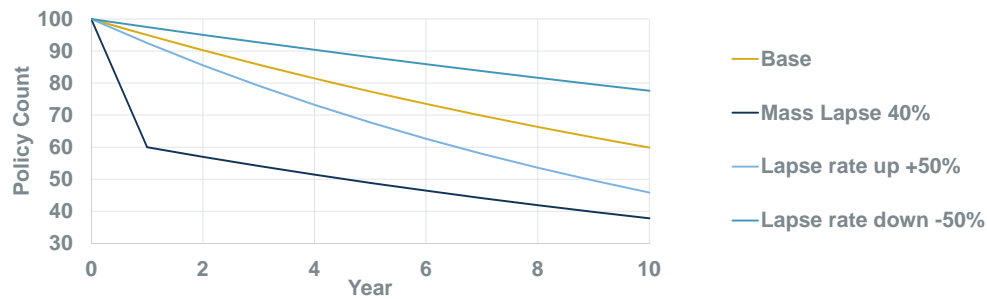
What has been the objective?

In addition to lapse risk transfer, there have been a number of other drivers:

- Cash financing
- Capital Relief
- Reserve Relief
- [Tax (I-E)]

What is changing?

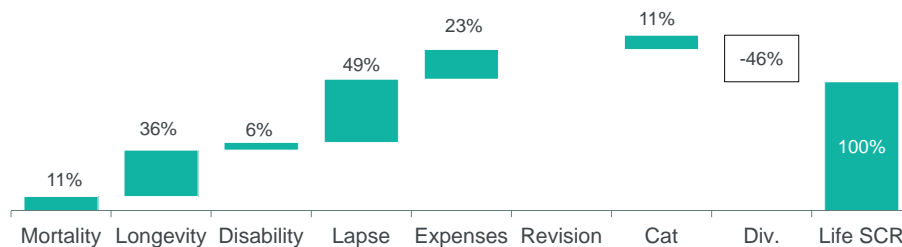
Solvency II lapse capital



- Explicit lapse capital held under Solvency II
- Prescribed Standard Formula Stress or Internal Model
- A bigger impact felt in continental Europe where no ICA equivalent regime existed
- Increased focus on cost of lapse capital

What is changing?

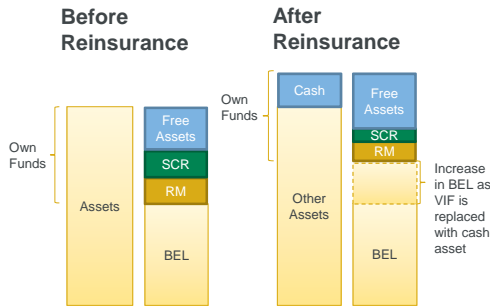
Life SCR components – averages across Europe¹



¹BSCR=Basis Solvency Capital Requirement.
Source: Bafin Report "Ergebnisse der fünften quantitativen Auswirkungsstudie zu Solvency II" (2011).

Value-in-force (“VIF”) solutions remain an option

Structure Overview

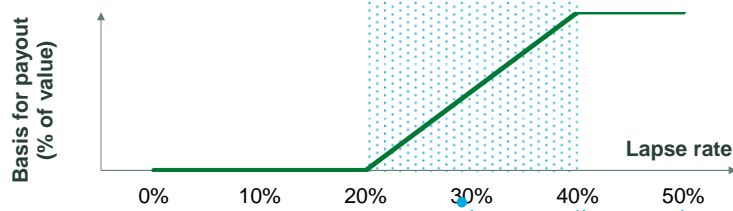


Key benefits

- VIF is converted to cash
- Can lead to significant reduction in SCR, including lapse component
- Stabilizes the VIF asset on the balance sheet and improve solvency ratios, but typically at a cost to own funds (cash advanced < VIF)
- Not a lapse specific structure

Non-proportional Mass Lapse cover

Non-proportional lapse risk cover illustrative



- 1 Structure triggers a pay-out if the lapse rate of the portfolio exceeds entry point
- 2 The payment amount is linear in the lapse rate, up to the maximum lapse rate (here 40%)
- 3 Lapses in excess of the maximum are not covered

Key benefits

- **Reduction of SCR** linked to Life Mass Lapse risk (benefit will be limited to level of SCR for Trend Lapse risk)
- **Protects future earnings** against a lapse stress
- Locks in reinsurance capacity for several years



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Further considerations

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Further considerations



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Conclusions

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Conclusions

- Lapse risk can be reinsured in right circumstances
- Solvency II has impacted the market
- New structures are emerging – old methods can still work
- Challenges remain



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Questions

Comments

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