Break-Out Session: Emerging risks for insurers and IORPs

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01 Risk Identification & Typology – Emerging Risks

02 Risk Assessment - Let’s do some stress testing

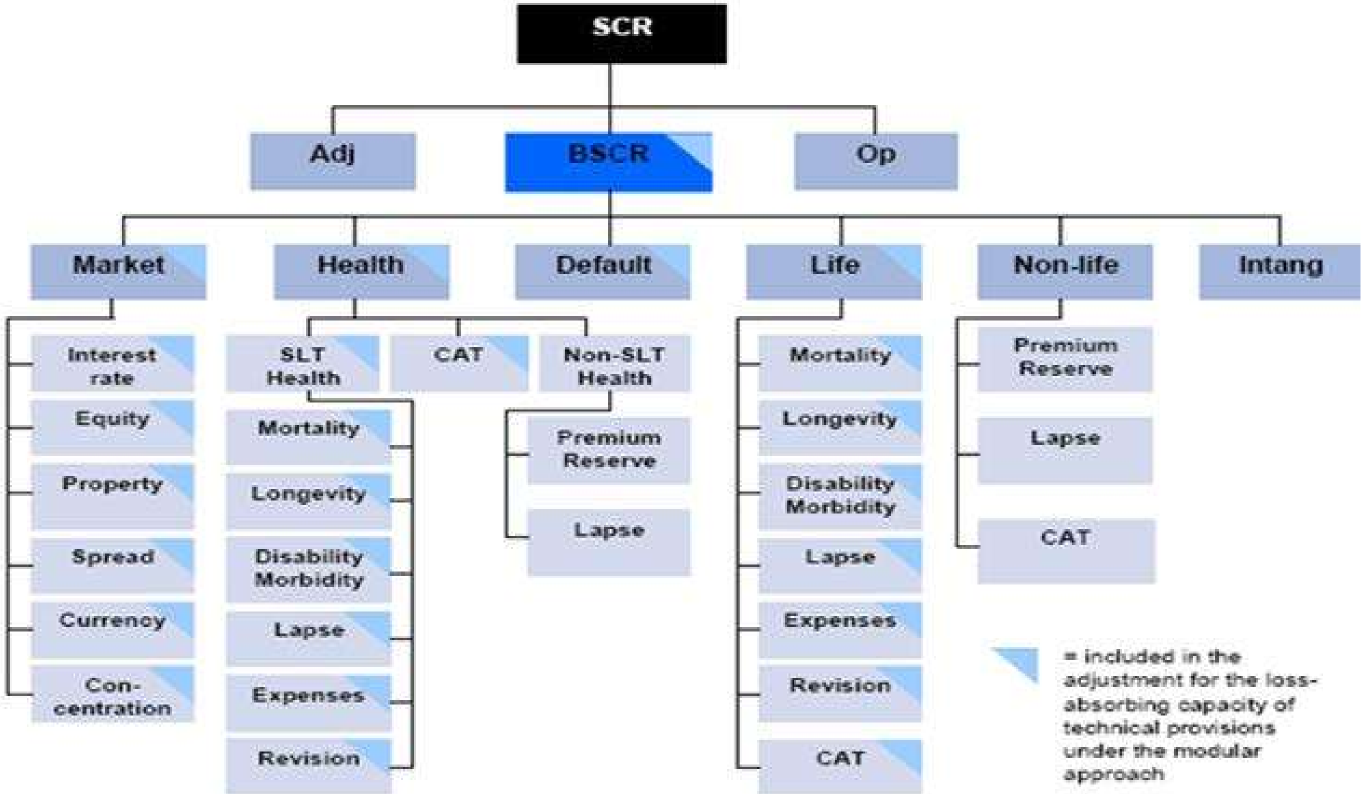
03 Risk Mitigation – And now? How to use stress test results?

Risk Identification & Typology

- **Risks are inherent** in the business model of financial institutions → no risk, no reward
- Importance of ***Risk Strategy* and *Enterprise Risk Management*** → risks should be identified, evaluated, assessed, monitored, prioritised, mitigated, …
- Important component of Risk Identification: **Risk Typology**
  - A system for categorising and classifying risks based on various characteristics
  - There are many different ways to set-up a risk typology
  - A comprehensive typology should aim to capture all relevant risks an institution is exposed

Risk Identification & Typology

A “famous” example – Solvency II SCR modules → **Risk Typology for a specific purpose**



Risk Identification & Typology - Emerging Risks

- There is no such thing as an official recognised definition of **emerging risk(s)**
- **Recurring aspects** when referring to emerging risks (*with a little help of AI*)
  - New risks or familiar risks showing a "new face"
  - Uncertainty … (often due to lack of data/information) in terms of likelihood & impact
  - Evolving nature
  - Complexity to measure/identify
  - Potential for significant impact
- Some key **aspects of emerging risk identification***
  - Thinking "outside the box"
  - Usefulness of external expertise
  - Be aware of human bias: overconfidence, group think, status quo bias, "availability", …

➔ **Not always obvious** how to define/identify emerging risk and e.g. fit them into a risk typology

*Navigating Uncertainty – A practitioner's toolkit to managing emerging risks (CRO Forum, December 2024)

Risk Identification & Typology - Emerging Risks

- Which risks have been prioritised lately by supervisory authorities? How has this evolved over time? Which of these could be considered as "emerging"?
- First observation: important link between **trends** & (related) **emerging risks**:

Table 1: Examples of Major Trends (CRO Forum's Emerging Risk Initiative[2])

Major trends	Examples of associated emerging risks
Ageing and Health Concerns	Antimicrobial resistance, emerging infectious diseases
Economic Instability	Global debt crisis, supply chain complexity
Environment and Climate	Climate change transition risks, environmental pollution
Sustainability	Climate engineering and storage techniques, Supply Chain Complexity
Shifting Geopolitical Landscape	Evolving terrorism, cyber risks
Technological Development	Artificial intelligence, data privacy and data ethics
Demographic and Social Change	Climate change physical risks, Nature and Biodiversity Loss

Risk Identification & Typology - Emerging Risks

Prioritisation: Top-10 highest qualitative indicators (weighted by GWP)		SWM 2025 score	SWM 2021 Rank	SWM 2022 Rank	SWM 2023 Rank	SWM 2024 Rank	SWM 2025 Rank
1	Market risk	3.43	16	16	2	7	1
2	Interest rate risk	3.40	1	1	1	2	2
3	Cyber risk (own exposure)	3.37	7	3	4	1	3
4	Reserve adequacy	3.37	8	9	10	8	4
5	Geopolitical risk	3.37	-	-	-	-	5
6	Climate Change Risk - Physical risk	3.36	15	8	6	3	6
7	Profitability	3.35	18	15	8	4	7
8	Solvency	3.32	10	6	13	5	8
9	Equity risk	3.24	21	25	9	25	9
10	Combined ratio	3.21	14	10	14	6	10

Example: Ranking of risks by supervisory priority – dynamic over time illustrating the evolving nature of the supervisory view on risks

(IAIS Sector-Wide monitoring)

Risk Identification & Typology - Emerging Risks

2020	2021	2022	2023	2024	2025
• Focus on Covid-19 assessment	1. Low interest rate environment and private equity ownership 2. Credit risk 3. Cyber risk	1. Lower macroeconomic outlook, high inflation and rising interest rates 2. Structural shifts in the life insurance sector, including the involvement of private equity	1. Managing interest rate, liquidity and credit risks in a challenging macroeconomic environment 2. Structural shifts in the life insurance sector (alternative assets, asset-intensive reinsurance)	1. Key risks in the current macroeconomic environment (continued focus on liquidity, credit, interest rate risk) 2. Structural shifts in the life insurance sector	1. Geoeconomic fragmentation impacting insurers' management of assets and liabilities 2. Insurers' increased investment in private credit 3. Insurers' adoption and governance of artificial intelligence

Example: evolution of IAIS sector-wide risk themes over time

(IAIS Sector-Wide monitoring)

Risk Identification & Typology - Emerging Risks

- Latest view of EIOPA – **Financial Stability Report** of June 2025
  - **Current (short/mid)**: geopolitical tensions, shift in the global trade and defence paradigm
    - Impact on economic growth, inflation, government indebtedness.
    - Impacts on financial markets markets: volatility, currency risk, liquidity, risk premia, infrastructure (e.g. CCPs).
    - Increase cyber risks
    - Implications for insurers: indirect, mainly on asset valuation, liquidity positions (margin calls), insurance premiums (particularly non-life)
  - **Slow burning (long):** protection gaps (natural catastrophes, pension savings), climate, technological progress (AI)

Let's get your views on emerging risks

Roundtable Discussion

Key questions:

1) Given the current macro-economic environment, what are the top 3 emerging risks for the global insurance sector according to you? Would your answer be different if we were talking about pension funds?

Considerations:

- Any differences in the short term vs. long term risks?
- Taking a global perspective, do you see any regional differences?
- What are the trends driving these (new) emerging risks?
- …

2) At which stage should we stop considering a risk as no longer "emerging"?

Risk Assessment – General Principles

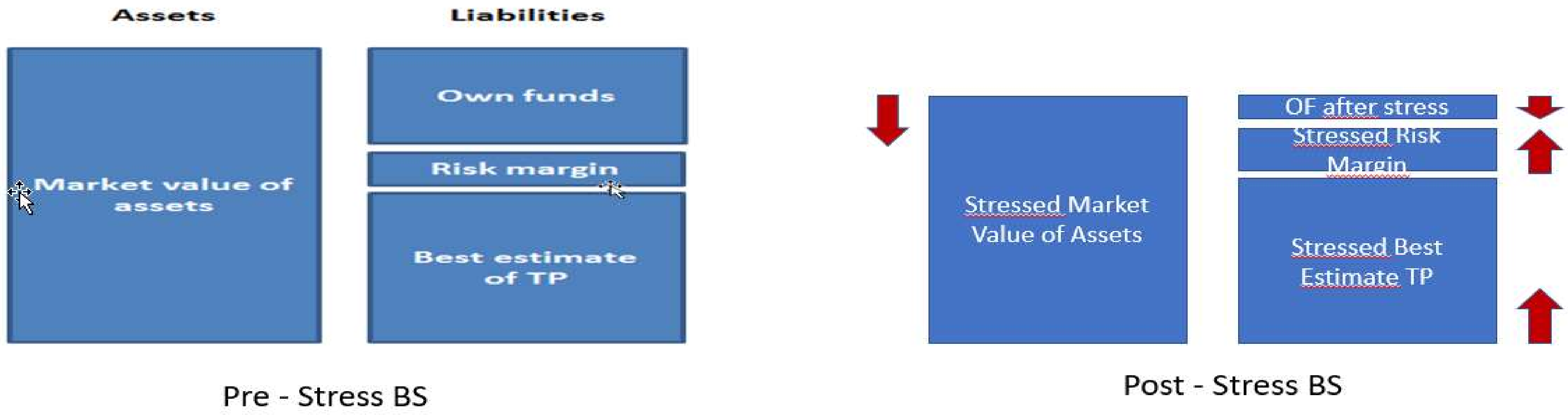
Once we have identified the risks, we can start **assessing/analysing/measuring** …

- **Goal:** Evaluating the **potential impact and likelihood** of the risks, trying to **quantify** the potential loss → **integration** in broader risk management strategy (ERM) e.g. risk prioritisation, risk mitigation, …
- **Different ways to measure risk** and to decide on which **risk metrics** to use for insurance companies e.g.
  - Impact on balance sheet/solvency
    - What will be the impact on my own funds of a 20% drop in equity value?; How will my solvency ratio be affected if the average spread of government bonds increases with 50 bps?; …
  - Impact on profitability
    - How much will my combined ratio (=[claims + Expenses]/Premium) improve if I increase my fire insurance premiums by 5%?; …
  - Other metrics
    - Number of complaints filed; Number of IT/Cyber incidents; …

Let's do some stress testing …

Stress Testing = one of the more **complex risk measurement tools**:

- Different types of stress tests: Micro-prudential (firm's own ST vs. supervisory ST) vs. Macro-prudential stress testing
- Role of the (regulatory) framework when developing stress test scenarios e.g. balance sheet valuation, SCR calculation, risks captured …



Let's do some stress testing …

- **Why supervisory stress testing?** The main **objectives**
  - To assess potential **vulnerabilities and resilience** of the individual players (micro) and financial sector (macro) against extreme, but plausible scenarios (all types of risks)
  - To examine potential **financial stability risks** and 2nd order effects in situations of stress
  - To reveal areas that require further **supervisory focus** and **possibly intervention**
- **In EU: EIOPA coordinates** stress tests for the insurance and pension fund sector on EU-wide level. Key aspects of EIOPA's approach towards e.g. insurance ST:
  - In 2019 the EIOPA BoS decided to reduce the **frequency** of the Union-wide Stress Tests to 3 years
  - **No pass-fail nature**: Results are considered on aggregated basis to potentially issue recommendations to the EU insurance industry and on individual basis to enrich the analysis on jurisdictions and individual undertakings
  - **Primarily micro-oriented**: Assess solvency & liquidity resilience of participants to adverse scenarios (providing info to supervisors). **Adding a macro-dimension:** aggregated results used to assess potential sector-wide vulnerabilities; application of constrained balance sheet approach to gauge potential spillovers to other markets generated or amplified by the (applied) reactive management actions

Let’s do some stress testing …

Need for a flexible stress test **scenario design** → fixing the different **ST parameters**

- Time Horizon: Instantaneous shock vs. Multi-period
- Historic vs. Synthetic
- 2nd order effects & Management actions
- ST Indicators & Risk Metrics: regulatory capital and/or other indicators
- Top Down vs. Bottom-up
- Single Risk Type vs. Multi-Factor ST
- Severity (& Cyclicality)
- Reverse ST vs. Sensitivity Analysis vs. Scenario Testing
- Scope: Who participates?

Let's do some stress testing …

Roundtable Discussion

Focus: Let's build our own Stress Test scenario – How could a relevant stress test scenario for insurance look like for 2026? Any differences for IORPs?

Key Questions:

1. Which risks to capture (e.g. link with our emerging risks and regulatory framework)?
2. Which levels of severity to apply for the scenario as a whole, or for specific risks (low, medium, high)?
3. Which ST indicators/risk metrics would you use?
4. Who should participate? Focus on certain types of insurers/pension funds (business model, size, …)?

Risk Mitigation – And now? How to use stress test results? Supervisory recommendations

- **EIOPA 2021 Insurance ST Recommendations (market-wide) - examples:**
  - EIOPA recommends NCAs to consider whether undertakings still reliant on **transitional measures** are taking concrete actions to **reduce their dependency** on measures introduced only to smooth the transition from the Solvency I to the Solvency II regime
  - For undertakings that did not apply **management actions**, even though they were warranted, EIOPA recommends NCAs to further investigate the reasons for not applying management actions and if these undertakings have sufficient options to apply management actions in case of need
- **EIOPA 2024 Insurance ST Recommendation:** EIOPA recommends NCAs to assess whether insurers are taking measures to enhance their **ability of modelling and reporting** the following items as prescribed in the technical specifications:
  - Look-through approach of assets
  - The impact of shocks on the UL/IL portfolios separately
  - The marginal impact of insurance specific shocks on TP, Excess of Assets over Liabilities and Own funds
  - Liquidity flows, e.g., margin calls

Risk Mitigation – And now? How to use stress test results? Opportunities for insurance companies*

- Importance of **strategic alignment** of **mitigation actions**
  - Involvement of senior leadership
  - Integration in overall RM framework e.g. ORSA
  - Understanding the opportunities triggered by effective risk management e.g. first-mover advantage in terms of product development
- **Examples** of mitigating actions
  - Transferring & containing (insurance) risk
  - Improving diversification
  - Enhancing the risk culture → awareness of (emerging) risks
  - Engaging with regulatory & legislative bodies

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How to use Stress Test Results

Open Questions:

- What (not) to do with Stress Test Results?
- Link between Stress Testing and the regulatory framework – Should one influence the other or not?