Auswirkungen von Solvency II auf das Geschäftsmodell der Rückversicherer

Deutscher Verein für Versicherungswissenschaft

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Solvency II – Fuelling a global trend towards risk-based supervision and the implications on Munich Re

Solvency II –
Fuelling a global trend towards risk-based supervision(?)

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Influence of Solvency II on other supervisory regimes

IAIS – International Association of Insurance Supervisors

COMMON FRAMEWORK FOR THE SUPERVISION OF INTERNATIONALLY ACTIVE INSURANCE GROUPS

Multilateral framework aiming for worldwide coherence of supervision among global insurance companies

Harmonisation
No separate framework

Convergence
No additional supervision

Evidence of the trend

Various supervisory regimes aiming for recognition under Solvency II ("equivalence"), e.g. Bermuda and Switzerland

Adjustments of risk-based-capital-type models in USA and Canada

Planned adaptions of Solvency II inter alia in Japan, Israel, Turkey, South Africa and Mexico

Convergence towards a common framework to be expected in the medium term

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well positioned to manage changes arising from Solvency II

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Main implications of Solvency II

Convergence of enterprise risk management standards in the industry	Impact on product design and pricing	Strengthened market discipline through increased transparency requirements

Impact on Munich Re

- Harmonisation between internal steering and regulatory requirements
- Some convergence with financial reporting
- Approval of internal model to gain better recognition of diversified business structure
- Additional reinsurance business potential due to changed/increased capital requirements

Capitalising on already existing enterprise risk management framework

Impact on insurance industry

- Enhanced comparability between insurance companies across different business models and countries
- Shift towards less capital-intense products especially as regards participating features
- Changes in asset allocation due to link between ALM and Solvency II
- Increased interaction with supervisors

Increased focus on risk and capital management

Munich Re's
enterprise risk management framework principles

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Pillars of Solvency II

1	2	3
Quantitative **Solvency requirements** Standard approach or internal model	**Qualitative** **Supervisory process** Efficient risk management and control	**Transparency** **Market transparency** Disclosure requirements to strengthen market discipline
Market-consistent valuation using the cost of capital concept Standard model calibration: Value-at-Risk 99.5%	Use test requires capital models to be used for risk and capital management	Implementing measures for external and supervisory reporting are currently being discussed – perception of overburdening companies
Munich Re's internal model scaling standard model calibration with 175% reflecting AA-company security requirement	Munich Re has been using own capital model for steering purposes, capital management and performance measurement for several years now	Munich Re has already been reporting risk figures internally and externally, as well as disclosing methods, for several years now

Munich Re's risk model already fulfils many requirements of Solvency II today

Munich Re's enterprise risk management (ERM) – already Solvency II compliant

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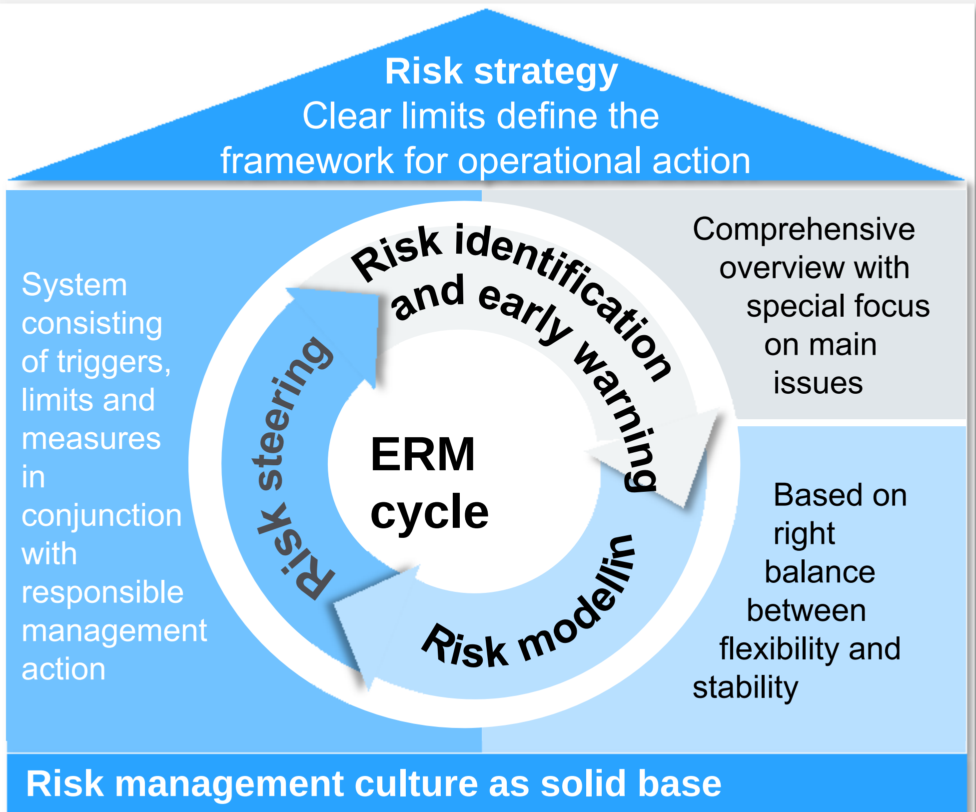
Components of Munich Re's ERM



Objectives

- Protect and generate sustainable shareholder value
- Ensure the highest degree of confidence in meeting policyholders' and cedants' claims
- Protect Munich Re's reputation

Business-embedding

- Risk steering
- Pricing/underwriting
- Liability-driven investment strategy
- Performance measurement
- Management compensation

Risk management is a key part of our corporate management – already in line with Solvency II

Certification process of Munich Re capital model well on track

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Roadmap to certification

Roadmap for the pre-application phase of Munich Re's capital model

2009	Focus on market and credit risk
2010	Focus on property-casualty risks and aggregation
2011	Focus on life/health and operational risks; increased focus on solo models
2012	Stronger focus on solo models; preparation of the formal application for group and solo entities

Various on-site visits in Munich and Düsseldorf as well as supervisory college workshops from 2009 until 2011

Challenges and achievements

- Standard formula not adequately capturing Munich Re's risk profile
- "Moving target" of Level I – III requirements entails close monitoring of regulatory debate and participation in related consultations …
- … making adjustments to current model may be necessary depending on regulatory developments (e.g. EIOPA yield curve)
- Formal application remains a challenge due to strictly formalised requirements
- Certification of internal model for subsidiary New Re in Switzerland under the Swiss Solvency Test

Munich Re on track in the pre-application phase for the certification of its internal model – Still some challenges but first goals have been achieved

Comparison of Munich Re's capital model with the Solvency II standard formula

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	Munich Re capital model	Draft implementing measures
Relevant risk-free interest rate term structure	Swap rates	Swap rates minus discount for credit risk plus either counter-cyclical or matching premium
Spread risks for European government bonds	Covered	Not covered
Volatility risks	Covered	Not covered in the SCR but reflected in the volatility of own funds
Diversification benefits between interest rate, currency and insurance risks	Covered	Ineffectively covered provides wrong incentive to hold entire surplus in reporting currency in cash
Insurance risk calibration	Specific for Munich Re's risk profile	Representing an average risk profile of a European insurer
Group risk margin	Diversification between legal entities taken into account	No diversification between legal entities taken into account

Munich Re capital model tailored to Munich Re's specific risk profile and built on economic principles of Solvency II

Volatility of own funds under Solvency II – something to get accustomed to

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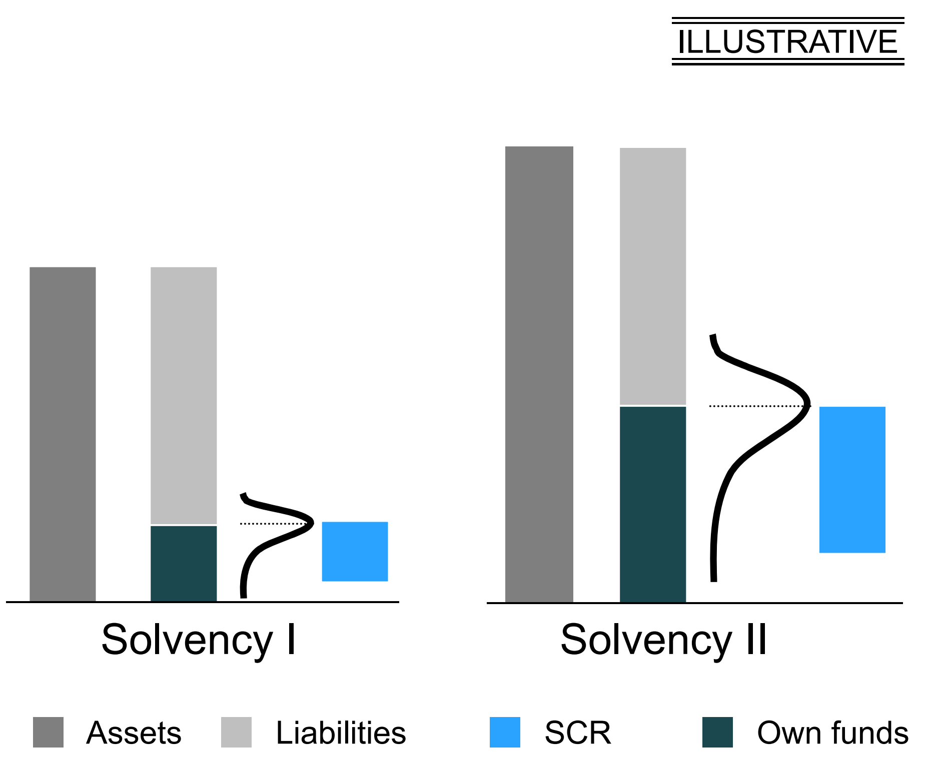
Solvency I vs. Solvency II



Examples of volatility drivers

- No risk-free investment available – deliberately taking investment risks
- Insufficient supply of investable assets for long maturities
- Sensitivity to changes in level and volatility of interest rates
- Risk margin reflects capital consumption over the business run-off

Indication of Solvency II volatility

- Calibration of MCR implies a 15% risk of losing ~35%-points on solvency ratio over one year by reduction of own funds

Solvency II own funds will be more volatile than existing frameworks – Volatility will become a mark of the "new normal" regulation

Solvency II will change reinsurance demand

Solvency II will change reinsurance demand

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Traditional motives for reinsurance …

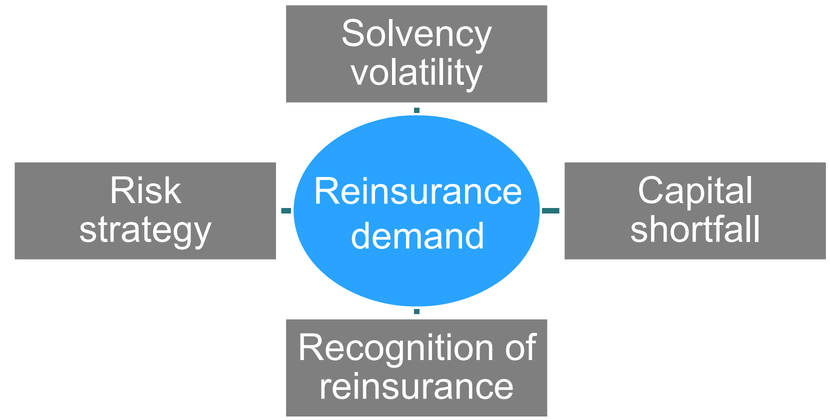
- Stabilisation of earnings
- Peak-risk management – portfolio homogenisation
- Additional impact of price and capacity of reinsurance

… not fully recognised yet

- Cap on cession (50%) compared to full economic effect
- Use of historical reinsurance purchase compared to forward-looking perspective
- Reliance on simple volume-based measures for reinsurance recognition

Better reflection of reinsurance under Solvency II – Driver of future reinsurance

- Reinsurance will be transformed into a powerful capital management tool
- (Partial) internal models allow for more complex products
- Internally set targets, e.g. for solvency or peak exposures, may also trigger increased reinsurance purchase



Capitalising on business opportunities

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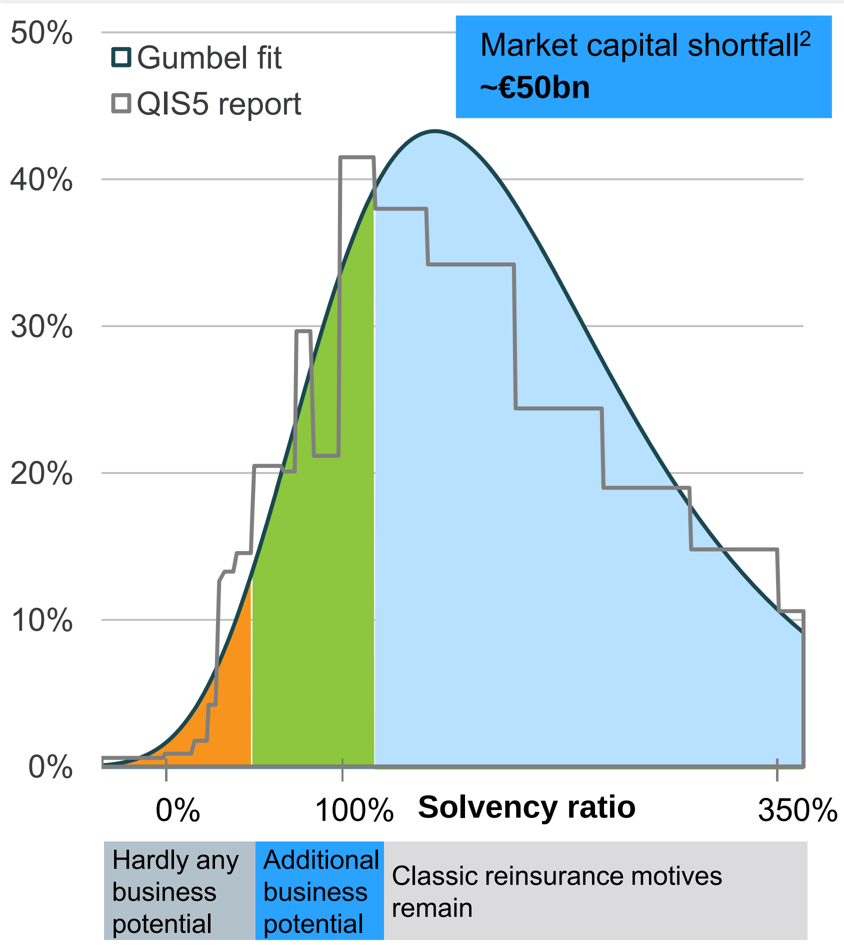
Distribution of solvency ratios[1]



Segmentation of business opportunities

- Companies in the left tail have the highest demand for solutions to improve solvency ratio but high default risk may discourage reinsurers
- Companies in the middle face new demand for reinsurance as a result of Solvency II
- Companies in the right tail are economically strong and remain the classic buyers of reinsurance cover

Prototypical non-life example

- Small company writing various business lines
- Solvency I ratio 130%, Solvency II ratio ~70%
- SCR reduction through quota share treaties in dominant business lines
- Immediate improvement of SII ratio to ~90%
- Future reserve risk reduction improves projected Solvency II ratio in 2014 to ~110%

[1] European insurance undertaking as at 31.12.2009 based on EIOPA's QIS5 report.
[2] Sum of all shortfalls below 120%.

Seizing business opportunities within Solvency II

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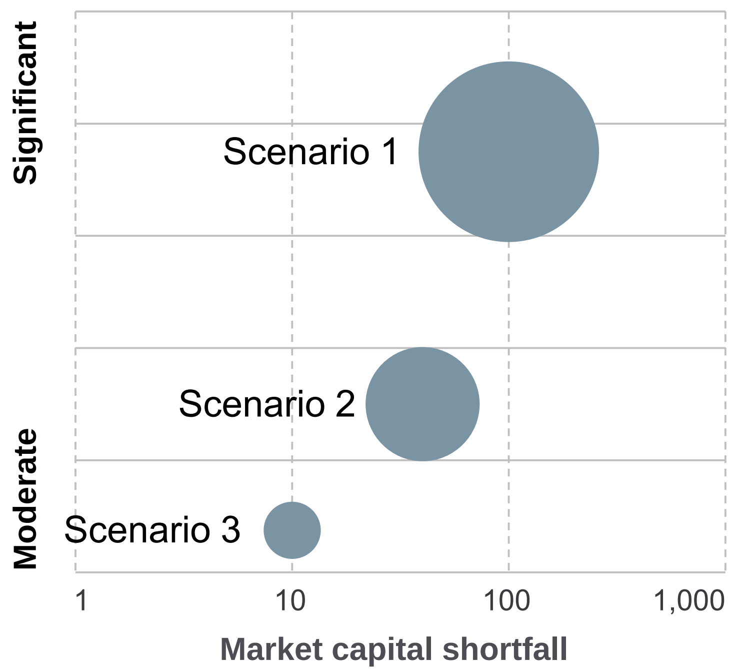
Profit potential[1] for Munich Re …

€bn

Additional reinsurance market profit potential



… dependent on final specifications

Scenario 1

High shortfall
- Negative market environment
- Large events depleting own funds
- Realistic economic assumptions

High incentive for reinsurance
- Insurance risks driver of SCR
- Insur. risks too conservatively calibrated

Transitional period
Short

Scenario 2

Realistic shortfall
- Improving market environment
- On average, realistic risk calibration
- Optimistic economic assumptions

Adequate incentive for reinsurance
- Economic impact of reinsurance adequately reflected

Transitional period
Appropriate

Scenario 3

Low shortfall
- Positive market environment
- Optimistic assumptions on valuation and (esp. insurance) risk calibration
- Enhanced use of risk dampeners

Low incentive for reinsurance
- Insurance risks not driver of SCR
- Attractive alternative risk transfer solutions

Transitional period
Long

**Positive business impact expected from Solvency II –
Extent dependent on final specifications**

[1] Bubble size reflects estimated additional profit for Munich Re.

Impact of Solvency II on clients and products

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Changes and challenges

- Challenges client-specific …
- … with regional differences and also having an impact outside Europe (e.g. Bermuda).

- Risk assessment for each segment …
- … increasing transparency as regards economic value contribution of different activities …
- … possibly triggering adjustments of clients' portfolios: Expansion into new lines of business vs. adaption and termination of certain lines of business

- Solvency II – a catalyst for a trend which has been developing for some time: Enterprise risk management

"Winners" and "losers"

Company size

- Increased pressure on rather small, not well-diversified players
- Overall cost of compliance generally affects smaller players (increasing barriers to entry)
- Large, diversified groups potential winners …
- … as well as well-managed small companies
- Insurers with excellent enterprise risk management with competitive advantage

Products

- Products with a high involvement of market risk ("asset-gathering business") may have to be redesigned or replaced

Level of diversification

- Pillar 1 will punish (small) monoline insurers

There is no general rule for "winners" and "losers – risk mitigation techniques offer solutions to reduce the competitive disadvantage

Advantages of reinsurance solutions

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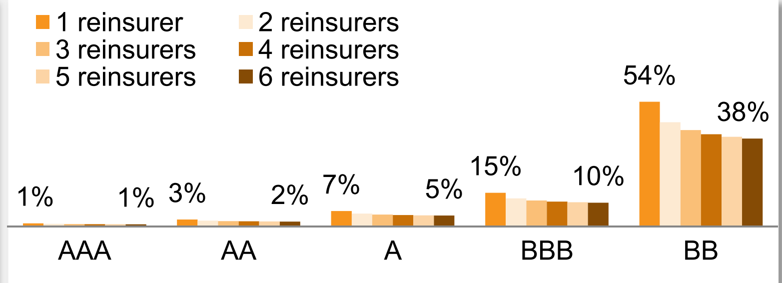
Criterion	Reasons
Capital strength and rating of reinsurer	▪ Rating and capital strength of reinsurers are differentiating criteria ▪ Explicit consideration of reinsurance credit risk through a deduction from capital relief (see chart1)
Advantages of reinsurance solutions	▪ Effective and available independent of capital market access ▪ Faster and more flexible than capital market solutions ▪ Reinsurance available to all segments and provides highest confidentiality
Capital management by reinsurance	▪ Capital management as an additional driver for reinsurance ▪ Comparison of internal cost of capital with the cost of reinsurance (cost of capital + administration cost + counterparty risk) will be possible and will influence decisions



Solvency II will lead to transparency in risk capital relief and will make the added value of reinsurance much more visible

[1] Chart based on QIS5 technical specifications.

Business opportunity segmentation

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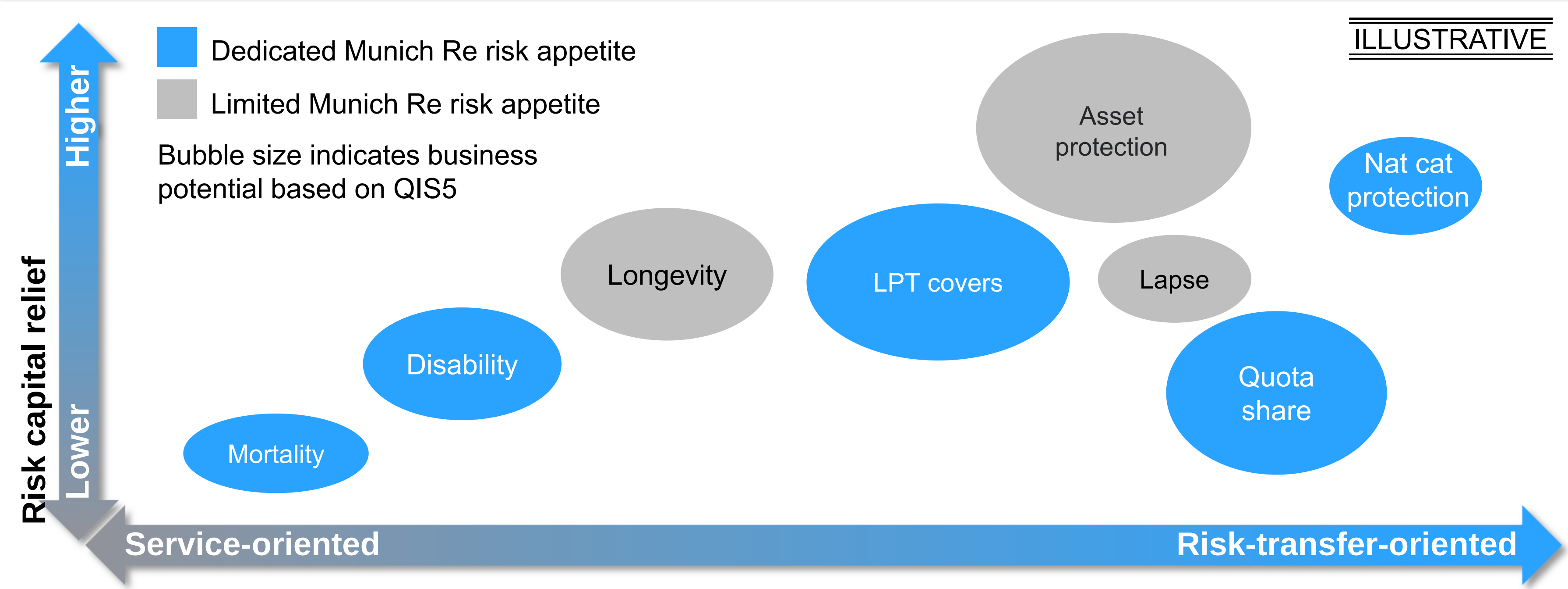

Life business

- Largest potential for products covering market risk
- Underwriting risks less important and generally written in connection with services

Non-life business

- Largest potential for nat cat, retrospective covers and quota share treaties depending on client risk profile
- Standard formula favours proportional treaties

Business opportunities will arise but careful selection will be required

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Key Takeaways

Key takeaways

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1. We have already been steering our business in line with Solvency II principles for years – Management intervention kicks earlier and is more granular than supervisory scheme
2. Solvency II will foster less capital-intense products that allow for more efficient hedges in al lines of business
3. Solvency II will lead to selective additional business potential for reinsurance while classic motives for reinsurance still remain valid
4. Increased transparency requirements enhance comparability across Europe in insurance business
5. Solvency II own funds will better reflect economics of insurance business

Solvency II will support all stakeholders in assessing the economic position of insurance undertakings

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Vielen Dank für Ihre Aufmerksamkeit!

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