

# PartnerRe

## **Solvency II – Challenge for the quantitative and qualitative risk management**

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George Muhle

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# **Abstract**

**Introduction**

**Scope of Solvency II**

**Quantitative aspects of Solvency II**

**Qualitative aspects of Solvency II**

**Consequences for risk management**

**Conclusion**





# **Introduction**

Scope of Solvency II

Quantitative aspects of Solvency II

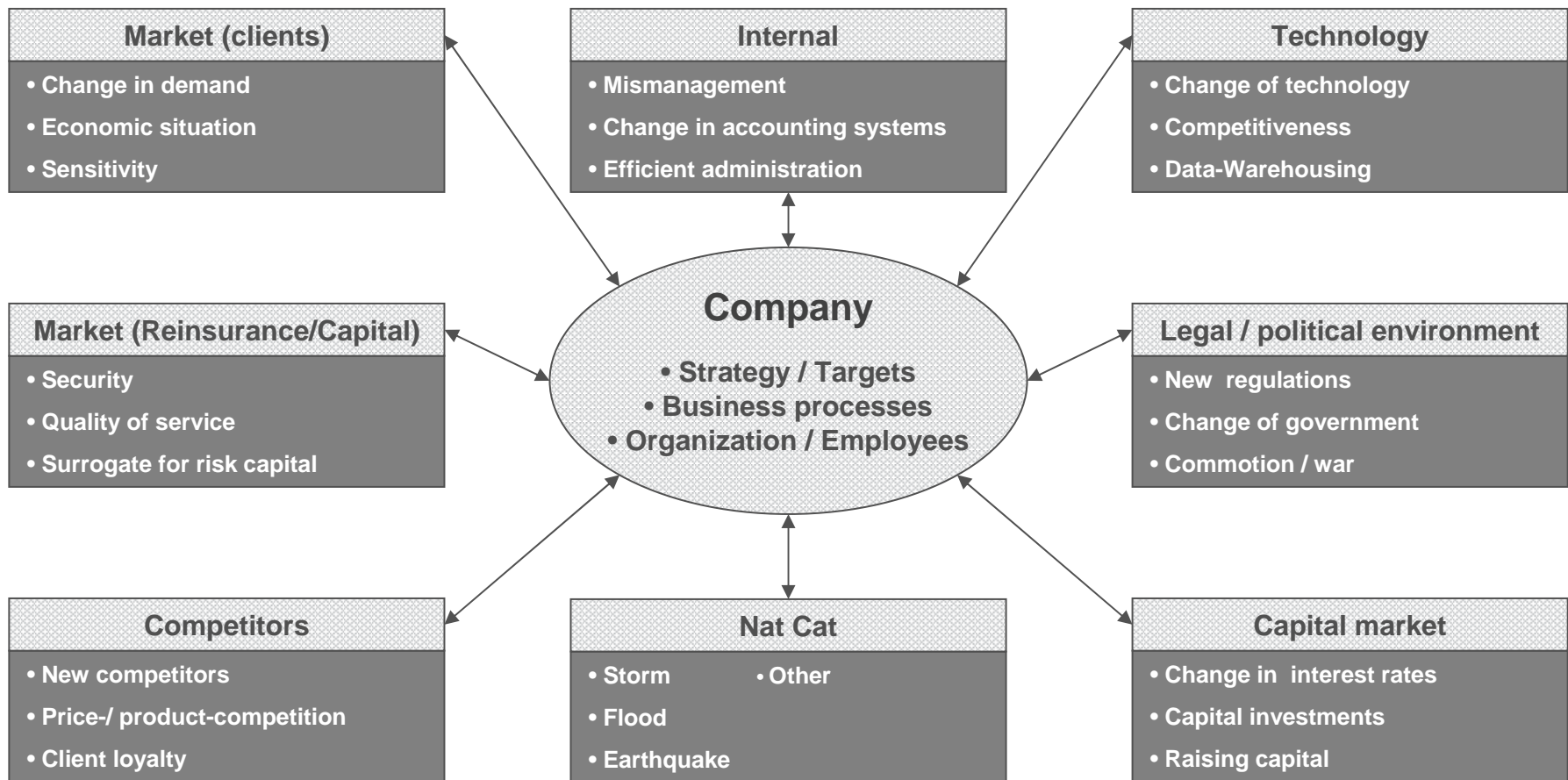
Qualitative aspects of Solvency II

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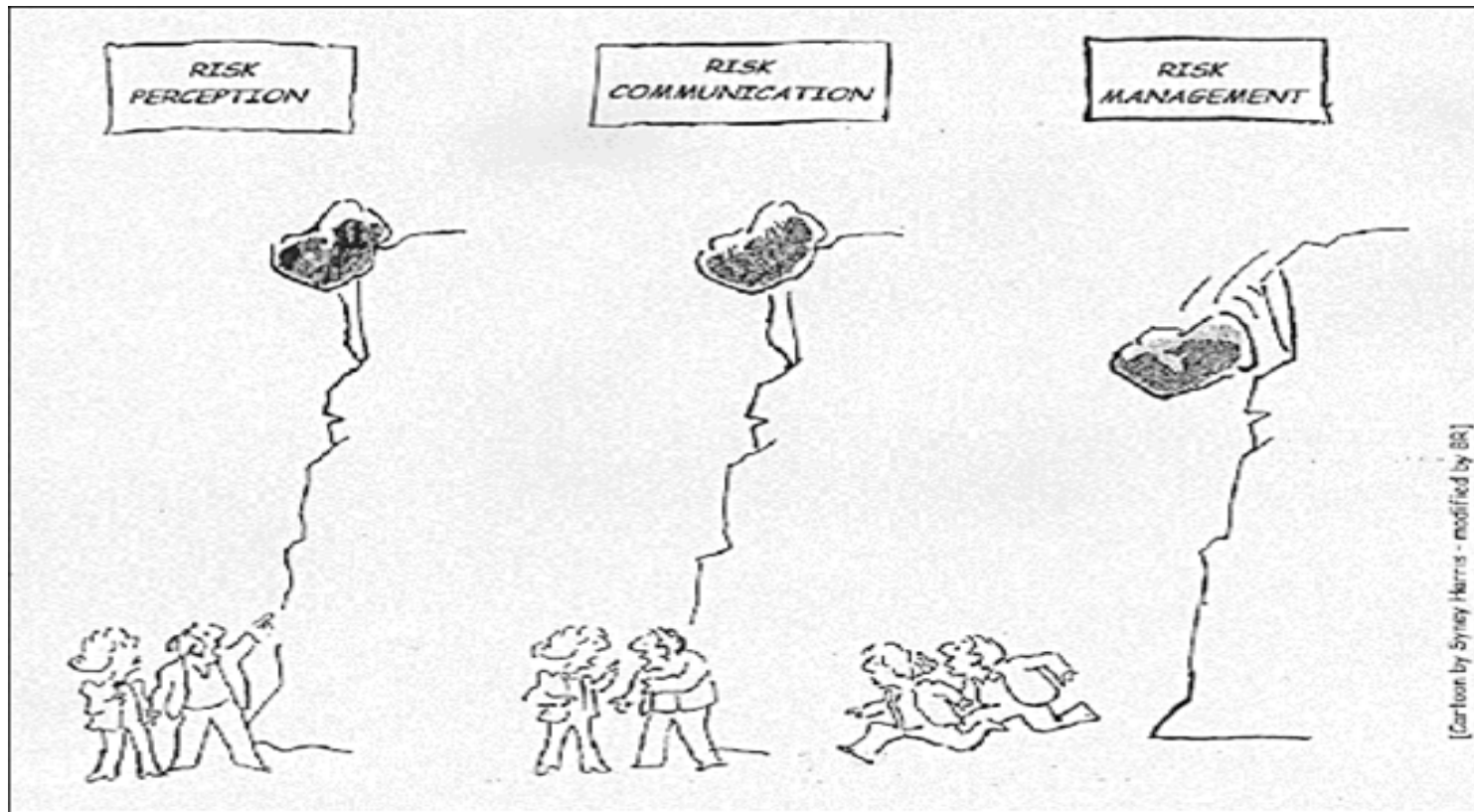


# Risk overview of an insurance company

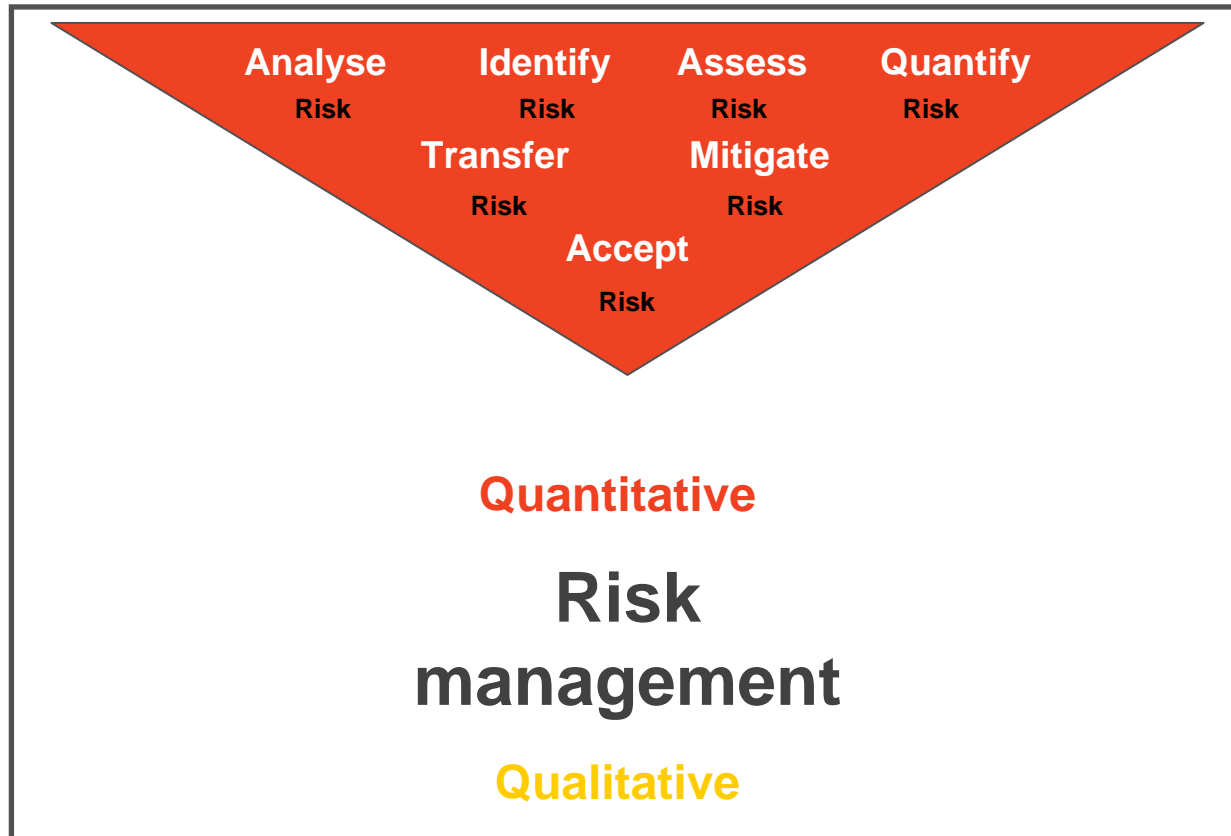


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# Everybody knows risk management – but what is risk management?



# Important features of risk management



# There is potential for further improvement of the industry's core competence risk management

Planning based on deterministic estimations

Important risks are not monitored

Deficits in respect of risk culture

Silo mentality

→ Single risks are not evaluated in the context

One dimensional capital allocation

→ Lack of connection of risk and capital

Diversification effects are neglected

No need for proving risk management

Risk  
management  
partly  
quantitative  
and less  
qualitative

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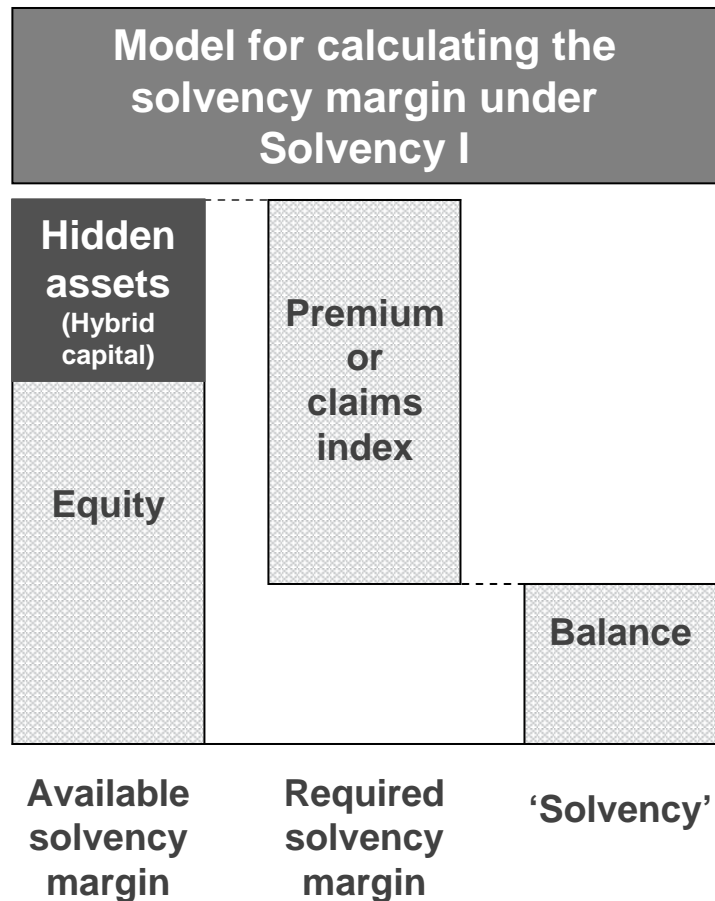
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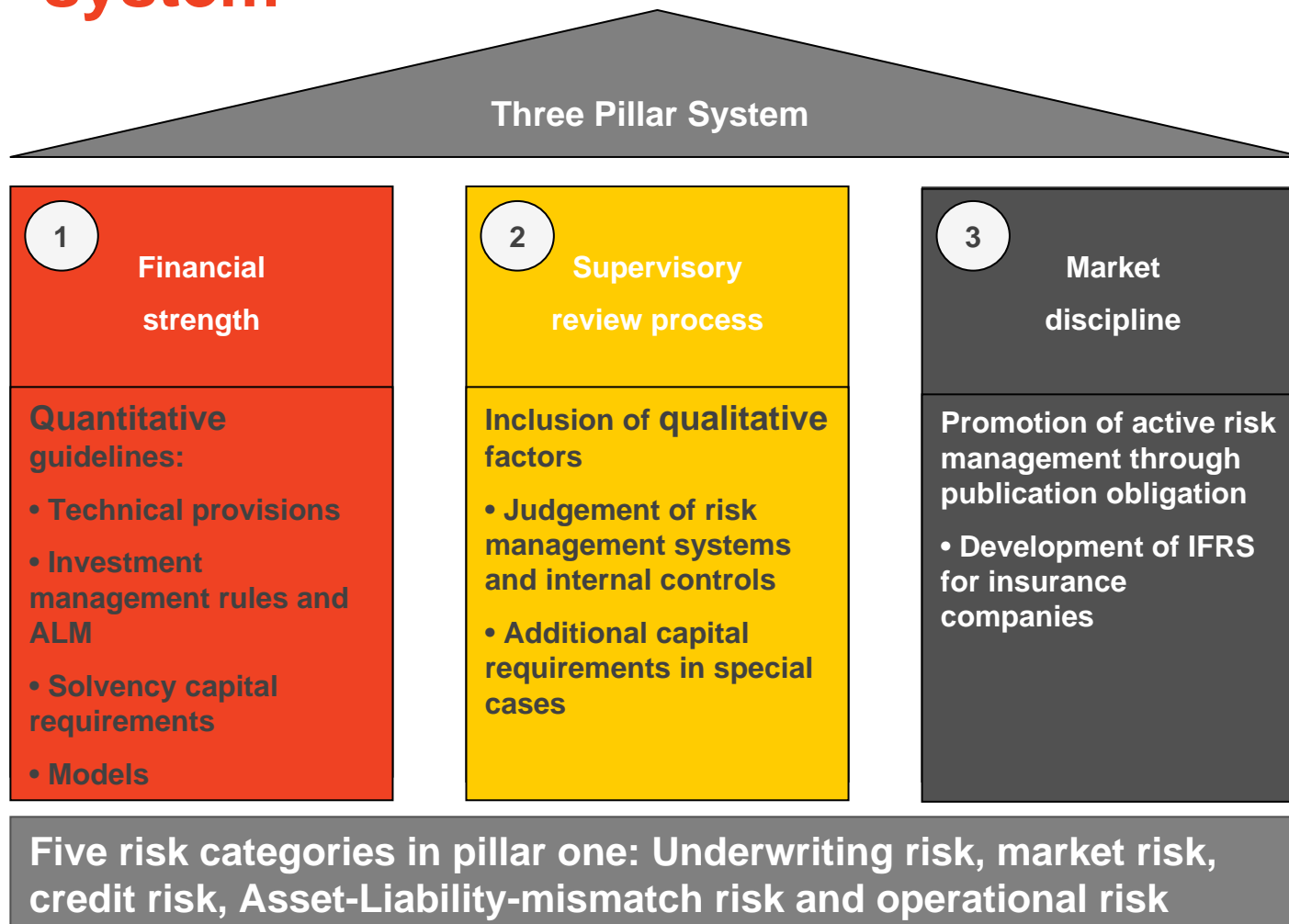
# Actual solvency system (Solvency I) is not adequate



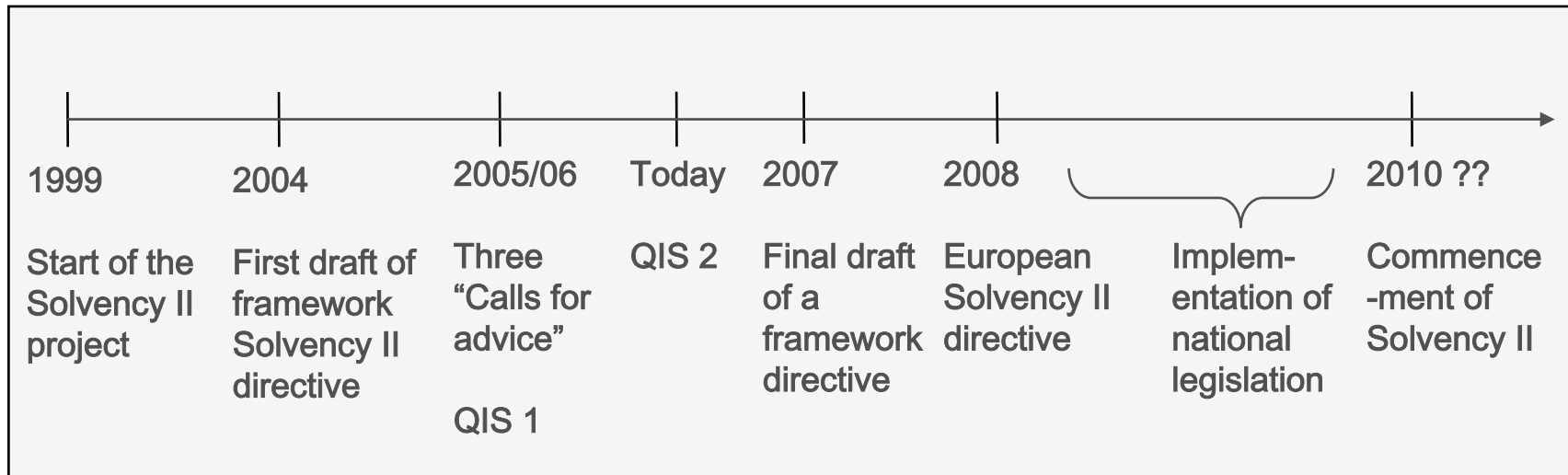
## Criticism

- Due to premium and claims related methods of determination, the effective risk classes are not reflected properly
- Quality of premiums and reserves not taken into account
- No consideration of diversification/mix of LOB's (Line of business)
- Complex forms of risk transfer are not taken into account
- No consideration of internal risk management systems
- Companies do not have to prove quality of risk management
- Negligence of risk orientated, sustainable management approach

# Solvency II is based on the three pillar system



# Expected timetable for Solvency II



QIS = Quantitative Impact Study



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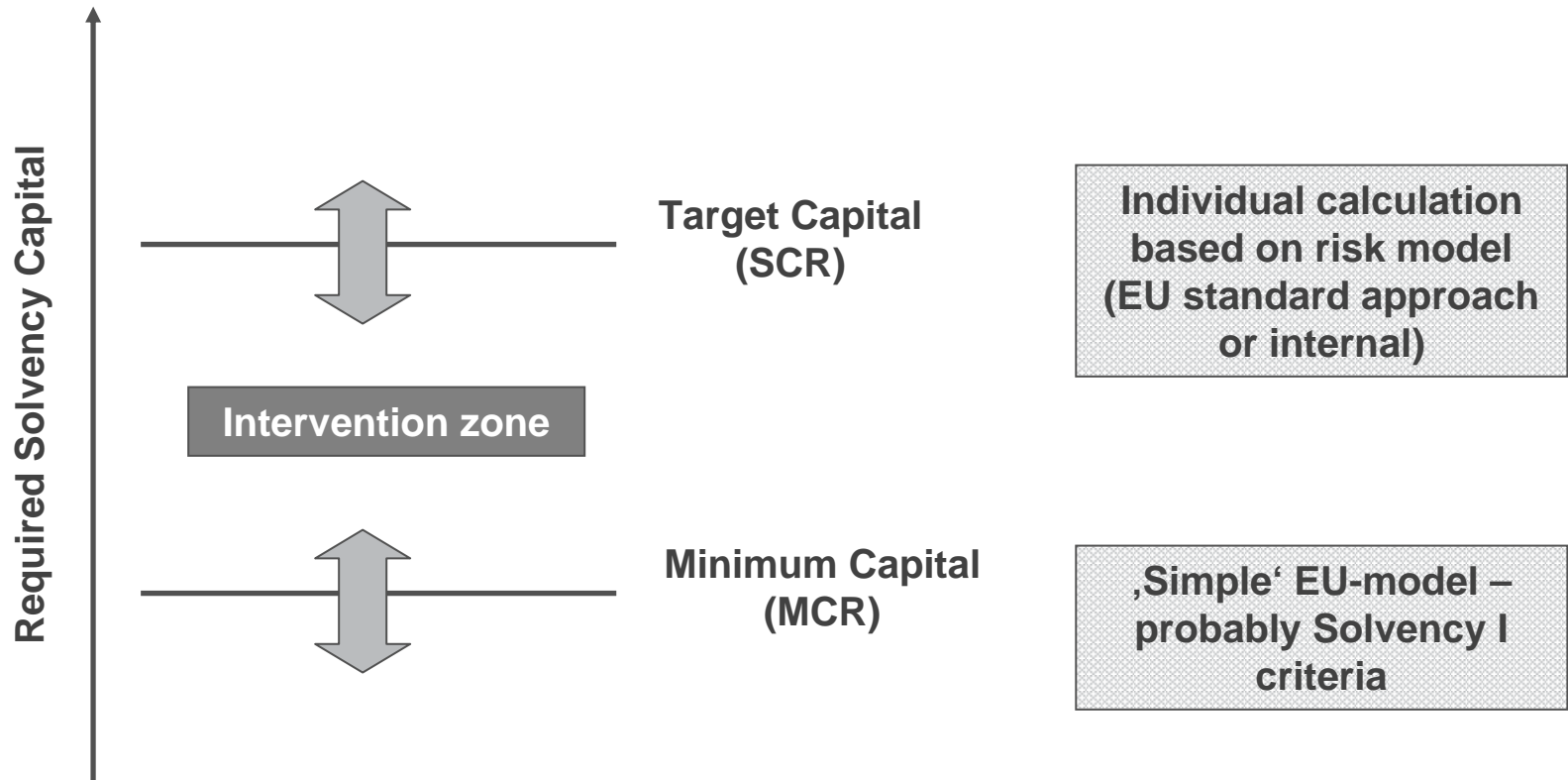
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# Two ways of determining solvency capital



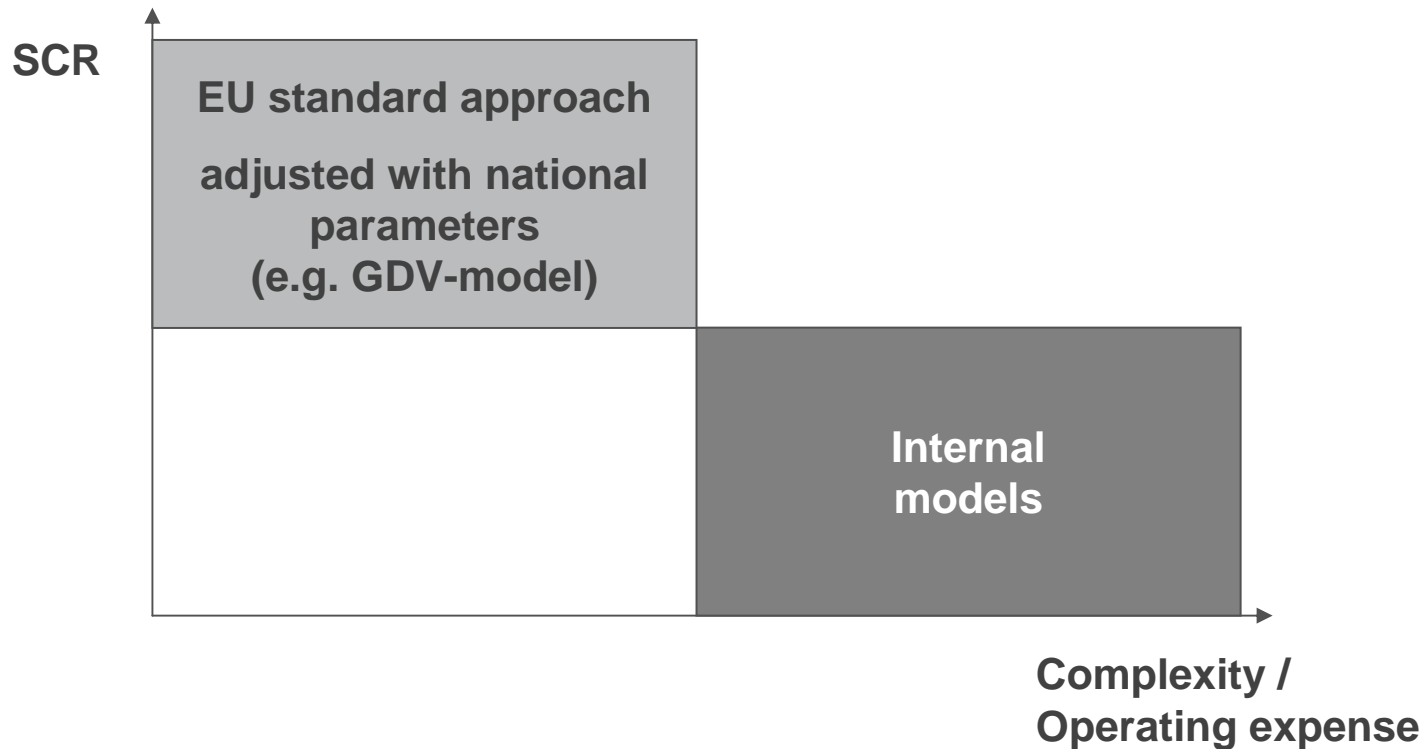
SCR = solvency capital requirement

MCR = minimum capital requirement



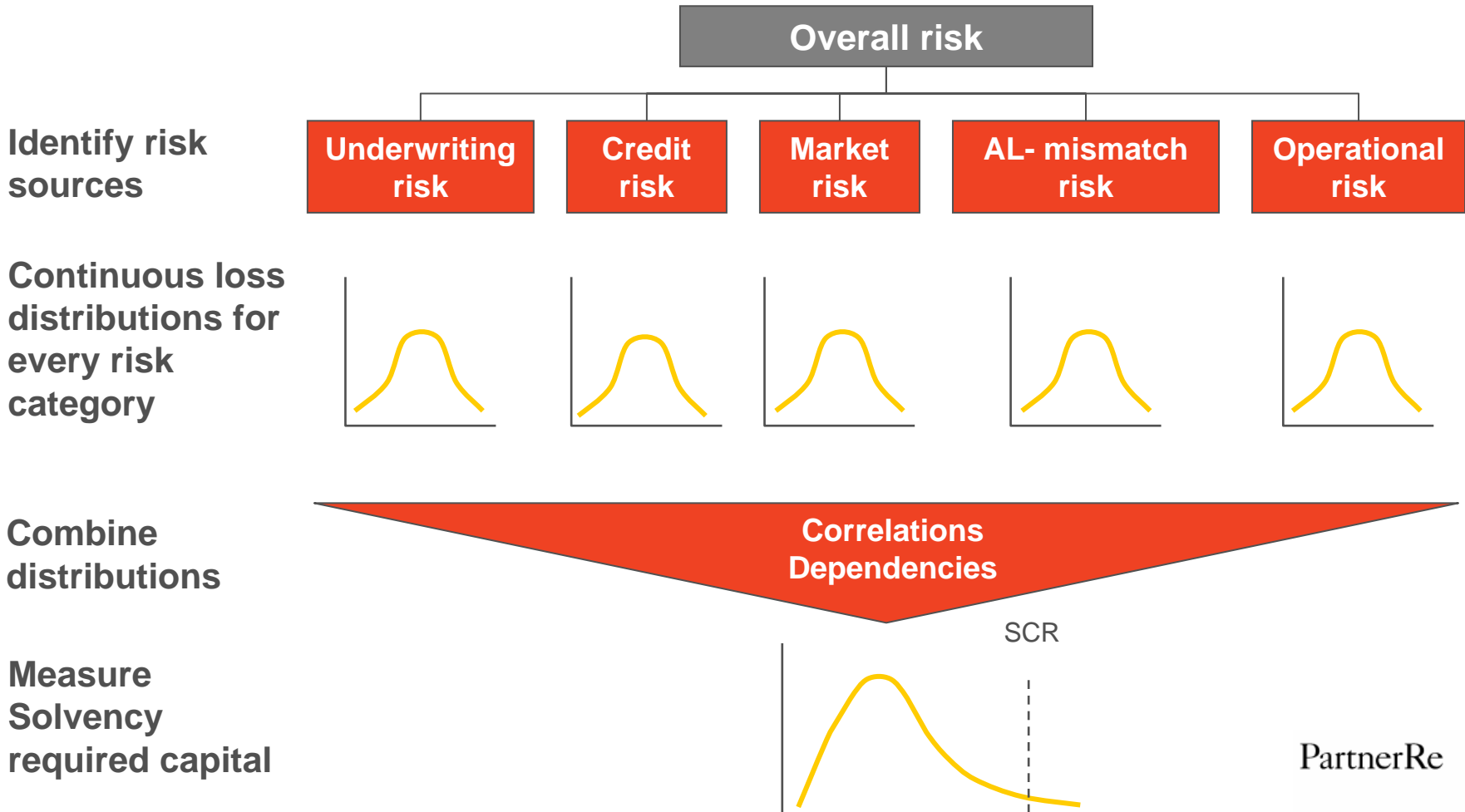


# The SCR incentive approach of Solvency II



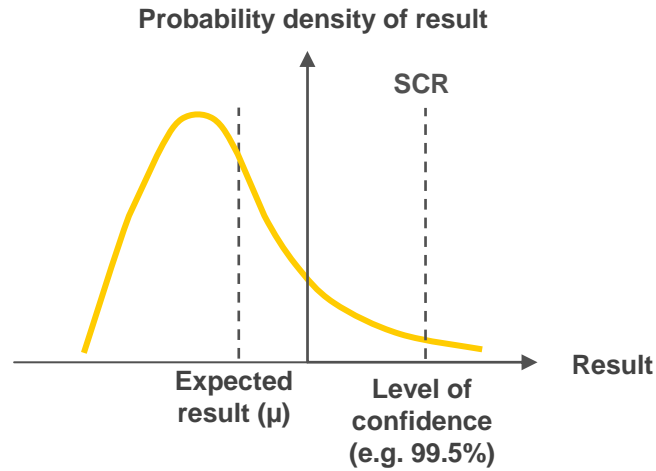


# From overall risk, to Solvency capital required

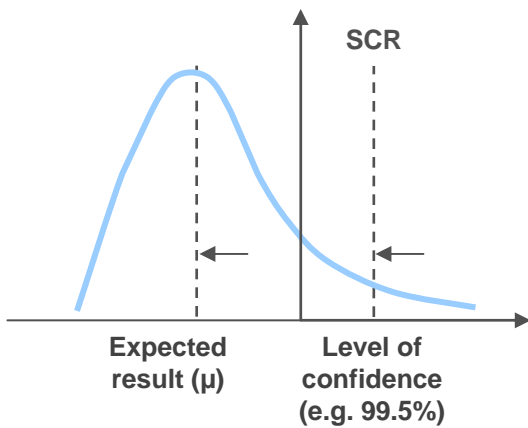




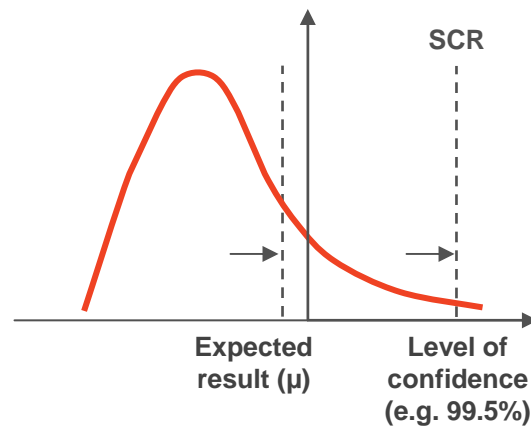
# Impact of business decisions on SCR



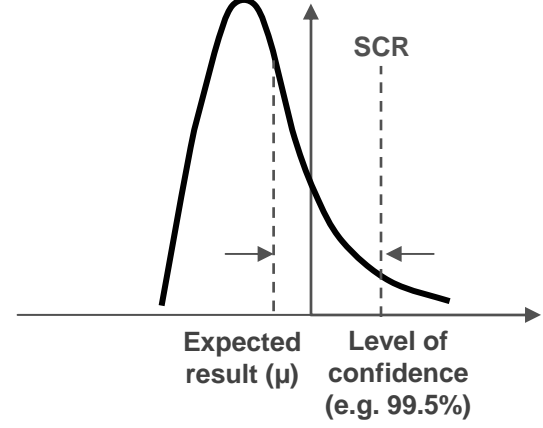
**More premium**



**Discount on premium**



**Efficient Reinsurance**



# Influence of reinsurance

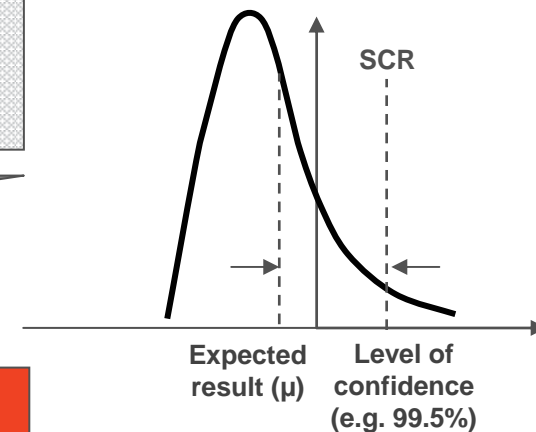
Reinsurance is a surrogate for capital

Board of Directors will be responsible for an adequate reinsurance management strategy

Reinsurance is one of the most efficient risk management tools

Rating will have an impact on SCR

Efficient Reinsurance



An important question in respect of Solvency II will be for the insurers:

Where do I get my capital for the best price with an adequate rating?

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# How can the limited resource capital be allocated most profitably to the different lines of business?

## Optimization of SCR-level...

### ...via the following instruments

- Smoothing of risk volatilities
- Obtaining a risk adequate premium
- Restrictive underwriting policy
- Optimizing of reinsurance structure
- Increasing of deductibles
- Adaptation of products
- Reduction of market share
- Exiting from LOBs (Lines of business)





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## Qualitative aspects of Solvency II

### Target of Pillar II

Qualitative review of risk management by supervisors  
→ Companies have to meet qualitative minimum requirements

### Precondition

Consistent supervisory evaluation of qualitative factors

### Consequence

Capitalization is linked to the quality of risk management

Risk management will become an important factor of competition due to linkage to capital requirements



## **Selected qualitative requirements**

**Senior management is responsible for implementing risk management strategies, policies and processes approved by the board of directors**

**Structured, ongoing monitoring and reporting systems**

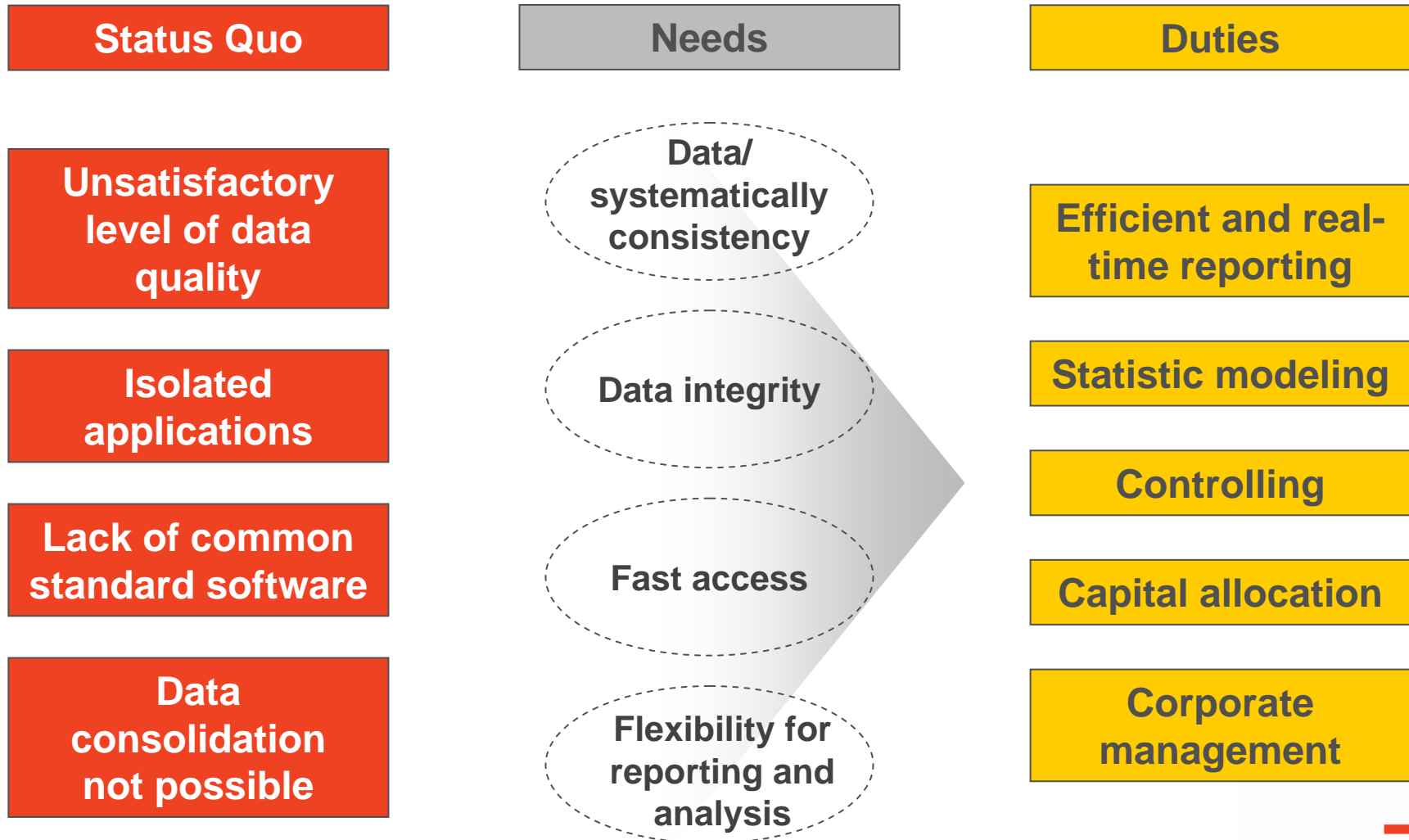
**Documentation of internal model**

**Consideration of all known current and future risk factors, but minimum underwriting, market, credit operational and liquidity risk**

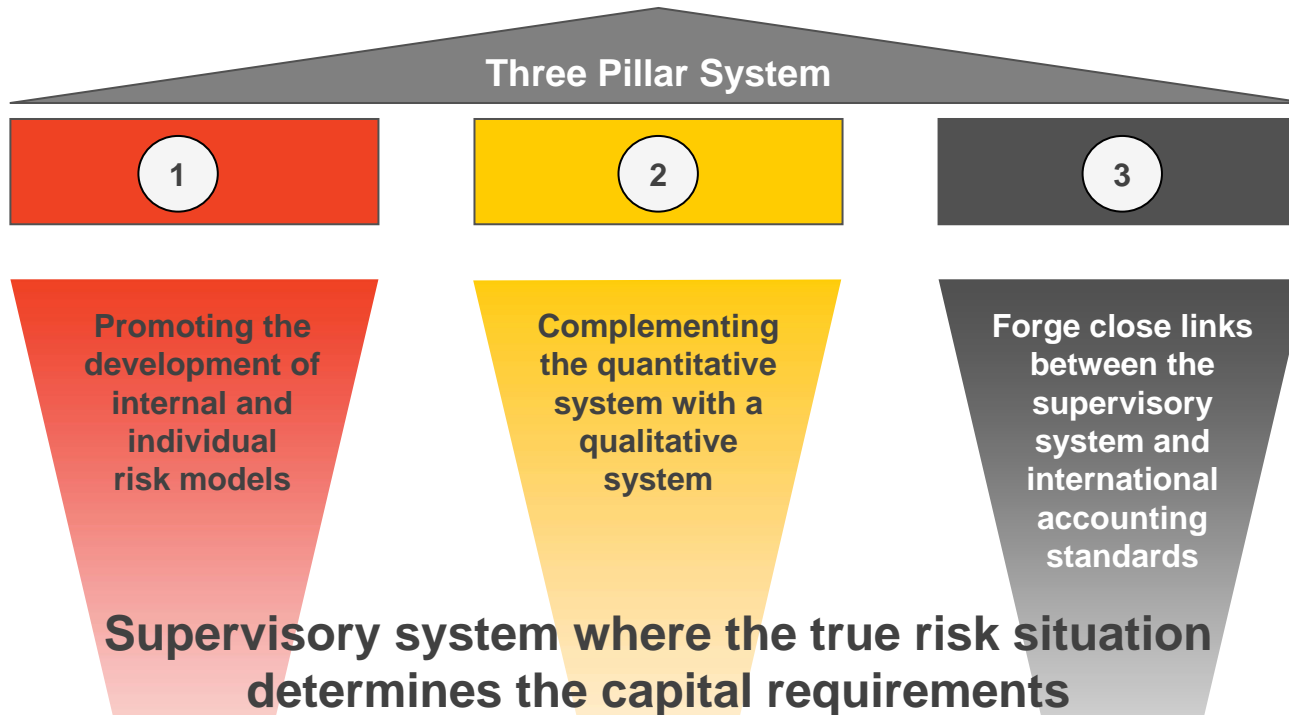
**Separation of risk management functions from operational functions**

**Communication of risk reports as basis for implementation of a company-wide risk awareness and culture**

# Data management - Basis for everything



# Impact of the three pillar concept on the insurance industry



**Solvency II should not merely be a solvency requirement, but more a call for a risk- and value based management approach**



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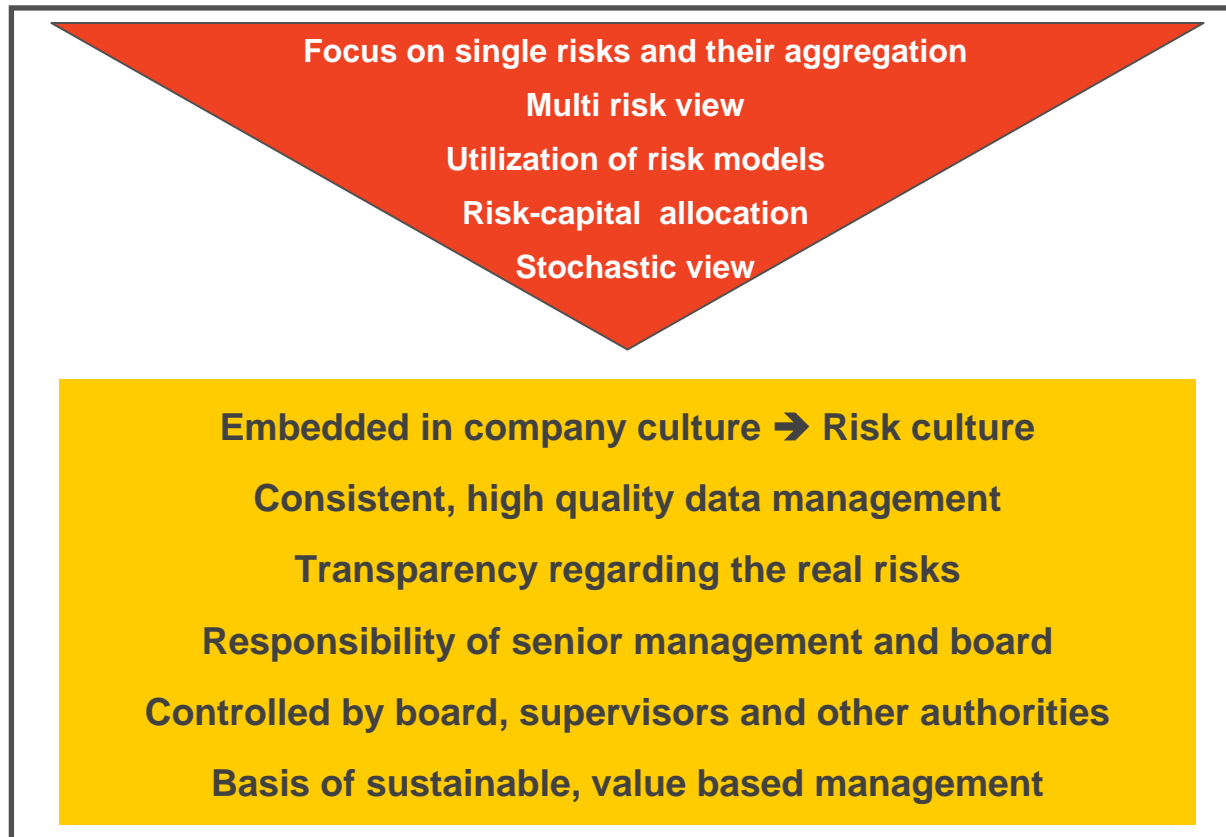
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# Scope of risk management in respect of Solvency II



→ Risk quantification and risk governance should be foundation of a sustainable risk and value based management approach

# General aspects of the impact of Solvency II

**A c t u a l   s i t u a t i o n**

**Risk management  
partly quantitative  
and less qualitative**

**The real paradigm shift is in pillar II, as the insurance companies have to assess for the first time the quality of risk management**

# Possible adverse development while implementing risk management culture



**“Every day I walk for 30 minutes, I drink 8 glasses of water, and I eat 5 fruits and vegetables...  
BUT I’M STILL GETTING OLDER!”**

## Pitfalls to avoid

Risk aversion

Internal overregulation

Overemphasize quantitative aspects

Responsibility aversion

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## Conclusion

**Combination of a quantitative- and qualitative risk management should lead to value- and risk based management approach**

**Creation of sustainable security- and growth effects**

**Implementation of an open and transparent risk culture**

**Establishing of a formal and methodical foundation**

**All-embracing - Solvency II compatible - risk management will result in a competitive advantage**

**Don't see Solvency II as a threat but more as a management opportunity**



**Thank you for  
your attention!**



# More information on Solvency II

**CEIOPS**

<http://www.ceiops.org/>

**European Commission Internal Market**

[http://ec.europa.eu/internal\\_market/insurance/solvency\\_en.htm](http://ec.europa.eu/internal_market/insurance/solvency_en.htm)

**International Actuaries Association (IAA)**

<http://www.actuaries.org/>

**Groupe Consultatif Européen**

<http://www.gcactuaries.org/>

**Comite Européen des Assurance (CEA)**

<http://www.cea.assur.org/>

**German Insurance Association (GDV) - Link to standard model**

<http://www.gdv.de/Hauptframe/index.jsp?navi=english>

**Swiss Supervisor (BPV) – Link to Swiss Solvency Test**

<http://www.bpv.admin.ch/themen/00506/index.html?lang=en>

