

MIMA

Pillar 1 – Quantitative Requirements

December 2nd, 2011



Marsh Risk Consulting

Agenda

1. Quantitative requirements : the new deal
2. Impact on Captives
3. Best practices for capital optimization
4. Conclusion

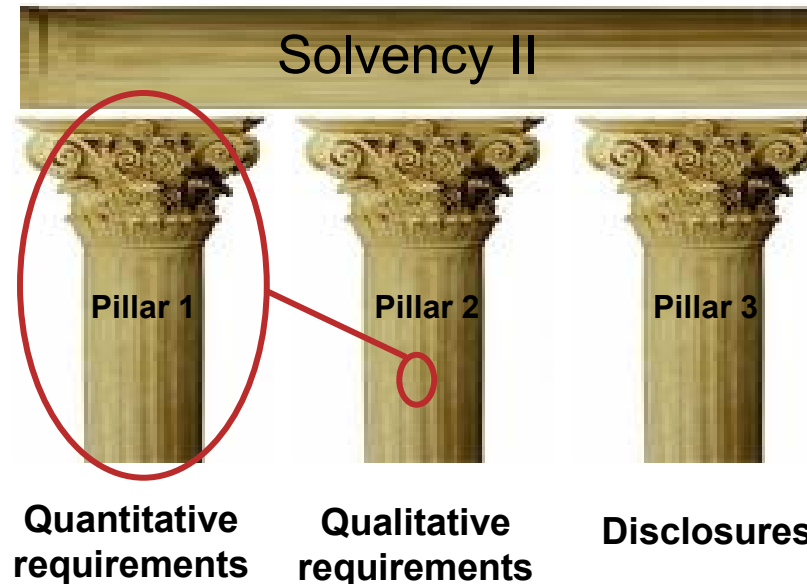
The rationale behind Solvency II

■ Main objectives of Solvency II

- Improve protection of policy holders and beneficiaries
- Increase financial sustainability of insurance and reinsurance undertakings
- Improve risk management practices
- Complete harmonization throughout Europe and enhance competition

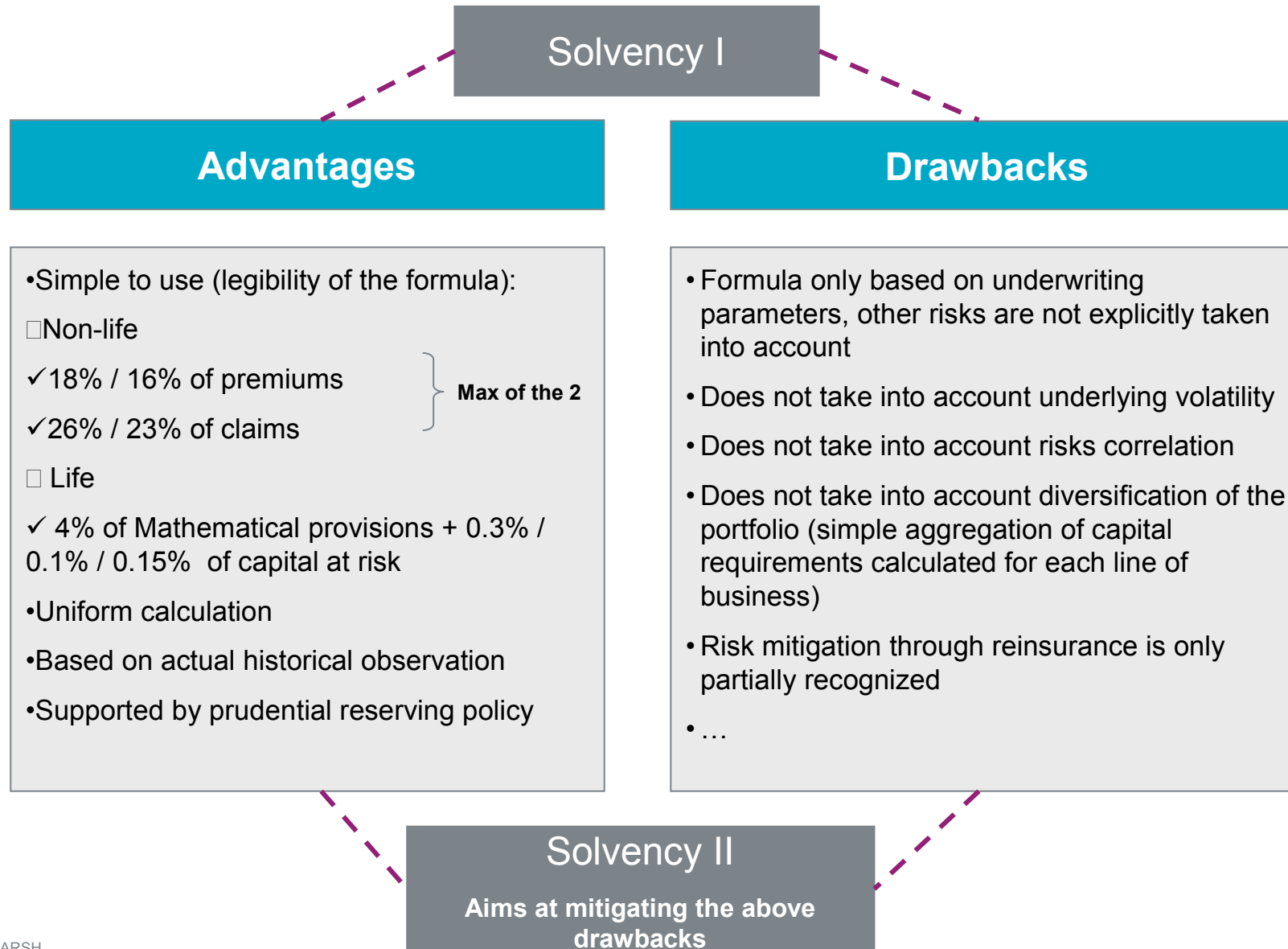
⇒ More sophisticated measure and efficient control of the risks of the undertaking

■ 3-Pillar approach



Some quantitative elements
are embedded in Pillar 2

Solvency I reminder



Solvency II - Pillar 1

Pillar 1 is supported by 2 principles

- Fair value valuation of assets and liabilities

- Risk based capital approach

- Explicit assessment of all risks the undertaking is exposed to

- Seeking to create a capital position at least equivalent to BBB+ rated company

- Creates need to be 99.5% certain that the undertaking will meet liabilities over the next 12 months

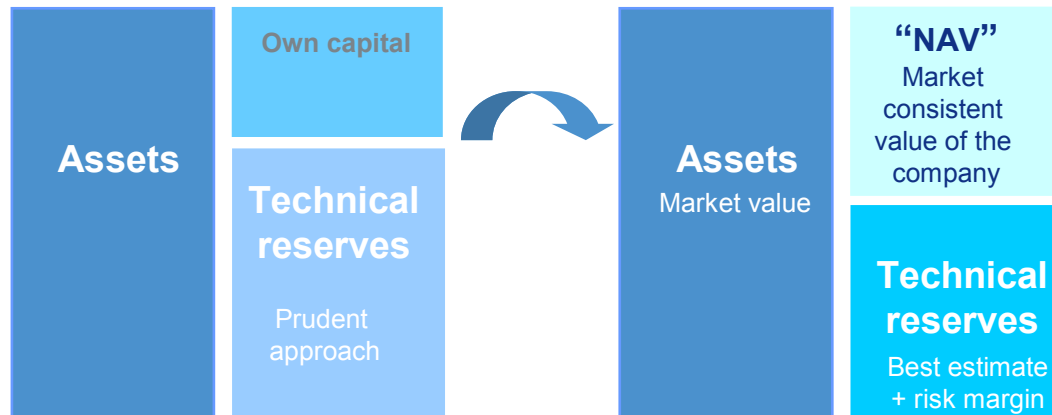
Strong corporate governance processes defined under Pillar 2

⇒ Aims at supporting the assumptions used to assess capital needs of the undertaking in accordance with Pillar 1 principles

Pillar 1 - Fair value principle

From a local
GAAP valuation...

... to a consistent
fair value



Fair value

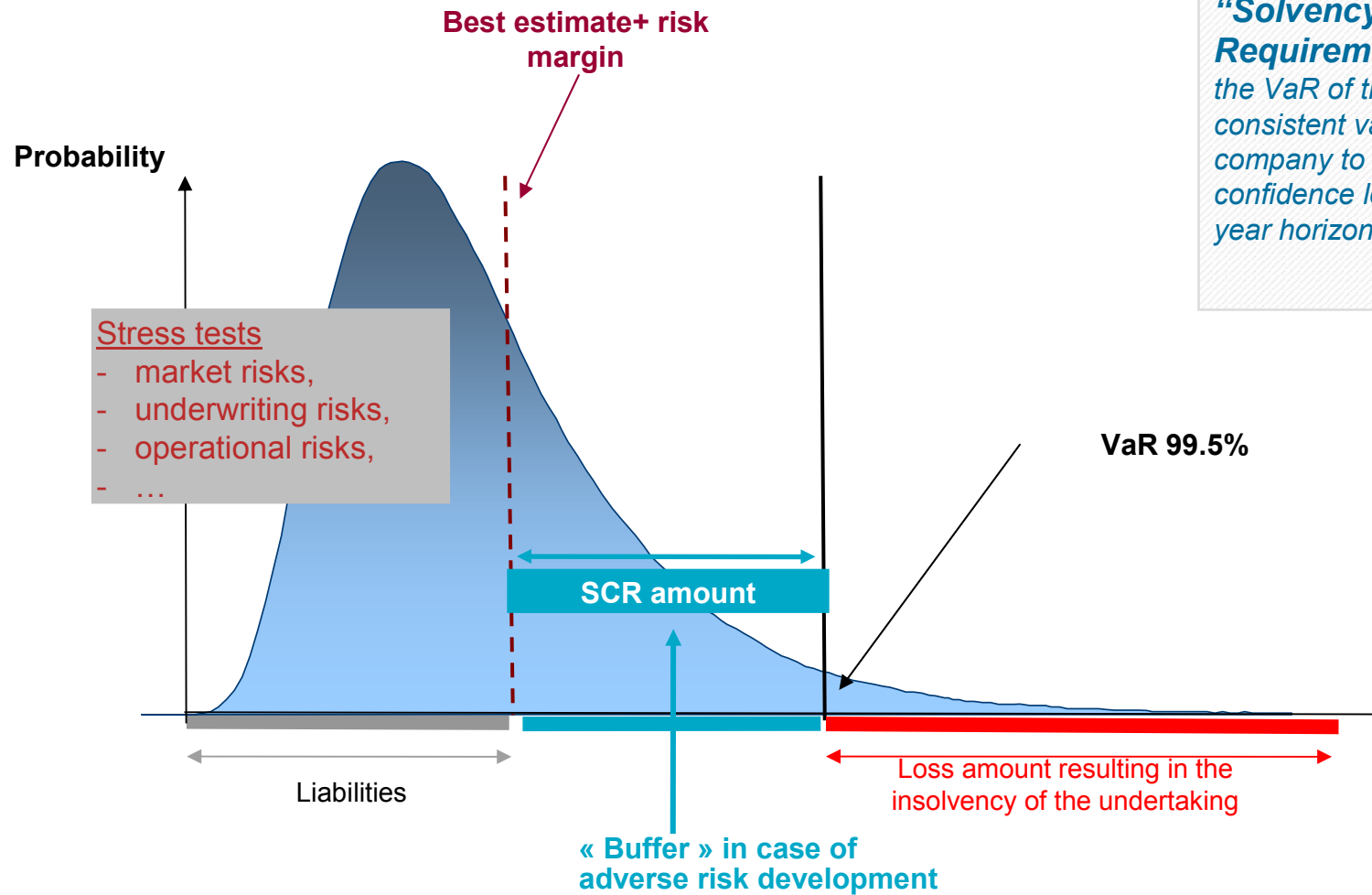
- ❑ **Assets** : market value
- ❑ **Liabilities** : “best estimate” approach

Economic value of the undertaking

= Assets minus Liabilities (**NAV**)

“NAV (Net Asset Value) is the difference between the market consistent value of assets and liabilities”

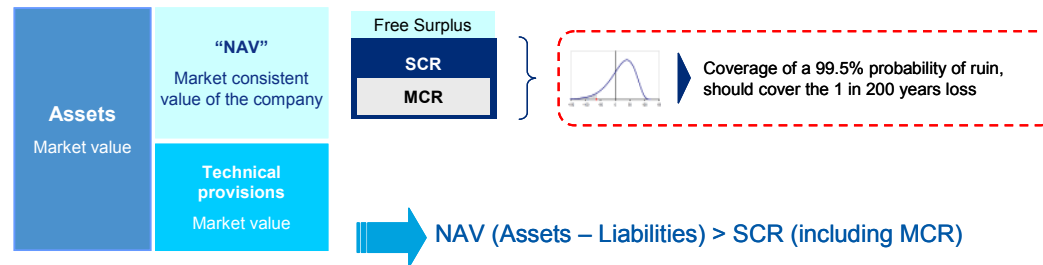
Pillar 1 – Risk-based capital approach



“Solvency Capital Requirement (SCR) is the VaR of the market consistent value of the company to a 99.5% confidence level on a 1 year horizon”

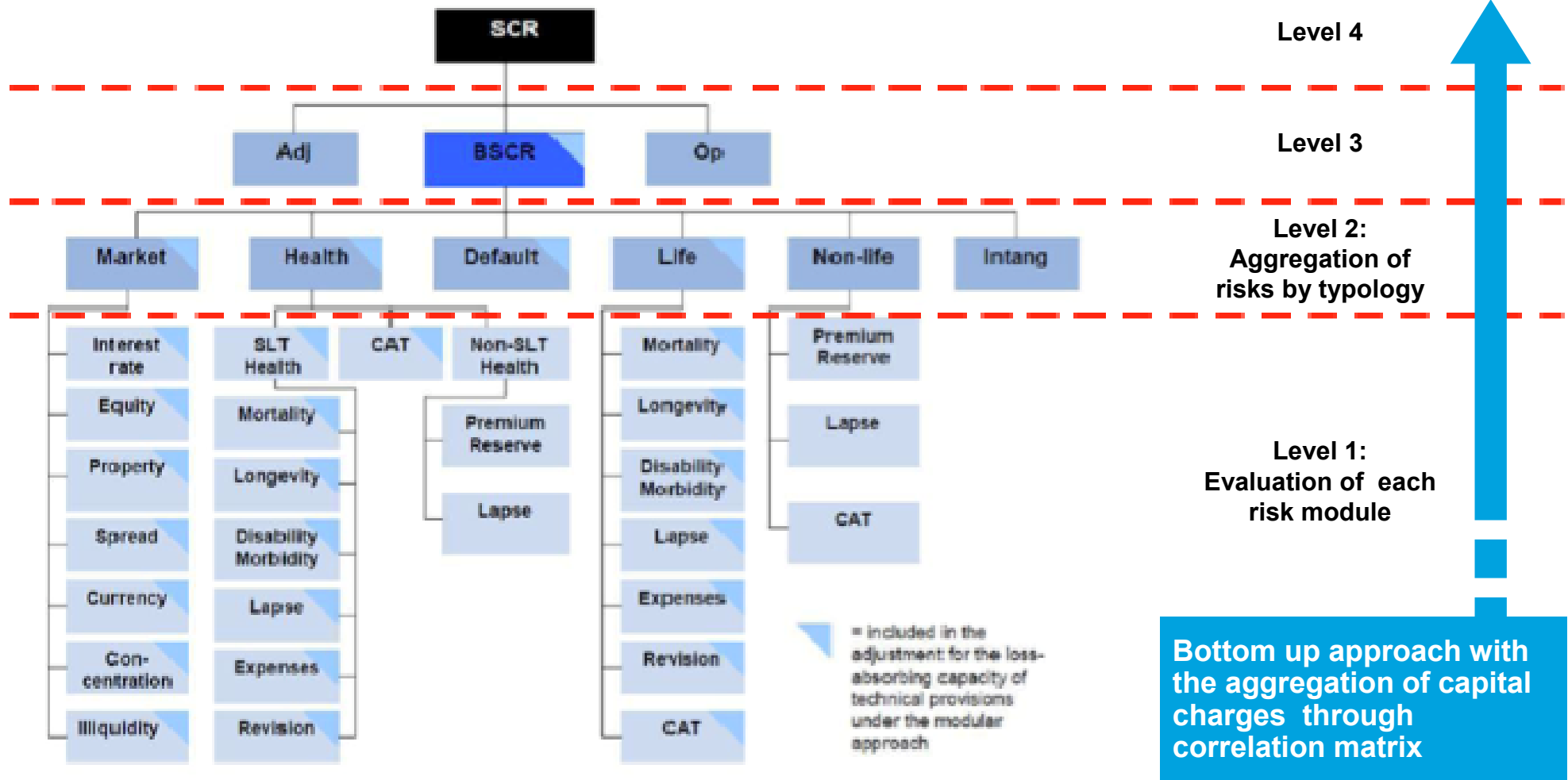
Pillar 1 - SCR & MCR calculation

- The capital requirements under Solvency II:
 - **The Solvency Capital Required (SCR):** the amount of capital held by a company ensuring it can meet its liabilities over the next 12 months
 - **The Minimum Capital Required (MCR):** the amount of capital below which the insurance license is withdrawn



- The Directive provides three options for calculating the SCR:
 - **Standard Model** – the Directive states the required calculation of the capital.
 - **Partial Internal Model** – this incorporates the Standard Model but individual modules can be replaced with an internal approach that is agreed with the Regulator
 - **Full Internal Model** – this is a bespoke model developed by the company covering at least the same aspects as the Standard Model and which have been tailored to the specific characteristics of that company. Given the complexity of such full internal models, these are an opportunity for large insurance or reinsurance undertakings

Pillar 1 – Modular approach



Pillar 2 - Quantitative aspects

- **Capital add-on:**

- The Solvency Capital Requirement standard formula is intended to reflect the risk profile of most insurance and reinsurance undertakings. However, there may be some cases where the standardized approach does not adequately reflect the very specific risk profile of an undertaking.
- Under exceptional circumstances, supervisory authorities have the power to impose a capital add-on to the Solvency Capital Requirement, only in the following cases:
 - The undertaking's risk profile deviates significantly from the assumptions underlying the SCR calculation
 - The system of governance of the undertaking deviates significantly from the standards and does not allow to properly identify, measure, monitor, manage and report the risks that it is or could be exposed to

- **Own Risk and Solvency Assessment (ORSA)**

- As part of the ORSA process, the undertaking shall:
 - quantify its overall solvency needs on a forward-looking basis covering each year of the business planning period (generally 3 to 5 years)
 - Subject identified risks to a sufficiently wide range of stress test/scenario analyses
 - Complement the quantitative approach with a qualitative description of the risks
 - If the undertaking's risk profile deviates materially from the assumptions underlying the SCR calculation, it shall quantify the significance of the deviation

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1. Quantitative requirements : main principles / the new deal

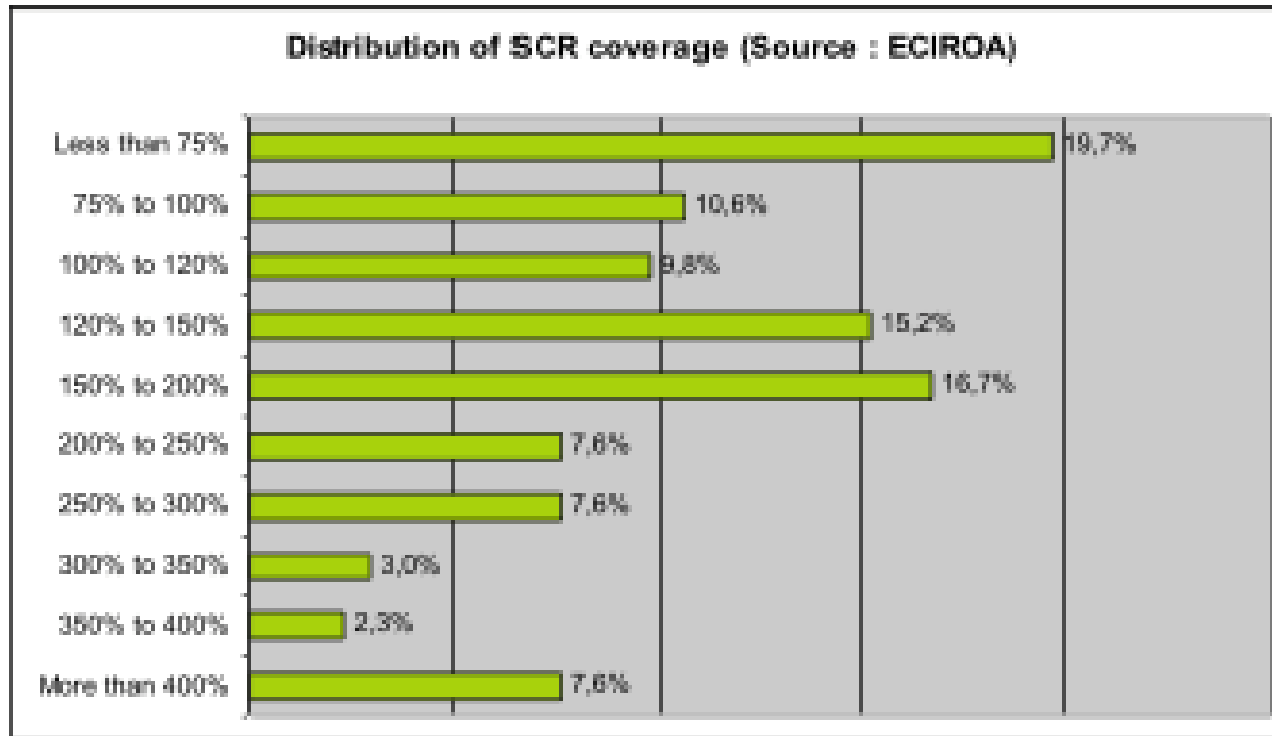
2. Impact on Captives

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QIS 5 Results - Benchmark analysis

- Source : ECIROA – Captive report on QIS 5
- Sample size : 132 captives (Marsh contribution on 41 captives)
 - 51 direct writing undertakings / 78 reinsurance undertakings
 - 9 domiciles represented
- Distribution of SCR coverage

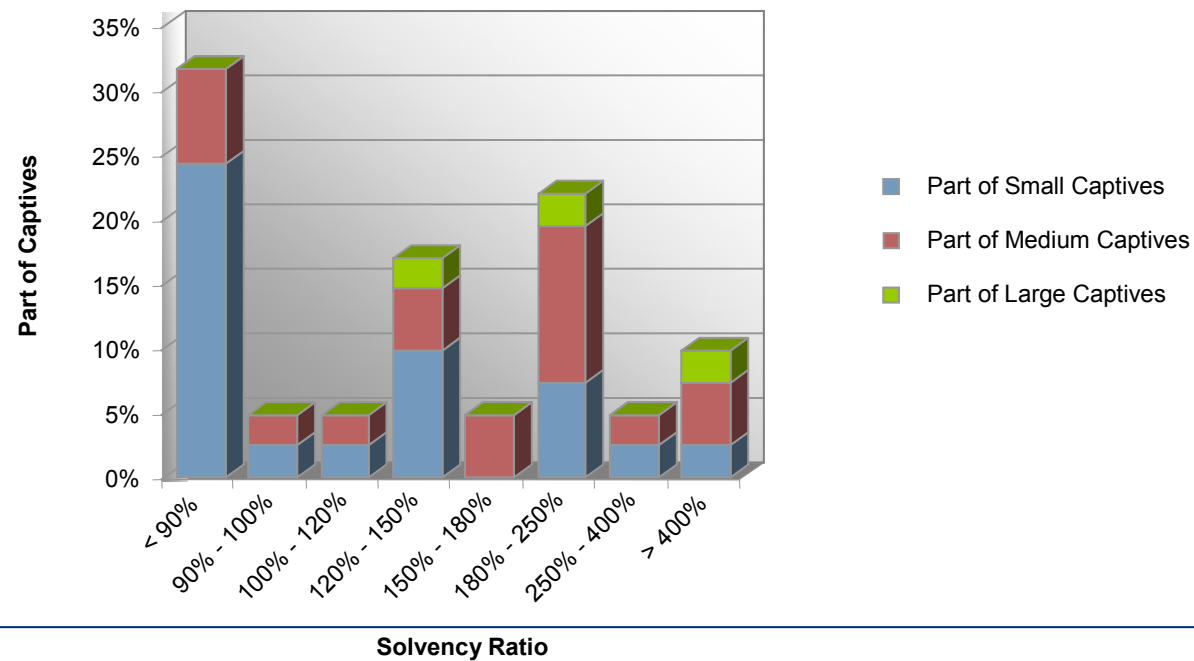


Based on Marsh' sample

Mean value	197%
Median value	133%

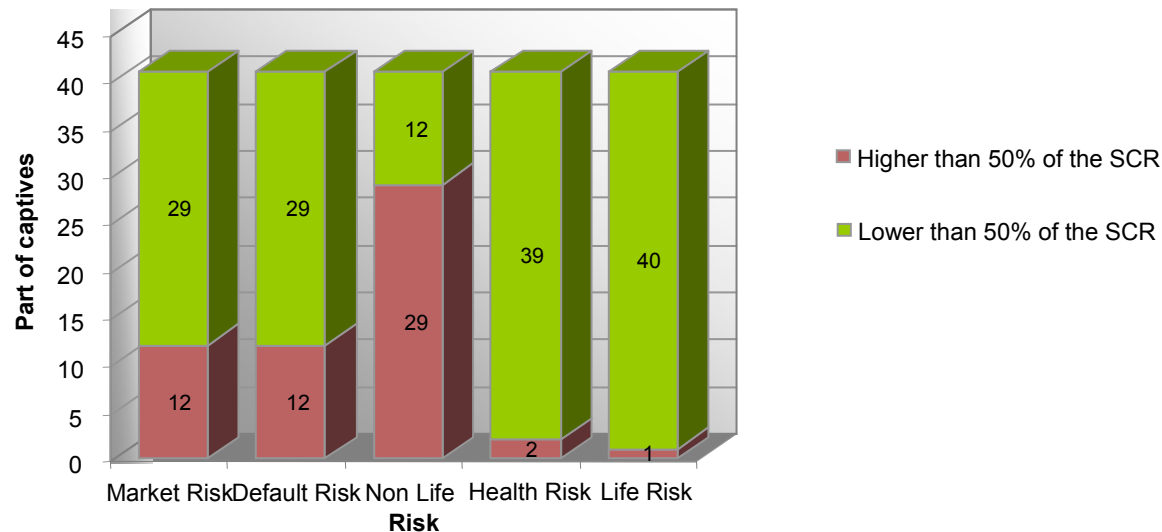
QIS 5 results – SCR coverage and captive size

- 35 % of captives (mainly small ones) wouldn't have enough capital to reach the SCR
- 35 % of captives have 180 % of SCR as available capital
- The first 10 % of captives have more than 400% of SCR



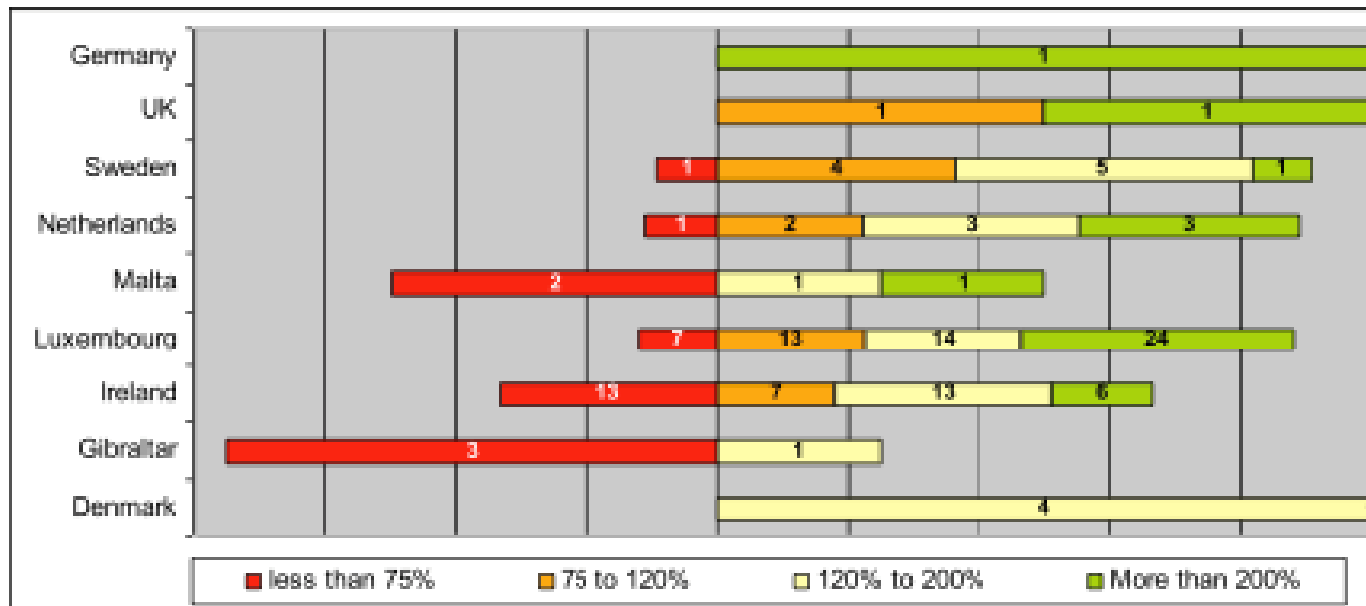
Main impacting elements

- **Non-life risk** is the major risk in terms of impact on the level of the SCR, mainly due to catastrophic risk
 - Non-life risks for captives represent in the average 44% of the SCR compared with 13% for traditional (re)insurers.
- **Market risk** mainly consists of the concentration risk on intragroup loans, which is a common practice in the captive market.
- **Default risk** is most often a direct consequence of the cat risk, as its scope includes risk-mitigating contracts
 - Capital charge required to absorb counterparty default risk shall take into account potential insolvency of reinsurers in the case of claims losses arising from catastrophic scenarios
- **Life & Health risk** only concern a limited number of captives



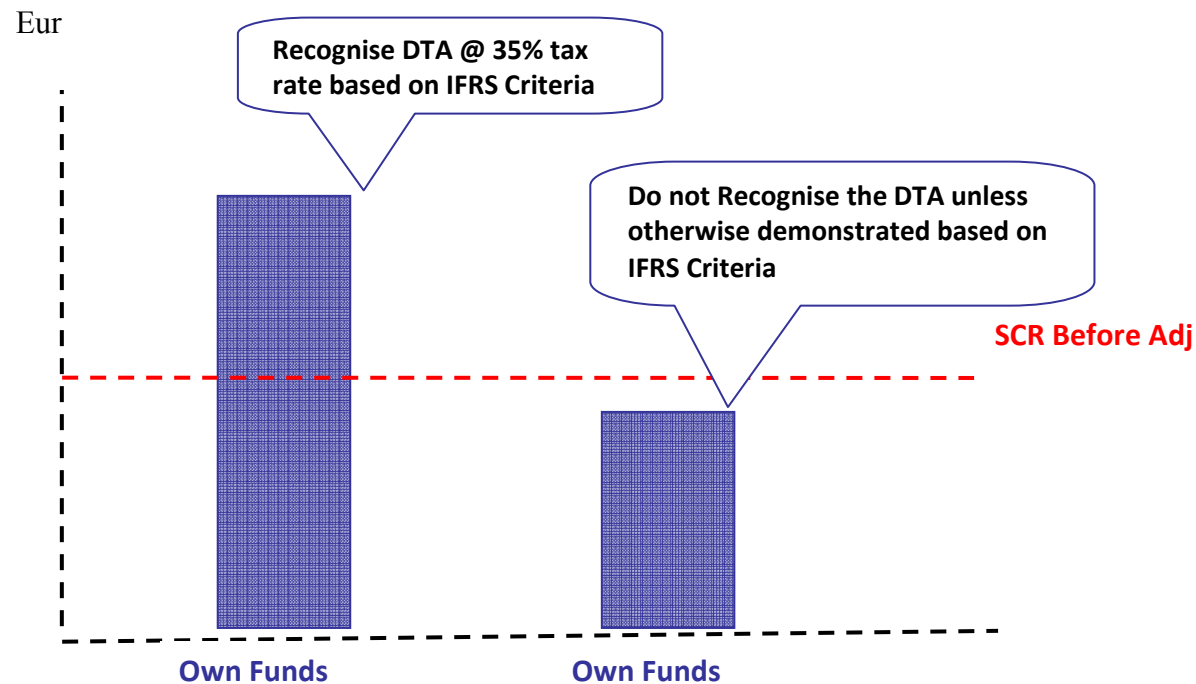
QIS 5 results – SCR coverage and domiciles

- A large majority (65%) of the captives having the higher solvency ratios (more than 200%) are Luxembourg captives
- Can be explained by the equalization reserve mechanism and the maturity of domicile
- As far as Malta and Ireland are concerned (the other “traditional” captive domiciles), the proportion of captives facing potential capital shortfall is more important
- More direct writing undertakings in these domiciles used as fronting facilities for reinsurance captives: this generates higher counterparty default risk due to risk mitigation agreement with unrated undertakings



Focus on Malta: Impact of Deferred Tax Adjustment

QIS 5 did not provide any concrete criteria, other than those set out in the technical specification. EIOPA recommended to follow relevant IFRS Criteria. However some guidance provided by EIOPA is as follows:



This can be an important aspect to consider when choosing domicile to set-up your company and Malta is well placed to provide the full benefit in this. The SCR can only be reduced in those cases where deferred tax on instantaneous losses can be realised in the very short term and as depicted above.

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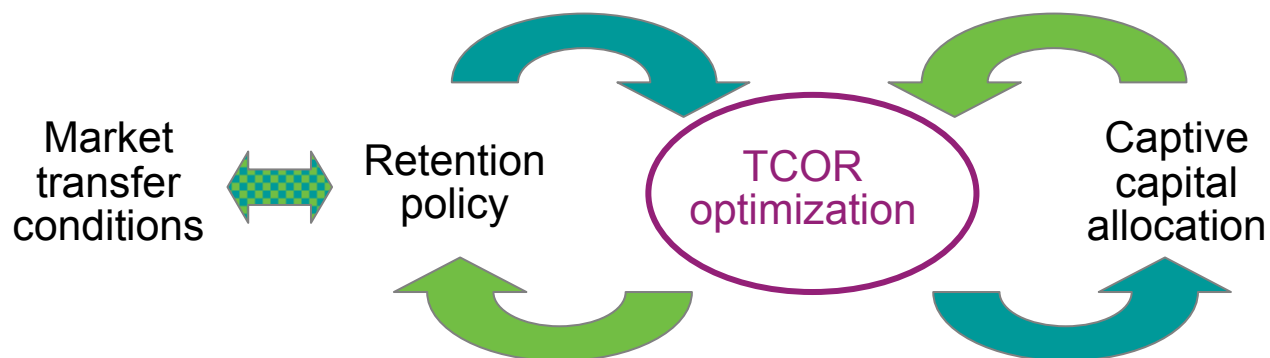
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Best practices - Investment policy

- ALM is key
- A differentiated approach “external investments” versus “intragroup deposits” can be contemplated in order to increase diversification and reduce the concentration risk
- Possibility to exempt captive undertakings from the concentration risk module to the extent that there exists legally effective formal provisions where the captive’s liabilities can be offset by intra-group exposures it may hold on entities of the group (captive simplification – Technical specifications SCR.14.19.)
- When assets are placed in collective investment funds, it is important to have as much details as possible to analyse their economic substance (look-through approach)
- Be attentive to counterparties’ ratings
- Question on the risk free treatment of european sovereign risks (risk charges vs M-t-M)

Best practices – underwriting, catastrophic and default risks

- The Catastrophic risk calibration has been detailed within two methods :
 - A method based on standardized cat scenarios (“man made” and “NatCat”)
 - A factorial method to be applied, if the first one is not applicable or if available data are not sufficient
- We recommend specific monitoring and information regarding the Cat Risk exposures and claims history so that the capital charge can be calculated as precisely as possible, in order to avoid overcharge due to approximate approach
- Optimization of reinsurance strategy specially for the extreme risks
- Avoid pure fronting captives who will experience much higher levels of SCR (Risk mitigation effect on counterparty default risk)
- Retention policy to be adjusted with a view to optimize the total cost of risk (TCOR), including the cost of capital → iterative process



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Conclusion

Solvency II Consequences for captives

- Increase barriers to entry for newly formed captives
- For a majority of existing captives, operations will require higher level of capital
- Increase complexity of retention strategy : arbitrage own funds / retention level / market transfer conditions
- Captive management will become more complex
- Require better risk awareness and management
- Programme structures to be reviewed to minimize risk mitigation impact on counterparty default risk
- Investment policy to be optimized

General application of Solvency II on the traditional insurance market may give rise to increased premiums and reduced capacity to cover certain risks.



Captives will therefore become all the more strategic tools to address potential market gaps.

ORSA : “the heart of Solvency II” (EIOPA)

- ORSA is a top-down process for an overall and holistic risk understanding
- It gives a picture of the company’s short-term and mid-term risks (=> stress-tests, scenarios)
- It must be integrated into the decision-making process of the top management
- It’s an evaluation of the company’s risk and solvency, regarding its risk appetite and business model (=> it goes further than the SCR-calculation and Pillar 1 risks)





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