Deloitte.

Konzultační materiály CEIOPS

Standardní formule (č. 47-54)

Seminář z aktuárských věd

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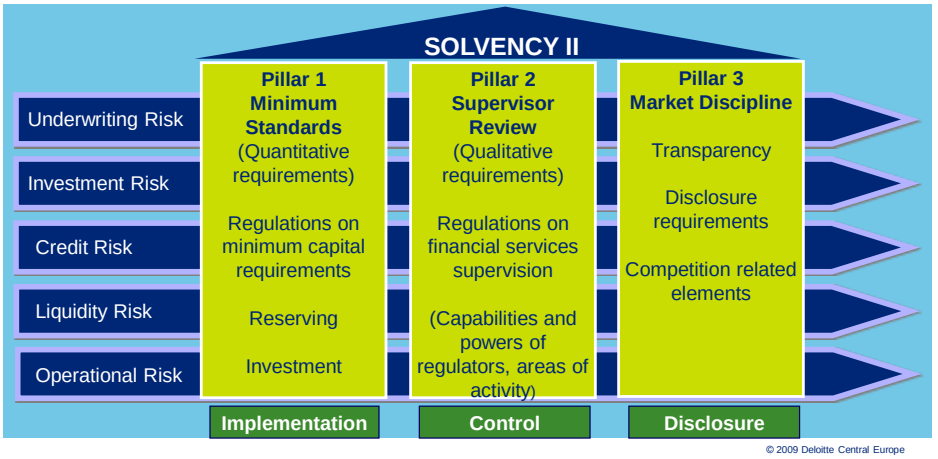
Solvency II – Three pillar approach

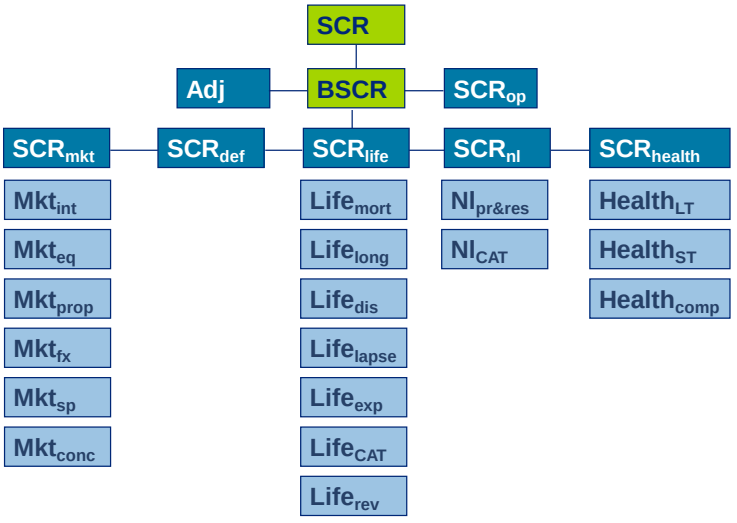
Three pillar structure from Basel II is to be adopted for the insurance industry

New system is intended to offer insurance companies incentives to measure and better manage their risk situation

New solvency system will include both quantitative and qualitative aspects of risk



SCR – Modular approach



Main QIS4 Findings - SCR

PART 1

Operational risk	• Standard formula tested in QIS4 was similar to the QIS3 approach
	• Issues for improvements
	  • Correlation of 100% with other risks
	  • Lack of risk sensitivity
	  • Formula not reflecting the wide spectrum of operational risks that can materialise within an undertaking
	  • Cap of 30% not being adequate (being too high)

Market risk	• For the equity risk module, many undertakings and supervisors stated that the **32% calibration** of the equity stress was too low for a 99.5% calibration, and suggested that a figure of around 40% might be appropriate
Counterparty default risk	• Concept of the **loss-given-default** was considered to be an improvement • Calculation was considered to be too complex

Main QIS4 Findings - SCR

PART 2	
Non-life underwriting risk	• Possibility to apply **geographical diversification** • Usage of undertaking **specific parameters** for parameters in the premium and reserve risk
Life underwriting risk	• Some participants have reported that **lapse risk** was considered to be too high (total lapse risk was considerably lower in QIS4 than in QIS3) • Allocation of contracts between the life, non-life and health underwriting risk modules was not always clear for participants
Health underwriting risk	• Criticism on the structure of the heath module in the QIS3 • QIS4 has restructured the module and included the short-term health and accident insurance and workers' compensation (this was welcomed)
PART 3	
Risk mitigation techniques	• Participants support the approach taken in QIS4

Standard formula SCR

Market risk Module
(CP 47)

SCR – Market Risk

Consultation paper 47

One of the most significant module

- Largest are: interest rate and equity risk
- Bear in mind when considering design and structure
- **Delta-NAV approach** used in the quantification of several market risks should be based on the balance sheet excluding the risk margin
- **Interest rate volatility** shock included in interest rate risk up and down shocks
- Each **currency shocked separately** and results combined, assuming zero correlation
- CEIOPS is considering **different property risk charges** for commercial, retail and other
- **Changes in lapse rates** should be considered in response to each scenario
- **Concentration risk thresholds** of 2% and 1% depending on rating, correlation assumption of 25%

Additional information/comments

A. Interest rate risk: Delta-NAV approach

B. Currency risk: Scenario-based approach to assessing currency capital charge has been refined where 'local currency' is the currency in which it is prepared local regulatory accounts

C. Spread risk: Should include the credit risk of investments in respect of unit linked contracts, credit derivatives and other credit risky investments such as participations in investment pools and loans guaranteed by mortgages

D. Property risk: Delta-NAV approach; Calibration of shocks will be considered in the forth coming draft advice on calibration of market risk

E. Concentration risk: covers assets considered in the equity, interest rate, spread risk and property modules and it should also consider direct and indirect exposures. Assets covering unit-linked funds are excluded as well as government bonds

F. Equity risk: the third set (design, calibration)

SCR – Market Risk

Consultation paper 47

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General comments by the CEA

1. CEIOPS will need to ensure that when allowing for the **inclusion of consideration of interest rate** a volatility in the interest rate risk sub-module that the total capital requirements for interest rate risk remains appropriate
2. Groups of foreign currencies would be more appropriate than individual currencies in some cases
3. New lower 2% concentration threshold (in respect AAA-AA-A rated exposures) appears overly prudent, we request details of how the threshold has been derived
   - CEIOPS recommends a threshold of
     - 15% for covered bonds
     - 1,5%/3% instead of 1% and 2% for AAA-A rated securities and other/non-rated securities

SCR – Market Risk

Consultation paper 47

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- **Concentration risk thresholds** of 2% and 1% depending on rating, correlation assumption of 25%

General comments by the CRO Forum

1. Further clarification over spread and concentration risk required
2. Clarity on use of static or dynamic approach required
3. Economic links to be considered when calibrating
4. There should be no double counting of lapse risk in market risk module

SCR – Market Risk

Consultation paper 47

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General comments by the Groupe Consultatif

1. Calibration will be of crucial importance, and should be subject to careful review following QIS5
2. GC has specific disagreements with the apparently intended scope of the spread risk module
3. Much more detail is required about underlying assets – significant information requirements

SCR – Market Risk

Consultation paper 47

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- Largest are: interest rate and equity risk
- Bear in mind when considering design and structure
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CEIOPS's Advice

1. Consider the **impact of interest rate** volatility on the shape (i.e., slope and curvature) of the term structure of interest rates
2. Currency risk
   - Retain a scenario-based approach
   - Refinements: consider each currency separately – too complex for standard formula
3. Spread risk
   - Propose to clarify the scope
4. Liquidity risk is better captured in Pillars 2 a 3
5. Concentration risk:
   - Similar parameters to those used in QIS 4 (Annex)
   - Look-through approach

Standard formula SCR

Counterparty default risk module
(CP 51)

SCR – Counterparty Default Risk

Consultation paper 51

1. CEIOPS proposed a new structure in CP 28
2. As with QIS4 and similarly to Basel II in banking, counterparty credit risk is **assessed using**
   - Exposure
   - Probabilities of default
   - Assessment of the loss given default
3. Probabilities of default remain driven by rating agency grades, not because these are perfect but in the absence of a viable alternative
4. Theory: Calculation requires an **assessment of every pair of risks** and the **correlation between them**

Additional information/comments

A. Calculation
   - Requires an assessment of the loss given default
   - Paper is introducing some possible simplifications
   - Still requirement of the quantification of the SCR with and without considering the effect of the reinsurance arrangements, SPV or derivatives
   - Permission for grouping of counterparties

B. Warning: Calibration of this module could change significantly as QIS4 potentially underestimated the importance of this risk

C. Recommendation: To reduce the recovery rate from 50% to 40% for reinsurance arrangements and 10% for financial derivatives

SCR – Counterparty Default Risk

Consultation paper 51

1. As with QIS4 and similarly to Basel II in banking, counterparty credit risk is **assessed using**
   - Exposure
   - Probabilities of default
   - Assessment of the loss given default.
2. Probabilities of default remain driven by rating agency grades, not because these are perfect but in the absence of a viable alternative
3. Theory: Calculation requires an **assessment of every pair of risks** and the **correlation between them**

General comments by the CEA

1. CEA welcomes the simplification proposals (welcomes the use of examples within the paper to assist clarity)
2. Too much prudency was used in deriving the calibration of this module and is keen to understand the rationale behind the parameters

SCR – Counterparty Default Risk

Consultation paper 51

1. As with QIS4 and similarly to Basel II in banking, counterparty credit risk is **assessed using**
   - Exposure
   - Probabilities of default
   - Assessment of the loss given default.
2. Probabilities of default remain driven by rating agency grades, not because these are perfect but in the absence of a viable alternative
3. Theory: Calculation requires an **assessment of every pair of risks** and the **correlation between them**

General comments by the CRO Forum

1. Calibration assumption should be evidenced
2. Treatment of unrated entities (major part of the type 2 exposure) needs further consideration
3. Threshold to distinguish type 1 and type 2 exposures
4. More work needed with respect to simplifications for Derivatives and Life insurance

SCR – Counterparty Default Risk

Consultation paper 51

1. As with QIS4 and similarly to Basel II in banking, counterparty credit risk is **assessed using**
   - Exposure
   - Probabilities of default
   - Assessment of the loss given default.
2. Probabilities of default remain driven by rating agency grades, not because these are perfect but in the absence of a viable alternative
3. Theory: Calculation requires an **assessment of every pair of risks** and the **correlation between them**

General comments by the Groupe Consultatif

1. Calculations are very complex
2. Default charge of 23% for type 2 exposures seems high
3. It complements the Consultation Paper 28 and should be read with it
4. GC supports the CEIOPS's simplifications

SCR – Counterparty Default Risk

Consultation paper 51

1. As with QIS4 and similarly to Basel II in banking, counterparty credit risk is **assessed using**
   - Exposure
   - Probabilities of default
   - Assessment of the loss given default.
2. Probabilities of default remain driven by rating agency grades, not because these are perfect but in the absence of a viable alternative
3. Theory: Calculation requires an **assessment of every pair of risks** and the **correlation between them**

CEIOPS's Advice

1. Calibration was considered too high (amendments)
   - **Recovery rates -** should be set at **50%** for reinsurance arrangements and **10%** for derivatives
   - Losses for past-due receivables
   - Quantile factor for type 1 exposures
   - Allow an implicit rating of BBB for unrated reinsurers and for unrated banks
2. Differentiating between two kinds of exposures – 75% correlation
   - Type 1 exposure: not be diversified, counterparty is likely to be rated
   - Type 2 exposure: diversified, counterparty is likely to be unrated
- Simplifications

Standard formula SCR

Life Underwriting Risk
(CP 49)

SCR – Life Underwriting Risk

Consultation paper 49

1. Sub modules (mortality risk, longevity risk, disability/morbidity risk, life expense risk, revision risk, lapse risk and life catastrophe risk)
2. Approaches to be used in the standard formula for this risk **remain broadly unchanged** from that elaborated for QIS4. In general, the calibration levels of the stress scenarios have increased
   - Mortality stress has increased to 15%
   - Morbidity stress increased its first year increase to 50% and added a decrease of 20% to recovery rates
   - Mass lapse stress has increased to 70% for "institutional investors"
   - Catastrophe stress has removed the morbidity increase, but increased the additional deaths to 2.5 per mille

Additional information/comments

- **Disability-morbidity risk** vs. Health underwriting module
- **Life expense risk:** policies with adjustable loadings.(As any future change to charges is a management action)
- **Lapse risk:** the scope of the module; allowance for lapse risk in market risk stresses; possible simplifications: less granular than policy-by-policy approach and a factor based formula approach

SCR – Life Underwriting Risk

Consultation paper 49

1. Sub modules (mortality risk, longevity risk, disability/morbidity risk, life expense risk, revision risk, lapse risk and life catastrophe risk)
2. Approaches to be used in the standard formula for this risk **remain broadly unchanged** from that elaborated for QIS4. In general, the calibration levels of the stress scenarios have increased
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   - Catastrophe stress has removed the morbidity increase, but increased the additional deaths to 2.5 per mille

General comments by the CEA

1. CEIOPS appears to be taking an overly prudent approach
2. Analysis CEIOPS has carried out based on one country's data is not necessarily sufficiently representative for the calibration
3. It is important to ensure there is no double-counting with the health risk module
4. 1-off shock for mortality/longevity is appropriate only as a simplification

SCR – Life Underwriting Risk

Consultation paper 49

1. Sub modules (mortality risk, longevity risk, disability/morbidity risk, life expense risk, revision risk, lapse risk and life catastrophe risk)
2. Approaches to be used in the standard formula for this risk **remain broadly unchanged** from that elaborated for QIS4. In general, the calibration levels of the stress scenarios have increased
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General comments by the CRO Forum

1. Suggested mortality CAT calibration is too high (priority: high)
2. Time horizon of stresses should be calibrated to a one-year view (priority: high)
3. Lapse rates should be limited to full and partial surrender rates (priority: medium)
4. Early engagement of industry in QIS5 with respect to calibration is required (priority: high)

SCR – Life Underwriting Risk

Consultation paper 49

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2. Approaches to be used in the standard formula for this risk **remain broadly unchanged** from that elaborated for QIS4. In general, the calibration levels of the stress scenarios have increased
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   - Mass lapse stress has increased to 70% for "institutional investors"
   - Catastrophe stress has removed the morbidity increase, but increased the additional deaths to 2.5 per mille

General comments by the Groupe Consultatif

1. GC is concerned here that calibrations have increased according to criteria that are not always justified in actuarial terms – a prudential calibration rather than an economical calibration
2. Proposals of QIS4 participants have not always been accepted
3. One general remark with respect to life risk: it would be easier and more logical to model not longevity and mortality, but trend and level uncertainty
   - Easier to model
   - Easier in setting correlation factors

SCR – Life Underwriting Risk

Consultation paper 49	CEIOPS's Advice
1. Sub modules (mortality risk, longevity risk, disability/morbidity risk, life expense risk, revision risk, lapse risk and life catastrophe risk) 2. Approaches to be used in the standard formula for this risk **remain broadly unchanged** from that elaborated for QIS4. In general, the calibration levels of the stress scenarios have increased • Mortality stress has increased to 15% • Morbidity stress increased its first year increase to 50% and added a decrease of 20% to recovery rates • Mass lapse stress has increased to 70% for "institutional investors" • Catastrophe stress has removed the morbidity increase, but increased the additional deaths to 2.5 per mille	1. Almost no changes in comparison to the Consultation paper 49. 2. Catastrophe risk: return to previous level of increase of death rates i.e. to 1.5 per mille

Standard formula SCR

Non Life Underwriting Risk

(CP 48)

SCR – Non Life Underwriting Risk

Consultation paper 48

1. Sub modules (premium & reserve risk and catastrophe risk)
2. Key changes to the formula and approaches used in QIS4
   - Removal of explicit geographical diversification benefits
   - Adding in explicit allowance for multi-year insurance policies
   - Removal of 'Method 3' for catastrophe risk models (cat. risk quantified based upon firm-specific exposure analysis) and use of a more detailed version of 'Method 2'
   - Within premium risk, the removal of credibility weighting of market-wide standard deviations and mechanistic undertaking specific estimates CEIOPS proposes to simply use market wide factors – however the use of entity specific parameters is still allowed

Additional information/comments

A. QIS4 standard formula is recognised as being unable to cope well with recognising the full risk mitigation effect of certain risk mitigation arrangements. Companies with complex risk mitigation arrangements should consider at least partial internal models

SCR – Non Life Underwriting Risk

Consultation paper 48

1. Sub modules (premium & reserve risk and catastrophe risk)
2. Key changes to the formula and approaches used in QIS4
   - Removal of explicit geographical diversification benefits
   - Adding in explicit allowance for multi-year insurance policies
   - Removal of 'Method 3' for catastrophe risk models (cat. risk quantified based upon firm-specific exposure analysis) and use of a more detailed version of 'Method 2'
   - Within premium risk, the removal of credibility weighting of market-wide standard deviations and mechanistic undertaking specific estimates CEIOPS proposes to simply use market wide factors – however the use of entity specific parameters is still allowed

General comments by the CEA

1. Compared to QIS4 there seems to be a movement to simpler but also more prudent calculations
2. Diversification effects should be considered appropriately in the standard formula (Strong case for recognising geographical diversification)
3. CEA strongly recommends the use of entity specific parameters
4. Finding a workable solution for an improved recognition on non prop transactions under the standard formula

SCR – Non Life Underwriting Risk

Consultation paper 48

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2. Key changes to the formula and approaches used in QIS4
   - Removal of explicit geographical diversification benefits
   - Adding in explicit allowance for multi-year insurance policies
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   - Within premium risk, the removal of credibility weighting of market-wide standard deviations and mechanistic undertaking specific estimates CEIOPS proposes to simply use market wide factors – however the use of entity specific parameters is still allowed

General comments by the CRO Forum

1. Non-life risk module is departing from being risk sensitive
2. Calibration should ensure a one-year time-period for solvency purposes
3. Segmentation should be more product-oriented
4. Calibration of stresses required to quantify impact on capital requirements
5. Further detail on Non-proportional reinsurance required

SCR – Non Life Underwriting Risk

Consultation paper 48

1. Sub modules (premium & reserve risk and catastrophe risk)
2. Key changes to the formula and approaches used in QIS4
   - Removal of explicit geographical diversification benefits
   - Adding in explicit allowance for multi-year insurance policies
   - Removal of 'Method 3' for catastrophe risk models (cat. risk quantified based upon firm-specific exposure analysis) and use of a more detailed version of 'Method 2'
   - Within premium risk, the removal of credibility weighting of market-wide standard deviations and mechanistic undertaking specific estimates CEIOPS proposes to simply use market wide factors – however the use of entity specific parameters is still allowed

General comments by the Groupe Consultatif

1. GC has a general concern that the direction of change associated with this paper is counter to the directive objective of a risk-sensitive standard with incentives to improve risk management in practice
2. Need for a final re-evaluation of the standard formula of the Non-Life Underwriting Risk
3. Numerous new formula and terms are given, but is not always enough detailed.

SCR – Non Life Underwriting Risk

Consultation paper 48	CEIOPS's Advice
1. Sub modules (premium & reserve risk and catastrophe risk) 2. Key changes to the formula and approaches used in QIS4 • Removal of explicit geographical diversification benefits • Adding in explicit allowance for multi-year insurance policies • Removal of 'Method 3' for catastrophe risk models (cat. risk quantified based upon firm-specific exposure analysis) and use of a more detailed version of 'Method 2' • Within premium risk, the removal of credibility weighting of market-wide standard deviations and mechanistic undertaking specific estimates CEIOPS proposes to simply use market wide factors – however the use of entity specific parameters is still allowed	1. We have not found significant changes in comparison to the Consultation paper 48 2. **Premium & Reserve risk**: The market-wide estimate of the standard deviation for premium/reserve risk for each LOB should be specified in implementing measures. 3. **Catastrophe risk:** The capital requirement shall not exceed the aggregate limit for a specific LOB (net retention per LOB, after reinsurance).

Standard formula SCR

Health Underwriting Risk

(CP 50)

SCR – Health Underwriting Risk

Consultation paper 50

1. Health underwriting capital requirement should be calculated as a combination of two sub modules:
   - SLT health: For health insurance obligations pursued on a similar technical basis to life insurance
   - Non-SLT health: For health insurance obligations not pursued on a similar technical basis to life insurance
2. Allocation of contracts between the life, non-life and health modules still remained unclear in many markets.
3. Rules for use of modules (Health risk):
   - MATERIAL **OR** CAN BE UNBUNDLED: Health module
   - IMMATERIAL **AND** CAN NOT BE UNBUNDLED: Life/Non Life module

Additional information/comments

A. SLT Health Module:
- Structured as the Life underwriting module.
- Different calculation of SCR for disability/morbidity risk (medical expenses) and catastrophe risk (approach of the non life module)

B. Non SLT Health Module:
- Structured as the Non Life underwriting module.
- 3 Options for the definitions of LOB

SCR – Health Underwriting Risk

Consultation paper 50

1. Health underwriting capital requirement should be calculated as a combination of two sub modules:
   - SLT health: For health insurance obligations pursued on a similar technical basis to life insurance
   - Non-SLT health: For health insurance obligations not pursued on a similar technical basis to life insurance
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   - IMMATERIAL **AND** CAN NOT BE UNBUNDLED: Life/Non Life module

General comments by the CEA

1. CEA proposes to stick to point the framework directive which clearly distinguishing between “Accident” and “Sickness” cover
2. Disability risk should be covered by life insurance, and accident risk should be covered by non-life insurance
3. Specificities of the different public/private health systems in the EU would be best captured by the allowance for country and/or entity specific parameters in the calculation of the health UW risk charge

SCR – Health Underwriting Risk

Consultation paper 50

1. Health underwriting capital requirement should be calculated as a combination of two sub modules:
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   - MATERIAL **OR** CAN BE UNBUNDLED: Health module
   - IMMATERIAL **AND** CAN NOT BE UNBUNDLED: Life/Non Life module

General comments by the CRO Forum

1. Health module deserves its own calibration
2. Appropriate segmentation in Health is key
3. Geographic diversification should be allowed for
4. Undertaking specific parameters (USPs) should be introduced
5. Definition of health insurance is crucial for an appropriate calculation of SCR

SCR – Health Underwriting Risk

Consultation paper 50

1. Health underwriting capital requirement should be calculated as a combination of two sub modules:
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   - MATERIAL **OR** CAN BE UNBUNDLED: Health module
   - IMMATERIAL **AND** CAN NOT BE UNBUNDLED: Life/Non Life module

General comments by the Groupe Consultatif

1. CEIOPS should consider whether a separated health module is really necessary.
2. Supervisors in different countries as consistent in their treatment of health insurance LoB
3. There needs to be an adequate balance between "standard" and "user specific" parameters.
4. We understand that the correlations presented in the paper are still under review, but the GC welcomes to provide input on these parameters.

SCR – Health Underwriting Risk

Consultation paper 50	CEIOPS's Advice
1. Health underwriting capital requirement should be calculated as a combination of two sub modules: • SLT health: For health insurance obligations pursued on a similar technical basis to life insurance • Non-SLT health: For health insurance obligations not pursued on a similar technical basis to life insurance 2. Allocation of contracts between the life, non-life and health modules still remained unclear in many markets. 3. Rules for use of modules (Health risk): • MATERIAL **OR** CAN BE UNBUNDLED: Health module • IMMATERIAL **AND** CAN NOT BE UNBUNDLED: Life/Non Life module	Changes in comparison to the Consultation paper 50: 1. Rules for use of modules • MATERIAL **OR** CAN BE UNBUNDLED: Health module • IMMATERIAL **OR** CAN NOT BE UNBUNDLED: Life/Non Life module 2. Catastrophe risk - Suggestion of LOB: Accident, Sickness and Workers Compensation 3. The introducing of undertaking-specific parameters (CEIOPS – CP – 75 – 09)

Standard formula SCR

Operational risk
(CP 53)

SCR – Operational Risk

Consultation paper 53

1. Suggests that the **QIS4 approach** is workable
2. Has suggested a re-calibration of the standard formula
3. Makes explicit allowance for operational risks associated with **future management actions**
4. Has introduced a **zero floor** for technical provisions
5. Splits **health obligations** between life and non life
6. CEIOPS has revised the formula to:
   - Capture the increased risk in operational risk as a result of increased business activity
   - Reflect the risk of failure or conflict of interest if a relevant part of a undertaking's investments are externally managed

Additional information/comments

A. Capital requirement for operational risk has been significantly widened.

B. Paper proposes a simple formula for the operational risk capital requirement
   - Factor times an insurer's earned premium and technical provision
   - Different factors for life, non-life and 'SLT Health' non-life

C. The **re-calibration of the factors** within the proposed formula
   - Re-calibration references internal models used by UK insurers and applies the re-calibration across the EU
   - Factors are calibrated to the 60th percentile of internal model capital requirements

D. Approach is one size fits all

SCR – Operational Risk

Consultation paper 53

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2. Has suggested a re-calibration of the standard formula
3. Makes explicit allowance for operational risks associated with **future management actions**
4. Has introduced a **zero floor** for technical provisions
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6. CEIOPS has revised the formula to:
   - Capture the increased risk in operational risk as a result of increased business activity
   - Reflect the risk of failure or conflict of interest if a relevant part of a undertaking's investments are externally managed

General comments by the CEA

1. Proposed parameters of the operational risk module is:
   - *Excessively high and*
   - *Not convinced by the argumentation used by CEIOPS in their derivation.*

2. QIS4 parameters were more appropriate

3. CEA would like CEIOPS to continue to investigate:
   - *Possibility of reflecting the qualitative aspects of the operational risk management in the design*
   - *Calibration of standard formula for operational risk*

SCR – Operational Risk

Consultation paper 53

1. Suggests that the **QIS4 approach** is workable
2. Has suggested a re-calibration of the standard formula
3. Makes explicit allowance for operational risks associated with **future management actions**
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6. CEIOPS has revised the formula to:
   - Capture the increased risk in operational risk as a result of increased business activity
   - Reflect the risk of failure or conflict of interest if a relevant part of a undertaking's investments are externally managed

General comments by the CRO Forum

1. Calibration to operational risk should be evidenced
   - Risk charge for operational risk was underestimated in the previous form of the operational risk module
   - Standard formula should be on the conservative side given that it will never be able to reflect accurately the risk profile of an individual company
   - New calibration proposed has effectively doubled the capital requirement
   - Standard model requirement should be higher than the internal model requirement
2. Good operational risk management should be encouraged
3. Proposed 60% cap is too high

SCR – Operational Risk

Consultation paper 53

1. Suggests that the **QIS4 approach** is workable
2. Has suggested a re-calibration of the standard formula
3. Makes explicit allowance for operational risks associated with **future management actions**
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5. Splits **health obligations** between life and non life
6. CEIOPS has revised the formula to:
   - Capture the increased risk in operational risk as a result of increased business activity
   - Reflect the risk of failure or conflict of interest if a relevant part of a undertaking's investments are externally managed

General comments by the Groupe Consultatif

1. Superficial analysis underlying this CP
   - QIS 4 approach may have been marginally under-calibrated
2. Pressure on firms to apply for either partial or full internal model approval
3. Need for a final re-evaluation of the standard formula of the Operational Risk
4. Revised parameters, taken together with lack of recognition of any diversifications between operational and other risks, might well result in an operational risk charge that is too high

SCR – Operational Risk

Consultation paper 53

1. Suggests that the **QIS4 approach** is workable
2. Has suggested a re-calibration of the standard formula
3. Makes explicit allowance for operational risks associated with **future management actions**
4. Has introduced a **zero floor** for technical provisions
5. Splits **health obligations** between life and non life
6. CEIOPS has revised the formula to:
   - Capture the increased risk in operational risk as a result of increased business activity
   - Reflect the risk of failure or conflict of interest if a relevant part of a undertaking's investments are externally managed

CEIOPS's Advice

1. Module
   - Does not differ significantly from the QIS4, revised to IM
   - Workable (99% NL, 93.6% L)
   - Calibration of sub-module to **99.5% VaR**, **one year** time horizon
2. Results of the analysis show - QIS 4 standard formula was **under-calibrated** (factors are too low)
   - CP has doubled
   - Advice has now lowered the charges by around a third compared to CP 53
3. Doubling of the cap from 30% to 60% of the BSCR - revert it back
4. **Zero floor** remain
   - Avoid an undue reduction of SCR
5. **Ladder factor**
   - Demonstrate improving operational risk management, should not be included

Standard formula SCR

Risk mitigation techniques
(CP 52)

SCR – Risk Mitigation Techniques

Consultation paper 52

1. Reinsurance could have significantly less effect in reducing MCR/SCR than it currently has under Solvency I

2. CEIOPS proposes **five high level principles** that would remain applicable in an ongoing environment of development and evolution of risk mitigation techniques
   - Effective risk transfer
   - Economic effect over legal form
   - Legal certainty, effectiveness and enforceability
   - Liquidity and valuation
   - Credit quality of the provider of the risk mitigation instrument

Additional information/comments

A. Effective risk transfer:
- Advice includes word-for-word the current FSA guidance on its effective risk transfer requirement set out at INSPRU 1.1.19E and 1.1.19F

B. Economic effect over legal form
- Economic effect of reinsurance mitigation techniques shall be recognised and treated equally regardless of legal form or accounting treatment

C. Legal certainty, effectiveness and enforceability
- SCR will need to include allowance for the possibility that risk mitigation may not be renewed or renewed on less favourable terms

D. Liquidity and valuation
- Overall effect of risk mitigation could increase SCR

E. Credit quality of the provider of the risk mitigation instrument: rating

SCR – Risk Mitigation Techniques

Consultation paper 52

1. Reinsurance could have significantly less effect in reducing MCR/SCR than it currently has under Solvency I

2. CEIOPS proposes **five high level principles** that would remain applicable in an ongoing environment of development and evolution of risk mitigation techniques
   - Effective risk transfer
   - Economic effect over legal form
   - Legal certainty, effectiveness and enforceability
   - Liquidity and valuation
   - Credit quality of the provider of the risk mitigation instrument

General comments by the CEA

1. CEA agrees with the use of high level principles to recognise the fact that there will be innovation in the reinsurance market
2. All risk mitigation techniques should be allowed for according to their genuine risk transfer capacity
3. CEA does not agree that reinsurance mitigation techniques should be fully ruled out of the SCR calculation if basis risk is material
4. Reinsurance mitigation techniques should not be fully ruled out of the SCR calculation if basis risk is material
5. CEIOPS approach runs counter to a number of principles under Solvency II

SCR – Risk Mitigation Techniques

Consultation paper 52

1. Reinsurance could have significantly less effect in reducing MCR/SCR than it currently has under Solvency I

2. CEIOPS proposes **five high level principles** that would remain applicable in an ongoing environment of development and evolution of risk mitigation techniques
   - Effective risk transfer
   - Economic effect over legal form
   - Legal certainty, effectiveness and enforceability
   - Liquidity and valuation
   - Credit quality of the provider of the risk mitigation instrument

General comments by the CRO Forum

1. Further detail on Non-proportional reinsurance required (priority: high)

2. Recognition of risk mitigations according to principles and economic effects (priority: high)

SCR – Risk Mitigation Techniques

Consultation paper 52

1. Reinsurance could have significantly less effect in reducing MCR/SCR than it currently has under Solvency I

2. CEIOPS proposes **five high level principles** that would remain applicable in an ongoing environment of development and evolution of risk mitigation techniques
   - Effective risk transfer
   - Economic effect over legal form
   - Legal certainty, effectiveness and enforceability
   - Liquidity and valuation
   - Credit quality of the provider of the risk mitigation instrument

General comments by the Groupe Consultatif

1. It is important that the focus is on principles and not rules and this CP seems to follow that line of thought

SCR – Risk Mitigation Techniques

Consultation paper 52

1. Reinsurance could have significantly less effect in reducing MCR/SCR than it currently has under Solvency I

2. CEIOPS proposes **five high level principles** that would remain applicable in an ongoing environment of development and evolution of risk mitigation techniques
   - Effective risk transfer
   - Economic effect over legal form
   - Legal certainty, effectiveness and enforceability
   - Liquidity and valuation
   - Credit quality of the provider of the risk mitigation instrument

CEIOPS's Advice

1. Risk mitigation techniques have been split into **financial** risk mitigation techniques and **reinsurance** risk mitigation techniques according
   - Instruments not covered by the scope of this paper fall under the scope of advice on the allowance of financial mitigation techniques
2. CEIOPS: Standard SCR shall not allow for financial mitigation techniques that generate **material risks**
3. Advice about the **criteria** the reinsurance risk mitigation technique shall meet
4. Principles in order to effectively transfer risk from the undertaking
   - Assumptions - ratio of net to gross risk does not significantly exceed the net-to-gross ratio of premiums and best estimate provisions

List of Used Literature

- Consultation papers CEIOPS 47 – 54
- Comments to consultation papers 47 – 54 (CEA, CRO Forum, Groupe Consultatif)
- CEIOPS' Advice for Level 2 Implementing Measures on Solvency II (Former CPs 47 – 54)

Děkujeme za pozornost

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