Solvency II - Report to Insurance Committee

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Barcelona

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Solvency II project - activities

EIOPA Stress Test 2016

Press Release (**Frankfurt, 24 May 2016)**

EIOPA LAUNCHES THE EU-WIDE INSURANCE STRESS TEST 2016

- The aim is to assess vulnerabilities.
- *It is **not** a pass-or-fail exercise.*
- *Participation increased to 75% (from 50% in 2014) of each national market.*
- *Focus on two major market risks: prolonged low yield environment and a "double-hit" scenario.*
- *Severe stress scenarios chosen to better identify critical vulnerabilities.*

Gabriel Bernardino, Chairman of EIOPA, said: "*The current challenging macroeconomic environment has to be acknowledged in such a stress test exercise. Therefore, **EIOPA decided to conduct severe stress scenarios**. I am confident that the results of the simulation of such shocks will provide us a "high-resolution" picture of the European insurance sector and its most critical vulnerabilities. We need to see the issues requiring particular supervisory attention and response to the potential built-up of systemic risks at the European level. **Hence this exercise will not focus on who is not meeting the capital requirements after the shocks but on the financial stability implications of those scenarios**".*

EIOPA Stress test 2016: Objectives

Stress Test 2016
EIOPA Workshop Frankfurt, 13 April 2016

Statements

1) Accepted: the necessity to run the stress test (due to legal requirements)
2) Agreed: Reinvestment is a crucial challenge for companies offering products with guaranteed interest rates (not hedged!)
    a. Duration gap constitutes a risk in low interest rate environment
    b. Concept of stress test shows improvements compared to 2014 (acknowledging the impact of future discretionary benefits)
3) Questionable:
    a. Underwriting risk not considered – impacts assessment of vulnerability
    b. One fits it all - approach
    c. Low for long: Isolated view on Insurance undertakings leaves economy and effects on other financial institutes or market effects (e.g. pension obligations, social security systems,…) out of scope. What could be the meaning of “going concern” in such an environment
    d. Exercise only for solo entities can not disclose group effects (Caution required in analysis and communication of results)

EIOPA Stress test 2016: Objectives

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e) Unit linked business might offer guarantees.

f) Templates: e.g. Q 1.1 requires a subdivision of liabilities according to guaranteed interest rate and duration. Local GAAP effects might change this partition of portfolio significantly by eliminating higher guaranteed interest rates (additional reserves!)

g) Use of excessive granularity questionable (assets and liabilities)

h) Granularity requirements might impact the quality of the data submitted

i) Macroprudential objectives vs. microprudential issues: Limitation of such an analysis without deeper knowledge of portfolio structure (top-down approach, para. 17)

j) Worst case: Additional exercise might not lead to any added value given the Solvency II reporting

EIOPA Stress test 2016: Timeline

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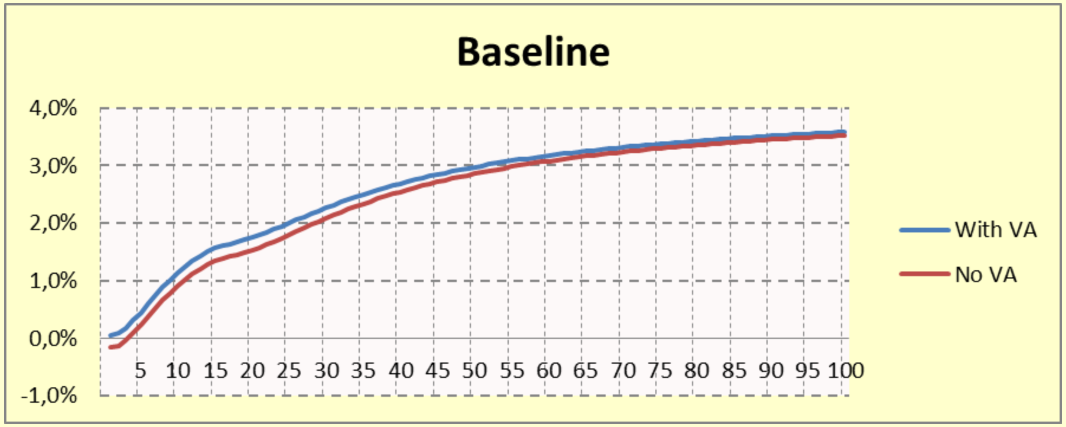
Date	Activity
13th April 2016	Workshop with industry participants
24th May 2016	Launch of a Europe-wide stress test specifications and templates for the insurance sector
15th July 2016	Submission deadline for industry participants to the national supervisory authorities (NSAs)
22nd August 2016	Collection and validation of undertakings' data by the national supervisory authorities (NSAs)
29th September 2016	Centralised validation by EIOPA of all the submitted results
December 2016	Disclosure of the results of the stress test analysis

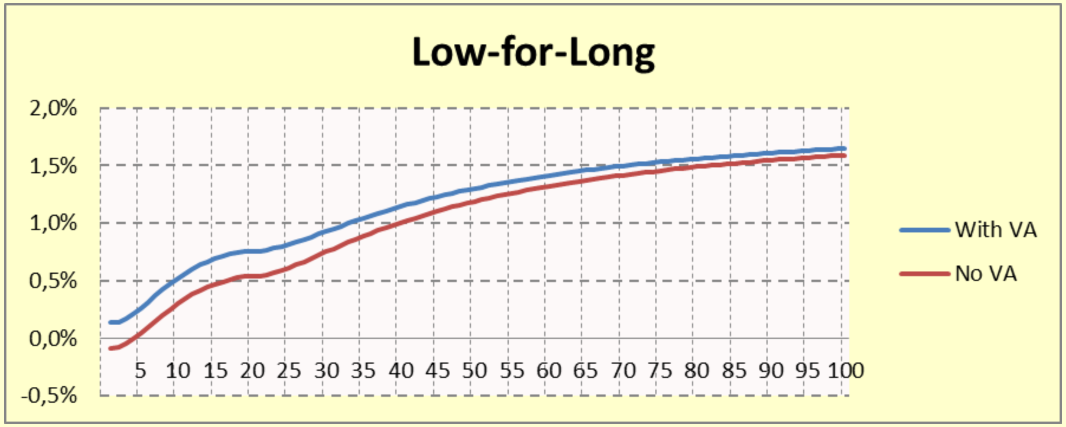
https://eiopa.europa.eu/Pages/Financial-stability-and-crisis-prevention/Stress-test-2016.aspx adapted

EIOPA Stress Test: 13 April workshop with EIOPA

Discussion of restrictions when drawing conclusions out of reported data
No pass-or-fail exercise: Public might misunderstand published report
Due consideration required when compiling the report

EIOPA: Stress Test Szenarien



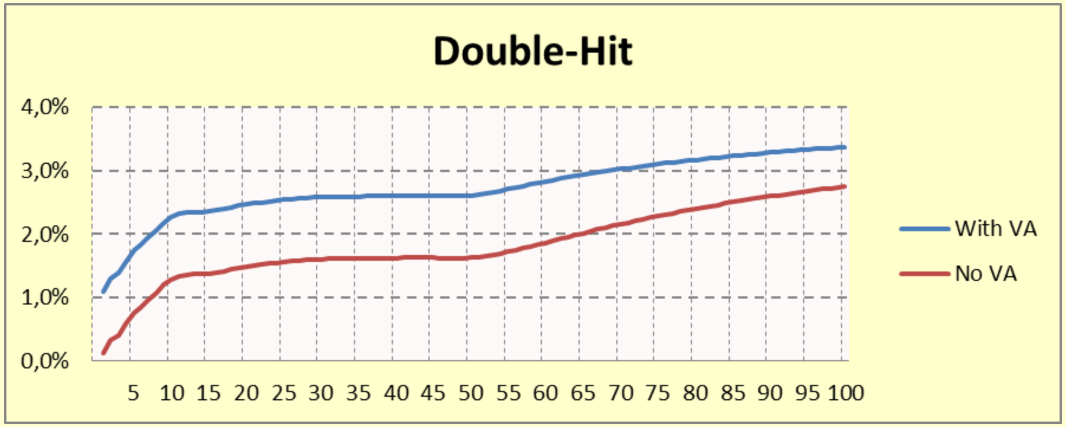


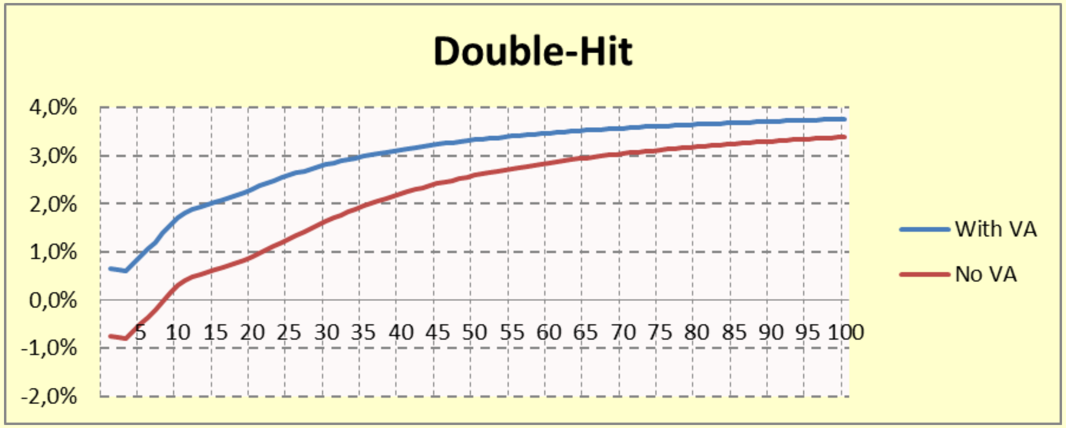
UFR 2% !

2016 EIOPA INSURANCE STRESS TEST. Instructions (v. 13-05-2016)

Main_RFR	Basic risk-free interest rate term structures, and also the term structures once adjusted with the relevant volatility adjustment
	The sheet provides curves for the baseline, Low-for-Long and Double-Hit scenarios

EIOPA: Stress Test Scenarios





UK

Differing scenarios

Germany

Further activities

1) Adaptation of methodology to develop the risk free rate:

EIOPA organized a telephone conference with stakeholders at 26 July 2016.

Discussion based on a tentative paper provided by EIOPA.
Changes discussed will be published after meeting of Board of Supervisors at 29th September 2016. Only minor effects for European currencies expected.

They will become effective by end of 2016.

2) Consultation on UFR → to be discussed later (agenda item 9)
Consultation issued 19th April 2016
Deadline for comments: 19th July 2016

Commission's request for advice to EIOPA on Solvency II review

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Directive, Art. 101 (extract)

Calculation of the SCR

The SCR shall be calculated on the presumption that the undertaking will pursue its business as a **going concern**. 101(2)	It shall correspond to the Value-at-Risk of the basic own funds of an undertaking subject to a **confidence level of 99,5 % over a one-year period**. 101 (3)	The SCR shall cover at least the following risks: • **non-life underwriting risk;** • **life underwriting risk;** • **health underwriting risk;** • **market risk;** • **credit risk;** • **operational risk.**

Directive Art. 104: Design of BSCR
SCR – Calculation is a scenario based exercise

The **Basic Solvency Capital Requirement** shall comprise individual risk modules, which are aggregated by use of correlation matrices

At least the following risk modules are required:

(a) non-life underwriting risk;
(b) life underwriting risk;
(c) health underwriting risk;
(d) market risk;
(e) counterparty default risk.

Allocation of insurance operations to the underwriting risk module that best reflects the technical nature of the underlying risks.

The correlation coefficients for the aggregation of the risk modules, as well as the calibration of the capital requirements for each risk module, shall result in an overall SCR which corresponds to a Value at Risk of the own funds subject to a confidence level of 99,5 % over a one-year period

Directive Art. 104: Design of BSCR

Each of the risk modules shall be calibrated using a Value-at-Risk measure, with a **99,5 % confidence level, over a one-year period.**
Where appropriate, diversification effects shall be taken into account in the design of each risk module.

Undertaking specific parameters can be used after approval by supervisor to replace a subset of parameters of the standard formula

Such parameters shall be calibrated on the basis of the internal data of the undertaking concerned, or of data which is directly relevant for the operations of that undertaking using standardised methods.

Scenario-based approach requires reliable input

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Challenge for EIOPA

EIOPA had to prescribe a stress for each risk submodule that will ensure the required 99.5% confidence level over a one-year time horizon.

During the QIS, especially QIS3 and QIS4 suitable stress factors have been tested and partly adapted.

These factors had to be taken from studies available at that time.
A list of references can be found in EIOPA's underlying assumption paper.

EIOPA -14-322: **The underlying assumptions in the standard formula for the Solvency Capital Requirement calculation**

"A standard formula is, by its very nature and design, a standardised calculation method, and is therefore not tailored to the individual risk profile of a specific undertaking. For this reason, in some cases, the standard formula might not reflect the risk profile of a specific undertaking and consequently the level of own funds it needs."

Solvency II Framework

The Delegated Regulation **should** ensure that the standard formula is sufficiently risk sensitive by setting out capital charges that are appropriately tailored to the specific risks faced by insurers and reinsurers.

For this purpose Delegated regulation set out detailed rules on the

- methods,
- assumptions and
- standard parameters

for the calculation of the capital requirements,

Without a sufficiently risk-sensitive framework, capital resources would not be aligned with capital needs, leading to a sub-optimal capital allocation across the market.

The requirements for own funds **should** also ensure that the capital held is of a nature that allows the timely and efficient absorption of losses, when they may occur. , in setting out

Future revision of methods, assumptions and standard parameters by Commission

Review should make use of the experience gained by undertakings during the transitional period and the first years of application of these delegated acts, and **be performed before December 2018**

Delegated Regulation

Citation 150)

In order to ensure that the standard formula continues to meet the requirements set out in paragraphs 2 and 3 of Article 101 of Directive 2009/138/EC on an ongoing basis,

the Commission will review the methods, assumptions and standard parameters used when calculating the SCR with the standard formula,

- in particular the methods, assumptions and standard parameters used in the market risk module, including a review of the standard parameters for fixed-income securities and long-term infrastructure,
- the standard parameters for premium and reserve risk,
- the standard parameters for mortality risk, as well as
- the subset of standard parameters that may be replaced by undertaking-specific parameters and
- the standardised methods to calculate these parameters.

Risk margin and cost of capital rate

Delegated Regulation: Article 39

Cost-of-Capital rate

The Cost-of-Capital rate referred to in Article 77(5) of Directive 2009/138/EC shall be assumed to be equal to 6 %.

Directive: Article 77

Calculation of technical provisions

(5) The rate used in the determination of the cost of providing that amount of eligible own funds (Cost-of-Capital rate) shall be the same for all insurance and reinsurance undertakings and **shall be reviewed periodically**.

The Cost-of-Capital rate used shall be equal to the additional rate, above the relevant risk-free interest rate, that an insurance or reinsurance undertaking would incur holding an amount of eligible own funds, as set out in Section 3, equal to the Solvency Capital Requirement necessary to support insurance and reinsurance obligations over the lifetime of those obligations.

Review requirements concretised by Commission's call for advice

18 July 2016: Call for advice of the EU – Commission

Delegated Regulation requires a review of several components of the standard formula until December 2018 by the Commission

According to this call for advice EIOPA is asked to provide appropriate information and proposals until 31st October 2017

Issues concerned by this call for advice are predominantly directly taken from the Delegated Regulation.

Additional requirement: Assessment of methodology for calculation of the risk margin and the adequacy of the cost-of-capital rate. Directive does not prescribe a date for the review.

Commission's call for advice: Non comprehensive list of tasks

- Improvements for existing simplifications
- Market risk module: simplification provided for look-through approach
- Non-life catastrophe risk submodule, Counterparty default module
- Credit risk in calculating the spread risk submodule, ….
- Underwriting risk submodule
  - Non-life premium and reserve risk
  - Mortality and longevity risk in life and health underwriting risk
- Non-life catastrophe risk submodule
- Market risk module with respect to related undertakings
- Appropriateness of risk mitigation techniques
- Loss absorbing capacity of deferred taxes
- Undertaking specific parameters
- Risk margin: Methods and assumptions applied, adequacy of cost-of-capital rate
- Own funds
- Group currency risk

Review requirements concretised by Commission's call for advice

In preparation for answers to the issues under review it might be helpful or perhaps necessary to know about the methods and data bases used to develop the current settings.

Some sources are listed on the following slide

Structure and Calibration of standard formula and risk margin

Solvency II Directive: Basic Requirements

- Article 101
- Article 77 (5)

Delegated Acts: Stress calibration

- EIOPA-14-322 25 July **2014:** The underlying assumptions in the standard formula for the Solvency Capital Requirement calculation
- CEIOPS-SEC-40-10 15 April **2010:** QIS5 Calibration Paper
- CEIOPS-DOC-42/09 October **2009:** CEIOPS' Advice for Level 2 Implementing Measures on Solvency II: Standard formula SCR - Article 109 c Life underwriting risk (former CP 49)
- CEIOPS- FS-14/07 April **2007:** QIS3 Calibration of the underwriting risk, market risk and MCR
- 21 January 2009 Towers Perrin: **UNESPA Longevity risk investigation**;
- 2004 Watson Wyatt**: Further studies**
- The Swiss Experience with Market Consistent Technical Provisions - the Cost of Capital Approach Federal Office of Private Insurance, March 28, 2006

Call for Advice: List of questions

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3.1.1	The simplified calculations provided for specific sub-modules and risk modules, as well as the criteria that undertakings shall be required to fulfil in order to be entitled to use each of those simplifications.
3.1.2	The methods and assumptions to be used when applying the look-through approach to calculate the market risk module, the underwriting risk module and the counterparty default risk module
3.1.3	The methods, assumptions and standard parameters to be used when calculating the non-life catastrophe risk submodule and the counterparty default module
3.2.1	Methods, assumptions and standard parameters to be used when assessing the credit risk in calculating the spread risk submodule, the market risk concentration submodule and the counterparty default risk module with respect to references to external credit ratings
3.2.2	Standard parameters to be used when calculating specific underwriting risk modules - for non-life premium and reserve risk, and for medical expense risk - mortality and longevity risk in the life and health underwriting modules
3.2.3	The methods and assumptions to be used when calculating the non-life catastrophe risk sub module
3.2.4	Assumptions used when calculating the market risk concentration submodule
3.2.5	The methods, assumptions and standard parameters to be used when calculating the market risk module with respect to related undertakings
3.2.6	The differences between Delegated Regulation (EU) 2015/35 and Directive 2013/36/EU and Regulation (EU) No 575/2015 as regards exposures guaranteed by a third party and as regards exposures to regional governments and local authorities
3.2.7	With respect to risk mitigation techniques, which have significantly developed in recent years, the methods and assumptions to be used to assess the changes in the risk profile of the undertaking concerned and to adjust the calculation of the Solvency Capital Requirement, and the qualitative criteria that the risk mitigation techniques must fulfil in order to ensure that the risk has been effectively transferred to a third party
3.2.8	The method and parameters to be used when assessing the capital requirement for counterparty default risk in the case of exposures to qualifying central counterparties and to derivatives
3.2.9	The method to be used when calculating the adjustment for the loss absorbing capacity of deferred taxes
3.2.10	The subset of standard parameters in the life, non-life and health underwriting risk modules that may be replaced by undertaking-specific parameters, and standardised methods to be used to calculate those parameters
3.2.11	The methods and assumptions to be used when calculating the risk margin, In particular the cost-of-capital rate
3.12.12	Where inconsistencies with Directive 2013/36/EU and Regulation (EU) No 575/2013 exist, the features determining the classification of own funds items
3.2.13	The list of own-fund items, deemed to fulfil the tier 1 eligibility criteria, which contains for each own-fund item a precise description of the features which determine its classification
3.2.14	The application of the accounting consolidation based method to calculate the Solvency Capital Requirement under the standard formula with respect to the calculation of currency risk

Independent from review process: Comparison of risk profile with underlying assumptions required

Directive Article 45

Own risk and solvency assessment

1. As part of its risk-management system every insurance undertaking and reinsurance undertaking shall conduct its own risk and solvency assessment.

That assessment shall include at least the following:

(a) the overall solvency needs taking into account the specific risk profile, approved risk tolerance limits and the business strategy of the undertaking;

(b) the compliance, on a continuous basis, with the capital requirements, as laid down in Chapter VI, Sections 4 and 5 and with the requirements regarding technical provisions, as laid down in Chapter VI, Section 2;

(c) **the significance with which the risk profile of the undertaking concerned deviates from the assumptions underlying the SCR** as laid down in Article 101(3), calculated with the standard formula in accordance with Chapter VI, Section 4, Subsection 2 or with its partial or full internal model in accordance with Chapter VI, Section 4, Subsection 3.