ACTUARIAL ASSOCIATION OF EUROPE

Item 12: Solvency II

Virtual Meeting Insurance Committee

Siegbert Baldauf

8 October 2020

Solvency II 2020 review - agenda

1) Stock-taking
2) EIOPA’s tentative advice
3) Commission’s own initiative
4) Solvency II Working Group

Solvency II 2020 review - agenda

1) Stock-taking
2) EIOPA’s tentative advice
3) Commission’s own initiative
4) Solvency II Working Group

SII-Review: Process outlined in Article 77f

Article 77f (1):

Until 1 January 2021 EIOPA shall, on an annual basis report to the European Parliament, the Council and the Commission about the impact relating i.a. to the use of the LTG-measures → **LTG Report**

ongoing

Article 77f (2):

EIOPA shall submit to the Commission an **opinion** on the assessment of the application of i.a. the LTG-measures → ***end of December 2020***

Article 77f (3)

Commission shall submit a report to the European Parliament and to the Council by ~~1 January 2021~~ (*expected 3. quarter 2021*). This report will be accompanied by legislative proposals. → **change of the SII - Framework**

SII-Review: Legislative Steps

TFEU (Treaty on the functioning of the EU) and
EIOPA Regulation (EU) **1094/2010** constitute the legal basis

European Parliament

European Council

European Commission

SII-Directive is a Level 1-document in the hierarchy of the framework. Adaptations have to be approved by the trilogue parties.

After approval it has to be transferred to national law in all member states.

In addition, amendments of Delegated Regulation, Regulatory technical standards or Guidelines might be required.

Becoming effective:
Normal process: 2023+
Acceleration?
Preparatory use?

The way to Commission’s report

EIOPA‘s technical advice (Opinion)

- Consultation on EIOPA‘s opinion
  3 consultation papers
- Holistic impact assessment
  2 information requests

Commission’s Consultation

Review of prudential rules for insurance and reinsurance companies

(Solvency II)

Published 1 July 2020

Commission’s roadmap:

Proposal for a Directive

3rd quarter 2021

Requirement

Fundamental principles of SII should not be questioned (confidence level underlying calibration of capital requirements and the market-consistent valuation

Covid-19 has changed timelines!

Steps towards EIOPA’s opinion paper

1)
CP on proposals for Solvency II 2020 Review Package on Supervisory Reporting and Public Disclosure

12 July 2019 – 18 October 2019

2)
CP on proposals for Solvency II 2020 Review Harmonisation of National Insurance Guarantee Schemes

12 July 2019 – 18 October 2019

3)
CP on the Opinion on the 2020 review of Solvency II

15 October 2019 – 15 January 2020

The AAE commented on these Consultation Papers

4)
Holistic impact assessment: Data request

2 March 2020 – 1 June 2020

5)
Complementary information request

1 July 2020 – 24 September 2020

Solvency II 2020 review - agenda

1) Stock-taking
2) EIOPA's tentative advice
3) Commission's own initiative
4) Solvency II Working Group

Holistic impact assessment (HIA)

Consultation papers

Comprehensive discussion of extrapolation, VA, risk margin,…

- Deficiencies and options analysed in depth
- Preliminary impact assessment relating to particular options
- No concrete advice concerning preferred option

Advice provided

- to extend risk management concerning VA proposed
- not to change Risk Margin calculation ….

Holistic impact assessment

Reference date **31 December 2019**

Three scenarios tested:

- Baseline scenario: the current legal framework for Solvency II
- <u>Scenario 1</u>: changes to the baseline in accordance with EIOPA’s tentative advice: Extrapolation, Volatility adjustment, Risk margin, interest rate risk, LTE,…
- <u>Scenario 2</u>: The same as scenario 1, but without a change to the interest rate risk calibration

Complementary information request
Reference date **30 June 2020**

- Modified scenarios (extrapolation, VA, long-term equity,…)

DLT–assessment for the Euro: EIOPA's analysis

Already shown in April meeting

Swap markets analysed only for years 2016, 2017

Result: Swap market for the euro in these years is deep, liquid and transparent for maturities 1 to 15, 20, 25, 30, 40 and 50 years (not for other years)

Bond markets: no data delivered for the Euro-countries

Matching criterion: Analysed with and separately without unit-linked and index-linked business (value in brackets)

Maximum LLP: 2016: 10 years (10 years)
2017: 15 years (15 years)
probably not complete data: 2018: 15 years (23 years)

Residual volume criterion:

Resulting LLP: 2016: 21 years
2017: 22 years
2018: 22 years

The LLP depending on outstanding volumes of bond cashflows is calculated based on a threshold of 6%.

AAE comments: EIOPA fails to substantiate a shift of the current LLP of 20 years for the Euro. **The LLP of 20 years should not be changed**

Extrapolation of risk-free rate (Euro)

Current methodology

Last liquid point (LLP) = 20

Convergence point = 60 years

Convergence tolerance = 3 bp

Credit risk adjustment = 10 bp

Ultimate forward rate = 3.75%

Methodology:

Smith-Wilson method

Speed of convergence controlled by parameter alpha (>=0.05)

* Tested in addition: LLP = 30, Convergence Horizon 40 years

Alternative methodology

First smoothing point (FSP) = 20 (residual bond criterion used)

Last liquid forward rate (LLFR): based on weights and forward rates identified in the DLT assessment.

Ultimate forward rate = 3,75%

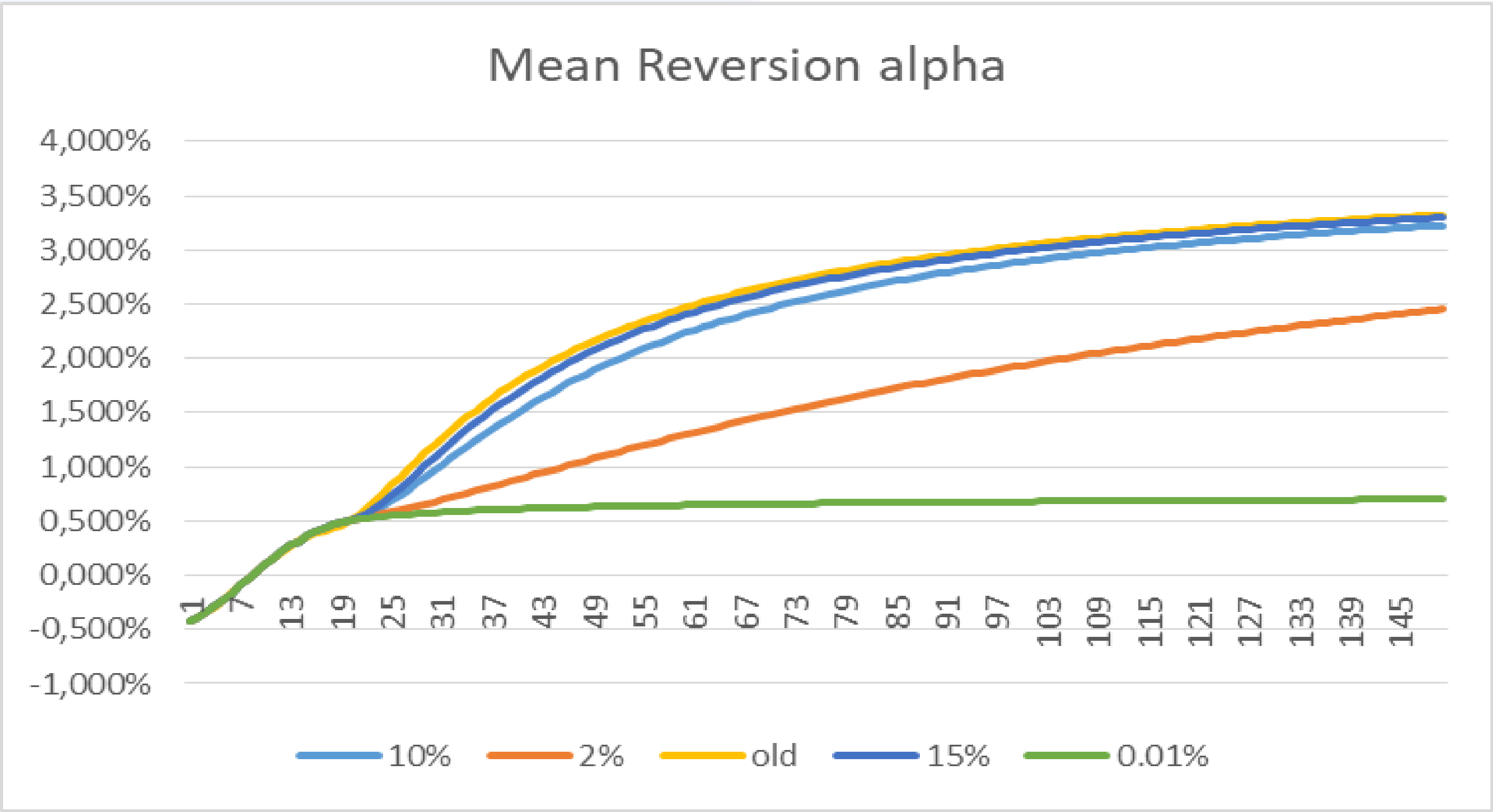
Methodology:

- Forward rates after FSP: weighted combination of LLFR and UFR
- Mean reversion factor alpha=10%
- No convergence tolerance prescribed

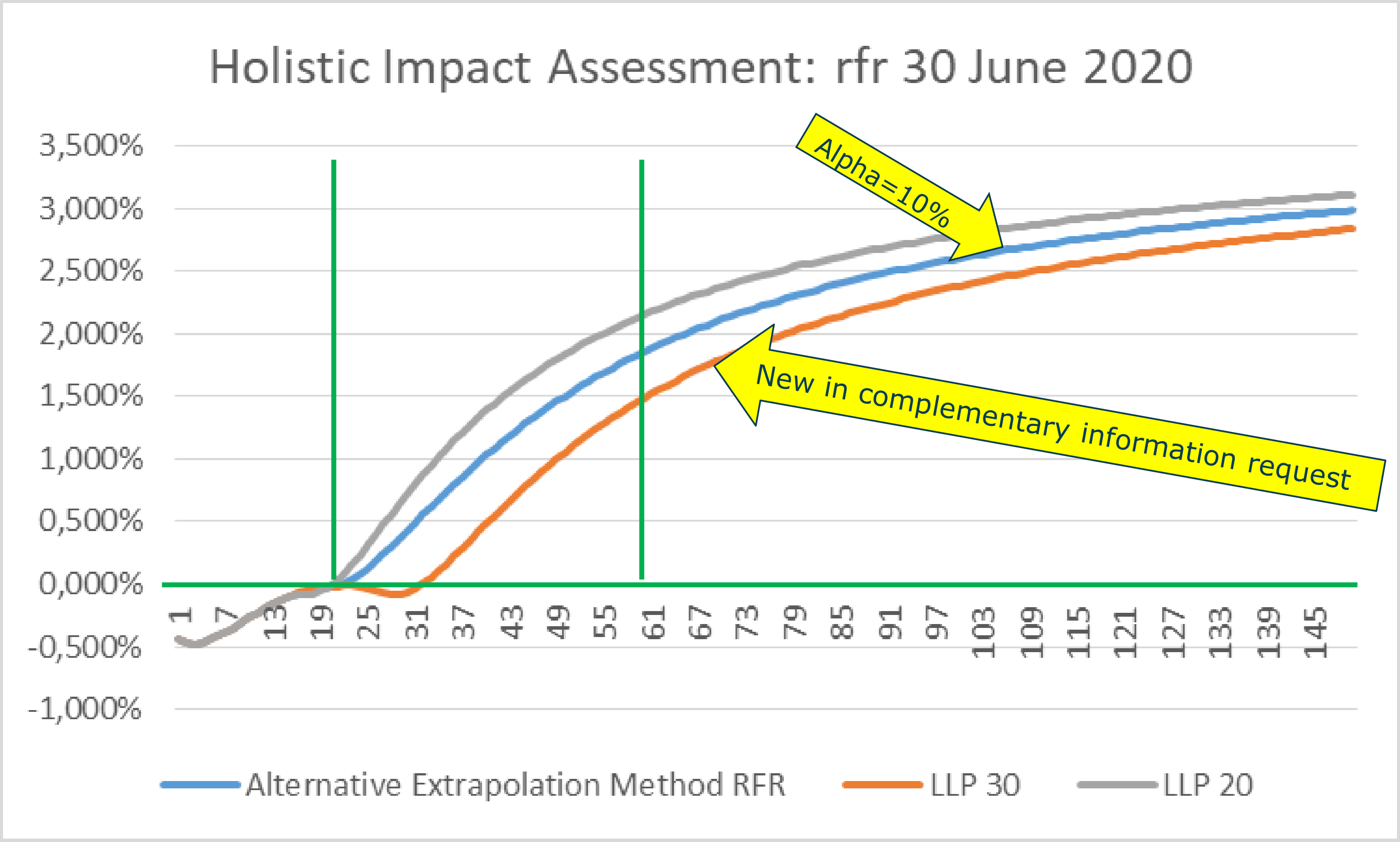
* Complementary information request for 2020 review– Risk-free interest rate term structure as of 30-06-2020

Alternative Extrapolation: Sensitivity Alpha

Shape of rfr and convergence to UFR significantly affected by alpha



Scenario for complementary information request



LLP 20 and LLP 30 extrapolated with Smith-Wilson method,
LLP 30: convergence horizon remains 40 years

Alternative extrapolation method: AAE's view

Further analysis required

- DLT-characteristic post LLP /FSP only analysed for swap-market in 2016, 2017
- Behaviour in different market situations (incl. crisis situations and significantly higher interest rates…)
- IBOR-Transition: possible effect on DLT–assessment
- Impact of ECB's asset purchase programs on interest rates. Long-term expectation vs. currently observable yields from long-term investments.
- Convergence process of forward rates to UFR: neither convergence point nor convergence tolerance required → impact on stability of results (artificial volatility), current distortions prolonged to whole RFR

At this point in time and based on EIOPA's analysis neither changing the LLP for the Euro nor the extrapolation methodology can be supported.

In order to reduce volatility, we don't support the weakening of the role of the UFR and the loss of a reliable convergence process to the UFR, currently determined LLFR and the mean reversion factor alpha.

Volatility adjustment: Permanent VA

EIOPA‘s tentative proposal: The total VA will consist of a permanent VA and a macroeconomic VA (calculated as a country-specific VA for country j). This conforms to approach 1 in Commission’s request.

Total VA^i = $VA_{\mathbf{perm}}{}^{\mathbf{i}}$ **+** $VA_{\mathbf{macro,j}}{}^{\mathbf{i}}$ (for undertaking i located in country j)

The permanent VA is calculated as

$$VA_{\mathrm{perm}} = GAR \cdot AR_4 \cdot AR_5 \cdot Scale_c \cdot RC\_S_c$$

where

- AR_4, to correct mismatches in fixed income assets and liabilities
- AR_5, to account for the illiquidity characteristic of liabilities
- GAR is the general application ratio *(set to 85% in HIA)*
- $Scale_c$ scaling-factor for currency *c* *(set to 139% for the EURO) in HIA)*
- RC_S_c risk-corrected spread of the representative portfolio for currency c *(set to 0.274% for the EURO in HIA)*

Observations: Spread determined for representative portfolio. But AR_4 and AR_5 are undertaking-specific.

Illiquidity solely considered via AR_5. This deserves further analysis. A spread of zero does not eliminate this characteristic of liabilities.

Calculation of the macroeconomic VA

Part of the Complementary Information request

The macroeconomic VA for country j:

$$VA_{\mathbf{macro,j}} = GAR \cdot AR_4 \cdot AR_5 \cdot \omega_j \cdot \mathbf{max}\,(Scale_{c,j} \cdot RC\_S_{c,j} - 1.3 \cdot Scale_c \cdot RC\_S_c; 0)$$

- $Scale_c$ scaling-factor for currency *c* *for representative portfolio*
- $Scale_{c,j}$ scaling-factor for country j using currency *c*
- RC_S_c risk-corrected spread representative portfolio for currency c
- $RC\_S_{c,j}$ risk-corrected spread representative portfolio for country j using currency c

$$\omega_j = \begin{cases} 0 & RC\_S_{c,j} \leq 60 \text{ bps} \\ \frac{RC\_Sc_{,j} - 60}{30} & 60 \text{ bps} < RC\_S_{c,j} \leq 90 \text{ bps} \\ 1 & RC\_S_{c,j} > 90 \text{ bps} \end{cases}$$

ω_j for gradual and smooth activation of country component, mitigating cliff effects.

Risk margin: Modification proposed in HIA

The weight of future SCR is attenuated by application of a factor λ;
CoC-rate remains unchanged

$$RM_{scenario} = CoC \cdot \sum_{t \geq 0} \frac{SCR(t)}{(1+r(t+1))^{t+1}} \times \max(\lambda^t, 0.5),\ \lambda = 0.975$$

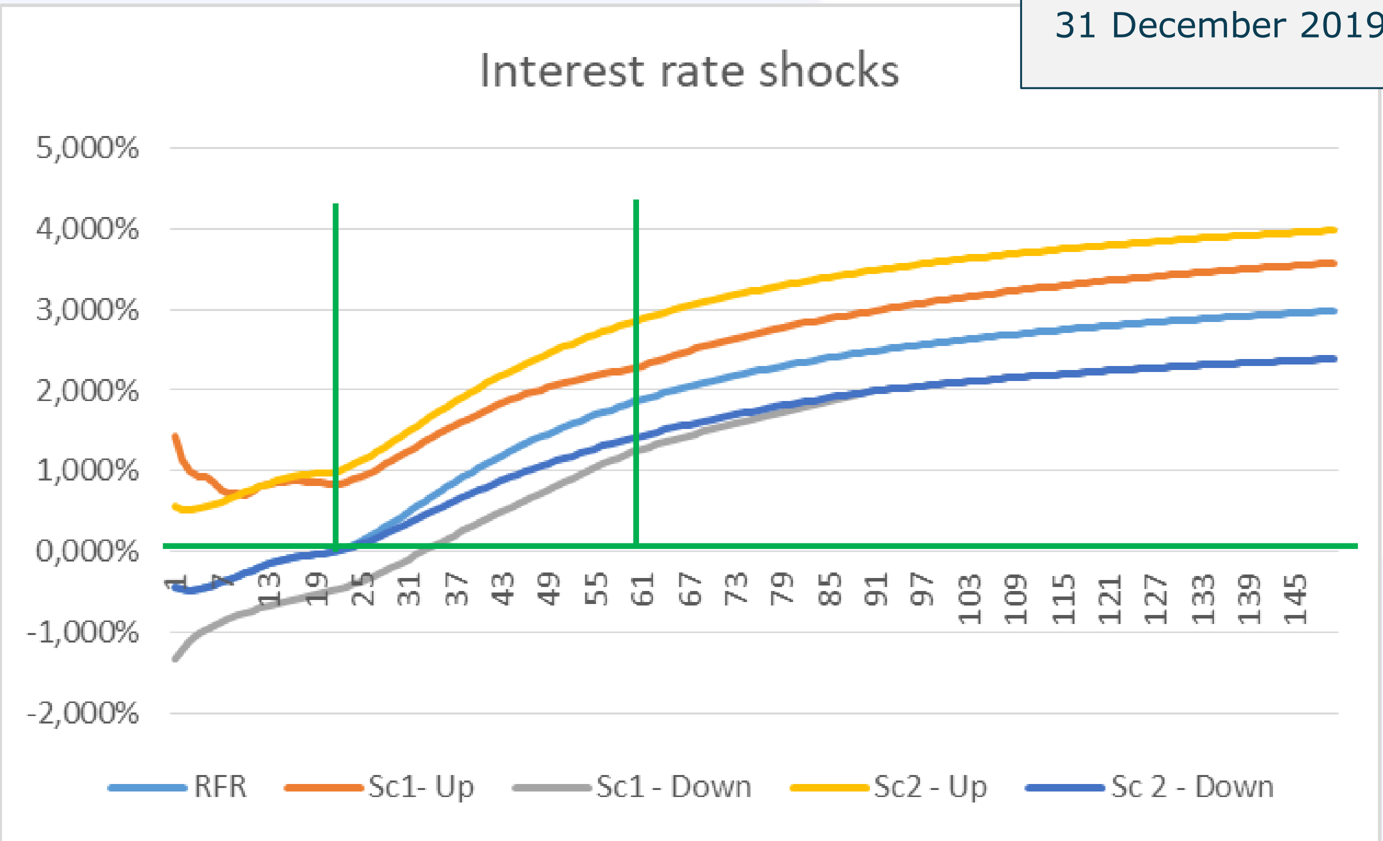
- SCR(t): SCR after t years;
- r(t+1): basic risk-free rate for the maturity of t+1 year
- CoC = 6%

This factor λ reduces the risk margin considerably.
Effect comparable to a significant reduction of the CoC –rate.
No justification for the size of the factor λ is given

For further consideration: The risk margin has a binary character:

- No risk margin required in case of full hedge,
- Full risk margin required undifferentiated in all other cases – even in case of partial hedges

Interest rate stress



Term structures
31 December 2019

Proposed stress:

Proportional stress
+
Additive component, after FSP linearly decreasing to 0 until year 60

Criticism: We don’t support the stress of the UFR. SII requires a one-year-horizon.

Invitation to calculate SCR with a modified calibration of scenario:
A floor of -1.25% to shocked interest rates.

Solvency II 2020 review - agenda

1) Stock-taking
2) EIOPA's tentative advice
3) Commission's own initiative
4) Solvency II Working Group

The way to Commission’s report

EIOPA‘s technical advice (Opinion)

- Consultation on EIOPA‘s opinion

  3 consultation papers

- Holistic impact assessment

  2 information requests

Commission’s Consultation

Review of prudential rules for insurance and reinsurance companies

(Solvency II)

Published 1 July 2020

Commissi
on’s
roadmap:

Proposal for a Directive

3rd quarter 2021

Commission’s further goals:

The framework needs to take into account the ***political priorities*** *of the EU; notably*

– *the European Green Deal,*

– *the completion of the Capital Markets Union, and*

- *the strengthening of the single market.*

It should be ***flexible*** *enough to cope with any economic and financial developments (including the unprecedented protracted low – and even negative – interest rate environment).*

Commission's review: Broad spectrum covered

Commission's consultation paper covers four main areas

1)	2)	3)	4)
- Long-termism and sustainability of insurers' activities - Priorities of the European framework	- Proportionality of the European framework and - Transparency towards the public	- Improving citizens' trust, - Deepening the single market in insurance services - Enhancing policyholder protection and financial stability	New emerging risks and opportunities that may need to be addressed by the European framework

Together with results from EIOPA's technical consultations the results will all feed into Commission's review process.

Source: Review of prudential rules for insurance and reinsurance companies (Solvency II)

EU-Commission: Some goals and concerns

Solvency II as a prudential framework should

- provide the right incentives for robust risk management while avoiding excessive risk-taking, and limiting financial stability implications.
- avoid procyclical behaviour and
- not unduly prevent insurers from contributing to the long-term financing of the economic recovery of the EU in the aftermath of the current crisis.

Concerns relating to the unprecedented environment of low interest rates, which is progressively deteriorating the profitability of insurers:

1) Despite the prudential framework, it can incentivise insurers to “search for yield” by taking more risks and investing in more complex securities
2) The low interest rate environment can affect the life insurance landscape, and the ability of insurers to offer insurance products with guarantees. The current trend of risk shifting to policyholders can result in new challenges, depending on customers’ risk tolerance and financial literacy.

Source: Review of prudential rules for insurance and reinsurance companies (Solvency II)

EU-Commission: Action plan

To consider

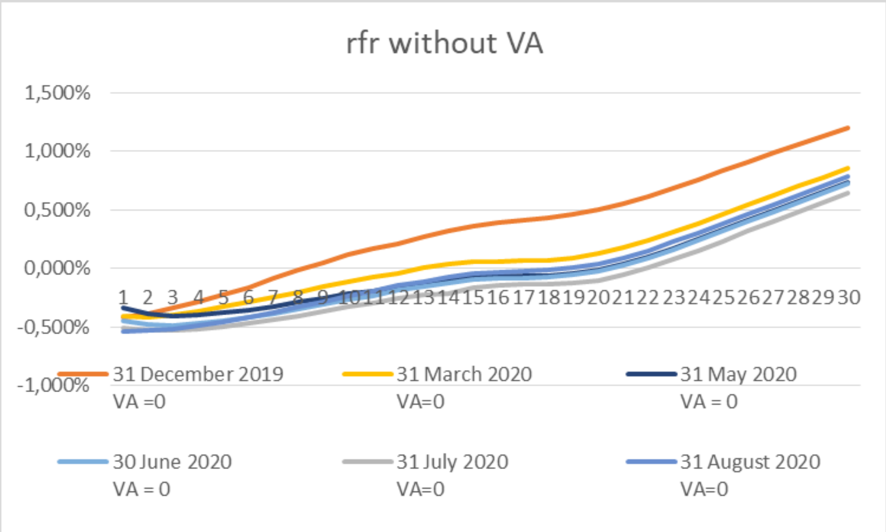
COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Brussels, 24.9.2020 COM(2020) 590 final

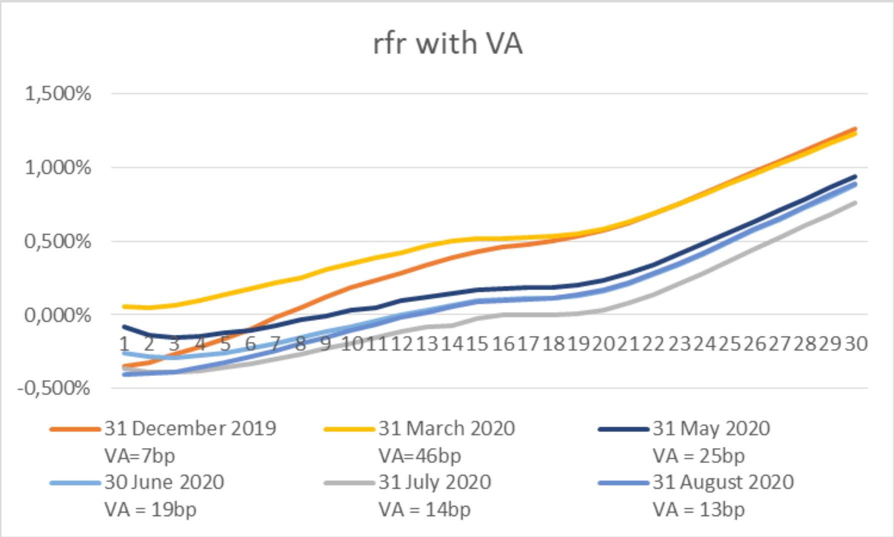
Insurers are among the largest institutional investors. They have, however, been retrenching on long-term assets over the last fifteen years, and the share of their investments in the real economy and infrastructure remains limited. The participation of insurers in long-term investments, in particular equity, can be supported by ensuring that the prudential framework appropriately reflects the long-term nature of the insurance business and mitigates the impact of short-term market turmoil on insurers' solvency

Action 4: *The Commission will seek to remove regulatory obstacles for insurance companies to invest long-term, without harming financial stability and policyholder protection. It will also seek to provide for an appropriate prudential treatment of long-term SME equity investment by banks. Furthermore, it will assess possibilities of promoting market-making activities by banks and other financial firms.*

Source: https://ec.europa.eu/finance/docs/law/200924-capital-markets-union-action-plan_en.pdf

Low interest rate environment





Low interest rate environment remains a challenge- especially for undertakings with long-term life insurance tariffs with guarantees in their portfolio.

Interest rates (already affected by ECB-activities) lowered after outbreak of COVID-19-pandemic.

- RFR since March significantly below RFR end of 2019.
- Volatility adjustment cannot compensate for the loss.

Development VA

2019

31 December **7bp**

2020

24 March:	**51bp**
31 March:	**46bp**
30 April:	**33bp**
15 May:	**35bp**
31 May:	**25bp**
30 June:	**19bp**
31 July:	**14bp**
11 August:	**12bp**
31 August:	**13bp**
15 September:	**13bp**

COVID-19: Impact on Equities and Volatility

Background

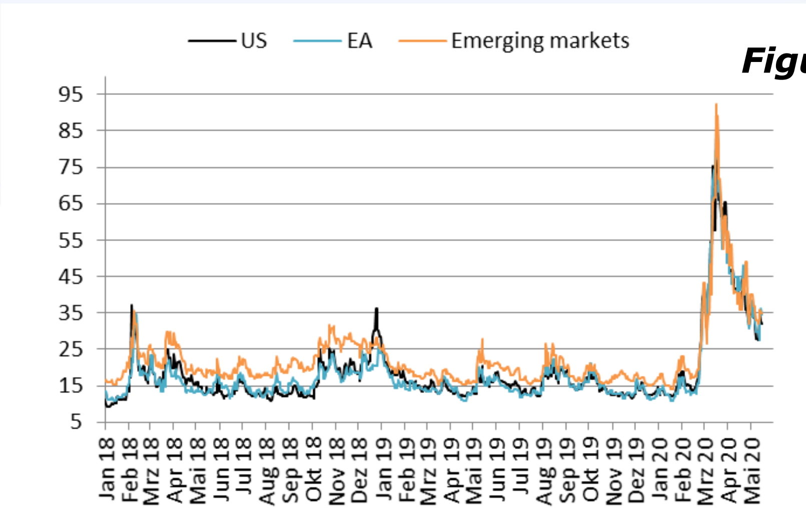


Figure 1.14 *Market volatilities*

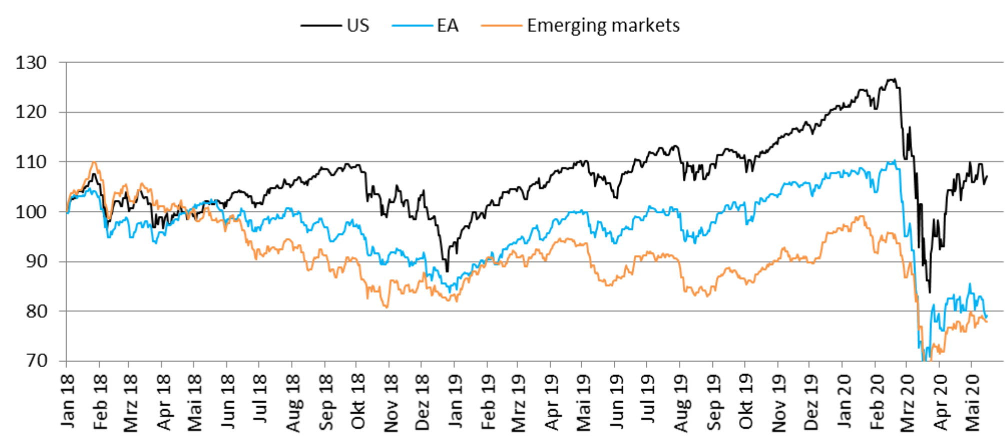


Figure 1.13 Equity market performance

Quelle: Financial stability report Juli 2020

Risks: Downgrades

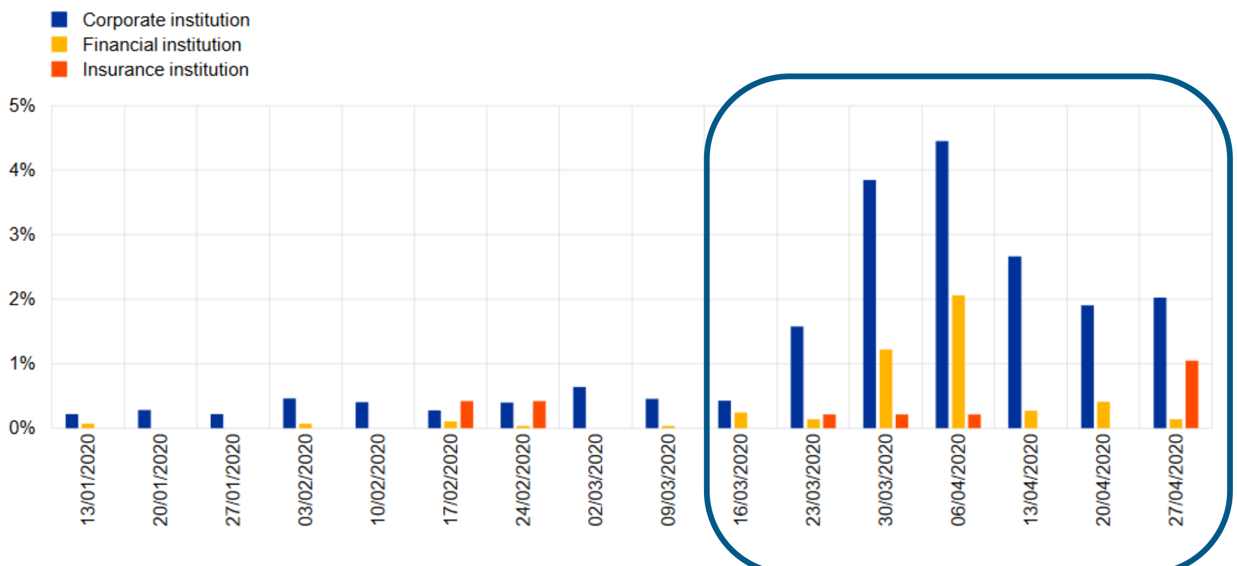
Background

ESRB observed increased rate of downgrades since March 2020

Chart A.7

Issuers with at least one bond downgraded in 2020

(percentages of issuers)



Source: RADAR and ESMA calculations.

Notes: Percentage of issuers with at least one bond downgraded over the total of outstanding issuers rated by the big 5 CRAs (Fitch, Moody's, S&P, DBRS, Scope) per rating type.

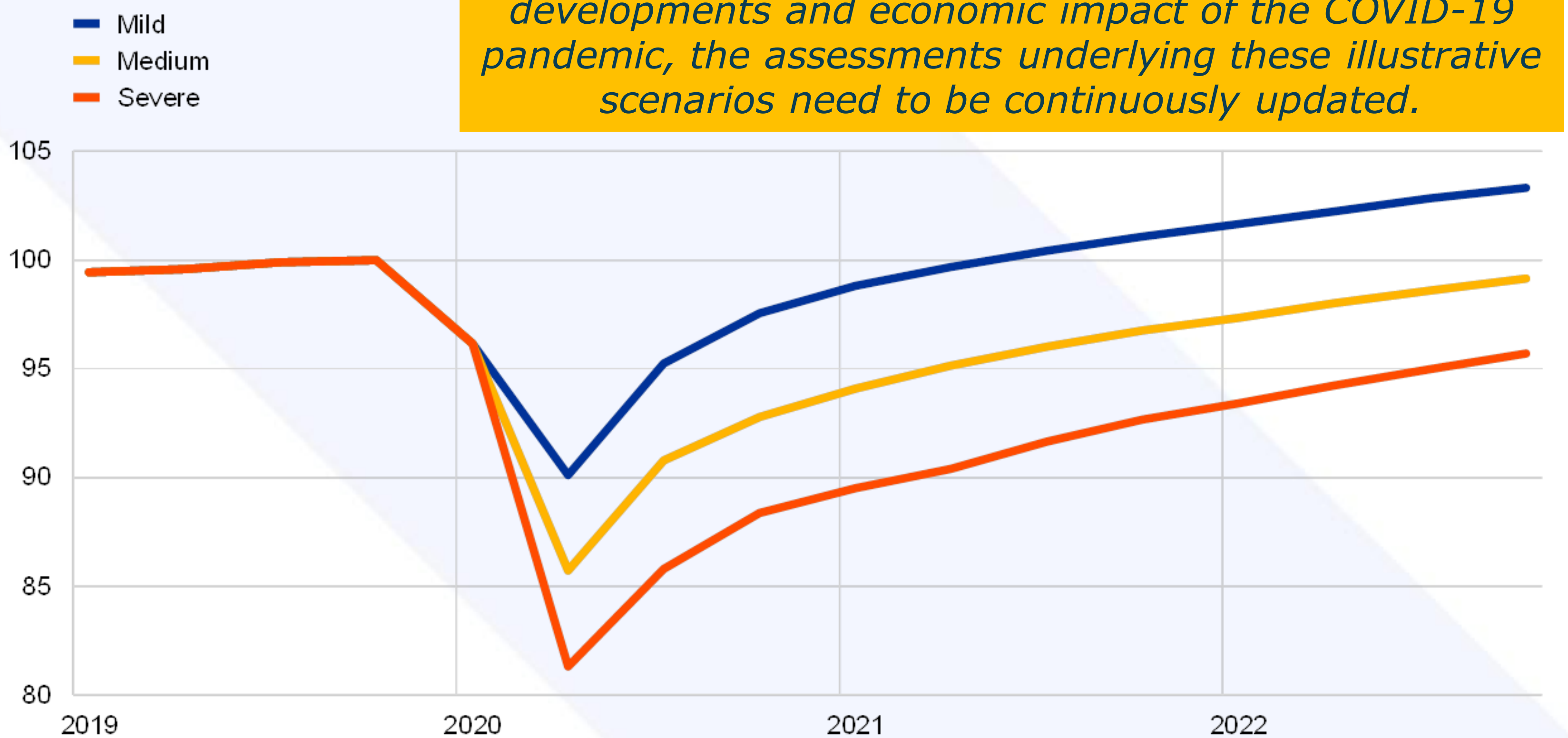
https://www.esrb.europa.eu/pub/pdf/reports/esrb.report200514_issues_note~ff7df26b93.en.pdf

COVID-19: ECB Scenario, impact on GDP

Background

Chart C: Euro area real GDP under the mild, medium and severe scenarios
(index, 2019 Q4 = 100)
Source: ECB calculations

Given the unprecedented uncertainty surrounding the developments and economic impact of the COVID-19 pandemic, the assessments underlying these illustrative scenarios need to be continuously updated.



https://www.ecb.europa.eu/pub/economic-bulletin/focus/2020/html/ecb.ebbox202003_01~767f86ae95.en.html

EIOPA's risk dashboard (17 August 2020)

Background

Covid-19 not completely captured

Risks	Level	Trend
1. Macro risks	Very high	→
2. Credit risks	High	→
3. Market risks	High	↘
4. Liquidity and funding risks	Medium	↘
5. Profitability and solvency	High	→
6. Interlinkages and imbalances	Medium	→
7. Insurance (underwriting) risks	Medium	↘
8. Market perceptions	Medium	→

https://www.eiopa.europa.eu/tools-and-data/risk-dashboard

Solvency II 2020 review - agenda

1) Stock-taking
2) EIOPA's tentative advice
3) Commission's own initiative
4) Solvency II Working Group

SII-Working group

The Solvency II Working Group of the AAE will

- Monitor all upcoming activities relating to the SII review 2020
- Respond to consultation or discussion papers relating to SII
- Develop own views on actuarial issues of high importance within SII

Latest Consultations

1) Joint Consultation Paper ESG disclosures (23 April 2020)

Joint paper of EBA, ESMA, EIOPA

Comments submitted: **1 September 2020**

✓

2) EIOPA-BoS-20/341: Second discussion paper on methodological principles of insurance stress testing (2 June 2020)

Comments submitted: **2 October 2020**

✓

3) EU Commission: Review of prudential rules for insurance and reinsurance companies (Solvency II)

Deadline for submission: **21 October 2020**

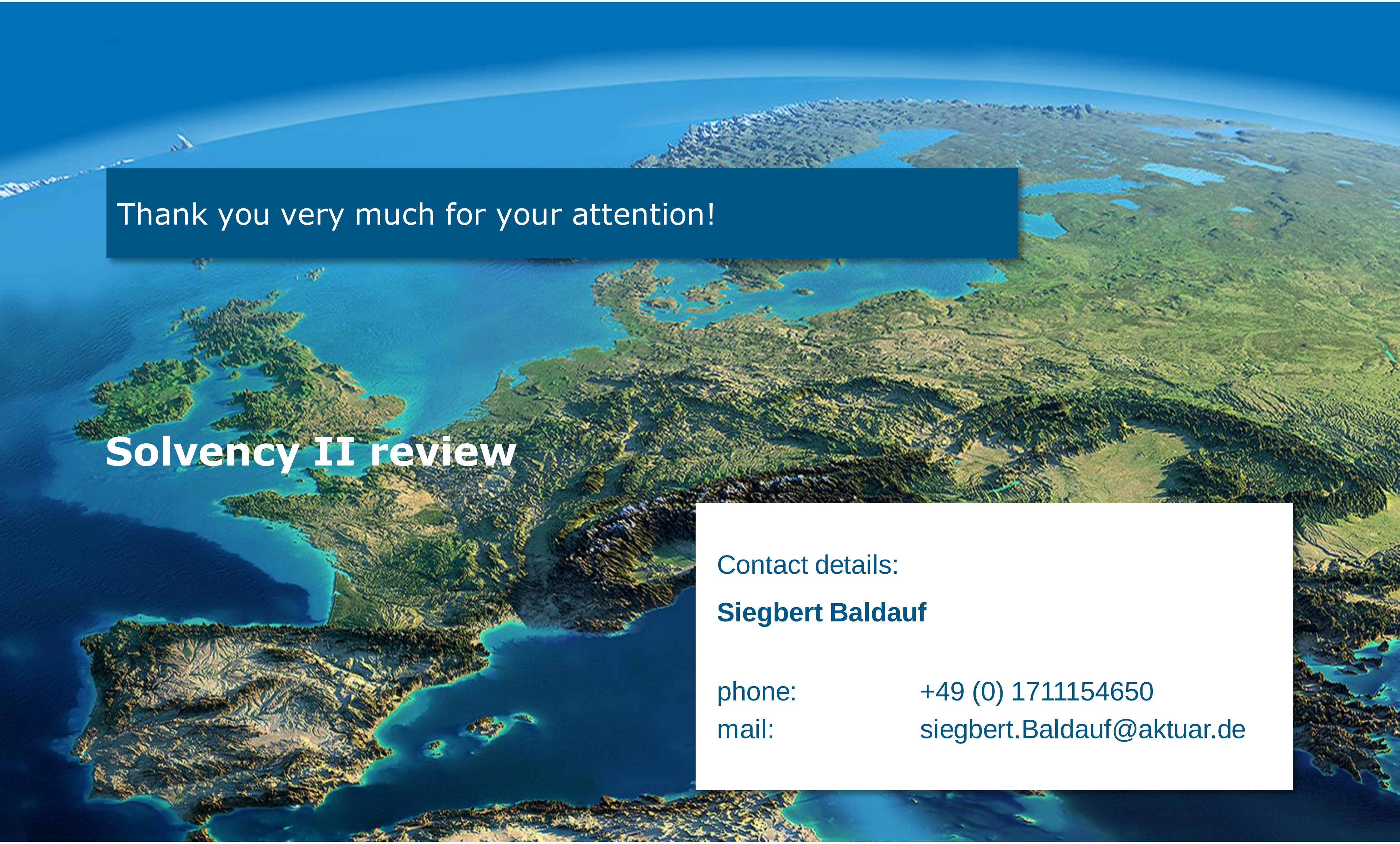
→ **Details see above**

Related initiatives of the SII working group

The working group has prepared two papers:

1) **Extrapolation**
Content: Analysis of alternative method proposed and tested in the holistic impact assessment
Based on comments provided in January to Consultation paper
Conclusion: We would not support a change at this point in time

2) **Volatility adjustment**
Content: Analysis of EIOPA's proposed changes, comparing approaches discussed in the Consultation paper to adaptations made in the holistic impact assessments



Thank you very much for your attention!

Solvency II review

Contact details:

Siegbert Baldauf

phone: +49 (0) 1711154650
mail: siegbert.Baldauf@aktuar.de