

# ACTUARIAL ASSOCIATION OF EUROPE

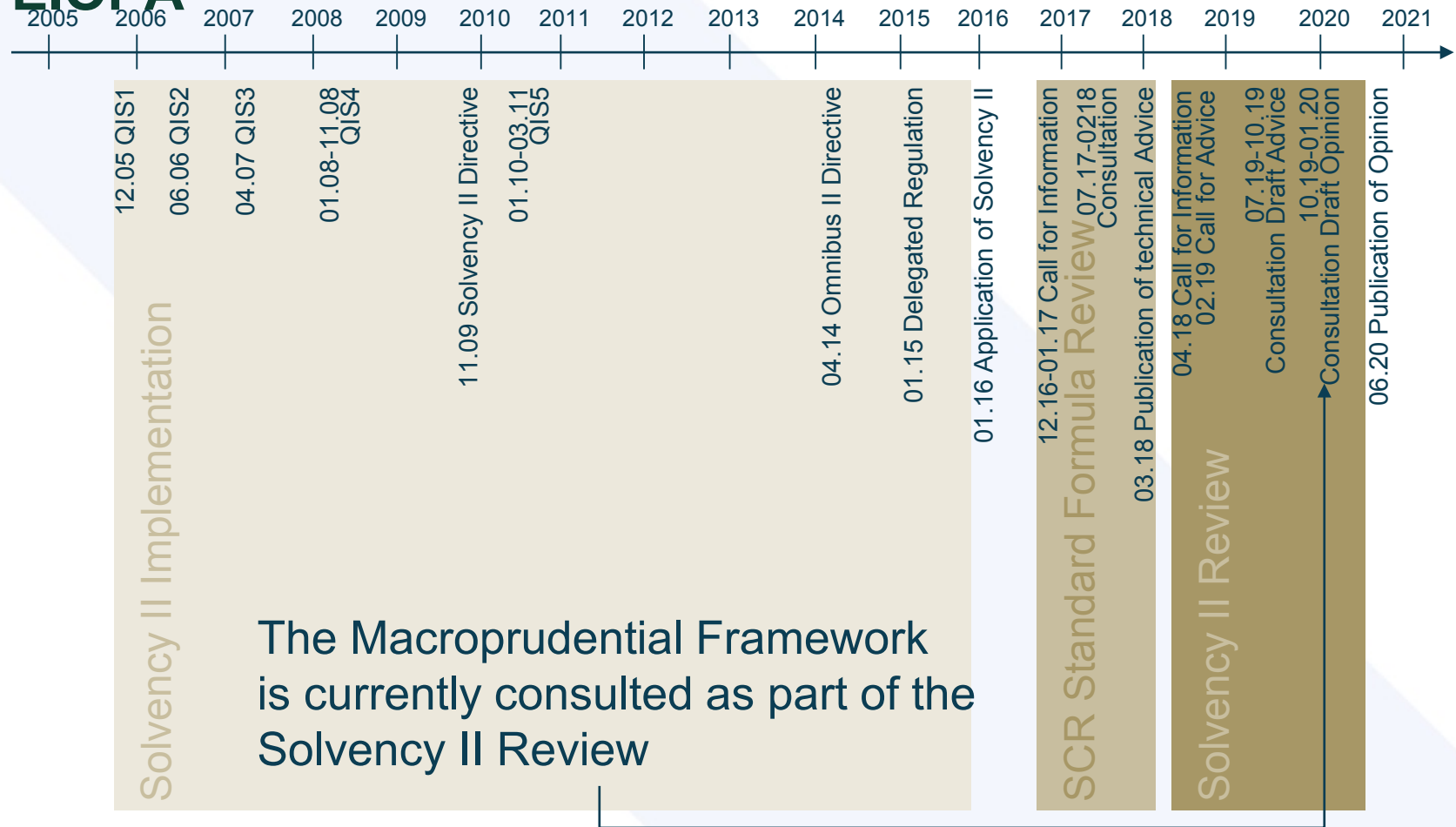
## EIOPA's Macroprudential Framework

How to tackle the systemic risks of the insurance industry

Dr. Frank Schiller, Vice Chair of the AAE Risk Management Committee  
Webinar of the AAE Risk Management Committee, 5 December 2019

# Introducing and reviewing Solvency II

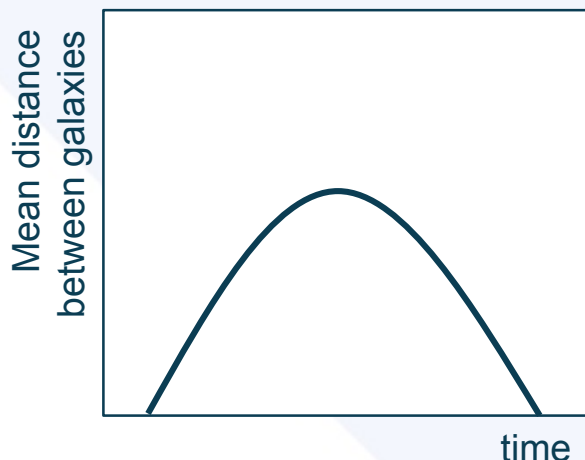
## Reviews are an evolution not a revolution ... says EIOPA



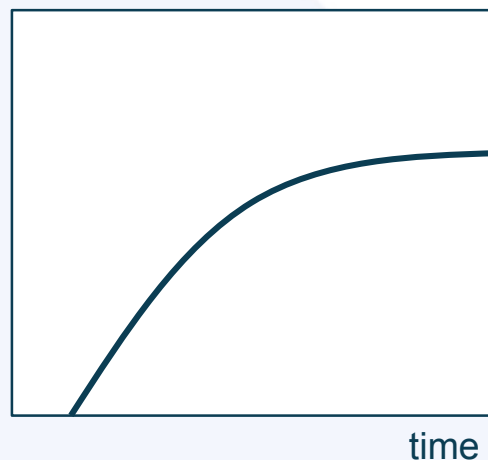
# A brief history of time Solvency II

What kind of universe is Solvency II?

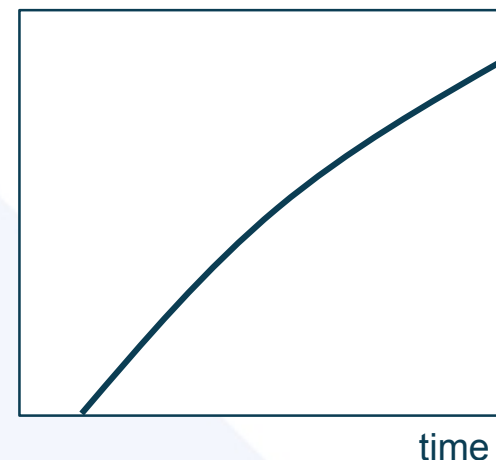
The Freidmann-Lemaître-Robertson-Walker-Model differentiates three classes:



**Contracting universe:**  
 After a Big Bang it will eventually **collapse** again.



**Static universe:**  
 The universe will **converge** to a stable size.



**Expanding universe:**  
 The universe will **grow without limitation**.

Sources: [https://en.wikipedia.org/wiki/Expansion\\_of\\_the\\_universe](https://en.wikipedia.org/wiki/Expansion_of_the_universe), [https://en.wikipedia.org/wiki/A\\_Brief\\_History\\_of\\_Time](https://en.wikipedia.org/wiki/A_Brief_History_of_Time)

# What is a macroprudential framework?

## Macro- vs. microprudential regulation – a short explanation

- **Systemic risk**  
The risk of **disruption in the financial system** with the potential to have serious **negative consequences** for the **internal market** and **real economy**.
- **Financial stability**  
The state where the **build-up of systemic risk** is prevented.
- **Macroprudential regulation**  
A framework that aims at **mitigating systemic risk** (or its build-up) leading to **financial stability** and, finally, to **economic growth**.
- **Microprudential regulation**  
A framework to **limit potential distress** of individual institutions and **ensure policyholder protection**.

# What is a macroprudential framework?

## And why is it relevant for insurers?

- Earlier systemic crises particularly impacted banks:  
e.g. 1929 Wall Street Crash, 1984 Failure of Continental Illinois, 1986-89 Savings and Loans Crisis, 2007-08 Financial Crisis
- Insurers might create or magnify systemic risks:
  - AIG: **credit risk exposure** during 2007-08 Financial Crisis
  - ESRB December 2015 Report systemic risks in EU insurance sector: exposure to long-term interest rates “**low-for-long**” and “**double-hit**”
- Arbitrage between banks and insurers to be avoided  
**Consistency** with ESRB and IAIS approaches important
- But insurance industry specifics need to be considered  
**Insurance is different** with its typical hold to maturity and long-term investments, e.g., for retirement products

# Implement a macroprudential framework

## Route taken by EIOPA for the analysis and derivation of a proposal

1. Analyse how insurance creates or amplifies systemic risk.  
EIOPA report 02.2018 “Systemic risk and macroprudential policy in insurance” <sup>1</sup>
2. What are the tools already existing in the Solvency II framework, and how do they contribute to mitigate the sources of systemic risk?  
EIOPA report 03.2018 “Solvency II tools with macroprudential impact”  
<sup>1</sup>
3. Are other tools needed, and which ones should be promoted?  
EIOPA report 07.2018 “Other potential macroprudential tools and measures to enhance the current framework” <sup>1</sup>

<sup>1</sup> <https://eiopa.europa.eu/Publications/Reports/>



# Step 1. Analysis of systemic risk in insurance

	Systemic risk drivers	Transmission channels
Entity-based	<b>Deterioration of solvency position</b> leading to (collective) failures	
	<ul style="list-style-type: none"> <li>• Size or global activity (G-SII and D-SII)*</li> <li>• Interconnectedness (counterparty &amp; macroeconomic exposure)</li> <li>• Substitutability</li> </ul>	<ul style="list-style-type: none"> <li>• Exposure</li> <li>• Lack of supply</li> <li>• Expectations and information asymmetry</li> <li>• Asset liquidation</li> </ul>
Activity-based	<b>Activities or products</b> with potential for systemic risks and <b>dangerous interconnections</b>	
	<ul style="list-style-type: none"> <li>• Derivative trading (non-hedging)</li> <li>• Financial guarantees (incl. monolines)</li> <li>• Asset and direct lending (e.g. securities)</li> <li>• Lapsable products</li> </ul>	<ul style="list-style-type: none"> <li>• Exposure</li> <li>• Asset liquidation</li> <li>• Bank-like activities (maturity transformation and leverage)</li> </ul>
Behaviour-based	<b>Concentrations</b>	<b>Excessive risk-taking</b>
	<b>Inappropriate provisioning</b> <ul style="list-style-type: none"> <li>• Concentration of certain asset classes</li> <li>• Excessive risk taking <ul style="list-style-type: none"> <li>– “Search for yield”</li> <li>– Too-big-to-fail / moral hazard</li> </ul> </li> <li>• Heightened competition potentially leading to insufficient technical provisions</li> </ul>	<b>Collective behaviour</b> <ul style="list-style-type: none"> <li>• Exposure</li> <li>• Asset liquidation</li> </ul>

\* FSB definition of G-SII: Global Systemically Important Institution / Insurer, D-SII: Domestic Systemically Important Insurer

Source: EIOPA report 02.2018 “Systemic risk and macroprudential policy in insurance”, <https://eiopa.europa.eu/Publications/Reports/>

## Step 2. Tools existing in Solvency II

**Solvency II as a microprudential framework itself has a positive effect on financial stability. Further direct impacts:**

- **Reduce collective, procyclical behaviour of insurers:**
  - **Symmetric adjustment** to the equity risk charge (time and index averaging to reduce effects on extreme market price movements)
  - **Volatility adjustments** (reduce effect of market volatility and challenging environment – “low-for-long” and “double-hit”)
  - **Matching adjustments** (cushioning of market volatility by incentivising hold to maturity strategies)
  - Extension of **recovery period** in exceptional adverse situations (avoid collective behaviour after extreme market events)
  - **Transitional measure** on technical provisions (allow for smooth transition from old solvency regimes to Solvency II)

Source: EIOPA report 03.2018 “Solvency II tools with macroprudential impact” , <https://eiopa.europa.eu/Publications/Reports/>



## Step 2. Tools existing in Solvency II

### Direct macroprudential impact (continued):

- Restrict risk for activities or products with systemic risks and hence also restrict effects of interconnectedness:
  - Indirectly Solvency II related: EIOPA may temporarily prohibit or restrict certain **financial activities or practices for PRIIPs** \* (only to address a significant investor protection concern)
- Reduce risks after breach of SCR

Only reactive measures, no possibilities to reduce risk before incidence

  - Cancellation or **deferral of dividends**
  - Requesting **recovery plans** and financing schemes
  - Prohibit free **disposal of assets**

\* PRIIPs: Packaged Retail and Insurance-based Investment Products

Source: EIOPA report 03.2018 “Solvency II tools with macroprudential impact”, <https://eiopa.europa.eu/Publications/Reports/>

# Step 3. Discussed new tools and measures

## Tools to be considered during the Solvency II Review 2020

Enhanced reporting and monitoring	
Capital and reserving-based	Leverage ratio
	<u>Enhanced monitoring against market-wide under-reserving</u>
Liquidity-based	<b><u>Additional reporting on liquidity risk</u></b>
	Liquidity risk ratios
Exposure-based	<b><u>Enhancement or Prudent Person Principle</u></b>
	<b><u>Enhancement of ORSA</u></b>
Pre-emptive planning	<u>Recovery plans</u>
	<u>Resolution plans</u>
	<b><u>Liquidity Risk Management Plans (LRMP)</u></b>
	<b><u>Systemic Risk Management Plans (SRMP)</u></b>
Intervention Powers	
Capital and reserving-based	<u>Capital surcharge for systemic risk</u>
Liquidity-based	<u>Temporary freeze on redemption right</u>
Exposure-based	<u>Concentration thresholds</u>

**Bold:** analysis requested by European Commission  
Underlined: now proposed tools by EIOPA during consultation

# Capital and reserving-based tools

**Objective: avoid (or provide early warning for) deteriorations of the solvency position in case of a shock.**

**Tools should not collide with existing Solvency II metrics.**

- **Capital surcharge for systemic risk:**
  - Could be defined similarly to O-SII buffer in the banking sector either for certain activities or for exposed entities.
  - Very difficult to calibrate to achieve desired effect.

*EIOPA's proposal: Grant NSAs with the power to require a (non-permanent) capital surcharge for systemic risk*

Insurance is **too heterogeneous** to effectively define hard limits or capital-add-ons. The approach would also **contradicting the risk-based nature** of Solvency II. Even though a clear rationale is demanded, the application of the tool might seem **arbitrary**.

# Capital and reserving-based tools

- Monitoring against market-wide under-reserving:
  - Additional QRTs required for detailed movement / variation analysis of TP to enable regulator to analyse in more granularity deviations of actuals vs. expected.
  - Can be used on entity and (as consistently defined) market level for an indication of under-reserving, i.e., not adequate best estimate assumptions.
  - Has to be designed properly to keep operational efforts manageable.

*EIOPA's proposal: Enhance reporting to identify potential deviations of the assumptions from the actual experience.*

Consistent monitoring **could provide insights and early warning** for systemic risks. However, the current pure data driven proposal from EIOPA is hardly suitable to achieve the intended goal, as it will be **difficult to achieve comparability** even in single markets within Europe, not to speak of detecting trends relevant for whole Europe. Also **qualitative aspects needed** to be able to interpret results and derive conclusive actions.

# Liquidity-based tools

**Objective: ensure that insurers meet their payment obligations even for assets invested more illiquidly or when extreme events occur.**

**Liquidity is only partially captured in Solvency II via PPP, ORSA or other qualitative requirements (Art. 44).**

- **Additional reporting:**

- Proportional reporting requirement, e.g., for G-SII and insurers involved in certain products / activities.

*EIOPA's proposal: Enhance the reporting framework with the aim of detecting potential market-wide liquidity stresses.*

Additional reporting requirements and stress testing have to be **focused on relevant risks** to avoid meaningless exercises. For small insurers **proportionality has to be considered** effectively.

# Liquidity-based tools

- Temporary freeze of redemption rights:
  - May be applied in exceptional circumstances to restrict policyholders lapsing and thus enable institutions to more robustly manage extreme situations.
  - Might be conflicting to policyholders' interests

*EIOPA's proposal: Grant NSAs with the power to impose a temporarily freeze on redemption rights in exceptional circumstances.*

This might be **helpful for managing** effectively risks of **unhedgeable policyholder options** and long-term capital market guarantees.

A relevant example could be mass lapse events after extremely rising interest rates and a following material transfer of assets from retirement products at insurers to saving plans at banks.

# Exposure-based tools

**Objective: excessive concentration of exposures and interconnections have to be managed properly.**

**Solvency II already addresses concentrations in the PPP and the ORSA and by certain risk charges.**

- **Prudent Person Principle:**
  - Extend requirements in the PPP to
    - ensure that no excessive level of direct or indirect exposure concentration occurs
    - discourage excessive involvement in certain products and activities.

*EIOPA's proposal: Expand the PPP to take into account macroprudential concerns.*

**It is unclear how macroprudential concerns can be effectively targeted** such as herding behaviour or excessive exposure concentrations.



# Exposure-based tools

- Concentration thresholds:
  - Excessive concentration in assets should be discouraged without jeopardizing the funding role of insurers needed in many markets.
  - What is a “normal” concentration varies materially in the different European markets.

*EIOPA's proposal: Grant NSAs with the power to define “soft” concentration thresholds.*

Soft thresholds are less intrusive and should effectively be used as a **monitoring tool**. The concept needs to still follow the **proportionality** principle and leave enough freedom **not to introduce new systemic risks** by itself.

This tool **might further increase differences** between European countries.

# Exposure-based tools

- ORSA:
  - Add consistent reporting requirements to the ORSA to enable supervisors to take market-wide perspective in risk analysis of excessive concentrations.
  - Vice versa from these reports undertakings will have to consider relevant scenarios from a macroprudential perspective as provided by the regulator.
  - Extensions should consider proportionality and not be prescriptive.

*EIOPA's proposal: Expand the ORSA to include the macroprudential perspective.*

Existing reporting requirements could be better utilized before adding new ones. **Rule-based requirements** for reporting, monitoring or even limits **will not help mitigating systemic risks**. New exposure-based tools implemented in ORSA still need to follow the **proportionality principle**.

# Pre-emptive planning

**Objective: minimize the risk of failures as well as the potential impact in case of materialized failures.**

**These tools should improve transparency on the future behaviour in extreme situations and can therefore reduce systemic risks.**

- **Recovery Plans**

- Contingency planning of G-SII and D-SII for restoring their financial position after significant deteriorations.
- Should be seen as extension of ORSA and improves preparedness.

- **Resolution Plans**

- Roadmap provided by undertakings and authorities to achieve an orderly process of resolution or liquidation.
- Improves undertakings and supervisors readiness to deal with crisis.

# Pre-emptive planning

- Recovery and Resolution Plans (continued)

*EIOPA's proposal: Require pre-emptive recovery and resolution planning from undertakings covering a very significant (for recovery planning) and significant (for resolution planning) share of the national market.*

- Systemic Risk Management Plans

- G-SII or D-SII should provide a risk assessment of how they contribute to systemic risks and how these can be managed, mitigated or reduced.

*EIOPA's proposal: Require SRMPs from a subset of undertakings.*

- Liquidity Risk Management Plans

- Relevant institutions should provide a framework to assess liquidity risks and how to further manage, mitigate or reduce them.

*EIOPA's proposal: Require LRMPs with possibility to waive undertakings.*

# Pre-emptive planning

It is reasonable that EIOPA wishes to require these tools for different groups of institutions. However, the **level of requirement** seems to be too wide.

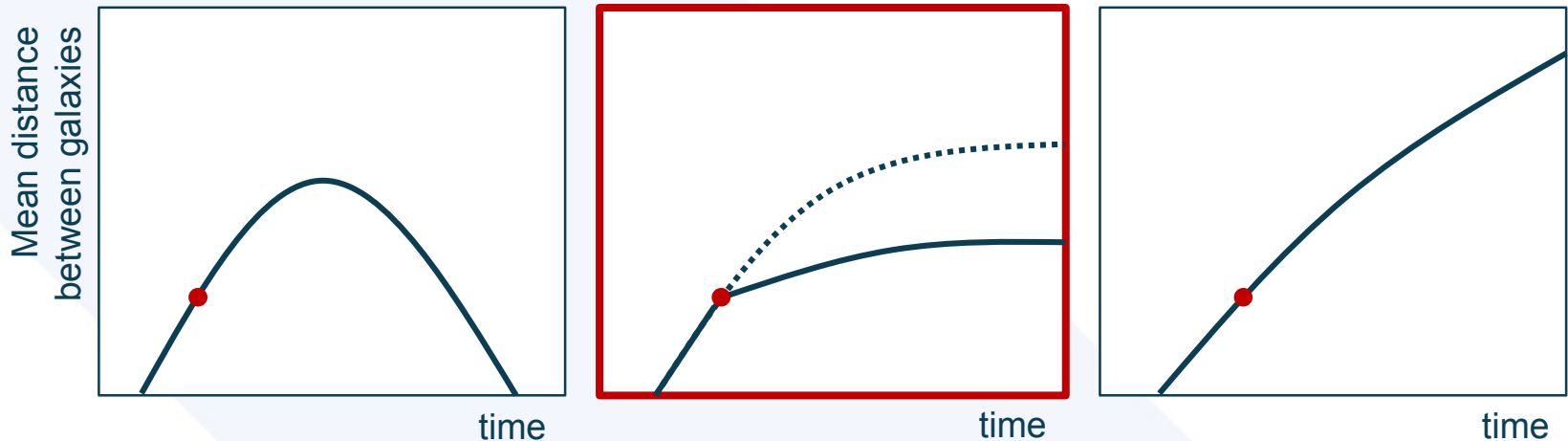
Tools in pre-emptive planning should especially consider **proportionality** and a **principle based approach**. Only then it can be ensured that this is not a formal and potentially useless exercise but really adds value for tackling systemic risk.

Linking the requirement of a **Liquidity Risk Management** to the application of **Volatility Adjustments** seems to be an academic exercise.

It is unclear what a **resolution plan** is really worth when it comes to that extreme and rather **unpredictable situation**.

# A brief history of time Solvency II

Let's hope we live in a stable universe close to the target...



**For a converging, stable Solvency II universe we have to**

- manage effectively all **interdependencies between the components** and avoid an **implicit increase of the solvency level** higher than 99.5%
- **avoid an overload** of the framework to keep it manageable
- strive for a **consistent interpretation** for all users and stakeholders, including the supervisors.





Thank you for your attention

Dr. Frank Schiller