# Solvency II overview

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# Solvency II
## Contents

# What is Solvency II?

Solvency II is the new EU wide regulatory regime, due to come in force Jan 1, 2013. It is based on the '3 Pillar' Basel II model from the banking industry:

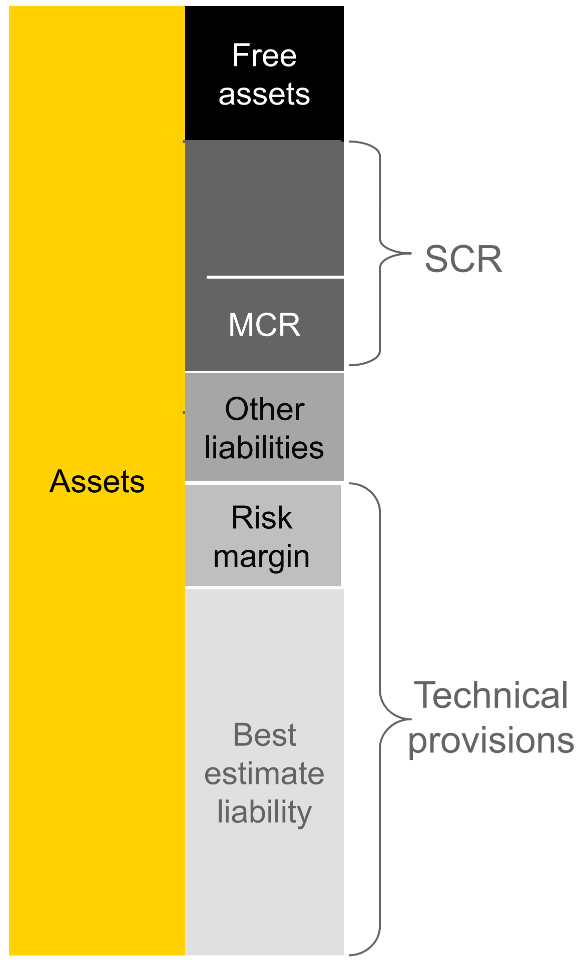
| Pillar 1 | Pillar 2 | Pillar 3 |
| --- | --- | --- |
| **Valuation principles**<br><br>**Capital requirement**<br>SCR[1]<br>MCR[2]<br><br>**Standard Formula / Internal Model**<br><br>*Internal model approval process* | **Must allow for all risks,** including those not captured in the SCR<br><br>**ORSA**<br>Own risk and solvency assessment<br><br>**Reviewed by supervisor**<br>may impose capital add-ons | **Public disclosure**<br>Solvency and financial condition report<br><br>**Report to supervisor**<br><br>*"Transparency"*<br><br>*"Market discipline"* |

1. *Solvency Capital Requirement*
2. *Minimum Capital Requirement*

# Pillar 1
## Market consistent balance sheet

*Assets*

- **Investments:** generally able to be marked to market
- **Intangible assets:** adjustment to remove intangible assets, e.g., DAC and Goodwill
- **Deferred tax provision:** balance sheet revaluation will create profit /loss, leading to an additional deferred tax asset / liability




*Capital requirements*

- **SCR =** first regulatory intervention point
- **MCR =** final regulatory intervention point

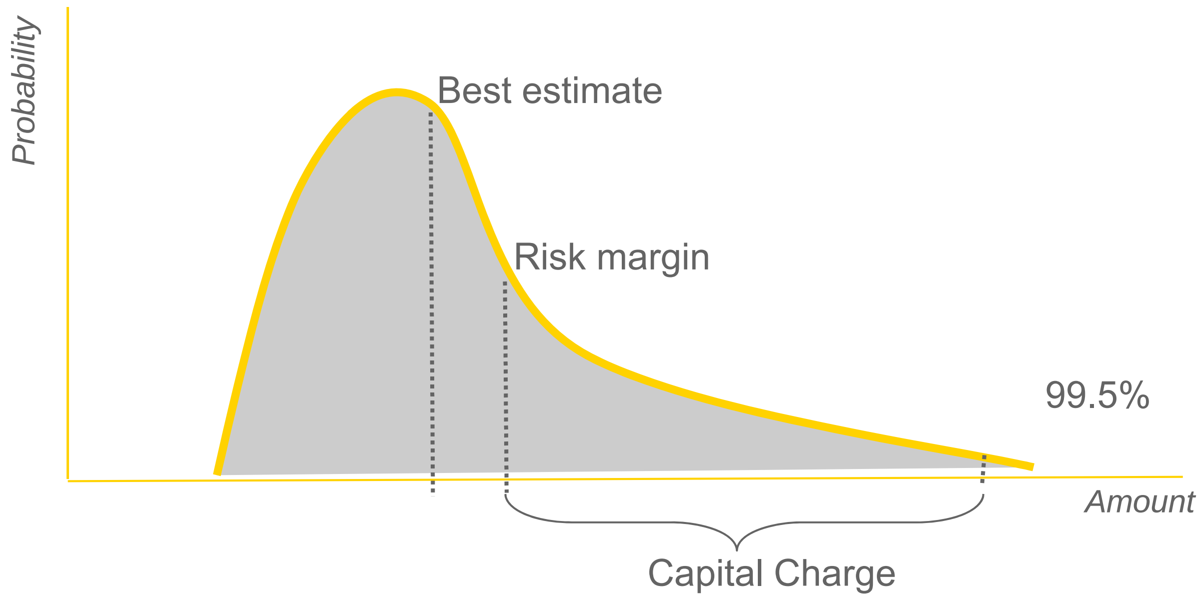
*Technical provisions (gross and ceded)*

Three building blocks, similar to new IFRS:

- **Best estimate** of all future cash flows
- **Discounted** at a risk-free interest rate
- **Risk margin** to capture uncertainty

# Pillar 1
## Solvency capital requirement

- Solvency capital requirement (SCR) is calibrated to achieve **99.5%** probability of survival (**value-at-risk**) over a **one-year time period**




- There are *two alternative* approaches for calculating the SCR:
    - Standard formula
    - Internal model



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# Pillar 1
## Standard formula

- Factor-based calculations and stresses on Solvency II basis balance sheet amounts
- Broadly:

  Insurance Risk *(premium, reserve, catastrophe, lapse)*
  \+ Counterparty Risk *(reinsurance, bank deposits, intermediaries etc)*
  \+ Market Risk *(interest rates, FX, equity, property, spread, concentration, illiquidity premium)*
  \+ Operational Risk
  \- (Diversification Benefit)
- Companies able to use undertaking specific parameters (USPs) in certain instances
- Same rules for all companies in industry – "one size fits all" model means it likely fits no one!
- Latest iteration given in "QIS5" exercise completed in November 2010, EU report has been published…

# Pillar 1
## QIS5 highlights

Comparison of results for total industry (both life + non-life companies):

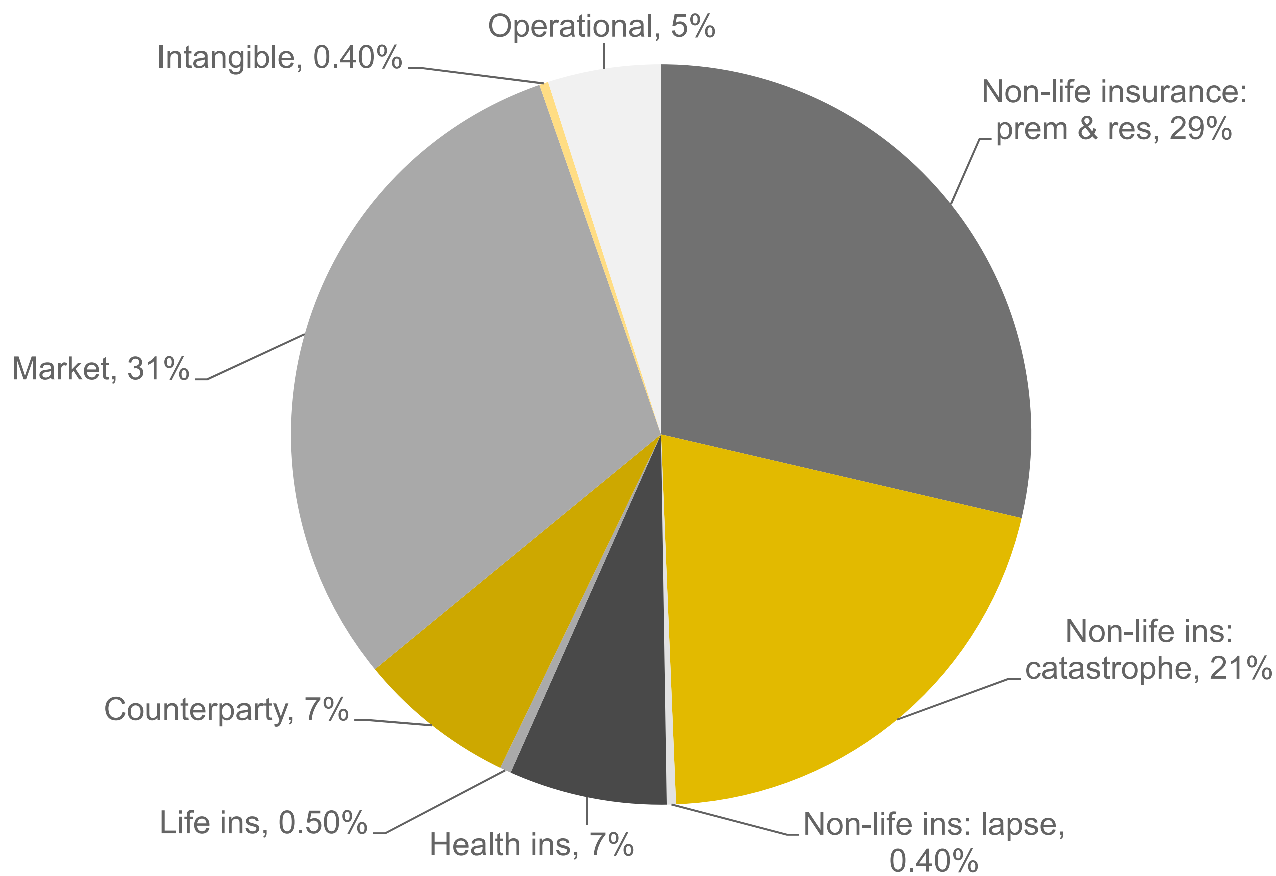
| | Current basis | QIS5 |
|---|---|---|
| **Solo entities** | *% of total assets* | |
| Capital requirement | 3.1% | 7.4% |
| Available capital | 10.0% | 12.9% |
| **Surplus capital** | **6.9%** | **5.3% ↓** |
| | | |
| **Group entities** | | |
| Capital requirement | 4.0% | 5.0% |
| Available capital | 5.8% | 8.1% |
| **Surplus capital** | **1.8%** | **3.1% ↑** |

**Non-life companies**

- Generally small reductions in technical provisions, since discounting > risk margins
- Risk margins typically around 10% of technical provisions
- Standard formula comes out around **25% higher** than internal models for groups

# Pillar 1
## QIS5 highlights

**Breakdown of risks for "average" non-life[1] insurer:**




*[1] Includes health products similar to non-life (workers comp, personal accident, etc.) and incidental life business*

# Pillar 1
## Internal models

- Developed by the firm and needs approval from regulator, demonstrating compliance with a number of tests
- Partial internal model approach is allowed:
  - Can model only specific risks that are not handled effectively by standard formula
- Internal model approach is likely to be preferred where similar internal models are already in use and for complex organizations *(Standard formula can be penal)*
- **234** undertakings submitted results from Internal Models in recent QIS5 exercise
- In order to attain internal model approval, companies must satisfy 7 tests:
  1. Use test - *Model must be embedded and used in the business*
  2. Statistical quality standards - *Accuracy of data, methodology and assumptions*
  3. Calibration standards - *Must be consistent with SCR framework (99.5% over 1 yr)*
  4. Profit and loss attribution
  5. Validation test
  6. Documentation standards
  7. External models and data

# Pillar 1
## Internal models approval process

- Onerous process to get approval. Pre-application template has over 80 sections to complete simply laying out what <u>will be</u> in the submission (!!)
- In UK, 14 separate items will need to be submitted...thousands of pages
  - A. Cover Letter
  - B. Written declaration from the Board of the firm
  - C. Copy of the Application Approval from the Board of the firm
  - D. Results of the latest ORSA and details of the firm's business and risk strategies
  - E. Scope of application for full and partial internal models and model
  - F. Risk management process and risk profile
  - G. Self-assessment
  - H. Technical characteristics of the internal model
  - I. External models and data
  - J. Model governance, systems and controls incl. copy of organizational charts
  - K. Independent review/validation report
  - L. Policy for changing the full / partial internal model and other policies for internal model governance
  - M. Plan for future model improvement
  - N. Capital requirement

# Pillar 2
## Own Risk and Solvency Assessment (ORSA)

*The entirety of the processes and procedures employed to identify, assess, monitor, manage, and report the short and long term risks that the business faces or may face and to determine the own funds necessary to ensure that its overall solvency needs are met at all times.*

- It is the <u>firm's own view</u> of required capital, whereas Pillar I is the regulatory view
- Aim is to enhance link between internal capital needs and risks business is exposed to
- Main focus on demonstrating good:
  - Risk management framework
  - Systems of internal control
  - Corporate governance
- Will need to be fully documented and independently (externally?) assessed
- It is both…
  - An **internal assessment process** and as such should be embedded in strategic decisions
  - An effective mechanism to **demonstrate regulatory compliance** around Pillar 2

# Pillar 3
## Disclosures

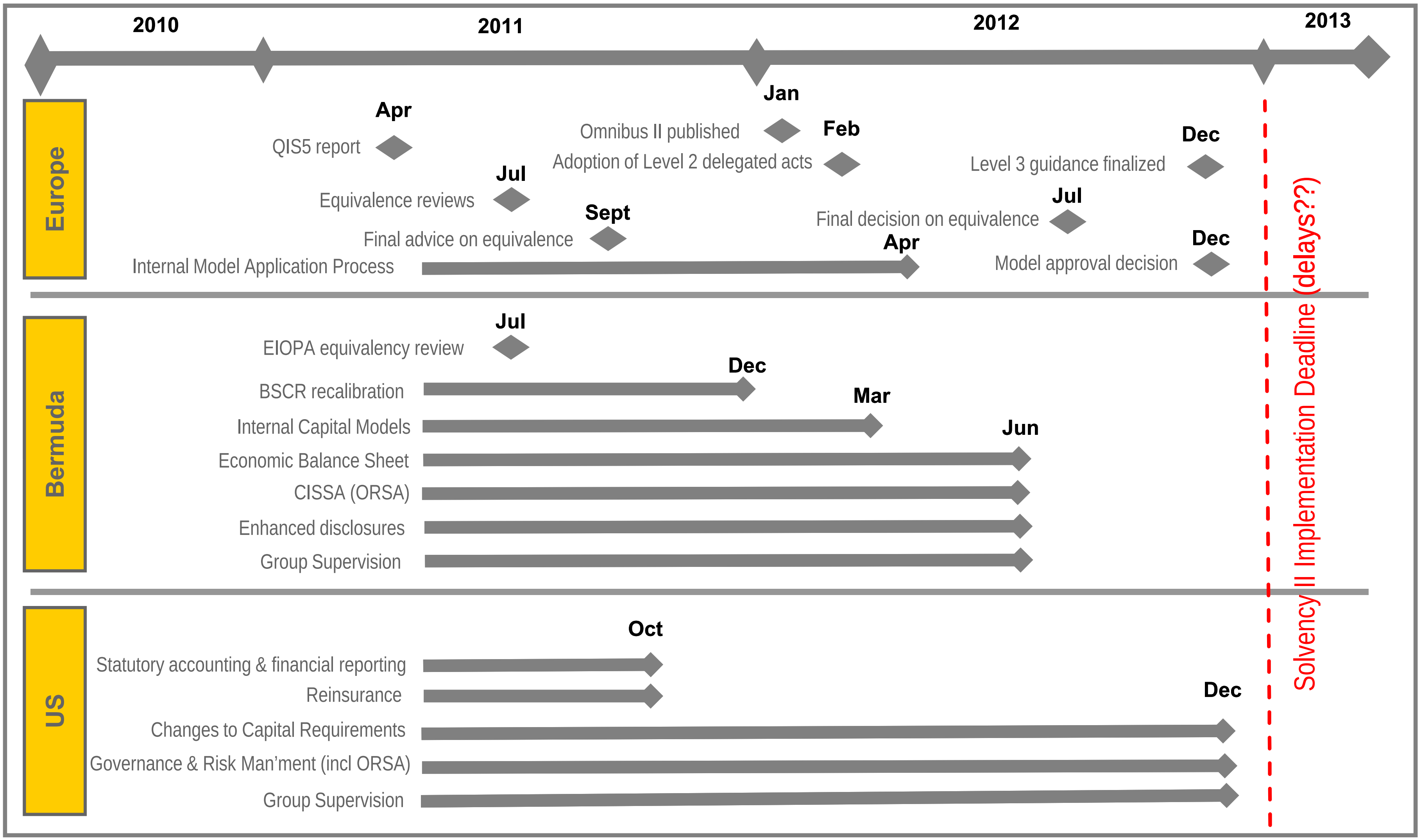
- Pillar 3 requires the following disclosures:

| Regulatory Disclosures | Public Disclosures |
| --- | --- |
| Regular Supervisory Reporting – RSR<br>Qualitative information to regulator<br>Full report every three years<br><br>Quantitative Reporting Template – QRT<br>Standardized financial reporting<br>Annually in full / Quarterly to support MCR | **Solvency and financial condition report — SFCR**<br>Public disclosures<br>*at least annually*<br><br>**Extracts from Quantitative Reporting Templates** |

- Extensive **additional disclosures** compared with US GAAP / SEC filings
- **External audit** may be required for some parts, no firm determination yet
- A **written disclosure policy** needs to be approved by the management body
- Speed of reporting required will be a particular challenge…
  - Narrative RSR and SFCR reports need to be produced **within 14 weeks** of year end
  - Quantitative templates **within 6 weeks** for quarterly reporting, 16 for annual

# Current state of play

## Timeline



# Third country equivalence
## Background

Solvency II equivalence is defined at three levels:

| | Reinsurance supervision *(Article 172)* | Group solvency calculation *(Article 227)* | Group supervision *(Article 260)* |
|---|---|---|---|
| ***Affects*** | ***Non-EU reinsurers*** | ***Groups with EU parent*** | ***Groups with non-EU parent*** |
| Non-equivalence | May have to post collateral in EU | Required to use Solvency II basis for foreign entity's contribution to group solvency calculation | EU-level holding company needs to be established, regulated by EU supervisor |
| Equivalence | Collateralization not required | Can rely on local capital calculation for foreign entity (eg RBC for the US) | Rely on domestic supervisor for group regulation |

- **Switzerland**, **Bermuda** *(all articles)* and **Japan** *(Article 172 only)* have been deemed "largely equivalent" (ie with caveats) in recent Consultation Papers (NB this is still draft recommendation)
- **US** is not being assessed but likely to be treated under "transitional arrangements", where decision deferred for a few years (maximum 5 years) to give time to prepare

# Third country equivalence
## United States

- EU report identified a number of issues with assessing equivalence for US including:
  - The lack of a single, central regulator
  - The absence of any group supervisory framework
  - Professional secrecy, especially with NAIC as does not act as a supervisory authority

- US has launched the “Solvency Modernization Initiative” to bring its own system up to date

- In particular, NAIC has just released a Consultation Paper on US version of the ORSA, requiring:
  1. Documented description of the Risk Management Policy
  2. Quantitative measurements of risk exposure in normal and stressed environments (certain stresses defined by NAIC)
  3. Prospective solvency assessment, on regulatory and economic basis, over next 3-5 years

- NAIC also meeting to discuss reforms to collateralization rules

*…”Solvency II” type framework coming to the US in the very near future!*

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