



**30TH ANNUAL CONFERENCE**

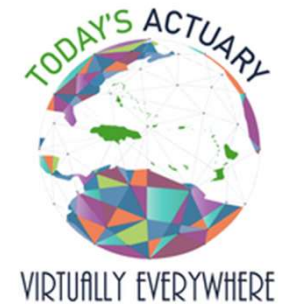
# **Global Trends in Risk Based Capital Regulation**

November 30th, 2020  
9:00 am EST



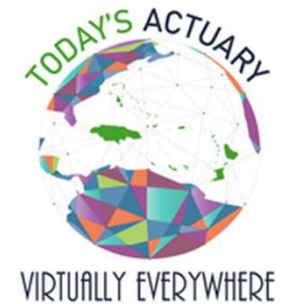
## Agenda

- Introduction
- Risk Based Capital regulation
- Solvency II
- Partial implementation
- Development phase
- Implications



## Introduction

- Standard Life (1998-2010)
- Hymans Robertson (2010-2012)
- Scottish Friendly (2012-2018)
- RL360 (2018-)



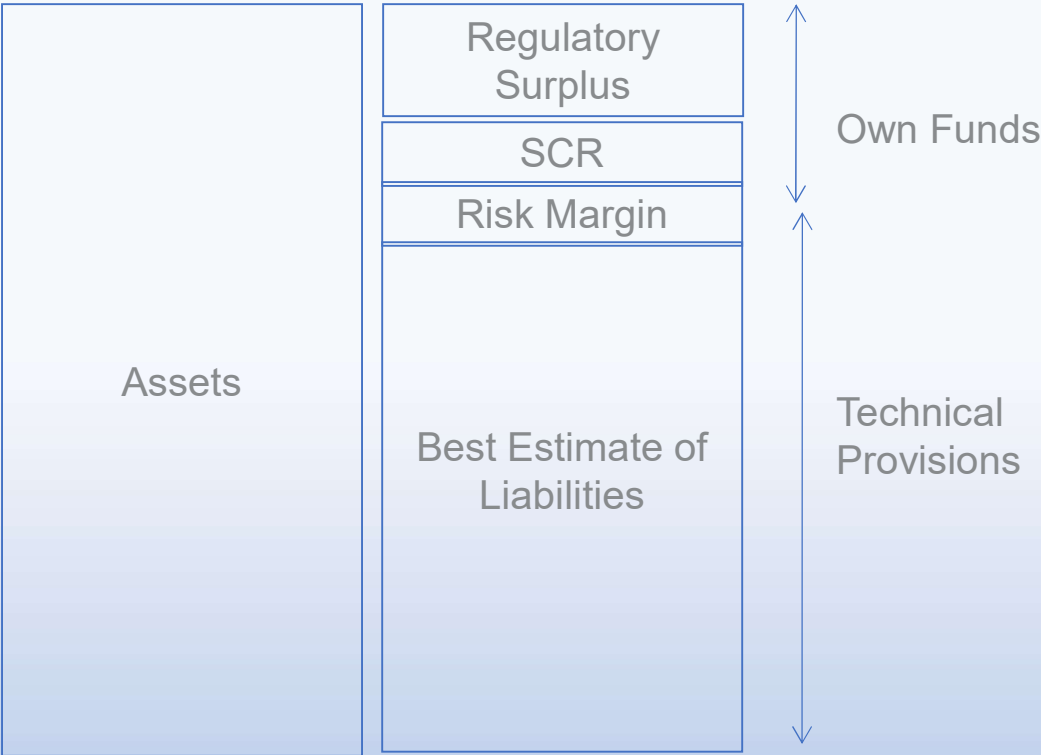


## Risk Based Capital regulation

- Historic regulations
  - Based on size
  - Used reserves, sum assured, number of policies
- Risk Based Capital
  - Capital requirement linked to risk
  - Three pillars approach
    - Solvency and capital adequacy
    - Own Risk & Solvency Assessment
    - Disclosure



# Risk-based capital Balance sheet



Minimum Capital Requirement (MCR) must also be calculated



## Solvency Capital Requirement (SCR)



- Firms must calculate SCR quarterly and report this to the regulator
- The SCR must be covered by an equivalent amount of assets in excess of liabilities. (In the UK, if the SCR isn't covered then a recovery plan must be submitted to regulator.)
- SCR is determined using a risk-based approach
- Capital requirement calculated for a number of prescribed risks
- Capital requirements for different risks then aggregated to determine overall SCR



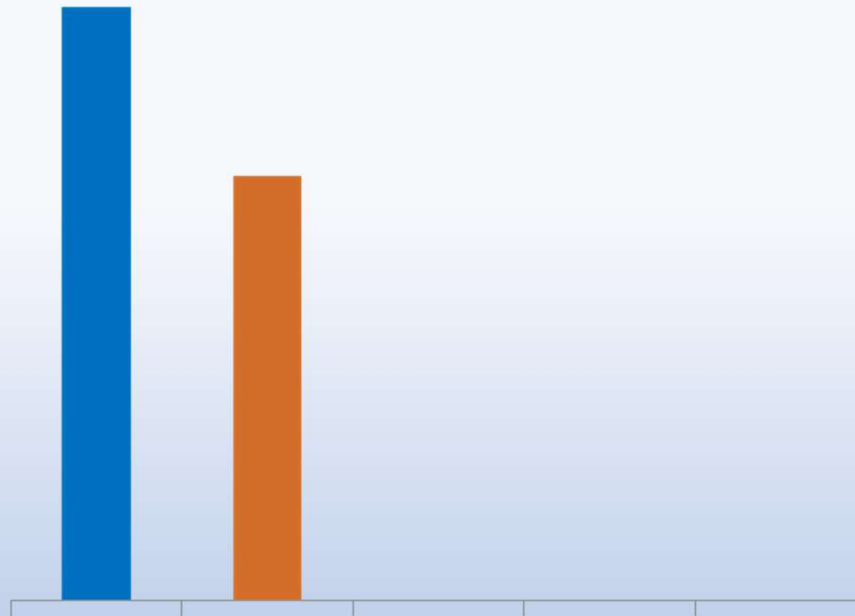
## Approach to stressing

- Prescribed stresses for each risk considered.
- Each stress should reflect a 99.5<sup>th</sup> percentile.
- “The SCR should correspond to the Value-at-Risk of the basic own funds of an insurance or reinsurance undertaking subject to a confidence level of 99.5% over a one-year period.”
- Capital requirement for each risk is the change in the net value of assets and liabilities under the stress scenario



## SCR Example

Base case

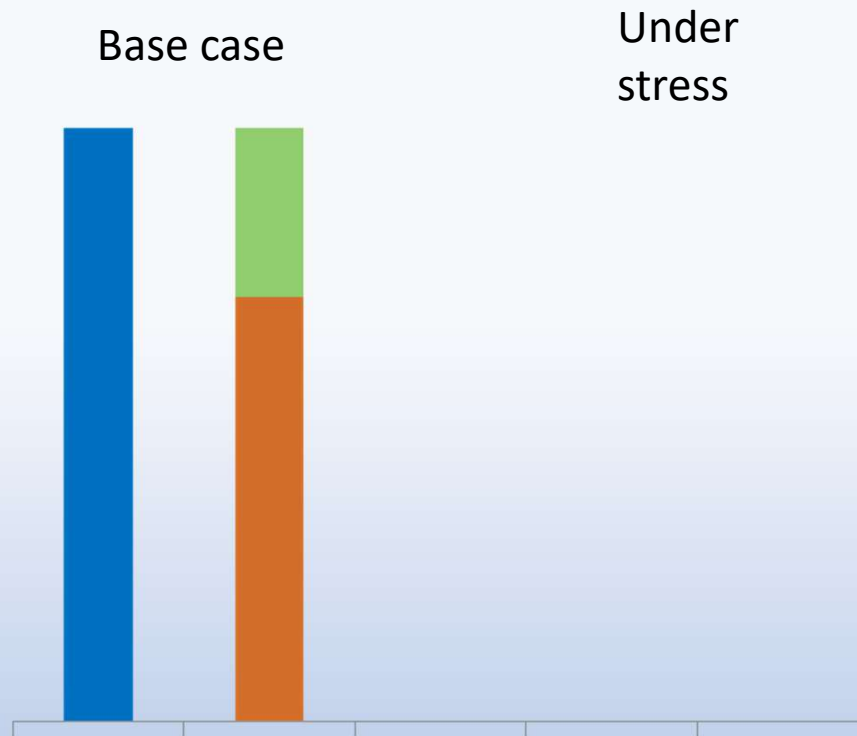


Assets
Liabilities
Surplus
Capital required





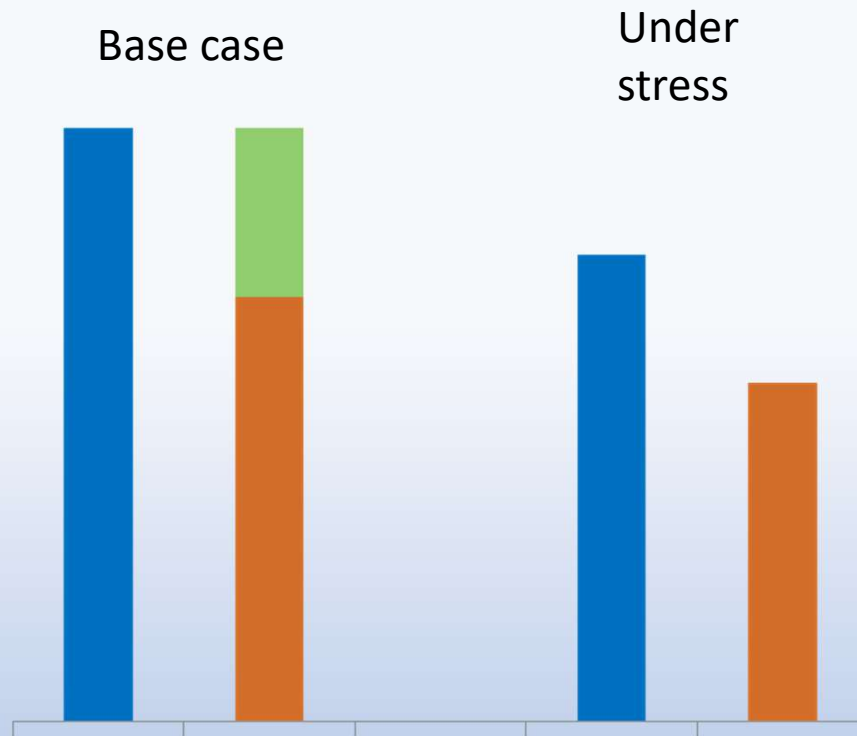
# SCR Example



Assets
Liabilities
Surplus
Capital required



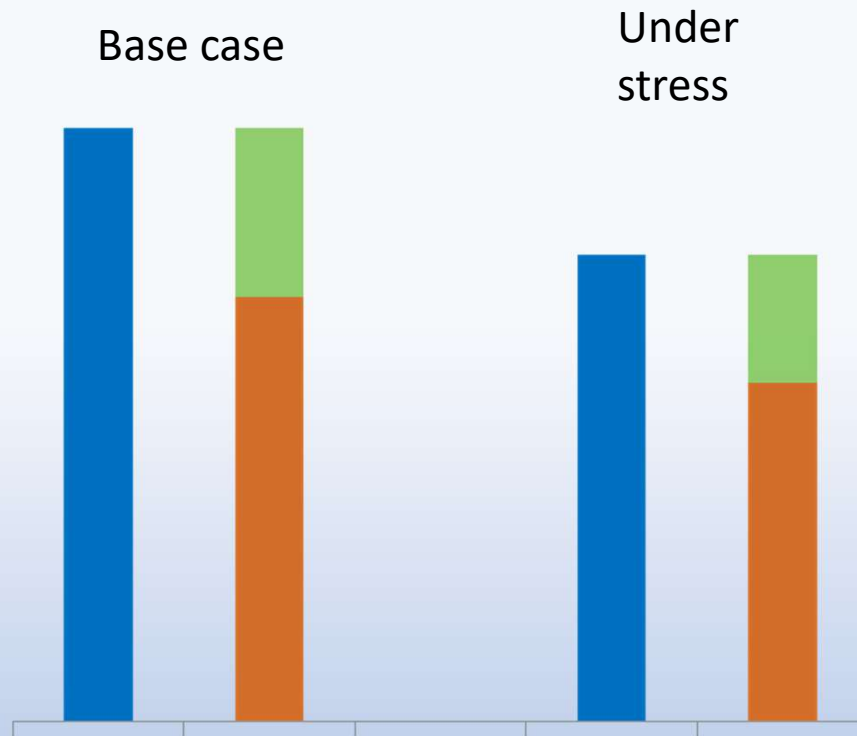
# SCR Example



Assets
Liabilities
Surplus
Capital required



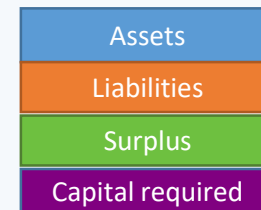
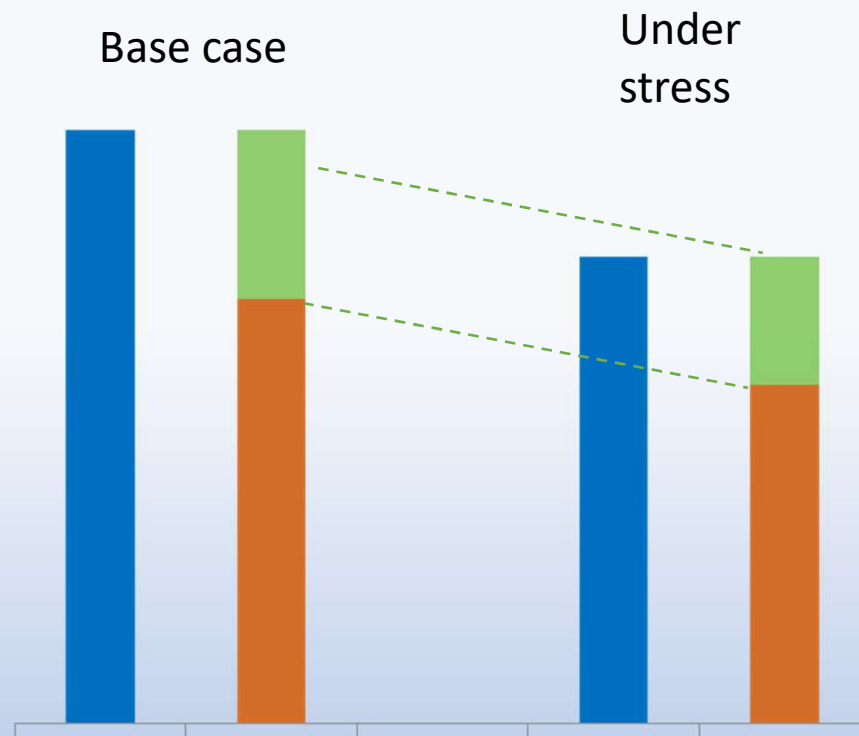
# SCR Example



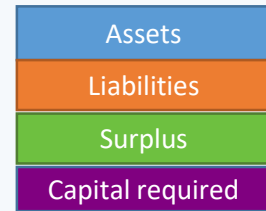
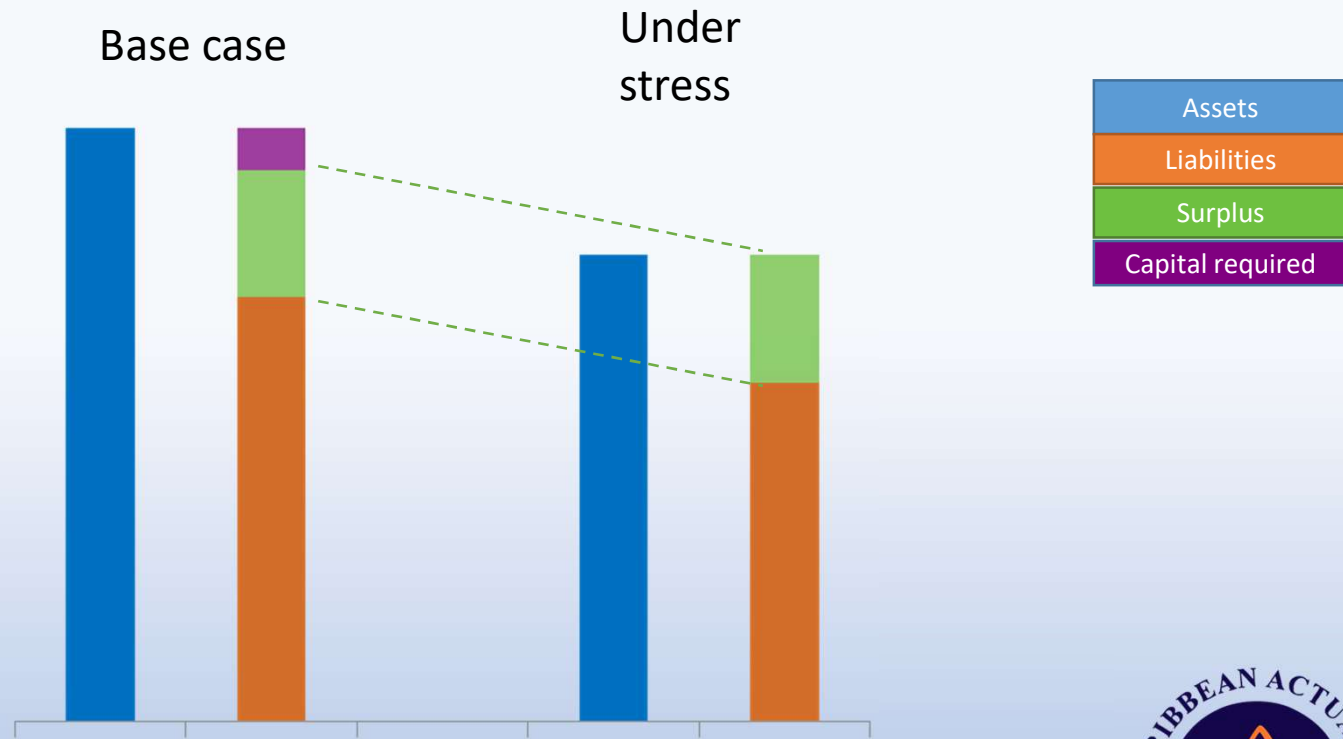
Assets
Liabilities
Surplus
Capital required



# SCR Example



# SCR Example





## Solvency II timeline

- 2009 Solvency II Directive passed by European parliament
- 2009 Level 1 framework directive published
- 2010 Level 2 implementing measures published
- 2011 Level 3 supervisory guidelines published
- 2010-2013 Quantitative Impact Studies
- 2011 Omnibus II directive published (January)
- 2013 Solvency II expected to be implemented (1 January)
- 2014 Omnibus II vote
- 2016 Solvency II expected to be implemented (1 January)





## Solvency II – three pillar approach

- Pillar 1 – Quantitative Requirements
  - Balance sheet evaluation
  - Solvency Capital Requirement (SCR)
  - Minimum Capital Requirement (MCR)
- Pillar 2 – Qualitative Requirements
  - System of Governance
  - Own Risk & Solvency Assessment (ORSA)
  - Supervisory Review Process
- Pillar 3 – Disclosure
  - Annual published Solvency and Financial Condition Report (SFCR)
  - Regular Supervisory Report (RSR)





## Solvency II – Pillar One

- QRTs and NSTs must be prepared and submitted to regulator
- Some templates required quarterly, some annually
- National specific templates often replace regulatory disclosures pre-Solvency II
- Templates to cover balance sheet, liabilities, investments, capital requirements, own funds





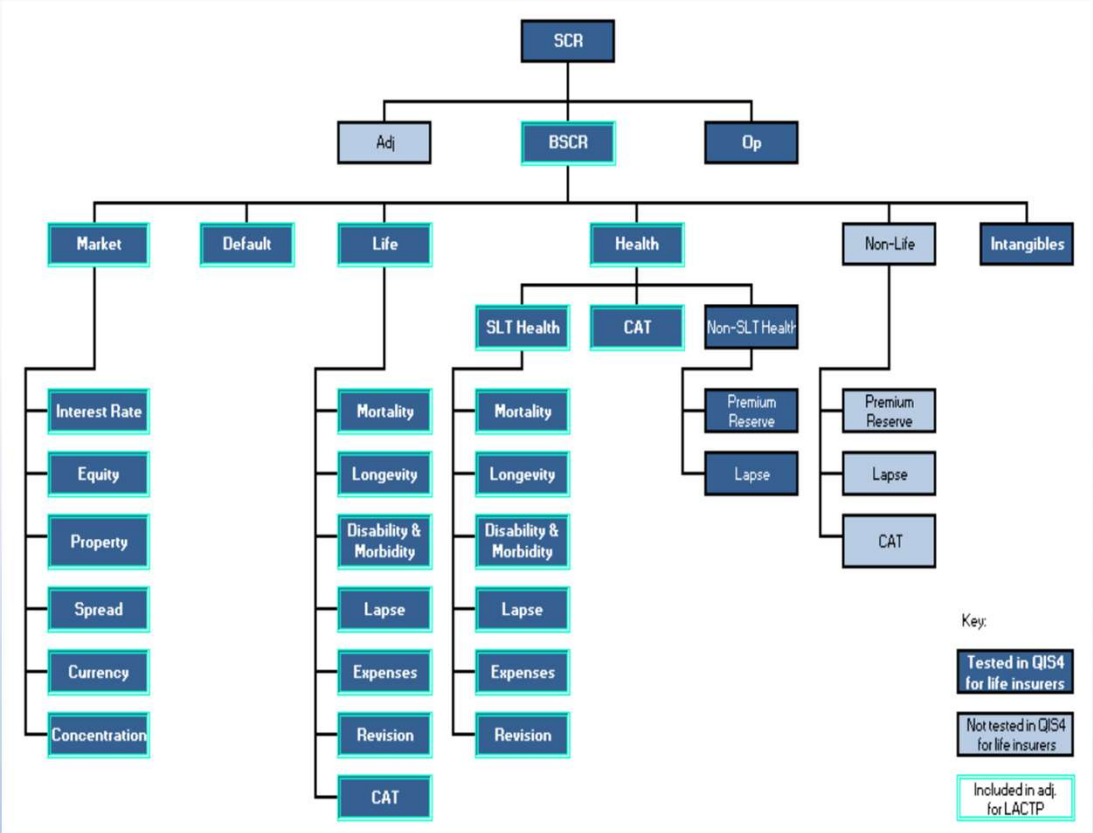


## Solvency II – Pillar One

- Firms must calculate and report SCR annually
- The SCR must be covered by an equivalent amount of assets in excess of liabilities. If SCR isn't covered then recovery plan must be prepared
- SCR determined using risk-based approach
- Two approaches to calculate SCR: standard model or internal model
- Internal model should result in lower capital requirement
- But require regulatory approval to use internal model for calculating SCR
- Can also use “partial internal models” to calculate SCR



# Risks considered





## Solvency II – Pillar Two

- ORSA is insurer's assessment of risk capital it needs to hold at any time.
- Involves setting up a framework to determine and manage this risk capital (e.g., governance structures).
- Should also be an internal risk assessment tool as well as a supervisory tool
- All insurers must carry out an ORSA regularly
- They must have processes in place to identify and measure the risks it faces in the short and long term
- The ORSA must form an integral part of the business strategy
- Should recalculate the ORSA following significant changes to risk profile
- Must inform regulator of results which drop out of ORSA
- Highlight significant deviations from SCR
- Also need to provide information about governance and risk management



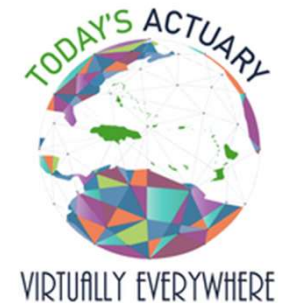
## Solvency II – Pillar Three

- Disclosure requirements
- Solvency and Financial Condition Report (SFCR)
  - Business performance
  - Governance
  - Risk profile
  - Valuation basis
  - Capital management
- Regular Supervisory Report (RSR)



## Solvency II experience

- Development
  - QIS exercises
  - Bank of England workshops
- Implementation issues around IT
- Board implications
- Reporting timescales
- Documentation requirements
- Risk governance impact
- Impact of ICA
- Impact on auditors
- Impact on regulators



## Partial implementation - Isle of Man

- Pillar 1 implemented 2018
  - Similar calibration (99.5%)
  - Reduced number of QRTs but covering same areas
  - Timescales longer
- Pillar 2 implemented 2019
- Pillar 3 in development



## Developing – Hong Kong and Labuan

- Currently at QIS stage
- Similar calibration
- Some bespoke elements (e.g. Operational risk)





## Implications

- Lessons learned from Solvency II
  - Insurers - risk governance, risk appetite, Board training
  - Actuaries – capital management, modelling capabilities
  - Auditors
  - Regulators
- Launching new insurance company – reporting timescales
- Group solvency challenges

