Outline

• Background and the macro view
• Costs and Benefits of Modelling
• Deriving Value
• The Alternate View
The Macro View

Statutory Objectives of Regulators

FCA
• To secure an appropriate degree of protection for consumers.
• To protect and enhance the integrity of the UK financial system.
• To promote effective competition in the interests of consumers

PRA
• The safety and soundness of these firms and, specifically for insurers
• To contribute to the securing of an appropriate degree of protection for policyholders

EIOPA
• Better protecting consumers, rebuilding trust in the financial system.
• Ensuring a high, effective and consistent level of regulation and supervision taking account of the varying interests of all Member States and the different nature of financial institutions.
• Greater harmonisation and coherent application of rules for financial institutions & markets across the European Union.
• Strengthening oversight of cross-border groups.
• Promote coordinated European Union supervisory response.
Insurance and the UK economy

The UK insurance industry is the largest in Europe and the third largest in the world. It plays an essential part in the UK’s economic strength, managing investments of £1.8 trillion (equivalent to 25% of the UK’s total net worth) and paying nearly £12bn in taxes to the Government.

It employs around 315,000 individuals, of which more than a third are employed directly by insurers with the remainder in auxiliary services such as broking.
Onus horriblis

SII places the onus for the running of the Internal Model on the board.

Article 116
“The administrative, management or supervisory body shall have responsibility for putting in place systems which ensure that the internal model operates properly on a continuous basis”

Article 120
“The administrative, management or supervisory body shall be responsible for ensuring the on-going appropriateness of the design and operations of the internal model, and that the internal model continues to appropriately reflect the risk profile of the insurance undertaking concerned”

The regulation ensures that the modelling team get their ‘seat at the table’ but without making actuaries only a regulatory requirement. Once there, it’s up to the actuaries themselves to demonstrate value – the regulation will not do this for us.

Benefits of Modelling

Regulation is driving the use of models within the insurance industry. Modelling provides a fundamental benefit to insurance companies.

• Modelling a process requires a thorough understanding of the underlying risks
• Discovering drivers and dependencies
• Use as a ‘What-If’ engine
• Identifying areas for potential growth

Financial modelling is something that we would be doing regardless of regulatory requirements.
Deriving Value

Governance

Overheads
- Policies, Terms of Reference, independent review, … can’t we just get on with it?
- More information for Boards and Committees to digest (too much?)
- Evidential requirements

Value
- Empowerment and Escalation – opportunity to ensure boards and committees are digesting the right information
- Less time spent on preparing papers, more on preparing ideas
- Use committees for Discussion & Decision, not to Update or Inform
Documentation

Overheads
• Design, methodology, data, processes, techniques, justification, expert judgements, assumptions, limitations, … when does it stop?
• It’s three times the work: Technical, Specialist and Executive
• Not the natural strength of the average actuary

Value
• Build trust through documentation and checklists – e.g. for strengths and limitations – avoid constantly changing the model
• Limitations become your to-do list; get them sponsored by the business
• ‘Upsourcing’: identify the key technical documents and ask Board members to summarise and report back to their peers

Validation

Overheads
• Somebody else to check my work…
• Access to sufficiently independent resource and expertise
• Documentation requirements
• Time and resource demands on the modelling team; scope creep

Value
• Some firms are inventing it anyway, but take care with terms of engagement
• Opportunity to rotate team responsibilities
• All feedback is good feedback, as long as materiality is understood
• Dual use validation tests
Data

• More documentation – processes, expert judgements, quality criteria, etc.
  • overheads for the business as well as modelling teams
• Investment in new systems and IT
• Time spent defining CAA criteria
• Coercing data producers

Overheads

• Efficient modelling processes come from quality data
• Criteria for complete, accurate and appropriate are often the sense checks that
  modellers apply when they first receive the data – codify and pass upstream
• More time for analysis and interpretation
• Communication with the business

Value

Use Test

• Communication, communication, documentation, communication
• Explaining strengths and limitations of the model without invalidating it for use
• Talking about the 1:200 without ignoring the 1:20

Overheads

• Capital allocation as a means of making everybody equally unhappy
• Risk adjusted performance measurement: a major expense of all companies is
  the cost of capital
• Build on the documentation and communication: devolve power to the business

Value
The Alternate View

**Contrary**
- Increased regulation doesn’t add value
- SII has not promoted competition; effective barrier to entry
- PRA don’t like models; what is a 1 in 200 anyway?
- Genuine black swans are off the radar of models (by definition)

**Cynical**
- Models point to recent events rather than sources of future losses
- Value from regulation has been for actuaries and consultancies
- Regulation creates demand and inevitably leads to financial benefit for suppliers
Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.