Internal Model Industry Forum(IMIF): Creating value through internal models

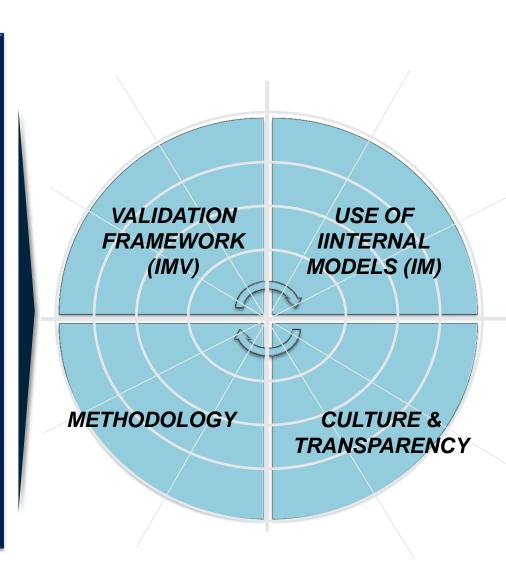
José Morago Group Risk Director at Aviva Plc IMIF's Chairman and the IRM's Deputy Chairman



Key principles for Internal models

Some key principles:

- The model outputs appropriately reflect the firm's risk profile (and is as simple as it can be)
- The model must be designed and built to support decision making
- The model should be understood
- The model should be reliable and trusted



Internal Models – Universe of topics/ hot spots

VALIDATION FRAMEWORK

IMV operating model and process (incl. tools, resources, documentation, approach to independence)

IMV governance

(e.g. IMV policy, roles& responsibilities,escalation,independence)

IMV robustness and on-going improvement process (e.g. IMV controls, IMV cycle)

IM USE

IM's flexibility (incl. less extreme calibrations)

Solvency and capital (incl. business planning, capital allocation and risk appetite) Additional uses of the internal model (pricing, asset portfolio, concentrations etc.)

IMV scope (materiality/ proportionality and firm's risk profile)

Calculation Kernel and validation tools (e.g. IMV of op.risk vs. market risk, dependencies, expert judgement) Model change policy (incl. validation criteria, pass/ fail criteria, communication to regulators etc) IM/IMV reporting to users/Board (incl. validation MI) Board/ executives IM awareness and training

User's/Board's challenge of IM/IMV

CULTURE/TRANSPARENCY

METHODOLOGY /TOOLS

Hot spots

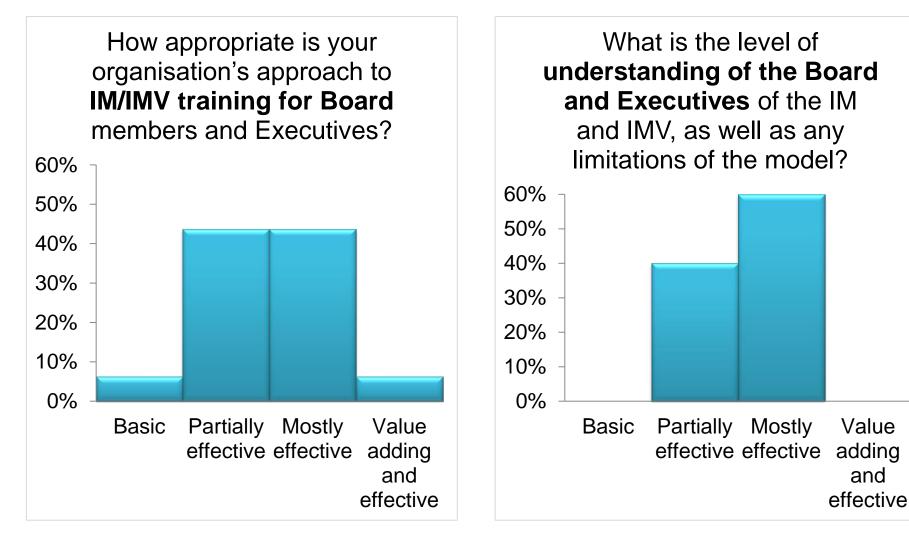
Challenge 1 – Decision makers and recipients of the model need to understand and trust the model

Key questions from the Board: "Wood for the trees"

- How does it work? What are the key drivers?
- Where did you get those assumptions from?
- What happens if I change a key assumption?
- What happens if I try various different scenarios?
- Is there anything missing?
- It is only a model what can't it handle well?
- How do I know that SCR number is even in the right ballpark

Source: Ian Marshal's presentation to the IMIF in June 2014

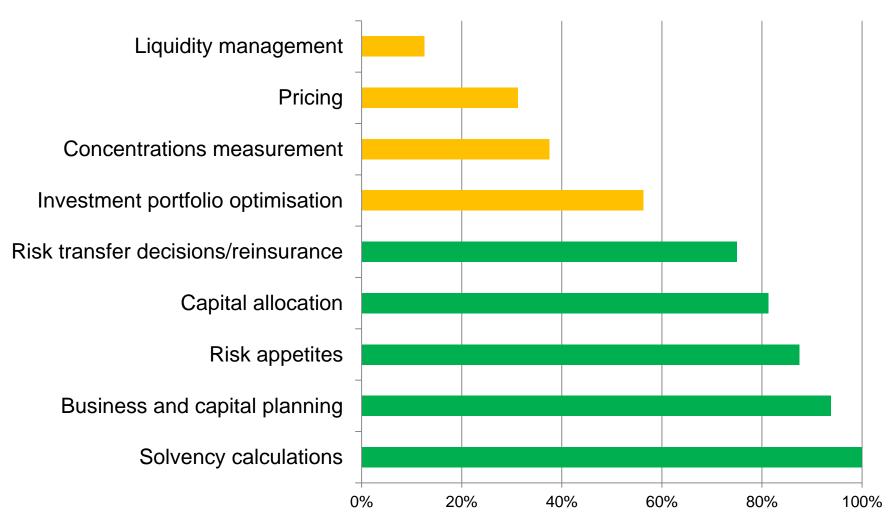
Challenge 1 – More to do on reporting and training to ensure the proper challenge and understanding



Source: IMIF's survey – May 2014

Challenge 2 – The model must be designed and built to support decision making

Main uses of the IM which are currently business as usual (% of respondents)



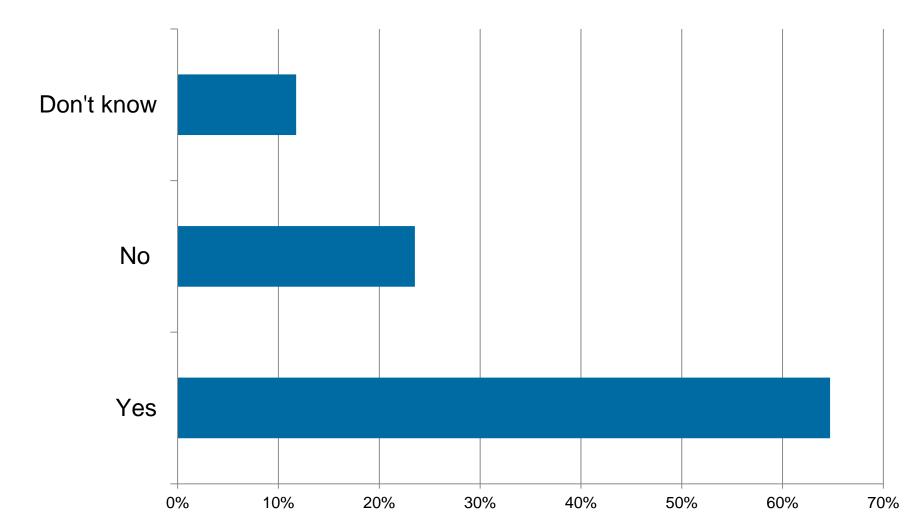
Challenge 3: The model should be reliable and trusted through a robust IMV framework

PRA's perspectives and observations on IMV:

Useful observations on IMV	Weaknesses in the IMV
 Scenarios analysis with impacts aggregating across risk categories that are key to the firm Validation captures expert judgment and degrees of confidence/reliance 	 Lack of Validation MI and/or entry to Board level: undermines the understanding of model strengths and limitations Lack of Proportionality : bottom up approach with lack of focus on the validation of key judgments Tools and testing of model do not
	confirm or inform model robustness
	 Lack of Independence – the challenge of model should be objective

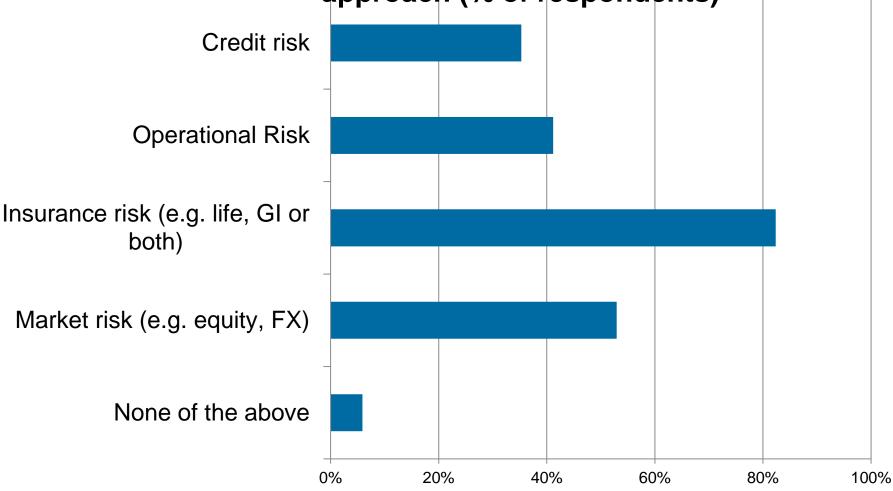
Challenge 3: The model should be reliable and trusted through a robust IMV framework

Is the independence of the IMV formally assessed?



Challenge 4: Still some hot spots in methodology and the calculation kernel

Risk categories where the industry feels most confident in terms of the effectiveness of the IMV approach (% of respondents)



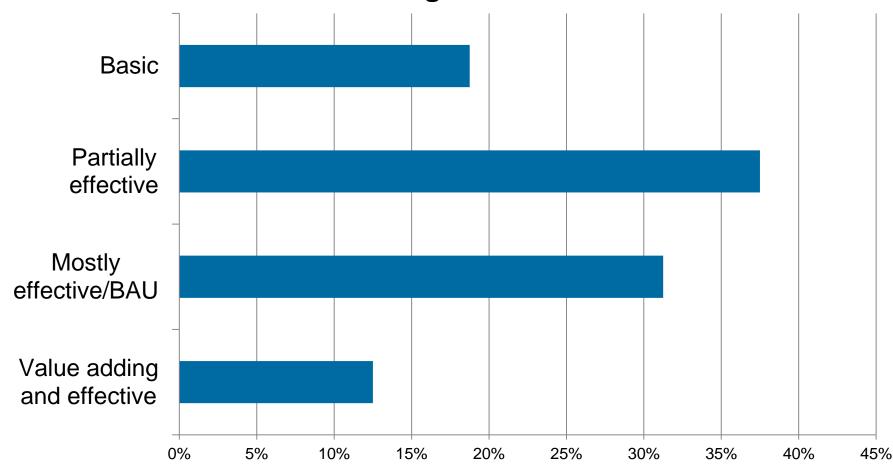
Challenge 5: Ensuring a cost effective and value-adding IMV beyond complying with regulation

IMIF Survey: Only 30% companies assessed IMV as value adding and cost effective

"In order to satisfy the regulator too much time is spent documenting all challenges and responses"

"IMV is ticking a regulatory box, we need to get it to the stage where it adds value to the business" Challenge 5: ... and a value-adding on-going IMV process after day 1 (i.e. IMAP approval)

How effective has the IMV cycle been in the past in terms of ensuring on-going improvement and challenge of the IM?



Internal Model Industry Forum: Creating value through internal models

Over 40 UK Life and Non-life insurance companies involved

Over 100 Members (incl CROs, NEDs, head of IMV etc.)

Support from the PRA and other industry associations (IRM, IFoA, ORIC etc)

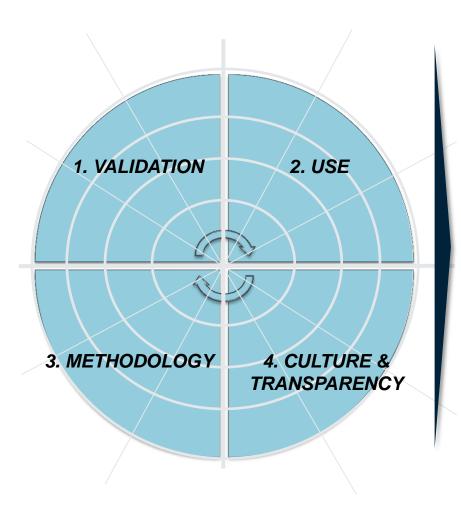
7 workstreams with experts on key topic areas

IMIF Steering committee made of workstreams leads, industry representatives and some consulting firms

IMIF - key objectives:

- Understand the stages of maturity in embedding a value-added IM and IMV Framework and the current stage of the industry.
- Ensure alignment in the industry with regards to the build-up, use and validation of IMs.
- Define best practices and share real life cases and examples for current IM/IMV's challenges
- Communication channel with the regulator, industry associations and other stakeholders
- Focus on the IM/IMV's big questions and less on the technical details.

Workstreams



IMIF workstreams:

- IMV cycle and on-going improvement process.
- IMV governance and IMV operating model.
- Board's understating and challenge of IM and IMV process
- IM flexibility and alternative uses of the IM.
- Validation tools and Model Change policy.
- IMV for operational risk.
- IMV for dependencies & diversification.

Timeline / Next Steps

- Planned IMIF meetings from October
- Inputs based on surveys, roundtables, interviews to IMIF's company members as well as from forum discussions/ presentations
- Test good practice and understand the stage of maturity in embedding a value-added IM/IMV framework.
- Delivery of best practice guidance and document for each of the workstreams

Internal Model Industry Forum

For more information please go to www.theirm.org

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