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

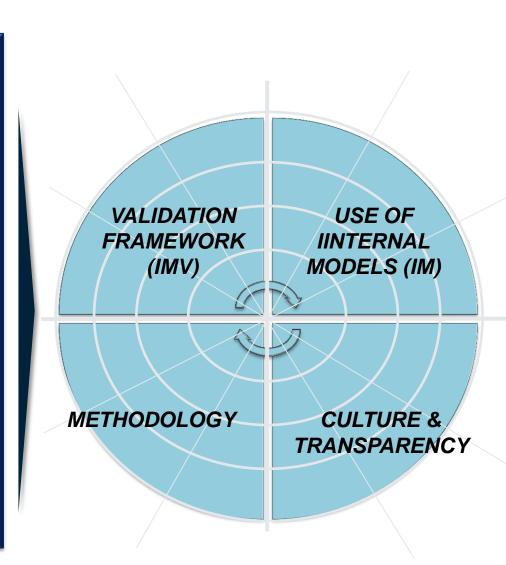
José Morago Group Risk Director at Aviva Plc IMIF's Chairman and the IRM's Deputy Chairman



## 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

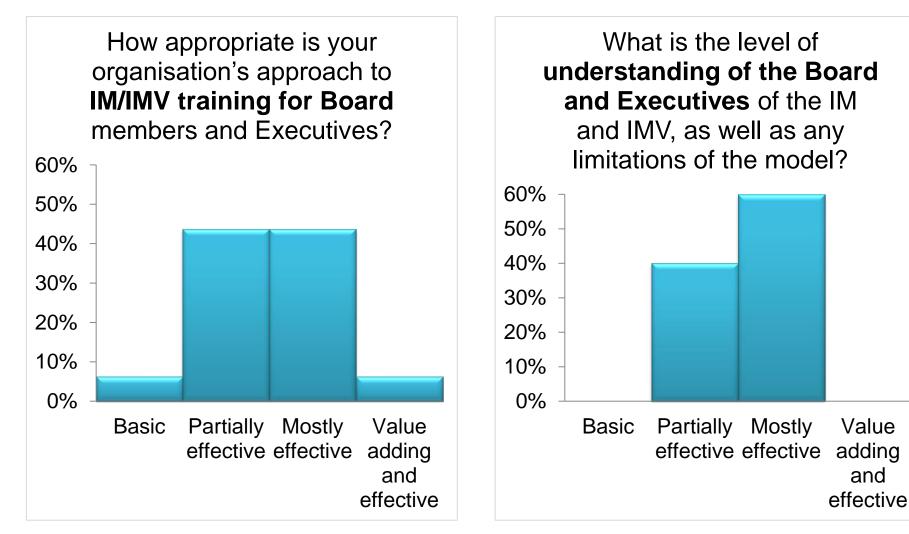
# Challenge 1 – Decision makers and recipients of the model need to understand and trust the model

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

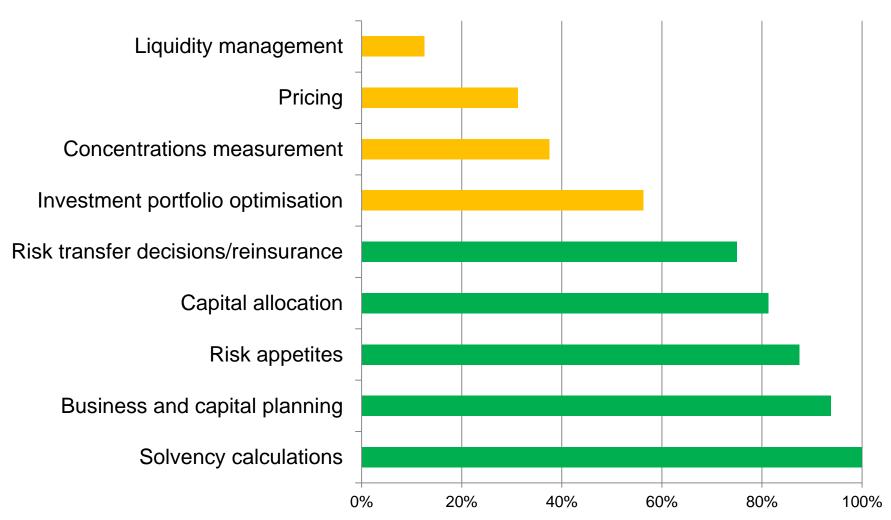
# Challenge 1 – More to do on reporting and training to ensure the proper challenge and understanding



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)



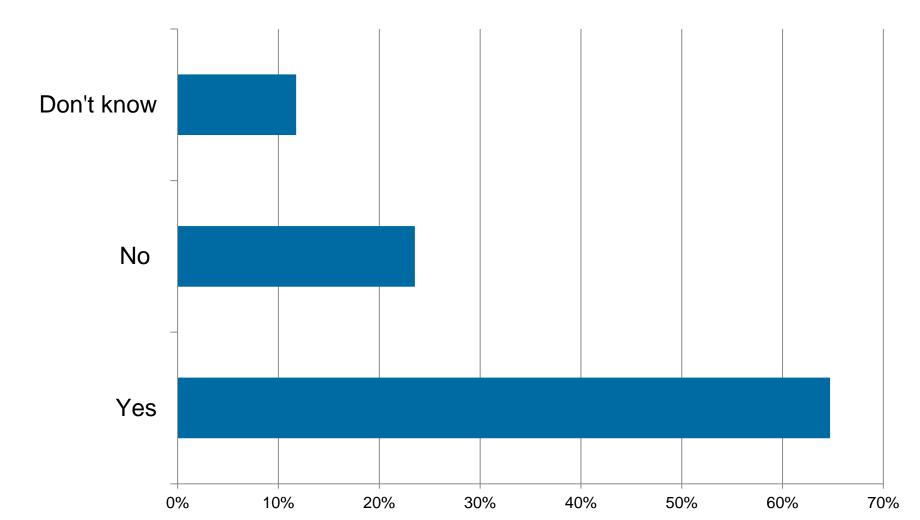
# Challenge 3: The model should be reliable and trusted through a robust IMV framework

### PRA's perspectives and observations on IMV:

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

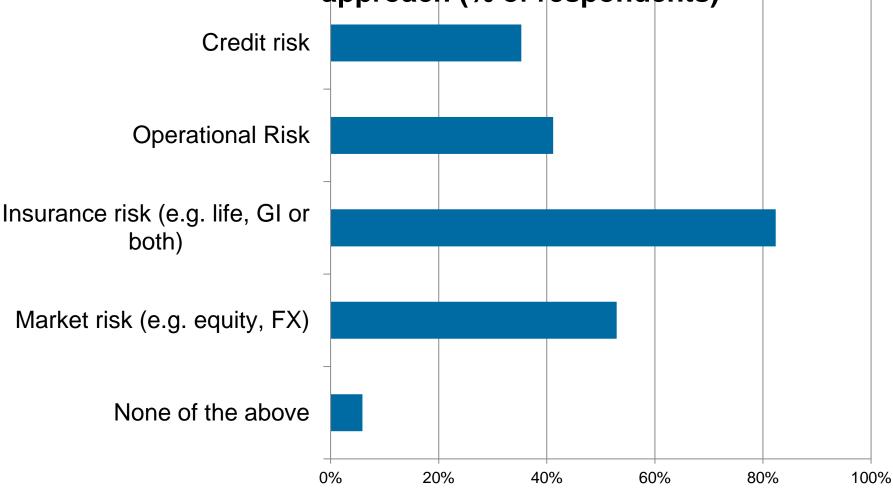
# Challenge 3: The model should be reliable and trusted through a robust IMV framework

### 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)



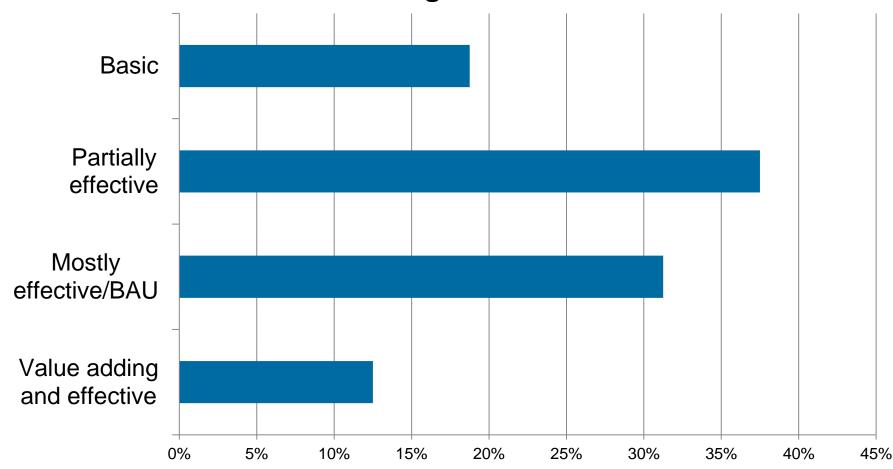
Challenge 5: Ensuring a cost effective and value-adding IMV beyond complying with regulation

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)

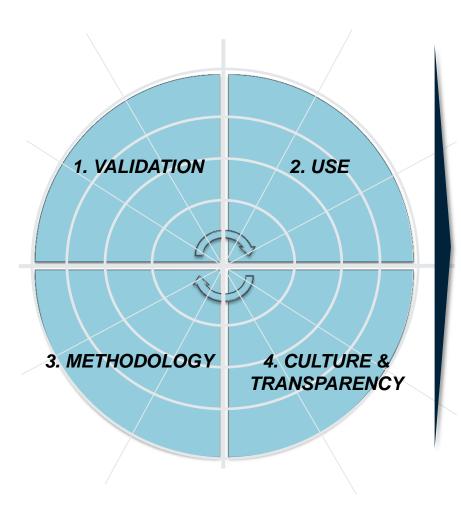
7 workstreams with experts on key topic areas

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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