Use of internal models

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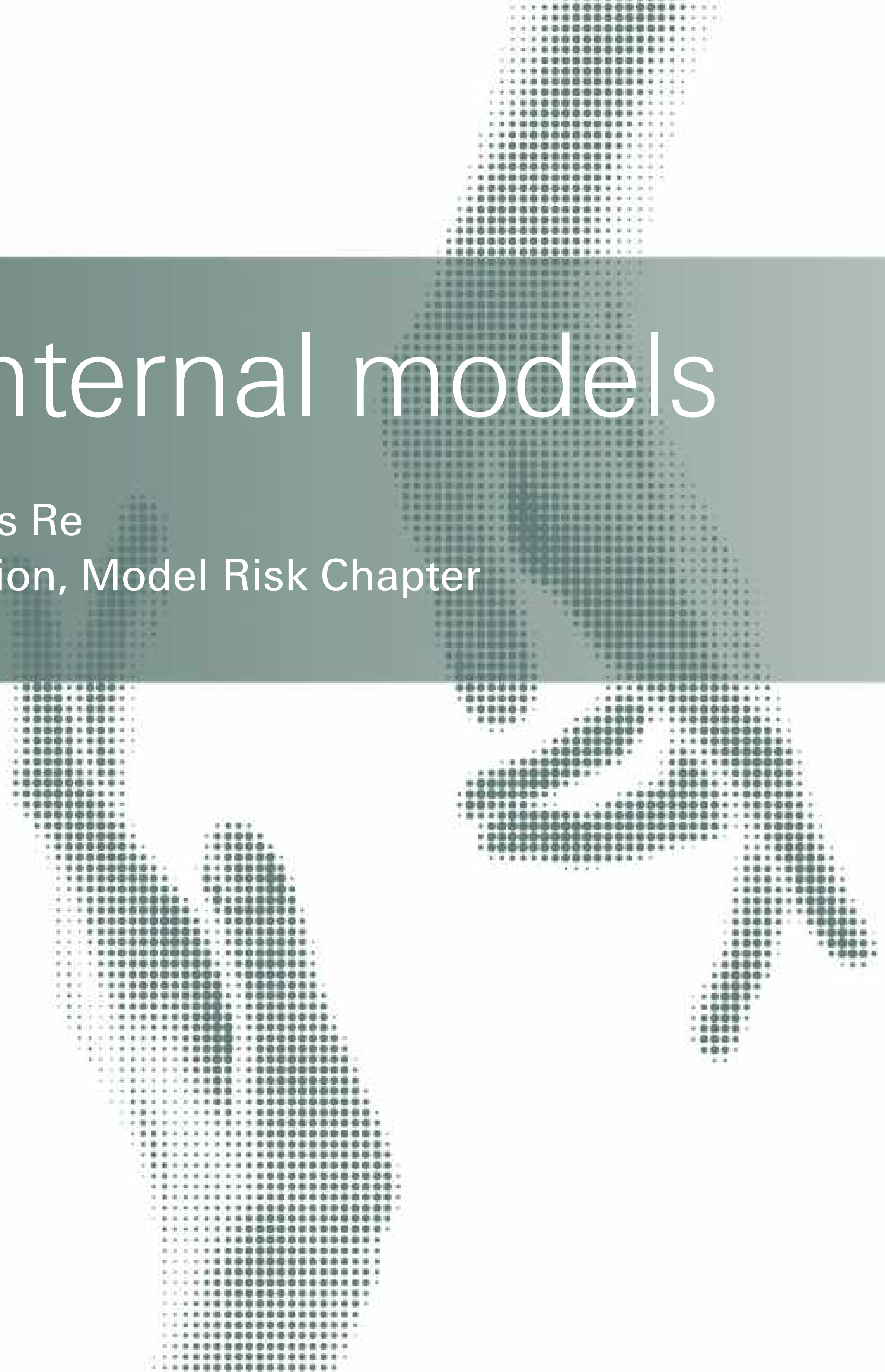

Internal models: a challenge of trust

Trust is the main challenge posed to all, investors, supervisors and management. Each of the parties must ask:

*How can I be sure that modelling is carried out in my **interests**?*

The overarching answer is **comprehensive compliance with the use-test** – we can explain that in more detail when we talk about key success factors.

There are three aspects of internal modelling that create issues of trust. These are the “three Cs”:

- **Complexity**
- **Comparability**
- **Conflict of interest**

The three C's

Internal models in insurance are **intrinsically complex**.

- They provide a model of events in the real world including all the dependencies in the real world. This is complex. This is not simple.
- It has been proposed to address this issue by going for "simple robust benchmark". This can only be unsuccessful.

Comparability is a concern to supervisors and investors.

- Obviously the resulting capital requirement should be comparable between companies. Some supervisors try to address comparability by benchmarking.
- The **true performance metric is the 99.5% VaR**.
- So benchmarking really means getting the SCR (solvency capital requirement) right.

Conflict of interest between the management and the supervisor when it comes to the size of the capital requirement is obvious.

- Management appreciates a low capital requirement while supervisor prefer a higher capital requirement – esp. when in doubt.
- The **use test** helps to address the issue.
- If the company uses the internal model comprehensively the management will take care to get it right in order to avoid taking wrong decisions.

Key success factors

Use test

- The **use test** helps to address the issue of conflict of interest.
- If the company uses the internal model comprehensively the management will take care to get it right in order to avoid taking wrong decisions.
- Insurers' use IMs throughout the business cycle. Insurers are therefore required to ensure that IMs realistically reflect the risks to which they are exposed.

Sound regular validation

- As discussed in the previous presentation

Solid gover-nance

- As discussed in the previous presentation

Bench-marking (correctly)

- Some parties started to misuse the term benchmarking under the (wrong) assumption that a benchmark model exists.
- It does not exist. Benchmarking to a flawed indicator is counterproductive.
- In insurance, the national competent authorities are responsible for testing all these success factors. EIOPA's initiative to support them by providing tools and guidance can be utmost useful.
- An example are **Internal Model On-Going Appropriateness Indicators** (IMOGAPIs).