The Good, Bad and Ugly of Stress and Scenario Testing

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Agenda

- SST – In Theory

- SST – In Practice

- Results presentation

- Lesson learned

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SST – In Theory

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# What is Stress and Scenario Testing? (in layman terms)

1. We make up some adverse scenarios in our heads (and write them down)

2. Then imagine (estimate) how various aspects of the company would be impacted and to what extent

3. Check if controls are in place to mitigate these risks

4. If not, discuss with management on how to manage them in the future and what actions are needed

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SST Framework - Content
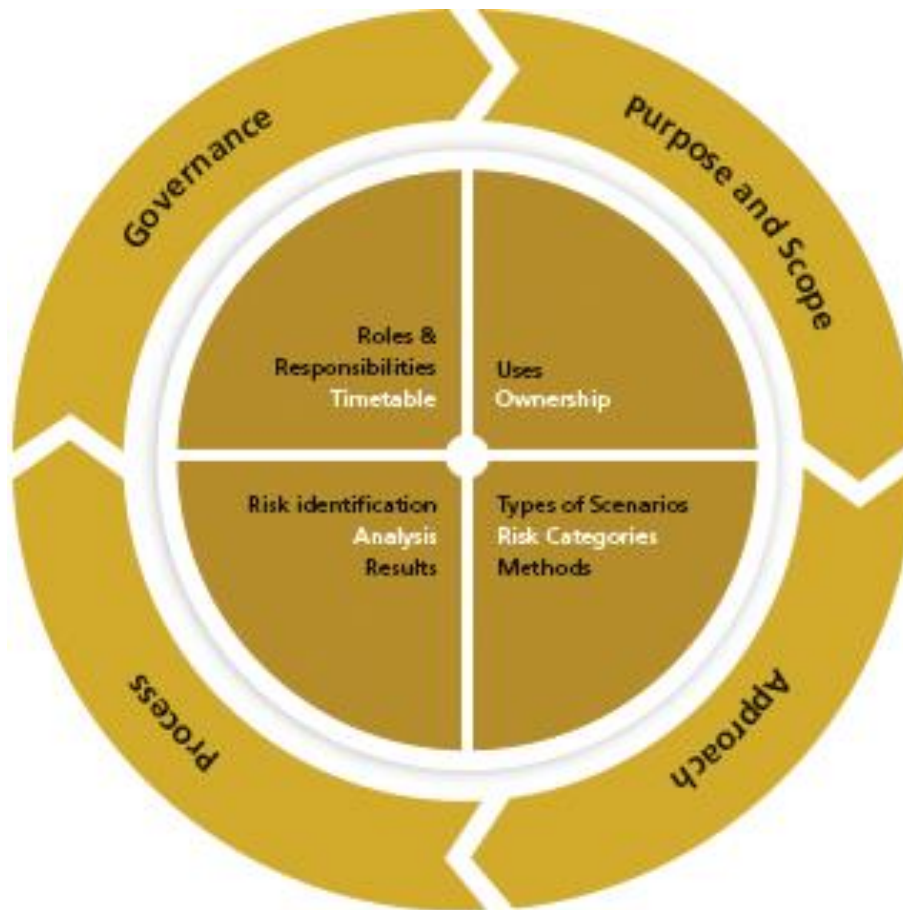
Purpose of SST
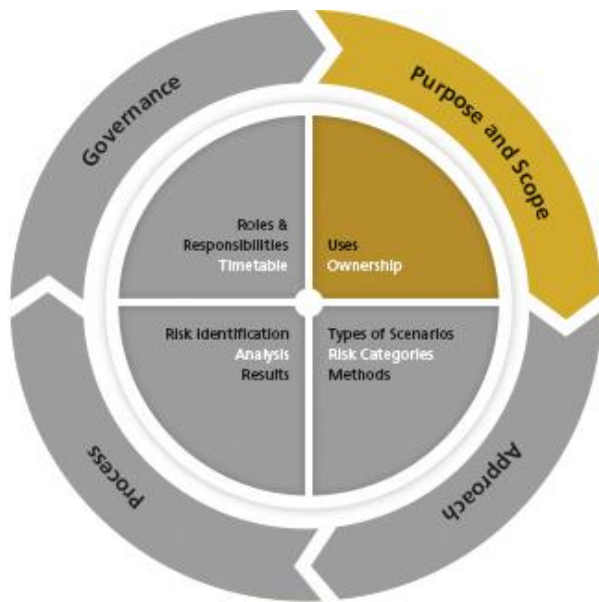
- Test how resilient the firm is under adverse conditions

- Meet regulatory requirements

- Helps identify, analyse and manage risks

- Inform business planning and strategy development

- Help set risk appetite and tolerances

- Model validation

- Validate suitability and feasibility of management actions
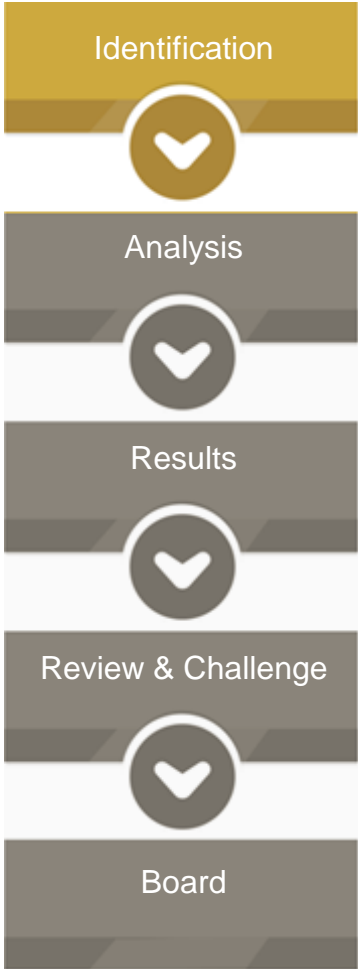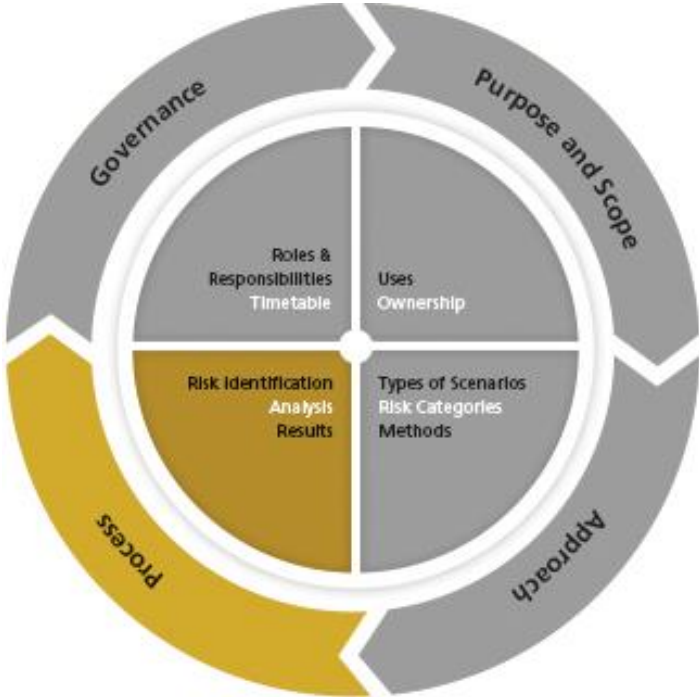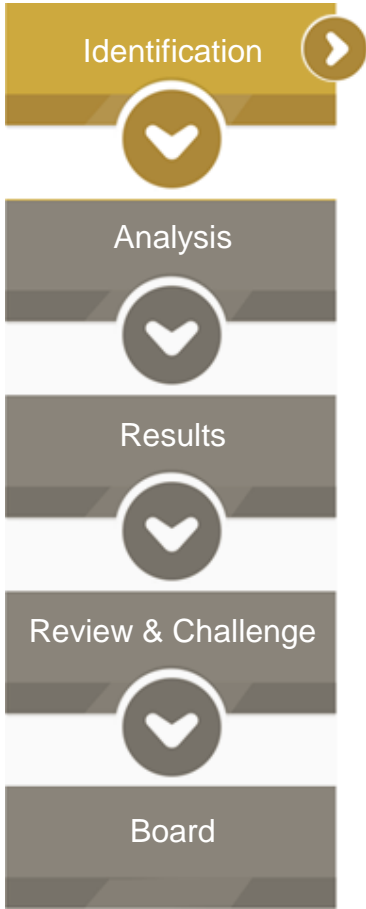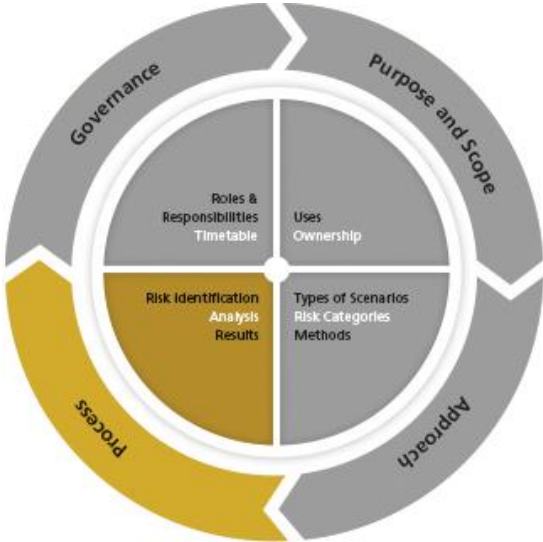
- Backtesting

- Demonstrate use test

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SST – In Practice

SST Process

SST Process - Identification

Identification	1	Risk Profile
Analysis	2	What has been done already
Results	3	Discuss with key risk owners
Review & Challenge	4	Identify possible scenarios
Board	5	Select and agree scenarios
	6	Document rationale

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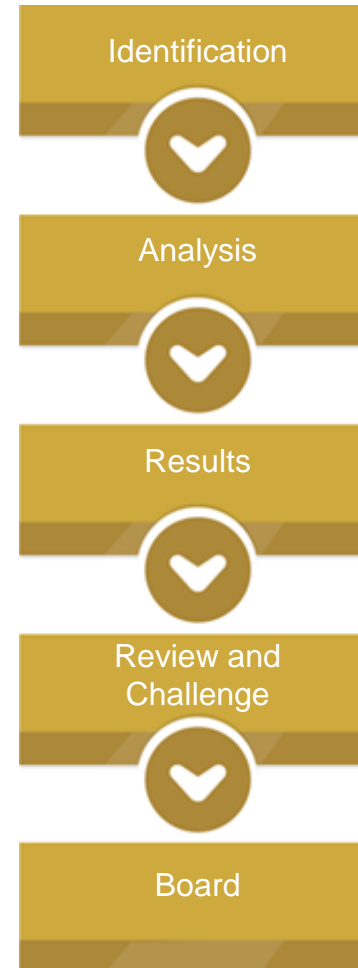
SST Process

SST – Process
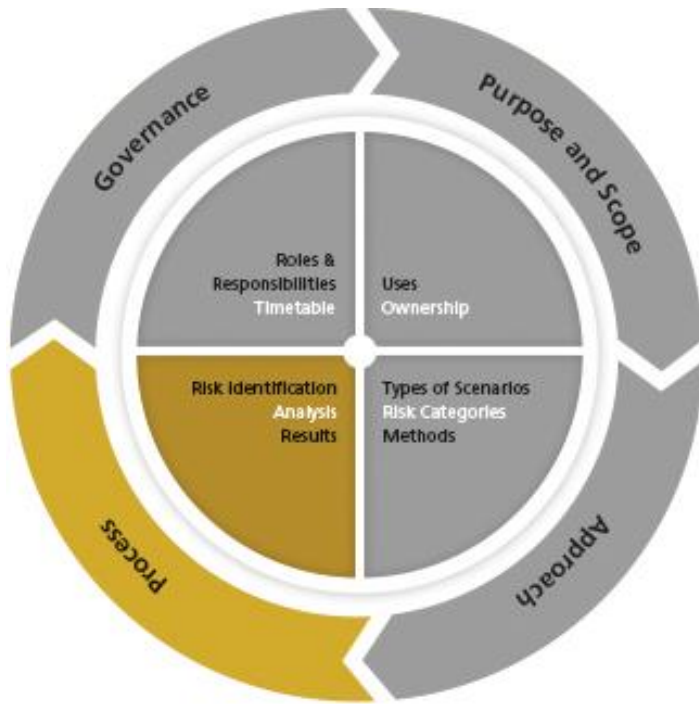
1 Get senior management buy-in

2 Engage key stakeholders early

3 Have a plan!

4 Fit SST into the company wide plan

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Scenario classification – Snake and Ladder trigger framework
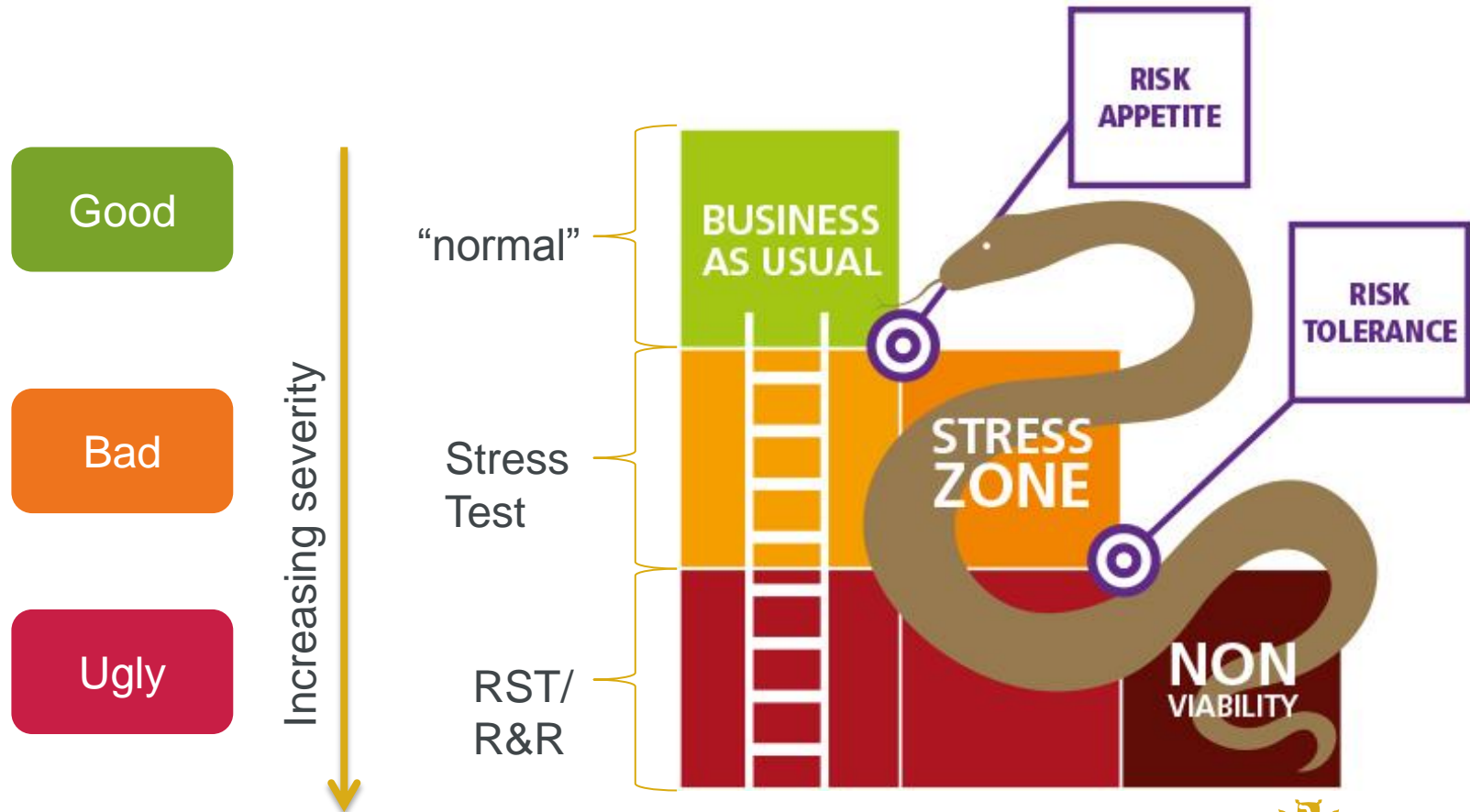
Scenario Analysis - Categorisation

Financial (Capital Mitigation)

VS

Non-Financial (Non Capital Mitigation)

Examples:
- RI Failure
- Reserve Deterioration
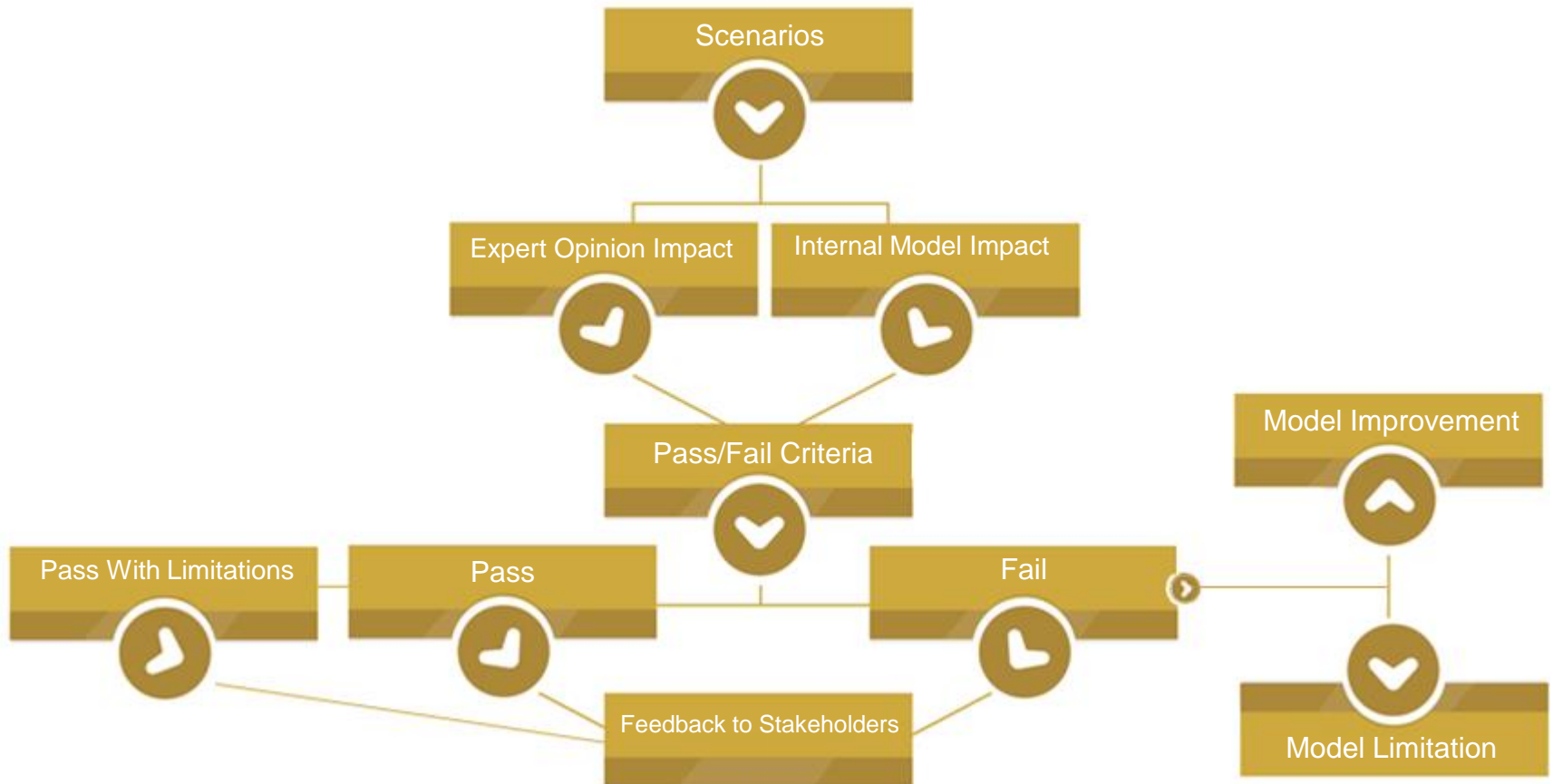- Market Recession

Examples:
- Reputation Risk
  - Downgrade
  - Licence Revoke

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Analysis - Financial scenarios

Analysis - Financial scenarios
Example on how to use Internal Model?

Here-to-Stay Scenarios

Questions:
- What is the expected P&L?
- What is the SCR if the scenario happens?

Actions:
- Rerun Internal Model with "Scenario" as mean.
- (new) Expected P&L
- (new) SCR (Change in SCR)

One-Off Scenarios

Questions:
- What is the expected P&L?
- Does the Internal Model capture these scenarios

Actions:
- Filter through generated simulations
- What is the attached P&L?
- Above/ Below SCR?

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Analysis - Non-Financial scenarios

Scenarios

Expert Opinion Impact

Mitigation Methods
- ORSA
- Risk Monitoring
- Risk Policies

Management Actions
- Actions Points on various trigger points
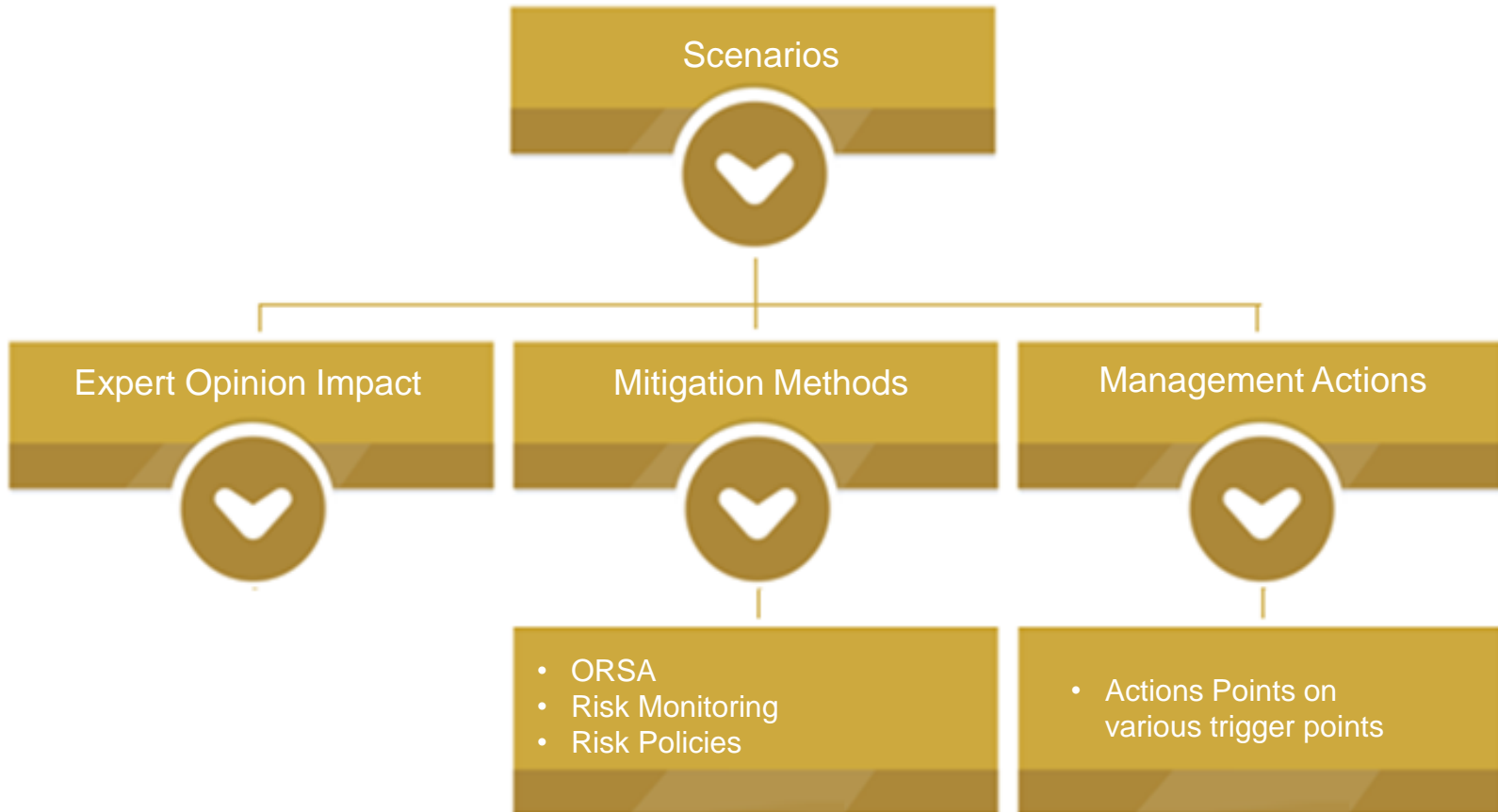
Results presentation

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Results - Summary

Sample content	
Scenario title	Meaningful heading
Risk Category	e.g. market or underwriting
Related to which business risk	e.g. operation
Quantification method	e.g. internal model or expert judgement (or both)
Scenario description	Tell your story here
Impact summary	e.g. impact on capital, P&L, Balance Sheet…etc
Assumptions	e.g. speed or duration of the scenario
Management Actions	e.g. actions already in place or future actions

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Results – Visualisation for one scenario
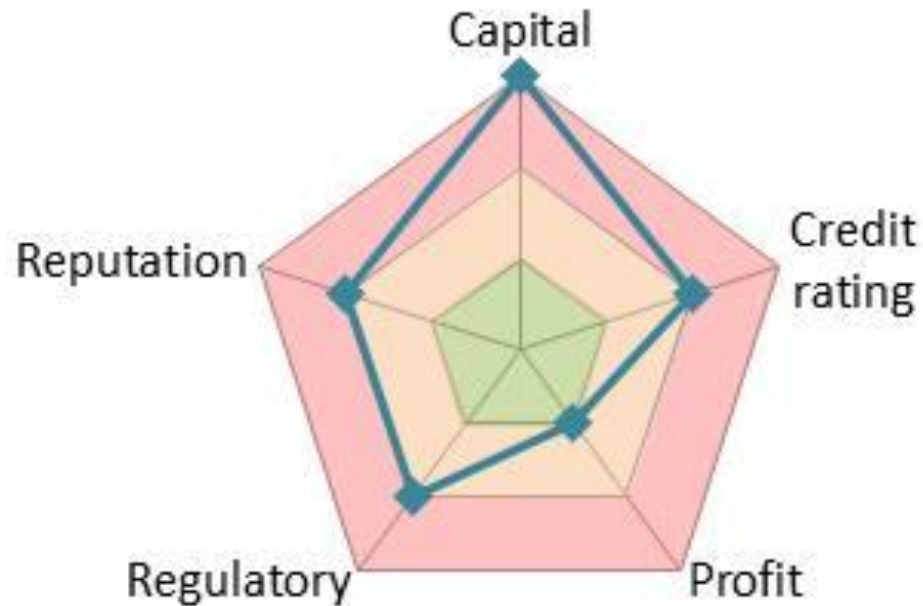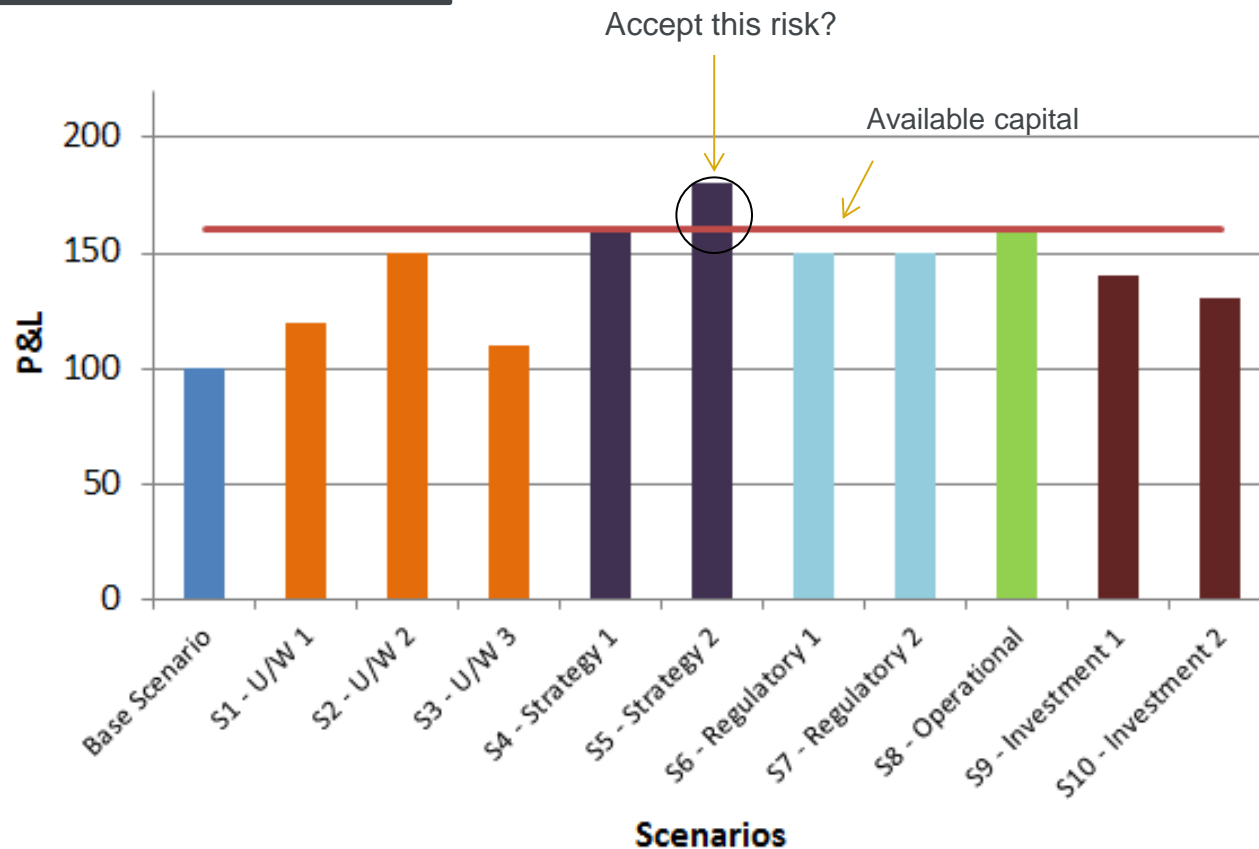

sample radar diagram

Results – Visualisation for all scenarios

Sample figures

Results - Documentations

- Process

- Key decisions made/expert judgement

- Detailed report

- Summary report

- Evidence of review and challenges

- Board sign-off

- Addressing PRA feedback

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Lesson Learned

What we learned? - Company

Good	Bad
Better understanding of • Business • management of risks • Internal model	Time and resource consuming process
Board gets exposure to internal model	Scenario assumptions may not be realistic
Early buy-in and co-operation from risk owners is the key	Results may not be ideal and subjective
Fit into wider risk management framework	Lots of documentation

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What we learned? - Personally

Good	Bad
Learn a lot about the business from personal perspective	Hard to get sufficient attention from the Board/risk committee
Build a network within the firm	Complex to include in Internal Model
Early buy-in and co-operation from risk owners is the key	Embedding process is tricky
	Many moving parts in the plan

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Summary

- Stress and Scenario testing is a **really** useful tool

- Particularly useful in testing business plan and model validation

- Integral part of ORSA

- Tips:

  – Good planning

  – Board support/ownership

  – Tell management a good story

  – Summarise results in tables and graphically

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Questions

Comments

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