

REVERSE STRESS TESTING: THE RETURN OF 'ADEQUACY'

THE INSTITUTE OF RISK MANAGEMENT STRESS TESTS AND SCENARIO ANALYSIS 5 MAY 2015

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CONTEXT OF REVERSE STRESS TESTING (RST)

- One of the lessons from the financial crisis
 - concern about subjectivity of stress tests
- Alternative perspective to stresses tests?
 - start with business failure and work backwards
- Regulatory perspective
 - FSA CP from 2009, now PRA Handbook SYSC 20
 - Solvency 2
- Why would RST matter?
 - better understanding of 'tail risks'
 - an additional perspective to business and capital planning
 - improve contingency planning

STEP BY STEP OVERVIEW

Step by step – Reverse Stress Testing

Step 1: Business Model Definition

Step 2: Identify Business Failure

Step 3: Stresses and Scenarios Leading to Failures

Step 4: Risk Mitigation and Adequacy

STEP 1: BUSINESS MODEL DEFINITION

- Different from business strategy and planning:
 - Responsibilities of the Board are to “*establish the business model, set the strategy and then let management get on with it*”, Sir Wim Bischoff, ex Chairman of Lloyds Banking Group
- What is the rationale for the business model?
 - How does the insurer create value?
 - What is the company size ambition?
 - Are there any considerations about group structure?
 - Any relevant points about capital structure?

STEP 2: IDENTIFY BUSINESS FAILURE

- Identify potential business failures
 - inability to meet prudential requirements
 - operational failures
 - impact of major counterparties
 - significant market disruption
- } Systemic considerations!
- But note that failure may take place “*well before the firm’s financial resources are exhausted*”
 - Pillar 1 vs Pillar 2 capital measures

STEP 3: STRESSES AND SCENARIOS LEADING TO FAILURES

- Universe of Risks and Completeness
 - Risks in ICA / ORSA
 - Consider existing and emerging risks
 - An extensive list of risks in the PRA handbook
 - (a) credit risk; (b) market risk; (c) liquidity risk; (d) operational risk; (e) insurance risk; (f) concentration risk; (g) residual risk; (h) securitisation risk; (i) business risk; (j) interest rate risk (k) pension obligation risk; and (l) group risk.
- What individual stresses could lead to failure?
 - Can consider likelihood by reference to the 'distance' from the 1-in-200 stresses in your ICA / ORSA
- What combination of stresses (i.e. scenarios) could lead to the insurer's failure?

STEP 4: RISK MITIGATION AND ADEQUACY

- What management actions would the insurer be able to take under each of the scenarios identified?
 - Identify actions and business owner
 - Assess the implementation hurdles (including £ and time)
 - High-level indication of trigger points
- 'Adequacy test'
 - Are there any changes arising to the business model or strategy arising from the RST exercise?

GOVERNANCE OF RST

Potential questions to consider

- How have the relevant materials being developed?
- Who has been involved?
- How have those discussion been recorded?
- What review has been applied to the above outputs?

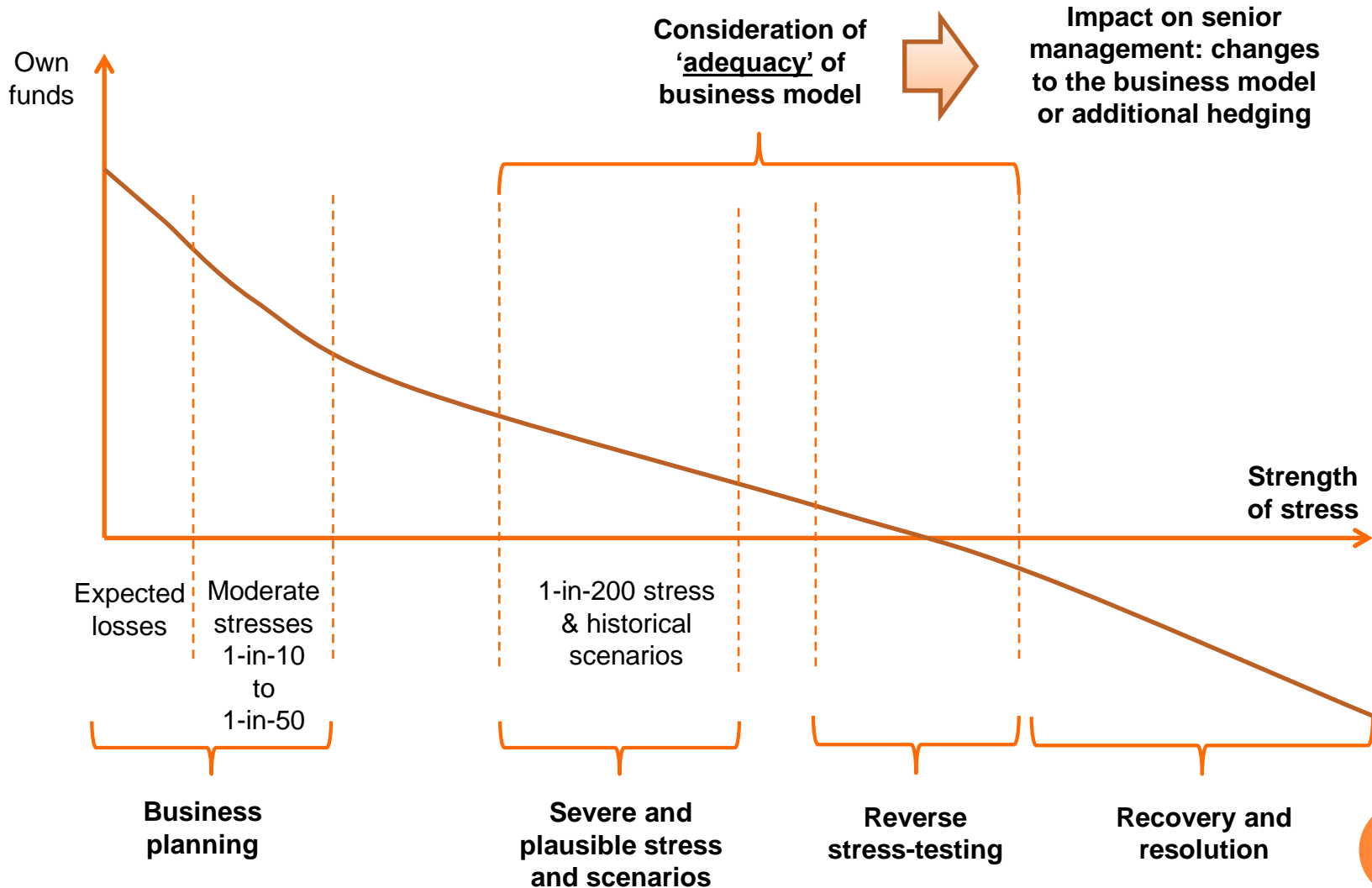
Board's role in RST - more than just ratification

- Identify circumstances that trigger a review of RST, e.g. an acquisition, a significant change in business strategy
- Input into identification of potential events resulting in failure
- Challenge the outputs of the RST

POTENTIAL CHALLENGES

- Limited articulation of business model
- Overly simplistic capital scenarios
- No consideration of operational risk failure
- Limited considerations of risks
- No consideration of scenarios (as opposed to single stresses)
- Emerging risks ignored
- No linkages with risk appetite
- Management actions not well articulated
- Limited documentation and / or governance

BUSINESS IMPLICATIONS



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CONCLUSION

- 'Adequacy' is back – more than 'capital adequacy'!
- Challenge of articulating and completeness
- Enhance management understanding of vulnerabilities