



S2 NL IM

Solvency II non-life internal model



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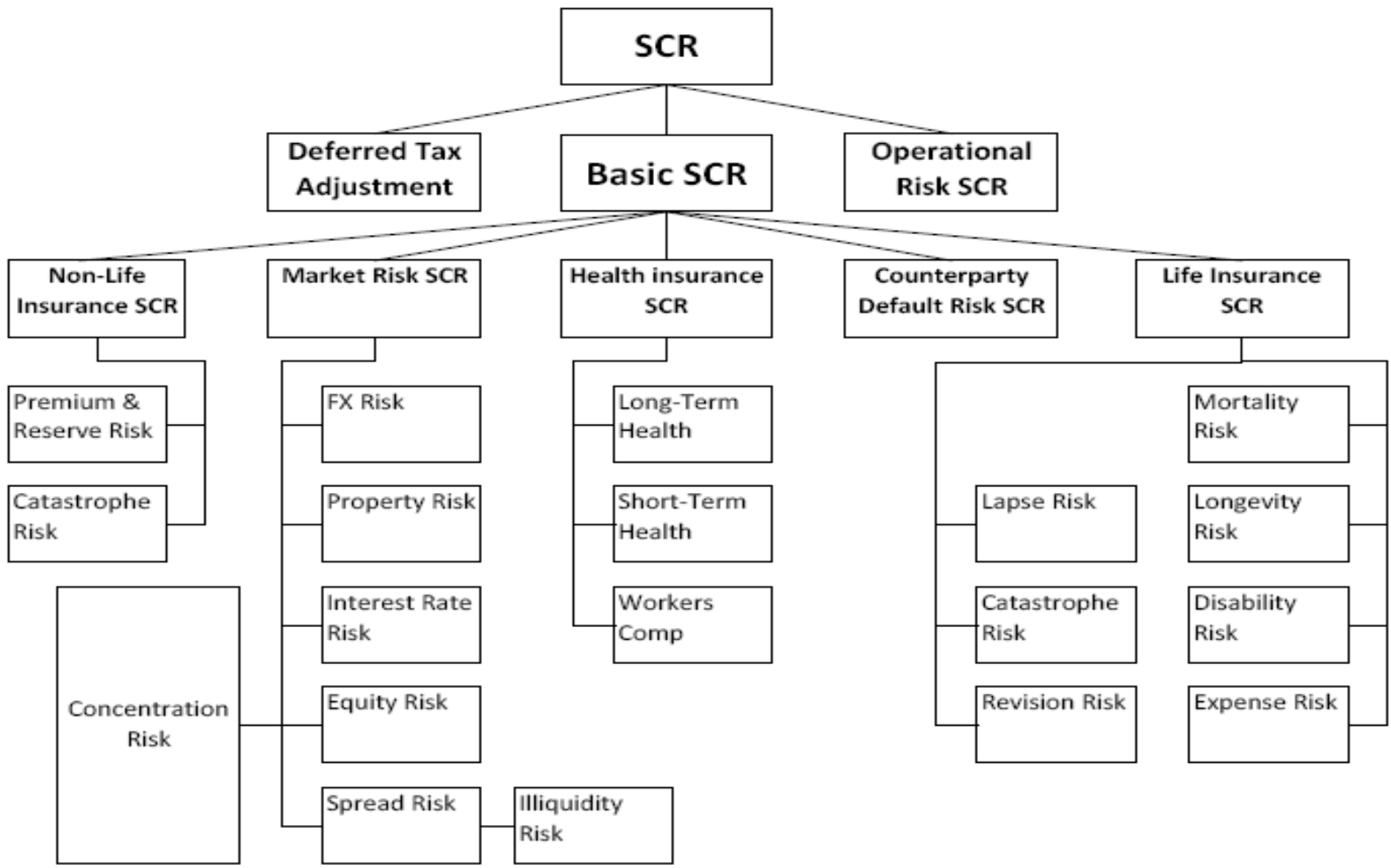
CONTENTS

- Approach to S2 SCR
- Difference from SF
- IM Pros & Cons
- Bootstrapping example
- Discussion

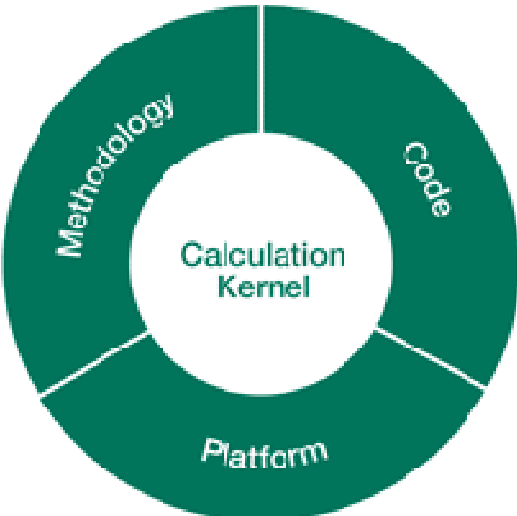
APPROACH TO S2 SCR

- SF
- IM
- USP...
- Run-Off ☺





The internal model is a key concept in Solvency II

Internal Model	Internal Model Definition	Internal Model Output	Use Test						
Data Processes <ul style="list-style-type: none"> ■ Policy systems ■ Claims systems ■ Asset systems ■ External Data 	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Data policies</td> <td>Assumption setting policy</td> </tr> <tr> <td>Data grouping/ model point policy</td> <td>Assumption setting process</td> </tr> <tr> <td colspan="2">Input and output data attributes (data directory)</td> </tr> </table>	Data policies	Assumption setting policy	Data grouping/ model point policy	Assumption setting process	Input and output data attributes (data directory)		Current & Projected <ul style="list-style-type: none"> Capital Requirements (SCR & Economic Capital) Balance Sheet (assets & liabilities) Analysis of Change Sensitivity Analysis 	Governance <ul style="list-style-type: none"> ■ Board ■ Executive ■ Risk Management ■ Finance ■ Actuarial ■ Underwriting
Data policies	Assumption setting policy								
Data grouping/ model point policy	Assumption setting process								
Input and output data attributes (data directory)									
Risk Assessment <ul style="list-style-type: none"> ■ Risk Universe ■ Operational risk data ■ Risk register ■ Concentrations ■ Counterparty Data ■ Risk Transfer 	<div style="text-align: center;">  <p>Internal Model Control Framework</p> </div>	Risk & Capital Management <ul style="list-style-type: none"> ■ Capital strategy ■ Risk Profile ■ ORSA ■ Risk appetite ■ Exposure management ■ Asset-liability management ■ Capital management 							
Business Processes <ul style="list-style-type: none"> ■ Business Plans ■ Pricing ■ Management Actions ■ Reserving 		<ul style="list-style-type: none"> Model Governance Model Change Policy Validation Policy 	Business Processes <ul style="list-style-type: none"> ■ Strategy ■ Mergers and acquisitions ■ Business planning ■ Product development ■ Capital allocation ■ Pricing ■ Underwriting ■ Reinsurance purchase ■ Performance management & reward 						
Level 1 Asset & Liability Models <ul style="list-style-type: none"> ■ Various 									



DIFFERENCE FROM SF

- One size fits all!
 - Scenarios – standard?
 - Parameters – local?
- Deterministic vs. stochastic
 - SCR vs. SCR distribution
 - Diversification effect
- Usage



IM PROS & CONS

■ PROS

- ORSA

- Decision making

■ CONS

- IMAP

- Resources

BOOTSTRAPING EXAMPLE



Reserve

Catastrophe

Underwriting

Market &
Credit

Operational



DISCUSSION

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