

Members of Working Party:

Gautam Kakar James Pratt

Lana Nguyen Patrick Reen

Shayanthan Pathmanathan Devadeep Gupta

Rod Bryn-Hussey Roelof Coertze

Fabio Schiaffini

Crystal Lam

Scope of working party

- How risk appetite is defined and what does it mean to the different insurers?
- Importance of risk appetite for the business of life insurance companies and how appetite links with return and stakeholder value creation?
- How to translate risk appetite into a sufficiently granular and operative set of boundaries?
- Review the practical application of risk appetite by life insurers
- Consider the practical challenges faced in embedding the risk appetite framework
- Risk appetite in the context of regulations including Solvency II

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Agenda

- ☐ Risk Appetite literature review by working party members:
 - Background, definitions and;
 - Best practice
- ☐ Risk Appetite Framework under Solvency II
- ☐ Risk Appetite statements in company Annual Reports
- □ CRO Survey Results on Risk Appetite
- Summary and Next Steps



Risk Appetite

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Key Definitions

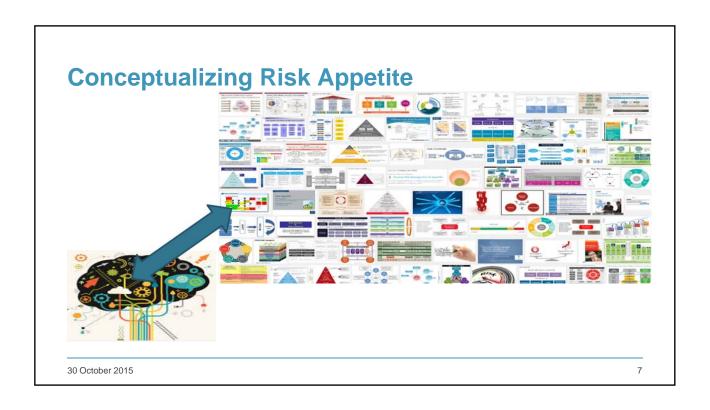
Almost as many definitions as there are risk practitioners - no one size fits all definition

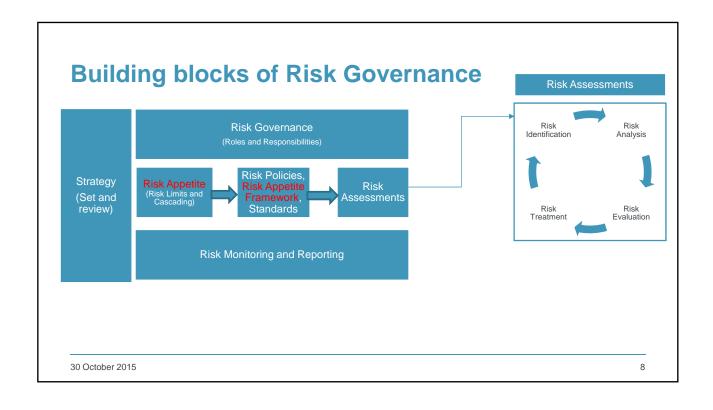
What is Risk Appetite?

Risk Appetites¹: The aggregate level and types of risk a financial institution is willing to assume within its risk capacity to achieve its strategic objectives and business plan

Notes:

 The term 'risk appetite' is defined as per FSB, Principles for an Effective RAF, 18 Nov 2013, Section II





RAF in essence

... "the aim of the risk management framework is to assist management in identifying, measuring and managing risks and a proper understanding of propensity to take and control risk is an essential and integral part of RAF..."



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What constitutes an effective RAF?

Aspects	FSB	IRM	North America CRO Council
Complex, iterative, evolutionary, adaptable process	1	1	/
Consider diverse interests/views of relevant parties/strategic, tactical, operational level	1	1	1
Realistically manageable	?	?	✓
Identify and quantify risk preferences for material risks	?	?	✓
Regular review and reassessed after significant event	?	?	✓
Enable consistent criteria used for decision making	✓	?	✓
Comparable and measurable criteria to facilitate and evidence alignment	✓	?	✓
Qualitative boundaries set for non-quantifiable risks	✓	?	✓
Communicated and developed in the context of risk management capability	1	1	?
Integrated with the control culture and decision-making process	✓	1	?

Good practices for RAF

Practice Ahead

Step by step...

- 1. Definitions and risk taxonomy
- 2. Define objectives, propensity to take and control risk
- 3.In-depth knowledge of interactions between
 - a) Stakeholders competing interests
 - b) Group and subsidiary
 - c) risks and corresponding materiality
- 4. Define approaches to set and review risk appetite (Top-down/Bottom-up or mix)
- 5. Devising risk mitigation responses to proactively manage risk in a timely manner
- 6.Embedding, integration and communication

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Solvency II

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Solvency II

Art. 44 states that: "Insurance and reinsurance undertakings shall have in place an **effective risk-management system** comprising strategies, processes and reporting procedures necessary to **identify, measure, monitor, manage and report**, on a continuous basis the risks, at an individual and at an aggregated level, to which they are or could be exposed, and their interdependencies."

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Solvency II System of governance

- Documented risk management strategy, including risk preferences and risk appetite
- Written policies defining risk tolerances
- Processes and procedures to identify, assess, manage, monitor and report risks, including escalation triggers and processes
- Reporting procedures and feedback loops
- Appropriate own risk and solvency assessment (ORSA) process

Solvency II Risk appetite challenges 1 of 3

- How many capital risk appetites are required?
 - > Pillar 1 and Pillar 2?
 - Potential implications
- Define a buffer
 - Converting qualitative appetite statements in operational limits
 - > Distance from mean or distance from break even
 - Treatment of transitionals, contract boundaries and risk margins

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Solvency II Risk appetite challenges – 2 of 3

- Risk categories and tolerances
 - Definition
 - Links to appetite statements
- Forward looking approach
 - Projecting risk appetites and risk tolerances
 - Timing of reporting

Solvency II Risk appetite challenges – 3 of 3

- Groups risk appetite
 - Capital fungibility
 - Granularity
 - Cascading risk appetite
- Role of stress and scenario test
- Management actions

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ORSA (Own Risk and Solvency Assessment)

Objectives

What are we trying to achieve? How do we measure it?

Risks

What are the risks related to these objectives?
What mitigations are in place?

Risk Appetite

Objectives versus Risk over what timescale?

Test – Scenarios?

Test – How robust?

The ORSA Processes

- Periodic review
 - Business Plans (objectives, risks, time, strategies)
 - Risk Appetites
 - Risk Tolerances
 - Capital and solvency model
 - Reconcile to SCR
 - Test

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Risk Appetite

Risk Appetite statement in Annual Reports

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Companies Included in Review

- Prudential
- Legal & General
- Old Mutual
- Royal London
- LV=
- Lloyds Banking Group
- Standard Life

- Aegon
- NFU Mutual
- HSBC
- Aviva
- Phoenix
- Wesleyan

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Key Observations from Review

- Many similarities between companies
- Accepting and managing risk is a fundamental part of the business strategy of a life insurer
- Risk Appetite helps identify which risks to take and which risks to avoid.
- Areas covered explicitly typically include:
 - Capital
 - Earnings
 - Liquidity
- Some companies also explicitly mention strategy and operational areas
- Conduct and reputational risk are areas that have developed more recently

within the risk statements and frameworks of life insurers

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Detailed Walkthrough

Legal & General Risk Appetite Disclosures

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L&G Risk Appetite Disclosures

L&G's risk appetite sets the ranges and limits of acceptable risk taking for the Group as a whole. L&G's overall attitude to risk is expressed using the following statements and measures

Strategy

L&G manages a diversified portfolio in which risk is accepted as part of the normal course of business and aim deliver sufficient returns. Relevant risk appetite measure is minimum return on economic capital.

L&G has appetite of risks which L&G understands and is rewarded for taking. Relevant risk appetite measure is maximum economic capital deployed.

Capital

L&G aims to maintain a buffer of capital resources over minimum capital requirements. Relevant risk appetite measure is minimum statutory and economic capital coverage ratios.

L&G Risk Appetite Disclosures (continued)

Earnings Volatility

L&G has low appetite for volatility of earnings. Relevant risk appetite measure is maximum acceptable variance in earnings to plan.

Customer and Reputation

L&G treats customers with integrity and acts in a manner which protects or enhances the group franchise. Relevant risk appetite measure is customer and reputation risk dash board.

Liquidity

L&G expects to be able to meet payments and collateral obligations under extreme but plausible liquidity scenarios. Relevant risk appetite measure is minimum liquidity coverage ratio.

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L&G Risk Appetite Disclosures (continued)

- The appetite to specific risk types (market, credit, insurance, operational and liquidity) is also set out in terms of which risk L&G has appetite for usually due to obtaining better returns (e.g. equity, property, credit) and which risks L&G has limited tolerance for (e.g. interest rate, inflation).
- Very broad statements on how the risks are managed is also included including the use of limits and tolerance primarily for credit risk exposures.
- Although qualitative statements and some measures are provided, there are no quantitative limits given in the disclosures.



Some of the draft questions that may be asked in questionnaire

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- Who owns Risk Appetite?
- Which elements are included within your risk appetite statements?
- How far do you cascade your risk appetites down your company?
- Do you have Risk Appetite limit?
- How would you calibrate quantitative risk limits for use in monitoring exercises?
- How Risk Appetite helps in value creation?
- Whether you have separate risk appetite for Pillar 1, Pillar 2 and Pillar 3?
- Whether your risk appetite is influenced by the fact that whether you use internal model or standard formula



Risk Appetite

CRO Survey on Risk Appetite

(Conducted by North American CRO COUNCIL)

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CRO Survey Results on Risk Appetite

- Survey covering most key areas regarding RAFs:
 - Scope
 - Cascading
 - Risk Tolerances
 - Governance
- Summary Report, aimed at enabling companies to benchmark themselves against the diverse range of industry practices in order to improve their RAFs.

CRO Survey Results on Risk Appetite Goals & Objectives

	Yes			
RAF main objectives and goals (in decreasing order of % of "yes")	%	Protection	Performance optimization	Others
Preserve capital adquacy	71%	✓		
Maintain adequate liquidity	69%	✓		
Ensure customer protection	67%	✓		
Achieve/maintain a specifc debt rating	63%		✓	
Protect against earnings volatile	60%	✓		
Protect the company's fanchise value	56%	✓		
Achieve target performance	54%		✓	
Support business growth	52%		✓	
Ensure alignment between risk and return	42%		✓	
Establish debt leverage limits	38%		✓	
Maximise shareholder value	35%		✓	
Ensure comparability to peers	31%			✓
Optimize use of capital	31%		✓	
Others	10%			✓

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Scope

Quantitative	Qualitative
Capital	Reputational
Liquidity	Compliance
Market	Operational
Credit / Concentration	Strategic

CRO Survey Results on Risk Appetite Areas for improvements

Improvements needed in company's RAF		Improvement Required?			
(in decreasing order of % of "Major")		Minor	No		
Operationalising RAF in day-to-day decisions	46%	42%	12%		
Cascading Group RAF down to business units/legal entities	44%	44%	12%		
Achieving satisfactory consistency between Group tolerances and already existing operational limits	21%	52%	27%		
Monitoring against RAF	21%	44%	35%		
Governance of RAF and implications for management	19%	52%	29%		
Achieving balance between Group requirements and local constraints	19%	48%	33%		
setting tolerance levels and/or risk limits	15%	63%	22%		
Achieving consistency between home and host regulatory constraints	10%	46%	44%		
Defining the RAF and/or RAS	8%	63%	29%		

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Cascading





- The most common approach appears to utilize an iterative dialogue in setting risk appetite between the group and business units or legal entities.
- Capital and liquidity are the main quantitative metrics cascaded, with earnings, underwriting limits, and profitability indicators not far behind.
- Quantitative metrics least cascaded are leverage and embedded value.

Cascading

- Half keep Diversification benefits at Group level
- Other half either partially or fully allocate down
- Again a variety of allocation approaches are used such as proportionality methods with goal of improving the competitive position locally.



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Risk Tolerance – Key Metrics

- Capital Adequacy: Regulatory and economic capitalization
- Earnings-at-Risk: IFRS or GAAP earnings are most widely used metrics;
- Liquidity: Liquidity terms, survival horizons in stressed conditions and shortterm liquidity ratios
- Franchise value: Customer satisfaction and rating agency.

Risk Tolerance



Stress Testing

- · Widely used to set and review risk tolerances.
- Typically comprises
 - single factor 1 year stress tests
 - multiple risk factor stress tests
 - scenario analyses (including both financial and operational risk events e.g. pandemic events)
- Many companies plan to increasingly use reverse stress testing.

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Governance

- Over half employ "strategic controller" governance model
 - > Decision making authority is largely delegated to business units / legal entities ...
 - > ... but specific areas of control are retained at Group level
- Alternatives are fully centralised
 - > all decisions at Group level
- Or decentralized/federated governance models
 - > all decisions at business unit / legal entity level

Governance

- Embedding: many respondents indicated:
 - Risk appetite embedded into risk culture
 - Risk consistently managed across organisation
 - > RAFs => common framework for measurement across organisation
- Monitoring and Reporting
 - Majority report quarterly
 - Many reported projections => forward looking expectations to facilitate business decisions.
- Breach of Risk Limits:
 - Most accept for an agreed period => return to within stated risk tolerances, or
 - > Employ multiple thresholds => early warning + dialogue to determine corrective action.

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Risk Appetite

Summary and Next Steps

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Summary

✓ Literature review:

- Risk Appetite Definition: The aggregate level and types of risk a financial institution is willing to assume within its risk capacity to achieve its strategic objectives and business plan
- > RAF Core principles: process to identify, measure and manage risks
- > RAF Good Practice: Well-defined and logical process; including regular review
- RAF Challenges: Cascading; Using RAF consistently in decision-making
- RAF is not one size fits all

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Summary

Solvency II Risk Management System

- Similar challenges to implementing RAF
- Specific challenges due to nature of Solvency II
- > ORSA is management's view of risk profile

Risk Appetite statement in Annual Reports

- Many similarities for Life companies
- > Principles set centrally and customised at local business level
- Economic Capital is a key measure
- Embedding can be difficult

Summary

☑ CRO Survey Results on Risk Appetite

- > Goals: preserve capital adequacy, maintain adequate liquidity and ensure customer protection
- Risk Tolerance metric: IFRS / GAAP earnings most widely used
- > Stress Testing used to determine risk tolerances
- Many plan to rely on Reverse Stress Testing
- Governance: Over half of respondents employ a "strategic controller" governance model
- Cascading: Half of respondents allocate diversification benefits down in some way

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Next Steps

- Presentation to Global Conference of Actuaries, Mumbai
- Carry out UK-focussed risk appetite survey
- Risk Appetite Modelling
- Working Party Report
- Regional actuarial societies

Feedback Requested from Audience

- Scope of Working Party
- Issues faced in RAF
- Thoughts on Risk Appetite Modelling
- Questions that may be covered in the survey



Questions

Comments

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Appendix A − Risk Appetite Definition Organisation Definition/Description

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Organisation	Definition/ Description
FSB	The aggregate level and types of risk a financial institution is willing to assume within its risk
	capacity to achieve its strategic objectives and business plan
EIOPA	Risk appetite addresses the attitude of the AMSB (administrative, management or supervisory body) toward the main categories of risks. It needs to be clear and detailed enough to express and reflect the strategic high level objectives of the AMSB.
EBA	'Risk tolerance/appetite' is a term that embraces all relevant definitions used by different institutions and supervisory authorities. These two terms are used here interchangeably to describe both the absolute risks an institution is a priori open to take (which some call risk appetite) and the actual limits within its risk appetite that an institutions pursues (which some call risk tolerance).
Basel Committee on Banking Supervision	Risk appetite is a high level determination of how much risk an organisation is willing to accept taking into account the risk/return attributes; it is often taken as a forward looking view of risk acceptance.
IRM	Risk appetite can be defined as 'the amount and type of risk that an organisation is willing to take in order to meet their strategic objectives. Organisations will have different risk appetites depending on their sector, culture and objectives. A range of appetites exist for different risks and these may change over time.
APRA	(a) the degree of risk that the RSE (Registrable Superannuation Entity) licensee is prepared to accept in pursuit of its strategic objectives, giving consideration to the interests of beneficiaries (risk appetite);
OSFI	The risk appetite statement reflects the level of aggregate risk that a FRFI (Federally Regulated Financial Institution) is willing to assume and manage in the pursuit of the FRFI's business objectives.
AMF	Risk appetite refers to a broad notion whereby a financial institution determines the aggregate level of risk it can assume or accept in connection with its strategic objectives.
NVB	Risk appetite (in Dutch: risicobereidheid) refers to the amount of reasonably foreseeable risk that the bank—given its proposed activities—is prepared to accept in the pursuit of its objectives.
Institute of Directors	The level of residual risk that the company is prepared or willing to accept without further mitigation action being put in place, or the amount of risk the company is willing to accept in
Southern Africa	pursuit of value.

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