Institute of Actuaries of Australia
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BEYOND THE MANDATE
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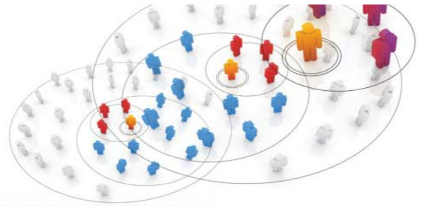


Risk Appetite

Kent Griffin

Framework and challenge of practical implementation

Articulating & Embedding Risk Appetite

- A clearly articulated statement of risk appetite is a fundamental component of Enterprise Risk Management. Increasingly stakeholders such as regulators, rating agencies and investors are demanding that the company's risk appetite be clear, and that it cascaded operationally and culturally on a consistent basis throughout the organisation.

Why the increased focus on Risk Appetite? Australian Regulatory Perspective

"In recent times, we have reviewed the Risk Appetite statements from a number of GI and life insurers, and spoken to a number of CEOs and boards about the engagement of the board in the Risk Appetite process.

- It's early in this exercise, but in summary, here's what we have found so far:
- In some cases there is no clear statement of Risk Appetite, or no obvious understanding of what it actually is in concept.
- There is a wide range of approaches to articulating Risk Appetite – from short high-level statements to a few pages of detailed thoughts. This diversity is not necessarily a bad thing, but we need to better understand the practical implications of it.
- The quality of the statement of Risk Appetite ranges from poor to quite good.
- There is a lack of analysis of Risk Appetite through the use of scenario analyses, stress testing etc.
- It is not always clear that the board has been heavily engaged in setting the Risk Appetite.
- In some cases there is a disconnect between the Risk Appetite statement and its translation into operational management.
- And last, with some subsidiaries or branches of foreign-owned insurers, we see an adoption of group risk management practices without necessarily full and proper engagement of local management and/or board.

Why the increased focus on Risk Appetite? Australian Regulatory Perspective

You should expect that APRA will increase its focus on Risk Appetite – and its supervisory skills and expertise in this area will continue to develop.

You should also expect that I personally will be taking a close interest in the engagement of boards and senior management in Risk Management and in the management of Risk Appetite."

- Ian Laughlin, Member, Australian Prudential Regulation Authority

Institute of Actuaries of Australia 17th General Insurance Seminar, Gold Coast, 8 November 2010

Risk Appetite in Action
Solvency II– CEIOPS Guidance

CEIOPS' Advice for Level 2 Implementing Measures on Solvency II: System of Governance

3.72. An effective risk management system requires at least the following:

a) A clearly defined and well documented risk management strategy that includes the risk management objectives, key risk management principles, general risk appetite and assignment of risk management responsibilities across all the activities of the undertaking and is consistent with the undertaking's overall business strategy;

b) Adequate written policies that include a definition and categorisation of the material risks faced by the undertaking, by type, and the levels of acceptable risk limits for each risk type, implement the undertaking's risk strategy, facilitate control mechanisms and take into account the nature, scope and time horizon of the business and the risks associated with it;

Risk Appetite in Action
Solvency II Requirements – CEIOPS Guidance

CEIOPS' Advice for Level 2 Implementing Measures on Solvency II: System of Governance

c) Appropriate processes and procedures which enable the undertaking to identify, assess, manage, monitor and report the risks it is or might be exposed to;

d) Appropriate reporting procedures and feedback loops that ensure that information on the risk management system, which is coordinated and challenged by the risk management function is actively monitored and managed by all relevant staff and the administrative, management or supervisory body;

e) Reports that are submitted to the administrative, management or supervisory body by the risk management function on the material risks faced by the undertaking and on the effectiveness of the risk management system; and

f) A suitable own risk and solvency assessment (ORSA) process.

Risk Appetite in Action
Start with a simple or basic view

At the core of any risk appetite is an awareness of two key items:

- What is it that we want to protect by means of risk appetite, and
- How de we link reward to risks we want to accept.

This is because we have two fundamental objectives:

- Align behaviour with the entity's risk objectives, and
- Transparent communication to stakeholders to facilitate appropriate expectations

Generally this will be made tangible by reference to the potential impact on one or a combination of the following:

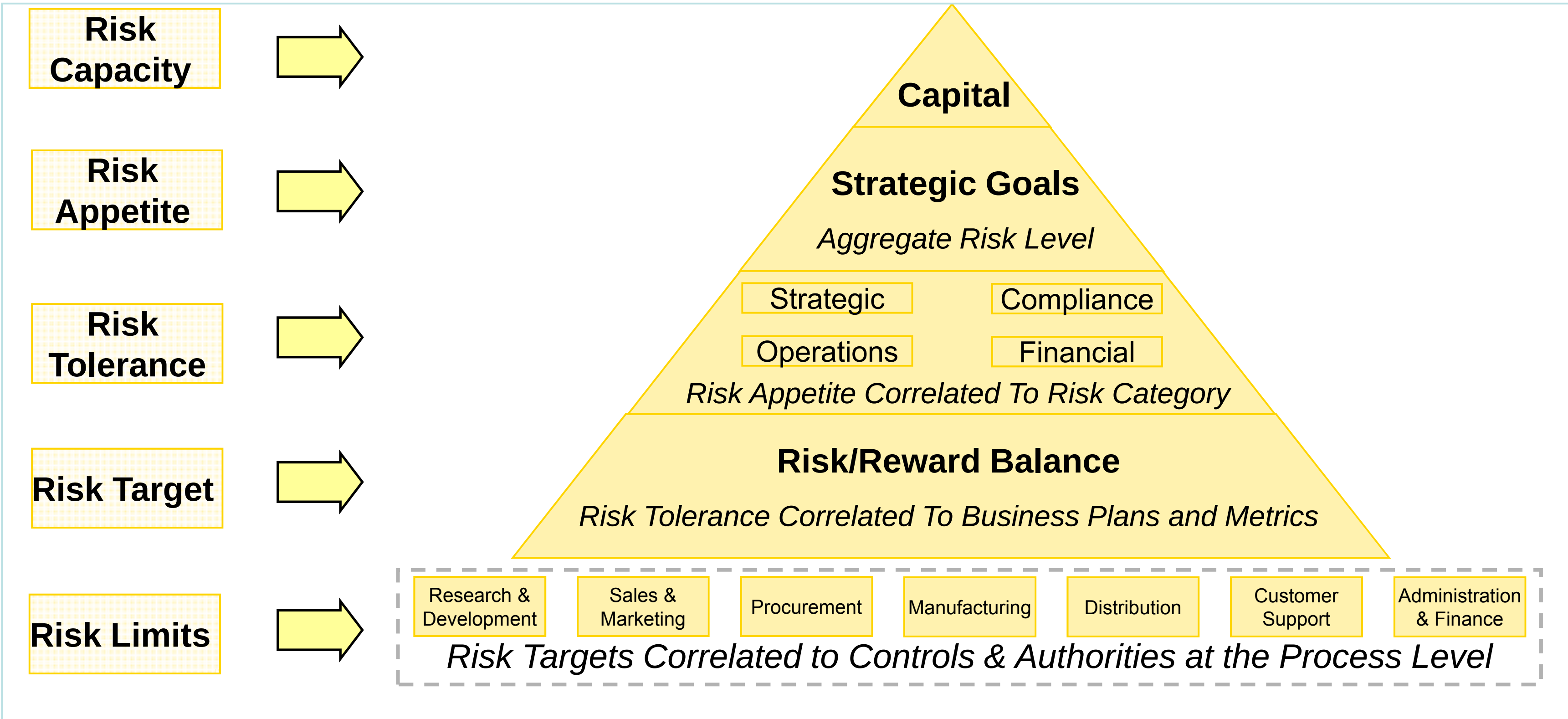
- Earnings,
- Regulatory Capital (or economic capital, target surplus, etc),
- Economic Value (or performance indicator such as return on capital), and
- Brand (or potential future business and/or growth measure)

Ultimately what is an acceptable level of risk can only be considered in the context of acceptable level of return or performance

Relating risk appetite, risk tolerance and risk limits

Risk Capacity	The broad based **amount of risk a company is *able* to accept** in pursuit of its mission, vision, business objectives and overall strategic goals - directly related to an entity's capital, liquidity and external stakeholder influence
Risk Appetite	The broad-based **aggregate amount of risk a company is *willing* to accept** in pursuit of its mission, vision, business objectives and strategic goals - directly related to an entity's risk capacity as well as its culture, desired level of risk, risk management capability and business strategy
Risk Tolerance	The **specific maximum applicable to each category of risk** regarding the magnitude of risks that the organization is willing to take to achieve its strategy and objectives - set such that the aggregation of risk tolerances ensures the organization operates within the risk appetite
Risk Target	The **optimal level of risk** that the organization desires to take **to achieve specific business objectives** and operate within its appetite/tolerance for risk – **defines the balance between risk and reward** - risk target is based on the management's desired returns, the role of risk to achieve those returns and capability to manage the risk/reward profile
Risk Limits	**Thresholds to ensure that variation from expected outcome** will be consistent with the risk target, but will not exceed the risk appetite/tolerance – **defines process level controls and management authorities** and should reflect risk limits

Understanding “Risk Appetite”



Example

Leading industry practices: Overall comments

- Many insurers either have or are in the process of developing/implementing an individual risk appetite for their organization. A number recognize the need for risk appetite
  - Those institutions with the most mature corporate wide risk appetites also have more sophisticated measurement methods and economic capital models in place
  - Global insurers have developed "top down" risk appetite statements. North American insurers are in the process of developing these statements
  - Mutuals/Non-Public insurers have built more "academic" risk appetites and are in the process of developing more business practical statements
- Risk appetites developed by the global insurers contain both financial and non-financial risk classes
- The association to and the linking of "top down" risk appetite statements with "bottom up" risk limits continues to be a challenge to the industry at large
- Currently, most companies do not state risk appetite and tolerances in the context of risk and return
  - For those that do include a risk and return focus, the predominant measure is contribution to economic value
  - As part of future development plans more companies are trying to relate risk appetite to performance
  - Some leading companies have linked risk and return primarily through the use of risk targets and economic capital/risk adjusted performance frameworks, which are then utilized to calibrate risk appetite and tolerances

Example: Recent Insurance industry risk appetite statements

Capital exposure

- Capital at risk not to exceed X% of available financial resources over a Y-year horizon at Z probability (C)
- Loss of X capital at Y return period (V)
- Maintain multi-year capital volatility standard (V)
- Economic capital no higher than X% of capital and surplus (C)
- Maintain economic capital in excess of X over Y-year horizon at Z probability (C)
- GAAP and statutory capital volatility not to exceed X over a Y-year horizon at Z probability (V)
- Ensure regulatory capital ratios are greater than minimum targets (C)
- Maintain available capital at specified levels (C)
- Exposure limited to X% of assets or surplus (varies) (C)
- Hold sufficient capital to meet all regulatory capital requirements (C)
- Maintain adequate capital to meet all obligations at a specified confidence level (C)
- Maintain capital and surplus greater than X company action level RBC (C)
- Maintain capital at a level to allow strategic initiatives (P)
- Maintain economic capital at a level that maximizes shareholder value (P)
- Protect a minimum capital ratio with capital ratio hedging (P)

Earnings

- Earnings at risk no higher than Y% of 12-month planned earnings (V)
- GAAP earnings volatility not to exceed X over Y-year horizon at Z probability (V)
- IFRS earnings volatility not to exceed X over a Y-year horizon at Z probability (V)
- GAAP earnings volatility not to exceed X of prior year (V)
- GAAP earnings or earnings will be within Y% of target X% of the time (V)
- GAAP net income will be within Y% of target X% of the time (V)
- Return on equity in excess of X% and increasing by Y% per year (Val)
- Average annual growth in earnings per share of % (Val)
- Be able to earn way out of a shortfall in an X-year time frame (P)
- Loss from single natural event less than X (C)

Value-at-risk

- Not lose more than X% of value for events that have >Y% chance of happening (V)
- Manage earnings at risk and embedded value-at-risk to X% of baseline value (V and C)
- Not engage in activity that will put long-term value at risk (P)

Legend:

C – Risk "Ceiling“	V – Volatility
Val – Value	P – Risk Preferences

Rating agency

- Maintain rating agency rating at a specified level (C)
- Maintain rating agency capital (C)
- Maintain ratings floor (one-year severe downgrade) (C)
- Maintain financial strength ratings with a certain degree of confidence (C)
- Maintain financial strength advantage (Val)
- Maintain rankings at current level (C)
- Maintain solvency standard (economic and rating agency) (C)
- Protect the firm's financial strength and ratings (P)

Liquidity

- Maintain liquidity ratios at specified levels (C)
- Maintain liquidity at a strong level (P)

Other

- Not engage in activity that is inconsistent with shared values (P)
- Provide competitive long-term dividends (Val)
- Assets under management (P)
- Equity limitation test limits equity allocation (P)
- New business sates $s (P)

Example
Qualitative Risk Appetite Statements

In addition to quantitative statements, qualitative risk appetite statements may be identified for non-core and non-financial risks

Qualitative statements may be grouped into three individual buckets:

- **Cultural Statements** – statements around behavior that are principles based across the company. Cultural Statements are useful for setting a tone, but do not tend to be as measurable or actionable. Examples include:
  - XXXX Company has a very low appetite for reputational risk exposure that impacts the company's reputation and/or brand. Steps to minimize the likelihood of adverse Reputational impact should always be taken
  - XXXX Company will promptly take action to address customer complaints and regulatory concerns
  - XXXX Company will not engage in any activity that will put its long-term value at risk. The company will meet customer's expectations of providing efficient, considerate and cost-effective services
  - XXXX Company is an equal opportunity employer that employs skilled and experienced staff in positions with clearly defined roles and responsibilities

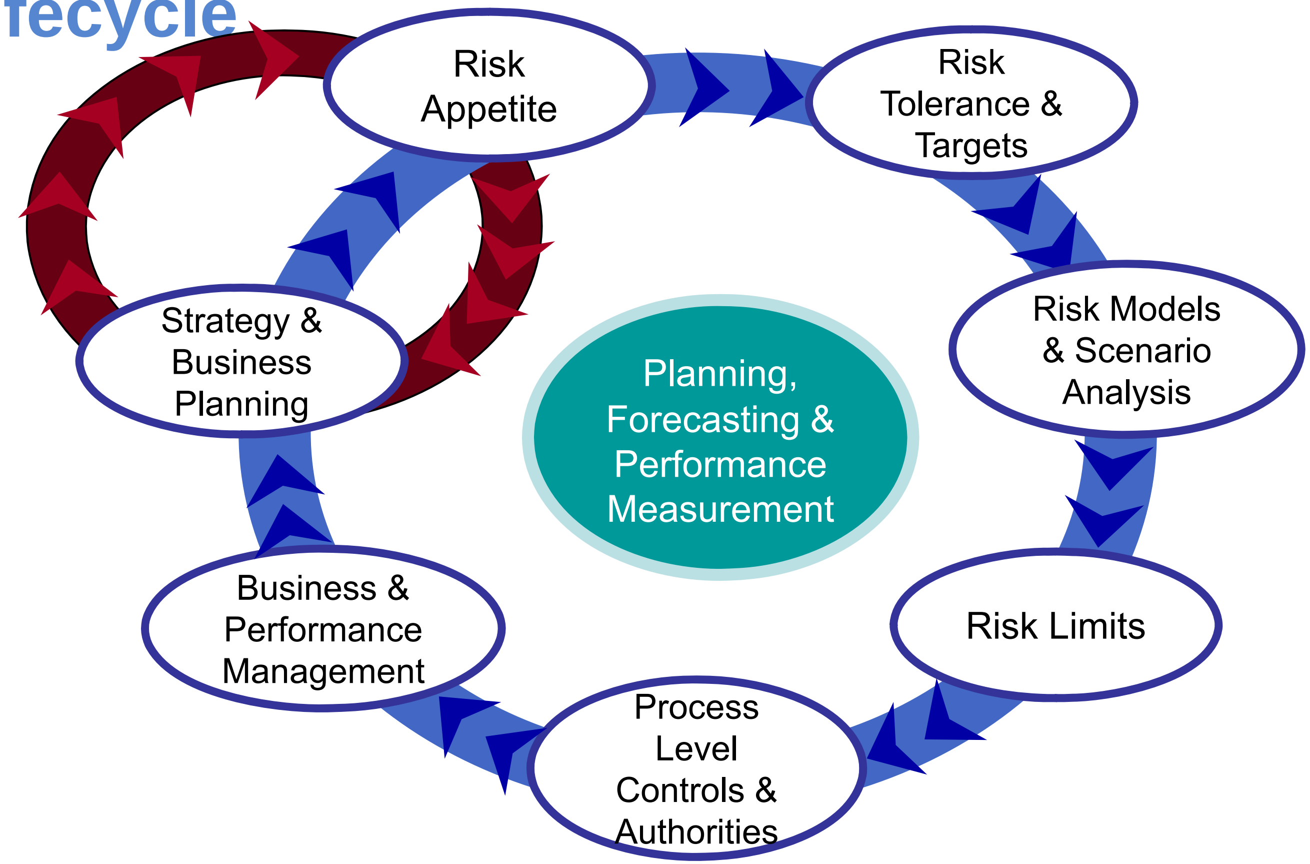
Example
Qualitative Risk Appetite Statements (cont'd)

- **Outcome Statements** – statements that specify limits or maximum impact or outcome. Outcome Statements can be measurable, but do not generally speak to how the outcomes will be achieved or put specific constraints on activity Examples include:
  - The dollar value or number of operational loss amounts for a given period (e.g., quarterly, yearly) that are acceptable or unacceptable
  - The size of a single operational loss amount that is acceptable or unacceptable over a given period of time
  - The degree to which operational loss levels/number of events can increase in a given year

- **Expectation Statements** – statements that identify the company's tolerance for particular actions. Expectation Statements are generally measurable and action oriented, but tend to be more narrow or specific to specific activities or risks. Examples include:
  - XXXX Company has a low appetite for operational risk. These risks will be mitigated and controlled to where the cost of control is equal to the marginal cost of the risk
  - XXXX Company has zero appetite for internal fraud activities
  - XXXX Company has a low appetite for information technology outages. There is no tolerance for outages that exceed one week

Risk Appetite Lifecycle

- Risk appetite, tolerance and limits are not static
- They must be updated with changes in strategy, the environment and market expectations
- Ultimately, they should be a key element in driving risk taking and in turn in performance measurement



In summary

- Risk Appetite is a fundamental component of an Enterprise Risk Management Framework
- Risk Appetite is subjective
- It is an ongoing area of focus by stakeholders – shareholders, regulators and rating agencies
- Articulating risk appetite is an exercise in communication – aligning internal decision making process to a common level of risk taking
- At the Board level, it is usually an articulation of impact on earnings, capital, value and brand with some attachment of likelihood
- Operationalising risk appetite is usually based around specific risk limits
- Challenge is to link the Board level with operational limits
- Financial conglomerates face a significant challenge to implement a framework – systems, people and processes – which sufficiently reflects reality while taking an holistic view