2014 EAAC
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Risk, Challenges & Opportunities

The Essence of Risk

EAAC

What is Risk?

Risk

FAILURE TO ACHIEVE OBJECTIVES

Controlling Risks

Risk is everywhere but controlling risk is particularly important for financial intermediaries.

Pension Funds

Insurance Companies

Banks

Financial intermediaries:

- Provide liquidity, security and economies of scale to the average customer.
- Have a social responsibility to act in utmost good faith

Uncontrolled risks in financial intermediaries could lead to serious far-reaching economic and social issues.

The Essence of Risk

Risk Appetite

Risk appetite represents a company's overall tolerance for risk. It represents the company's willingness and ability to absorb losses in pursuant of its objectives. Risk appetite levels depend on the company's objectives and nature of business.

Football

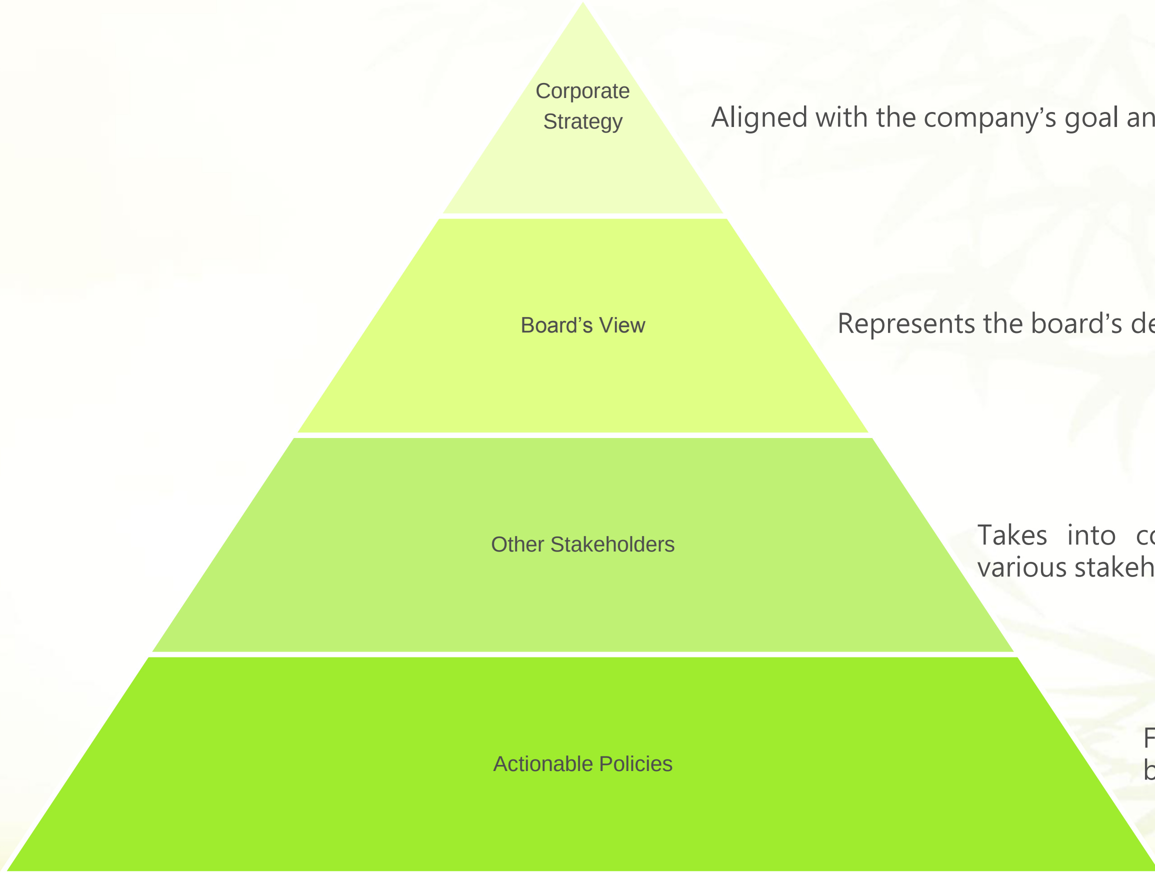
	Club Champion	Club Survivor
Objective	To win the League and capitalize on ticket sales, endorsements, broadcasting rights, winning prize	To maintain a qualifying spot in the premier league
Risk Appetite	Not finish at 4th position or lower	Not relegated
Culture/Actions	• Attractive and entertaining football. • Winning mentality	• Cautious playing style • Different strategy on player trades

Financial Intermediaries

	Publicly Traded Insurer A	Growing Insurer B
Objective	To maintain stable earnings for stockholders	To increase sales
Risk Appetite	Not achieving lower than 50% of expected profit	Not a top 5 player
Culture/Actions	• Conscious of earnings drivers • Consider hedging strategy • Diversify product mix	• Additional distributional channel or alternative distribution approaches • Market entry

Risk Appetite

Effective risk appetite statements must be cascaded from the Board and senior management, being translated from a vision/strategy into more granular everyday actions that the staff on the ground can relate to and enact upon.



Aligned with the company's goal and direction

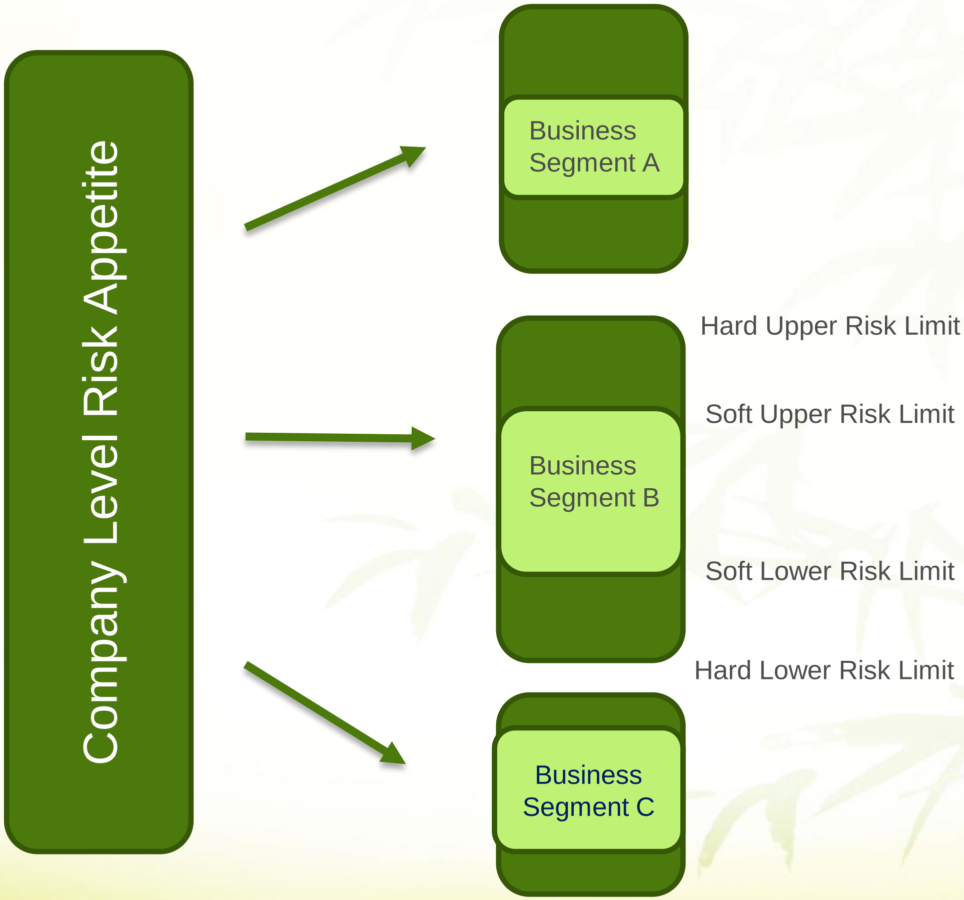
Represents the board's decision and view on taking risk

Takes into consideration the conflicting interests of various stakeholders

Functional risk policies for each business unit or business function

Risk Policy

Risk appetite determined at a company level are allocated down to the business segments through risk limits. Risk policies translate the risk appetite into actionable guidelines to which risk limits are implemented. Risk limits provide a measure against which the company can monitor its exposure to risk.



Upper Limit – ensure the corporate objectives are not endangered

- Soft limits are trigger points to escalate issue
- Hard limits should not be exceeded

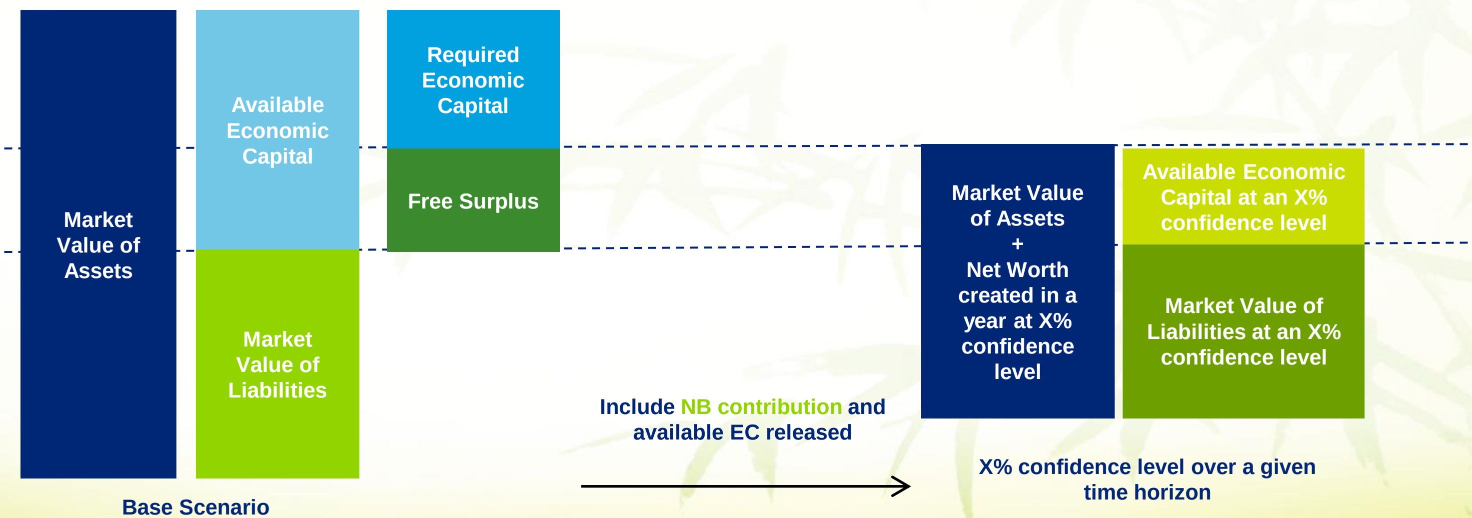
Lower Limit – on a standalone basis set at zero for any risk that the firm is not willing to accept. Complications with risk interaction.

Risk Quantification

Risk quantification = Assessing the financial impact of the uncertainty and exposure

Risk	The team not winning a game
Uncertainty	• The number of goals scored in a game • Fans loyalty
Exposure	• What is the winning prize? • How many endorsements will be offered if the team wins this game? • Ticket and merchandize sales

- When there is uncertainty and exposure, the level of resources (e.g. available capital) could vary from the current estimate.
- Economic capital is one way to quantify risks in an insurance company



Risk Quantification

- To quantify risk using economic capital, you will need to:
  - Identify the risks
  - Choose risk drivers to represent the identified risks
  - Use risk models to model uncertainty
  - Use asset liability models to model exposure
  - Use capital models to aggregate risk

- Other risk quantification methods – scenario analysis or risk factor models for operational risks

Risk Monitoring and Reporting

Risks quantified should be monitored periodically (quarterly, semi-annually).

All companies monitor the performance of individuals and the corporation using Key Performance Indicators (KPIs). But how many companies monitor risk?

Key Risk Indicators (KRIs) enable companies to monitor the effectiveness of risk management and serve as an early warning for unfavourable changes in risk levels.

KPIs	• Number of goals scored • Number of goals conceded • Ball possession
KRIs	• Number of fouls • Number of injured players • Amount of bad press on the players or manager

Risks monitored against the risk limits should be presented to the risk committee, senior management and Board through the use of:

- Heat maps
- Management info deck

MARKET UNCERTAINTIES		
ASSETS		
Risk-free Interest Rate Level	High	High
Equity Dividend Yield	High	Low
Equity Price	High	High
Corporate Bond Spread	High	High
Corporate Bond Default Rate	Medium	Low
Index on Index-Linked Bond / Loan		
Conversion on Convertible Bonds / Shares		
Loan Repayment Rate	Medium	Immaterial
Loan Default Rate	Low	Immaterial
Derivative Price	High	
Property Rental Yield	Immaterial	Immaterial

Risk Management

Risk management is the process of reducing risk either through a reduction of uncertainty or exposure or both.

Effective risk management can:

- Reduce volatility in performance and outcomes
- Reduce the financial effect of catastrophic events to the company
- Allow company to create a sustainable competitive advantage over its competitors

Aspects to consider:

- Complexity of the risk
- Intensity of the risk
- Degree of uncertainty
- Interactions between risks

Risk management can be achieved in various ways:

- Organizational change → risk committees/departments
- Cultivation of a strong risk culture → internal training, hiring risk experts, formal risk governance
- Risk based decision making → risk based performance evaluation and compensation

Example

Onerous investments guarantees in the inforce products. How would you manage your assets to alleviate the problem?

- Aggressively invest in equities and junk bonds → What effect does this have on your risk limit and credit rating? How would this in turn affect your capital requirements?
- Invest in property → How would this affect your risk levels? Are you more exposed to catastrophic risks?

Next Steps

Opportunities arise from accepting identifiable and manageable risks.

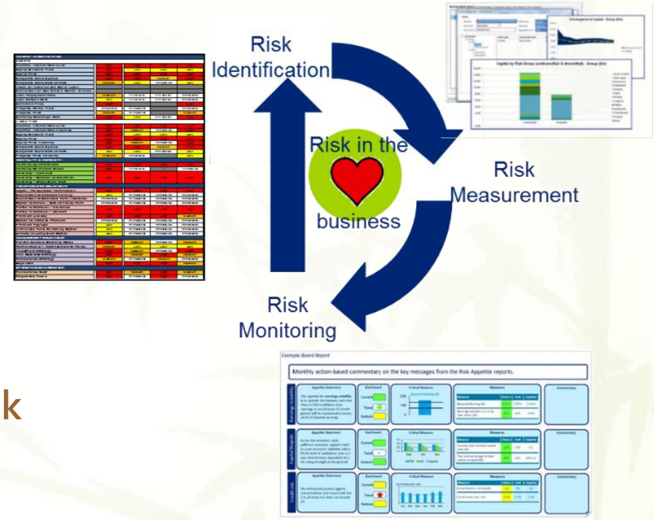
Challenges arise in every step:

- Risk Appetite
  - How do you define your acceptable probability of ruin?
  - How do you balance conflicting interests of different stakeholders?
- Risk Policy
  - How do you set policies that are easy to act upon and measure?
  - How do you create a strong sense of risk awareness so that the policies will be followed?
- Risk Quantification
  - How complex do your models need to be?
  - Is the methodology suitable for the complexity, intensity and importance of the risk to the company?
- Risk Monitoring and Reporting
  - What is the right level of granularity and frequency at which to monitor each risk?
  - How do you implement a strong governance structure for proper escalation of issues when limits are breached?
- Risk Management
  - Is there a protocol in place to tackle the risks swiftly and effectively?
  - Given limited resources, how do you pick and choose your battle?
  - How do you know if the remediation actions are working?

Next Steps

However, embedding risk management frameworks to understand the risks in the business will hopefully allow you to gain a competitive advantage. Risk is at the centre of a insurance business and can be reflected in:

- Product pricing
- Business planning and strategy
- Regulatory and market reporting



Risk is foundational to businesses.

Optimise your business - understand **The Essence of Risk**

The Essence of Risk

Questions & Answers