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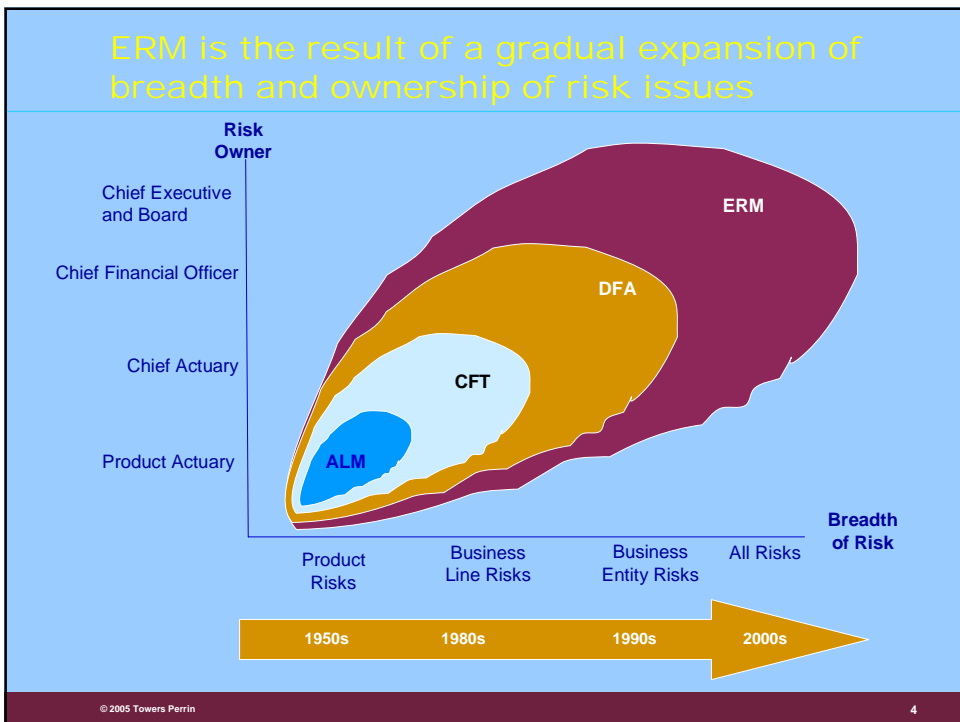
ALM and its links to Strategic Management and ERM in Insurance Companies

Ian Farr

Agenda

- Enterprise Risk Management
- Risk and capital management vs strategic management
- What business am I in? What business should I be in?
- Asset-liability management

Enterprise Risk Management



ERM embraces risk as essential to sustainable value creation

Traditional approach	ERM approach
Starts with a checklist of risks	Articulates strategy and identifies risks to achieving strategic objectives
Focuses only on downside risks	Considers upside as well as downside outcomes Identifies opportunities for risk taking based on relative ability to manage risks vs. competition
Analyzes risks in silos	Considers interaction of risks to expose areas of concentration and diversification
Supports monitoring and reporting	Supports decision-making

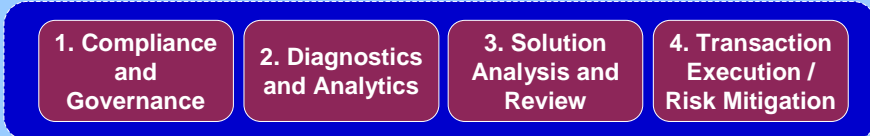
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There are four components of ERM



ERM Framework and Processes



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ALM represents but one component of an ERM process, but a strategically important one

ERM Framework and Processes



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Risk and capital management vs Strategic management

Risk and capital management

Asset/liability
risk

Insurance
risk

Operational
risk

Business
risk

- How much capital does the risk exposure tie up?
- What potential return does that risk exposure generate?
- Does the return exceed an appropriate threshold?
- How best should I allocate capital?

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Strategic management

Geographic
strategy

Product
strategy

Distribution
strategy

Asset
strategy

- Where can I add value?
- Where do I have competitive advantage?
- Where can I leverage existing strengths?
- Value chain analysis:

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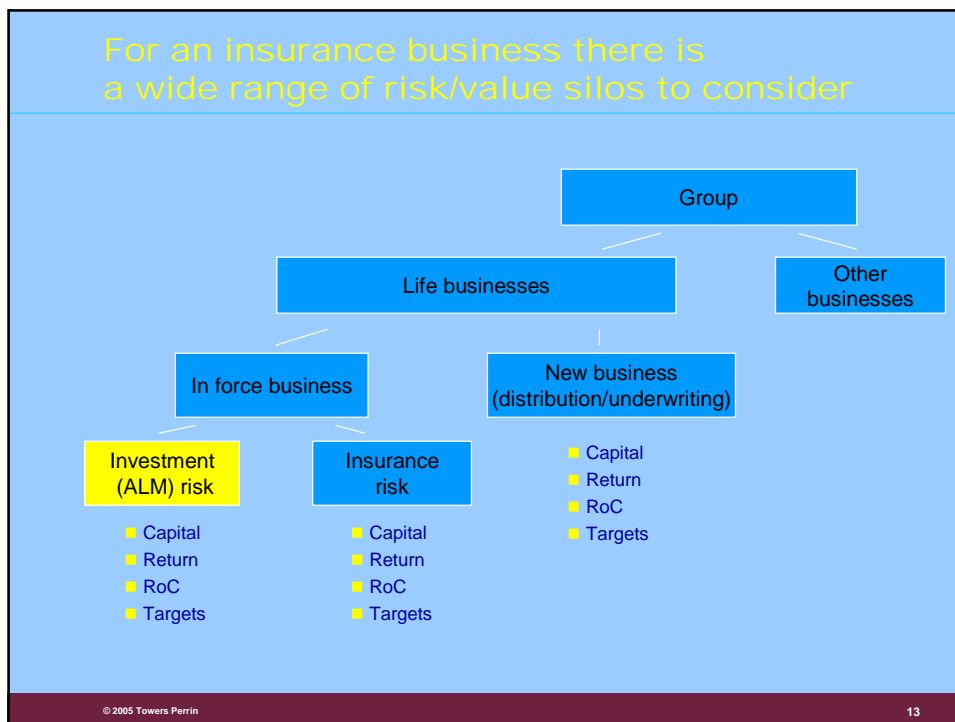
graph LR
    A[Distribution] --> B[Underwriting]
    B --> C[Administration]
    C --> D[Fund management]
    
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Risk, capital and strategic issues need to be considered together

- Any source of risk will tie up capital
 - Risks need to be considered in the context of the value added which might be derived from them
- Any strategic direction will involve risk
 - The capital implications of alternative strategies need to be considered
- Resource constraints – including available capital and risk appetite – also need to be factored in
- “Risk silos” and “Value silos” should be considered as one and the same thing

What business am I in?
What business should I be in?



Each risk/value silo needs to be assessed for resource consumption and value added

Example 1: In force life insurance risk

- Capital consumption: Significant, unless large scale
- Potential value added: Small
- Risk characteristics: Diversifiable
- Conclusion: Seek reinsurance (or securitisation)

The risk exposure should also be compared to any statement of risk appetite (or shareholder expectations)

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Each risk/value silo needs to be assessed for resource consumption and value added

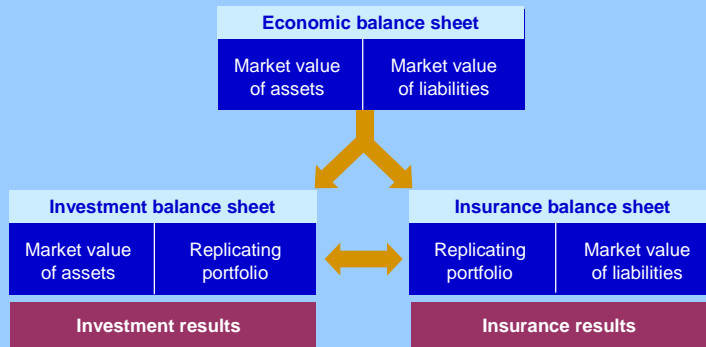
Example 2: Distribution/risk origination

- Capital consumption: Low (higher for P&C)
- Potential value added: High
(skilled sellers/underwriters)
- Risk characteristics: Partially diversifiable
(but some systematic risk)
- Conclusion: Expand/leverage

The risk exposure should also be compared to any statement of risk appetite (or shareholder expectations)

Asset-Liability Management

A replicating portfolio concept can be used to separate investment and insurance risks



- Improved understanding of risk exposure
- Clearer assignment of responsibilities

Some products give natural ALM exposure; here the decision is about whether to hedge

Example: Unit-linked/mutual fund business

- ALM exposure arises as a result of asset-dependency of future fee stream
- The extent and nature of ALM exposure is determined by the policyholder’s choice of investment funds
- Whether hedged or not, the approach, and the extent of exposure should be communicated (eg sensitivities)

Eg: “Skandia assumes that shareholders can independently manage the main financial risks such as market and currency exposure by, for example, hedging or diversification. Thus any protection of profits will be carried out only to maximise shareholder value, which in most cases entails no protection at all.”

Other products give the insurer a choice of ALM exposure

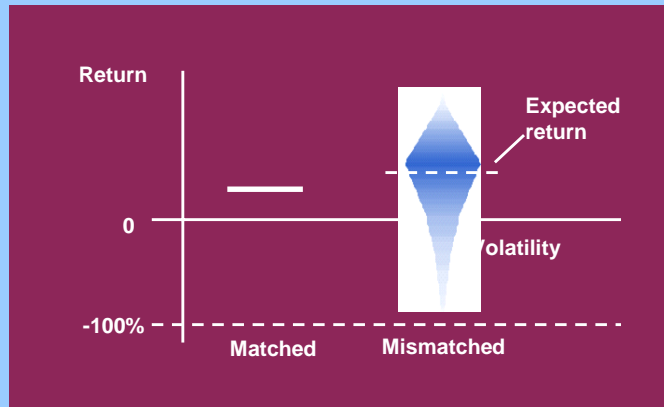
Example: Annuities in payment

- Liability payments are stable and predictable
- Matching with gilts gives minimum risk/minimum capital
- Why take on credit risk (eg corporate bonds, corporate loans) – more risk, more capital?
 - Need to justify premium return (above price for risk) to cover frictional costs of capital
 - Eg skilled loan originators can place loans at yields above price for risk
 - Eg Capture liquidity premium in corporate bond prices
- But recognise this as a separate “asset side” profit centre

Participating business is, however, less straightforward

- Adopting minimum risk strategy (ie matching guarantees with gilts)
 - Minimises capital and maximises value
 - But will likely attract few customers
- So there is a need to increase asset risk exposure:
 - Increasing capital requirements, with associated frictional costs
 - Reduces value
 - part of asset risk reward is paid to customers
 - shareholder picks up downside exposure of guarantees (once fund reserves are exhausted)
- The key is getting the right balance

ALM is a key tool in shaping the shareholder risk/return profile



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