ERM – A Capital Idea

Jack May

Agenda

• Enterprise Risk Management
  – Relative profit
  – Risk portfolio
  – Holistic management

• Capital Modelling
  – What?
  – How?
  – Why?
Agenda

• Enterprise Risk Management
  – Relative profit
  – Risk portfolio
  – Holistic management

• Capital Modelling
  – What?
  – How?
  – Why?

Enterprise Risk Management
Enterprise Risk Management

• Widget Co.
• 2014: £1m profit

Enterprise Risk Management

• Widget Co: What affects profit?
  – Material cost
  – Consumer demand
  – Transport costs
  – Marketing
  – Competition
  – Overheads
  – Finance costs
  – Tax
  – ...

  – Fraud
  – IT failure
  – Investment performance
  – Litigation
  – Warehouse fire
  – Theft
  – Director’s resignation
  – Reputation
  – Creditor default
  – ...

18 November 2014
Enterprise Risk Management

• “Shopping list” of risks
  – Reduce
  – Remove
  – Retain
  – Transfer

Enterprise Risk Management

• Enterprise Risk Management
  – Life Insurance Co.

Pensions  Life Assurance
Enterprise Risk Management

- Profit is relative
- Portfolio of risks

Life Insurance
- Holistic risk management

Retail Bank
- Combine:
  - Enterprise Risk Management

Enterprise Risk Management

- Enterprise Risk Management
  - Retail Bank

Treasury
Mortgages
Deposits
Agenda

• Enterprise Risk Management
  – Relative profit
  – Risk portfolio
  – Holistic management

• Capital Modelling
  – What?
  – How?
  – Why?

Capital modelling – what?
Capital modelling – what?

- Financial statements: Profit & Loss

![Graph](Image)

### Capital modelling – what?

<table>
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<th>Plan</th>
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</table>
Capital modelling – how?

Simulated events ➔ Quantify impact ➔ Profit / Loss

Capital modelling – how?

Simulated events ↔ Quantify impact ↔ Profit / Loss
Capital modelling – what?

- No more than a 5% chance of losing over $100m in the next five years.
- Less than a 1% chance of losing our ‘A’-rating over the next 12 months.
- Less than a 10% chance of making a loss over the next 10 years.
Capital modelling – what?

Appetite

Limits

Sub-limits

Assets

Equity

Liabilities
Capital modelling – what?

Safe
- Policyholders
- Regulators
- Long-term?

Expensive
- Shareholders
- Short-term?

What about:
- The board?
- Rating agencies?
- Creditors?
- Competitors?
Capital modelling – what?

New policy

• How much to charge?

Capital modelling – what?

- Total capital requirement
- Class allocation
- Profit required
- Premium required
- Business volumes

Board control

Business impact
Summary

Enterprise Risk Management
Profit is relative
Manage holistically
Align behaviour

Capital Modelling
Profit / Loss
Identify drivers

Questions
Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

Comments
The views expressed in this presentation are those of the presenter.