## The Actuarial Profession making financial sense of the future

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# **Corporate Risk Management**

The Growing Importance of Risk Data Analysis

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### Introduction

- There is a growing demand in corporate governance practices for more effective risk management
- Risk management methodologies require effective risk identification, without which the steps taken to analyse threats, quantify exposures and devise responses will be incomplete
- The risk environment is constantly changing, so risk identification has to be a continuous process
- Informal, infrequent, non-specific data collection will not be good enough
- So, let's look at
- why data is important
- corporate governance developments
- other drivers for better risk analysis
   the role of Actuaries

### Why data is important

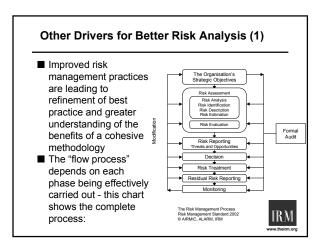
- We need better loss prediction so that we can respond appropriately to risk
  - business strategy decisions; contractual; risk financing; investment in risk reduction measures
- Risk must be analysed in terms of likelihood and severity
- Scenarios derived from risk analysis help senior management formulate their risk appetite
- Getting to really useful predictions requires an analysis of a lot of data - the more the better - and it should be relevant to your business and the environment in which you operate
- The question is, "where do I get relevant, updated, focused data?"

### **Corporate Governance Developments**

- Principle D2 of The Combined Code States: the board should maintain a sound system of internal control
- The Turnbull Guidance (on applying Principle D2) says:

  - the board should consider
     the nature and extent of risks facing the company
     the extent and categories of risk it regards as acceptable for the company to bear
  - they must make a statement (in the Annual Report) that there is an on-going process for identifying, evaluating and managing significant risk







### Other Drivers for Better Risk Analysis (2)

### Post 9/11

- Catastrophe modelling used in other areas, eg natural hazards, to be applied more widely
- "After 9/11 the insurance and reinsurance industries woke up to a riskier world, hence there has been an increased use of modelling to help assess these higher and more complex risks"
- And flowing from this, underwriters want to see clients modelling their own risks
- Good risk analysis helps clients "differentiate" in a difficult market
- "A focus on providing underwriting information to insurers portraying the risk exposure clearly and accurately enhances the ability to; place the risk; obtain cover and capacity; improve competition; assess correct levels of cover"2 IRM

<sup>1</sup>Sept 11 Sparks Demands for Modelling Lisa Howard, National Underwriter 2.9.02 <sup>2</sup> Marsh Topic Letter - Number VIII, 2002

### Other Drivers for Better Risk Analysis (3)

- Directors and senior managers like to understand what is happening in other companies, both peer group and other industries
- To date risk identification has had strong "seat of the pants" component - now it must be as scientific as possible.
- In banking, the Basel Committee will require banks to hold specific capital for Operational Risks. A discount to the amount of capital held will be given if effective risk management is in force. "An essential for any rigorous operational risk management process is comprehensive, reasonable, verifiable and validated data . . ." 1

1 Sound Practices for the Management and Supervision of Operational Risk, December 2001. The Financial Services Authority



### What sort of information is required by organisations?

- Own loss history
- Peer group specific loss history
- Industry-wide generic loss data for "transferability" analysis
- Insurers' data individually and as a group
- Consultants' and academic data on corporate risks, such as post-merger performance; legal vulnerability; international political issues
- Examples of databases; ISO; Marsh; IC<sup>2</sup>



# From Data to Decisions Important to keep in mind the potential practical application of your data analysis Data should be suitably adjusted to allow for wider economic assumptions and changes in the risk environment "We need to be able to critically assess the applicability and credibility of all sources of risk management information" 1

<sup>1</sup> Mark Jablonowski Risk Management Magazine Aug. 2002



### The Role of Actuaries

- Building risk databases librarian skills
- Creating effective interrogation and reporting structures - IT skills
- Taking raw data and creating models that help users understand risks and inform decision making actuarial and presentational skills
- Understand and capitalise on the link between risk analysis and value in client organisations commercial acumen



Questions?	
Views?	
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