



Institute of Actuaries of Australia

# XVth GENERAL INSURANCE SEMINAR

*Evolution of the Industry*

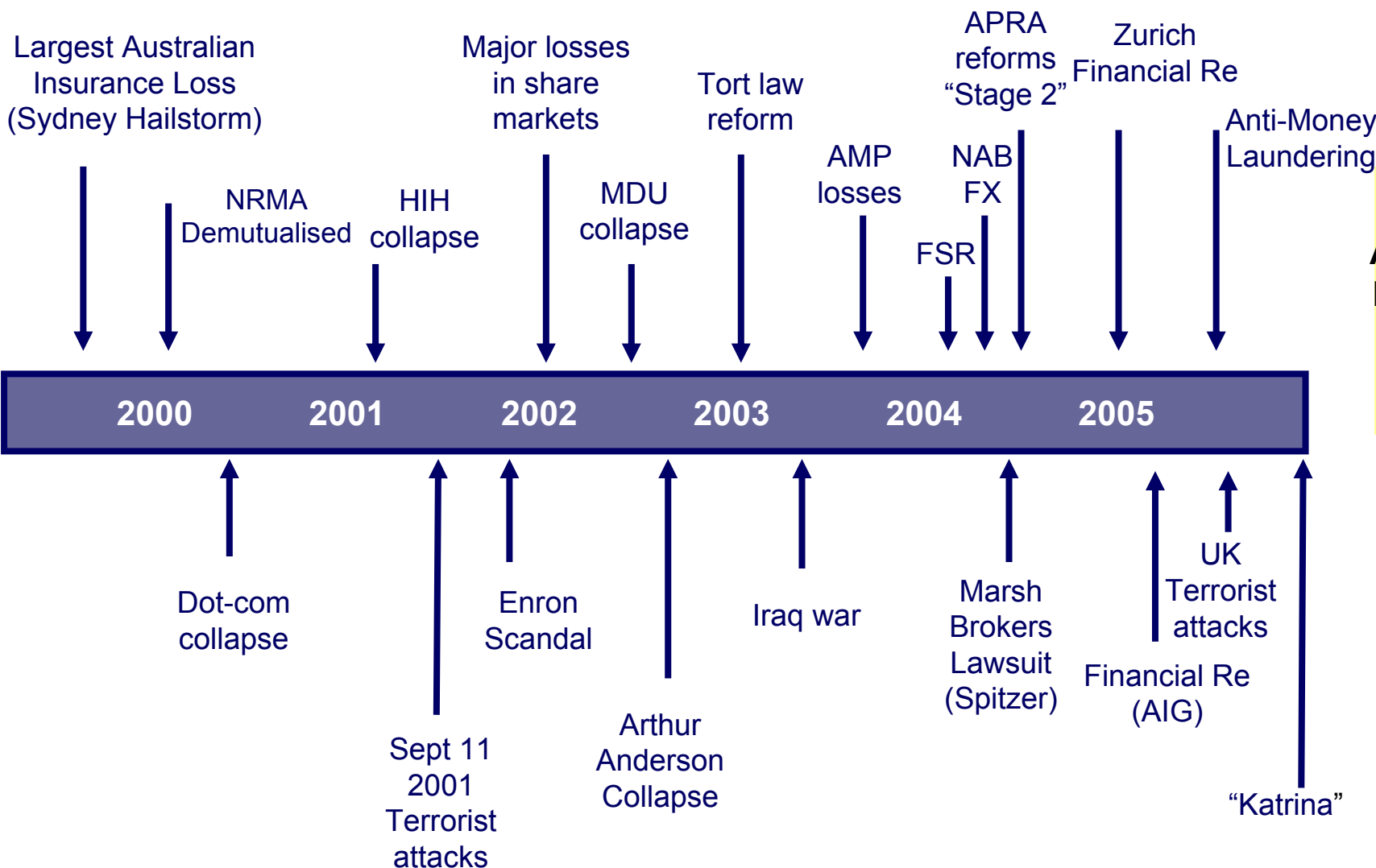


## **Key insurance industry challenges and their implications**

Tony Coleman  
Chief Risk Officer & Group Actuary  
Insurance Australia Group



# Time of significant change & risk





# Large mature markets make up the bulk of P&C GWP worldwide (80% in North America & Western Europe)

World Non-Life Market  
= US\$1,395B<sup>1</sup>

## Western Europe

Non Life GWP	US\$469B
Market Share	34%
CAGR (99-04) <sup>2</sup>	11%

## Eastern Europe

Non Life GWP	US\$34B
Market Share	2%
CAGR (99-04) <sup>2</sup>	21%

## North America

Non Life GWP	US\$643B
Market Share	46%
CAGR (99-04) <sup>2</sup>	9%

## Japan

Non Life GWP	US\$106B
Market Share	8%
CAGR (99-04) <sup>2</sup>	1%

## Africa

Non Life GWP	US\$11B
Market Share	1%
CAGR (99-04) <sup>2</sup>	10%

## South & East Asia

Non Life GWP	US\$ 63B
Market Share	5%
CAGR (99-04) <sup>2</sup>	13%

## Latin America

Non Life GWP	US\$29B
Market Share	2%
CAGR (99-04) <sup>2</sup>	4%

## Australasia

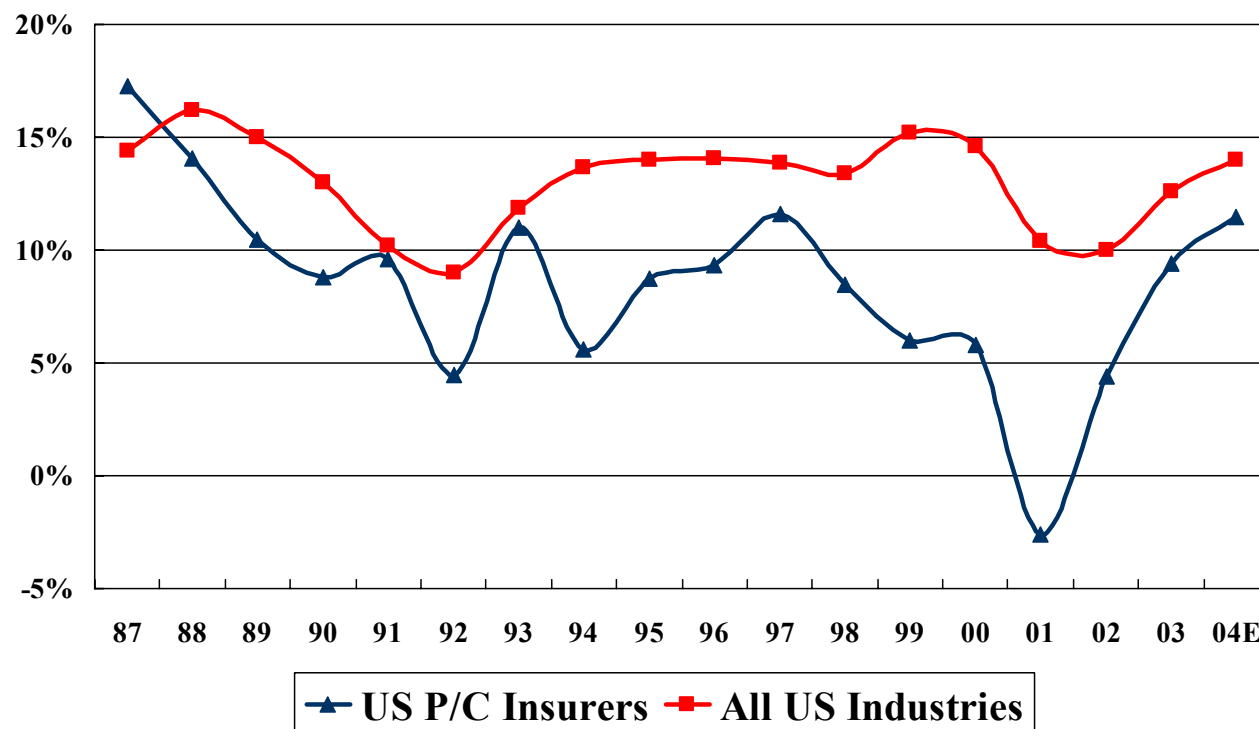
Non Life GWP	US\$ 28B
Market Share	2%
CAGR (99-04) <sup>2</sup>	12%

Note: (1) Non-life GWP includes health and PA (2) Nominal % changes

Source: Swiss Re 2004;



# Return on Equity: US P/C vs. All Industries 1987–2004E



**For most of past 15 years Investors provided with**

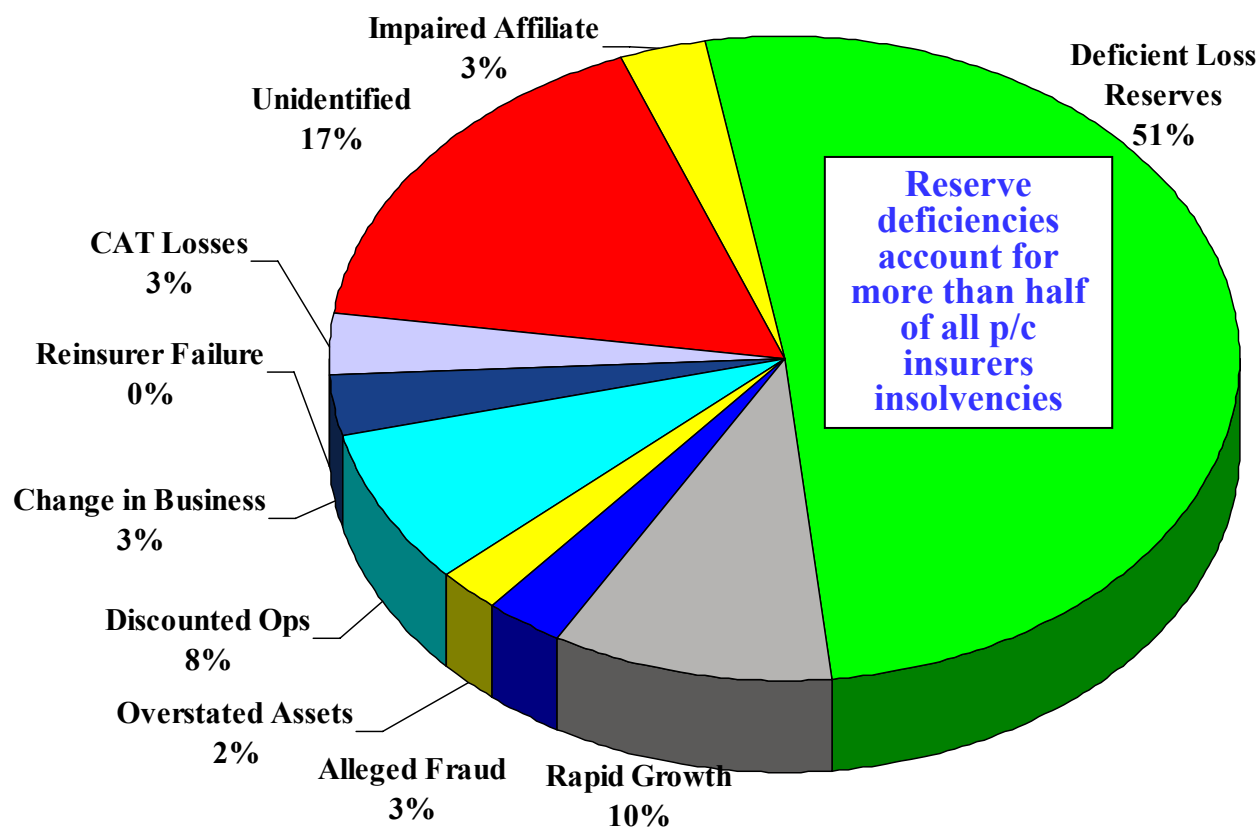
- plenty of volatility
- but only single digit returns

**Making insurance a less attractive investment for many investors**

**Source: Insurance Information Institute: Fortune**

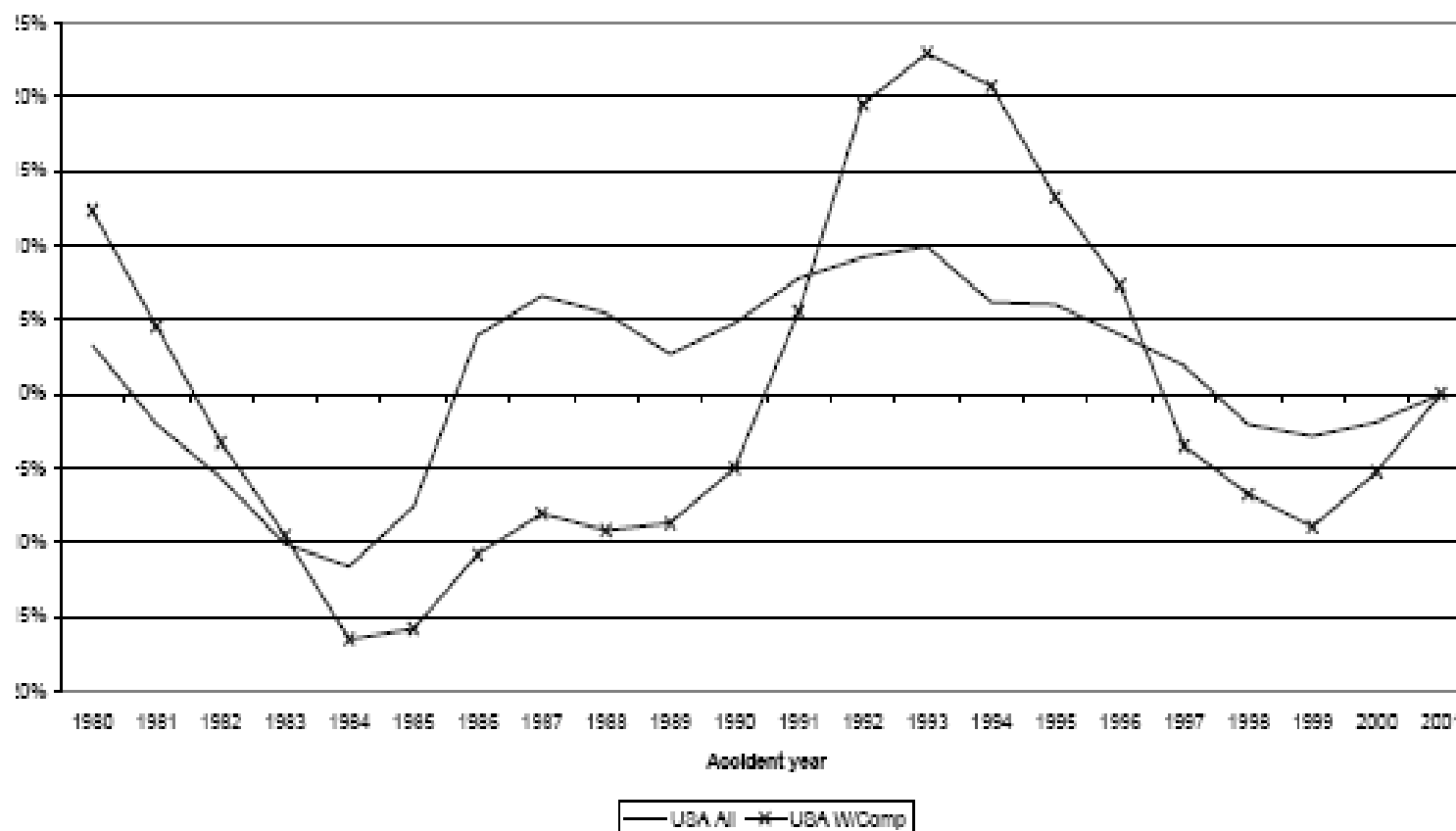


# Reason for US P/C insolvencies (218 insolvencies, 1993 – 2002)



# Reserving Cycle

Initial overstatement / (understatement) of ultimate claim estimates as a proportion of current estimates



Source: The Cycle Survival Kit, GIRO 2003 – IOA (UK) Working Party



# Conclusions of IoA (UK) Working Party

- A Reserving Cycle exists in the UK as well as in the USA.
- This Reserving Cycle is correlated to the insurance underwriting cycle.
- The last soft market led to significant levels of under-reserving which continues to cause a drag on ongoing profit levels in the industry.
- There are two principal motivations for flattening the reserving cycle.
  - First, improving the accuracy of reserving early on will reduce adverse prior year reserve development that damages the industry so badly.
  - Second, giving management a more accurate assessment of the profitability of product lines will facilitate better decisions being made. In a hard market this may mean expansion for a product line. In a softening market this may mean reducing volume targets, encouraging rate increases or exiting lines of business completely.





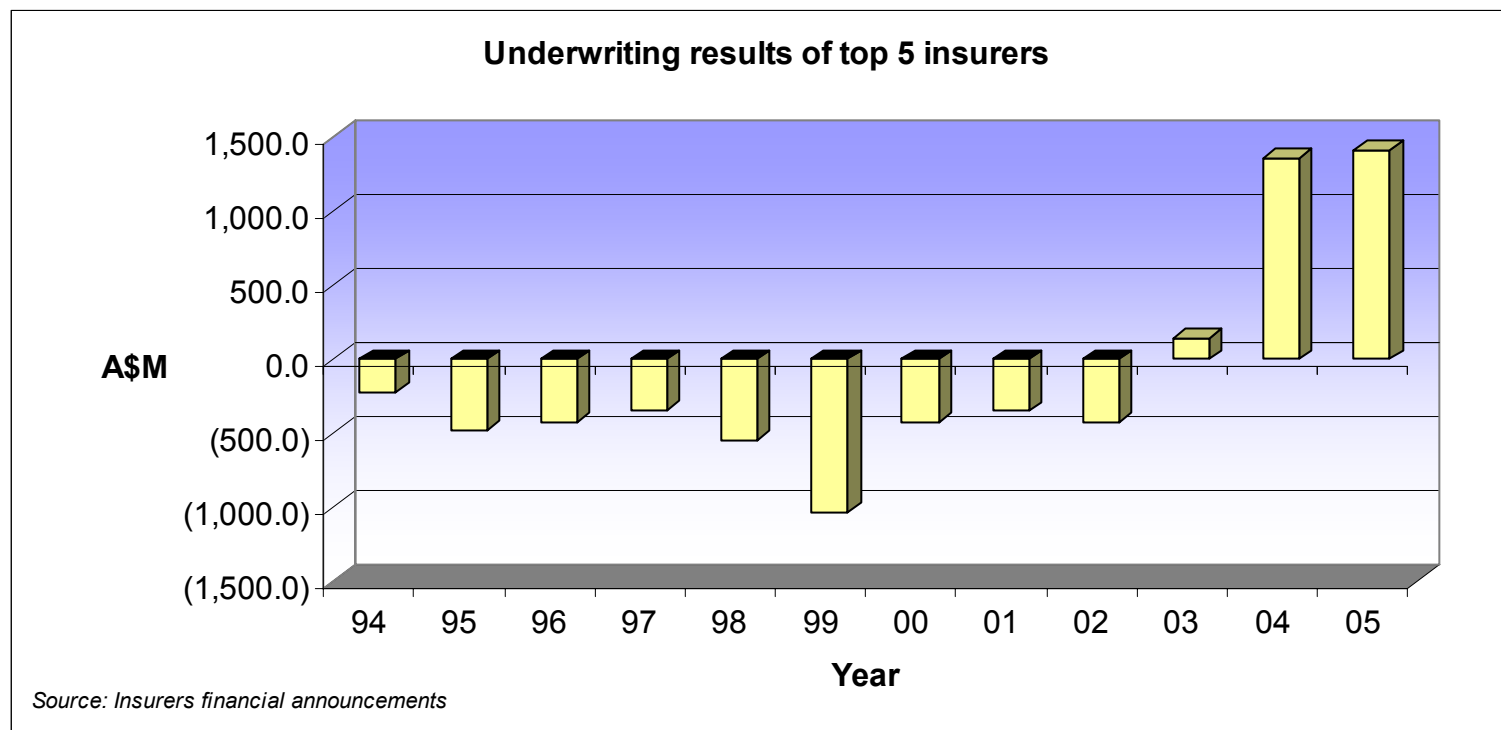
# Conclusions of IoA (UK) Working Party

- Even though management rather than actuaries set reserves in USA and UK various degrees of actuarial sign-off are required.
- Some standard actuarial reserving methods can contribute to accentuating the reserving cycle.
- Premium rating indices are a fundamental reserving tool. Their usefulness is as great as the difficulty in constructing them and they are likely to understate the amplitude of the underwriting cycle.
- The best way to stay close to the likely profitability of current business is to be close to its pricing.
- By increasing the degree of technical input to the pricing both management and the actuary increase their understanding of the adequacy of premium rates.





# Recent Australian Underwriting Experience – but where to from here?





**Would you invest your money  
in this industry?**



# Many challenges ahead

## Forces driving change

- Political demands for governance transparency
- Harmonisation of global prudential regulation
- International Accounting Standards
- Relentless rise of sustainability as an issue
- Climate change and rising catastrophe costs
- Economic growth (especially China & India)



# Key challenges for insurance industry

Lord Levene, Chairman of Lloyds May 2005

- **Managing industry's reputation**
  - Better communication with those outside our industry
  - Improving transparency and disclosure and managing contract certainty
- **Managing Insurance Cycle**
  - “44% of 100 Lloyds u/w's say it's the No.1 issue in 2005”
- **Managing risk better with increasing catastrophe losses**
  - Investment in scientific research and effective disaster planning
  - Shortage of adjusters on ground



# How can our industry improve its reputation?

**We need to deliver what our customers want**

- Consistency – not cyclical
- Service – expertise to help manage risk
- Security & financial strength – restoring ratings to ensure long term credibility
- Clarity – fewer disputes about cover
- Integrity – earn trust of our customers



# Some financial analysts argue that insurance is characterised by:

- Lack of transparency;
- Lack of consistency;
- Lack of comparability

## *Which leads to:*

- Poor management and governance
- Poor understanding of industry by equity investors and a correspondingly high cost of capital
- Poor industry reputation with customers and politicians



# Why does this happen?

- Often difficult to demonstrate that premiums are inadequate when written due to risk uncertainties
- “Bad news travels slowly” syndrome often leads to delays in disclosure of losses
- Lack of early disclosure of losses leads to lack of underwriting pricing and discipline
- Ability of new companies to attract capital and underprice existing underwriters who have developed “legacy liabilities”

“You are always at the mercy of your dumbest competitor”





# What is happening to address these problems?

- International Insurance Accounting Standards
- Increasing Focus from both prudential and consumer protection regulators worldwide in response to political pressure
  - APRA / ASIC (Australia)
  - FSA (UK)
  - SEC / NAIC (US)
- How effectively will the impact of recent reforms mitigate the cycle in Australia?



# New Accounting Environment

## International Financial Reporting Standards

1. Impacts on Corporates
2. Impacts on Insurance



# International Financial Reporting Stds

## – Impacts on corporates

### Traditional accounting

Largely static and objective  
But often irrelevant historical costs  
e.g derivatives, options, swaps

### Fair value accounting

Updates items regularly in order  
To try and capture current value  
But more malleable

- America's Securities and Exchange commission endorse shift to fair value accounting (June 2005)
  - In belief it will simplify accounts and reduce firms interest in structuring transactions to meet accounting goals
- Financial standards accounting board to release guidance on how to apply fair value devising "hierarchy" of items based on hardness to value



# Fair value problems for Corporates

- **More volatile profits**
- **More reliance on estimates**
  - Many items not traded in liquid markets & lack verifiable price
  - Involves complicated models based on subjective estimates
  - At best Estimates difficult for investors/auditors to verify or compare across companies
  - At worst Unscrupulous could manipulate models to flatter bottom line e.g Enron

e.g. Federal reserve research shows fair value of bank loans can vary widely depending on inputs/ methodologies.

Market values for lower-rated corporate bonds, one possible benchmark, can vary by as much as 2 – 5% giving managers leeway to fiddle with numbers



# Potential to manipulate

Scandals like Enron, Worldcom, AIG etc show accounting numbers are malleable

Potential to manipulate increases as use of estimate increases

- As businesses become more complex and “knowledge” based
- With move to “fair value” accounting

Reliable/Unreliable numbers

- Reliable means investors can make sound decisions
- Unreliable leads to loss of confidence in markets and s/h loss

Study by Glass Lewis, found investors lost over \$900 billion in 30 big accounting scams between 1997 and 2004

Study from Harvard & Chicago University found ample evidence of tinkering at delicate moments before acquisitions, equity offerings and exercising stock options

e.g some inflated assumed rate of return on pension fund assets thus flattering profits



# Fair value solutions/ consequences

## Potential solutions

- Disclose assumptions ( including their history and sensitivity)
- Objectivity & independence of those making estimates and those verifying them
- Harder scrutinising of numbers by investors / analysts / auditors / regulators
- Better disclosure of how much profits are based on facts compared to estimates and how previous estimates panned out

## Consequences

- Encourage managers to value things realistically
- Highlights difficulty of measuring a firm's performance – a complex subjective notion cannot be captured in single profit figure
- Helps investors decide whether estimates are fair or foolhardy and to think harder about what a business is worth

Similar issues to  
what actuaries are  
dealing with



# So what issues does this raise ?

- How are others dealing with problems we also have to deal with e.g. estimates, assumptions, judgements?
- How are we allowing for the impact of accounting changes in our investment decisions?
- What is the relationship between profits and share value ?
- Are rules resulting in right outcomes and behaviours?
- Are we considering enough issues in the wider field that may impact us?  
For example what risks are we not considering? e.g carbon risk





# IFRS – Insurance changes

## Phase II

- Financial instruments – IAS39  
Consistency of accounting treatment for assets and liabilities
- Conceptual Accounting Frameworks
- Revenue recognition – will insurance be the “tail wagging the dog” ?
- US GAAP and IASB convergence generally



# Conceptual Accounting Frameworks

- **FASB (in “Concepts Statement No 1”) concluded:**

“...Financial reporting should provide information to help investors, creditors, and others assess the amount, timing and uncertainty of prospective net cash inflows to the related enterprise (*para 39*)

- **The IASB framework:**

“The economic decisions that are taken by users of financial statements require an evaluation of the ability of an entity to generate cash and cash equivalents and of the timing and certainty of their generation (*para 15*)



# Revenue and contract liability recognition

- **What is Revenue and when is it recognised?**

In insurance, this will become either the Unearned premium (“defer and match”) or Premium Liability (“here and now”) approach

- **Substantial Cultural Differences**

Identification of legal obligations and “constructive” obligations, recognising that legal and constructive definitions vary by jurisdiction  
civil law (Napoleonic) vs. common law (Anglo-Saxon) origins



# Pressure on US GAAP

- **Recent focus by US regulators on finite reinsurance**
  - Contracts regarded as “bread and butter” (in the US) now being challenged for existence of risk transfer (e.g. General Re and AIG)
- **SEC identification of the need for IFRS recognition**
  - EU/SEC agreement on a “roadmap” for elimination of the need for companies using IFRS to reconcile with US GAAP by as early as 2007
- **Move to harmonise FASB and IASB positions (“Norwalk” agreement)**
  - Creation of joint IASB/FASB projects of which insurance is one, led by IASB.



# Phase II – The Australian situation

- Phase I represented a positive step in the setting of liabilities (e.g. LAT, risk margins, PoA disclosure)
- Australian approach to many Phase II issues is finding favour with the IASB (e.g. accounting approach in general, using discounting and risk margins with appropriate disclosure) despite initial opposition from other jurisdictions
- May result in few changes to Australian Standards for Phase II (especially for non-life insurance)

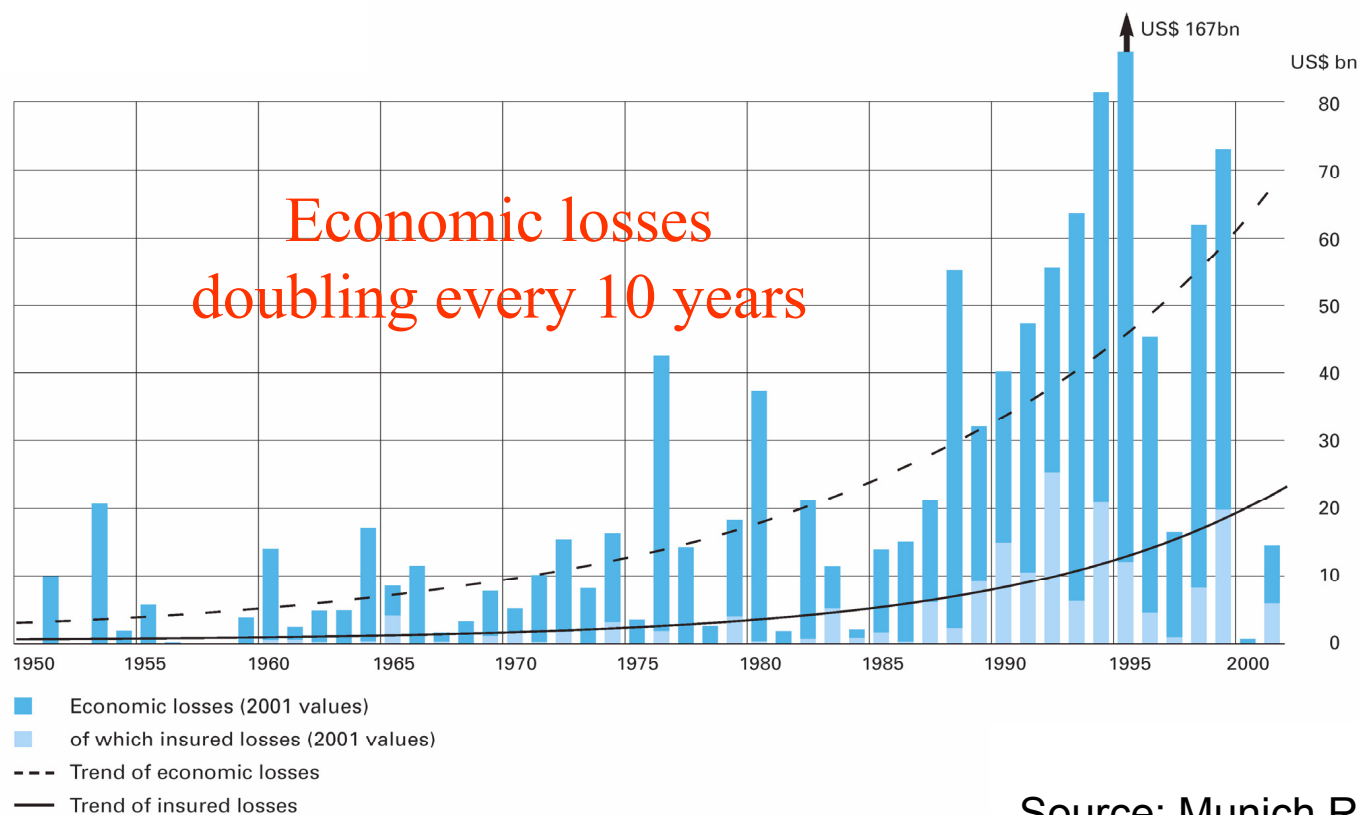


# Issues on the horizon

- **International Association of Insurance Supervisors (IAIS)**
  - International convergence on regulation (incl capital requirements)
  - Leveraging off IFRS + globalisation
- **Review of IASB Framework??**
  - “probable” / “likely” → “probability weighted”??
- **Insurance “risk margins”**
  - will the international actuarial profession agree on the way forward?



# Increasing costs of global disasters



Source: Munich Re





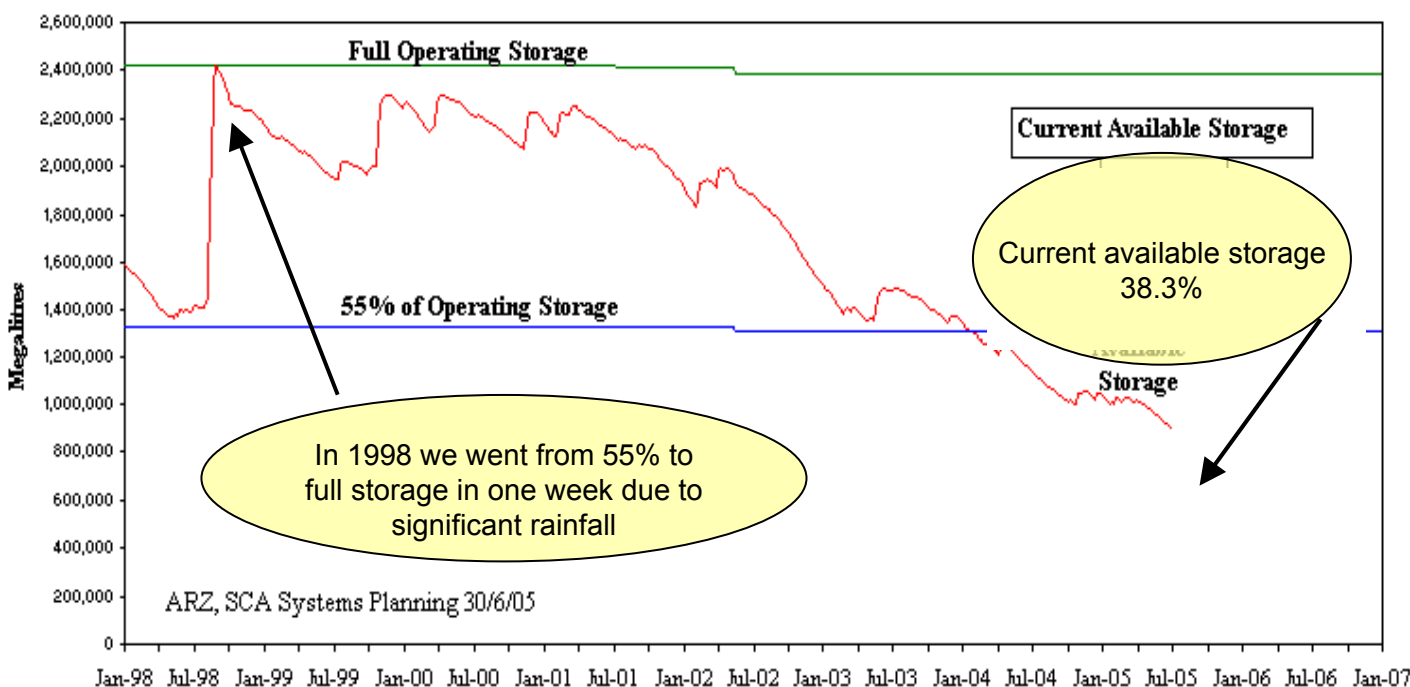
# Hurricane Katrina

- NAIC meeting to discuss climate change was to have been held in New Orleans in early September – it had to be cancelled !
- Katrina has made climate change an issue in the USA Insurance industry agenda – and increased the associated political pressure.



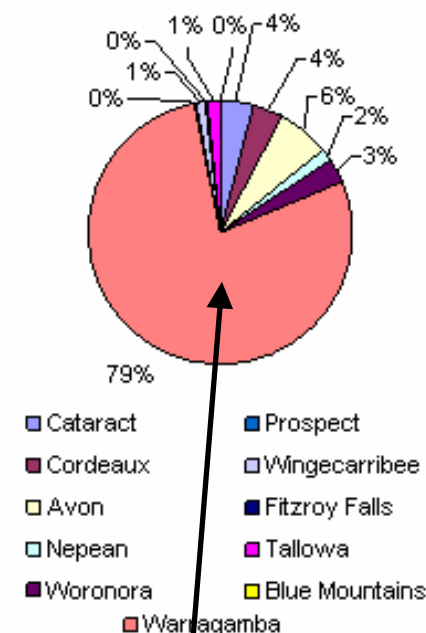
# How much water do we have?

Available Water Storage in Total System as at 30 June 2005



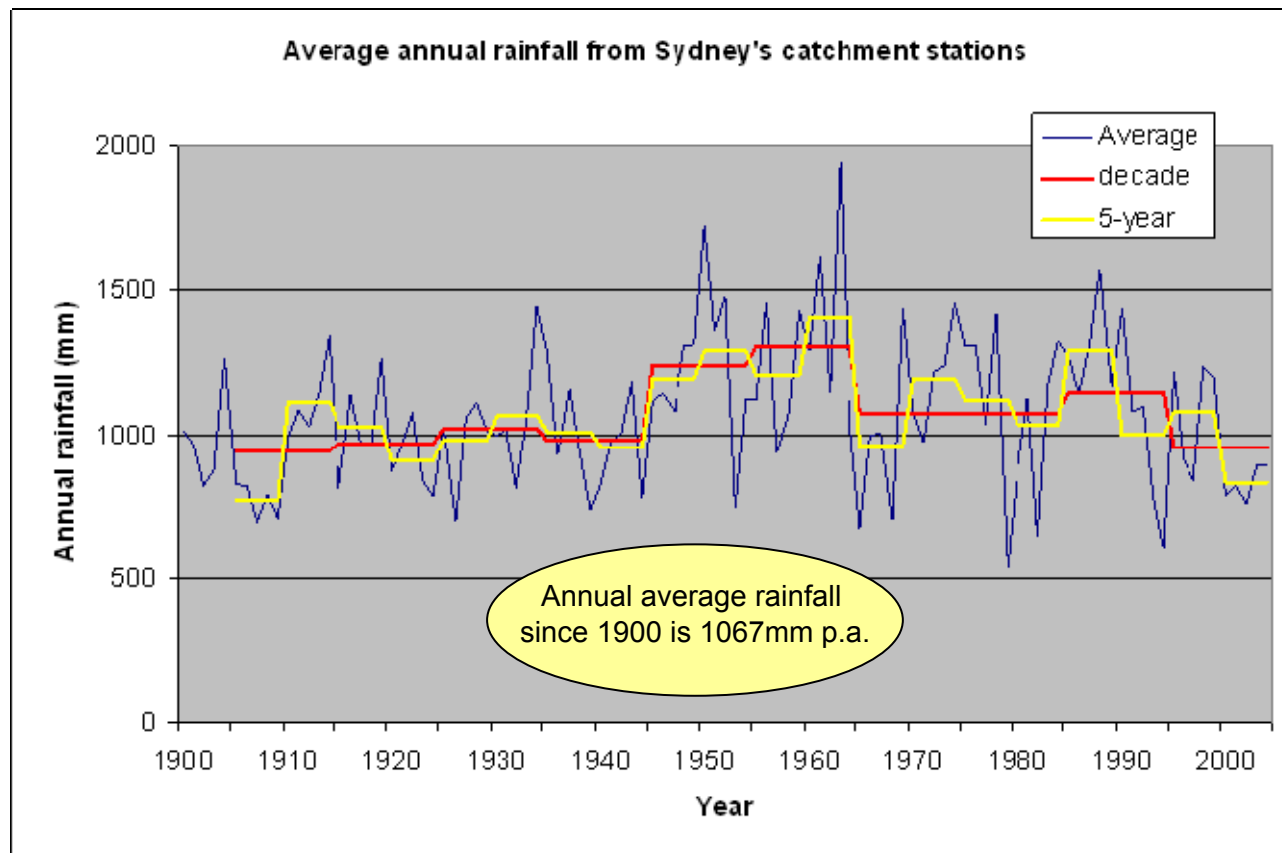
We have just less than 1 million megalitres of water in the dam – the same amount that we've used over last 3 yrs

Dam storage as % of total



79% of total storage comes from just one dam - Warragamba

# What is normal Sydney rainfall?



## 5-yearly trend

- Past 5 yrs rainfall (828mm) really low compared to period since mid-1940s
- Lowest period occurred from 1905 - 1910 (767mm).
- 1000mm rainfall from 1900 to 1945

## Decadal trend

- Past 10 years (954mm) more in line with first half of century (1000mm)
- Mid-1940s to mid 1990s are considerably wetter.
- If assessing rainfall on past 50 yrs only, a decline is seen, however when viewing past century a different picture emerges indicating that period from 1945-1995 could in fact be anomalous.

Sydney rainfall has high natural decadal variability - consequently difficult to forecast trend due to short observation period of 100 years



# Capital market crisis (2001 -2003) shook insurance industry

- Insurers challenged in both Asset and Liability management
  - Making different risk measurements correspond
  - Capital allocation to operating entities and lines of business
  - Differences in accounting and statutory reporting
  - Prudent underwriting
  - Accumulation control
  - Hedging
- “Solvency II project” – European legislator desire greater regulatory framework incorporating asset/liability management, reinsurance arrangements and techniques from world of financial economics, use of internal models



# Adding value ?

In this period of significant change in

- Global accounting framework and
- New Regulatory environment

How do we ensure these changes **add value**  
rather than merely add paperwork?



# It is vital to maintain the distinction between:

- Genuine risk management

Setting an organisation's risk appetite and then seeking to optimise the return for that risk appetite

AND

- Compliance

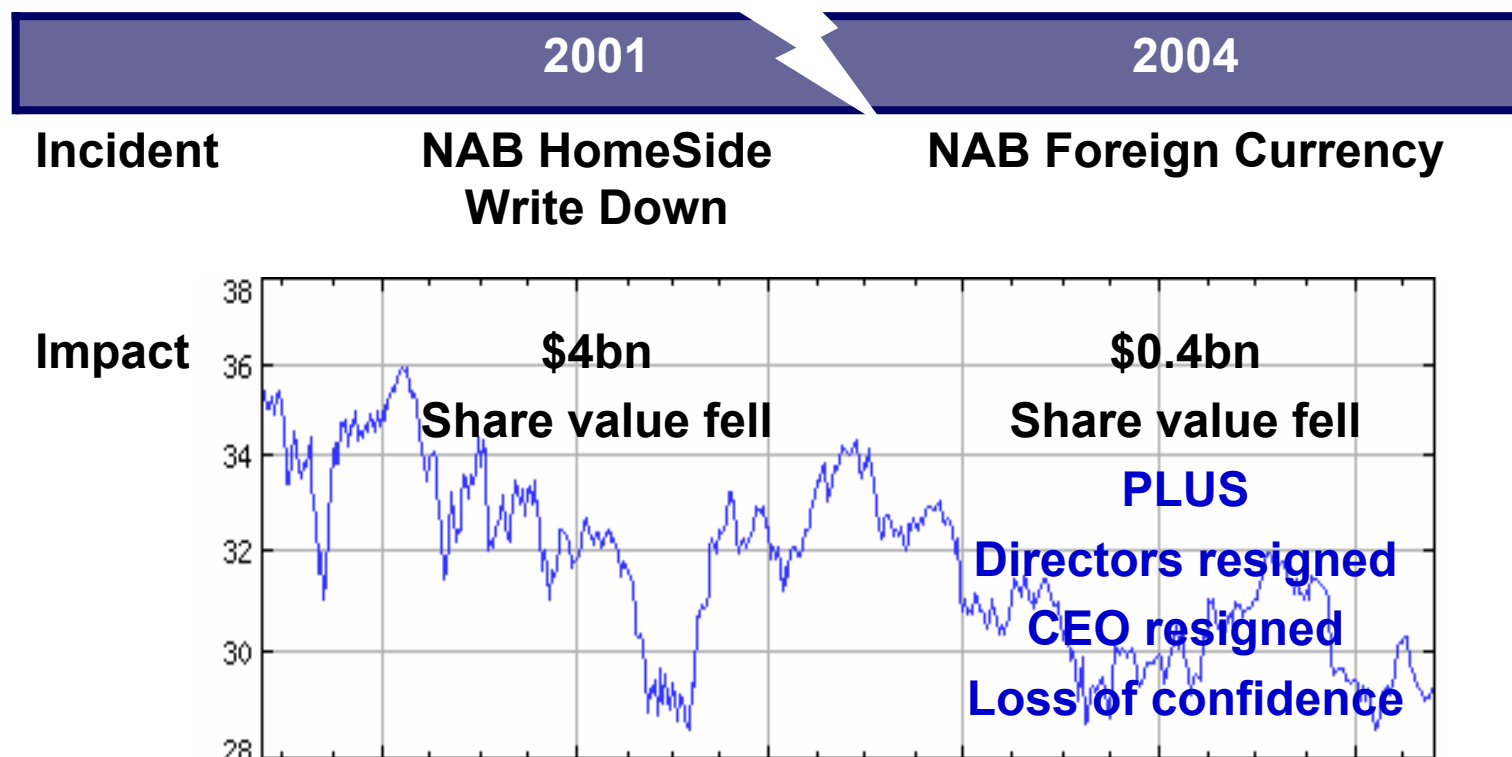
Ensuring that regulations and rules are followed

Compliance is a necessary but not sufficient part of risk management - IT IS NOT VALUE DRIVEN



# Reduced tolerance for mistakes

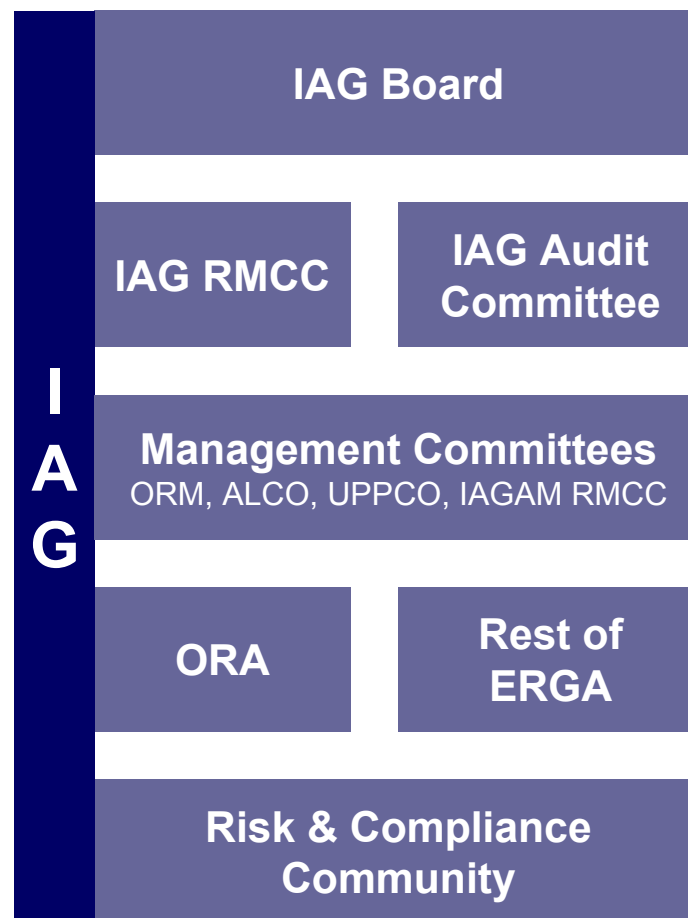
**Reputation risk can multiply the cost of financial risk**







# Structure is necessary but not sufficient!





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# Culture

If you are trying to drive fast you need good brakes





# Risk Culture

right help

- Foster an environment where risks / incidents / breaches are reported promptly
- Avoid 'bad news travels slowly' syndrome
- Avoid 'shoot the messenger' syndrome
- Promote transparency and a 'fix it' mentality



# Shared Language

## RISK CATEGORIES





# Agreed Measures with clear and frequent Feedback Processes

**Red**

- Balanced scorecard approach impacting executive remuneration

**Orange**

- Simplicity and consistency
- Profit-before-Tax relativities
- Group operational risk tolerance

**Yellow**

- Regular Business Unit and project ratings

**Green**

- External audit alignment



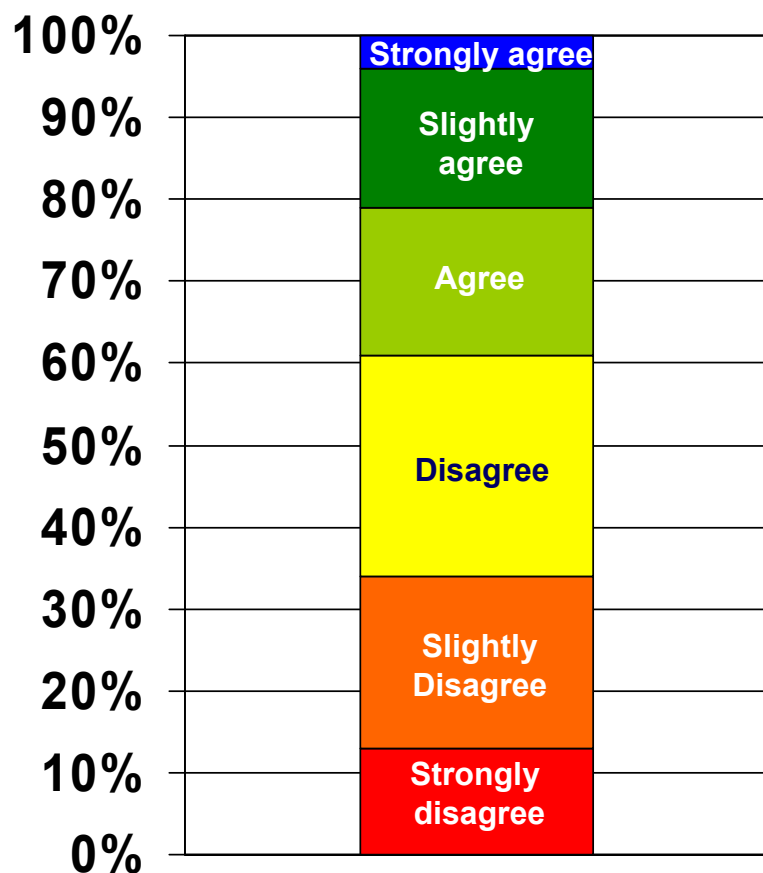
# Risk Culture Approach

**Make risk management behaviours ‘part of the way we do things’**

- Understand Business Unit cultural survey results
- Develop Company and Business Unit specific activities
- Quantify operational risk
- Hold Executives and Senior Managers accountable for improvements
- Include in all external / internal audits and health checks.



# Risk Culture Measure – Ask all the Employees

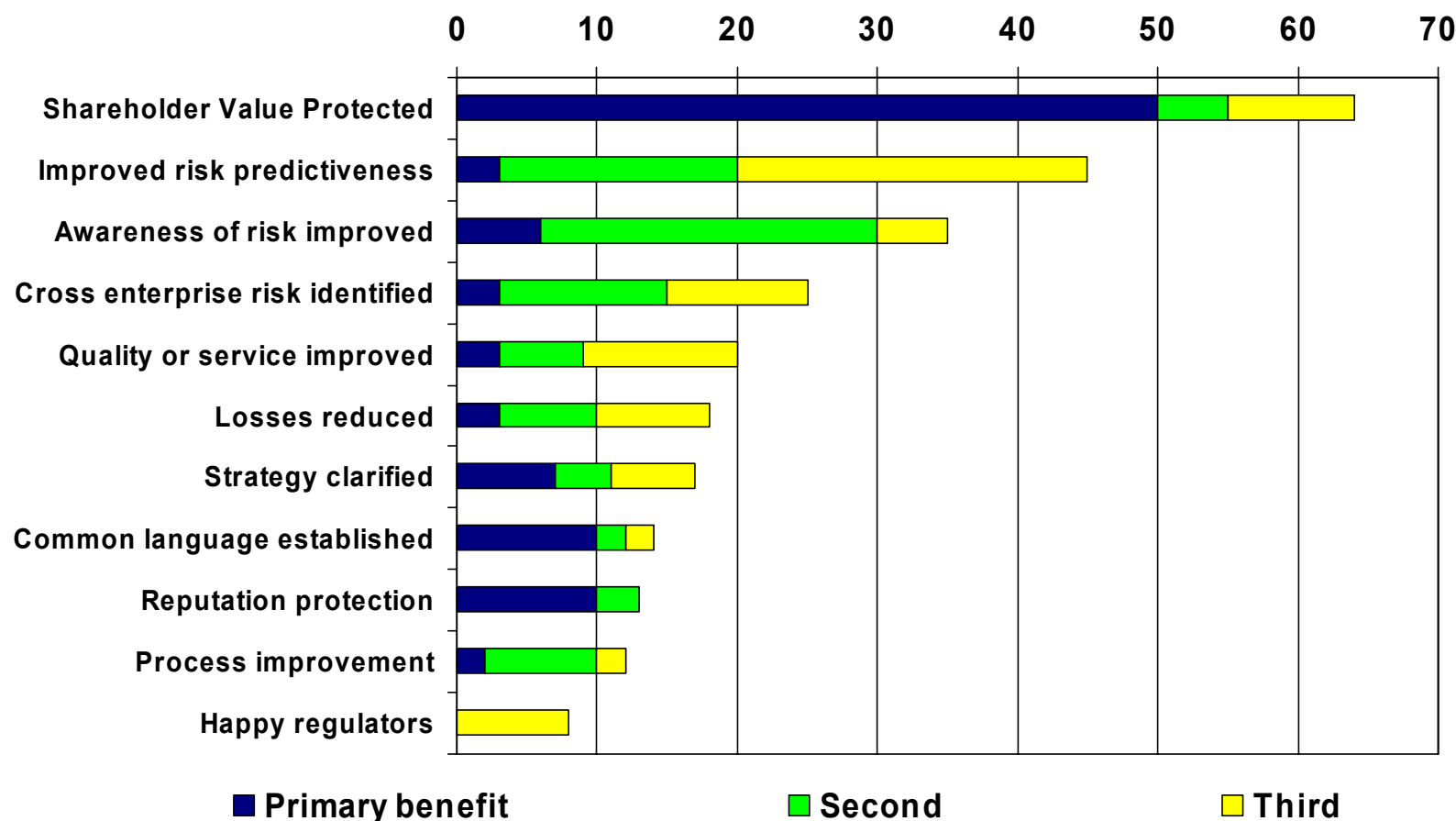


Survey focusing on:

- Prevention
- Detection
- Recovery
- Continuous Improvement



# Benefits of Enterprise Risk Mgt

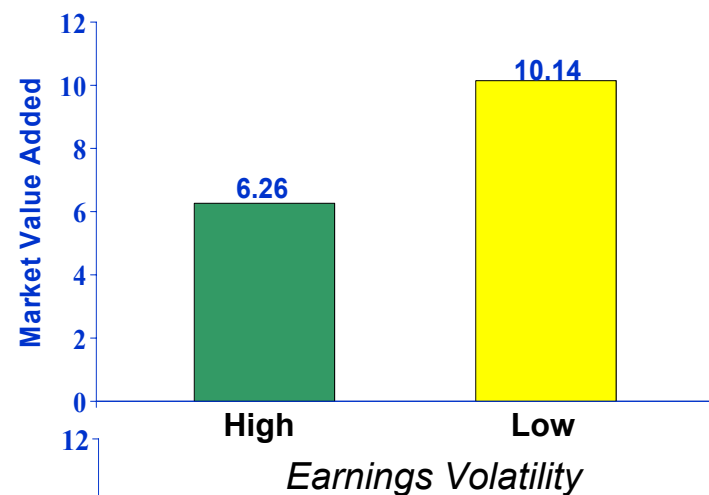
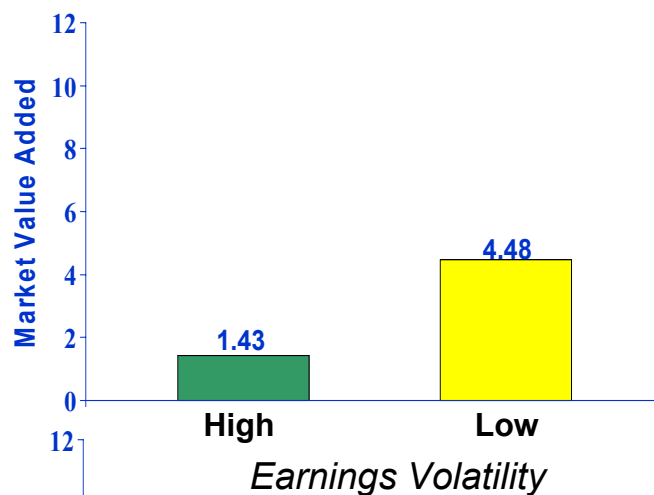




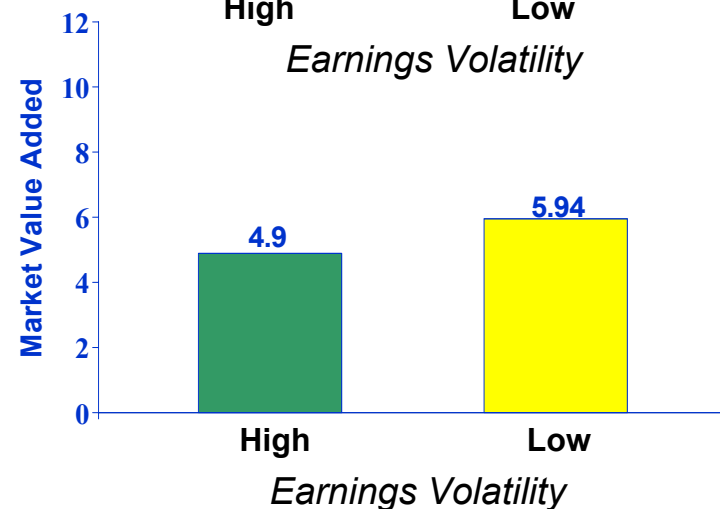
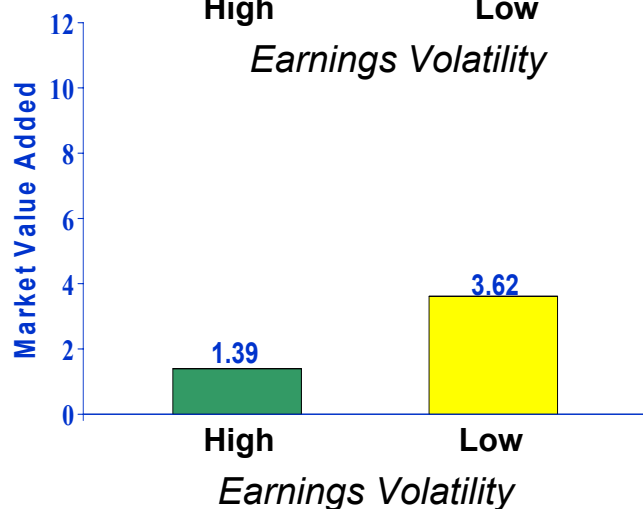


# Volatility & Shareholder value

High Return Companies



Low Return Companies



Low Earnings Growth Companies

High Earnings Growth Companies



# What are the challenges here for the actuarial profession?

Can we “*Go Beyond Uncertainty*” to create value adding solutions to risk laden problems ?

Or will we retreat to a narrowly defined, declining base and let others take up the real challenges ?

## **What is needed?**

- Start thinking globally while acting locally
- A risk & opportunity assessment for the profession?
- Education & CPD to support Actuaries as business leaders & thinkers – not just analysts of detail



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# Can we go beyond uncertainty to turn risk into value ?

