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CASUALTY CATASTROPHES

How well do you know them?

34TH ANNUAL GIRO CONVENTION

CELTIC MANOR RESORT, NEWPORT, WALES

Terry Masters & Jun Lin

Capital Requirement

- Capital Requirement:
1 : 200 for ICA and
1 : 250 Rating Agencies
- Feedback shows main driver is Natural Perils exposures
- Property Catastrophe exposures drive Capital Requirements

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The Issue

“70% of insurer failures were attributable to Casualty writings” – AM Best

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Historic Experience – US Market

- 2005 Katrina, Wilma and Rita combined contributed around \$80bn.
- In 2002-2005, we also saw security cases
 - Enron, (to be disclosed), WorldCom (\$5.1bn), Parmalat (\$1bn), IPO Allocation (\$1bn?), Laddering (\$1.4bn), Royal Ahold (\$1.1bn), AOL Time Warner (\$2.5bn).....
- Not to mention in the same period, there are over \$50bn in reserve deterioration, with majority coming from Asbestos related claims.

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Some Speculations

- So why Nat Cat dominates the DFA tail results?
 - Property risks are easily identified,
 - Perils are known and "relatively" constant in nature.
 - Exposure are known and easily monitored through good Data capturing.
 - Market Loss info from historic Nat Cat events/RDS type scenarios are readily available (modelling firms/brokers etc.)
 - Time – money invested in property modelling
 - Proprietary modelling companies, emerged since late 80s, concentrated on property exposures modelling
 - Significant amount of efforts were put in by governmental and academic organisation as well as the insurance companies to understand Nat Cat.
- Can we say the same for Casualty?

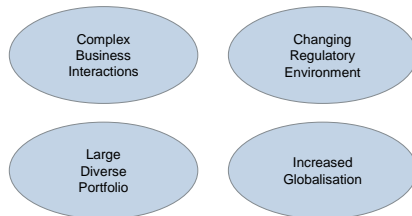
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What are Casualty Cat Events?

- Change in business practice
 - PI, D&O/ML, FI
- Pandemic
 - WCA/EL, D&O, Product, Med Mal/Hospital Liability, GL
- Major product failure
 - Product, GL/Umbrella, Recall, PI, FI, WC/EL
- Economic downturn driven event
 - FI, D&O, PI, Credit
- Unknown/Hidden Hazard – GM, Nanotech, Comp Virus etc
- Tort
 - Med Mal, Product, Med Mal, Auto Liab, EL, FI, D&O
- Nat Cat/Terrorist Attack

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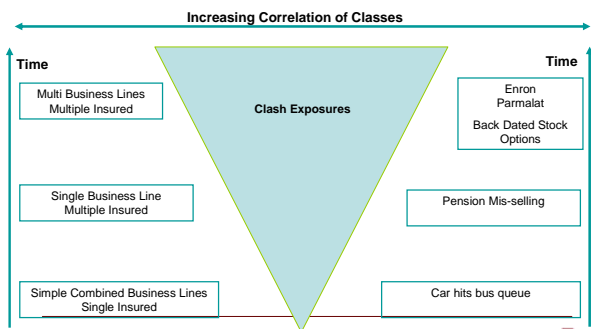
The Issue



= Risk of Systemic Aggregation

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The Issue



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Example 1

Manipulated Stock Options

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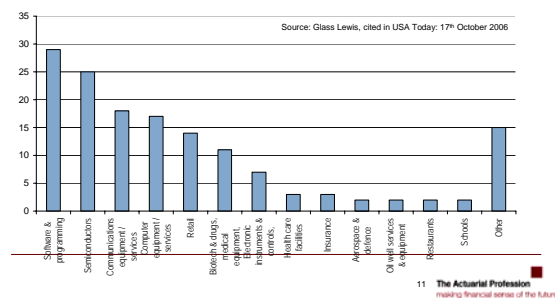
The Perception

- Illegal (?) behaviour by a number of firms whereby executives were given the right to buy stock at an artificially low price from a previous date
- Limited and known involvements but increasing boundaries to the problem
- Single type of activity / business practice

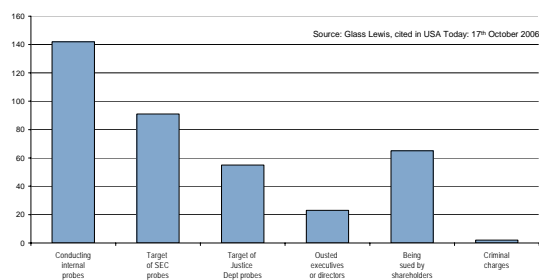
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The Reality

- Single activity / business practice but multiple companies in a variety of different industries



The Reality Continued...

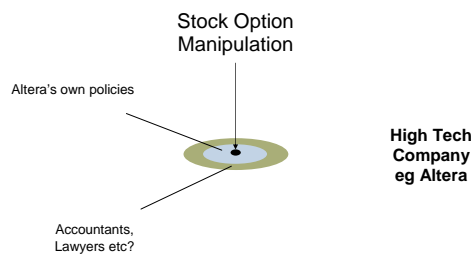


The Reality Continued...

- Constantly growing list of involved companies
 - The Big Four accounting firms have recently been urged to determine what role they may have had in the backdating of clients' stock options

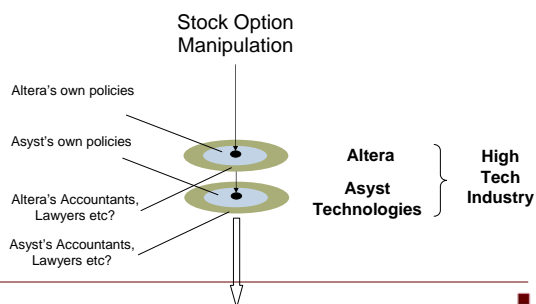
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The Perception



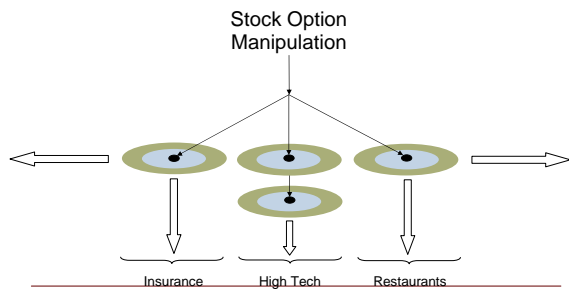
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But Many Companies...



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...And Many Industries



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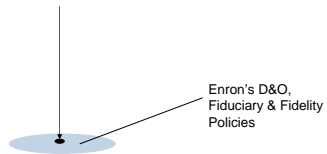
Example 2

Enron

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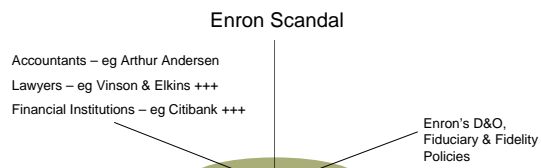
Initial Losses

Enron Scandal



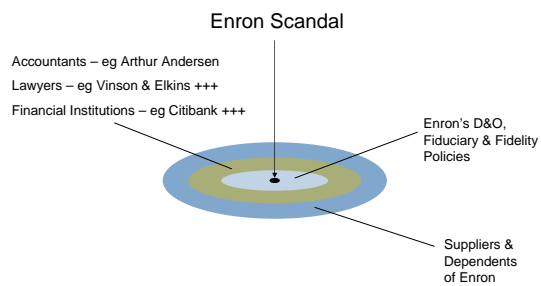
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Other Firms At Fault



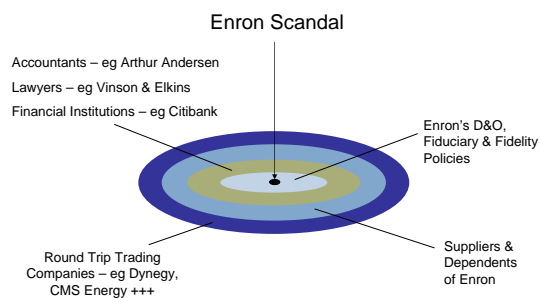
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Expanding Shockwaves



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Further Losses



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Lessons learned

- Increasing correlation between LOBs on high profile losses.
- Increasing time period over which other classes became involved in loss.
- Increasing frequency and value of losses
- Current estimate of Enron event is \$7.1bn

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Other Concerns

- Heavy consolidations in various industries leads to increase risk aggregation
- Recent trend of increasing outsourcing in manufacturing and service industries
 - less direct control
 - Few specialists supplying to a large no. of clients
 - Risks are "hidden"
- Increasing dependencies on electronic equipments.
- Increased human travel

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Today's Issues

Current Sub-Prime situation extends beyond US

"We are seeing things that were 25-standard deviation events, several days in a row" - David Viniar, Goldman CFO

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Casualty Catastrophes

- What should they mean for Capital requirements?
