

## D&O Pricing, Not as Easy as ABC

Anup Seth – September 2006

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### Agenda

- D&O Product Overview
- Typical D&O Programme
- Claim Frequency
- Claim Severity
- Financial Markets Approach
- Case Study

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### D&O Product Overview

#### Definition of Coverage

- A D&O policy provides coverage for claims arising from the "wrongful acts" of insured persons while serving in their capacity as directors or officers, including any act, error, or omission in their capacity as directors or officers.

#### Types of Coverage

- Side ABC – Entity Coverage
- Side AB – Corporate Reimbursement for Directors & Officers
- Side A – Non-indemnifiable coverage (Personal asset protection for Directors & officers)

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## D&O Product Overview

### Form & Exclusions

- Claims made Form
- Allocation
- Excess DIC (Difference in conditions)
- Insured v Insured
- Severability

### Additional Types of Coverage

- E&O
- Fiduciary
- EPLI (Employment Practice Liability)

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## A Typical D&O Programme

Bermuda QS	\$65m x \$135m	(Premium \$0.75m)
Arch	\$15m x \$120m	(Premium \$0.18m)
Houston Casualty	\$15m x \$105m	(Pm \$0.21m)
Hartford	\$15m x \$90m	(Premium \$0.25m)
St Paul	\$15m x \$75m	(Premium \$0.29m)
C.N.A	\$15m x \$60m	(Premium \$0.36m)
Ace USA	\$15m x \$45m	(Premium \$0.44m)
AIG	\$20m x \$25m	(Premium \$0.74m)
Chubb Primary	\$25m	(Premium \$1.15m)
Side A	Side B	Side C

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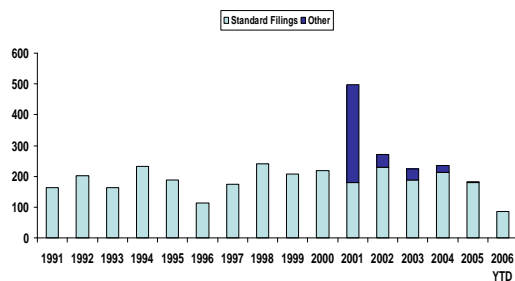
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## Claim Frequency – No of Class Actions



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## Claim Frequency

- Firms face a 2% chance of being sued each year

	1993 - 1995	2003 -2005	Change
No of Publicly Traded Companies	11,688	12,287	5.1%
Annual Class Action Suits Filed	210	241	13.7%
Probability of Securities Class Action	1.8%	1.9%	8.1%

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## Claim Frequency

### Potential Characteristics that impact Claim Freq

- Market Cap
- Industry Sector
- Stock Volatility
- Financial Strength
- Corporate Governance
- M&A/IPO Activity

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## Claim Frequency

### Systemic Issues

- 2000 – Utility Industry (Round Tripping)
- 2001 – IPO Allocation
- 2001 & 2002 – Laddering
- 2003 & 2004 – Mutual Funds
- 2005 – Insurance Industry (Elliot Spitzer)
- 2006 – Stock Option Back Dating
- What Next??

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## Claim Severity

- Top Ten Shareholder Class Action Settlements as at 1/3/06

Ranking	Company	Year	Settlement Value \$m
1	Enron Corp.	2005	7,144
2	WorldCom Inc.	2005	6,156
3	Cendant Corp.	2000	3,528
4	AOL Time Warner Inc.	2006	3,650
5	Nortel Networks	2006	2,474
6	Royal Ahold, NV	2006	1,100
7	McKesson HBOC Inc.	2005	960
8	Lucent Technologies	2003	517
9	BankAmerica Corp, NationsBank Corp	2002	490
10	Dynegy Inc.	2005	474

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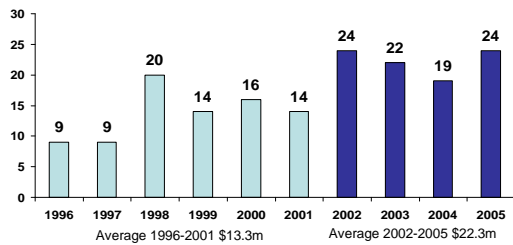
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## Claim Severity

Mean Settlement Value \$m



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## Claim Severity

### Potential Characteristics that Impact Claim Severity

- Market Cap
- Industry Sector
- Corporate Culture (Insured behaviour)
- New Management
- Lead Plaintiffs

### Defense Costs

- Approx 10% - 20% of indemnity cost

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## Actuarial Approach to D&O Pricing

### Premium equals

- Expected loss cost in the layer (claim freq x claim severity)
- Risk load (percentage of SD)
- Expense load
- Acquisition costs load
- Profit load

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## Financial Markets Approach to D&O Pricing

### Base Claim Frequency

- Rating Agency Default Rates
- Implied Default Rate from Credit Spreads

### Adjust for

- Market Cap
- Stock Volatility
- Regulatory Investigations
- Institutional Investors own > 5% of outstanding stock
- M&A or IPO Activity

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## Financial Markets Approach to D&O Pricing

### Option Pricing

- Selling a D&O policy is synonymous to selling a put option
- Example
  - A Large FTSE 100 Bank
  - Limit £20m, Attachment £100m
  - 20% fall in Market Cap would lead to a total loss
  - Black Scholes to calculate the implied premium
  - Allow for Market Volatility

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## Case Study

What is the Premium of the Top Layer

- Large Pharmaceutical Company
- Side ABC Standard D&O coverage
- Market Cap – Approx \$6bn
- Limit \$40m, Attachment \$160m
- NASDAQ Listed
- Good Financial Strength (SE \$3bn)
- Excellent Corporate Governance
- Loss Free to date

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## Case Study – Programme Structure



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