



Institute of Actuaries of Australia

XVth GENERAL INSURANCE SEMINAR

Evolution of the Industry

Terrorism – exposures, insurability, pools and other solutions

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Issues

- **exposures**
- **accumulation control**
- **insurability**
- **pools and other solutions**
- **TRIA**
- **ARPC**





Exposures

- **concerted physical attack on assets, population or infrastructure**
- **chemical or biological attack on physical assets or population**
- **contamination of resources/infrastructure by chemical or biological means**
- **or???**



Potential exposures

- **“...had the attack in New York been nuclear, it is likely that most of the US insurance industry, as well as reinsurers worldwide, would have been destroyed. Such an act could have caused US\$1 trillion or more of insured damage...”** Warren Buffett Berkshire Hathaway shareholders letter November 9 2001”



Potential exposures

- **“...the scale of damages from a terrorist attack are only limited by the imagination of the terrorists themselves..”** Joe Plumeri, CEO of Willis at Monte Carlo Rendezvous, September 2005”



Potential exposures

- **“a mega-cat is no surprise: one will occur from time to time. We did not however price for *manmade* mega-cats and we were foolish in not doing so. In effect...the industry, included coverage for terrorist acts in policies covering other risks - and received no additional premium for doing so. This was a huge mistake and one that I myself allowed”** ” Warren Buffett
Berkshire Hathaway shareholders letter November 9 2001”

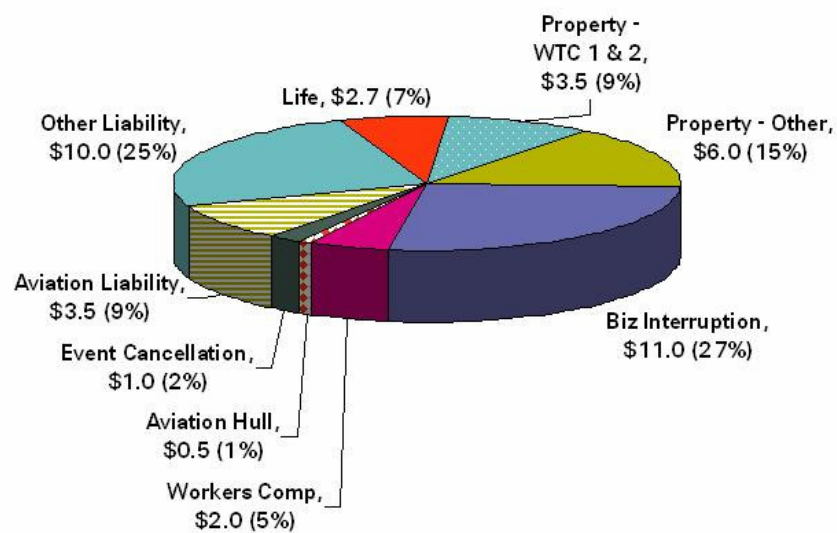


Accumulation control

- **how do we measure accumulations?**
- **classes of business exposed**
 - **property incl BI, workers' comp, liability, motor, PA, fine arts, domestic, marine, aviation, engineering, life and ??**
 - **contingent exposures**
- **insurance exposures, reinsurance exposures**
- **do TRIA and ARPC resolve accumulations?**



Accumulation control





Insurability?

Insurance and insurability

“Insurance is the mutual cover of a fortuitous, assessable need of a large number of similarly exposed businesses” Alfred Manes, Principal, Berlin Business School, 1906-1935



Insurability criteria

- **assessability – loss probability and severity must be quantifiable**
- **randomness – timing unpredictable, occurrence independent of will of insured**
- **mutuality – exposed parties form risk community**
- **economic feasibility – premium commensurate with risk**



The new (re)insurability of terrorism

- **necessary characteristics to ensure (re)insurability**
 - **additional premium commensurate with the risk**
 - **liability for losses limited**
 - **risk community extended if insufficient pool**
- **issues of anti-selection**
- **initial capacity offered to, and coordinated with, state and private pools**



Pool solutions

- **pre September 11**
 - **Northern Ireland**
 - **Criminal Damage Compensation Scheme**
 - **Spain**
 - **Consorcio de Compensacion de Seguros**
- **UK**
 - **Pool Re**



Pool solutions

- **post September 11**
 - **Austria**
 - **Terrorism Pool**
 - **Germany**
 - **Extremus**
 - **France**
 - **GAREAT**



TRIA – the US response

- **Terrorism Risk Insurance Act 2002**
 - **operative to end 2005**
 - **classes covered – commercial property/casualty**
 - **retention of insurer (annual aggregate)**
 - **2002 & 2003 – 7% of gross premiums**
 - **2004 – 10% of premiums**
 - **2005 – 15% of premium**



TRIA – the US response – cont'd

- **plus 10% co-insurance**
- **mandatory coverage in all of an insurers commercial P&C policies**
- **total cover capped at US\$100 billion per annum**
- **extension beyond end of 2005?**



The Australian solution

- a national pool from 1 July 2003
 - \$300 million funded by reinsurance premium
 - \$1 billion commercial line of credit
 - \$9 billion Federal Government funding
- ARPC established
- automatic insurance coverage for eligible policies for declared events
- optional reinsurance to ARPC



The Australian solution – cont'd

- **insurer retention – lesser of 4% of property income or \$1 million annual aggregate**
- **industry retention - \$10 million per event**
- **cover for property and liability related to property**
- **differential rating according to location of risk**
 - **2%, 4% and 12% of property premium**
 - **nil on liability**



The Australian solution – cont'd

- **post event additional funding**
 - **up to 6%, 12% and 36% of property premium for non-urban, urban and CBD property**
 - **up to 2% of liability premium**



The Australian solution – cont'd

- **ARPC 200+ clients**
 - **all Australian insurers**
 - **captives**
 - **overseas insurers**



The Australian solution – cont'd

- **sufficient cover?**
 - **\$10.3 billion approx 6% of aggregate commercial sums insured in ICA zone 41**
- **gaps in cover**
 - **large strata blocks**
 - **ARPC says not commercial**
 - **reinsurers say not domestic**



Workers' compensation and motor CTP

- **workers' compensation**
 - **Western Australia – limit of exposure all insurers \$25 million**
 - **balance to contribution fund**
- **Motor CTP**
 - **ACT, NSW and Queensland allow exclusion or grant indemnity for losses arising from acts of terrorism involving an insured vehicle**



Some conclusions

- **September 11 2001 changed the world**
- **Exposures – limited only by the imagination of the terrorists**
- **Control of accumulations**
- **Is terrorism insurable in traditional sense?**
- **The role of Government schemes**
- **Sufficiency of cover**