

Lime Street, Wall Street and Main Street

Graham Fulcher and the Securitisation Working Party
Alex Marcuson and the Sub-Prime Working Party



Securitisation Working Party

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Regulation
(IFRS, SII)

Catastrophe
Bond
Pricing

Catastrophe
Bond
Performance

Implications of
fallout from
Sub-prime

NON-LIFE
INSURANCE
SECURITISATION

Catastrophe
Bond Triggers

Trading of
insurance risk

Insurance
indices

Literature
review

Securitising
other assets

Past GIRO
Papers

Securitisation Working Party Papers

- History
 - GIRO 1996-1998 revisited
How have the forecasts held-up?
- Zero Beta
 - Atlantic Hurricanes and the Dow Jones
100 years of correlation, but no causation?
- Basis Risk
 - A new wide ranging definition
What does basis risk really mean and how do you measure it?
Approach adopted by Rating Agency

Securitisation Working Party Papers

- Regulatory Regimes
 - Solvency II
A supply side boost?
- Lessons from Sub-Prime
 - Learning from the bankers' mistakes
Institute Press Release
Could it happen in insurance?
- Other risks
 - The rest of the balance sheet
Future employment prospects for actuaries?

The Time: 1760BC
The Place: Babylon



Source: Wiki Commons

The Time: 1241AD
The Place: Rome



Source: Wiki Commons

- Pope Gregory IX condemns usury in 1234 but later says
- "He who loans a sum of money to one sailing or going to market, since he has assumed upon himself a risk, is not to be considered a usurer who will receive something beyond his lot"
- Development of pure insurance, separated from lending

The Actuarial Profession
making financial sense of the future

The Time: 1370
The Place: Genoa



Source: Wiki Commons

- First known reinsurance contract
- Facultative marine war risk
- Placement of hazardous part of a journey from Genoa to Sluys
- Insurance as a private transaction carried out by individuals
- Reinsurance as arbitrage

The Actuarial Profession
making financial sense of the future

The Time: 1720
The Place: London

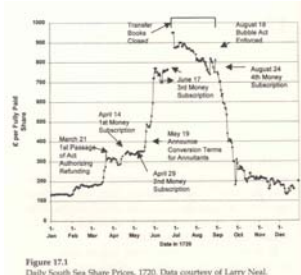


Figure 17.3
Daily South Sea Share Prices, 1720. Data courtesy of Larry Neal.

Source: Garber, P.M., 'Famous first bubbles

- South Sea Bubble
- Resulting duopoly of marine insurance companies boosted development of Lloyd's
- On Continent and US insurance companies developed more freely
- Risk mitigation via:
 - Syndication (UK)
 - Reciprocity (elsewhere)

The Actuarial Profession
making financial sense of the future

The Time: 1842/1861
The Place: Hamburg/Glarus



- Showed flaws in mutual risk sharing between primary insurers
 - Accumulations
 - Lack of expertise
 - Commercial constraints
- Cologne Re – first independent, professional reinsurer
- In turn Swiss Re founded after 1861 Great Fire of Glarus
- Risk spreading via proportional reinsurance

Source: Wiki Commons

The Actuarial Profession
making financial sense of the future

The Time: 1906
The Place: San Francisco



- Cuthbert Heath
- Risk sharing Innovations
 - Earthquake and hurricane insurance
 - Non-proportional reinsurance
 - Per risk XL
 - Event XL
- Possible originating cause of Panic of 1907

Source: Wiki Commons

The Actuarial Profession
making financial sense of the future

The Time: 1992
The Place: Florida



- Hurricane Andrew
- First understanding of potential exposures
- Realisation that insurance industry under-capitalised and unable to internally diversify mega catastrophes
- Birth of catastrophe modelling
- Impetus for Catastrophe bonds

Source: Wiki Commons

The Actuarial Profession
making financial sense of the future

The Time: 2005-8
The Place: New Orleans/Wall Street



- Katrina a supply side boost for catastrophe bonds
- Credit crunch a demand side boost
- Pure insurance risk as a desirable diversified asset class for the finance industry

Source: Wiki Commons

The Actuarial Profession
making financial sense of the future
