Anatomy of a General Insurance Failure

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Hong Kong

Meeting the Challenges of Change

14th Global Conference of Actuaries

19th – 21st Feb, 2012 | Mumbai, India

Institute of Actuaries of India

Swiss Re

Table of Contents

Introduction

Introduction: Causes of failure

Causes of General Insurance Failure

Primary Causes	Number of Companies	% of Total Identified
Insufficient Reserves	145	34%
Rapid Growth (Under Pricing)	86	20%
Alleged Fraud	44	10%
Overstated Assets	39	9%
Catastrophe Losses	36	8%
Significant Change in Business	28	7%
Impaired Affiliate	26	6%
Reinsurance failure	22	5%
Total	426	100%

Question: this study is rather dated (AM Best, 1999). Will the future causes be different?

Significant Risks at Swiss Re

The following risks have highest Group model shortfalls

1. Credit Spread
2. Lethal Pandemic
3. Inflation
4. Costing and Reserving
5. Generic Liability
6. TC North Atlantic
7. Terrorism
8. WS Europe
9. Equity
10. Credit

A few overlaps with the previous list – not many

Risk landscape at Swiss Re

Core risks (quantified)

Insurance
- Natural catastrophe
- Other property
- Liability
- Mortality
- Morbidity

Financial Market
- Equity
- Interest rate
- Credit spread
- Real estate
- Foreign exchange

Credit
- Default
- Migration

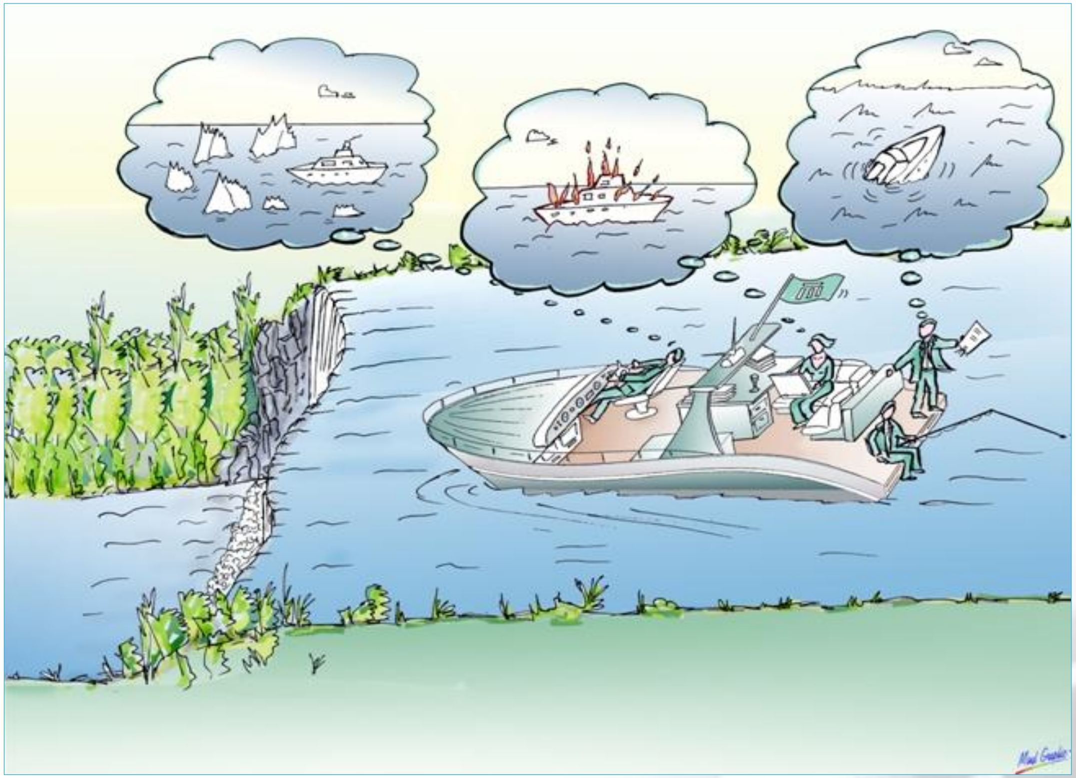
Ancillary risks (partly quantified)

Operational
- People
- Processes
- Systems
- External

Other
- Funding and liquidity
- Reputational

In addition, we need to 'think the unthinkable'

Do the ‘unthinkable’ scenarios match the risk landscape?



Difficulty of accurate pricing, increases insolvency risk

Insurers are different from Manufacturers

- Manufacturers have clearly defined costs for providing a product
- A GI's cost of production is not known in advance
- Costing products in GI requires specialised knowledge and a wide variety of assumptions
- Even when Insurers' products are accurately priced, they may still be brought down by unfortunate loss occurrences

The GI premium cycle increases insolvency risk

- The General Insurance market is extremely competitive in most markets, for most lines of business
- The low frequency, high severity nature of some insurance is such that the market needs to experience a number of good years to make up for the occasional very bad year (2011 for example)
- A number of good years attracts new entrants to the market, driving premiums down
- This in turn could lead to insolvency in certain players, if there are unexpected large losses
- Insurance companies are often victims of the 'winner's curse'. They win business because they may have underpriced it.

Case Studies

A selection of troubled and insolvent companies

Older failures

- 1966 Fire, Auto and Marine Insurance company
- 1985 Transit Casualty
- 1987 Mission Insurance Company

More recent failures

- 2001 Taisei Marine and Fire Insurance
- 2001 HIH Insurance Company
- 2008 AIG
- 2011 AMI Insurance, New Zealand

The Fire, Auto and Marine Insurance Company scandal

- FAM was founded by Dr Emil Savundra in the UK in 1963
- Low regulatory oversight: needed 50,000 pounds capital to set up an insurance company; new companies didn't have to demonstrate the required solvency margin for 2 years
- No background check on Dr Savundra – history of 'sharp practice'
- Inaccurate costing: Dr Savundra worked with an IBM programmer to develop a system to evaluate risks and produce 'instant policies'. Premiums were inaccurate.
- Fraud: appears that most FAM assets were transferred to a bank in Liechtenstein (funds never found)
- 400,000 motor policyholder affected by the collapse

Primary causes of failure – reckless management, rapid expansion from under pricing, fraud, incompetence and false reporting.

Transit Casualty

- Transit, based in Missouri, started in 1945 as an insurance company for the transportation industry, but did not 'stick to its knitting'
- Reckless expansion through Managing General Agents (MGAs) who were given little or no guidelines to write business. Inadequate reinsurance.
- When receivership took over, Transit had practically no records at the home office of policies it had written.
- Very long insolvency proceedings, due to long tail claims: mass tort, asbestos, and environmental cleanup
- At the time the failure in 1985 was known as the 'Titanic of all insurance company insolvencies'

Primary causes of failure – expansion into new areas, delegated authority, and incompetence

Mission Insurance Company

- California domiciled company, with a (prior) good reputation for writing worker's compensation. Complex company with numerous insurance and non insurance subsidiaries.
- Expanded rapidly in the soft market cycle of the early 1980s by writing large volumes of commercial property and casualty business
- Wrote both direct and reinsurance business mainly through Managing General Agents, who underpriced the business. MGAs

  had limitations as to what they could write but ignored them
- The company relied heavily on reinsurance: had around 600 reinsurers, some of them unregulated, who ultimately refused to pay.
- Insufficient reserves were held for various lines of business
- It took 21 years to close its estate

Primary causes of failure – over reliance on managing general agents, poor reinsurance arrangements, under pricing and under reserving

Turning to more recent failures

How has the world changed?

- Complex and exotic asset classes have emerged which may have unforeseen consequences
- The World a more complicated place generally: global competition
- Most companies now employ extensive risk management programmes, which are an integral part of the decision making process
- Massive improvement in IT infrastructure – making monitoring risks easier
- More sophisticated tools and models to price business
- Stricter regulatory oversight
- Solvency regimes are more sophisticated

Progress should mean fewer insolvencies, or at least cleaner insolvencies?

Taisei Marine and Fire Insurance

- Taisei Marine and Fire Insurance, was the 15th largest Japanese GI company in 2001, with an 815% solvency margin.
- Member of a US Aviation reinsurance pool, Fortress Re. The companies net exposure to the pool was 1.5 times it's capital base.
- Relied almost entirely upon management decisions made by Fortress Re, and had limited understanding of its liabilities
- Fortress Re reinsurance protection was 25% to Carolina Re, owned by close family of Fortress Re execs, and the remainder finite reinsurance
- Collapsed under aviation claims stemming from September 11 2001 terrorist attacks, and merged with Sompo Japan in 2002

Primary causes of failure – delegated risk management to pool owner, insufficient reinsurance cover, and unexpected catastrophe event.

HIH Insurance Company - History

- HIH Insurance group was Australia's second largest insurer
- Incorporated in 1968, HIH started as provider of workers compensation cover in the Victorian State market.
- In the mid 1980s, after legislative changes had significantly reduced business in Victoria and South Australia, HIH began to diversify, mainly through acquisitions.
- By 2000 it was one of the key players in the Australian non-life market (and significant internationally too).
- HIH collapsed in March 2001 and was Australia's biggest corporate failure
- The deficiency of the group was estimated to be up to AUD 5.3 billion

HIH Insurance Company – Causes of Failure

- The company lacked a clear and integrated group strategy, including a poorly implemented growth strategy based on acquisition without adequate due diligence
- The company also had an ineffectual board that did not adequately probe management
- The consulting actuary of the company was an old friend of HIH chief executive Ray Williams and used unrealistic assumptions to arrive at unreasonably low estimates of the group's claims liabilities

Primary causes of failure (according to the liquidator): rapid expansion, unsupervised delegation of authority, extensive and complex reinsurance arrangements, under-pricing, reserve problems, false reports, reckless management, incompetence, fraud, greed, and self–dealing.

HIH Insurance Company - Consequences

- Although the government did not bail-out HIH, there were substantial economic losses accruing to HIH creditors and Australian taxpayers
- While the HIH failure did not cause contagion for other financial services providers, it did impose significant costs on other sectors
- The under-pricing of risks by HIH had shut out a number of competitors. They were reluctant to enter the market at the price level maintained by HIH. Hence there were no substitutes in the market when HIH collapsed.
- Led to a 'liability insurance crisis' in Australia
- Subsequent significant tort reform in 2003
- Can still be felt in local regulations today: requirements for external peer review of actuarial reports; strong requirements for assets in Australia, etc

AIG

"It is hard for us, without being flippant, to even see a scenario with any kind of realm of reason that would see us losing one dollar in any of those transactions"

- Joseph J. Cassano, Head of AIG Financial Products, August 2007

- AIG Financial Services, a business unit of AIG, accounted for 9 per cent of AIG's 2007 revenues
- By 14 September 2008 AIG Financial Products had written credit default swaps (CDS) derivatives and futures with a total notional value of USD 2.7 trillion
- AIG FP had bet more than twice the market value of AIG in credit default swaps, without hedging or protecting itself against collateral calls.

AIG

- After rating downgrades of US sub-prime securities, calls for cash collateral put stress on AIG
- After further ratings downgrades of sub-prime securities, credit rating agencies announced the potential downgrade of AIG
- This created a vicious circle of ever more calls for cash collateral
- AIG required a USD 85 billion dollar credit facility from the US government to avoid insolvency

Primary causes of failure – collateral calls on AIG financial services. Ultimately (arguably): excessive complexity and overconfidence about knowledge of business

AMI Insurance

- AMI Insurance is a New Zealand based mutual insurance company
- It had a 35% fire and general market share in Christchurch, and the Christchurch earthquake natural catastrophe led to a loss estimated to be NZD 1.8 billion
- In April 2011 it obtained a NZD 500 million government guarantee to meet it's claim liabilities.
- In December 2011 AMI was bought out by IAG (Insurance Australia Group) for NZD 380 million (excluding AMI's earthquake claims)

Primary causes of failure– unforeseen catastrophe losses, lack of adequate reinsurance cover, excessive market concentration in one locality

Conclusion

Conclusion

Some concluding remarks

- General Insurance (GI) Companies fail. A 0% insolvency rate is not possible, nor desirable (prohibitively expensive)
- Managers with dynamic drive are good; too much dynamic drive is detrimental!
- A company is insolvent when its available net surplus is less than its required surplus (generally, as required by the local regulator). Cash-flow insolvency is relatively rare.
- For every insolvent company, there are many troubled companies, that need to merge with another company to survive.
- Two main techniques for avoiding insolvencies are to hold a capital buffer and good risk management.
- GI companies are exposed to many risks, of varying 'obviousness' and 'quantifiability'

The Role of Actuaries

- Traditionally, actuaries have played an important role in pricing insurance products and setting reserves, and preparing Valuation reports
- Actuaries now form an integral part of the Risk Management setup of most companies – and are well placed to contribute in this area
- Actuaries prepare Financial Condition Reports in some jurisdictions – more holistic than Valuation reports
- Actuaries may often find themselves in conflict with short term interests of the senior management – good risk management takes courage.

Thank you

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