



Taisei Fire and Marine Insurance Co.

Summary

In November 2001, following the September, 11th 2001 (“9/11”) terrorist attack on the World Trade Center, Taisei Fire and Marine Insurance Co (TFMI) collapsed, due to catastrophic insurance claims of \$2.5 billion.

TFMI, together with two other Japanese companies, had a management agreement with Fortress Re, which pooled the funds of the companies to share the risks of reinsuring aviation portfolios. All four planes that crashed on the World Trade Center and other sites during the 9/11 attack were reinsured in the Fortress Re pool.

The participated companies’ lack of skills in management of Fortress Re and their limited understanding of liabilities in the pool were revealed after the event. Apparently, TFMI had completely relied on Fortress Re’s management decisions.

Even though it was true that the unforeseen nature of terrorist attack was a trigger for TFMI’s bankruptcy, this event showed that delegating the entire authority of managing the pool to the Fortress Re management added considerable risks to the company’s portfolio, and did not reduce any risks. TFMI’s collapse was an example of how a company overlooked the potential risk of “reinsurance”, and transferred risk only on the accounting book, not in the real world.

Background

For the fiscal year ending March, 2001, TMFI was the 15th largest Japanese non-life insurer, with \$740 million in premium. TMFI’s solvency margin (assets over liabilities) was 815%, well in excess of the 200% demanded by the Japanese authorities as the required level for financial strength. TMFI had large volumes of domestic Japanese property and casualty business. It also had a large volume of inward reinsurance¹ premiums, most of which came through a US reinsurance pool managed by Fortress Re, a North Carolina-based reinsurance managing agency .

TMFI, together with Nissan Fire & Marine and Chiyoda Fire & Marine Insurance (since merged with Dai-Tokyo Fire & Marine Insurance as Aioi Insurance) were the three members of the Fortress Re pool. Fortress Re acted as the reinsurance pool manager responsible for securing the inward reinsurance business. The Fortress Re pool included aviation, marine and many other reinsurance products but by 2001 the aviation component had grown to nearly 70%.

For many years, Fortress Re had accepted inward reinsurance and used traditional reinsurance products to offset significant portions to other reinsurers. However, it was increasingly relying on finite reinsurance², and from early 2000, relied solely on this form of reinsurance for its risk limitation.

It also transpired that 25% of the pool’s business had been ceded to Carolina Re, a Bermuda-based

¹ Assumed reinsurance business accepted by an insurer or reinsurer, as opposed to that ceded to another insurer.

² Finite reinsurance is reinsurance that transfers over only a limited amount of the risk. By transferring less risk to the onward reinsurer, the original insurer receives coverage on its potential claims but at a lower cost than traditional reinsurance. First used in the 1980s, finite reinsurance products reduced the cost to the ceding insurer through profit sharing, in exchange for limiting the liability of the reinsurer.

reinsurer, which was owned by the principals and close family of Fortress executives. Carolina Re subsequently became insolvent with \$350 million in liabilities and was liquidated by a Bermuda court in late 2001.

How did it happen - the unforeseen nature of claims

The Fortress Re pool recorded substantial profits from this arrangement. However liabilities were building up prior to 9/11 with a series of aviation claims – TWA off Long Island, New York (1996), Swissair off the coast of Nova Scotia (1998), EgyptAir of the East Coast of the US (1999), Alaska Airlines off the West Coast of the US (2000) and Concorde in Paris (2000).

Whilst the prime reason for the TFMI's bankruptcy was lack of sufficient reinsurance protection against a single major event, the 9/11 terrorist attack, it was also true that TFMI, as well as the other two companies, lacked underwriting controls and relied almost entirely on Fortress Re's management team for information on risks in the portfolio. The three companies in the pool gave Fortress Re wide powers to conduct business on their behalf and to arrange reinsurance protection. TFMI had only limited understanding of the pool's liabilities, complicated further by the impact of the use of finite reinsurance.

The finite reinsurance model allowed Fortress Re to claim reinsurance claims payments from the finite reinsurers and it paid premiums to cover these deals over a 5-year period. As the risks were spread over time, the future premiums were not accounted for as current liabilities on the books of the pool members, giving a false impression of profitability.

A further issue which disguised the actual risks faced by TFMI was the accounting risk transfer procedures. Under Generally Accepted Accounting Principles, if a policy did not transfer risk, it was a financial agreement in which all premiums are treated as deposits. If reinsurance agreements were found not to involve enough risk transfer, the company should have to make an adjustment to take all the losses into the income statement and consider the effect on its solvency margin. However, this procedure made it hard for TFMI to determine whether risk had actually been transferred and whether it had sufficient catastrophe cover for the future.

In summary, TFMI's over-reliance on the pool manager's judgments and limited understanding of its pool's liabilities associated with accounting procedures for risk transfer meant TFMI had inadequate reinsurance protection, therefore, TFMI was not protected from large losses. Consequently, TFMI's solvency margin of 850% was not enough to cover catastrophic reinsurance claims in a worst case scenario, as actually happened on September 11th.

A model of TFMI's reinsurance process

The model involving the use of finite reinsurance gave a deceptive view of the profitability of the pool's aviation booking and of its own capital strength. As it is shown in Figure 1, the root drivers are the strict aviation insurance regulations in each country that oblige airline companies to buy insurance from local insurers (fronting insurance companies). Then, these local insurance companies transferred all risks to the Fortress Re pool which were in turn reinsured but with a limit on coverage (finite reinsurance).

The Fortress Re pool accepted inward reinsurance (transaction between fronting insurance companies and the Fortress Re pool) and used traditional reinsurance to retrocede significant portions to other companies. For further cover, a finite risk program was implemented to spread the risk over a long time period.

Even though reinsurance had been profitable prior to the terrorist attack and seemed a perfect hedge strategy against catastrophic losses, the scheme of a finite reinsurance, in which risk was reduced through accounting or financial methods, turned out to be imperfect. It made financial results look better and misled the participated companies. Furthermore, the scheme actually did not fully transfer risk, and made it hard to recognize the actual loss exposures.

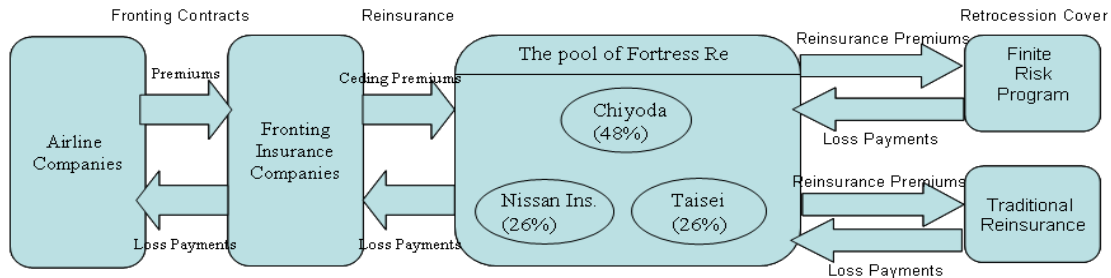


Figure 1: Fortress Re's reinsurance process (Source: Aioi Sonpo IR and Kinzai Weekly 2001)

Timeline of TFMI's collapsing process

1972 November	Taisei and Chiyoda's first management agreements with old Fortress.
1981 May	Nissan first entered into management agreements with Fortress.
1986	Fortress anticipated a very favourable market and sought to increase its capacity. Fortress earned \$1,819,152 (74% was attributed to reinsurance).
1988	Fortress earned \$20,747,536 (62% was attributed to reinsurance).
2001 September 11	The terrorist attack on the World Trade Center.
2001 November 22	Taisei filed for court protection (rehabilitation) under Japanese law.
2002	Estimated excess of liabilities over assets was US \$765 million .
2002 December 1	Direct business acquitted by Sompo Japan (established on July 1, 2002 by the merger of Yasuda Fire & Marine Insurance and Nissan Fire and Marine Insurance).

Concluding remarks

After the failure, Taisei President Ichiro Ozawa said. "Reading risk is an insurer's responsibility, and I failed to anticipate the amount of risk involved. I apologize for betraying the hopes and trust of our customers." He added "Looking at the outcome, it seems that I did not fully understand the contents of the contract."

The TFMI's participation in the pool agreement showed that the complex financial instruments actually did not transfer the risk but made it hard for the company to recognize its financial condition against loss claims in a worst case scenario. Engaging in risk transfer process but delegating risk management to the pool manager was an unsuccessful process and ended up forcing the company into bankruptcy. Ironically, President Ozawa also said "An accident involving the terrorist attack was not something we had included in our calculation, but we left it to the overseas agent to decide." TFMI was apparently not aware of what Fortress Re was doing, but believed that



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its solvency margin was enough to cover claims and that implementing the reinsurance scheme would be a great element to reduce the risk. Fortress Re's misuse of the reinsurance scheme and TFMI's lack of management and its overlooking the potential risk of the products were the crucial failings in TFMI's risk management procedures.

It should be noted that Nissan and Chiyoda also lost large amounts; but being many times larger than Taisei, they were able to stand these losses.

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