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Divide and conquer

Considered by many to be too awkward and time-consuming, fac has been given a back seat by insurers. But natural disasters and improved risk modelling are making its benefits more appealing

Facultative reinsurance has not

always had the best of reputations. Many insurers prefer treaty, or blanket, coverage, as pulling out individual or groups of policies is perceived to be more time-consuming and administratively burdensome.

However, there is evidence that insurers are becoming more comfortable with where and when they should use what is colloquially referred to as 'fac', as risk modelling becomes more technology-based and sophisticated.

Hannover Re, for example, said that premiums in its fac division "increased considerably" in 2010, enlarging its North American business in property and casualty.

Cedants offset their risk by removing the more worrying-looking policies from their treaties. The recent flurry of natural disasters, such as the New Zealand earthquakes and Japanese tsunami, makes fac more attractive.

"The most sophisticated buyers look at a blend of treaty and facultative reinsurance to protect their portfolios in the most efficient way possible, and this has increased the use of analytical tools," says Guy Carpenter's head of international fac business, Massimo Reina.

Finding risk-averse mix

Reina adds that although different cedants have different strategies, they are all looking closely at their buying strategy to find the most risk-averse mix.

Willis's head of fac, Jason Howard, agrees and says that the increased use of actuarial models has allowed "for more of a portfolio approach rather than just a one-off purchase". As insurers have improved their maths, so they have been able to work out that having several fac policies would



Catastrophe losses and the benefits of fac



provide better protection than having one or two on particularly large risks.

"It's beneficial to use fac where there is a risk or accumulation of risks pushing up exposure in a particular area," Howard says. "Analytics allows for a good understanding of your portfolio – and then you can use fac to take out peak risk exposure."

Miller Insurance Services head of facultative reinsurance Michael Papworth says: "Another area where fac has been useful is on contingent business interruption. There were losses in Japan [following the earthquake and tsunami earlier this year], as there was interruption to supplies to Japanese manufacturers."

For example, US carmaker General Motors was forced to close a factory in March, after vital spare parts could not be shipped from Japan. Toyota and Subaru limited production so that they did not run out of parts.

As a result, Papworth predicts that Japanese and New Zealand cedants will look to increase their fac levels, having seen how useful the policies were at the height of their crises.

Burgeoning middle class Similarly, Willis's Howard believes that countries that are experiencing high

Catastrophe, wind and earthquake fac has proven to be useful in mitigating losses from those natural disasters. Hannover Re pointed out in its 2010 annual report that its fac division took a hit from BP's Deepwater Horizon disaster in the Gulf of Mexico, suggesting that cedants had wisely separately reinsured policies with major oil companies.

Fac is also useful for insurers looking to reduce their exposure to the power generation and energy sectors. These are considered to be volatile, with losses stemming from breakdowns in new, relatively untested, technology and fuel supplies.

growth will see their reinsurance markets evolve to mirror the more blended portfolios of established western markets.

> 'It's beneficial to use fac where there is a risk or accumulation of risks pushing up exposure in a particular area'

> > Jason Howard, Willis

He says: "I expect that demand for reinsurance in general will increase in areas where there is a burgeoning middle class, like India and China, with a corresponding demand for more fac."

It may be more awkward to administer reinsurance policies for very specific risks, but to create an overall portfolio that can withstand losses from particularly awful one-off events, fac is worth the effort. **GR** Special Report: Facultative | **GR**

Facs of the matter

The first three months alone of 2011 marked the year as one of the worst ever for facultative reinsurance losses. Some say rates will rise, others argue that demand will decrease. How will the market will be affected?

Australian floods, Queensland's

Cyclone Yasi, New Zealand earthquakes and a Japanese tsunami combined to make the first three months of the year the worst ever for facultative reinsurance losses.

Global reinsurance intermediary Aon Benfield found 10 losses exceeding \$50m, compared to 13 for the entirety of last year. In total, reinsured and insured losses were expected to come to more than \$50bn for those first three months, up more than 25% for the previous 12 months.

After fac rates reduced in 2010 there was a belief at the start of the year, given these losses, that the trend would be reversed in 2011. Aon Benfield fac chief executive Elliot Richardson said at the time: "We expect that rate rises will now be seen in affected territories as well as other catastrophe-exposed areas. Early signs are that US property cat rates are hardening, which is an indicator that it will not be contained to affected areas only."

However, there seems to be some disagreement as to whether this has actually been the case. Willis head of fac Jason Howard insists: "There is an increased demand for fac products, which, coupled with recent losses, has led to an upward push on pricing. Fac [pricing] does remain competitive, though."

That competitiveness was a result of overcapacity in the fac market. Put simply, business was being written at wholly unsustainable rates.

Going the distance

Some argue that this has still not been properly addressed. Head of Guy Carpenter's GC Fac International business, Massimo Reina, says there is still "no obvious shortage of capacity".

Reina adds: "There is an expectation that rates will rise, which has not happened – the exceptions being property catastrophe, where we are seeing some increases. Overall, demand is at least stable."

The property catastrophe uplift has clearly quickly filtered through from the first quarter. This would have been compounded by the severe property damage caused in several catastrophes last year, including the Chilean tsunami and initial earthquake in New Zealand in September last year, which was believed to have damaged as many as 100,000 homes.

Given the number of natural catastrophes over the past 18 months, as well as more manmade disasters like oil spills, it is perhaps surprising that demand for fac has merely been "stable". The rationale behind fac would suggest that insurers would be keen to separate out potential losses from riskier aspects of broad treaty

'There is an expectation that rates will rise, which has not happened'

Massimo Reina, Guy Carpenter

portfolios, so that they did not turn from profitable to loss-making over a single incident.

Looking long-term

Head of facultative reinsurance at broking group Miller Insurance Services Michael Papworth goes as far as to say that demand in certain areas has even slightly decreased. He thinks that insurers believe that over a significant period of time, perhaps a decade, they are getting little financial benefit.

"The market is generally looking at anything that reduces cost and saves a bit of money," Papworth argues. "I know of two global, multinational cedants that [are looking to pull out of fac] as they have spent more on premiums than they have recovered in claims."





Papworth concedes that catastrophe, wind and earthquake fac are still popular given recent events, and that demand for the policies will grow in the recent big trouble spots of Japan and New Zealand.

This demand will likely increase as the full extent of the rebuilding programme in Christchurch, which has been estimated at 10-15 years, becomes more apparent and further claims are processed.

Location, location

Research released by Aon Benfield in September – Reinsurance Market Outlook – agreed that rate changes have varied by geography and business line. For example, North American property facultative catastrophe rates rose 4% at the end of the second quarter as a result of severe tornadoes and floods earlier this year, while Australia and New Zealand soared by 25%.

In France, some facultative reinsurers stopped offering multi-year policies for catastrophe loss. This suggests that they believe rates will continue to grow and so do not want to be tied to policies that fail to reflect this change.

By contrast, non-catastrophe rates in the Middle East and Africa fell by 3% and 2.5%, respectively. Even for catastrophe fac rates, Africa was flat.

The report says: "In those areas that have not suffered devastating losses, we have seen a continuation of facultative market softening."

In this latest report, Aon Benfield did maintain its argument from the first quarter: "The first half of 2011 will go down in history as being one of the worst on record for the facultative market due to the severity of the losses."

Given the emergence of Hurricanes Irene and Katia during the third quarter of the year, 2011 is unlikely to let up its pressure on fac. Eventually, that pressure must filter through to rates or at least lead to constraints on capacity in the market as reinsurers realise that the prices are not reflective of recent losses. **GR**

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Catastrophe modelling is becoming increasingly sophisticated. PartnerRe's head of facultative business unit explains its importance to the fac market

Q: What good are cat models?

A: Cat modelling is a developing science and one that the (re)insurance industry began to get serious about 20 years ago. Models are becoming increasingly sophisticated and help the underwriter make decisions based on scientific data, rather than relying primarily on actual events.

Yet, the leading models commonly generate substantially different estimates and often significantly under- or over-estimate ultimate costs of individual events. There are important scientific debates about phenomena such as global warming and El Niño/La Niña. This clearly demonstrates that, over a short period and for any individual event, the lack of transparency and high variability in model results creates frustrations and limits the credibility of models.

Over the long-run, however, they should logically produce better results. They should also continue to improve. Using a good model provides consistency and structure in decisionmaking and exposure measurements.

Q: Are cat models good or bad for the facultative industry?

A: Despite inevitable shortcomings, cat models improve the assessment of risk and should be unbiased over the long-run. They will continue to improve and I don't see how the market can progress without them.

In fact, they are an important benefit to the industry. They should help buyers and sellers better understand what their cat risk might be and prepare appropriately. Despite limitations, judging cat risk with the help of models is clearly an improvement over any alternative. The current difficulty is that the widely used industry model has just changed dramatically. This leads to a loss of confidence and credibility as well as the potential for considerable market disruption.

Furthermore, too much dependence on one model can have negative consequences. At PartnerRe, we will continue to develop our own internal models, which help us to better avoid model biases and disruptions while providing a more balanced view.

Q: How will recent model changes (for example RMS 11) affect the supply of and demand for facultative solutions?

A: I expect the model changes will ultimately have a significant impact on supply and demand. After a couple of months, the impact on the facultative market so far has been limited. My interpretation is that no one wants to move first.

Whoever imposes such dramatic increases first will lose quite a bit of business. The market adjustment may be gradual but probably more dramatic as soon as a major event occurs. However, I suspect pressure will start building on carriers, particularly from a risk management perspective. Pressure should come from rating





agencies, retrocessionaires, regulators, and company executives (chief risk officers in particular). It will be difficult for companies to attract capital and solid ratings if they disregard what a leading cat model suggests their exposure to be.

Q: How will this impact differ from the effects on more traditional treaty capacity?

A: Individual accounts tend to be more concentrated in specific areas, occupancies or vulnerabilities, and hence tend to suffer wider swings both in terms of indicated cat loads and probable maximum losses.

Q: Equally, how do the effects on the fac market this time around compare with those during the previous re-versioning?

A: Recent storms have demonstrated the need for revisions. This time around, the model impacts are much more significant and one vendor model is in a more dominant market position; consequently, one vendor company's model has more influence than in the past.

Perhaps the resulting market disruption will prompt stakeholders to invest in alternatives that generate more choice. PartnerRe will invest further in its propietary cat model, because we believe that will improve the understanding of our cat risk as well as cost control, re-versioning and user-friendliness.

Q:Will the implications of the model changes be temporary or more permanent?

A: I think there will be a reappreciation of risk leading to a new, somewhat permanent, equilibrium in cat markets. I say somewhat permanent because I believe we will still have cycles; it's just that both the peaks and the troughs of the cycles will be at higher levels. This will be driven not only by the cat models themselves, but by the realisation that cat models have historically underestimated risk. **GR**