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The Role of Reinsurance in the Florida Insurance Crisis

An Advisen Briefing

Essence: A number of insurers have claimed that rising reinsurance prices and a lack of reinsurance capacity are at the root of their decisions to raise premiums or reduce exposures in Florida. Reinsurance does play a critical role in the Florida insurance crisis, but news stories and press releases may be over-emphasizing the leverage being exerted by reinsurers on the overall Florida insurance market.

Back-to-back record hurricane seasons have led to skyrocketing premiums for insureds in Florida. Many commercial insurance buyers claim that they cannot obtain sufficient coverage at any price. Insurer after insurer has blamed rising reinsurance costs and a lack of reinsurance capacity for commercial insurance premium hikes and decisions to cut back their Florida exposures.

Ordinarily, the reinsurance industry is far in the background, and many insurance buyers are only vaguely aware of its workings. However, as the Florida crisis demonstrates, reinsurers are essential to the efficient operation of the insurance industry, and their actions can materially impact policyholders. This report will examine the mechanics of reinsurance and show how and why reinsurers at least appear to be calling the shots in the Florida crisis. It also will look at the dynamics of the reinsurance market, and identify the forces that will either accelerate or retard the recovery of the Florida commercial lines marketplace.

The Reinsurance Market

Virtually no insurance company retains all the risk it assumes under the policies it writes. Even the largest insurance companies find it necessary – or at least financially desirable – to transfer some portion of its risk to the reinsurance market. Based on 2004 numbers, U.S. insurance companies paid about 19% of their premium income to reinsurers for coverage, which includes, in addition to property catastrophe reinsurance coverage, reinsurance of casualty lines of insurance, workers compensation, and other types of property coverages, as well as for specialty lines such as marine and aviation business.

Reinsurance is a global business, largely by necessity. Reinsurers succeed by spreading risk over a very broad base so that, if losses are high in Eastern Europe for example, they may be offset by favorable loss experience in, say, South America. In the United States, more than half of reinsurance premiums in 2004 were written by the three largest global reinsurance groups: Swiss Re (including the recently acquired reinsurance operations of General Electric), Munich Re, and Berkshire Hathaway. About 12% were written by Bermuda domiciled reinsurers or their U.S. subsidiaries.

Reinsurers, especially smaller reinsurance companies, also buy reinsurance, called retrocessional coverage. For the most part, the retrocessional market is a subset of the reinsurance market – some of the

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same reinsurance companies that provide reinsurance coverage also write retrocessional coverage. Essentially, the retrocessional market is a way to further diversify risk among reinsurers.

In recent years, alternative sources of catastrophe reinsurance capacity have emerged. Vehicles such as catastrophe bonds, catastrophe swaps, industry loss warranties, sidecar agreements and contingent capital facilities tap the capacity of the capital markets to provide reinsurance-like coverage. So far, these alternative vehicles represent only a small part of the total reinsurance capacity, but their use is growing rapidly.

The reinsurance market is subject to the same economic and competitive forces as the primary insurance market. Pricing in the reinsurance market is cyclical, and largely tracks the ups and downs of primary insurance pricing. Market cycles are caused principally by the ebb and flow of capital; when capital (which is a measure of insurance and reinsurance "supply" in the supply/demand equation) is abundant, prices tend to fall. Conversely, when capital is scarce, prices tend to rise. Capital, or "policyholders' surplus," has been accumulating in recent years, due to large price increases during the 2001-2003 period and good returns on invested assets. Since 2004, prices have generally been falling except, in the past year, for property business in catastrophe-exposed regions. Despite the monumental catastrophe losses of 2005, many reinsurers reported growth in capital, which keeps downward pressure on pricing.

Catastrophe Reinsurance

The principal type of reinsurance protection for natural catastrophes is the property per occurrence excess of loss reinsurance treaty or, as it is more commonly known, the cat cover. Under this type of reinsurance, an insurer is reimbursed by a reinsurer for its actual losses arising from one "occurrence" – typically a natural catastrophe – that are in excess of a pre-determined amount of retained losses. For example, under a $10 million excess of $10 million cat cover, the insurer can recover up to $10 million dollars of losses paid for claims arising from a single occurrence beyond an initial $10 million in retained losses. Once the limit of liability has been exhausted by losses, catastrophe agreements typically provide for an automatic reinstatement of the limit for an additional premium.

For the reinsurance buyer – the insurance company, or "ceding company" in the parlance of a reinsurance transaction – the principal issues in buying catastrophe reinsurance are how much coverage to buy and how much risk to retain. Computerized catastrophe models can help with these decisions, though there has been some concern in the aftermath of Hurricane Katrina that the algorithms used by some of the current models may underestimate the losses from a very large storm. The decision on how much risk to retain must take into consideration how many catastrophes may occur in a year as well as the potential size of a catastrophe. Of course price is an important consideration for a reinsurance buyer, but a more significant concern is the financial strength of its reinsurers – whether the reinsurers will be able to pay their losses following a large catastrophe or, of even greater concern, a series of large catastrophes.

Computerized models and the growing availability of detailed digitized exposure data from ceding companies have been a boon to reinsurers in underwriting cat covers and monitoring aggregate exposures in catastrophe exposed areas. However, the underwriting process remains as much an art as a science. In the aftermath of the record-smashing 2005 hurricane season, many reinsurers are reassessing their catastrophe underwriting and pricing criteria to determine whether they are adequate for what appears to be the beginning of a period when hurricanes will be larger and more frequent.

Another type of reinsurance cover that responds to catastrophe losses is called a property quota share treaty. Under this type of cover, reinsurers share premiums and losses with the ceding company in a pre-

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determined proportion. For example, under a 25% quota share treaty, the reinsurer receives 25% of the premium written by the ceding company for the policies subject to the treaty (minus a "ceding commission" paid to the insurance company for its expenses associated with underwriting the business), and pays 25% of the losses incurred under those policies. Property quota share treaties are popular with insurance companies – they provide capacity to write more business than the company's own capital base might allow, and offer certain accounting benefits – but some reinsurers were reluctant to provide this type of coverage in catastrophe exposed regions even before the 2005 hurricanes. Those now providing property quota share reinsurance are often limiting their catastrophe exposure with "event caps" and are reducing the ceding commission paid to the insurance company, sometimes below the company's actual costs of underwriting and administering the policies.

The Hurricanes of 2005 and the Florida Insurance Crisis

As of April 1, the global insurance and reinsurance industry had reported $64.6 billion in losses from the three major 2005 U.S. storms: Hurricane Katrina, Hurricane Rita, and Hurricane Wilma. This was, by far, the worst year on record for natural catastrophes, and the second record-breaking year in a row.

The property & casualty industry fared well in 2005 despite the monumental hurricane losses, with net income growing 24% over 2004 and policyholders' surplus, the measure of available insurance capacity, growing by more than 9%. However, back-to-back record hurricane seasons and concerns that computerized hurricane models were not adequate to handle what increasingly seemed to be a new era of more and larger storms prompted many insurers and reinsurers to step back and reassess their appetite for catastrophe-exposed business, the adequacy of the tools they use for pricing and underwriting the business, and the cost and efficacy mitigating the financial impact of catastrophes.

A number of commercial insurers announced that they are limiting their Florida writings. Others, such as St. Paul Travelers and North Pointe, are actively reducing their commercial policy count in the state. Independence Casualty and Surety, an excess and surplus lines carrier, announced that it is canceling all windstorm polices written for commercial insureds. Virtually every carrier has significantly increased rates for commercial property business. Many insurers have stated that their actions, at least in part, are due to higher reinsurance costs and reduced reinsurance capacity.

Reinsurance intermediary Benfield reported price increases on exposed cat treaties of up to 100% at January 1, 2006, and reinsurers report that rates on catastrophe-exposed treaties, especially those with Southeast U.S. exposure, continue to rise sharply. One reinsurer, Aspen Re, commented that some insurance companies tried to renew their catastrophe reinsurance programs earlier in the year in order to secure capacity at hoped-for lower prices, which had the unintended consequence of accelerating rate increases and capacity shortages. Some reinsurers have cut back on the capacity allocated to Southeastern exposures, and a few are strategically withholding capacity in anticipation of higher rates later in the year. One important provider of catastrophe reinsurance capacity, PXRE, was downgraded by rating agencies as a result of its 2005 losses, and subsequently lost 65% of its business. Effectively, PXRE's capacity has disappeared from the market since it no longer meets the financial threshold of many insurers.

On the flip side, a significant amount of new reinsurance and retrocessional capacity was created in the aftermath of the 2005 hurricane season in anticipation of rising premiums. Billions of dollars flowed into Bermuda to form new reinsurance companies, many created specifically to write catastrophe business. A new European reinsurer, Augsburg Re, is set to raise $1 billion in London's Alternative Investment Market, and Lloyd's underwriter Kiln is increasing its capacity by about $350 million. Swiss Re has created a new facility financed by catastrophe bonds to provide nearly $1 billion in catastrophe protection.

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Capital committed to so-called sidecars, essentially special purpose reinsurance companies created to provide capacity to a single insurer or reinsurer, recently topped $2.5 billion. Reinsurance intermediary Benfield is presently working with Lloyd's of London to develop a $250+ million facility to provide Lloyd's syndicates with access to catastrophe capacity. This new capacity, thus far, has done little to lighten the load on insurers with Florida and Southeastern exposures, but it will increase competition within the reinsurance market, ultimately to the benefit of Florida insureds.

Is Reinsurance Driving the Florida Insurance Crisis?

Judging from press releases and news stories, most of the adverse actions taken by insurers in Florida were the direct result of higher reinsurance premiums or lower reinsurance capacity. Reinsurance is a significant factor in the Florida insurance crisis, but the purported leverage of the reinsurance market in Florida seems exaggerated. Insurers rely on reinsurance to varying degrees depending on their size, the nature of the exposures they insure, their financial health, and their risk appetite. But on average, only about 19% of an insurer's written premium is paid to reinsurers, and much of that is for quota share reinsurance over which reinsurers have little control of the pricing (since policy premiums are shared in a predetermined proportion between the insurance company and its reinsurer). For large companies the percentage of premium paid for reinsurance is often much smaller. Big increases in catastrophe reinsurance costs typically translate, on a dollar-to-dollar basis, to only small-to-moderate increases in primary insurance premiums.

On the other hand, access to reinsurance capacity is critical for most insurance companies. Reduction in reinsurance capacity can translate directly into impairment of an insurer's ability to write business. In some cases, insurance companies may be able to renew or replace the current level of catastrophe reinsurance coverage they carry, but they need to acquire additional coverage to satisfy rating agencies or their own revised estimates of how much reinsurance coverage is necessary in the changing catastrophe risk environment. In other words, not only is the supply of catastrophe reinsurance shrinking, demand is simultaneously increasing.

Some insurance companies – especially very large companies with significant capacity needs, and companies with underlying underwriting problems – reportedly are having difficulty in obtaining adequate reinsurance capacity, but most insurers are finding coverage, albeit with higher retentions and at increased premiums. Reinsurance intermediary Guy Carpenter reported that catastrophe capacity at January 1, 2006 renewals was "adequate but expensive for most renewing programs," and the Florida Office of Insurance Regulation, which recently sent letters to 19 insurance companies asking them to demonstrate they had adequate reinsurance in place for the current hurricane season, found that 17 of the 19 companies had their reinsurance programs in place, one firm has some, but not all its reinsurance in place, and the last one is still negotiating a reinsurance contract.

More reinsurance capacity will lessen the availability crisis now being experienced by Florida policyholders, but it is not the magic potion that will restore the Florida commercial insurance market. The issues prompting reinsurers to raise premiums and limit capacity also are driving insurance companies to make similar decisions unrelated to the cost and availability of reinsurance.

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Factors Driving Reinsurers' Response to the 2005 Hurricanes

The Bermuda reinsurance market took a beating from the 2005 hurricanes, but the reinsurance industry otherwise performed well in 2005. Munich Re recorded a $5 billion profit, while Swiss Re ended the year with a $1 billion profit. Twenty-six U.S. reinsurers tracked by the Reinsurance Association of America posted a combined profit of nearly $2 billion. While the hurricanes clearly made a dent in reinsurers' profitability, the sector proved to be resilient.

Given the solid performance of the reinsurance market in the face of the worst year on record for catastrophe losses, sharply rising premiums and restricted capacity may seem to be an over-reaction. However, profitability in a single year is only one item – and not the most important item – factoring into reinsurers' response. Other factors include:

- Tropical Storm Risk, a seasonal climate forecasting organization, predicts a 74% probability of an above-normal Atlantic hurricane season in 2006, with an expectation of 14 tropical storms for the Atlantic basin as a whole, with 8 of these being hurricanes and 3 intense hurricanes. Other forecasting groups concur that 2006 will be an above-average year in both the frequency and intensity of storms. Some climatologists believe we have now entered a period where more frequent and more destructive hurricanes will be the norm. In the aftermath of the 2005 storms, many reinsurers are concerned that pricing is inadequate for the heightened level of activity expected in the future.
- Rating agencies are concerned that some reinsurers are inadequately capitalized to withstand what A.M. Best predicts could be more than $120 billion in insured losses from a hurricane striking either Miami and raking the Florida coastline as it moves north, or running up the New Jersey coastline and plowing into New York City, or a series of severe catastrophes in a year. All the major rating agencies have made it clear that minimum capital requirements will increase for reinsurers writing catastrophe-exposed business. Some reinsurers will cut back on catastrophe-exposed business to lessen minimum capital requirements, while others will pass on the costs associated with the additional capital to reinsurance buyers and, ultimately, to insurance buyers in the form of higher premums.
- Some insurers and reinsurers, as well as some major rating agencies, have expressed concern about reliance on computerized catastrophe models, which underestimated damages from Hurricane Katrina. All the catastrophe model vendors are updating and fine tuning their models based on Katrina experience, and RMS, one of the leading firms in catastrophe modeling, recently unveiled a completely revised model. While improved models may restore confidence in their use for pricing purposes, the new algorithms also may indicate that some reinsurers are overexposed in some catastrophe-prone areas, prompting further cutbacks. The revised models also may indicate that some insurers need to buy more reinsurance, increasing demand and put further upward pressure on rates.
- Rate levels in other lines of business were unusually strong in 2005, and returns on invested assets have been on the rise. However, reinsurers cannot rely on underwriting profits from other lines and robust investment returns to subsidize catastrophe losses in the future.
- Some reinsurers have made a strategic decision to withhold capacity in anticipation of higher rate levels in the future.
- A tight retrocessional market has forced some reinsurers to reduce the capacity they offer to their clients.

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Will the Reinsurance Market for Florida Business Improve?

Insurers writing in Florida may never see property reinsurance rates return to pre-Katrina levels, and reinsurance contract terms may be more restrictive, but it is very likely that reinsurance capacity will return. How soon it returns depends significantly on the 2006 hurricane season; if it is a comparatively mild season, capacity may grow quickly.

Competition will be a powerful motivator. Competition already was keen in the reinsurance market even before the creation of billions of dollars in new reinsurance capacity following Hurricane Katrina. Rate levels in most other lines of business, and even in property business in less exposed regions, have been trending downward since 2004. Reallocation of Florida capacity to other lines and other regions, continued organic growth in capacity as profits swell the reinsurance industry's capital base, and the infusion of new capital will increase downward pressure on rate levels in other lines and regions and make Florida catastrophe business look increasingly attractive. In addition, new sources of catastrophe coverage such as cat bonds and industry loss warranties that tap the capacity of the capital markets will add yet more fuel to the competitive fire.

While only a few reinsurers have stated that they are ready to enter or increase their capacity in Florida, some recent developments suggest that the capacity already is creeping back, or is waiting in the wings, ready to be deployed at the right terms:

- Berkshire Hathaway, the third largest reinsurance group, is reportedly increasing its writings in catastrophe-stung areas, though at much higher rates.
- Newly formed Lancashire Re is actively seeking opportunities in lines of business "most impacted by Hurricanes Katrina, Rita and Wilma in 2005."
- Augsburg Re, which will be capitalized at $1 billion, will focus on aviation business, but also plans to write US property catastrophe business.
- Much of the $2.5 billion in new sidecar capacity is earmarked for supporting catastrophe risks.
- Lloyd's insurer Hardy is forming a new syndicate with a focus on property insurance and reinsurance.
- Lloyd's insurer Kiln is increasing its capacity with the expectation that 2006 will be a year "offering excellent underwriting opportunities."
- Reinsurance intermediary Benfield is presently working with Lloyd's of London to develop a $250+ million facility to provide Lloyd's syndicates with access to additional catastrophe capacity.

Various proposals for state or federally funded catastrophe reinsurance facilities have been floated, but have been vigorously opposed by the reinsurance industry. According to a position paper from the Reinsurance Association of America: "[N]atural disaster risk is both cyclical and insurable. Proper pricing, which involves adequate rates with an appropriate load for catastrophes, smoothes the risk over time. Over the longer term, the competitive private sector provides better-priced protection than is possible with a government-funded Cat Fund." One might argue that the reinsurance industry opposes a government reinsurance facility because the Florida crisis drives up rates to its benefit, and it has little motivation to relieve the pressure. However, it is in reinsurers' best interests to write Florida business if the premiums are adequate for the exposure. Overall, the industry is not capacity deficient, and any capacity not allocated to Florida is applied elsewhere, increasing competition and driving down premiums. If Florida

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business is priced to produce a risk adjusted return at least equal to other reinsurance business opportunities, reinsurers will allocate more capacity to the state.

The most significant threat to an easing of the reinsurance capacity crunch in Florida market is another bad hurricane season. If 2006 proves to be less severe than forecast, high rate levels and competitive pressures should encourage reinsurers to soon begin writing more Florida-exposed business. However, a repeat of 2005 or worse will deepen the crisis, probably for years to come.

BUSINESS IMPACT: Barring another severe hurricane season, the current reinsurance capacity crunch in Florida should be short lived. Already, opportunistic reinsurers are increasing their writings in catastrophe-exposed areas to take advantage of higher rate levels, and a significant amount of new capacity has been earmarked for catastrophe business. However, the crisis could be deepened if 2006 is another severe year for hurricane losses.

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