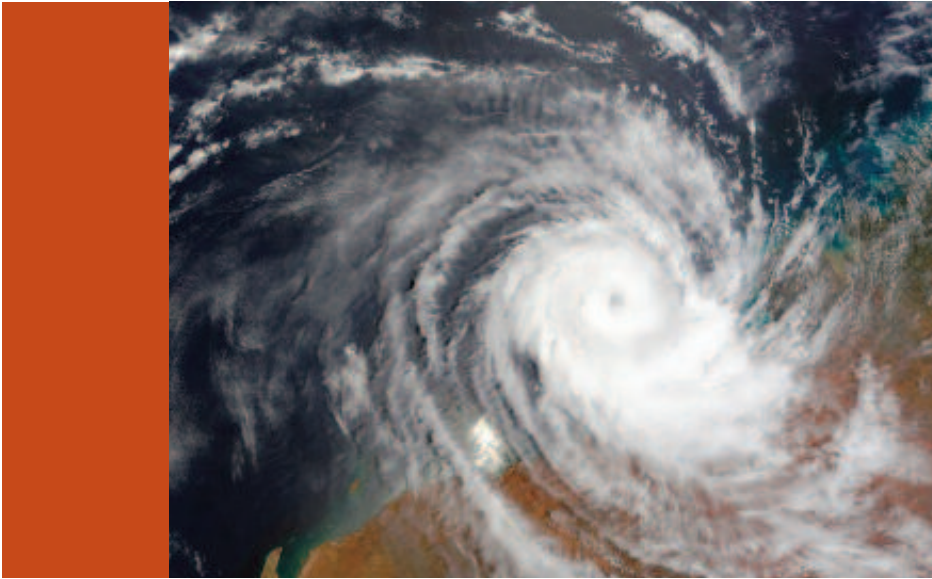


Financial Services Practice



Could Third-Party Capital Transform
The Reinsurance Markets?

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Introduction

The influx of third-party capital into reinsurance markets has increased significantly in recent years. Primary carriers are turning to capital markets instead of traditional reinsurance companies to provide protection, particularly for property catastrophe coverage. Pension funds and asset managers are increasingly investing in this space, along with the dedicated funds that specialize in this type of investment. These investors are attracted to the property catastrophe market's uncorrelated returns and historically attractive yields, especially in today's low-rate environment.

This market has grown as carriers have sought to diversify their catastrophe protection and have become more comfortable with non-traditional coverage options. Recent developments—including the issuance of indemnity-based bonds for large commercial risks (by AIG, for example) and the establishment of a catastrophe bond facility for small and regional carriers—highlight how capital markets continue to gain prominence in the reinsurance industry.

As third-party capital continues to enter this market, primary carriers—as the cedents—stand to increase their negotiating leverage, yet face several hurdles, including uncertainty about the long-term availability of this capital. Traditional reinsurers face the prospect of diminished share and greater pressure on margins in what historically has been a very profitable line of business. On one hand, as an alternative source of supply, third-party capital could become an existential threat to traditional reinsurers. On the other hand, if reinsurers adapt their model and actively manage this capital, they may benefit from a better return profile.

Whether third-party capital peaks at current levels in the market, or continues to become more prominent, will determine the extent to which primary carriers and reinsurers find their businesses reshaped by this trend.

The market today

Today, 16 percent of the approximately \$300 billion in catastrophe reinsurance capacity worldwide is provided by third-party capital, up from 2 to 3 percent of the market in the late 1990s. Third-party capital is typically accessed through securitized instruments (such as catastrophe bonds or loss warranties that pay out based on industry-wide loss events) or private deals between an investor and a primary carrier (such as collateralized reinsurance). Another common vehicle is the sidecar, through which capital markets co-invest their capital alongside reinsurance capital (Exhibit 1).

About 80 percent of third-party capacity is focused on risks in the U.S. market (primarily hurricanes and earthquakes), though this may change as international markets mature. The need for catastrophe protection is expected to grow in the U.S., particularly in light of the expected long-term increase in frequency and severity of Atlantic storm activity (Exhibit 2). The increasingly higher value of coastal property exposures is also contributing to the higher severity of these events.

Exhibit 1

About half of third-party instruments are securitized

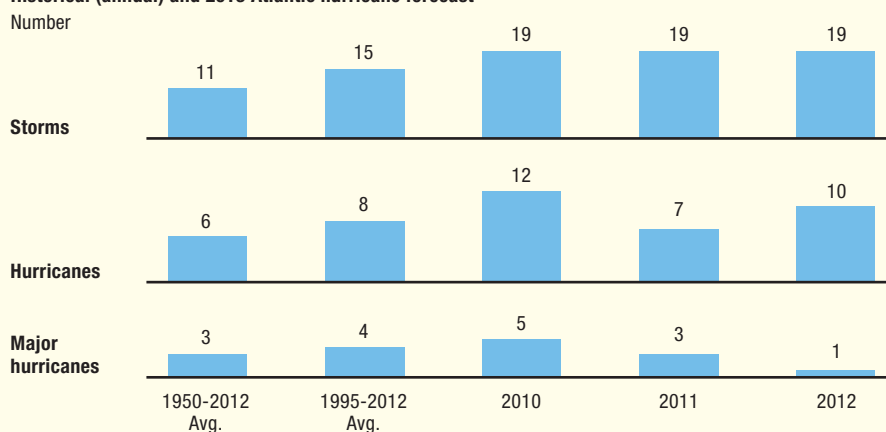
		2012 capacity \$ billions	Description
Alternative capital operating differently from "traditional" reinsurance	Insurance-linked securities (ILS)		
	Industry loss warranties (ILWs)	6	Securitized contracts indexed on industry-wide losses arising from an event; may or may not be collateralized
	Cat bonds	15	Risk-linked securities in a securitized SPV (special purpose vehicle); typically 2-3 year duration; based on variety of triggers
	Collateralized reinsurance (non-securitized, "private" deals)	13	Reinsurance with collateral; allows participation of non-rated players
Alternative capital deployed similar to "traditional" reinsurance	Fronting arrangements	n/a	Third-party capital provided on paper of rated carrier
	Sidecars	1	Co-investment where third-party capital sits in SPV alongside Re capital
Hedging instruments	Cat futures	n/a	Index traded on NYMEX and CME (similar to ILWs) or CCFE; indexed to parametrics
	Derivatives	n/a	Trading of above instruments (cat bonds, ILWs)

Source: Reinsurance Association of America (RAA); Guy Carpenter; Willis Re; AON; Partner Re; McKinsey Insurance Practice

Exhibit 2

Most third-party capital is deployed to U.S. wind exposure, which is expected to increase in frequency and severity

Historical (annual) and 2013 Atlantic hurricane forecast



Source: Swiss Re Capital Markets; Lane Financial LLC; Weather Services International; Accuweather; Tropical Storm Risk; NOAA, National Hurricane Center; Tropical Meteorology Project/ Colorado State University

Pros and cons for primary carriers

For cedents in both personal and commercial lines the main benefit of third-party capital is that it provides another source of reinsurance protection. This, in turn, gives carriers more negotiating leverage in the reinsurance market. Apart from more pricing power, third-party capital offers carriers other benefits relative to traditional reinsurance (Exhibit 3, page 4):

- Reduced counterparty credit risk (particularly when third-party vehicles are backed by collateral)
- Greater diversification, as coverage becomes less concentrated with a few reinsurers that are often interconnected through the retrocessional market
- The ability to lock in rates with multiyear structures, as catastrophe bonds have durations of two to three years or longer. This helps to prevent significant pricing shifts after a large catastrophic event (such as the 75 percent rate increase after Hurricane Katrina)





The main drawback of third-party capital is concern over its long-term availability, as well as its inability to replicate traditional reinsurance structures:

- Third-party capital may not be as permanent as traditional capital. If the provider of third-party capital withdraws (or fails to reissue) due to a large catastrophic event or a more favorable interest rate environment, primary carriers will be compelled to turn back to traditional reinsurers to purchase protection—and they will do so with a weakened negotiating position. Currently, even with softening conditions, these investments remain attractive to capital markets, given the arbitrage between the cost of equity for reinsurers (recently rising) and expected returns required by institutional investors (recently falling in the low-rate environment). However, this attractiveness will diminish with the inevitable rise in rates.
- Alternative third-party vehicles often lack critical provisions included in reinsurance contracts (such as reinstatements), and providers lack the value-added expertise that reinsurers offer.

As these vehicles become more available, cedents will need to develop new internal capabilities to actively manage them.

Exhibit 3

For primary carriers, traditional reinsurance and third-party capital each have pros and cons

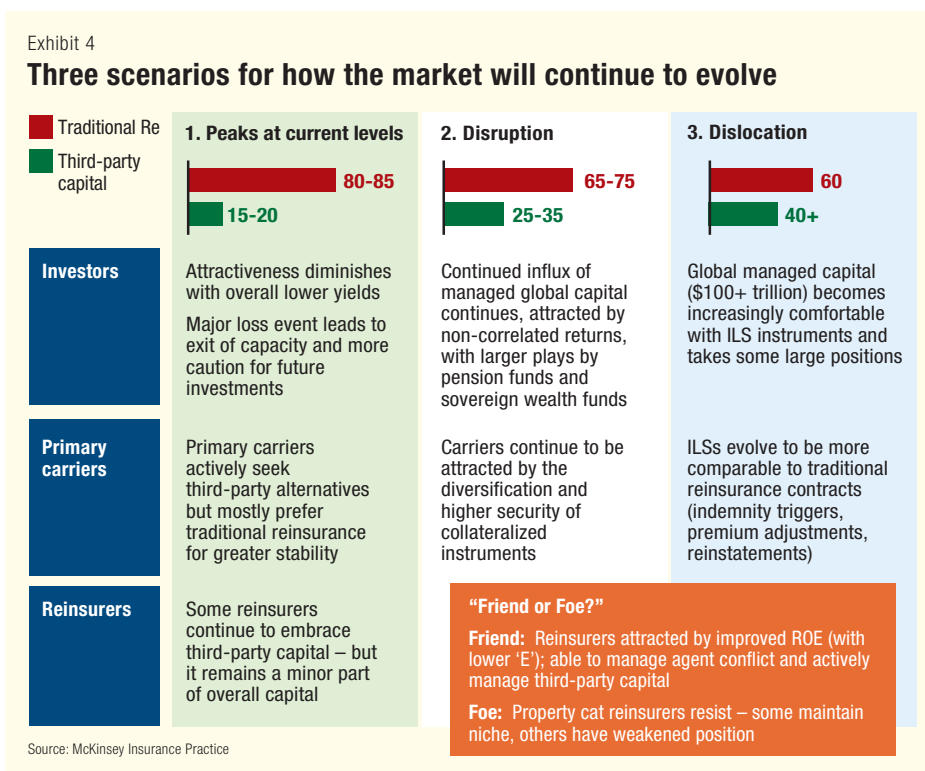
	Reinsurance	Capital markets
Capacity risk	Long-term partner and commitment; “face to the risk”	“Faceless” instrument; with large losses, capacity may abruptly exit
Flexibility	Customized terms & conditions on 12-month basis	Standard multiyear contracts (2 to 3 years); early redemption penalties
Fees	Brokerage fees/commissions; no upfront costs 	High fixed up-front costs (legal, rating, bank, broker, modeling) 
Expertise	Reinsurer provides technical expertise and market insight	Transactional capacity; modeling done by third-party firms
Rating	Primary carrier gets capital credit for high-rated reinsurer	Do not get full capital credit due to basis risk for non-indemnity covers
Price volatility	Rates renegotiated each year; vulnerable to hard market	“Lock in” today’s rates; multiyear structure decouples from pricing cycle
Credit risk	“Promise to pay”; some insolvency risk 	Typically collateralized, thus eliminating most credit risk 
Liquidity	Bilateral contract; cannot be traded or transferred	Cat bonds can be traded in secondary markets

Source: McKinsey Insurance Practice

Scenarios for third-party capital by 2020

The role of third-party capital in reinsurance markets could develop in any number of ways. Scenarios for how the market will evolve range from peaking at current levels of 15 percent of capacity, to true dislocation, in which third-party capital reaches or even exceeds 40 percent of capacity (Exhibit 4). Planning for these scenarios is critical for the cedents (who may in fact influence this outcome), as well as for the reinsurers (who have the most to lose):

- Peaks at current levels:** External investors may hesitate or pull back from their current involvement for several reasons. These could include rising investment yields in standard markets; overall softer pricing for property catastrophe reinsurance (driven by the greater supply of capital); or a large catastrophic event that erodes their principal investment. Additionally, primary carriers could stop turning to external investors if they become skeptical about the investors' long-term commitment to the market, and choose instead to place their business with more reliable traditional reinsurers.



- **Disruption:** Third-party capital could grow to become 25 percent to 35 percent of capacity. This would occur if primary carriers become more comfortable with these instruments, while investors continue to be attracted by uncorrelated yields and become increasingly comfortable with the risks they are assuming.
- **Dislocation:** The prospect of third-party capital reaching or exceeding 40 percent of capacity is conceivable when considering the sheer size of global managed assets (more than \$100 trillion), compared with a total property catastrophe reinsurance market of \$20 billion in premiums. Several major investors could take a large position in the market, with balance sheets that have the depth to absorb market volatility.

Whether third-party capital will peak at current levels, or whether there will be disruption or dislocation, depends on several structural and macroeconomic factors. There is a strong case for dislocation if the following three circumstances hold true (if any do not hold true, dislocation becomes less likely):

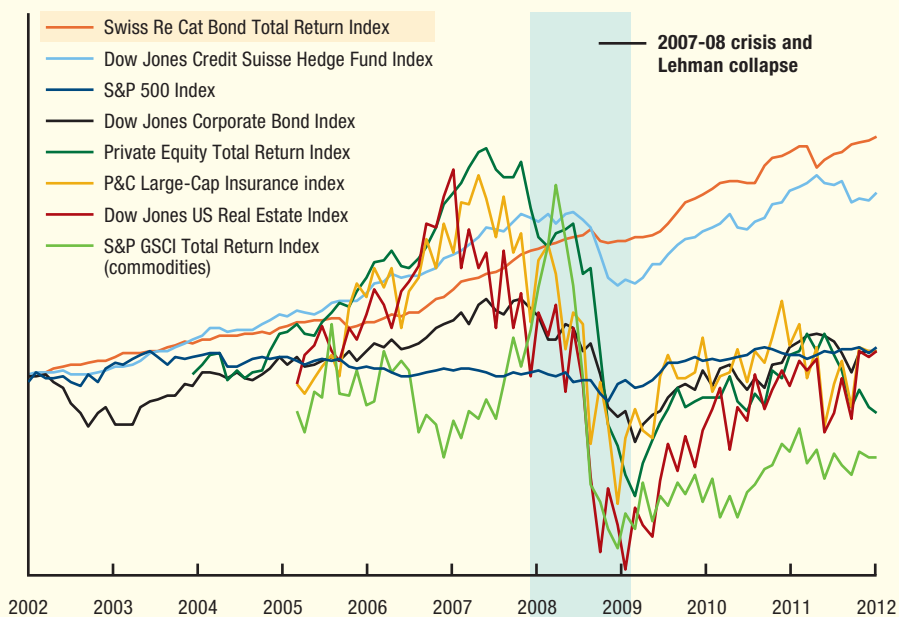
1. **Third-party capital products can mimic traditional reinsurance.** Several third-party capital asset managers must be willing to make large investments and show long-term commitment to providing permanent capacity to the markets. Products must also evolve to become more attractive to cedents by, for instance, including indemnity-based triggers and reinstatement options.
2. **Third parties remain more efficient providers of capital than reinsurers.** It will continue to be more efficient for third parties to provide capital for catastrophe risks compared with reinsurers, particularly given the differential in cost of equity. Despite giving up some margin, reinsurers are better off managing third-party capital with fee-based revenues, as opposed to managing their own capital directly.
3. **Property catastrophe markets continue to be attractive for investors.** Property catastrophe markets provide returns that are not correlated to the broader market (Exhibit 5), and, in the past 10 years, they have offered these higher returns with lower volatility than most other types of investments. That said, softer pricing in the reinsurance markets, coupled with increasing rates in capital markets, will diminish the attractiveness of reinsurance markets to third-party investors. This may be countered, at least partially, by increased demand for catastrophe capacity if there is a higher frequency and severity of catastrophic events in coming years.

Overall, increased capacity from third-party capital will exert downward pricing pressure in the reinsurance market. After Hurricanes Andrew and Katrina and 9/11, market losses were the catalyst for sharp spikes in rates. Going forward, the influx of third-party capital is expected to dampen the firmness and duration of higher post-event rates (Exhibit 6, page 8).

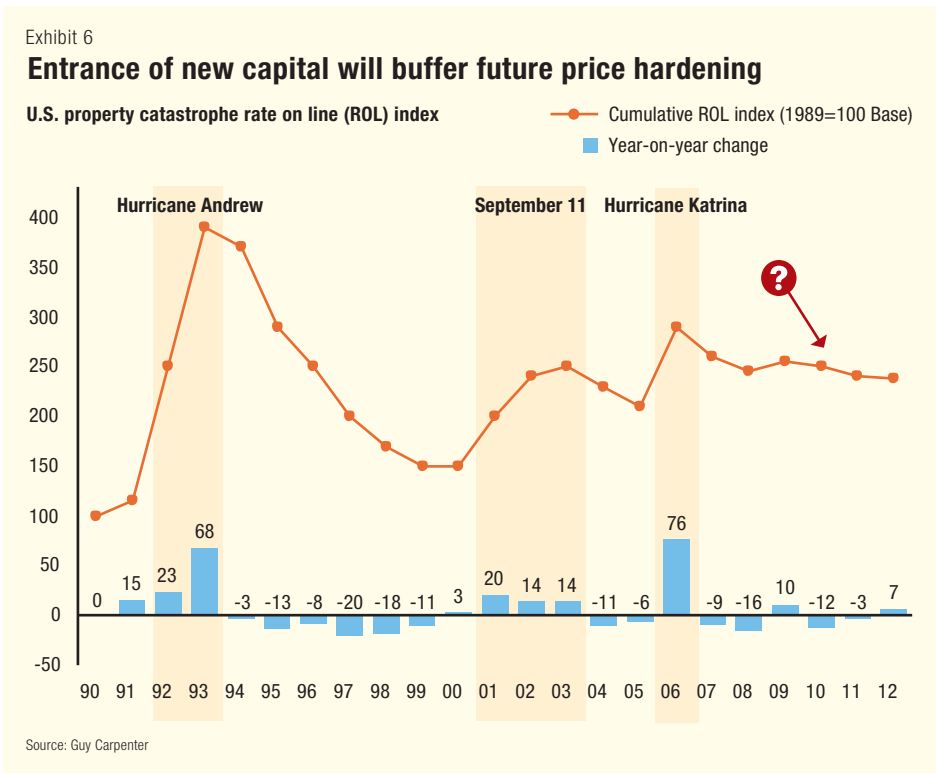
Downward pricing pressure is good news for primary carriers, but represents a challenge for traditional reinsurers for whom this line has been highly profitable. Reinsurers have reacted differently to third-party capital's arrival in the market. Some continue to play defense, remaining skeptical about its stickiness—they are warning cedents that investors who lose their principal may “have an emotional reaction and head for the exits.” However, the majority of traditional reinsurers are embracing third-party capital, following the example of Renaissance Re, which was among the first to do so with DaVinci Re as early as 2001. Indeed, third-party capital may be an opportunity for those reinsurers that actively manage it, given its very attractive ROE profile—in particular, fee-based income (R), without the need for equity (E).

Exhibit 5

For investors, property catastrophe offers uncorrelated returns



Source: Morgan Stanley; Citibank; Towers Watson; SNL



It is also important to note that 25 percent to 30 percent of third-party capital is deployed as retrocession capacity. In other words, reinsurance carriers are also beneficiaries of alternative funding—despite the threat it potentially poses.

Expansion of third-party capital beyond property catastrophe

Third-party capital may expand to other lines in P&C, with varying degrees of impact. In some cases, reinsurers will benefit by having supplemental sources of capital to support white-space risks; in other cases, reinsurers will face the same threat as with property catastrophe, where third-party capital is a competing source of capacity. Some possibilities include:

- **Government-backed terrorism and flood:** Total terrorism capacity is estimated at \$3.75 billion, partially backed by the U.S. government’s Terrorism Risk Insurance Act (TRIA). There may be an opportunity for third-party capital in this market if TRIA is not renewed by December 2014. Similarly, the National Flood Insurance Program (NFIP), sponsored by FEMA, col-

lects \$3.6 billion in premiums annually for \$1.2 trillion of coverage. Recently enacted legislation requires FEMA to evaluate the potential for private markets to supplement or replace this government-backed, highly subsidized program.

- **Pandemics:** Carriers may face large liabilities if there is a pandemic with higher-than-average deaths. For instance, the Centers for Disease Control and Prevention projects that a “severe” influenza pandemic could result in 1.9 million deaths, while a “medium” pandemic could result in 200,000 deaths, compared with the current annual average rate of 40,000. While life and health insurers would bear the brunt of the impact, new products may be introduced in P&C, such as coverage for business interruption resulting from a pandemic. This is currently a white space in the market, with negligible premiums. Given the “peak peril” nature of this potential exposure, capital markets would be the natural candidates to support new products.
- **Property facultative coverage:** There have been some recent deals in which third-party capital has replaced traditional facultative coverage for individual large placements. However, this market has been flat for several years and already has excess capacity, limiting potential returns to investors.
- **Traditional liability:** There are \$40 billion in global reinsurance liability premiums, which is about twice the size of the market for property catastrophe reinsurance. Yet third-party capital has had almost no traction in supporting liability products. The liability market already has excess capacity and, more importantly, securitized vehicles for liability coverage are more difficult to structure than for property, particularly given the 5-to-10-year tail before losses are evident. Nevertheless, there has been some innovation in this market that may promote the introduction of third-party capital. As an example, ISO launched a casualty index in 2011 in an effort to facilitate the securitization of casualty markets. More generally, several primary carriers have publicly expressed interest in accessing third-party capital for liability, if for no other reason than to have more negotiating leverage with reinsurance carriers.

Another recent development is the establishment of fully capitalized reinsurance companies by hedge funds (known as “Hedge Fund Re”)—such as Greenlight Re or Third Point Re—in which the bulk of returns are generated by their assets, rather than by underwriting profits. These companies access cheaper capital in the form of low-volatility reinsurance premiums and use the

float on these premiums to employ a more aggressive investment strategy than traditional reinsurers. Importantly, the underwriting appetite for these new vehicles excludes the higher-volatility property catastrophe lines.

Hedge Fund Re participants represent a small yet growing segment of the reinsurance market and illustrate the continued influx of non-traditional players into the industry. However, their entrance is unlikely to lead to significant displacement in the market, because reinsurance markets outside property catastrophe have been shrinking (as primary carriers continue to cede less premium), and the standard reinsurance markets already have significant excess capacity.

* * *

Third-party capital has become an established niche in the property catastrophe reinsurance market. The jury is still out as to whether full dislocation will occur or whether third-party capital will peak at current levels. Either way, the winners are primary carriers (which benefit from a new source of supply), asset managers (who have a new, uncorrelated vehicle in which to deploy capital), and financial advisors/banks (which have a new product to place).

Traditional property catastrophe reinsurers face the most risk in terms of diminished premiums and lower margins. In the worst case, this may be an existential threat for some of the Bermuda short-tail cat specialists. However, third-party capital could also be seen as an opportunity, because reinsurers that participate as the asset managers of this new capital—as many have been doing—will have a better returns profile.

In addition, specialized capital market participants will continue to innovate and explore new opportunities (for example, Hedge Fund Re), though these efforts are unlikely to result in the same level of disruption as in the property-catastrophe markets. The big unknowns are whether capital markets will support the expansion of reinsurance markets (for instance, privatization of flood coverage), or whether capital markets will enter the broader reinsurance markets beyond property catastrophe (such as for liability coverage).

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