Reinsurance: Ensuring Market and Pricing Stability for Catastrophic Events

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Industry Focus on Catastrophe Risk is Understandable

Natural catastrophe risk is considered to be 1/3rd of the total risk to the P&C Industry and the largest single risk

- The bulk of the risk is in the property sector – some additional risk resides in casualty areas and in the Life and Health businesses

An approximate analysis can help us calibrate the issue (round numbers)

- Capital deployed in the “core” P&C industry - $250bn
- Historic annual return has averaged about 8% = $20bn (includes small cats)
- Catastrophe losses have a predictable effect on the P&C industry
  - $20bn of cat losses will move the industry to a “break even” year
  - $50bn will cause about a 12% loss of capital - manageable
  - $100bn will cause a 32% loss of capital – undesirable
- Reinsurers provide about $75bn of P&C industry capital
  - Reinsurers generally pay about 50% of the larger industry cat losses
  - Capital provided by reinsurers for cat risk is about $40-50bn
  - Reinsurers have generally assumed a greater proportion of cat risk relative to primary companies – service provided

Catastrophe Risk has Been Growing Quickly on Both a Realized and Measured Basis

"Inventory" of risks exposed to natural catastrophes has been growing at 10-15% per year for the last 5-10 years

- Booming coastal property development exposed to both hurricanes and earthquakes
- Wealth factor has also increased the value of structures and contents: increased constructions costs

Recent concern about potential increased frequency of destructive storms

- Decadal frequency - scientific research is well aligned
- Uncertainty about effects of Global Warming / Climate Change
- Consensus resulted in a 50% increase in potential hurricane destructiveness

Realized hurricane activity is up in recent history

- 2004 Florida – very high frequency, 4 events – 36bn total losses
- 2005 Katrina – largest loss in history at $50bn
- 4 year average at $21bn vs. approx $10bn measured "expected"

Combination of factors has caused measured risk to increase by over 100% in last 5 years: 1/100 event moved from $50bn to $100bn

Reinsurers Have Been Asked to Provide Significantly More Capital for Catastrophe Risk

- Underlying demand for catastrophe reinsurance has increased (in lumps) by at least 100% since 2003 – the supply has been catching up and is close to in balance
- Reinsurers compete for their capital from the overall capital markets
  - Most reinsurers are publicly held & rated
  - Reinsurers have been designing products to better access the capital markets to support catastrophe risk
  - Currently non-Insurance capital market products provide about 20% of risk capital (>20bn face capital) – up fivefold in last 4 years
  - These products have been gaining popularity in the capital markets
- Reinsurer balance sheets must be of high quality to guarantee future payments
  - Clients and rating agencies demand risk diversification
  - Value proposition is to accept cat risk from around the world to create a diversified portfolio and spread the worldwide risk
  - Non-cat reinsurance products have been growing much slower than catastrophe risk and the ability for reinsurers to absorb significant additional demand on their own balance sheets is limited
  - Capital market products are poised for continued significant growth

Reinsurers Provide an Effective Conduit for Catastrophe Risk to the Larger Capital markets

Catastrophe risk can be either diversified and transferred pre-event or financed post-event

The temptation of relying primarily on post-event financing can be seductive

- Pre-event costs tend towards the risk, post-event tend toward broader assessment bases
- Financing options are understandable during dislocations – but should be secondary
- Having the risk priced by market forces should provide economic insight.

Risk charges are coming down in the risk transfer markets – diversification is being realized by the capital markets

Reinsurers spend lots of time and money to understand catastrophe risk to appropriately charge out the economic risks– it is not easy, but needs to be done

Catastrophe modeling is still a newer science

Modeling natural phenomena is very complex

Reinsurers are working on initiatives to mitigate risks

Full scale testing – RenaissanceRe Wall of Wind

Improved construction techniques – economically driven

Improved hurricane prediction for property preparation and evacuation

Reinsurers are Bringing Capital Efficiency to Cat Risk

Bringing the efficiency of capital markets to help manage cat risk is good public policy: Catastrophe risk needs to be smartly managed, not pushed back or ignored

Costs in the private market can be higher in a dislocation (short term) and the undesirable political dislocations it can create are understandable

The (very) long term benefits in actively managing these risks as they evolve will outweigh the short term dislocations

Reinsurers are at the leading edge of managing these risks and have teams of experts, driven by market realities, developing the most viable and effective long term solutions to the problem

The imbalance between the supply and demand for catastrophe protection is alleviated, in part due to new capital markets participation

The future is not clear and we need to bring proper creative market forces to the cost of risk, value of mitigation and the trade-offs of living in catastrophe prone areas.