## 6th Seminar on Enterprise Risk Management Hotel Sea Princess, Mumbai

# Reinsurance for risk management

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Institute of Actuaries of India

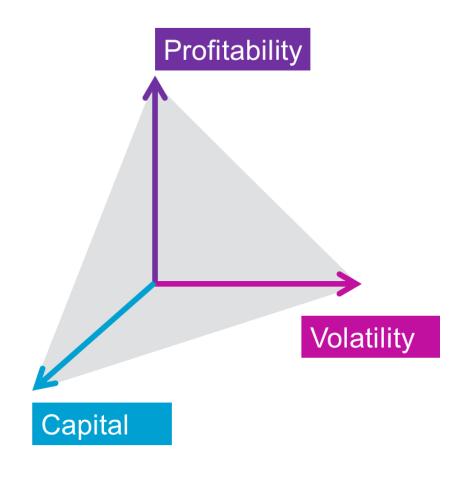
## **Setting the Scene: KPI's to monitor**



Financial statements and risk appetite statements of insurers make reference to three 'dimensions' (or 'vectors'), for example:

Subject to an acceptable level of risk of insolvency, we aim to manage our business in a way which maximises our profitability, while still managing volatility of results and return on capital

- Make decisions with reference to three key financial dimensions:
  - 1. Profitability
  - Volatility
  - 3. Capital



Reinsurance is a tool for managing profitability, volatility, capital and the financials

## **Need for Reinsurance**



## Risk transfer, risk financing and knowledge

- Transfer of risk from an insurer to a reinsurer...insurance for an insurer
- Protects Balance sheet provides contingent capital
- Catastrophe protection
- Provides large limit capacity
- Stabilization of profitability
- Helps enhance underwriting capability; develop new products

Reinsurance is like the shock absorbers on a car. It does not reduce the losses but merely smoothens out the effect on the insurer

## **Other Considerations**



## Industry View

- Peer comparison
- Retention in relation to size of insurer

#### Limits settings

#### **Financial View**

- Maximum retained loss as a percentage of capital
  Retained profits
- Impact on projected solvency

### Impact on projected dividends

#### **Rating Agency View**

Minimum credit rating constraint, if any

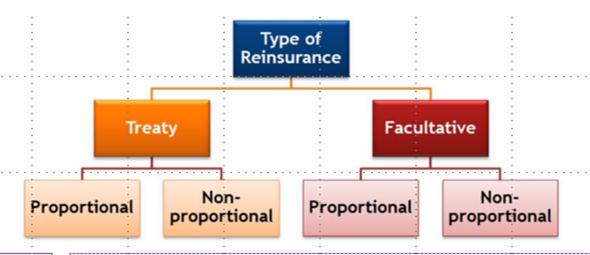
#### **Economic View**

- Reinsurance optimization
- Frequency and Severity risks

Catastrophe modelling

#### As we all know !!!





**Treaty** 

Automatic risk sharing arrangement between the insurer and the reinsurer. Risk sharing pattern and other terms and conditions are defined upfront. All the risks underwritten by the company can be automatically ceded in the treaty subject to terms and conditions.

**Facultative** 

Unlike treaty reinsurance in case of facultative reinsurance every risk/policy has to be referred to the reinsurer. The facultative reinsurer is free to either accept or refuse any risk offered

Proportional

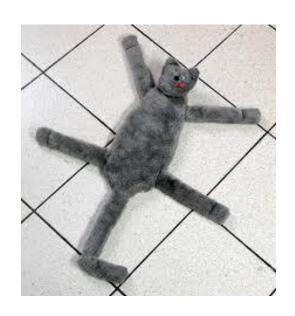
The insurer and reinsurer share the premiums and claims in the contractually defined ratio.

Non-Proportional Responds if the loss suffered by insurer exceeds the defined threshold, called deductible, up to a contractually defined cover limit.





## Limited by imagination and bound by regulation





## Dead cat bounce

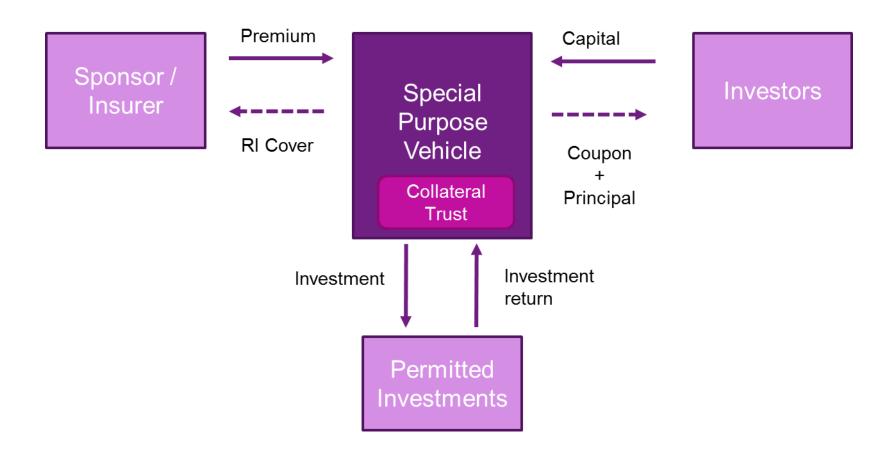
## **Key forms of Alternate Capital**



Collateralized Re	A reinsurance contract which is fully-collateralized by investors or third-party capital
Catastrophe bonds	High-yield debt instrument designed to raise money for companies in the re/insurance industry in the event of a (natural) catastrophe
Industry Loss Warranty (ILW)	Re/Insurance contract in which coverage is triggered when the losses experienced by an industry exceed a specific threshold.
Side Cars	Sidecars are SPVs sponsored by reinsurers, established to allow investors to take on the risk and benefit from return of reinsurance business

## **Insurance Linked Securities**





## Why do sponsors consider cat bonds?

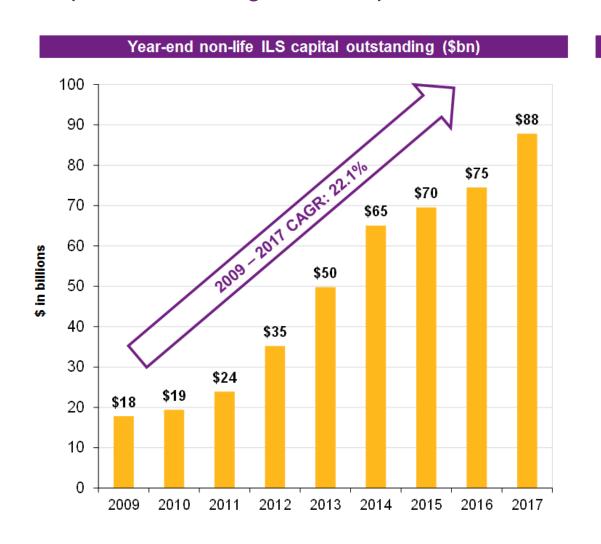


- Concern about counterparty credit risk in case of a large event
- Shortage/pricing of available traditional capacity
  - e.g. companies with large reinsurance programs, peak perils
- Diversifying sources of capacity
  - Reducing dependency on one just one market
- Structural features that the traditional markets have difficulty providing in size at the right price
  - Aggregate, second event, drop down, etc.
- Multi-year pricing stability (3 5 year term is typical for cat bonds)

## **ILS Capital Growth**



### Rapid reload and growth in spite of 2017 cat losses



#### Commentary

## Non-life ILS capital stood at \$88 billion at year-end 2017

A year-on-year increase of 17%

#### ILS capital is running toward the longer term opportunity to partner with re(insurers)

## Withstood substantial loss activity in H2 2017

- Reloads overcame any issue on trapped capital
- Loss creep will test Trust Agreement language

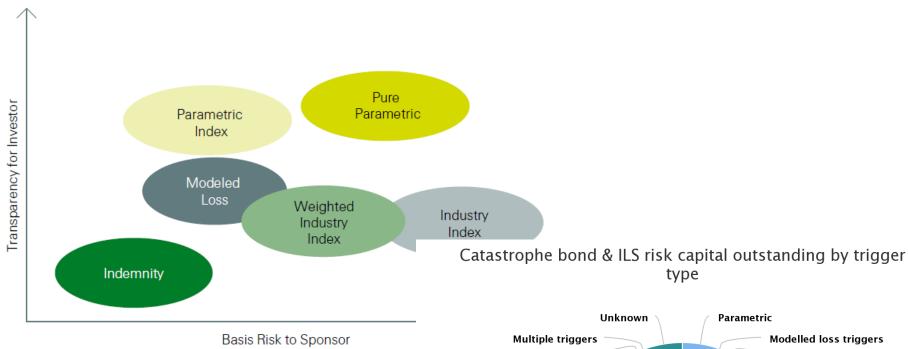
#### Cat Bond issuance continues to grow

- \$8B of new issuances through H1 2018
- Second highest ever including Scor bond covering EU and US wind

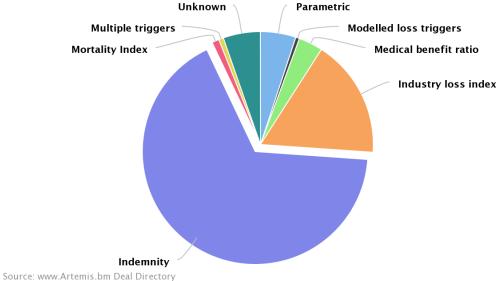
## WTW ILS offering now fully embedded into Willis Re

## Cat bond: triggers and basis risk





Source: Swiss Re Capital Markets

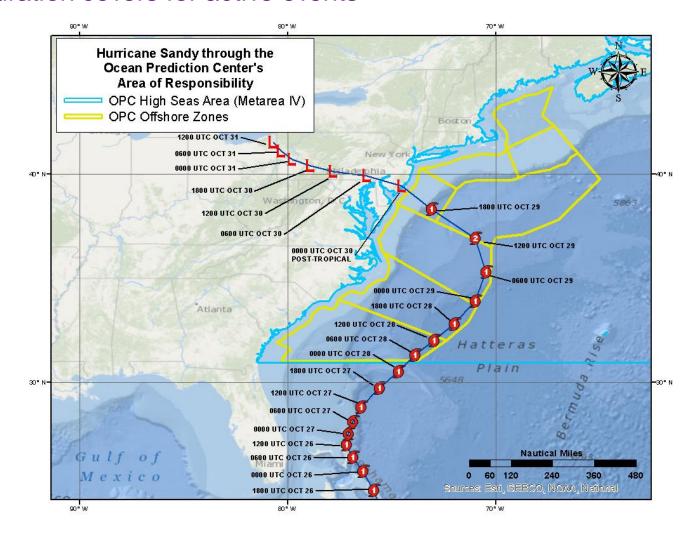


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#### Short duration covers for active events





# Thank you !!!

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