Non-traditional (Re)insurance

A world of changing capital – don’t worry – be happy

October 20, 2014

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In the Headlines…

In the Headlines…

- “Alternative Capital could take 50% of cat reinsurance market”
- “Alternative Risk Captures 20% of catastrophe reinsurance market”
- “Berkshire, Nephila et al take on MTA cat risk”
- “Alternative reinsurance capital up 18% to $59B in first-half 2014”
- “Pine River now working with Allied World on reinsurance venture”
- “Nephila receives $50mn IBM investment”
- “Ace and BlackRock considering new venture”

Who are These Guys?

Who are These Guys?

- Nephila
- Pillar
- Aeolus
- Catco
- Twelve Capital
- Secquaero Advisors
- Securas
- Watford Re

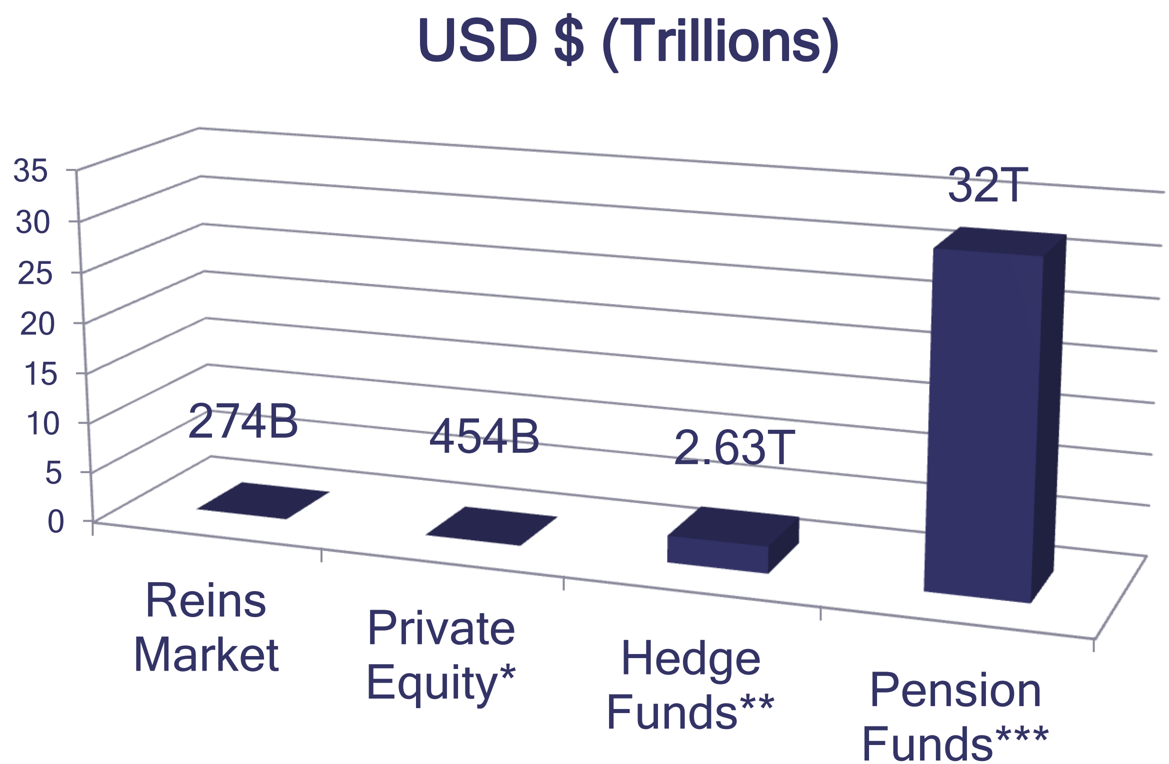
All of the above, and **many** more, have two things in common:

1. They are actively **soliciting traditional** reinsurance from intermediaries; and
2. They are **managing third party capital** on behalf of outside investors

Capacity Overview

Capacity Overview

Macro View of Capacity…



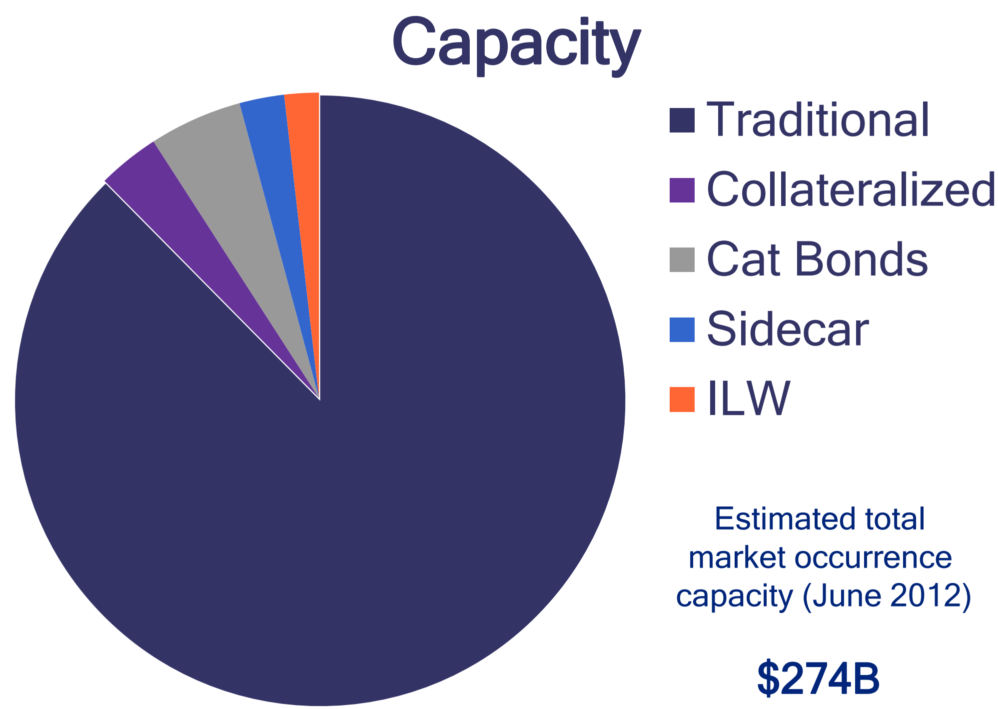
* Preqin (report Q2.2014)
** Hedge Fund Research, Inc. (report 1.21.14)
***Towers Watson (report 2.5.14)

Capacity Overview

Occurrence Catastrophe Capacity

Estimated Occurrence Limits in Market:
(non-traditional market ≈ 15% of total capacity)

Traditional Reinsurance →	$240B
Collateralized Reinsurance →	$9B
Catastrophe Bond →	$13.5B
Sidecar →	$6.5B
Industry Loss Warranty →	$5B



Estimated total market occurrence capacity (June 2012)

$274B

History of Non-Traditional Reinsurance

a) Catastrophe Bonds
b) Industry Loss Warranty
c) Sidecars
d) Collateralized Reinsurance

History of Non-Traditional Reinsurance

What Does it Mean?

1. Capacity provided through **managed capital**;

2. Risk assumed by **non-equity** (“unrated”) balance sheet

History of Non-Traditional Reinsurance

How Did We Get Here? **1990's**

1. A squeeze on capacity and rising rates from loss events:
   - 1992 Hurricane Andrew - total insured loss $15.5B (adjusted loss $46.7B)
   - 1992 Hurricane Iniki - total insured loss $1.6B (adjusted loss $2.9B)
   - 1992 Northridge earthquake - total insured loss $12.5B (adjusted loss $20.0B)

2. 11 insurance companies insolvent

3. The advent and acceptance of cat modeling, analytics/actuaries and computers

4. Floor on cat pricing developed

History of Non-Traditional Reinsurance

Products Introduced as a Result…**1990's**

1. Catastrophe Bonds

2. Industry Loss Warranties ("ILWs")

Catastrophe Bonds

Cat bond is a **debt security** used for high-severity/low-frequency risk

- **Insurer** or **reinsurer** (the “sponsor”) want to transfer some/all Cat risk
- Bond is issued by “**Special Purpose Vehicle**” (a separate legal structure established, often by the sponsor)
- Cat bond proceeds are typically **invested** in low-risk securities (the collateral)
- Investors: limited partners with experienced dedicated fund manager
- Periodic **payments** are made to investors:
  - Earnings on collateral
  - Insurance premium paid

  → Variable rate interest payments = LIBOR + Margin (spread)
- Principal from collateral back to investors, if no loss
- **Sponsor’s right to access** collateral is triggered with covered cat occurrence
- 3 year term norm; range from 2-4

Triggers:
- Parametric
- Modeled loss
- Industry Loss Index
- Indemnity
- Hybrid

Industry Loss Warranty

Utilize Single or Double Trigger:

Written:

- Double trigger – written by reinsurers or SPVs, as re/insurance OR
- Single trigger – written on an ISDA form, as a derivative

Triggers:

- Industry loss
  - Measurable industry parameter - PCS/PERILS
- Indemnity feature (Ultimate Net Loss)

Purchased:

- As gap coverage
- Full payout based on hitting both triggers

History of Non-Traditional Reinsurance

How Did We Get Here? **2001 – 2010 (total insured loss)**

September 11, 2001 - $18.8B (adjusted loss $24.7B)

2004: Hurricane Charley $7.5B (adj loss $13.5B)
Hurricane Ivan $7.1B (adj loss $10.7B)
Hurricane Jeanne $3.6B (adj loss $6.4B)
Hurricane Ivan $7.1B (adj loss $10.7B)
Hurricane Francis $4.6B (adj loss $7.6B)

2005: Hurricane Katrina $41.1B (adj loss $44.8B)
Hurricane Wilma $10.3B (adj loss $14.7B)
Hurricane Rita $5.6B (adj loss $6.3B)

2008: Hurricane Ike $12.5B (adj loss $14.9B)

- **Economic distress**
- **Acceleration of modeling & risk management techniques**
- **Rating agencies**
- **Modeling changes**
- **Mid-2006: Demand ↑ Supply ↓ Capacity *CRUNCH***

Florida Market

- Mandated mitigation credit
- Ballooning Hurricane Catastrophe Fund

History of Non-Traditional Reinsurance

Products Introduced as a Result…**2000's:**

Sidecars – mostly retros of sponsors

A Sidecar is:

- Special purpose "mini" and **temporary reinsurer** or vehic**le ("SPV")**
- Formed by a **sponsor** (usually a reinsurer, who may also act as the manager) seeking to provide additional/substituted capacity
- **Pure insurance risk**, as most other responsibilities (management, operations) remain with sponsor
- To provide a **quota share** of **specific risks** of the sponsor
- Capitalized by **3rd party investors** – hedge funds/private equity firms
  - Equity
  - Debt
- Usually includes investment from sponsor
- Relatively easy to set up = quick response to capital needs = very cyclical
- Most active 2005-07, following very active Cat loss activity

History of Non-Traditional Reinsurance

How Did We Get Here? **2010 and forward**

- Federal reserve -- increased **supply** $$$
- Low interest rates
- The **products** being developed made it easy – they were/are efficient/desirable
- **Buyers** have long **memories** (capacity crunch of 2006 and 2007)
- **Investors** actively seeking **higher returns**

History of Non-Traditional Reinsurance

Products Introduced Post **2010**…the way forward

Collateralized Reinsurance

Traditional reinsurance, written by an **unrated reinsurer:**

- On an UNL, occurrence or aggregate basis
- **Fully collateralized** liabilities utilizing trust agreement (governed) or LOC
- Security of collateralization and collateralization documentation should be carefully scrutinized
- Easy to understand

Investors/sponsors include:

- Hedge fund
- Private equity funds
- Re/insurers
- Pension funds
- Big named banks
- Any one with lots of cash

Where Are We Now…Where Are We Headed?

Where Are We Now…Where Are We Headed?

Traditional Reinsurer Viewpoint

- Reinsurers are seeing the need to **evolve**
- Reinsurers can be **issuers** or **users** of ILS
- Reinsurers evolving into **asset management role**

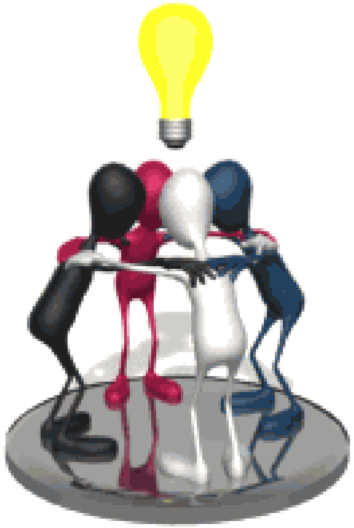
Utilizing their:

- Market access
- Risk – assuming expertise
- Modeling abilities

Reinsurers are:

- Affiliating with ILS managers
- Building ILS platforms/establishing dedicated ILS units
- Entering strategic relationships/partnerships
- Raising 3rd party capital

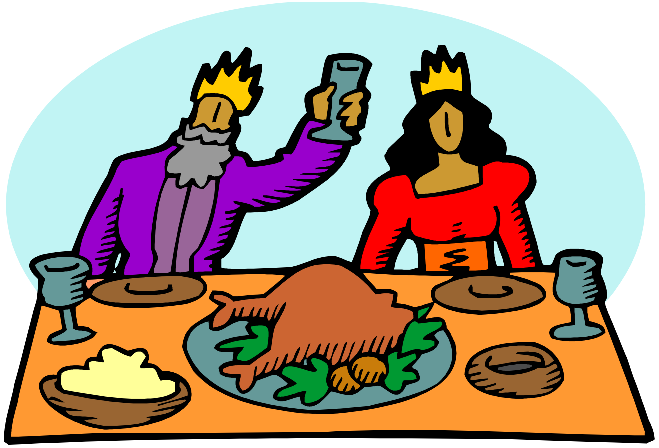
What does this mean for the program management community?



Opportunities Abound

Aggregators of risk are **kings** and **queens** of the industry

- **Most valuable** in the (re)insurance food chain = **aggregators/distributers** of risk
  - **Capacity**, in all various forms, is **plentiful**
  - Non-traditional capacity is rapidly developing; trying to **get closer to original risk**
  - Increase in **mergers** and **acquisitions**
  - Increase in **joint ventures**
  - Good for your **clients** (i.e., the original insureds)

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Q & A

Thank You

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