Aon Benfield

Reinsurance Market Outlook

Capacity Builds Ahead of Mid-Year Renewals

April 2018

Aon
Empower Results®

Contents

Executive Summary: Capacity Builds Ahead of Mid-Year Renewals

April 1 treaty reinsurance renewals are dominated by Japan, India, and Korea. Traditional reinsurers continue to show strong appetite for this business and buyers in these markets found ample capacity to meet their risk transfer needs and to support geographic and product growth aspirations.

The bulk of this report is dedicated to reviewing the annual results of the 21 major reinsurers comprising the Aon Benfield Aggregate (ABA*), following the significant natural catastrophe losses experienced in the second half of 2017. We also summarize recent activity in the alternative capital sector, which continues to exert a growing influence on the global market.

The ABA results confirm that the traditional reinsurance sector as a whole continued to make money in 2017. Net income across the group stood at USD4.0 billion, contributing toward a 2.5 percent increase in total equity to USD204 billion. The return on average equity stood at 2.0 percent.

Property and casualty (P&C) underwriting losses stood at USD10.6 billion, on net premiums earned of USD144 billion, representing a combined ratio of 107.4 percent. Natural catastrophe losses of USD23.6 billion were partly offset by favorable prior year reserve development of USD5.9 billion. These figures should be viewed in the context of a total investment return of USD29.5 billion.

Alternative capital showed significant growth over the course of 2017. Losses in the third quarter tested the market and institutional investors responded by showing renewed commitment to an asset class that has delivered relatively attractive, non-correlating returns over time. Catastrophe bond activity has been at record levels for a first quarter and we expect to see further growth in alternative capital during 2018.

The first few months of 2018 have also been notable for two major M&A deals, pairing AIG with Validus and AXA with XL Catlin. We believe there is scope for further consolidation in the sector, driven by the quest for growth, the need to optimize expense and capital efficiency and the external pressure now being applied to certain franchises by investors and rating agencies.

Major losses have been below average so far in 2018 and capital market conditions have been relatively benign. We conclude that global reinsurer capital remains at peak levels ahead of the mid-year renewals in June and July, which will likely result in strong competition, even for loss-impacted business.

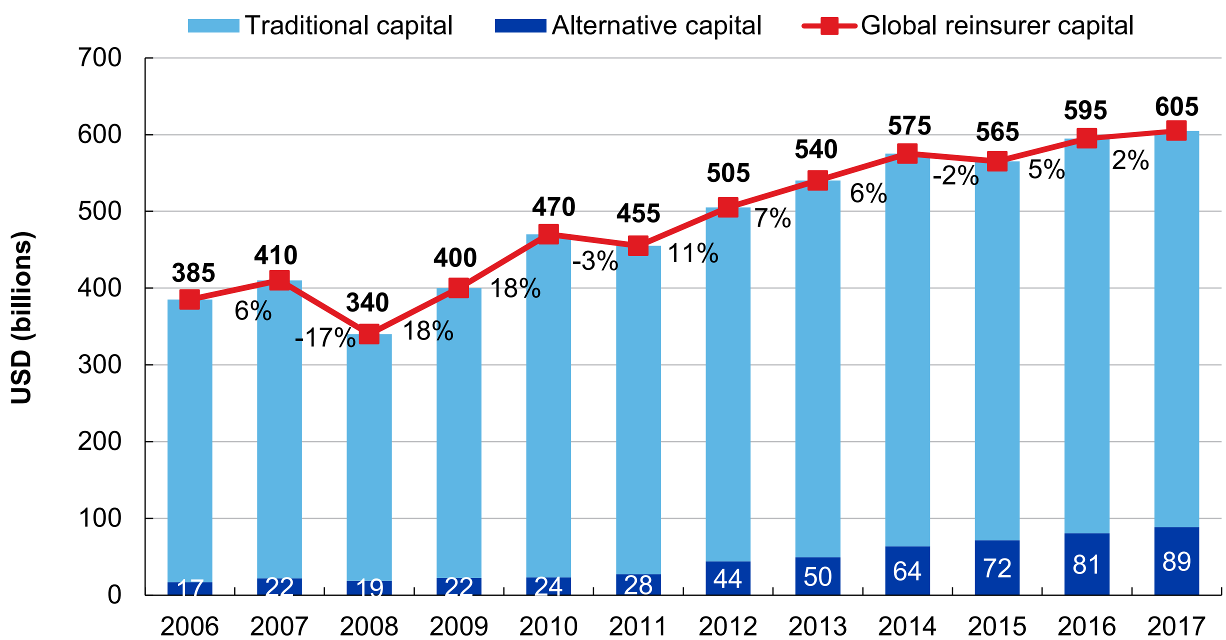
* The ABA constituents are Alleghany, Arch, Argo, Aspen, AXIS, Beazley, Everest Re, Fairfax, Hannover Re, Hiscox, Lancashire, MAPFRE, Markel, Munich Re, Partner Re, QBE, RenRe, SCOR, Swiss Re, Validus and XL Catlin.

Global Reinsurer Capital

Growth despite catastrophes

Aon Benfield estimates that global reinsurer capital stood at USD605 billion at December 31, 2017, an increase of 2 percent relative to the end of 2016. This calculation is a broad measure of the capital available for insurers to trade risk with. Traditional capital rose by USD2 billion to USD516 billion, while alternative capital rose by USD8 billion to USD89 billion.

Exhibit 1: Change in global reinsurer capital



Sources: Company financial statements / Aon Benfield Analytics / Aon Securities Inc.

The increase in global reinsurer capital may seem counter-intuitive, given the USD136 billion of global insured natural catastrophe losses tracked by Impact Forecasting in 2017.

The following factors provide some explanation:

- A portion of the losses from the major events in the US were retained by various government agencies – we estimate around USD20 billion.
- The reinsurance market picked up a relatively low proportion of the private sector losses, due to the generally high retentions carried by primary insurers – we estimate less than one third.
- Within traditional reinsurer earnings, elevated catastrophe losses were mitigated by continued favourable prior year reserve development and better than expected investment returns.
- Capital markets investors continued to show strong appetite for insurance risk, both before and after the third quarter hurricanes.
- Weakening of the US dollar against most major currencies benefitted the year-on-year comparison.

The Aon Benfield Aggregate – 2017 Results

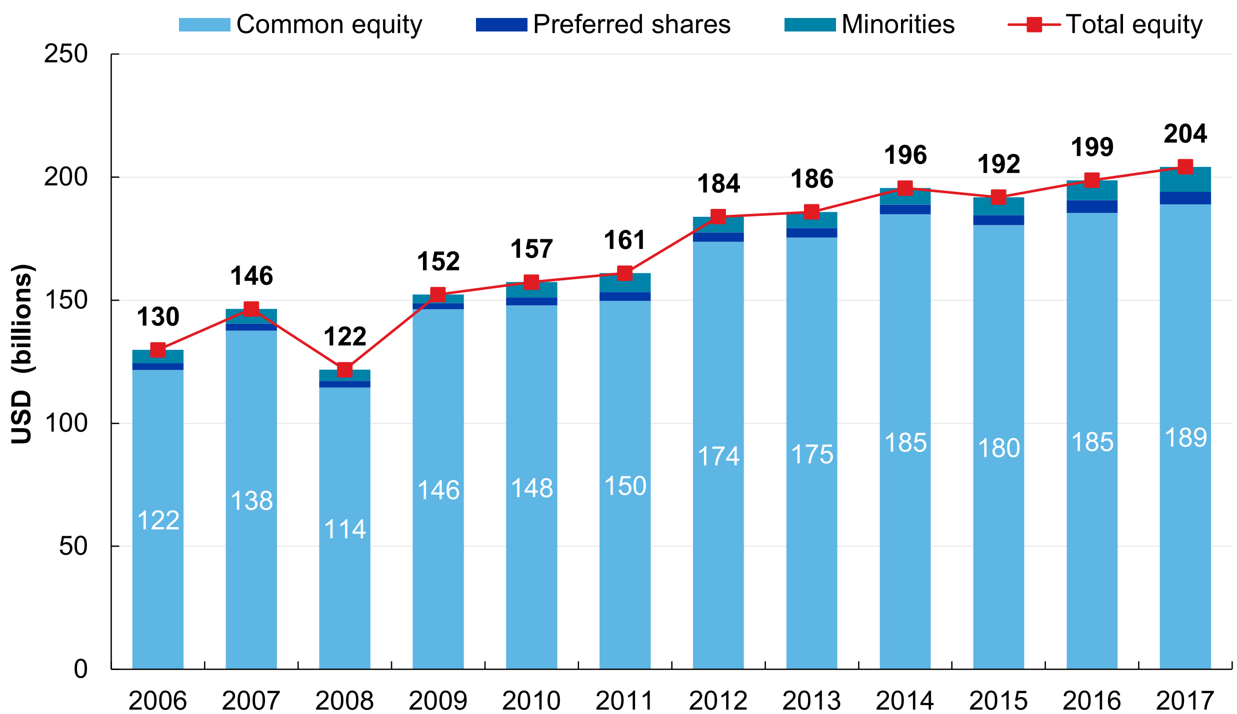
The ABA in context

The ABA study tracks the results of 21 major reinsurers* domiciled in developed markets that write approximately 50 percent of global property and casualty (P&C) premium on a combined basis. These companies carry significant exposures to large natural catastrophe events in the US and their performance is not necessarily representative of the traditional reinsurance market as a whole.

ABA capital

Total equity across the ABA constituents rose by USD5 billion, or 2.5 percent, to USD204 billion over the year to December 31, 2017. This outcome is flattered by a 14 percent year-on-year weakening of the US dollar versus the euro – the reporting currency of four of the largest companies in the study.

Exhibit 2: Change in ABA total equity



Source: Company financial statements / Aon Benfield Analytics

In original currencies, only eight ABA constituents reported increases in total equity. In most other cases, the reductions were influenced by active capital management prior to the third quarter hurricanes. Dividends and share buybacks across the ABA totaled USD10.5 billion in 2017, down from USD12.3 billion in 2016. In addition, weakening of the US dollar meant that companies reporting in euros experienced reductions in the translated value of their net assets held in the US.

*The ABA constituents are Alleghany, Arch, Argo, Aspen, AXIS, Beazley, Everest Re, Fairfax, Hannover Re, Hiscox, Lancashire, MAPFRE, Markel, Munich Re, Partner Re, QBE, RenRe, SCOR, Swiss Re, Validus and XL Catlin.

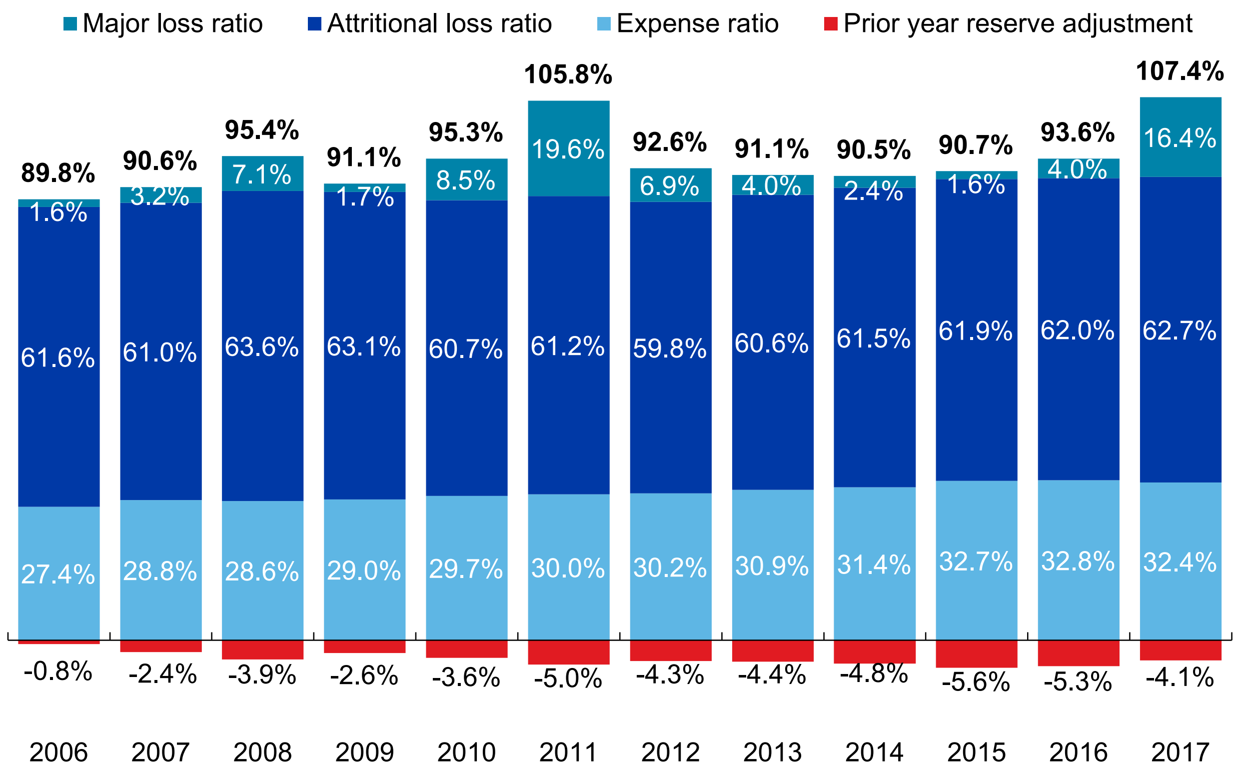
Underwriting

Gross premiums written by the ABA totaled USD249 billion in 2017. The volume of P&C business stood at USD174 billion, with primary insurance up 8 percent to USD89 billion and assumed reinsurance up 5 percent to USD85 billion. P&C net premiums earned rose by 6 percent to USD144 billion.

The combined ratio increased to 107.4 percent in 2017, taking the five-year average to 94.7 percent. Net natural catastrophe losses of USD23.6 billion contributed 16.4 percentage points (pp), with around a quarter of these losses derived from primary insurance operations. At least USD1 billion of the reported reinsured losses were ultimately passed to the alternative market, via third party investors.

Reserve releases of USD5.9 billion benefitted the combined ratio by 4.1pp in 2017, the reduction relative to prior years being partly influenced by the unexpectedly severe cut in the Ogden discount rate in the UK (an outcome which is likely to be partly reversed in the coming months).

Exhibit 3: ABA combined ratio

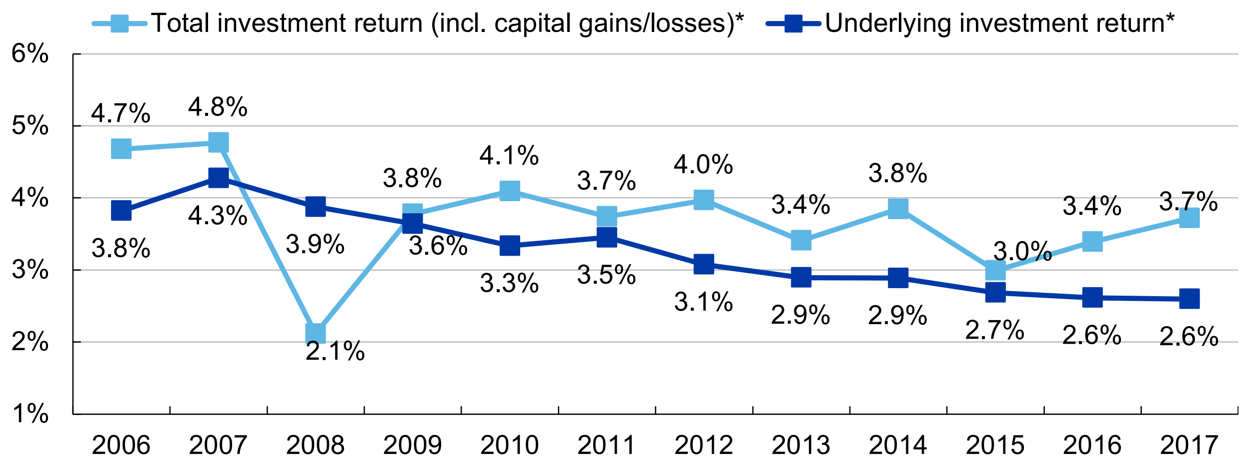


Source: Company financial statements / Aon Benfield Analytics

Investments

The investment returns of the ABA constituents generally exceeded expectations in 2017, despite the impact of persistently low interest rates. The ordinary yield appears to have bottomed-out at around 2.6 percent and significant capital gains resulted in an improved overall return of 3.7 percent.

Exhibit 4: ABA investment return

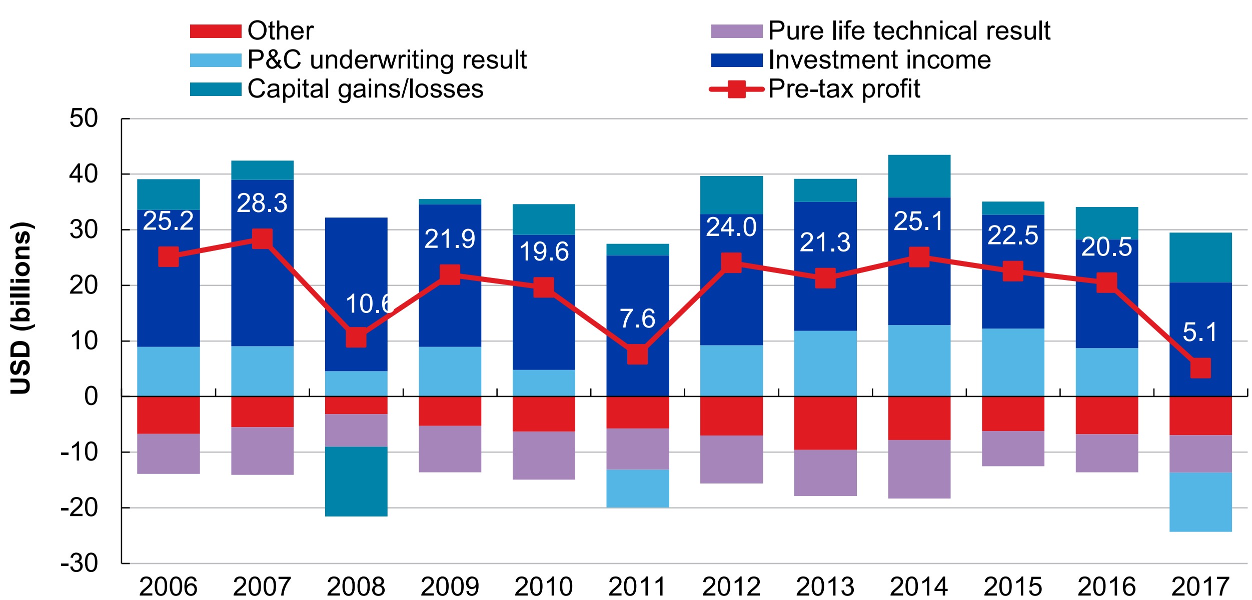


Source: Company financial statements / Aon Benfield Analytics

Pre-tax profit

Across the ABA as a whole, pre-tax profit fell by 75 percent to USD5.1 billion in 2017. Net investment income of USD20.6 billion and capital gains of USD8.9 billion were partly offset by P&C underwriting losses of USD10.6 billion and other charges of USD13.7 billion.

Exhibit 5: ABA pre-tax profit

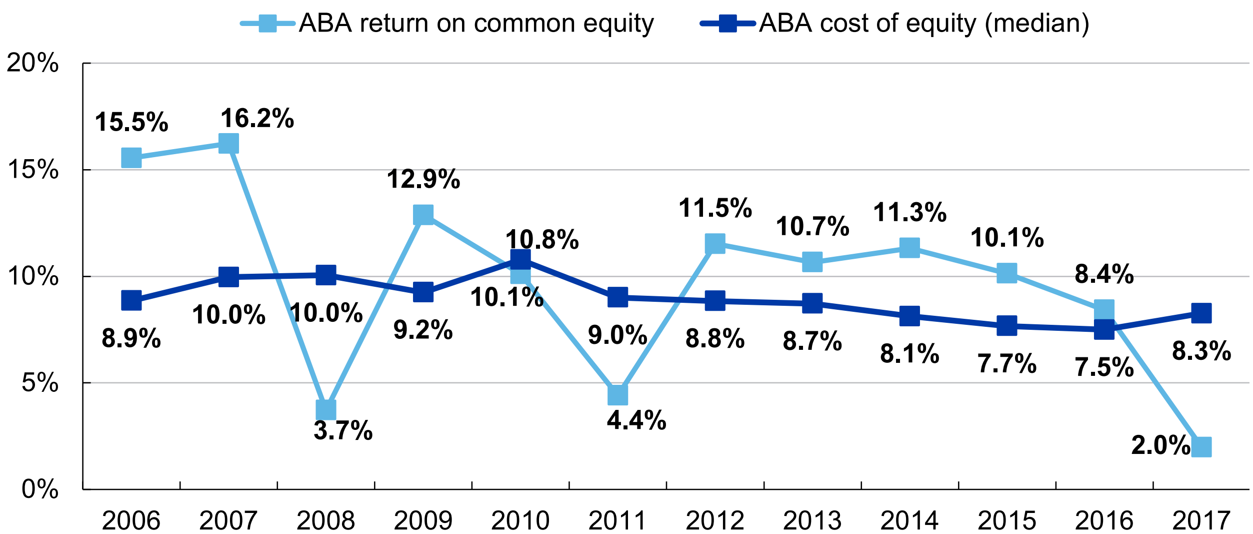


Source: Company financial statements / Aon Benfield Analytics

Return on equity

Across the 21 ABA constituents as a whole, the return attributable to common shareholders divided by average common shareholders' equity stood at 2.0 percent in 2017. The five-year average stands at 8.5 percent, compared with an average cost of equity across this period of 8.1 percent.

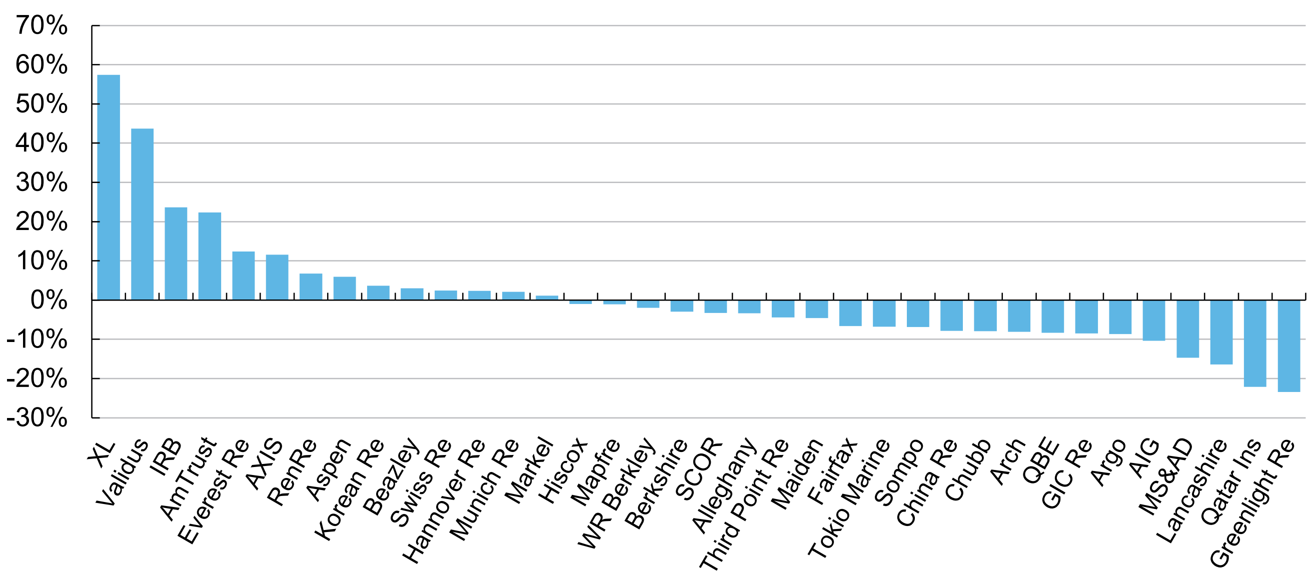
Exhibit 6: ABA return on equity



Source: Company financial statements / Aon Benfield Analytics

Share price development

Exhibit 7: Share price changes (March 23, 2018 vs December 31, 2017)



Source: S&P Global Market Intelligence

Financial strength ratings

The number of adverse rating outlook changes has been increasing, but out-right downgrades remain few and far between. The main drivers have been M&A activity and weakening underwriting performance.

Exhibit 8: Financial strength ratings

Reinsurer	A.M. Best		S&P	
Allianz Re	A+	Stable	AA	Stable
Allied World	A	Stable	A-	Stable
Arch Re	A+	Negative	A+	Negative
Argo Re	A	Stable		
Asia Capital Re	A-	Negative	A-	Stable
Aspen Re	A	Stable	A	Negative
AXIS Re	A+	Negative	A+	Negative
Berkley Re	A+	Stable	A+	Stable
CCR RE	A	Stable	A-	Stable
China Re	A	Stable	A	Stable
Chubb Re	A++	Stable	AA	Stable
Deutsche Ruck			A+	Stable
Everest Re	A+	Stable	A+	Stable
GenRe	A++	Stable	AA+	Negative
GIC Re	A-	Stable		
Greenlight Re	A-	Stable		
Hamilton Re	A-	Stable		
Hannover Re	A+	Stable	AA-	Stable
Hiscox Re	A	Stable	A	Stable
HCC Re	A++	Stable	AA-	Stable
IRB Re	A-	Stable		
Korean Re	A	Stable	A	Stable
Lancashire	A	Stable	A-	Stable
Liberty Mutual	A	Stable	A	Stable

Reinsurer	A.M. Best		S&P	
Lloyd's	A	Stable	A+	Negative
Maiden Re	A-	Negative	NR	
Mapfre Re	A	Stable	A	Positive
Markel Re	A	Stable	A	Stable
MS Amlin	A	Stable	A	Stable
Munich Re	A+	Stable	AA-	Stable
Odyssey Re	A	Stable	A-	Stable
Partner Re	A	Stable	A+	Stable
Peak Re	A-	Stable		
Qatar Re	A	Stable	A	Stable
QBE Re	A	Stable	A+	Stable
R+V Re			AA-	Stable
RenRe	A+	Stable	A+	Stable
SCOR Re	A+	Stable	AA-	Stable
Sirius Re	A	Review Neg	A-	Stable
Sompo Re	A+	Stable	A	Positive
Swiss Re	A+	Stable	AA-	Stable
Taiping Re	A	Stable	A	Stable
Third Point Re	A-	Stable		
Toa Re	A	Stable	A+	Stable
Tokio Millennium	A++	Stable	A+	Stable
TransRe	A+	Stable	A+	Stable
Validus Re	A	Review Dev	A	Stable
XL Catlin Re	A+	Review Dev	A+	Stable

Update / outlook raised since January 2017

Update / outlook lowered since January 2017

Ratings relate to the principal reinsurance operations as at March 2018.
Source: A.M. Best / Standard & Poor's / Aon Benfield Analytics

Alternative Capital

Overview

Investors are typically pension funds, sovereign wealth funds, endowment funds and high net worth individuals seeking direct exposure to insurance risk as part of a diversified investment strategy. These investors generally have a long-term investment horizon and operate with a relatively low cost of capital.

Funds are usually deployed via specialist insurance-linked securities (ILS) fund managers, after significant due diligence. The main product types are collateralized reinsurance contracts, catastrophe bonds, reinsurance sidecars and industry loss warranties (ILWs).

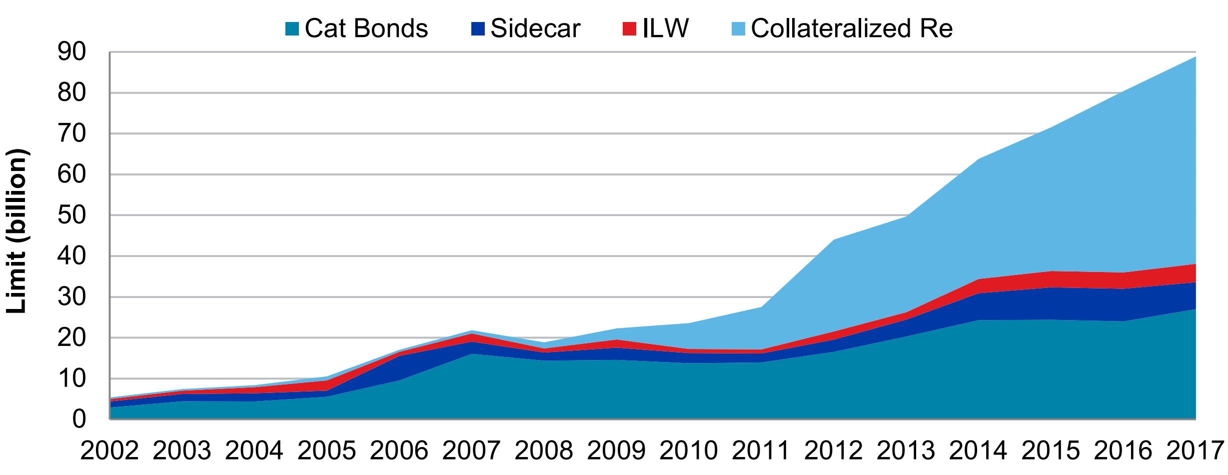
This capital has a disproportionate impact on the US property catastrophe and global retrocession markets, as collateral provision and rollover favors lines of business with early loss recognition and risk assessment is dependent on reliable modelled data. However, it is beginning to be applied in other areas.

Strong growth

Strong inflows in the first half of 2017 coincided with record volumes of catastrophe bond issuance. Second half losses from natural disasters are estimated at USD15 billion, mostly in retrocession, lower attachment point reinsurance and aggregate covers, with another USD5 billion of collateral trapped.

Most of the capital lost or trapped has since been replaced. Many investors previously enjoyed excellent returns and losses in 2017 generally fell within published risk tolerance ranges. In addition, the prospect of improved returns in the classes and territories most affected has attracted new participants.

Exhibit 9: Alternative capital deployment



Source: Aon Securities Inc.

Continued growth in alternative capital is translating into growing influence in the market. The willingness of investors to reload mitigated upward pressure on retrocession pricing at the January renewals. Established sidecars were renewed and several new vehicles were formed, as traditional reinsurers looked to grow their business positions, while controlling their net exposures.

Exhibit 10: New alternative capacity

Sponsor	Vehicle	Capital (USD billion)	Notes
Canada Pension Plan	Ascot Re	1,000	New writer of North American property cat and retro business rated 'A' by A.M. Best
Sompo Int'l	Blue Lotus Re	62	Collateralized reinsurance sidecar
RenRe	DaVinci Re	249	New capital raise for existing rated quota share reinsurer
Munich Re	Eden Re II	300	Property cat reinsurance and retro sidecar
Argo	Harambee Re		Additional cat capacity for specific Ariel Re Syndicate 1910 property portfolios
Hannover Re	K Cession	600	Renewal of a collateralized multiline quota share retrocession contract
RenRe / RGA	Langhorne Re	500	Joint venture targeting in-force life and annuity blocks
LGT	Lumen Re	300	Conversion of Collateralized Re Ltd; now a Class 3A reinsurer rated 'A' by A.M. Best
Lutece	Lutece Re	250	New ILS fund targeting retro; headed by Erik Manning and part-backed by BTG Pactual
Neon	NCM Re	72	Approved under new legislation as the first UK-based sidecar; providing collateralized quota share on a portion of Neon Syndicate 2468's property treaty and D&F portfolios
Brit	Sussex Re	100	Collateralized retro for Brit Syndicate 2987 and collateralized reinsurance for third parties
Beazley	Syndicate 5623	41	Quota share of a new book of facilitized risk written by Beazley Syndicate 3623
Chaucer	Thopas Re	95	Collateralized reinsurer supporting Chaucer Syndicate 1084's property cat portfolio
MS Amlin	Viribus Re	60	Quota share of MS Amlin Syndicate 2001's worldwide property cat XL book
	Total	**USD3.6 billion**	

Source: Aon Benfield Analytics

The catastrophe bond market has had a strong first quarter in 2018, continuing momentum established in 2017. The range of geographies and perils covered is broadening and a growing number of jurisdictions are enabling ILS issuance:

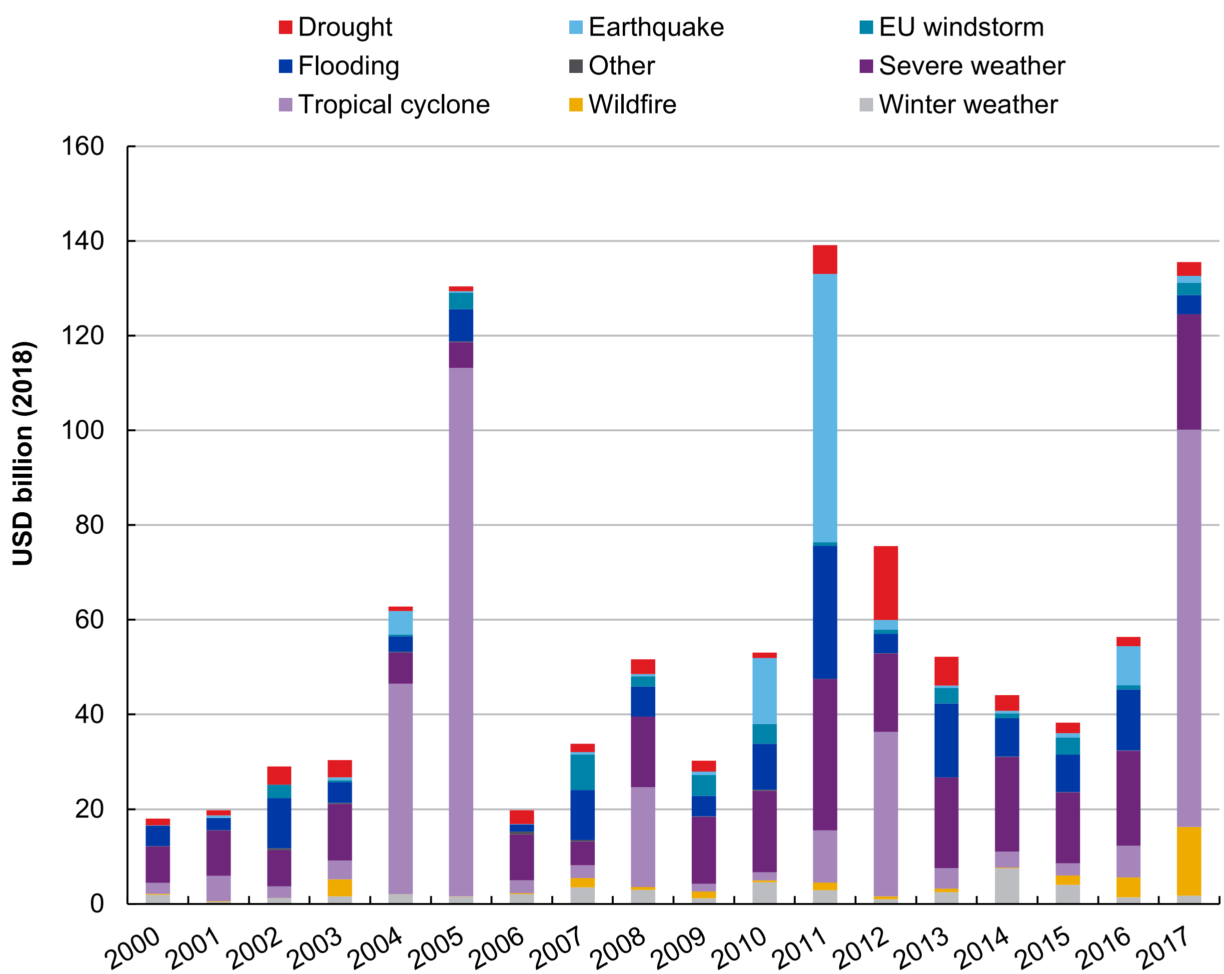
- London has become a mainstream onshore alternative, having recently passed legislation that will allow it to develop as an ILS centre.
- Singapore is bidding to become a hub for ILS activity in Asia, announcing in November 2017 that its regulator would fund 100% of the upfront costs incurred in issuing catastrophe bonds locally.

We expect to see further growth in the alternative capital market during 2018. Passing the test posed by the 2017 catastrophe events has dispelled any remaining doubts about the sector's permanency, boosting the confidence and acceptance of both investors and the broader marketplace.

Global Catastrophe Losses

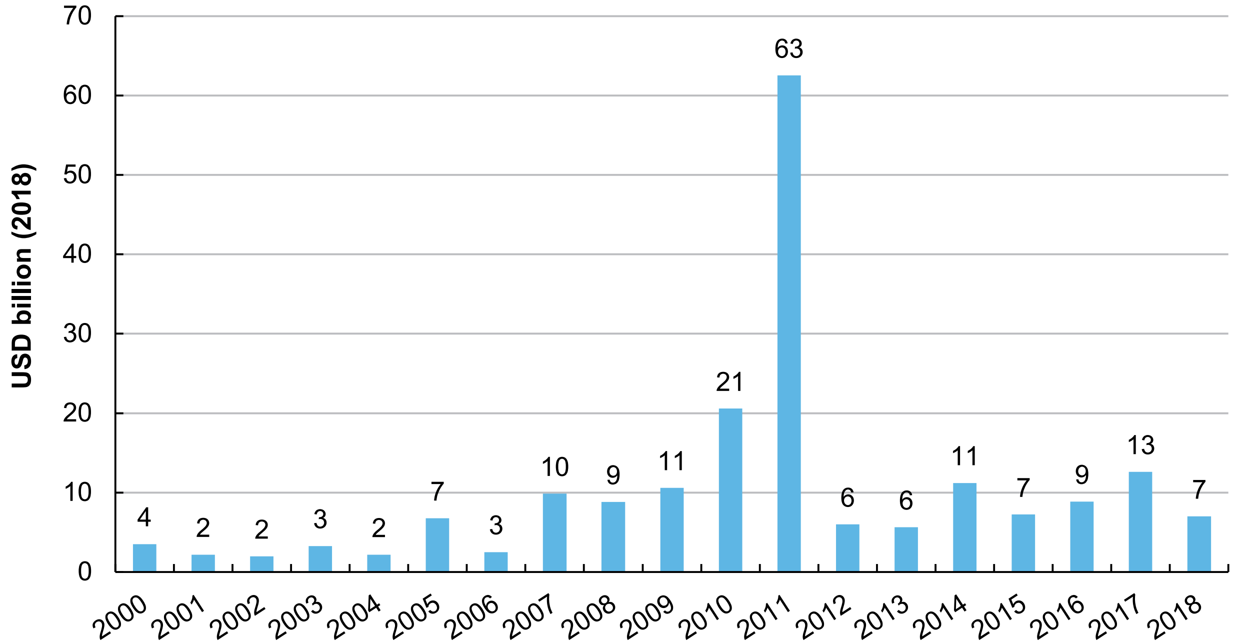
As claims continue to be received and processed following an active year for natural catastrophes in 2017, the latest global statistics show payouts of USD136 billion. This covers payments by both public and private insurance entities. The USD136 billion incurred in 2017 was second only to the USD139 billion paid by insurers in 2011 since 2000. These losses have been adjusted for inflation to today's dollars using the US Consumer Price Index. The majority of the losses last year were driven by three hurricanes (Harvey, Irma, Maria) and separate California wildfire outbreaks. Those events alone combined to account for USD94 billion, or 69 percent, of all global payouts during the year.

Exhibit 11: Insured losses by year by type



Source: Aon Benfield Analytics

Exhibit 12: Global insured losses in first quarter 2018



Source: Aon Benfield Analytics

Preliminary data for the first quarter of 2018 indicates a below-average start to the year. The estimated USD7 billion in insured losses are much lower than the USD13 billion sustained in 2017. The primary reason for the drop in payouts versus last year is a very quiet start to severe weather season in the United States. It is worth noting that while US thunderstorm losses were down in first quarter, this was partially offset by an active year for European windstorms. With payouts near USD2.8 billion, this is the highest first quarter total for the peril since 2015 (USD3.7 billion). For further, up-to-date global catastrophe loss information, please visit Impact Forecasting's Catastrophe Insight website: www.aonbenfield.com/catastropheinsight.

Contact Information

Mike Van Slooten
Head of Market Analysis, International
Aon Benfield
+44 0(20) 7522 8106
mike.vanslooten@aonbenfield.com

Marie Teissier
Market Analysis, International
Aon Benfield
+44 0(20) 7522 3951
marie.teissier@aonbenfield.com

Tracy Hatlestad
Global Chief Operating Officer of Analytics
Aon Benfield
+65 6512 0244
tracy.hatlestad@aonbenfield.com

Greg Heerde
Head of Analytics & Inpoint, Americas
Aon Benfield
+1 312 381 5364
greg.heerde@aonbenfield.com

Kelly Superczynski
Head of Analytics, EMEA
Aon Benfield
+44 0(20) 7086 2175
kelly.superczynski@aonbenfield.com

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